



D • R • U • G

E N F O R C E M E N T

I N P U B L I C

H O U S I N G :

S i g n s o f S u c c e s s i n D e n v e r

**DRUG ENFORCEMENT
IN PUBLIC HOUSING**
Signs of Success in Denver

BY:
**SAMPSON O. ANNAN AND
WESLEY G. SKOGAN**

Police Foundation, 1993

POLICE FOUNDATION

THE POLICE FOUNDATION IS A PUBLIC, NONPROFIT RESEARCH AND TECHNICAL ASSISTANCE GROUP ESTABLISHED BY THE FORD FOUNDATION IN 1970 AND DEDICATED TO IMPROVING POLICING IN AMERICA. THE RESEARCH FINDINGS IN THIS PUBLICATION WERE SUPPORTED UNDER AWARD NUMBER 89-DD-CX-0054 FROM THE NATIONAL INSTITUTE OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, U.S. DEPARTMENT OF JUSTICE. POINTS OF VIEW IN THIS DOCUMENT DO NOT NECESSARILY REPRESENT THE OFFICIAL POSITION OF THE U.S. DEPARTMENT OF JUSTICE.

©1993 by the Police Foundation. All rights, including translation into other languages, reserved under the Universal Copyright Convention, the Berne Convention for the Protection of Literary and Artistic Works and the International and Pan American Copyright Conventions. Permission to quote readily granted.

Library of Congress Catalog Card Number: 93-84925

CONTENTS

ACKNOWLEDGEMENTS	3
FOREWORD	5
INTRODUCTION	
The Legacy	7
What We Know	9
THE NARCOTICS ENFORCEMENT IN PUBLIC HOUSING PROGRAM	
The Denver Program	13
The Evaluation	15
The Housing Developments	19
Monitoring Program Activity	21
Monitoring Drug Problems	27
Monitoring Victimization and Fear	31
Monitoring Assessments of Policing	35
SUMMARY AND CONCLUSIONS	37
Recommendations for Future Evaluation	38
REFERENCES	39
TABLES	40

ACKNOWLEDGEMENTS

We wish to express our appreciation to those who provided assistance and guidance for the completion of this evaluation. The individuals who played important roles in the two-site evaluation include police administrators and detectives, government officials, researchers, and residents of public housing developments in Denver and New Orleans.

Our first acknowledgments are to the project staff of the National Institute of Justice (NIJ), particularly Program Manager Craig Uchida for his guidance, contributions, and active participation throughout the course of the study.

We also want to thank Fred Heinzelmann, Frank Vaccarella, and Edwin Zedlewski for their contributions at different stages of the evaluation, particularly during the working meetings.

We also express our deep appreciation to the men and women of the Denver Police Department. Denver Police Chief Aristedes Zavaras allowed us complete and unrestricted access to his department. His command staff gave us full cooperation throughout the evaluation period. Division Chief C. Jerry Kennedy, Captain Rudy Sandoval, Lt. Fred Carter, Sgt. Joe Black, and Sgt. Rick Castricone (now a lieutenant), were always available. We thank the four NEPHU detectives who patiently cooperated with us and shared their thoughts and experiences throughout the year.

We are grateful to Steve Brown, Department of Safety Research Director, who provided computer support for our research efforts. Working tirelessly and without complaint, the Department of Safety Analyst Specialist Chris Eiss did the programming for the computer mapping of recorded crime and arrests for the housing developments and the entire city. She also provided the data for our independent analysis.

A special thanks is also extended to the Denver Public Housing Authority (DHA) staff, particularly Security Director Bill Martinez for sharing his knowledge and expertise with us. The contributions of resident managers Paul Goldman and Esther Campbell made all the difference in our survey efforts. Paul Goldman deserves our special thanks for providing the office space and telephone for our research assistant during the three waves of surveys.

The staff of the Police Foundation provided excellent support. Jo Anna Besseghini, our research assistant in Denver, was the eyes and ears of the research team. She documented all the program implementation, went on ride-alongs and raids; interviewed local leaders; assisted in hiring and training; and supervised interviewers for the resident surveys. Her final report on program implementation contributed greatly to this report.

We also thank Hattie Matthews for assisting in interviewer training and supervising all data collection and preparation activities; Teresa Bishop for helping with coding and machine editing; and Virginia Burke, Kenneth Brunk, Linda Edwards, and Connie Uchida for their spirit of cooperation when they were called upon to help with the tedious task of cleaning data. Virginia Burke deserves extra special thanks for putting up with inconsistencies in report format and producing this document.

Finally, we want to express our gratitude to the many residents of public housing developments in Denver who gave us interviews and spoke candidly about the drug and crime problems in their neighborhood. They remain anonymous but not unappreciated.

Sampson O. Annan
Police Foundation

Wesley Skogan
Northwestern University

As drugs and their attendant violence continue to take a toll upon our society, we search for the means of ensuring that all of our citizens enjoy safety and security in their homes and in their streets. Nowhere has that proven more elusive than in public housing developments.

While the creation of public housing symbolized our national resolve to provide shelter and security to all Americans, reality has not entirely lived up to our ideals. Public housing projects are frequently plagued by a high incidence of crime, including the use and sale of illegal drugs and other drug-related or drug-driven criminal activity.

In many of these developments, residents stay locked behind doors, fearful of drug-related crimes that might befall them should they venture out and worried about their children who must skirt trouble each day on their way to school and back. The precious freedom of movement—to take a walk around the block, to shop in the neighborhood, to socialize with neighbors, to play children's games—is thus denied.

While there is widespread interest in finding solutions to problems plaguing the nation's public housing, crime control in public housing developments presents special problems for law enforcement and for housing administrators. Police officers have encountered difficulty in winning the trust of those whose lives they are charged with protecting. There is also evidence that narcotics investigators pay less attention to public housing developments because it is unlikely that residents in such reduced circumstances will participate in major drug deals—the kind that bring high visibility arrests.

To address these problems the federal government has over the years funded several innovative programs. Evaluators have found, however, that effects have frequently not matched program goals and resident mistrust of the police persists.

With this knowledge, the City of Denver, Colorado, created in 1989 the Narcotics Enforcement in Public Housing Unit (NEPHU). Funded by the federal Bureau of Justice Assistance and lodged in the Denver Police Department, NEPHU was charged with exclusive responsibility for enforcement in the ten major public housing developments and scatter-site housing administered by the Denver Housing Authority. The primary objective of the unit was to reduce the availability of drugs in these areas.

The Police Foundation, under contract with the National Institute of Justice, conducted an evaluation of the NEPHU program at two Denver housing developments. Our findings suggest that the program had some positive effect in reducing the availability of drugs. Our researchers found declining arrest rates following implementation of the NEPHU program and residents reported declines in fear of crime and in the incidence of personal and property crime. In one development, resident beliefs about the responsiveness and demeanor of police improved significantly, while in the other, there was no deterioration—a phenomenon not uncommon during concentrated drug enforcement efforts. In short, it appears that the program achieved a significant measure of success.

The drug epidemic in this country, one which has cost thousands of lives and billions of dollars, is far from over, despite some recent signs that improvement may be in the offing, particularly in the middle class. Indeed, the nation's inner cities are on the verge of collapse, burdened by the weight of the effects of widespread drug abuse and the gang wars that are fast thinning the ranks of our urban youth. Public housing projects are often a living example of this. Thus, a symbol of hope for some is also a symbol of despair for others.

This report sets forth the historic backdrop for the creation of the NEPHU program, the scientific approach to evaluating the program, the results of that evaluation, and recommendations for future evaluation. It is our fondest hope that these findings will have a positive effect on the police approach to drug enforcement in public housing and other locations where the same lessons might apply. It is only through this kind of evaluation and the validation of program efficacy that we can hope to make real progress in this area.

Hubert Williams

President

The Legacy

CONCERN ABOUT THE LEVEL OF CRIME IN PUBLIC HOUSING BECAME A DRAMATIC PUBLIC ISSUE IN 1972. WHEN THE 33 HIGH-RISE BUILDINGS OF THE PRUITT-IGOE DEVELOPMENTS IN ST. LOUIS, MISSOURI, WERE SYSTEMATICALLY DEMOLISHED IN A DESPERATE ATTEMPT TO ELIMINATE THE DECAY AND RAMPANT LAWLESSNESS THAT PREVAILED THERE. ALTHOUGH SUCH A SYMBOL FAILS TO RECOGNIZE THE HUNDREDS OF WELL-MAINTAINED, ORDERLY, AND SAFE PUBLIC HOUSING DEVELOPMENTS THROUGHOUT THE NATION, IT WAS A HARBINGER OF WHAT COULD HAPPEN IF PROFOUND CHANGES IN THE PUBLIC HOUSING SYSTEM WERE NOT MADE.

Authorized by the U.S. Housing Act of 1937, public housing had the dual purposes of (1) providing "safe and sanitary" homes for low income families and (2) stimulating the economy by providing federal funds (and jobs) for housing construction. Nearly 200,000 public housing units were built in the program's first 12 years, and over one million units were built in the next three decades.

Today, there are over 3,100 Public Housing Authorities (PHAs) that provide public housing for nearly 1.5 million families. Generally, they live in one of two distinct worlds of public housing. Each world has developed with the evolution of federal and local policy decisions made over the last 55 years. One world is inhabited by low-income families, representing about 60 percent of PHA residents; the other is occupied by elderly persons, often living out their last years alone.

The world occupied by low-income families, 80 percent of which are black or Hispanic and 75 percent of which are single-parent households, has suffered the most. Over 65 percent of the members of these households, a majority of which receive public assistance, are under 18 years of age.

Nationwide, few families live in the popular stereotype of public housing, the high-rise. During the late 1950s and early 1960s, the federal government permitted the construction of some high-rise housing developments for low-income families. The problems this generated were readily apparent, and by the 1980s, about 75 percent of the nation's public housing units were in low-rise buildings of less than five stories. Only seven percent of family public housing complexes are now composed of high-rise buildings (Bratt, 1986). Generally, high-rise public housing is reserved for the elderly and other special populations. Slightly more

than half of the public housing developments in the nation are low density areas (fewer than 200 units).

Regardless of their physical structure, public housing development crime rates are often high. Drug problems add another dimension to the public housing environment. In September, 1990, the *New York Times Magazine* described the problem in public housing developments across the nation as follows: "...strewn with trash, covered with graffiti, plagued by broken windows and unsecured doors, the [public housing] complex offers drug dealers an ideal environment in which to operate. It also offers them a ready-made market."

Few public housing developments were constructed with security in mind, and often they were built in economically

depressed neighborhoods already plagued by high rates of crime. The buildings were constructed with multiple access points that made them difficult to close to unwanted traffic. It is virtually impossible to keep nonresidents from entering low-rise developments. Criminals can work with virtual impunity in the stairwells and breezeways. Residents often lack the capacity to defend themselves, be it against predators, gangs looking for revenge, or drug dealers engaged in turf wars or intimidation.

Public housing is an arena in which government has particular responsibility for order maintenance and crime control. The local Public Housing Authority is the landlord, with a responsibility to use its powers to ensure the security of the residents. ●

What We Know

THE FIRST CONCERTED FEDERALLY COORDINATED EFFORT TO REDUCE CRIME AND FEAR IN PUBLIC HOUSING WAS EMBODIED IN THE 1979 URBAN INITIATIVES ANTI-CRIME DEMONSTRATION PROGRAM. UNDER THE PUBLIC HOUSING SECURITY ACT OF 1978, THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD), IN CONJUNCTION WITH SEVERAL OTHER AGENCIES, PROVIDED FUNDING TO 39 PUBLIC HOUSING AUTHORITIES TO DEVELOP INNOVATIVE COMMUNITY ANTI-CRIME DEMONSTRATION PROGRAMS TO REDUCE THE LEVEL OF CRIME IN PUBLIC HOUSING PROJECTS AND THEIR SURROUNDING NEIGHBORHOODS. AN EVALUATION OF THE PROGRAMS CONDUCTED BY THE POLICE FOUNDATION (PATE, 1984) CONCLUDED THAT "... THE URBAN INITIATIVES ANTI-CRIME DEMONSTRATION PROGRAM, BY DIFFUSING ITS ATTENTION OVER A LARGE NUMBER OF PROJECTS, MANY OF WHICH WERE NOT EXPERIENCING SERIOUS PROBLEMS, AND BY BEING INCAPACITATED BY MANAGEMENT PROBLEMS, WAS UNABLE TO PROVIDE CONCENTRATED EFFECTIVE ASSISTANCE TO THOSE PROJECTS WHICH MOST NEEDED IT. AS A RESULT, FEW LOCAL PROGRAMS WERE EFFECTIVE, LEADING TO VIRTUALLY NO MEASURABLE IMPACT."

Other studies have been conducted to help policymakers respond to the perception that public housing developments are centers for intense drug-related criminal activities. Some of the studies have shown that many of the programs have misdefined the solution and generalized too much about public housing developments. While community and citizen involvement programs can work, innovative federal programs have not been fully implemented; instead, funds have been directed at financing and perhaps enhancing current programs. In addition, efforts to involve the residents of

public housing in policing and refurbishing their community have been met with apathy and an unwillingness by residents to participate — largely due to fear and suspicion of the police.

Some studies have shown that involvement of residents is a key factor in a successful crime reduction program. Kelling (1988) and others argue that police, working in concert with local groups, can help revitalize the communities and help them devise their own defenses against drugs and crime. In the Fear Reduction Experiments conducted in

Houston, Texas, and Newark, New Jersey, researchers found that the Community Organizing Response Team, which organized an effective community group in a low-income neighborhood in Houston, significantly reduced resident perception of social disorder, fear of personal victimization, and perception of personal and property crimes. It also increased their satisfaction with police services (Pate, et al., 1986; Skogan, 1990).

A variety of drug control initiatives have been tried. For example, Phoenix has implemented a police walking beat program in public housing developments. Los Angeles has conducted undercover investigations, developed social service programs, installed passive security measures, and instituted police sweeps of local developments. Chicago has conducted vigorous sweeps of individual buildings and secured them against nonresidents by redesigning their entranceways, placing guards at the doors, and issuing identification cards to legitimate residents.

Preliminary findings from a survey of three cities suggest that "... rates both of drug and non-drug crime are considerably higher in public housing than in other areas." Records of reported crimes and arrests over a three-year period indicate, however, that there are variations between the types of crimes occurring in public housing developments. "Some projects may have high rates of violent crime but low rates of drug crime, or the reverse." The variation in violent crime rates is even noticeable between adjacent projects (Dunworth and Saiger, 1992).

Two other evaluations, one involving problem-oriented policing in Philadelphia, Pennsylvania, (Weisel, 1992), and the other involving community policing in a public housing neighborhood in Birmingham, Alabama, showed some promise (Uchida, et al., 1992). In the evaluation conducted in Philadelphia by the Police Executive Research Forum (PERF), the police (1) initiated cleanup programs to eliminate abandoned cars and secure empty buildings, both of which served as trafficking locations; (2) launched two narcotics anonymous treatment programs for public housing residents; and (3) established Drug Free Zones around

schools serving the targeted public housing development.

The PERF study also noted that solutions to enduring public housing problems, such as gang violence and drug-related crime, require a broad perspective. Drugs and related problems must be tackled together. The report concludes that solving these apparently overwhelming problems requires setting of reasonable goals, and that progress will come from the "...accumulation of many small hard fought victories" (Weisel, 1990).

In the Birmingham community policing experiment designed to control street drug trafficking, a public housing development apartment in a neighborhood being used as a control site was turned into a police mini-station after 11 shootings occurred in a 14-day period. The mini-station was fortified by heavy wire mesh and a front door protected by iron bars. Analysis of the data by Police Foundation researchers showed that residents "perceived that their neighborhood had improved significantly as a place to live as a result of the police mini-station." (Uchida, et al., 1992).

Residents of the public housing community also perceived that the police were more responsive to their concerns, aided more victims, worked together with residents to solve local problems, spent more time in the neighborhood, and kept order. In fact, across the three beats that were selected for the study, 72 percent of the residents believed that the mini-station in the public housing development was either somewhat effective or very effective in reducing drug-related crime.

In summary, these studies indicate that the police focus must be wider than simply arresting drug traffickers. Studies of crime reduction programs in public housing developments have shown that many of the programs have applied simplistic solutions and ignored significant differences among the problems facing different developments. While community involvement programs can work, federal funds aimed at encouraging innovative programs often have not had their intended effect; funds have often been used to enhance or expand existing programs. Little has been done to lift the atmosphere of mistrust that characterizes the

relationship between police and the residents of many public housing developments. Too often, resident apathy and unwillingness to participate in anti-drug efforts can be traced to fear and suspicion of police.

With this knowledge in hand, Police Foundation researchers began their evaluation of the Narcotics Enforcement in Public Housing Unit (NEPHU) program in Denver. NEPHU's chief objective was to reduce the availability of narcotics within the targeted public housing development. It was also anticipated that the program would lead to decreases in the levels of crime and fear, and an increase in citizen satisfaction with police services. Even though NEPHU was small and had difficulty in sustaining its enforcement activities because of the way it was organized, the Police Foundation found that the program did seem to have a positive impact on drug and crime problems in the two housing developments being evaluated.

Resident surveys taken by foundation researchers suggest declines in the availability and frequency of drug use in both housing developments. Residents also reported declines in personal and property crimes, as well as in fear of crime. These results are congruent with drug arrest statistics, which declined 88 percent in Curtis Park (the development in which NEPHU was most active during the first six months) but only 20 percent citywide during the same

period. On the basis of this citywide benchmark, researchers interpret the decline in drug arrests as evidence of the program's impact. The program, however, did not seem to have improved citizen satisfaction with police services.

This study has some important implications for the police, as well as for researchers. The results suggest the need for police departments to make sure that special units are adequately staffed. The absence of one or two staff members during the course of the NEPHU program caused major interruptions. The difficulties the unit had in sustaining its activities made it difficult to determine its full impact. Police departments should also make serious efforts to involve citizens in addressing the drug and related crime problems in their communities. Even though NEPHU did not appear to have made things worse, it is likely that limited involvement of the residents could have resulted in significant improvement of their perception of police.

For researchers, it would be useful to study a similar program under more controlled experimental conditions. Researchers should also work to ensure that a serious commitment is made to involve the residents in the program planning and implementation process.

The rest of this report presents a description of the Denver NEPHU program, the implementation process, the evaluation design, and the results. ●

The Denver Program

THE NARCOTICS ENFORCEMENT IN PUBLIC HOUSING UNIT (NEPHU) WAS ESTABLISHED IN DENVER, COLORADO, WITH THE SUPPORT OF A GRANT FROM THE BUREAU OF JUSTICE ASSISTANCE (BJA). IT WAS ENFORCEMENT-ORIENTED AND EMPLOYED TRADITIONAL POLICING METHODS, BUT FOCUSED NEW ENERGY AND RESOURCES ON A PROBLEM THAT OTHERWISE WAS NOT BEING SQUARELY ADDRESSED.

Before the formation of its special housing unit, narcotics enforcement in public housing was the responsibility of Denver's two regular drug units: the Street Narcotics Unit and the Crack Task Force, both under the command of the Vice and Drug Control Bureau. In addition, each police district had a tactical squad—or Special Crime Attack Team (SCAT)—that could be called in to deal with specific situations. As in many cities, however, uniformed police and officers on narcotics assignments preferred to avoid working in public housing areas. Public housing residents were an object of scorn in the eyes of many officers. In addition, because public housing residents normally occupy the lowest rung on the drug distribution ladder and infrequently deal in large quantities of drugs, the seizures of money and drugs in public housing rarely equal, in magnitude, the seizures of other narcotics units. Impressive seizure totals are the measure of worth of many narcotics units; they also provide the means by which many police departments finance continu-

ing narcotics operations. Aggressive units thus tend to look outside public housing developments for action. NEPHU was formed to lodge responsibility for public housing enforcement in the hands of a special unit, thus signaling recognition of the importance of drug problems in public housing.

THE NEPHU PROGRAM

The Denver Housing Authority (DHA) provides shelter for about 25,000 people, half of whom live in distinct housing developments, one-quarter in scatter-site family housing, and one-quarter in high-rises for senior or handicapped persons. Overall, about two-thirds of DHA residents are of Hispanic origin (compared to 23 percent of the city) and one-quarter are black (compared to 13 percent of the city).

The goal of the NEPHU program was to reduce the availability of narcotics in and around Denver's public housing areas. It was anticipated that this effort would have a

number of "spin-off" consequences, including decreased levels of crime and fear, and increased confidence in police. In its proposal, the City of Denver promised to implement a number of drug-reduction strategies. Some were to be carried out only by NEPHU; others were to involve the cooperation of the DHA and sections of the uniformed patrol division of the Denver Police Department.

NEPHU was to focus on traditional enforcement methods—making investigations and gathering intelligence leading to warrant searches and on-view arrests. It involved six full-time officers. Their salaries and a considerable amount of overtime pay were included in the NEPHU grant. The police department proposed to increase levels of uniformed patrol in order to maintain high visibility in the housing development areas. NEPHU also proposed to conduct drug awareness programs within the developments; one of its goals was to "educate citizens in... tenant responsibility, crime prevention, and drug identification and suppression." The unit was to operate a special telephone drug hot line, as well as to meet regularly with housing development Tenant Councils in an effort to improve community relations.

The DHA agreed to take on several responsibilities. They were to step up measures to repair and repaint vandalized DHA units and to cooperate with NEPHU in an active eviction program for those arrested.¹

The NEPHU program was funded to begin in August, 1989. During August and September, unit members were selected and equipment procured. This was followed by a two-day training period. NEPHU was unable to recruit experienced narcotics detectives, who held a bias against working in public housing, so new team members had to learn the basics. Shifting from patrol-oriented thinking to successful undercover narcotics work requires learning how to write incontestible warrants, develop and control dependable informants, conduct surveillance operations, and carry out productive interrogations. Team members had to learn

to identify many different kinds of drugs and how crime labs operated. They also took special weapons training. Not surprisingly, the transformation of NEPHU officers into narcotics investigators took some time.

NEPHU employed the most basic undercover narcotics strategies. One was to make "controlled buys" and warrant arrests. This involved developing and managing informants who purchased evidentiary drugs from suspected dealers. NEPHU members then swooped down upon their apartments armed with search warrants issued on the basis of this information. Because of the dangerous nature of this enterprise, whenever possible NEPHU relied on Denver's Metro SWAT unit to make forced entries.

Typically their informants were recruited after they had been apprehended on drug-related charges and offered a deal. They were convinced to work for the unit by a promise of NEPHU intercession with the District Attorney on their behalf if they brought in three drug dealers. Informants were also paid a fee based on the quality of their information and the quantity of drugs involved.

NEPHU officers also pursued buy-bust tactics to generate narcotics arrests. Officers made direct purchases and then arrested the seller. Buy-busts were always conducted within the view of other team members, and the officer involved wore a small radio so that the surveillance team could monitor the encounter. Code words warned those listening when the undercover agent was in trouble and the surveillance car should move in quickly. The team actually executed more "buy-walks" than "buy-busts." Colorado state law stipulates mandatory sentencing for anyone selling 28 grams (1 ounce) of cocaine. Hence, it was strategic to make several purchases, each increasing in quantity, to build dealer confidence in the buyer so that he could request to purchase a full ounce. Moreover, the Denver District Attorney's Office preferred and more readily accepted case filings involving multiple purchases from the same dealer. ●

¹ The parts of the program featuring community involvement or requiring the cooperation of the DHA or other units of the Denver Police Department did not materialize for managerial and logistical reasons. See Skogum and Annan, 1992; 1993.

The Evaluation

THROUGH ITS EVALUATION, THE POLICE FOUNDATION SOUGHT TO MONITOR THE PROGRESS OF DENVER'S NEPHU PROGRAM. RESEARCHERS TRACKED THE IMPLEMENTATION OF THE PROGRAM AND ASSESSED ITS IMPACT. AN ON-SITE OBSERVER GATHERED EXTENSIVE INFORMATION ON LEVELS OF PROGRAM EFFORT AND ON THE ACTIVITIES THAT TOOK PLACE IN AND AROUND THE DEVELOPMENTS, PARTICULARLY ON THE LEVEL OF DRUG AVAILABILITY. THE EVALUATION ALSO MONITORED TRENDS RELATED TO THE LONGER-TERM GOALS OF THE EFFORT, E.G., REDUCING LEVELS OF CRIME AND FEAR OF CRIME, AND ENHANCING RESIDENT CONFIDENCE IN THE DENVER POLICE. WHILE THE POLICE FOUNDATION'S EVALUATION FOCUSED ON TWO DEVELOPMENTS—CURTIS PARK AND QUIGG NEWTON—NEPHU'S RESPONSIBILITY EXTENDED TO ALL 10 MAJOR DHA DEVELOPMENTS AND SCATTER-SITE PUBLIC HOUSING IN THE CITY.

Detailed descriptions of the programs and program management have been presented elsewhere (Skogan and Annan, 1993a & 1993b); this report focuses on the quantitative measures of program effort and outcomes.

EVALUATION SURVEYS

Several kinds of quantitative data were collected for the evaluation. First, survey interviews were conducted in the target developments at three points in time. They enabled us to examine both the onset and persistence of any apparent program effects. The survey was conducted using a panel design. The first wave of the survey was conducted in December, 1989. Interviews were attempted with all 751 households in the two target developments. Ultimately, researchers conducted interviews with residents in 520 households. The second wave of interviews was conducted in

June, 1990. Interviewers contacted units in which an interview was successfully conducted during wave 1. They reinterviewed the original respondents if they still lived there, or, alternatively, selected new respondents. Just over 400 residents were interviewed during this wave. The third wave of the survey was conducted in December, 1990. This time, interviewers revisited all the units in which an interview was completed at wave 1, again selecting replacement respondents if those interviewed in the past had left the household. There were 423 respondents to the wave 3 survey. At each address the leaseholder was the designated respondent. In households with two leaseholders, the interviewer randomly selected one of them for the interview. In all, a total of 1,366 interviews were conducted with 642 different people: 201 only once, 158 twice, and 283 on all three occasions. Forty-seven percent of the respondents lived in

Curtis Park, and 53 percent in Quigg Newton.

The resident surveys played a critical role in the evaluation of the program. Respondents were asked to identify conditions and events in and around their homes, especially those related to drugs and crime. Given the furtive character of the drug market, survey-based reports on the availability of drugs and the perceived frequency of use are at least as good as arrest-based indicators of the extent of drug market activity, and probably are superior to other ways of assessing the actual availability of narcotics to residents of the target developments (e.g., hospital admissions for drug overdose). The surveys also played a key role in assessing crime trends because the vagaries of victim reporting and police recording practices make it difficult to accurately interpret short-term fluctuations in crime rates for small areas.

The survey also included a number of questions about the extent of visible police activity in and around the developments. Respondents were asked if they had seen or been involved in any of a number of drug-enforcement activities, including foot patrols, vehicle stops, stake-out units, intensive field interrogations, and police searches of apartments. They were also asked if they had been stopped by the police, either on foot or in a car. The evaluation surveys included other special items on drug-related programs instituted in the target developments. Respondents were asked about their knowledge of evictions of drug dealers from the development by the DHA and about their awareness of a special DHA drug hot line. They were also asked whether residents had received brochures or flyers, and if they had heard about or attended any meetings to discuss drug problems.

Because of its design, the evaluation survey could be analyzed in two different ways. First, responses by the 283 panel respondents who were interviewed on all three occasions could be tracked to reveal changes in individual experience and opinion during 1990. This is a particularly powerful aspect of the study, and the charts and tables presented in this report generally are based on these panel respondents. There was, however, a great deal of turnover in

these developments during the course of the year; 359 "new" persons living in the sample apartments were interviewed during the course of the evaluation. Thus, each wave of interviewing also produced representative cross sections of the residents of Curtis Park and Quigg Newton at each point in time. The aggregate responses of these larger samples varied from wave to wave because their composition varied, as well as because individual views and experiences changed. Including them in the analysis, however, helps to account for the reasons why respondents may have moved in and out of the developments, and thus in and out of the panel.

Research on housing decisions suggests that the bulk of these moves probably stemmed from factors that had nothing to do with NEPHU or the levels of crime and drug problems in the developments; moving probably was more affected by such factors as changes in income, marital status, and household composition. But some residents no doubt moved away because they were fearful, either for themselves or their children, and thus the subset of consistent panel respondents might underestimate the magnitude or the impact of those problems. For this reason, detailed statistical analyses duplicated all of the analysis for both the panel respondents and the representative cross sections.

The results of both kinds of analysis are presented in the tables located at the end of this report. Even though the representative samples included more and different respondents, the conclusions suggested by the panel respondents were always consistent with the patterns revealed by the cross sections. Respondents who were interviewed on all three occasions were somewhat younger than the others, they were somewhat more likely to be women than men, and they were less likely than other respondents to be married. They were not particularly poorer, but they were somewhat less likely than all other respondents to have been personally victimized. These differences were not large, however, and a strategy of duplicating every analysis, using both the panel and the pooled set of all respondents, protected against making inferences about changes in the developments that actually reflect the differential composition of the survey samples.

ARCHIVAL RECORDS

The evaluation also gathered archival data on the two developments and their surrounding neighborhoods. These included data on recorded crimes and arrests. The Denver Department of Safety produced computer-generated maps identifying the location of crimes, drug-related arrests, and other incidents in and around the two developments. They also supplied the original data for independent analysis. In addition, the site observer in Denver logged the progress of all drug-related arrests made by NEPHU during the evaluation period. This enabled researchers to track the rate of "prosecution quality" arrests. NEPHU's daily activity reports were also examined and coded. These were filed whenever a warrant was requested or executed, a drug purchase was arranged by a confidential informant or undercover officer, or an arrest was made and drugs or money confiscated. The reports noted the location and duration of various activi-

ties, the team members involved, and information about arrestees and drug and currency seizures. Along with departmental information on officer assignments, this documented the kind and extent of activity by NEPHU in the target developments.

SITE OBSERVER

The evaluation's on-site observer monitored the community relations aspect of the program. She attended meetings that NEPHU arranged with DHA tenant council members. She also conducted interviews with school officials, business leaders, the resident managers of the developments, and other key local informants, to gauge their perceptions of the NEPHU program. She attended many meetings with NEPHU officers at the Denver Police headquarters, rode with them on patrol, and met with officers and commanders of the Patrol Division sectors that served DHA areas. ●

The Housing Developments

THE PROGRAM WAS CONDUCTED IN PARTNERSHIP WITH THE DENVER HOUSING AUTHORITY. WITH DHA ASSISTANCE, TWO MATCHED HOUSING DEVELOPMENTS WERE SELECTED FOR THE EVALUATION OF THE NEPHU PROGRAM. ONE DEVELOPMENT WAS THE HOME PRIMARILY OF MEXICAN-AMERICANS, WHILE RESIDENTS OF THE OTHER WERE PREDOMINANTLY AFRICAN-AMERICAN.

The Curtis Park Homes development is located in a neighborhood of the same name. The population of the area is now predominantly American born, of Mexican ancestry, although the residents of Curtis Park Homes are overwhelmingly African-American. Drug dealing became visible in the area during the 1970s, principally conducted by "Mexican nationals" (a Denver term) and Chicanos (American-born Mexicans). Because many dealers had good connections to drug producers below the Rio Grande, Curtis Park became one of the easiest places to buy drugs (principally marijuana and heroin) in Denver during the 1970s. During the 1980s, the Northeast section of Denver became a magnet for two Los Angeles gangs, the Crips and the Bloods; they brought crack to the Curtis Park area. Currently, crack distribution in the area is concentrated in the hands of black dealers, while illegal Mexican immigrants still concentrate on heroin sales in Curtis Park Homes and around the adjacent park.

The Quigg Newton Homes area of North Denver was

first settled by immigrant Italian families, but the Quigg Newton neighborhood and housing development has been predominantly Hispanic since the 1950s. During the 1980s, many illegal Mexican immigrants moved into the area and began to form gangs that were actively involved in the drug business. Local Chicano youth gangs strengthened themselves in the face of this invasion and also tried to get into the drug business. Today, Mexican nationals predominate in the heroin trade, while Chicano gangs both sell drugs and conduct organized burglary and auto theft operations.

Despite these problems, visitors to the two housing developments might be surprised by their physical layout and condition. The developments feature low-rise buildings; individual units are located in relatively small row-houses, and none is more than two stories high. The two developments are also small: neither has more than 400 units. Their population density is low, and in 1985 several buildings were demolished in the Curtis Park development to further reduce

the density of that area. Apartments are clustered in small groupings, and there are trees and sidewalks between the buildings. In Quigg Newton, some buildings are entirely off the street and surrounded by lawns; these would be easily accessible only to foot patrols. Parking appears to be plentiful in both developments (although the first survey indicates that a majority of residents do not have a car). There are large, well-lit, offstreet parking lots in the Curtis Park complex. Each development has an on-site manager and is apparently well run. Lawns are generally well-kept and buildings are free of graffiti (which is not true of buildings in the surrounding neighborhoods). There were no visibly abandoned cars in the parking lots during any staff visits, and no broken glass. In Curtis Park, fences close off direct access to rear areas of the buildings from the street, and "no loitering" signs are prominently displayed in potential gathering places on the sidewalks ringing the development area. Tenant turnover is low, as are vacancy rates, averaging less than 10 percent. There is a waiting list for apartments in both developments, and units usually are empty only while they are being renovated.

The first survey of the two developments drew a profile of the residents of the two target developments, presented in Table 1 of this report. With the exception of their eth-

nic characteristics, the two groups of residents proved to be strikingly similar, indicating the power of the initial matching procedure. Residents of the largely Hispanic development had less formal education than the largely black residents of Curtis Park, but otherwise there were few differences between them.

These data thus suggest that although the target developments looked fairly pleasant, their residents match the general profile of public housing developments in many cities. Typically, they were poor, single mothers without much education and with few prospects for a job. Overall, 90 percent of the adults interviewed were not married, 68 percent had children, and 93 percent were women. Only about 15 percent reported having a job, and 87 percent said they made less than \$6,000 in cash the previous year. Some residents were elderly, but most were young and officially lived alone with their children. Levels of crime and fear in the two developments were also high. As Table 1 indicates, rates for residential burglary were particularly high; almost one-quarter of those interviewed were victims of attempted or successful burglary in the past six months.² Vandalism rates were also particularly high, while robbery rates stood at about the national urban average. ●

² This is the highest neighborhood burglary victimization rate registered in eight years of Police Foundation evaluation surveys of largely high-crime cities.

Monitoring Program Activity

THE EVALUATION INVOLVED SEVERAL MEASURES OF ENFORCEMENT ACTIVITY IN AND AROUND THE TARGET HOUSING DEVELOPMENTS. THESE INCLUDED DAILY ACTIVITY REPORTS BY NEPHU, DEPARTMENTAL ARREST STATISTICS, AND RESIDENT REPORTS OF VISIBLE ENFORCEMENT EFFORTS.

VISIBLE ENFORCEMENT

The surveys included a number of questions about resident awareness of anti-drug programs, the visibility of policing activity in the developments, and personal contacts with police. The questions in each wave focused on events that took place during the previous six months. To measure the level of visible police activity in and around the target developments, residents were asked:

Here are a few specific situations in which you may have seen a police officer here in the development or somewhere in this neighborhood. During the past six months, have you seen a police officer here ...

- Pull someone over who was driving around in the development?
- Stop someone who was walking through the development?
- Tell anybody here to move along, or tell them to get out of the development?

- Break up any groups or try to keep groups from hanging around in the development area?
- Searching or frisking anyone here in this area, or making an arrest?

In the first wave, about 60 percent of those interviewed indicated that they had seen someone pulled over in the immediate area, 47 percent saw someone stopped on foot, 36 percent saw police moving people along, 47 percent saw them breaking up groups, and 55 percent saw them searching or frisking someone. Those percentages are quite high. Responses to these questions were correlated an average of $+ .41$. An index number summing the number of these situations that each respondent recalled was used to measure general police visibility in each development area; it had a reliability of $+ .78$. Table 2 documents these index scores for each development over time.

Researchers also used the survey results to assess the extent to which the respondents had themselves been the targets of police intervention in and around the developments.

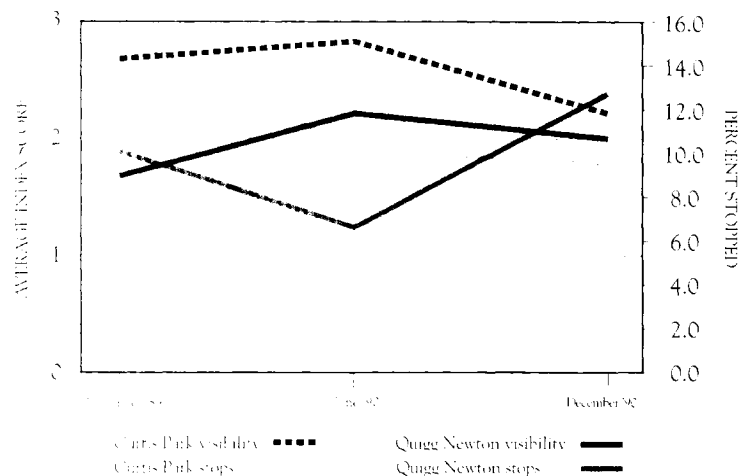
During the interviews, residents were asked:

- In the past six months, have you been in a car which was stopped by the police? [Did this happen in or close to this development?]
- In the past six months, have you been stopped and asked questions by the police when you were out walking? [Did this happen in or close to this development?]

In the first wave of interviews, 14 percent recalled being stopped (two-thirds in or close to their development), and 9 percent were stopped while on foot (92 percent in their development). The rate of vehicular stops is roughly comparable to those found in earlier Police Foundation surveys, but the pedestrian stop rate is two to three times higher. Responses to the two questions were combined to produce a single measure of the proportion of residents involved in those encounters.

Figure 1, based on the survey results, illustrates the extent of police-initiated contacts and the visibility of policing in the two developments. There was more attention given to Curtis Park than to Quigg Newton—policing was more visible in Curtis Park, and in two of the three periods residents there were more likely to be stopped by police. Interestingly, by both measures, police activity went down during the course of the evaluation in Curtis Park: both police visibility and proactive patrol there was highest immediately preceding the first wave of interviews. The pattern of recognized police activity in and around Quigg Newton was more varied: visibility went up, but then down again, while pedestrian and vehicle stops went down, and then up again. In the end, none of these changes in Quigg Newton were significantly different between wave 1 and wave 3 surveys.

FIGURE 1: POLICE VISIBILITY



The original NEPHU application proposed to increase the level of high-visibility uniformed patrol in and around the developments, but the unit was rebuffed when it attempted to secure this kind of cooperation from the Denver Police Department Patrol Division. The inability of NEPHU to secure the cooperation of district commanders in increasing the level of visible patrol in DHA projects (at one point they proposed using grant funds to pay for it) was indicative of the generally sour relationship between the unit and the rest of the department. Many other narcotics officers and Narcotics Bureau managers adopted a derisive attitude toward NEPHU and its task. Some were jealous because of NEPHU's special overtime budget, others because its BJA grant included leases for new, serviceable vehicles. The "rich kids" were derided because they were unable to produce large cash and drug seizures, yet were invited to conferences in Washington, D.C. Upper-level managers considered NEPHU an expendable add-in that would not survive the conclusion of its federal grant.

In this light, it is not surprising that visible enforcement activity did not go up in the target developments, for NEPHU itself deliberately chose not to undertake high visibility crackdowns. Instead, it emphasized undercover opera-

tions and the use of informants to gather information supporting requests for search and arrest warrants. The resident surveys document that these searches were not particularly visible to the residents in Quigg Newton and Curtis Park. As Table 2 details, awareness of searches also declined during the evaluation year. Following almost 20 survey questions about the police and drugs, residents were asked, "Have you heard of the police searching any apartments here in this development during the past six months?" At the outset, almost half of the residents of Curtis Park had heard of these searches, while 30 percent of those living in Quigg Newton had heard. Both percentages dropped over the course of the evaluation, and by December, 1990, awareness of searches stood at 38 percent in Curtis Park and about 20 percent in Quigg Newton. This decline parallels the actual rate of drug arrests in Quigg Newton, which also declined over the evaluation period. These declines were both significant, as detailed in Table 2.

ARRESTS

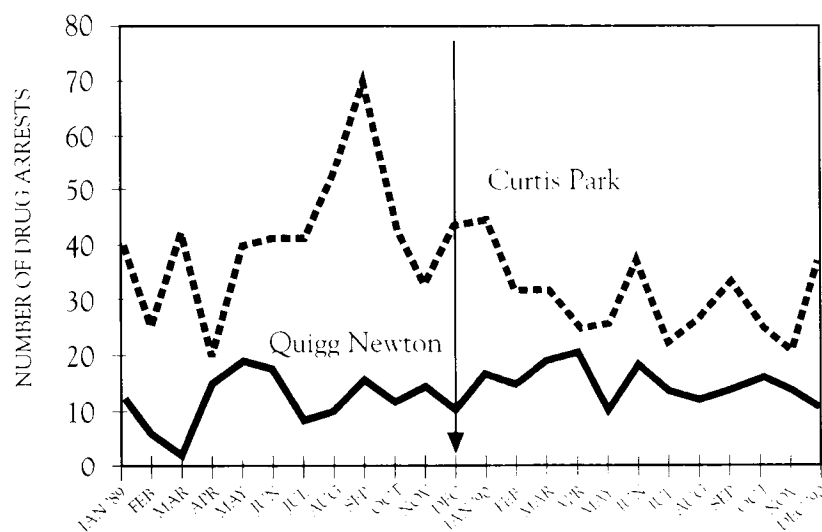
Counts of arrests in Curtis Park and Quigg Newton, and in the areas immediately surrounding them, provide another

indicator of enforcement efforts during the NEPHU evaluation. To examine this, the Denver Department of Safety mapped data on recorded crime and arrests in the housing developments and for a one-half mile radius around them. Data on arrests are available from January, 1989, about 10 months before the official start of the NEPHU program and 12 months before the first survey of residents of the target developments.

The arrest data indicate that there was relatively intensive police activity in and around Curtis Park in the months *before* NEPHU began in earnest, but that this died down once the program began. This can be seen in Figure 2, which charts, by month, all arrests in the two developments and immediately surrounding areas. A vertical line depicts the date of the first resident survey in December, 1989. In retrospect, this "pretest" survey actually *followed* one of the most intensive levels of enforcement in the entire evaluation for Curtis Park, and came seven months after a high point in arrests in Quigg Newton. The large jump in drug and other arrests in Curtis Park in August and September, 1989, was generated by the Crack Task Force, a citywide unit; the first NEPHU arrest was not logged until October.

Like the survey measures of police visibility, arrests in Curtis Park then dropped off steadily during most of the evaluation period. Arrests were less frequent in Quigg Newton throughout the evaluation period, but like resident reports of police visibility they remained relatively "flat" during the evaluation. The decline in arrests was congruent with survey measures of victimization in the two developments. Victimization dropped during this period in Curtis Park and remained stable in Quigg Newton, following the same pattern as arrest totals depicted in Table 2.

FIGURE 2: TOTAL ARRESTS



ACTIVITY REPORTS

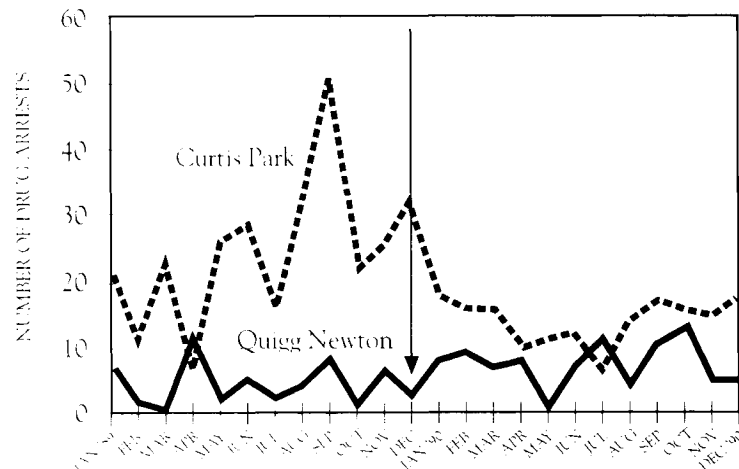
During the evaluation period, NEPHU submitted 120 daily activity reports. Slightly more than half of NEPHU's reported surveillance and undercover activities took place in DHA developments. About half of all buy-bust attempts were on DHA property, as were 65 percent of NEPHU's actual drug purchases. DHA areas were the site of only 42 percent of warrant searches. Drug houses serving DHA residents often are located in nearby areas; dealers and their suppliers do not necessarily live in the developments where they do business. Thus, many NEPHU warrant searches caught up with them elsewhere. In the end, NEPHU made

176 arrests, 114 based on search or arrest warrants issued following their investigations. The arrests met a high legal standard, for the Denver District Attorney's office accepted 90 percent of the cases that were turned over for prosecution.

Some of NEPHU's efforts were fairly evenly distributed between Curtis Park and Quigg Newton. The two areas were patrolled at about the same rate, counting the shifts in which NEPHU officers visited the developments. Contacts with suspects and controlled buy efforts associated with them were distributed about equally between the two areas. Otherwise, NEPHU focused its efforts on Curtis Park. Search and arrest warrants were much more frequently served in Curtis Park (24 percent of the NEPHU total) than in Quigg Newton (2 percent of the total). Half or more of all the DHA drug, currency, weapon, vehicle, and paraphernalia seizures made by NEPHU citywide were from Curtis Park. Similarly, 86 percent of warrant-based arrests made in the two developments were in Curtis Park. In the end, NEPHU made a total of 36 arrests in Curtis Park and 20 in Quigg Newton.

Quigg Newton presented a problem for NEPHU. In Curtis Park, dealers seemed willing to sell to almost any po-

FIGURE 3: DRUG ARRESTS



tential customer. They hung out around the nearby park, which gave the development its name, in order to make "drive-by" sales to suburbanites. Occasionally NEPHU borrowed a black rookie patrol officer to infiltrate drug networks in the Curtis Park development, and NEPHU enjoyed its most visible successes in this development. Drug purchases were more difficult to make in Quigg Newton. Hispanic dealers there typically confined their dealings to known and trusted—and Hispanic—customers.

Figure 3 plots the distribution of drug arrests in the two developments. It includes arrests made by all units in and around the two developments and illustrates that most drug arrests before and during the evaluation period were concentrated in and around Curtis Park. The upsurge of drug arrests recorded in August and September, 1989, before the beginning of the NEPHU program, occurred overwhelmingly in that development. Other analyses (not shown) indicate that about 60 percent of Curtis Park drug arrests were in the surrounding area, while about 40 percent were in the development itself. This pattern persisted throughout 1989 and 1990. Like arrests in general, drug arrests in Curtis Park declined in frequency through most of the evaluation period. Figure 3 also illustrates that there simply were few drug

arrests in and around Quigg Newton, either before or after the program began, and that there was no strong trend line. About two-thirds of the arrests in Quigg Newton were in the surrounding neighborhood and one-third in the development itself, but the numbers were small and amounted to a difference of only two or three arrests each month.

Most of these arrests were for drug possession rather than trafficking. In 1990, 93 percent of those arrested in Curtis Park and 89 percent of those arrested in Quigg Newton were apprehended for simple possession. The citywide figure was 93 percent. By this measure, NEPHU was no more successful than any other police effort to target and arrest drug dealers.

Many NEPHU arrests were made early in the evaluation period. It is likely that, as the residents of Denver spent more time outdoors during the summer of 1990, it became increasingly difficult to make controlled buys and secure search warrants. During the summer the site observer reported that the team cruised the city night after night in search of something to do. Between April and September, they served about one-half the number of warrants that they served during the first six months of the program. They waited at police headquarters for hours hoping that an informant would call. During this period, the team's focus also tended to drift from public housing areas to almost any case that would occupy their time.

Financial considerations may have also undercut the team's effectiveness. Drug seizure money normally replenished the unit's coffers. By June, 1990, NEPHU's operating funds were running out. Consequently, more lucrative non-DHA cases beckoned. Declining awareness among residents of apartment searches in the two areas parallels this decline.

In summary, police activity was more frequent and visible in Curtis Park than in Quigg Newton, and more of NEPHU's arrests and seizures were made there. Few arrests were made in or around Quigg Newton throughout the evaluation period. Most of NEPHU's drug arrests were for simple possession. During the evaluation period, police vis-

ibility, resident stops, and public awareness of searches declined significantly in Curtis Park, but by most of these measures levels of policing remained unchanged in Quigg Newton. Arrests, both in general and those in drug categories, also declined in Curtis Park, while remaining at a low level in Quigg Newton.

There are several reasons why visible patrol and openly proactive policing decreased in the developments during the course of the program. Some are internal to the workings of the Denver Police Department and have little to do with crime. Once NEPHU was created, other units in the Department could more freely pursue their natural inclination, which was to avoid working in public housing. As noted at the outset, this was an issue in Denver and seems to be a generic problem in policing. It was an important motivation for BJA sponsorship of independent NEPHU operations and could account for the relatively small number of pre-program arrests that took place within development boundaries, as compared to surrounding areas. As noted above, this was compounded by the active hostility of many other units to NEPHU, and the indifference with which they were treated by line commanders. After the program was announced, Denver was further afflicted with the "specialized unit problem" identified by Sparrow, Moore, and Kennedy (1990). That is, the creation of this specialized policing unit sent a message to other members of the Department that the unit's task was no longer their problem.

Alternately, NEPHU may have stopped working effectively midway during the evaluation period. Drug arrests were down for the city as a whole, but they decreased much more in DHA developments. The summer slump described above, plus extended NEPHU involvement in a federal wiretap case at the end of the year, may have produced the dramatic drop in arrests of all kinds in DHA areas during the last half of 1990. During this period, NEPHU was also hindered by a shortage of funds for making undercover drug purchases and paying informants. This was due in part to the unit's inability to make large cash seizures to finance its operations. It also became apparent a year later that the short-

age was in part attributable to theft of the unit's confidential funds by a corrupt member of the team (cf. Skogan and Annan, 1993b).

On the other hand, the decline in arrests observed during the closing months of the program might have signaled NEPHU's success. As noted above, it is difficult to use police statistics as indicators of the magnitude of drug problems. Unlike garden-variety "crimes with victims," there are virtually no reported offenses in the drug category except those that may accompany an arrest. If police are working an area hard, a decline in arrests by police could be evidence that open drug dealing is getting more difficult to uncover. There might be less dealing, or buyer-and-

seller networks may have adapted to new enforcement conditions or been driven further underground. The former interpretation, that there actually was less drug activity, gains credibility from evidence to be presented in the next section of this report: resident reports of the availability and use of drugs showed a significant drop in the heavily-policed Curtis Park development. This is congruent with the arrest data that show drug arrests off 88 percent in Curtis Park between the first six months of 1989 and the last half of 1990. Citywide drug arrests, however, declined only 20 percent during the same period. On the basis of this citywide benchmark, we interpret the decline in drug arrests as evidence of the program's impact. ●

Monitoring Drug Problems

THE TARGET OF ALL OF THESE PROGRAMS WAS DRUG MARKET ACTIVITY IN CURTIS PARK AND QUIGG NEWTON. BECAUSE ARREST OR DRUG SEIZURE DATA ARE BETTER INDICATORS OF POLICE EFFORT AND EFFECTIVENESS THAN OF THE EXTENT OF DRUG AVAILABILITY, THE BEST INDEPENDENT MEASURES OF THE IMPACT OF THESE PROGRAMS ON DRUG MARKETS IN CURTIS PARK AND QUIGG NEWTON COME FROM THE RESIDENT SURVEY. RESPONDENTS TO THE SURVEY SERVED AS INFORMANTS ABOUT THE FREQUENCY OF DRUG USE BY RESIDENTS OF THE DEVELOPMENTS AND THE EASE WITH WHICH ONE COULD BUY DRUGS THERE.

To measure the *frequency* of drug use by development residents, survey respondents were asked:

- How frequently do you think kids and young adults actually use drugs in this development? Do you think kids and young adults in this development use drugs? Is it very frequently, fairly frequently, not very frequently or not at all?
- How about drug use by adults who live here? Do you think drug use by adults here actually is very frequent, fairly frequent, or not very frequent?

Responses to these two questions were correlated +.53, indicating high reliability of the responses. They were added

together to form a drug-use frequency index.

To measure the *availability* of drugs in the target developments, residents of Curtis Park and Quigg Newton were asked:

- How easy do you think it is for people who want drugs to buy them here in this immediate area? Do you think that it is very easy for them, fairly easy for them, or not very easy for them?
- How easily would you say drugs can be bought out on the street in the immediate area of this development. Would you say that this is very easy, fairly easy, or not very easy?

- How easy would it be for someone to find an apartment where drugs could be bought here in this development. Would you say that this would be very easy, fairly easy, or not very easy?

Responses to these items formed a drug availability index with a reliability of $+.83$, good for a three-item index.

A third index of the extent to which residents believed that drugs were *linked to crime* in their developments was formed by responses to two questions:

- How important are drugs in causing crime here in this development? Are drugs a big factor in causing crime, some factor in causing crime, or not that important in causing crime?
- What about pressure on the youths who live in this development to get involved in the drug business? Do you think there is pressure on most of the youths here, some of the youths, or hardly any of the youths here?

Responses to these two items were correlated $+.32$; technically, this was the weakest of the indices. The independence of the three conceptual clusters of drug-related measures was confirmed using cluster and factor analysis of the first-round survey. The resulting index scores were correlated with one another (an average of $+.55$), but they appear to tap different aspects of drug markets in the target developments.

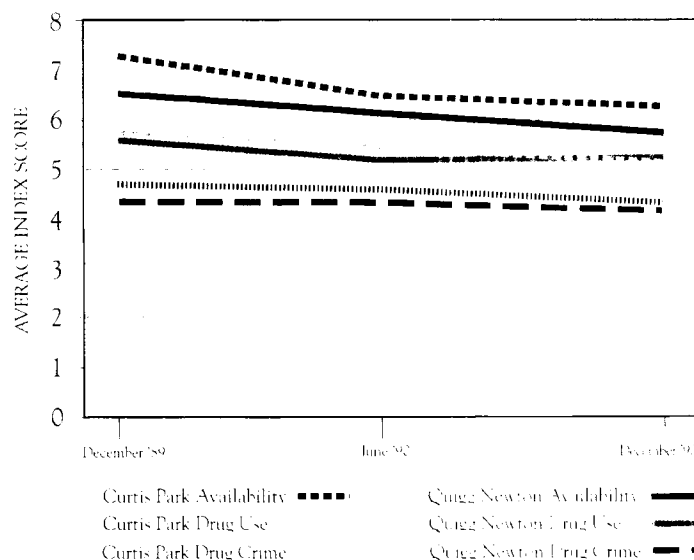
Details of distribution of responses to each of these questions are presented in Table 3. They point to a relatively high frequency of use and an easy availability of drugs in both developments before NEPHU took to the field. In response to the question about frequency of use by youths, 58 percent of those interviewed at the beginning of the evaluation thought that drug use among youths was very frequent. When asked how easy it would be to buy drugs in the area, 56 percent thought it would be very easy. Fully 42 percent of those interviewed also thought it would be very easy to find a drug apartment in their development.

The respondents were clearly concerned about these problems. In response to a question about the role of drugs

in crime, 65 percent thought drugs were a big factor in causing crime in the development. And when asked about "... pressure on the youths who live in this development to get involved in the drug business," one third thought there was pressure on most youths. An additional 40 percent thought there was pressure on at least some of them.

Figure 4 illustrates trends in response to these drug market indicators over the life of the evaluation. It plots responses of panel members to the three drug problem indices for each development. Across these and other measures in the survey, there was clear evidence of a decline in drug market activity in both Quigg Newton and Curtis Park. Table 4 details the

FIGURE 4: DRUG PROBLEM INDICATORS



over-time distribution of these index scores.

First, the frequency of drug use (as reported by panel respondents) was down in both areas. Based on the indices, five of six comparisons between wave 1 and wave 3 scores were significantly different, and every comparison showed decreasing levels of drug availability, use, and related crime problems. Among the individual questions, the percentage of respondents who reported that drug use by youths was very frequent declined from 60 percent at wave 1 to 44 percent at wave 3 in Curtis Park, and from 53 percent to 46 percent in Quigg Newton. Likewise, the proportion rating drug availability in the area as very easy dropped from 60 percent to 42 percent in Curtis Park and from 47 percent to 32 percent in Quigg Newton. The proportion indicating that it would be "very easy" to find a drug apartment in their development declined from 48 to 36 percent in Curtis Park and 37 to 31 percent in Quigg Newton. These declines were evident across all three waves of interviews. The drug-crime problems index was down significantly in Curtis Park between waves 1 and 3, and in the Quigg Newton cross section as well. In total, declines in drug availability, use, and related crime problems were statistically significant for 21 of the 28 wave-1 through wave-3 comparisons detailed in Table 3.

As a further check on the generality of these apparent declines, an index that combined responses to all seven questions about local drug problems was calculated. Responses to these questions were consistent, and the reliability of the resulting index was $+.83$. An analysis of this scale score for

the panel interviews indicated that in Curtis Park declines in drug problems from wave 1 to wave 2 and from wave 2 to wave 3 were statistically significant. In Quigg Newton, declines from wave 2 to wave 3 and from wave 1 to wave 3 were statistically significant. As a final check, these analyses were repeated after pooling the responses of all 642 persons who were interviewed during any wave of the evaluation surveys. The same pattern was apparent: reports of drug problems declined in both developments in each successive wave of interviews, and declines in the level of drug problems between December, 1989, and December, 1990, were statistically significant.

In summary, there was evidence of a decline in the availability and frequency of use of drugs in both developments. This was true even considering the responses of persons who later dropped out of the panel. The decline was consistent with the apparent difficulty that NEPHU had in making drug arrests in any of the DHA developments after mid-1990. As documented above, during the six months before the first survey, there were 31 drug arrests in that development; during the intervening six months before the second survey there were 11 arrests, and during the final six-month interval, there were 4 (an 87 percent decrease from the earliest period). Drug arrests were off as well (by 63 percent) in all DHA developments, while they were down only 19 percent in the City of Denver. The paucity of arrests in Quigg Newton makes it more difficult to track trends there; no more than five drug arrests occurred in any of the six-month periods described above. ●

Monitoring Victimization and Fear

THE RESIDENT SURVEYS ALSO REVEALED THAT BOTH VICTIMIZATION AND FEAR DECLINED IN CURTIS PARK. BOTH INDICATORS OF CRIME PROBLEMS DROPPED SOMEWHAT LESS ROBUSTLY AND CONSISTENTLY IN QUIGG NEWTON, ON THE OTHER HAND. THIS PATTERN GENERALLY PARALLELS LEVELS OF ARRESTS, POLICE VISIBILITY, AND TRENDS IN DRUG MARKETS IN THE TWO DEVELOPMENTS. IT DOES NOT MATCH THE LEVEL OF OFFICIALLY RECORDED CRIMES FOR THE TWO DEVELOPMENTS, HIGHLIGHTING THE IMPORTANCE OF INDEPENDENTLY MEASURING VICTIMIZATION RATES.

VICTIMIZATION RATES

Victimization was measured by responses to questions about 14 kinds of crime, using a questioning sequence adapted from the screening section of the National Crime Survey. In each instance, self-reported victims were asked whether or not the crime occurred in their development, and whether it was reported to the police. The analyses presented here refer only to victimizations that took place in Quigg Newton and Curtis Park.

Figure 5 ranks each kind of victimization by an estimate of its prevalence (the percentage victimized one or more times in the past six months), as measured by the first survey in the two developments. Topping the list were burglary, thefts, and vandalism. Personal crime was relatively infrequent except for threats and assault, but those questions did

not differentiate between minor and more aggravated forms of actual or threatened violence. The summary personal victimization measure combines responses to questions concerning robbery, purse snatching and pickpocketing, actual assaults and threatened harm, and rape. The property crime measure combines responses to questions concerning actual and attempted burglary, thefts from inside or outside their unit, mailbox theft, vandalism, car and motorcycle theft, and theft from or vandalism of their cars. Levels of victimization in the two developments were quite high. For example, in the first wave of interviews, 25 percent of those interviewed in Curtis Park recalled a recent successful or attempted burglary, as did 20 percent of those from Quigg Newton. Overall, in Curtis Park, 61 percent of those interviewed were victims of property crime and 24 percent

FIGURE 5: VICTIMIZATION BY TYPE OF CRIME

	PERCENT VICTIMS	PERCENT REPORTED		PERCENT VICTIMS	PERCENT REPORTED
Burglary	22.5	46	Robbery	3.9	40
Outside theft	18.3	10	Auto theft	3.7	79
Vandalism	17.9	30	Purse snatch	2.1	46
Inside theft	12.1	16	Mailbox theft	1.9	50
Threats	10.6	49	Rape	1.5	63
Assaults	9.4	49			
Theft from car	8.7	51	All property	52.8	34
Car vandalism	7.3	30	All personal	18.3	54
Bike theft	6.0	29			

were victims of personal crime; the comparable figures for Quigg Newton were 46 percent and 13 percent. The parallel figures for panel respondents were strikingly similar, suggesting that the reinterview process may not be biased toward those who were less likely to be victimized.

Again, the columns in Figure 5, indicating the percentage of each type of incident reported to the police, serve to remind us of the limitations of using reported crime as an indicator of real risks to the public. The most frequently reported crimes were auto theft and rape (based on only a few cases); inside and outside thefts were reported less than 20 percent of the time, and none of the remaining ten forms of victimization were reported more than one-half of the time. Overall, 54 percent of personal crimes and 34 percent of property crimes were reported to the police.

Figure 6 examines trends in victimization in the two developments, using the consistent panel of respondents. It illustrates substantial reductions in levels of victimization in Curtis Park over the course of the evaluation. The percentage victimized by personal crime fell from 26 percent to 13 percent, and by property crime from 60 percent to 34 percent. These are very large declines, and they are statisti-

cally reliable. On the other hand, there was a slight upward shift in both measures of victimization in Quigg Newton; these changes were not statistically reliable, however, and it would be more accurate to say that the numbers simply did not change very much over the course of the year. Like overall levels of victimization, these trends were also virtually identical in the pooled set of all interviews.

The similarity of the victimization trends in the two sets of data is detailed in Table 5.³

RECORDED CRIME

It is difficult to compare these trends in victimization with comparable trends in reported crime, for officially there was very little crime in these developments. As noted in Table 6, during the six months before the first survey (July-December, 1989), residents of Curtis Park reported (and the police recorded as verified) only 12 personal crimes and 27 property crimes. In Quigg Newton, the comparable figures were 8 and 21. Recorded property crime went down a bit in Curtis Park during 1990, while personal crime went up a little, but the numbers involved make it hard to extract any trend. In Quigg Newton, recorded property and personal crime jumped up and down, again in small numbers. Recorded crime data for all DHA developments and for Denver as a whole point to a drop in property crime (including burglary) during the evaluation period, but an increase in personal crime.

It is clear, however, that these official crime counts do not match the results of the victim surveys. This is best illustrated by burglary, which was common enough in the survey

³ A detailed examination of specific types of crime that were frequent enough to be examined separately (for example, burglary) pointed to the same conclusions suggested by Figure 2-6.

(60 or so cases in each development at wave 1) when compared to official statistics. Using for the computation (a) the number of households in each development, (b) the survey estimate of the percentage of households victimized during the six months before the first wave of interviews, and (c) the percentage of those burglaries that victims claim they reported to the police, one would anticipate that the Denver police would have recorded at least 44 burglaries in Curtis Park and 34 burglaries in Quigg Newton for the period. Police files, however, included only 18 burglaries in Curtis Park and 14 in Quigg Newton; in both cases, this was only 41 percent of what "should" have been there. There are several reasons why this could happen. Victims may be recalling incidents that happened more than six months ago, the period set forth in the evaluation survey (a common problem in measuring victimization), and they may be overstating how frequently they reported them to the police. On the other hand, it is possible that Denver police claimed as unfounded many of the burglary incidents reported to them, or were not keeping a correct count of their number. In any event, the great difference between the two accounts of crime illustrates the importance of gathering independent estimates of the

amount of crime when evaluating crime-reduction programs.

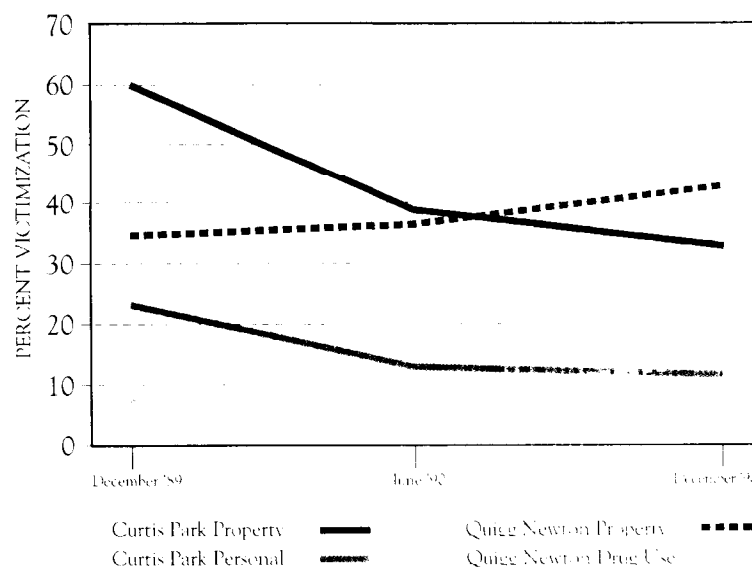
FEAR OF CRIME

An alternative measure of crime is fear. Perhaps less dependent upon complex methodological problems, trends in fear may be a robust—if indirect—indication of crime problems. To measure fear of crime, respondents were asked a series of questions about crime conditions in their development.

- Is there any particular place in this development where you would be afraid to go alone either during the day or after dark? [Yes or no]
- How safe would you feel being alone outside around this development at night? Would you feel very safe, somewhat safe, somewhat unsafe, or very unsafe?

Respondents were also asked about "things that might worry you in this development," and if they were "very worried, somewhat worried, or not worried at all?"

FIGURE 6: VICTIMIZATION



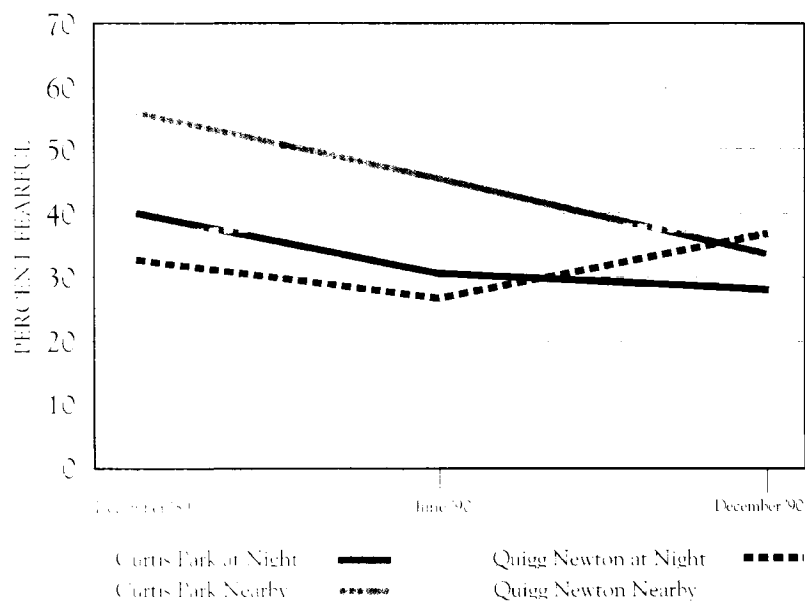
- Someone will try to rob you or steal something from you while you are outside around this development?
- Someone will try to attack you or beat you up while you are outside around this development?
- Someone will try to break into your home while no one is there?
- Someone will try to steal things that you might leave outside your home overnight?

- Someone will try to vandalize your unit?

Cluster analysis and factor analysis indicated that the five "worry" questions reflected the same set of underlying conditions, and could be combined to form a crime worry index. The questions concerning fear of crime after dark and unsafe places clustered separately, and were examined individually. Scores on these measures are detailed for all three waves in Table 7.

Figure 7 plots two of these indicators of crime problems in the two developments. The results generally parallel those achieved in the victimization surveys. By both measures, fear of crime went down substantially and significantly in Curtis Park during the course of the evaluation, principally between waves 1 and 2. On the other hand, levels of fear were essentially stable in Quigg Newton; the small fluctuations up and down in these measures of fear were not statistically significant. These

FIGURE 7: FEAR OF CRIME



patterns were similar for panel respondents and among the complete pool of persons interviewed during the course of the evaluation. The five-item "worry" index showed the same pattern: a significant decline over time in Curtis Park, and an insignificant decline in Quigg Newton. ●

Monitoring Assessments of Policing

THE EVALUATION SURVEYS ALSO INCLUDED MEASURES OF THE PERCEIVED QUALITY OF POLICE SERVICE IN THE TARGET DEVELOPMENTS. IT WAS PARTICULARLY IMPORTANT TO MONITOR RESIDENT ASSESSMENTS OF THE POLICE; THE STRONG ENFORCEMENT ORIENTATION OF NÉPHU GREATLY INCREASED THE POTENTIAL FOR ABRASIVE CONTACTS BETWEEN POLICE AND ORDINARY CITIZENS IN THE TARGET DEVELOPMENTS. AT THE EXTREME, A PROGRAM THAT SUCCESSFULLY TARGETED DRUG PROBLEMS AT HEAVY EXPENSE TO CIVIL RELATIONS BETWEEN POLICE AND THE COMMUNITY MIGHT NOT BE WORTH THE COST OF UNDERMINING PUBLIC COOPERATION WITH POLICE, INCREASING THE LEVEL OF DANGER TO POLICE WORKING IN THE AREA, AND PERHAPS SPARKING UNREST.

Police service was assessed taking into account two factors: police responsiveness to community concerns and police treatment of residents. Researchers measured each by use of several questions. Figure 8 illustrates the pattern of responses to these questions; detailed figures are reported in Table S.

The evaluation surveys included five questions about *police responsiveness to community concerns*. Residents of Curtis Park and Quigg Newton were asked:

- How responsive are the police in this area to community concerns? Are they very responsive, somewhat responsive, somewhat unresponsive, or very unresponsive?

- How good a job are the police doing in working together with residents of this development to solve local problems? Would you say they are doing a very good job, a good job, fair job, or poor job?
- How good a job do you think they are doing to prevent crime in this development? Would you say they are doing a very good job, a good job, fair job, or poor job?
- How good a job are the police doing in dealing with the problems that really concern people in this development? Would you say they are doing a very

good job, a good job, fair job, or poor job?

- How good a job are the police doing in dealing with the drug problem? Would you say they are doing a very good job, a good job, fair job, or poor job?

Responses to these questions were highly consistent; they were correlated an average of $+0.59$, and they formed an index with a reliability of $+0.88$. Note that the question referring specifically to how effectively the police were dealing with drug problems clustered with other "responsiveness" measures (it was correlated with the index score $+0.78$).

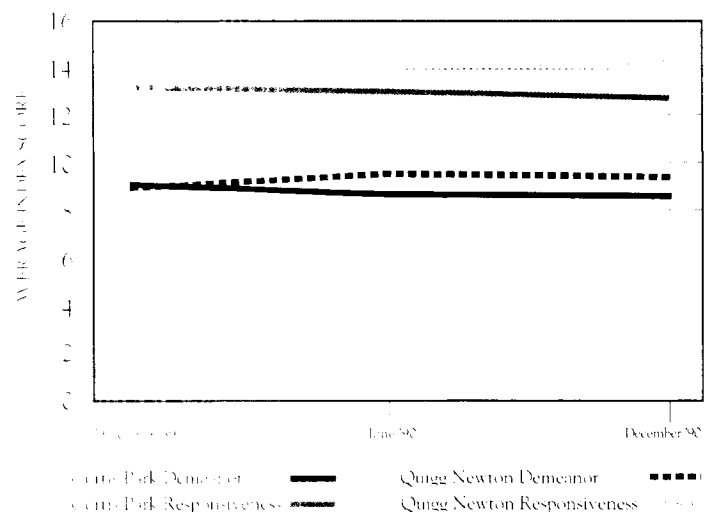
Residents of the two developments were also asked about *how the police behaved* toward them and their neighbors. In the survey, respondents were asked:

- In general, how polite are the police when dealing with people in this development? Are they very polite, somewhat polite, somewhat impolite, or very impolite?
- When dealing with people's problems in this development, are the police generally very concerned, somewhat concerned, not very concerned, not concerned at all about their problems?
- In general, how fair are the police when dealing with people in this development? Are they very fair, somewhat fair, somewhat unfair, or very unfair?

Responses to these three questions were correlated an average of $+0.57$, and they formed an index of police demeanor with a reliability of $+0.80$, meaning the responses to the questions were very consistent.

Two general trends are evident in Figure 8 and Table 8. First, the police were somewhat more highly regarded in Quigg Newton than in Curtis Park, especially as the year wore on. By

FIGURE 8: ASSESSMENTS OF POLICING



both measures the opinions of residents of Curtis Park grew more negative over time. Their perceptions of police responsiveness and their rating of how well police worked with community residents both declined, although only the former was statistically significant (and only for panel respondents). On the other hand, the views of residents of Quigg Newton grew more positive between December, 1989, and December, 1990. Changes in perceived responsiveness and demeanor between wave 1 and wave 3 were significant for the Quigg-Newton cross sections and resident views of police demeanor became significantly more positive among panel respondents.

Table 8 also presents responses to the question concerning police effectiveness in dealing with drugs. A slim majority of those questioned thought that the police were doing either a "very good" or "good" job. This reading was unchanged over the course of the program in both the Quigg Newton and Curtis Park panels. An improvement in these ratings in the Curtis Park cross sections between waves 1 and 2 was reversed, and by this measure opinion about the police grew significantly worse between waves 2 and 3.

In summary, assessments of the quality of police service did not change dramatically during the course of the NEPHU evaluation. The views of residents of Curtis Park remained essentially unchanged, while on several measures those of the residents of Quigg Newton became more positive. ●

THE NEPHU PROGRAM IN DENVER CONSISTED OF SIX FULL-TIME OFFICERS. THE PROGRAM WAS PRIMARILY ENFORCEMENT ORIENTED. THE UNIT EMPLOYED TRADITIONAL POLICING METHODS, INCLUDING SURVEILLANCE, CONTROLLED-BUY/WARRANT ARRESTS, BUY-BUSTS, AND ON-VIEW ARRESTS. THE UNIT FAILED TO DEVELOP ANY POLICE-COMMUNITY PARTNERSHIP.

The results of the evaluation suggest that something happened in the two housing developments that were monitored. The citizen surveys suggest that the program achieved its major goal of reducing the availability of drugs in the two housing developments. Even though the lack of a meaningful "control" site in the research design makes it difficult to attribute the changes directly to NEPHU, there are no simple alternative explanations for the reported reduction in victimization in Curtis Park and the decline in many measures of drug market activity in both Curtis Park and Quigg Newton.

The surveys gathered reports of the availability of drugs in and around the two developments, perceptions of the use of drugs there by adults and youths, and assessments of the impact of drugs on crime and gang activity. These indicators pointed to steady improvements in both projects during the course of the evaluation. The survey results point to a relatively high frequency of use and availability of drugs in both developments prior to the implementation of NEPHU. More than half of the respondents (58 percent) thought that youths in the development used drugs very fre-

quently, 56 percent thought it was very easy to buy drugs in the area, and 65 percent thought drugs were a big factor in causing crime in the developments. The analysis shows that all three indices of the drug problem in the two developments declined significantly during the evaluation period.

The number of arrests during the evaluation period is another indicator of the effect of enforcement efforts in the two housing developments and their immediate surroundings. The arrest data indicate that drug arrests were off 88 percent in Curtis Park between the first six months of 1989 and the last half of 1990. Citywide, however, they declined only 20 percent during the same period. If this is taken as evidence of a decline in drug market activity (and it certainly was reflected in the frustration of unit members, who after several months could not find as much "action" as they desired), it could be evidence of unit effectiveness. While the decline in drug arrests is not the best evidence of program effect, it is congruent with other evidence from the resident surveys.

Multiple indicators of the extent of crime in the two projects partly paralleled these findings. Survey measures

of personal and household victimization pointed to substantial declines in crime in Curtis Park during 1990. This was mirrored in measures of fear of crime, which also went down during the same period. Shifts in crime and fear were not significant in Quigg Newton; there these problems remained essentially unchanged (but at a lower level than in Curtis Park) during the evaluation. This did not come as a complete surprise since NEPHU concentrated most of its activities during the first six months of the program in Curtis Park.

These apparent gains were achieved without seriously eroding perceptions of the quality of police service and the way in which they treated residents of the housing developments, an important finding in light of their enforcement orientation. Beliefs about the responsiveness and demeanor of police did not change much in Curtis Park, and they improved significantly in Quigg Newton. Residents of Quigg Newton were also more likely to report that the police were doing a better job dealing with drug problems. This does not mean that they were particularly *happy* about the police department. In fact, only about one-quarter of those interviewed thought the police were "very fair" or "very concerned" while dealing with residents, and less than 22 percent of those in either housing development thought they were doing a "very good job" addressing the drug problem. In this respect, they closely resembled residents of other poor and minority neighborhoods that the Police Foundation has interviewed over the past decade.

The question, however, remains whether there would have been more positive change in citizen perception of police responsiveness and demeanor had the unit fulfilled its original commitment of community involvement and drug education. Even though NEPHU did not appear to make things worse, we believe that limited involvement of the residents could have resulted in significant improvement in their perception of police services. We know, for example, that in Oakland, the *attempt* at involving the residents produced a positive effect on the community (Uchida, et al., 1992). We also know that in Houston organizing community groups in low income neighborhoods significantly in-

creased their satisfaction with police services (Pate, et al., 1986).

RECOMMENDATIONS FOR FUTURE EVALUATION

The results of this evaluation make clear the challenges researchers face in trying to assess the impact of law enforcement strategies designed to (1) reduce the availability of narcotics (2) decrease levels of crime and fear, and (3) increase citizen confidence in police. The first challenge is finding adequate funding to carry out the controlled, multimethod, multimeasure study (Campbell and Fiske, 1959) that can definitively assess the "whats, whys, and hows" of a drug-reduction program's impact. This means that evaluators must not rely exclusively on self-report data from residents or official crime or arrest data from the police. As we attempted in this evaluation, the data must include surveys, archival records and systematic observation of the implementation process.

This study and many other evaluations show that programs often experience some change during the course of the project. The second challenge facing evaluators, therefore, is making sure that the baseline data include a wide range of measures. Even though such an approach would lead to collecting data that might not be used in the final analysis, it would ensure that data critical to the assessment of specific strategies that might evolve during the implementation process will be available.

This evaluation also highlighted the difficulty of maintaining control areas that would serve as benchmarks reflecting "normal" levels of victimization and drug market activity. The control areas might have been other housing developments or "matched" poor and minority areas of Denver. It would have been difficult, however, to find ordinary residential neighborhoods in Denver that matched the demographic composition and characteristic lifestyles of these public housing developments. In addition, many narcotics enforcement teams were active throughout the City of Denver during the evaluation period, including those with special funding that they felt obligated to justify

with dramatic results. In practical terms, it would have been impossible to restrain these very aggressive teams from working wherever their leads took them—which often would have been into poor and minority areas. Our evaluation plan called for NEPHU to avoid one of the developments (Quigg Newton) during the first six months of the project, so that it would serve as a control site, but the unit's mandate to focus on public housing so greatly narrowed its range of operations that NEPHU officers were unable to restrain themselves.

This study also makes clear that law enforcement agencies face certain challenges as they attempt to develop and implement narcotics reduction programs. Again, adequate funding and full implementation are essential. The program staff, for instance, should be large enough to avoid major interruptions in field operations during the absence of one or two members.

Law enforcement agencies must also make special efforts to overcome the atmosphere of mistrust that characterizes the relationship between police and residents of public housing developments. Fear and suspicion of police have often made residents apathetic and unwilling to participate in police-community partnerships. Law enforcement must make concerted efforts to develop police-community partnerships for drug reduction, especially in the poorest and most vulnerable communities. ●

REFERENCES

- Bratt, Richard. (1986). "Public Housing: The Controversy and Contribution." In Richard Bratt, Charles Hartman and Andrew Mayerson (eds.), *Critical Perspectives on Housing*. Philadelphia: Temple University Press, pp. 335-361.
- Campbell, D.T. and D.W. Fiske. (1959). "Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix." *Psychological Bulletin*. 56 :81-105.
- Dunworth, Terrance and Aaron Saiger. (1992). "Drugs and Crime in Public Housing: A Three City Survey." Final Report. Santa Monica, CA, The RAND Corporation.
- Pate, A.M. (1984). "Evaluation of the Urban Initiatives Anti-Crime Program: Final Report." Washington, DC: Department of Housing and Urban Development, Office of Policy Development and Research.
- Pate, A., M.A. Wycoff, W.G. Skogan, and L. Sherman. (1986). "Reducing Fear of Crime in Houston and Newark: A Summary Report." Washington, DC: The Police Foundation and the National Institute of Justice.
- Skogan, Wesley G. and S.O. Annan. (1993a). "Drug Enforcement in Public Housing." In Arthur Lurigio, Robert C. Davis and Dennis Rosenbaum (eds.), *Communities and Drugs*. Springfield, IL: Charles C. Thomas (pp. 162-173).
- Skogan, Wesley G. and S.O. Annan. (1993b). "Narcotics Enforcement in Public Housing." In Doris Layton MacKenzie and Craig Uchida (eds.), *Drugs and the Criminal Justice System*. Newbury Park, CA: Sage Publications (in press).
- Sparrow, Malcolm K., M. H. Moore and D. M. Kennedy. (1990). *Beyond 911: A New Era for Policing*. New York: Basic Books.
- Uchida, Craig D., B. Forst, and S. O. Annan. (1992). *Modern Policing and the Control of Illegal Drugs: Testing New Strategies in Two American Cities*. Washington, DC: National Institute of Justice and Police Foundation.
- Weisel, Deborah Lamm. (1990). "Playing the Home Field: A Problem Oriented Approach to Drug Control," in *Special Issue: Drug Enforcement, American Journal of Police*. Cincinnati: Anderson Press, pp 90-94. ●

TABLES

TABLE 1

DEMOGRAPHIC PROFILE OF DEVELOPMENT RESIDENTS

DEMOGRAPHIC CHARACTERISTICS	CURTIS PARK	QUIGG NEWTON
Percent black	70	4
Percent Hispanic	26	86
Percent have a job	15	14
Percent income under \$6,000	85	88
Percent not high school graduate	56	79
Percent with children	69	67
Percent one-adult families	77	83
Percent unmarried	93	87
Percent female	94	92
Percent under 40	55	54
Percent 60 and older	20	24
Percent recent victim of:		
burglary	25	22
robbery	6	2
vandalism	21	15
Number of cases	251	268

NOTE: based on all wave 1 interviews

TABLE 2
POLICE VISIBILITY AND CONTACT

POLICE VISIBILITY MEASURES	PANEL		POOLED WAVES	
	CURTIS PARK	QUIGG NEWTON	CURTIS PARK	QUIGG NEWTON
Police visibility index				
December 1989	2.8	1.8	3.0	1.9
June 1990	2.9	2.2	2.9	2.3
December 1990	2.2	2.0	2.1	1.8
Number of cases	145	136	250 196 209	267 224 213
Significance of changes				
W 1-2	.74	.02	.54	.01
W 1-3	.00	.12	.00	.54
W 2-3	.00	.40	.00	.00
Percent stopped by police				
December 1989	15.7	10.4	18.1	12.5
June 1990	10.3	6.6	10.7	9.8
December 1990	9.6	12.5	10.0	13.6
Number of cases	140	135	243 196 209	263 224 213
Significance of changes				
W 1-2	.14	.30	.03	.34
W 1-3	.10	.53	.01	.73
W 2-3	.82	.07	.83	.22
Percent heard of Searches				
December 1989	53.4	30.1	56.2	30.7
June 1990	41.1	27.7	42.3	28.9
December 1990	38.4	22.8	37.8	20.2
Number of cases	146	136	251 196 202	267 225 213
Significance of changes				
W 1-2	.01	.66	.00	.66
W 1-3	.01	.12	.00	.01
W 2-3	.60	.24	.35	.03

TABLE 3
DETAILED DRUG MARKET QUESTIONS

DRUG MARKET MEASURES	PANEL		POOLED WAVES	
	CURTIS PARK	QUIGG NEWTON	CURTIS PARK	QUIGG NEWTON
Drugs a big factor in crime				
December 1989	69.4	60.9	70.0	59.0
June 1990	59.4	53.1	59.6	51.9
December 1990	47.2•	53.7	49.5•	47.6•
Drug use by youths rated very frequent				
December 1989	58.7	57.9	59.9	53.0
June 1990	53.6	44.2	52.7	45.4
December 1990	40.7•	45.8•	43.8•	45.7•
Pressure on most youths to be involved in drug sales				
December 1989				
June 1990	35.9	29.4	34.9	31.1
December 1990	35.9	35.3	36.3	33.7
	22.2	16.8	22.4	15.2•
Drug use by adults rated very frequent				
December 1989	54.8	46.2	53.7	43.2
June 1990	43.5	39.8	46.5	40.2
December 1990	32.6•	39.1	33.7•	35.5•
Drug availability in the area rated very easy				
December 1989	60.4	52.2	60.4	47.4
June 1990	49.6	48.7	51.5	47.3
December 1990	40.9•	31.4•	42.1•	31.7•
Drug availability on the street rated very easy				
December 1989	68.9	45.9	68.9	45.2
June 1990	60.5	48.8	61.1	47.3
December 1990	43.8•	41.5	45.7•	40.8
Finding a development drug apartment rated very easy				
December 1989				
June 1990	46.2	37.5	47.7	36.9
December 1990	33.6	31.9	35.8	31.3
	33.6•	30.6•	36.2•	30.6•
Approximate number of cases				
December 1989	135	128	233	251
June 1990	135	128	178	212
December 1990	135	128	204	208

NOTE: • Indicates wave 1 to wave 3 change was significant $p > .05$ using a two-tailed test.

TABLE 4
DRUG INDEX MEANS

DRUG AVAILABILITY MEASURES	PANEL RESPONDENTS		POOLED WAVES	
	CURTIS PARK	QUIGG NEWTON	CURTIS PARK	QUIGG NEWTON
Drug availability index				
December 1989	7.2	6.4	7.3	6.4
June 1990	6.5	6.1	6.6	6.0
December 1990	6.2	5.8	6.3	5.8
Number of cases	119	108	210 160 192	216 187 171
Significance of changes				
W 1-2	.00	.36	.00	.14
W 1-3	.00	.04	.00	.01
W 2-3	.06	.16	.15	.35
Drug use index				
December 1989	5.7	5.6	5.8	5.5
June 1990	5.5	5.2	5.5	5.2
December 1990	5.1	5.2	5.2	5.1
Number of cases	114	108	204 153 190	225 183 174
Significance of changes				
W 1-2	.06	.04	.17	.04
W 1-3	.00	.02	.00	.01
W 2-3	.06	.29	.03	.55
Drugs and crime index				
December 1989	4.7	4.4	4.7	4.5
June 1990	4.6	4.4	4.6	4.4
December 1990	4.3	4.2	4.3	4.0
Number of cases	120	115	225 161 191	232 195 191
Significance of changes				
W 1-2	.19	.60	.33	.32
W 1-3	.00	.09	.00	.00
W 2-3	.12	.00	.02	.00

TABLE 5
VICTIMIZATION

VICTIMIZATION PREVALENCE	PANEL RESPONDENTS		POOLED WAVES	
	CURTIS PARK	QUIGG NEWTON	CURTIS PARK	QUIGG NEWTON
December 1989				
Personal	23.3	6.6	24.3	12.7
Property	59.6	35.0	59.0	40.7
June 1990				
Personal	12.3	8.8	11.2	10.2
Property	39.0	36.5	40.8	40.3
December 1990				
Personal	11.0	12.4	11.5	12.6
Property	34.2	41.6	31.6	37.9
Average number of cases	146	137	219	236
Significance of personal changes				
W 1-2	.01	.47	.01	.38
W 1-3	.01	.09	.01	.98
W 2-3	.68	.20	.93	.42
Significance of property changes				
W 1-2	.01	.75	.01	.93
W 1-3	.01	.23	.01	.53
W 2-3	.30	.29	.05	.60

TABLE 6
POLICE CRIME AND ARREST PATTERNS

REPORTED CRIMES AND ARRESTS	CURTIS PARK	QUIGG NEWTON	ALL PROJECTS	CITY OF DENVER
Part I Crimes				
July-Dec 1989	39	30	237	18964
Jan-June 1990	28	35	202	18010
July-Dec 1990	33	35	210	16730
Burglary				
July-Dec 1989	18	14	78	5409
Jan-June 1990	12	13	74	4603
July-Dec 1990	10	12	60	4404
Property Crime				
July-Dec 1989	27	21	178	17040
Jan-June 1990	15	30	152	15986
July-Dec 1990	15	25	145	14588
Personal Crime				
July-Dec 1989	12	8	54	1674
Jan-June 1990	12	5	46	1764
July-Dec 1990	17	10	61	1920
Part I Arrests				
July-Dec 1989	18	13	78	4339
Jan-June 1990	13	21	74	4313
July-Dec 1990	8	8	66	4352
Drug Arrests				
July-Dec 1989	31	4	57	1618
Jan-June 1990	11	4	41	1361
July-Dec 1990	4	5	21	1313

SOURCE: Office of Policy Analysis, Department of Safety, City and County of Denver

TABLE 7
FEAR OF CRIME

MEASURES OF FEAR OF CRIME	PANEL		POOLED WAVES	
	CURTIS PARK	QUIGG NEWTON	CURTIS PARK	QUIGG NEWTON
Worry about crime index score				
December 1989	8.0	8.0	8.0	8.0
June 1990	7.0	7.8	7.2	7.7
December 1990	7.2	7.7	7.3	7.5
Number of cases	145	135	249 196 208	265 226 212
Significance of changes				
W 1-2	.00	.33	.00	.27
W 1-3	.00	.22	.01	.10
W 2-3	.26	.67	.61	.56
Fear alone at night				
December 1989	2.9	2.7	2.9	2.7
June 1990	2.6	2.5	2.6	2.5
December 1990	2.6	2.7	2.7	2.7
Number of cases	145	136	250 196 208	267 226 213
Significance of changes				
W 1-2	.01	.09	.03	.01
W 1-3	.00	.59	.08	.85
W 2-3	.82	.23	.64	.03
Percent fear unsafe places in development				
December 1989	56	38	52	37
June 1990	45	40	47	42
December 1990	34	37	35	35
Number of cases	145	136	246 196 209	265 225 213
Significance of changes				
W 1-2	.05	.62	.35	.32
W 1-3	.00	.89	.00	.63
W 2-3	.04	.53	.01	.16

TABLE 8
ASSESSMENTS OF POLICING

PERCEPTIONS OF POLICE	PANEL		POOLED WAVES	
	CURTIS PARK	QUIGG NEWTON	CURTIS PARK	QUIGG NEWTON
Police demeanor index				
December 1989	9.0	9.1	8.8	8.6
June 1990	8.8	9.4	8.6	9.3
December 1990	8.6	9.3	8.5	9.3
Number of cases	130	119	226 177 195	243 203 180
Significance of change				
W 1-2	.09	.24	.34	.00
W 1-3	.05	.38	.13	.00
W 2-3	.57	.93	.66	.79
Community responsiveness index				
December 1989	13.4	13.3	13.2	12.5
June 1990	13.2	13.9	13.1	13.8
December 1990	12.9	14.2	12.8	14.4
Number of cases	133	121	232 181 190	234 201 186
Significance of change				
W 1-2	.98	.08	.73	.00
W 1-3	.27	.04	.27	.00
W 2-3	.38	.20	.47	.14
Police effectiveness dealing with drugs				
December 1989	2.6	2.6	2.6	2.4
June 1990	2.7	2.7	2.7	2.6
December 1990	2.6	2.8	2.6	2.9
Number of cases	136	125	237 188 200	251 207 193
Significance of change				
W 1-2	.21	.74	.36	.05
W 1-3	.64	.08	.96	.00
W 2-3	.36	.07	.35	.01