



Homicide in Eight U.S. Cities: Trends, Context, and Policy Implications



AN INTRAMURAL PROJECT OF THE NATIONAL INSTITUTE OF JUSTICE

U.S. Department of Justice Office of Justice Programs 810 Seventh Street N.W. Washington, DC 20531

Janet Reno Attorney General U.S. Department of Justice

Raymond C. Fisher Associate Attorney General

Laurie Robinson Assistant Attorney General

Jeremy Travis Director, National Institute of Justice

> Justice Information Center World Wide Web Site http://www.ncjrs.org

National Institute of Justice World Wide Web Site http://www.ojp.usdoj.gov/nij/

Homicide in Eight U.S. Cities: Trends, Context, and Policy Implications

An Intramural Research Project

Pamela K. Lattimore, Ph.D. James Trudeau, Ph.D. K. Jack Riley, Ph.D. Jordan Leiter, Ph.D. Steven Edwards, Ph.D.

> December 1997 NCJ 167262

This Research Report discusses an NIJ intramural research project. Opinions expressed are those of the authors and not necessarily those of the U.S. Department of Justice. Comments and questions should be addressed to Pamela K. Lattimore, Director, Criminal Justice and Criminal Behavior Division, Office of Research and Evaluation, NIJ, 810 Seventh Street N.W., Room 7333, Washington, DC 20531; or at pam@ojp.usdoj.gov.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, Bureau of Justice Statistics, Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.



The authors thank Attorney General Janet Reno, Assistant Attorney General Laurie Robinson, OJP, and NIJ Director Jeremy Travis for their support of this research. The authors acknowledge the contributions of DOJ staff: Eric Baumer, Stephanie Bourque, Stephen Holmes, Eric Jefferis, Robert Kaminski, Nancy La Vigne, Richard Lewis, Angela Moore-Parmley, Steve Shandy, and Jane Wiseman made site visits; Thomas Feucht, Ginger Kyle, Rosemary Murphy, and Christy Visher reviewed materials. Gil Gee and colleagues at the FBI's Uniform Crime Reporting Center provided assistance with the data. The authors extend thanks to the many individuals in the eight study cities and two pilot cities who gave their time and cooperation. Special thanks also go to Michael Farrell, Adele Harrell, Michael Maxfield, Cheryl Maxson, Richard Rosenfeld, and Margaret Zahn for their reviews and constructive criticism. Of course, the responsibility for errors and omissions lies solely with the authors.

| Chapter Two: Project Design | |
|---|---|
| Research Hypotheses | |
| Site Selection | 7 |
| Interview Development | |
| Project Implementation | |
| Appendix 2–A. Homicide Counts and Rates for 77 Cities | |
| Chapter Three: Homicide Trends | |
| Population and Homicide Victimization | |
| Homicide Victimization Rates | |
| Disproportionate Homicide Victimization | |
| Homicide Arrests and Homicide Arrest Rates | |
| Similarity of Homicide Victims and Offenders | |
| Circumstances of Homicides | |
| Chapter Four: The Macro Domain: Environmental Context and Homicides | |
| Economic and Related Factors | |
| Poverty | |
| Income Distribution | |
| Employment | |
| Household Type | |
| Education | |
| System Responses or Resources | |
| Emergency Medical Services | |
| Domestic Violence Programs | |
| Public Housing | |
| Summary | |
| Appendix 4–A. Homicides and Poverty in Washington, D.C., 1994 | |
| Chapter Five: The Micro Domain: Behavior and Homicide | |
| Drugs | |
| Two Hypotheses | |
| Perceived Impact of Drugs on Violent Crime and Homicide | |
| Use Versus Market Stability | |
| Drug Use | |
| Cocaine and Homicide Trends | |
| Other Drugs and Homicide Trends | |
| Drugs and Domestic Violence | |

TABLE OF CONTENTS



| Drug Market Stability | 87 |
|--|-----|
| Linking Drugs and Homicide Trends | |
| Policy Implications | |
| Guns | |
| Gun Hypothesis | |
| Perceptions of Guns | |
| Gun Control Strategies | |
| Gun Prevalence | 101 |
| Guns and Drug Selling | 101 |
| Policy Implications | |
| Gangs | 103 |
| Gang Hypothesis | 103 |
| Perceptions of Gangs | |
| Gangs and Drugs | |
| Policy Implications | |
| Appendix 5–A. Data Sources | |
| Appendix 5–B. Supplement to Homicide and Drug Analyses | 113 |
| Chapter Six: Criminal Justice System Domain: Response to Homicide and Violence | |
| Law Enforcement Efforts | 120 |
| Changes in Policing Practices in the Study Cities | 121 |
| Policing Practices in Public Housing | 122 |
| Community Policing Efforts | 122 |
| Summary of Law Enforcement Efforts | 123 |
| Arrest Policies and Police Practices for Domestic Violence | 123 |
| Multiagency Task Forces | |
| Four Task Force Arrangements | 126 |
| Witness Cooperation, Protection, and Intimidation | |
| Summary of Task Force Issues | |
| Incapacitation and Deterrence: The Effect of Inmate Flows | |
| Likelihood and Severity of Punishment | |
| Likelihood of Arrest | 131 |
| Clearance Rates and Victim/Offender Relationship | |
| Chapter Seven: Conclusions and Future Work | |
| Demographic Patterns and Homicide | |
| Economic Conditions and Homicide | |
| Services and Homicide | |
| | |



| Drugs, Guns, Gangs, and Homicide | 140 |
|----------------------------------|-------|
| Policing and Homicide | . 142 |
| Task Forces and Homicide | . 142 |
| Punishment and Homicide | . 142 |
| Future Work | . 143 |



| Table 2–1. | Structural Hypotheses Relating to Changes in City-Level Homicide Rates | 6 |
|-------------|--|-----|
| Table 2–2. | Linear Regression Model Results for 32 Cities | |
| Table 2–3. | Eight Cities Selected by Strongest Homicide Trend | 14 |
| Table 3–1. | Distribution of Homicide Victimization Counts, 1985 and 1994 | |
| Table 3–2. | Regression Results of Victim/Offender Age | 43 |
| Table 3–3. | Homicide Victim/Offender Age Relationships | 44 |
| Table 3–4. | Homicide Victim/Offender Race/Gender Combinations | 45 |
| Table 4–1. | Intimate/Family Homicides by Victim's Gender, 1985–1994 | 59 |
| Table 5–1. | Correlation of Homicide and Male Arrestee Cocaine-Positive Percentages | 76 |
| Table 5–2. | Regression Model of Cocaine-Positive Percentages on Homicide Rates | 77 |
| Table 5–3. | Percentage of Opiate-Positive Arrestees Testing Positive for Cocaine | 83 |
| Table 5–4. | Percentage of Cocaine-Positive Arrestees Testing Positive for Opiates | |
| Table 5–5. | Percentage of Arrestees Testing Positive for Cocaine Who Also Reported Recent Alcohol Use | 85 |
| Table 5–6. | Percentage of Arrestees Reporting Recent Alcohol Use Who Also Tested Positive for Cocaine | 85 |
| Table 5–7. | Market and Use Risk Factors for Heroin, Powder Cocaine, and Crack | |
| Table 5–8. | Correlation of Total Homicides and Gun Homicides | |
| Table 5–9. | Regression of Total Homicides and Gun Homicides | |
| Table 5–10. | Homicide Rates and Arrestees' Self-Reports of Firearm Ownership, 1995 | 102 |
| Table 5–11. | Correlations of Homicide Rates and Percentages of Cocaine-Positive Male Arrestees in Nonstudy DUF Cities | 115 |
| Table 6–1. | Change in Domestic Violence Arrest Policies | 124 |
| Table 6–2. | Relationship Between Clearance Rate and Homicide Count | 133 |
| Table 6–3. | Correlation Between Homicide Count and Percentage of Homicides for Which Victim/Offender Relationship Is Unknown | 136 |



| Figure 1–1. | Homicides in the United States, 1985–1994 | 2 | | | | | | |
|--------------|---|----|--|--|--|--|--|--|
| Figure 1–2. | United States' Homicide Rate, 1960–1995 | | | | | | | |
| Figure 2–1. | Site Selection Process | | | | | | | |
| Figure 2–2. | Mean Annual Homicide Counts for 77 Largest U.S. Cities, 1985–1994 | | | | | | | |
| Figure 2–3. | Mean Annual Homicide Rates for 77 Largest U.S. Cities, 1985–1994 | | | | | | | |
| Figure 2–4. | Mean Annual Homicide Counts and Rates for 32 U.S. Cities, 1985–1994 | 10 | | | | | | |
| Figure 2–5. | Ten-Year Homicide Rate Trends in 32 U.S. Cities, 1985–1994 | 11 | | | | | | |
| Figure 2–6. | Annual Homicide Rates for Selected Cities, 1985–1994 | 14 | | | | | | |
| Figures 2–7 | | | | | | | | |
| through 2-10 | Observed and Expected Homicide Rate Trends for Selected Cities, 1985–1994 | 15 | | | | | | |
| Figure 2–7 | . Decreasing Quadratic Homicide Trend in Atlanta and Washington, D.C. | 15 | | | | | | |
| Figure 2–8 | . Decreasing Linear Homicide Trend in Detroit and Tampa | 15 | | | | | | |
| Figure 2–9 | . Increasing Linear Homicide Trend in New Orleans and Richmond | 15 | | | | | | |
| Figure 2–1 | 0. "No Change" and Increasing Quadratic Homicide Trends in Miami and Indianapolis | 15 | | | | | | |
| Figure 2–11. | Average Population of Selected Cities, 1985–1994 | 16 | | | | | | |
| Figure 2–12. | Population and Homicide Counts of Eight Selected Cities During 1985–1994, Compared With 77 Largest U.S. Cities | 17 | | | | | | |
| Figure 3–1. | Cities' Population, by Race, 1985–1994 | 26 | | | | | | |
| Figure 3–2. | Homicide Victimization Counts, by Gender, 1985–1994 | 28 | | | | | | |
| Figure 3–3. | Homicide Victimization Counts, by Race, 1985–1994 | 29 | | | | | | |
| Figure 3–4. | Male Homicide Victimization Counts, by Race, 1985–1994 | 29 | | | | | | |
| Figure 3–5. | Female Homicide Victimization Counts, by Race, 1985–1994 | 30 | | | | | | |
| Figure 3–6. | Homicide Victimization Counts, by Age Group, 1985–1994 | 30 | | | | | | |
| Figure 3–7. | Homicide Victimization Counts of Black Males Compared With Total Homicides, 1985–1994 | 31 | | | | | | |
| Figure 3–8. | Black Male Homicide Victimization Rates, by Age, 1985–1994 | 32 | | | | | | |
| Figure 3–9. | White Male Homicide Victimization Rates, by Age, 1985–1994 | 34 | | | | | | |
| Figure 3–10. | Black Female Homicide Victimization Rates, by Age, 1985–1994 | 35 | | | | | | |
| Figure 3–11. | White Female Homicide Victimization Rates, by Age, 1985–1994 | 36 | | | | | | |
| Figure 3–12. | Disproportionate Homicide Victimization of Black Males, 1985–1994 | 37 | | | | | | |
| Figure 3–13. | Homicide Arrests of Black Males Compared With Total Homicide Arrests, 1985–1994 | 38 | | | | | | |



| Figure 3–14. | Homicide Arrest Rates for Black Males, by Age, 1985–1994 | 40 |
|--------------|--|----|
| Figure 3–15. | Homicide Arrest Rates for White Males, by Age, 1985–1994 | 41 |
| Figure 3–16. | Homicide Arrest Rates for Black Females, by Age, 1985–1994 | 41 |
| Figure 3–17. | Homicide Arrest Rates for White Females, by Age, 1985–1994 | 42 |
| Figure 3–18. | Circumstances Surrounding Homicides, 1985–1994 | 46 |
| Figure 4–1. | Individuals Living Below Poverty, by Race, in 1980 and 1990 | 49 |
| Figure 4–2. | Income Distribution for Washington, D.C., 1980 | 50 |
| Figure 4–3. | Income Distribution Measured by Gini Coefficients, 1980 and 1990 | 50 |
| Figure 4–4. | Black Income Equality, 1980 and 1990 | 51 |
| Figure 4–5. | Employment and Labor Force Status, 1990 | 52 |
| Figure 4–6. | Percent Employed (Age 16 and Older), by Race and Gender, 1980 and 1990 | 52 |
| Figure 4–7. | Poverty Status by Household Type, 1990 | 53 |
| Figure 4–8. | Percent of Households Headed by Married Couples, 1980 and 1990 | 53 |
| Figure 4–9. | High School Graduates (Age 25 and Older), 1980 and 1990 | 53 |
| Figure 4–10. | Serious Assaults Resulting in Homicide, 1985–1994 | 58 |
| Figure 4–11. | Homicide and Aggravated Assault Rates, 1985–1994 | 58 |
| Figure 4–12. | Female Homicide Victim/Offender Relationship, 1985–1994 | 60 |
| Figure 4–13. | Male Homicide Victim/Offender Relationship, 1985–1994 | 60 |
| Figure 4–14. | Homicides and Poverty in Washington, D.C., 1994 | 70 |
| Figure 5–1. | Homicide and Male Arrestee Cocaine Use, 1987–1994 | 76 |
| Figure 5–2. | Homicide and Male Arrestee Cocaine Use, by Age, 1987–1994 | 78 |
| Figure 5–3. | Homicide and Male Arrestee Cocaine Use, by Race, 1987–1994 | 79 |
| Figure 5–4. | Race-Specific Victimization and Male Arrestee Cocaine Use, 1987–1994 | 80 |
| Figure 5–5. | Age-Specific Victimization and Male Arrestee Cocaine Use, 1987–1994 | 80 |
| Figure 5–6. | Homicide and Marijuana Use by Male Arrestees, 1987–1994 | 81 |
| Figure 5–7. | Homicide and Opiate Use by Male Arrestees, 1987–1994 | 82 |
| Figure 5–8. | Homicide and Self-Reported Alcohol Use by Male Arrestees, 1987–1994 | 84 |
| Figure 5–9. | Homicide and Self-Reported Alcohol Use (Excluding Cocaine) by Male Arrestees 1987–1994 | 86 |
| Figure 5–10. | Female Homicide Victimization and Drug Use, 1987–1994 | 88 |
| Figure 5–11. | Homicide and Female Arrestee Cocaine Use, 1987–1994 | 88 |
| Figure 5–12. | Homicide Rates and Retail Cocaine Prices, 1987–1994 | 90 |



| Figure 5–13. | Homicide, Male Arrestee Cocaine Test–Positive Percentages, and Local Law Enforcement Interventions | |
|--------------|---|-----|
| Figure 5–14. | Homicide and Male Cocaine Use, Part 1 | 114 |
| Figure 5–15. | Homicide and Male Cocaine Use, Part 2 | 114 |
| Figure 5–16. | Homicide and Cocaine and Methamphetamine Use by Male Arrestees | 116 |
| Figure 5–17. | Homicide and Self-Reported Alcohol Use by Male Arrestees, Part 1 | 117 |
| Figure 5–18. | Homicide and Self-Reported Alcohol Use by Male Arrestees, Part 2 | 117 |
| Figure 6–1. | Inmate Flows, 1985–1993 | 131 |
| Figure 6–2. | Homicide Victimization and Clearance Rates, 1985–1994 | |

х

Introduction

HAPTER

In recent years, sharp declines in homicides have been recorded in several major U.S. cities. New York City, for example, experienced a 31-percent decline in its homicide rate between 1990 and 1994.¹ Although attention has focused on those cities that have recently witnessed dramatic declines in homicide, the downward trend is by no means universal. Indeed, as can be seen in figure 1–1, between 1990 and 1994, the total number of homicides in the United States reflected little change (23,440 homicides recorded in 1990 and 23,310 in 1994) and greatly exceeded the 18,980 recorded in 1985.²

In fall 1995, the National Institute of Justice initiated a series of studies to examine violence in the United States, with a particular focus on violence in cities. The initial efforts were focused on homicide because it represents the most serious level of violence and is the most precisely measured offense in the Nation's crime-reporting systems. During the study, it was necessary to consider "homicide and other serious violent crime" because a variety of factors—some of which were the focus of the project—may influence whether a crime is classified as a serious assault or a murder. The primary focus, however, was on homicide.

Figure 1–1 also shows homicides in "large cities" over the 1985–1994 period, where "large city" has been defined as one with a population of 200,000 or more during at least one year of the study. The focus was on what happens within a city boundary, not in the larger surrounding geographic region (e.g., county or Standard Metropolitan Statistical Area [SMSA]).

There were 78 U.S. cities that had populations greater than 200,000 during the period of interest, but Uniform Crime Reports (UCR) data were not available for one of those cities (Wichita, Kansas). The remaining 77 cities, which had approximately 20 percent of the total U.S. population, accounted for approximately half of the homicides recorded annually in the United States over this period. Further, in 43 of these cities, the number of homicides in 1994 exceeded the number in 1990; in 41 of these cities, the per capita homicide rate in 1994 exceeded the 1990 rate.³ Thus, the focus on national trends and on trends in major cities such as New York that have witnessed recent declines may mask a more complex picture that has substantial variation.

Figure 1–2 places the recent homicide trend in the United States in historical context. Since 1960, the homicide rate per 100,000 inhabitants has varied between a low of about 4.5 in the 1960s to a high of about 10 around 1980.⁴ The years 1984 and 1985 provide the most recent historical low, with an estimated value of 7.9. This study used 1985 as the start point for its 10-year framework.

Policymakers, media representatives, and scholars have attributed the recent declines in homicide to a variety of factors, including demographic and population changes that may have reduced the number of violent offenders on the streets, nuisance and violence abatement programs that may have deterred and incapacitated violent offenders, greater police visibility through wider implementation of problem-oriented or community-oriented policing, reductions in drug



use or stabilization of drug markets, and improvements in social or economic conditions. Generally, these attributions of program effectiveness—e.g., changes in policing practices—have been made with respect to the trends in specific cities that have witnessed *declines* in murders. The difficulty with this approach is that communities that witnessed *increases* in murders also might have experienced similar changes in programs or policies. To determine whether a program or policy change is effective, one must look at the programs or policies in cities that have experienced various trends in homicides over the period of interest.

In approaching this project, the researchers were interested in focusing on homicide as a local phenomenon. The reason for this is twofold. First, many of the factors chosen for study vary across locations and over time—not necessarily in concert with national trends. Second, the policies and programs to address violent crime are primarily the responsibility of local governments (albeit, perhaps, with financial infusions from the Federal Government or State legislatures). Thus, many of the causes and most of the solutions to violent crime were assumed to have been operating at the local or city level.

Resolving the conflicting components of the homicide picture has obvious policy implications. At the tactical level, the allocation of violence prevention resources, for example, depends to some extent on the



understanding of what works to prevent violence. Similarly, at the strategic level, antiviolence policies that may be considered or adopted in light of predicted changes in demographic trends may have to be reconsidered as the understanding of homicide changes. Moreover, what works to combat violence in one community may not work in another. In short, policymakers may benefit substantially by increasing their understanding of homicide.

This report describes the rationale for and approach to a study of homicide in eight U.S. cities—Atlanta, Detroit, Indianapolis, Miami, New Orleans, Richmond, Tampa, and Washington, D.C.-that experienced different trends in homicide from 1985 through 1994. Throughout the planning and operationalization of the project, emphasis was placed on investigating policy-relevant avenues of inquiry and providing findings in a policy-relevant time horizon. The recent changes in violent crime patterns, particularly in New York City, led to increased emphasis on reducing violent crime and homicide elsewhere. The researchers hoped to inform this debate by providing research results as quickly as was feasible. At the same time, the project team wanted to structure the project in a way that would anticipate and encourage additional research on homicide. This study was undertaken to attempt to offer insights on the diverse homicide trends in cities across the country and help organize and prioritize research on the subject.

Five basic decisions guided the development of the project:

- To focus on communities with strong changes in homicide trends in the belief that these changes in homicide trends would be substantial and, thus, more observable.
- To analyze a limited number of cities to establish deeper understanding of changes in signal communities rather than a broader understanding of national trends.
- To study factors that are closely linked with serious violence and homicide.
- To focus on recent history (1985–1994) because this period is most relevant to policymakers.
- To address both perceptions of and actual changes in factors in these communities.

The resulting study researches homicide trends between 1985 and 1994 in eight cities. It begins with a focus on the community, using homicide as the "dependent variable" in the project's inquiry into context, policy, and homicide.

Key findings of the project include evidence:

- (1) Reinforcing the local nature of homicide ("all crime is local").
- (2) Supporting a link between cocaine (primarily "crack") use and homicide.
- (3) Guns as the instrument of homicide increased over time in all eight cities—even those that showed declines in total numbers of homicides.
- (4) Supporting the perceived effectiveness of problem-oriented policing, public housing policing, multijurisdictional task forces, and programs and services for domestic violence victims.
- (5) Relating inmate flows into and out of State prisons with the level of homicide.

The results also suggest that:

- (1) Community-oriented policing activities and programs were too recently implemented in the eight cities to substantiate their effectiveness.
- (2) Drugs other than cocaine ("crack") were not associated with homicide trends in any discernible way.
- (3) Drug market structure appeared less associated with the level of violence than initial assumptions or findings had suggested.
- (4) Gangs were not viewed as a significant cause of violence in the eight cities, except to the extent that they were involved in drug dealing, perhaps because none of the cities is particularly noted for high levels of organized gangs.
- (5) Further investigation is needed regarding the relationship between the availability and lethality of guns, the quantity and quality of emergency medical services, and homicides.
- (6) While cross-city analyses of economic factors produced weak and mixed findings, within-city analyses using census tract data may be more promising.

Chapter 2 describes the project design and provides additional information on the hypotheses investigated, interview development and testing, and site selection. Chapter 3 presents an analysis of the homicide trends in the selected cities. The next three chapters describe key findings in each of the substantive domain areas environmental or macro, situational or micro, and system response. The chapter entitled "Conclusions and Future Work" includes a summary of key policy findings and a discussion of plans for future research.

Notes

1. "Homicide" and "murder" are used interchangeably throughout this report to refer to murder and nonnegligent homicide as it is classified by the Federal Bureau of Investigation's Uniform Crime Reports.

2. The period 1985 to 1994 is used throughout this report, although data are now available for 1995.

According to the Uniform Crime Reports (*Crime in the United States 1995*, Washington, D.C.: U.S. Department of Justice, 1996, p. 13), murder and nonnegligent homicide dropped 7.4 percent in the United States between 1994 and 1995 (from 23,310 to 21,597). Numbers reported here are the estimated numbers from the UCR. The U.S. data are from the *Sourcebook of Criminal Justice Statistics—1994*, K. Maguire and A.L. Pastore, eds., Washington D.C.: U.S. Department of Justice, 1995; and *Crime in the United States 1994*, Washington, D.C.: U.S. Department of Justice, 1995. City-level data were provided by the FBI, Uniform Crime Reporting Center; a city was included in the dataset if the population was 200,000 or greater during any year between 1985 and 1994. Homicide data were missing for several cities for some years. The number(s) of cities for which data were missing were one in 1985, 1986, and 1987; eight in 1988; three in 1989; and two in 1990.

3. Data were missing for Minneapolis for 1990.

4. Homicide rate estimates per 100,000 for 1960 through 1994 are from the summary of UCR estimates provided by the *Sourcebook of Criminal Justice Statistics*—1994, 1995, p. 324; the estimated rate for 1995 is from *Crime in the United States 1995*, p. 13.

Project Design

HAPTER TW

The project centered on gathering information on homicide, violence, and associated factors from key policymakers, law enforcement and criminal justice system representatives, and community leaders in a limited number of cities. The project was intended to be of reasonable scope with respect to time, personnel, and other resources. The main focus was on policy-related issues, with some attention paid to identifying the nature and extent of contextual factors associated with crime and violence.

This broad framework led to three questions: "What would we ask?" "To which cities would we go?" "To whom would we talk?" Answers to these questions are in the remainder of this chapter. Specifically, this chapter addresses (1) research hypotheses, (2) site selection, (3) interview development, and (4) project implementation.

Research Hypotheses

Several criteria were used for establishing the research hypotheses. Generally, priority was given to issues where a strong, *direct* link between the factor and the homicide rate could be anticipated. Specifically, an attempt was made to narrow the hypotheses to those where anticipated effects could be described as "first order." (These were also described as hypotheses in which the "chain" linking the factor and homicide could be envisioned as short.) To accommodate the 10-year period under study, the project also sought to investigate issues on which communities were likely to have acted over the past decade. To facilitate project design, hypotheses were grouped into three major categories or domains—two contextual and one response. The contextual domains were environmental or macro and situational or micro. The response domain included only the criminal justice system (law enforcement, prosecution, courts, and corrections). Service providers were included in the macro domain. The underlying structural hypotheses are summarized in table 2–1.

Macro domain. The macro domain included the environmental and social context within which homicide and violence occur and the set of societal forces that, in the aggregate, may stem from individuals' behavior but are typically beyond any individual's control. Examples of macro-level issues included demographic trends, employment rates, and educational attainment of citizens. Macro-level factors also were defined to include programs, services, and policies that are not the responsibility of criminal justice system agencies. Examples from this category included emergency medical service (EMS) programs, educational services, community groups and their responses to violence, and domestic violence programs. This domain proved the most difficult to narrow and, as envisioned, to satisfactorily research. Specific hypotheses in the macro domain are listed below:

- (1) Positive/negative changes in economic conditions result in decreases/increases in violence and homicide.
- (2) Increases/decreases in the numbers (and proportions) of those in violence-prone demographic groups result in increases/decreases in violence and homicide.

| Table 2–1. Structural Hypotheses Relating to Changes in City-Level Homicide Rates | | | | | | | | |
|--|--|---|--|--|--|--|--|--|
| Structural Domain | | | | | | | | |
| Environmental or Macro-Level Factors | Situational or Micro-Level Factors | Response or Criminal Justice System | | | | | | |
| Economic conditions | Drug market stability | Policing practices | | | | | | |
| Demographic changes | Extent and type of drug use | Task forces (interagency, multijurisdictional) | | | | | | |
| System responses or resources (e.g., emergency medical services, domestic violence shelters) | Availability and lethality of handguns/other weapons | Actual and perceived likelihood or severity of punishment | | | | | | |
| Prevention programs | Gangs and gang activity | Incapacitation of a large number of young, crime-prone males | | | | | | |

- (3) Improvements in system responses (e.g., EMS, domestic violence victim shelters) will result in decreases in homicide.
- (4) Increases in violence prevention programs (e.g., mediation) will result in decreases in violence and homicide.

Micro domain. The micro domain included the situational factors that relate directly to homicide and, typically, an individual's behavior. Thus, this domain of analysis was concerned with homicide in its situational context and can be best described as "guns, gangs, and drugs." Specific hypotheses in the microlevel domain, listed below, related to the availability of drugs and guns, the market structures associated with drugs and guns, and the extent of gang activity:

- (1) Increases/decreases in the stability of drug markets will be associated with increases/decreases in violence and homicide.
- (2) The extent of drug use and type of drugs prevalent in local markets will be related to the level of violence.
- (3) Increases in the lethality and availability of guns will be associated with increases in violence and homicide.
- (4) Gang activity—in connection with drug and gun markets or for other purposes—will be associated with violence and homicide.

In particular, the researchers were interested in whether certain drugs are more strongly associated with violence (e.g., crack cocaine) than others (e.g., marijuana). With respect to investigations of gangs, it is acknowledged—as will be seen in the next section—that none of the sites is known as a "gang city."

The response domain. The response or criminal justice system domain encompassed law enforcement, prosecution, courts, and corrections. This area of inquiry was established to explore the impact that criminal justice policies and practices might have on homicide trends. Thus, for example, one hypothesis to be tested in the criminal justice system area was that changes in police deployment practices have reduced the level of violence and, therefore, the number of homicides. In this domain, questions were designed to examine whether:

- More proactive and/or community-oriented policing is associated with a decrease in serious violence and homicide.
- (2) Interagency, multijurisdictional activities against violence, drugs, and/or gangs are associated with a decrease in serious violence and homicide.
- (3) Actual and perceived increases/decreases in the likelihood or severity of punishment are associated with decreases/increases in violence and homicide.

(4) Increases/decreases in the incarceration of large numbers of young, crime-prone males are associated with decreases/increases in violence and homicide.

The project team developed an approach for identifying cities that would be the subjects of investigation. The site selection process is described in the section that follows. The conclusion of this section details the development of a series of questions to generate information pertinent to the hypotheses, the identification of individuals who would be targeted for interview, and the field investigation.

Site Selection

A variety of options were considered to select the cities that would be the focus of the inquiries. Available resources were sufficient to visit 8 to 10 cities. The goal was to investigate the relationships between homicide trends and qualitative factors such as policing effectiveness that would be poorly measured at best. Therefore, efforts were focused on those cities where homicide trends were the "strongest" over the period of interest. Thus, no deliberate attempt was made to identify cities that could be construed, either individually or as a set, as representative of the Nation as a whole. Additionally, potential explanatory factors such as policing policies, urban migration patterns, and demographic characteristics were explicitly avoided in the selection process. The implication of this decision was that issues of interest—e.g., gang activity, urban migration patterns, or demographic characteristics-might not be represented in the final set of cities. Further, this process did not ensure heterogeneity with respect to other factors of interest such as geographic region.

In general, cities were selected for indepth study based on their population and the strength of their homicide rate trends over the past decade (1985– 1994). This period was chosen because 1985 represented the most recent upturn in homicide. Figure 2–1 shows the selection process. The research team chose to look only at cities with populations of more than 200,000 during at least one year of the study period. As previously noted, 1 of the 78 cities with populations over 200,000 was dropped because of missing homicide data; thus, the initial city set contained 77 cities. Population was used as a criterion because as few as one or two additional homicides in small cities can greatly change homicide rates. Population was based on those residing within the city boundary, not the Standard Metropolitan Statistical Area (SMSA).



The 77 cities selected exhibit considerable range in the number and rate of homicides, as can be seen in figures 2–2 and 2–3. The average annual *number* of homicides over the 1985–1994 period ranged from a low of 4.6 (Lincoln, Nebraska) to a high of 1,834 (New York, New York), while the average homicide *rate* per 100,000 population ranged from a low of 2.4 (Lincoln, Nebraska) to a high of 60.4 (Washington, D.C.). The mean number of homicides over all 77 cities for this period was 140.7; the median number of homicides was 58.8. The mean homicide rate over all 77 cities was 19.6 per 100,000 population; the median rate was 15.8—roughly twice the national homicide rate over this period, which was 7.9 per 100,000 in 1985, 9.8 in 1991, and 9.0 in 1994 (see figure 1–2).



*Large cities are defined as those with populations of more than 200,000. **Note:** The mean annual homicide count for each city is listed in Appendix 2–A. Black bars denote study cities.



Note: The mean annual homicide rate for each city is listed in Appendix 2–A. Black bars denote study cities.

Figure 2–4. Mean Annual Homicide Counts and Rates for 32 U.S. Cities, 1985–1994



Note: The mean annual homicide count and rate for each city is listed in Appendix 2–A. Black bars denote study cities.

Of the 77 cities selected, attention was focused on those with large homicide problems, i.e., annual numbers of homicides that averaged above the group median (58.8) and annual homicide rates that averaged above the group median (15.8 per 100,000 population). Thus, cities that represented a substantial portion of the national homicide picture were targeted, while those with low trends (and a resultant susceptibility to the effect of atypical events) were culled out.

Thirty-two cities had mean annual homicide counts and mean annual homicide rates that averaged above the medians for this set of cities and, thus, met the selection criteria. The homicide counts and rates for these cities are shown in figure 2–4.

In step 2 of the selection process, researchers identified the homicide trend (if any) in each of the cities and examined its strength. Cities that had clear trends or patterns in their annual homicide *rates* were sought. Rates rather than counts were reviewed at this point to control for population size. This purposive sampling was done in the belief that the underlying causal factors that could partially explain the trends would be more visible in communities where the trends were strongest. However, because of the sampling strategy, results from the investigations are not generalizable, for example, to national trends.

Five categories of trends were considered:

- Decreasing linear.
- Decreasing quadratic.
- Increasing linear.
- Increasing quadratic.
- No change.

Linear trends are those in which, over the 10 years under consideration, homicide rates generally moved in a straight or downward direction. Quadratic trends have values that "change direction" once over the relevant study period. Specifically, decreasing quadratic trends are those where several years of increases in homicide rates are followed by several years of decreases. Cities with decreasing quadratic trends have received the most attention recently largely because the peaks, or points of change in direction, have occurred in recent years and offer stark contrast to rates of the late 1980s. Increasing quadratic trends are the opposite—homicide rates decrease at first and then increase.

Regression analysis was used to fit each of the 32 cities' 10-year homicide rate data to linear and quadratic curves. Goodness-of-fit statistics were used to decide which type of curve best explained each city's 10-year trend. A city was placed into the decreasing linear category, for example, if the 10 years of data fit a downward sloping line better than a quadratic decreasing or increasing curve. If none of the four curves provided sufficient fit to the data, the city was placed in the no-change category.¹ Interestingly, in contrast to the national trend in homicide rates (which is decreasing quadratic as shown in figure 1-2) and recent media focus, 14 of the 32 cities that met the initial screens had increasing homicide trends (13 linear, 1 quadratic) and 9 had decreasing trends (7 quadratic, 2 linear). The remaining nine cities showed no clear homicide trends for this time period. Figure 2–5 summarizes the trend analyses for the 32 cities. The results of the regression analyses for the 32 cities are given in table 2-2. Both linear and quadratic

Figure 2–5. Ten-Year Homicide Rate Trends in 32 U.S. Cities, 1985–1994



models for each city are shown. Cities are listed within the category that provided the best fit to their data in order of the strength of the trend. (No-change cities are listed in alphabetical order.)² Within each category and where possible, the two cities with the strongest trends were selected. Only one city's homicide trend was characterized as increasing quadratic and, thus, a single city appears in this category.

| Table 2–2. Linear Regression Model Results for 32 Cities | | | | | | | | | |
|--|--------|----------------|----|-------------|----------------|---------|----------------|------------------------------|----------------------------|
| City | Model | R ² | df | F-Statistic | β ₀ | β | β ₂ | Homicide Number (Mean) | Homicide Rate (Mean) |
| Decreasing Linear | | | | | | | | | |
| Tampa | linear | 0.510 | 7 | 7.29* | 95.4451 | -0.8294 | | | |
| Tampa | quad | 0.534 | 6 | 3.43 | 670.633 | -13.706 | 0.0720 | 60.78 | 21.07 |
| Detroit | linear | 0.424 | 8 | 5.88* | 08.104 | -0.5591 | | | |
| Detroit | quad | 0.618 | 7 | 5.67* | -1090.1 | 26.2447 | -0.1497 | 613.4 | 58.07 |
| Decreasing Quadratic | | | | 1 | | | I | | 1 |
| Washington, D.C. | linear | 0.728 | 8 | 21.39* | -490.65 | 6.1571 | | | |
| Washington, D.C. | quad | 0.944 | 7 | 59.06* | -11108 | 243.656 | -1.3268 | 361.9 | 60.42 |
| Atlanta | linear | 0.221 | 8 | 2.27 | -52.949 | 1.1325 | | | |
| Atlanta | quad | 0.841 | 7 | 18.56* | -6055.7 | 135.411 | -0.7502 | 202.9 | 48.41 |
| Dallas | linear | 0.005 | 8 | 0.04 | 22.4082 | 0.1470 | | | |
| Dallas | quad | 0.541 | 7 | 4.13 | -4963.6 | 111.681 | -0.6231 | 363.4 | 35.56 |
| Jacksonville | linear | 0.013 | 7 | 0.09 | 34.1304 | -0.1545 | | | |
| Jacksonville | quad | 0.750 | 6 | 9.02* | -3733.7 | 84.1953 | -0.4716 | 130.9 | 20.27 |
| New York | linear | 0.186 | 8 | 1.83 | -21.071 | 0.5155 | | | |
| New York | quad | 0.842 | 7 | 18.60* | -3085.0 | 69.0528 | -0.3829 | 1834 | 25.07 |
| Philadelphia | linear | 0.524 | 8 | 8.82* | -73.958 | 1.1047 | | | |
| Philadelphia | quad | 0.817 | 7 | 15.61* | -2682.6 | 59.4581 | -0.3260 | 401.4 | 24.91 |
| Cleveland | linear | 0.406 | 8 | 5.46* | -50.335 | 0.8786 | | | |
| Cleveland | quad | 0.619 | 7 | 5.69* | -2066.8 | 45.9856 | -0.2520 | 148.0 | 28.30 |
| Increasing Linear | | | | | | | 1 | | |
| New Orleans | linear | 0.911 | 8 | 81.78* | -504.43 | 6.2402 | | | |
| New Orleans | quad | 0.916 | 7 | 37.99* | 920.890 | -25.643 | 0.1781 | 278.0 | 54.07 |
| Saint Louis | linear | 0.675 | 8 | 16.61* | -275.30 | 3.6248 | | | |
| Saint Louis | quad | 0.746 | 7 | 10.28* | 3444.45 | -79.584 | 0.4649 | 199.8 | 49.12 |
| Richmond | linear | 0.775 | 8 | 27.55* | -273.08 | 3.6131 | | | |
| Richmond | quad | 0.825 | 7 | 16.45* | 2617.80 | -61.054 | 0.3613 | 106.7 | 50.29 |
| Birmingham | linear | 0.728 | 8 | 21.37* | -177.93 | 2.4412 | | | |
| Birmingham | quad | 0.728 | 7 | 9.37* | -360.14 | 6.5172 | -0.0228 | 111.4 | 40.56 |
| Baltimore | linear | 0.885 | 8 | 61.39* | -166.89 | 2.2790 | | | |
| Baltimore | quad | 0.885 | 7 | 27.05* | -376.12 | 6.9593 | -0.0261 | 279.3 | 37.08 |
| Milwaukee | linear | 0.750 | 8 | 24.04 | -124.42 | 1.6042 | | | |
| Milwaukee | quad | 0.824 | 7 | 16.38* | -1713.9 | 37.1589 | -0.1986 | 119.6 | 19.16 |
| Norfolk | linear | 0.594 | 8 | 11.71* | -117.27 | 1.5521 | | | |
| Norfolk | quad | 0.692 | 7 | 7.86* | 2107.8 | 46.0783 | -0.2487 | 58.8 | 21.64 |

| Ta | able 2–2. | Linear R | egres | sion Mode | el Results f | or 32 Cities | (continue | ed) | |
|----------------------|--------------|----------------|-------|-------------|----------------|--------------|----------------|------------------------------|----------------------------|
| City | Model | R ² | df | F-Statistic | β ₀ | βı | β ₂ | Homicide Number (Mean) | Homicide Rate (Mean) |
| Chicago | linear | 0.764 | 8 | 25.97* | -95.490 | 1.3760 | | | |
| Chicago | quad | 0.764 | 7 | 11.36* | 103.62 | 1.5579 | -0.0010 | 798.7 | 27.66 |
| Oakland | linear | 0.643 | 8 | 14.43* | -87.001 | 1.3707 | | | |
| Oakland | quad | 0.724 | 7 | 9.19* | -1622.8 | 35.7254 | -0.1919 | 133.3 | 35.68 |
| Kansas City | linear | 0.687 | 8 | 17.59* | -74.944 | 1.1700 | | | |
| Kansas City | quad | 0.783 | 7 | 12.60* | -1452.5 | 31.9845 | -0.1721 | 131.3 | 29.77 |
| Charlotte | linear | 0.360 | 8 | 4.49 | -83.521 | 1.1569 | | | |
| Charlotte | quad | 0.410 | 7 | 2.44 | -1456.1 | 31.8598 | -0.1715 | 79.5 | 20.02 |
| Long Beach | linear | 0.451 | 8 | 6.56* | -74.413 | 1.0513 | | | |
| Long Beach | quad | 0.487 | 7 | 3.32 | -1016.8 | 22.1314 | -0.1178 | 84.0 | 19.68 |
| Memphis | linear | 0.448 | 8 | 6.49* | -60.461 | 0.9625 | | | |
| Memphis | quad | 0.548 | 7 | 4.24 | -1500.6 | 33.1774 | -0.1800 | 163.8 | 25.69 |
| Increasing Quadratic | | | | | | | | | |
| Indianapolis | linear | 0.510 | 8 | 8.34 | -102.19 | 1.3186 | | | |
| Indianapolis | quad | 0.726 | 7 | 9.26* | 2606.31 | -59.269 | 0.3385 | 71.6 | 15.82 |
| No Change (in alphab | etical order | r) | | | | | | • | |
| Boston | linear | 0.005 | 8 | 0.04 | 9.7967 | 0.0806 | | | |
| Boston | quad | 0.151 | 7 | 0.62 | -1399.2 | 31.5989 | -0.1761 | 97.2 | 17.01 |
| Fort Worth | linear | 0.029 | 8 | 80.24 | 68.5617 | -0.4108 | | | |
| Fort Worth | quad | 0.035 | 7 | 0.13 | 641.868 | -13.235 | 0.0716 | 141.8 | 31.79 |
| Houston | linear | 0.043 | 8 | 0.36 | -7.2653 | 0.3783 | | | |
| Houston | quad | 0.297 | 7 | 1.48 | -2914.3 | 65.4060 | -0.3633 | 454.9 | 26.59 |
| Los Angeles | linear | 0.263 | 8 | 2.86 | -19.117 | 0.5074 | | | |
| Los Angeles | quad | 0.299 | 7 | 1.49 | -608.78 | 13.6978 | -0.0737 | 906.0 | 26.30 |
| Miami | linear | 0.168 | 7 | 1.41 | 549.107 | -0.2587 | | | |
| Miami | quad | 0.168 | 7 | 1.42 | 292.107 | 0 | -0.00007 | 130.3 | 34.49 |
| Nashville | linear | 0.178 | 8 | 1.73 | 46.268 | -0.3320 | | | |
| Nashville | quad | 0.202 | 7 | 0.89 | 431.082 | -8.9400 | 0.0481 | 82.6 | 16.56 |
| Newark | linear | 0.002 | 8 | 0.02 | 28.6789 | 0.0626 | | | |
| Newark | quad | 0.017 | 7 | 0.06 | 542.665 | -11.435 | 0.0642 | 101.2 | 34.28 |
| Sacramento | linear | 0.019 | 8 | 0.16 | 36.0768 | -0.2140 | | | |
| Sacramento | quad | 0.026 | 7 | 0.09 | 430.610 | -9.0394 | 0.0493 | 60.0 | 16.93 |
| San Antonio | linear | 0.184 | 8 | 1.80 | -10.527 | 0.3404 | | | |
| San Antonio | quad | 0.201 | 7 | 0.88 | 318.923 | -7.0292 | 0.0412 | 187.6 | 19.94 |

*Significant at p<0.05.

Finally, given time and resource constraints and an interest in exploring extreme changes in homicide trends, only one no-change city was selected. The eight cities selected are shown in table 2–3; the observed homicide rate trends for these cities are shown in figure 2–6.

Figures 2–7 through 2–10 show the eight cities' observed homicide rates and expected homicide rates as predicted by the best-fit regression lines. The regression equations appear to adequately capture the trend information contained in the city-level homicide rate data.

All of the selected cities are in the Eastern United States, and most are in the South. Additionally, only Detroit had a population greater than 1 million, with an average population of 1,055,606 over the 10-year study period. Richmond had the smallest population, with a 10-year average of 213,634. The average annual populations for the eight cities are shown in figure 2-11.

| Table 2–3. Eight Cities Selected by Strongest Homicide Trend | | | | | | | |
|---|---------------------|-----------|--|--|--|--|--|
| 1985–1994 Homicide Rate Trends (number of | Selected Cities | | | | | | |
| eligible cities) | City 1 | City 2 | | | | | |
| Decreasing linear (2) | Detroit | Tampa | | | | | |
| Decreasing quadratic (7) | Washington, D.C. | Atlanta | | | | | |
| Increasing linear (13) | New Orleans | Richmond* | | | | | |
| Increasing quadratic (1) | Indianapolis | ** | | | | | |
| No change (9) | Miami | *** | | | | | |

* St. Louis was selected originally but was substituted with Richmond (third on the list; see table 2–2) because St. Louis is being studied extensively by other investigators, including Margaret Zahn and Richard Rosenfeld.

** Only one city exhibited this pattern.

*** Only one city with this pattern was selected.

Figure 2–6. Annual Homicide Rates for Selected Cities, 1985–1994



Figures 2–7 through 2–10. Observed and Expected Homicide Rate Trends for Selected Cities, 1985–1994



The selected cities represented meaningful (if not representative) contributions to the Nation's homicide picture. Although the selected 8 cities represented less than 10 percent of the total population of the 77-city set, they accounted for more than 15 percent of the homicides in these cities over the 10-year period. Figure 2–12 shows the percentage of population and of homicides for the 77 large cities that were due to



the selected 8 cities and the remaining 69 cities. The population panel shows that the portion of the population represented by the eight selected cities diminished over the period (in part because of declining populations in some of the cities). The homicide panel suggests that the 8 cities contributed a disproportionate number of homicides to the 77 city totals (not surprising since cities above the median were selected), just as the 77 cities contributed a disproportionate number of homicides when their population is compared with the total U.S. population. Additional demographic information on the cities is provided in chapter 3. The eight cities selected are described briefly below.

Decreasing quadratic homicide rate trend: Washington, D.C., and Atlanta. For these cities, the homicide rate during the study period reached a maximum and then decreased (see figure 2–7). As previously noted, these two cities were selected over the other decreasing quadratic cities because of the abruptness of the change from increasing to decreasing during this period. In the case of both Washington and Atlanta, the 1994 rate was lower than the peak but remained higher than the 1985 rate. Washington's homicide rate increased from 23.5 per 100,000 in 1985 to 80.6 per 100,000 in 1991 and then decreased to 70.0 per 100,000 in 1994. Washington's population declined by 9 percent during this period, from 626,000 to 570,000. The annual numbers of homicides from 1985 to 1994 were 147, 194, 225, 369, 434, 472, 482, 443, 454, and 399. Atlanta's homicide rate increased from 33.2 per 100,000 in 1985 to 58.6 in 1990 and then declined to 46.4 per 100,000 in 1994. Atlanta's population declined during this period by 6 percent, from 436,214 to 411,204. The annual numbers of homicides from 1985 to 1994 were 145, 186, 207, 217, 246, 231, 205, 198, 203, and 191.

Decreasing linear trend: Tampa and Detroit.

Tampa's homicide rate declined from 24.5 per 100,000 in 1985 to 21.0 per 100,000 in 1994—a decrease of 14 percent (see figure 2–8). The annual numbers of homicides from 1985 to 1994 were 70, 79, 61, (missing), 57, 62, 64, 49, 43, and 62. Tampa's population increased by 3 percent during this period, from 275,770 to 283,412. Detroit's homicide rate declined from 58.2 per 100,000 in 1985 to 52.9 per 100,000 in 1994, a 9-percent decrease. The annual numbers of homicides from 1985 to 1994 were 635, 648, 686, 629, 624, 582, 615, 595, 579, and 541. Detroit's population decreased 14 percent from 1,115,659 to 957,828 between 1985 and 1994.

Increasing linear trend: New Orleans and Richmond. New Orleans' homicide rate increased from 27.1 per 100,000 in 1985 to 85.8 per 100,000 in 1994, an increase of 217 percent (see figure 2–9). The annual numbers of homicides from 1985 to 1994 were 152, 197, 205, 228, 251, 304, 345, 279, 395, and 414. New Orleans' population decreased by 10 percent during this period, from 527,228 to 472,707. Richmond's homicide rate increased from 41.5 per 100,000 in 1985 to 77.2 per 100,000 in 1994, an increase of 86 percent. The annual numbers of homicides from 1985 to 1994 were 92, 82, 78, 99, 98, 113, 116, 117, 112, and 160. Richmond's population



decreased by 7 percent during this period, from 211,135 to 196,593.

Increasing quadratic trend: Indianapolis. The homicide rate for Indianapolis declined slightly and then increased during this period (see figure 2–10). Overall, the homicide rate increased from 12.5 per 100,000 in 1985 to 28.4 per 100,000 in 1994, an increase of 127 percent. The annual numbers of homicides from 1985 to 1994 were 59, 63, 57, 79, 41, 58, 95, 88, 68, and 108. Indianapolis' population increased by 5 percent during this period, from 475,603 to 500,414.

No Change: Miami. The homicide rate for Miami changed little over the study period (see figure 2–10). The homicide rate ranged from a low of 33.2 in 1987 to a high of 36.4 in 1991. The annual numbers of homicides from 1985 to 1994 were 131, 148, 128, (missing), 132, 129, 134, 128, 127, and 116. Population numbers for Miami changed little over this period; they were 352,708 in 1985 and 363,221 in 1994.

As the analyses leading to site selection proceeded, a concurrent effort was under way to design the study. The project design, including approach and hypotheses to be investigated, is described in the next section.

Interview Development

Interviews for each structural area were constructed through an iterative process that included developing an initial set of questions organized around the hypotheses, reviewing the instrument by an external panel of experts, and pilot testing in two cities. Revisions to the interview instruments were made after the initial review and after each pilot.

An independent team of individuals with substantive knowledge in the domain areas reviewed the interview questions and hypotheses. As a result of this review, the hypotheses were refined and made more central to the interview instruments. Additionally, many of the interview questions were reformulated to establish better definitional and comparative terms across sites. Finally, many questions were adjusted to more fully distinguish between perceived and actual events.

The initial set of interviewees included local representatives of Federal justice agencies, police department representatives, the sheriff, the probation office supervisor, representatives of the court (prosecutor, public defender, chief judge), representatives of the city government, school officials, the director of emergency medical services, and the coroner or medical examiner.

The interviews were pilot tested in two cities-Kansas City, which exhibited an increasing linear homicide rate trend, and Cleveland, which had a decreasing quadratic homicide rate trend. The intent of the pilot tests was to ensure that the interview questions were appropriate and comprehensive and that the scheduling protocol, which planned for about 20 interviews, was practical and feasible. Perhaps most significantly, the visits to the pilot cities convinced the research team that specific interview instruments were needed in certain key areas where they had previously been lacking. For example, prior to the pilot testing, interviewers had planned to question emergency medical service personnel using an instrument that contained generic questions about program resources and their adequacy. It became clear from the pilot studies that using nonspecific instruments was time consuming and distracting and raised the substantial risk of low inter-interviewer reliability across cities. That is, generic questions, probes, or contextual followup questions thought of by an interviewer in one city might not be asked by a second interviewer in another city. From the pilots, it was determined that the quality of data collection would improve if interviewers started with a specific instrument and modified or discarded questions as became necessary during each interview's course. These types of improvements were most common for programs and issues that tended to be substantially the same from city to city. Still, it was not possible to design specific interview instruments for some interviewees, primarily community groups, in advance of the questioning. Some organizations varied to such an extent from city to city that only a general

interview instrument would suffice. Nevertheless, information gathered from the pilot cities allowed the interview design team to include more salient interview instructions and guides.

The final set of data collection instruments consisted of more than 20 individual-specific interview instruments for the study.³ Generally, the instruments were organized so that questions were grouped around the hypotheses from a single domain, so that one interviewer could handle that portion of the interview. In general, respondents were asked for their perceptions and definition of the problem; how the individual or organization responded to the issue in terms of both policies and resources; how the issue had changed over time; and what data sources and tracking systems were used to monitor the problem. Both openended questions and scales were used in the interviews. An interview instrument typically included a mix of questions from the three domains. Significant emphasis was placed on eliciting information on interagency cooperation.

A second major result from the pilot interviews was that some interview subjects were added and some were abandoned. For example, it was decided that public housing administrators and public housing police would be interviewed separately. In contrast, despite intense interest in exploring the media's role with respect to homicide in a community, it was decided that media interviews were impractical. First, many media representatives appeared to have relatively short tenures in their communities, meaning they could not provide the longer term perspective. In addition, many media outlets tended to cover crime from a larger bureau, such as a city or metro desk. Most media outlets covered only a small fraction of the violent crimes and homicides that occur in their communities. Therefore, except for high-profile cases, few media representatives had a continuity of view with respect to crime issues. Although this problem perhaps could have been circumvented by interviewing reporters as a group or by interviewing assignment editors, this approach proved to be impractical as well. Instead, the media's reporting of crime issues was reviewed as part of the presite preparation, and specific questions about the media's impact and strategies were inserted into other interviews. Perhaps

it is meaningful that despite strong convictions that the media influence perceptions of homicide trends, the research team could not devise an adequate strategy for assessing that factor.

Project Implementation

The project was organized as a matrix comprising the three domain areas and the eight cities. Each project team member was assigned to a domain area and one or more cities. Domain team leaders were identified to collate findings, and city team leaders were identified to coordinate the site visits. Site visits were conducted by teams of three individuals (one representing each domain area) that visited a city for 3 days. Between 20 and 30 individuals were interviewed in each city. Following the site visit, each individual prepared a written report; subsequently, debriefings were held and another researcher reviewed and coded the interview instruments.

Prior to conducting interviews in the field, the interviewers were trained on the instruments at NIJ. As a mechanism for improving the quality of followup questions, interviewers became familiar with the basic crime trends, socioeconomic patterns, and cultural issues in the communities for which they were responsible. Interviewers contacted the sites and established the interview dates, thus helping them to become acquainted with the structure and operation of local institutions.

Site visits were conducted during the summer of 1996. Interviews were conducted by one or more team members, depending upon the extent to which questions for that interviewee represented one or more domains. For example, the police gang unit (or officer) was interviewed by team members from both the micro domain and the criminal justice system domain. The following individuals or appropriate representatives from the indicated agencies were interviewed:

- U.S. Attorney
- Drug Enforcement Administration
- Bureau of Alcohol, Tobacco and Firearms

- Federal Bureau of Investigation
- Police chief
- Police homicide unit
- Police gang unit
- Police drug unit
- Police juvenile unit
- Sheriff
- Probation office supervisor
- Prosecutor
- Public defender
- Chief judge
- Mayor or city manager
- School administrator
- School security
- Public housing administrator
- Public housing security
- Director of emergency medical services
- Coroner or medical examiner

In addition, efforts were made to conduct interviews with at least two representatives from community groups that dealt with issues relating to homicide. Community groups were typically identified through a review of newspaper files and contacts in city and police organizations. The team also talked with representatives from domestic violence prevention and intervention programs and people knowledgeable about the local economy.

Upon returning from the site visit, each interviewer provided an overview of findings relating to the hypotheses from his or her domain. Separately, a coder entered the data from each of the interview books into a database. The writeups, along with the interview books, were submitted to the domain leaders, who were responsible for analyzing the domain hypotheses across sites (in consultation with other team members). Additionally, two debriefings were held with all individuals who made site visits. The purpose of these debriefings was to distill and collate hypothesis-specific information across the sites. The first debriefings were coordinated by the domain team leaders (who also made site visits). The second debriefings were conducted by individuals who were knowledgeable in the domain areas but had not been directly involved in the project.

Initial review of the data resulted in a secondary effort to collect and analyze additional existing data. For example, NIJ Drug Use Forecasting (DUF) data were used in the micro domain because five of the eight cities are DUF sites. Additionally, National Correctional Reporting Program, Bureau of Justice Statistics, data were consulted with respect to the incapacitation hypotheses. Finally, information was collected about domestic violence shelters and programs. The results of these and similar analyses are included in subsequent chapters.

Notes

1. Note that some of the no-change cities may have experienced considerable year-to-year variation in their annual homicide rates. We subsequently use "no change" to refer to cities in which such variation could not be fit to either a linear or quadratic curve. Because we had a limited data series (10 data points for each city), we did not attempt to fit more complex curves to the data.

2. In the increasing and decreasing linear categories, cities were ranked by the absolute value of their slope coefficients (β_1). Cities with larger slopes exhibited steeper, more dramatic trends. Quadratic category cities were ranked on the basis of the abruptness of the change in trend, which is captured by the quadratic coefficient (β_2). Cities that lacked a clear trend were ranked by their data's mean absolute deviation from a horizontal line.

3. Copies of the interview instruments are available from Pamela K. Lattimore, Director, Criminal Justice and Criminal Behavior Division, Office of Research and Evaluation, NIJ, 810 Seventh Street N.W., Room 7333, Washington, DC 20531; or at pam@ojp.usdoj.gov.

Homicide Counts and Rates for 77 Cities

APPENDIX 2-A

| Characteristics of Large Cities, 1985–1994 (ordered by mean number of homicides) | | | | | | | |
|---|------------------|-----------------------|-----------------------------|-----------------------|--|--|--|
| City Number | City | Mean Homicide Rate | Mean Number of Homicides | Average Population | | | |
| 1 | Lincoln | 2.45 | 4.60 | 189,812.50 | | | |
| 2 | Mesa | 3.88 | 10.50 | 273,330.10 | | | |
| 3 | Aurora | 5.86 | 13.20 | 224,050.60 | | | |
| 4 | Lexington | 6.75 | 15.11 | 223,805.20 | | | |
| 5 | Colorado Springs | 5.47 | 15.40 | 282,705.90 | | | |
| 6 | Arlington | 6.21 | 15.70 | 257,406.50 | | | |
| 7 | Anchorage | 7.06 | 16.70 | 234,650.60 | | | |
| 8 | St. Paul | 6.89 | 18.70 | 270,473.40 | | | |
| 9 | Raleigh | 9.62 | 19.50 | 199,202.70 | | | |
| 10 | Virginia Beach | 5.82 | 21.80 | 374,395.60 | | | |
| 11 | Anaheim | 8.50 | 22.40 | 260,574.50 | | | |
| 12 | Akron | 10.50 | 23.70 | 225,559.70 | | | |
| 13 | Riverside | 11.19 | 24.80 | 218,641.60 | | | |
| 14 | Jersey City | 11.57 | 26.10 | 225,758.80 | | | |
| 15 | Corpus Christi | 10.05 | 26.70 | 266,089.10 | | | |
| 16 | Omaha | 7.76 | 27.22 | 351,612.10 | | | |
| 17 | St. Petersburg | 12.08 | 29.67 | 245,497.40 | | | |
| 18 | Tucson | 8.31 | 33.78 | 405,328.20 | | | |
| 19 | Honolulu | 4.02 | 34.00 | 848,417.90 | | | |
| 20 | Toledo | 10.63 | 35.89 | 338,332.10 | | | |
| 21 | Mobile | 18.35 | 37.50 | 204,611.60 | | | |
| 22 | El Paso | 7.37 | 38.30 | 516,793.40 | | | |
| 23 | Louisville | 14.27 | 39.78 | 279,273.20 | | | |
| 24 | San Jose | 5.21 | 39.80 | 766,558.20 | | | |

Characteristics of Large Cities, 1985–1994 (ordered by mean number of homicides)

| City Number | City | Mean Homicide Rate | Mean Number of Homicides | Average Population |
|----------------|---------------|-----------------------|-----------------------------|-----------------------|
| 25 | Tulsa | 10.79 | 40.30 | 373,315.00 |
| 26 | Austin | 9.09 | 41.90 | 466,541.00 |
| 27 | Stockton | 20.90 | 42.60 | 202,299.50 |
| 28 | Pittsburgh | 11.28 | 42.70 | 380,892.70 |
| 29 | Rochester | 18.93 | 44.50 | 235,679.70 |
| 30 | Portland | 11.45 | 47.80 | 420,338.50 |
| 31 | Cincinnati | 13.01 | 48.10 | 369,674.40 |
| 32 | Baton Rouge | 20.76 | 48.80 | 236,560.90 |
| 33 | Santa Ana | 18.28 | 49.90 | 268,712.20 |
| 34 | Minneapolis | 13.84 | 50.67 | 364,943.30 |
| 35 | Buffalo | 15.58 | 51.00 | 328,051.10 |
| 36 | Seattle | 10.64 | 55.10 | 517,583.20 |
| 37 | Jackson | 28.42 | 57.40 | 203,104.60 |
| 38 | Fresno | 17.33 | 58.30 | 330,423.70 |
| 39 | Norfolk | 21.64 | 58.80 | 274,002.50 |
| 40 | Sacramento | 16.93 | 60.00 | 355,829.80 |
| 41 | Tampa | 21.07 | 60.78 | 288,495.30 |
| 42 | Oklahoma City | 13.87 | 62.00 | 446,793.80 |
| 43 | Indianapolis | 15.82 | 71.60 | 461,307.70 |
| 44 | Denver | 15.47 | 77.10 | 498,558.30 |
| 45 | Las Vegas | 13.12 | 77.70 | 586,942.60 |
| 46 | Charlotte | 20.02 | 79.50 | 393,264.30 |
| 47 | Nashville | 16.56 | 82.60 | 500,005.90 |
| 48 | Long Beach | 19.68 | 84.00 | 423,755.80 |
| 49 | Columbus | 15.38 | 93.90 | 606,963.00 |
| 50 | Boston | 17.01 | 97.20 | 571,328.90 |
| 51 | San Francisco | 13.43 | 100.00 | 744,865.20 |
| 52 | Newark | 34.28 | 101.20 | 295,678.10 |
| 53 | Richmond | 50.29 | 106.70 | 213,634.00 |
| 54 | Birmingham | 40.56 | 111.40 | 275,958.20 |
| 55 | Milwaukee | 19.16 | 119.60 | 622,444.20 |

Characteristics of Large Cities, 1985–1994 (ordered by mean number of homicides)

| City Number | City | Mean Homicide Rate | Mean Number of Homicides | Average Population |
|----------------|------------------|-----------------------|-----------------------------|-----------------------|
| 56 | San Diego | 11.41 | 125.30 | 1,093,809.00 |
| 57 | Miami | 34.49 | 130.33 | 377,927.10 |
| 58 | Jacksonville | 20.27 | 130.89 | 646,053.20 |
| 59 | Kansas City | 29.77 | 131.30 | 441,403.50 |
| 60 | Oakland | 35.68 | 133.30 | 372,777.60 |
| 61 | Phoenix | 13.57 | 133.50 | 973,931.80 |
| 62 | Fort Worth | 31.79 | 141.80 | 445,837.90 |
| 63 | Cleveland | 28.30 | 148.00 | 525,022.30 |
| 64 | Memphis | 25.69 | 163.80 | 640,115.60 |
| 65 | San Antonio | 19.94 | 187.60 | 939,786.30 |
| 66 | St. Louis | 49.12 | 199.80 | 410,168.00 |
| 67 | Atlanta | 48.41 | 202.90 | 420,532.00 |
| 68 | New Orleans | 54.07 | 278.00 | 522,980.90 |
| 69 | Baltimore | 37.08 | 279.30 | 755,832.80 |
| 70 | Washington, D.C. | 60.42 | 361.90 | 603,990.00 |
| 71 | Dallas | 35.56 | 363.40 | 1,022,514.00 |
| 72 | Philadelphia | 24.91 | 401.40 | 1,615,011.00 |
| 73 | Houston | 26.59 | 454.90 | 1,717,886.00 |
| 74 | Detroit | 58.07 | 613.40 | 1,055,606.00 |
| 75 | Chicago | 27.66 | 798.70 | 2,902,224.00 |
| 76 | Los Angeles | 26.30 | 906.00 | 3,436,760.00 |
| 77 | New York | 25.07 | 1834.00 | 7,309,488.00 |

Note: Study cities are shown in bold.