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Saint Louis High Impact Crime Displacement Study



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Law Enforcement Assistance Council Region 5

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ST. LOUIS HIGH IMPACT ANTI-CRIME PROGRAM

SAINT LOUIS HIGH IMPACT
CRIME DISPLACEMENT STUDY

BY

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ABSTRACT

This report presents the findings of an extensive investigation of the relationship between geographic crime displacement and the High Impact Anti-Crime Program in the City of St. Louis during 1972 and 1973. Crime and arrest data were collected for the City of St. Louis plus the 93 municipalities and unincorporated areas of St. Louis County to empirically test the major components of a hypothetical crime displacement scenario.

Crime data collected for several years before and for two years after the beginning of the Impact Program indicated that no substantial decrease in City-wide crime occurred in St. Louis during the first two years of the Impact Program. Significant crime increases were recorded in St. Louis County during both 1972 and 1973.

Residency information from arrest data were used to measure the extent of inter-jurisdictional criminal mobility. Residency data were obtained from over 100,000 individual adult and juvenile arrest records. The residency information revealed that over 35% of all adults arrested for Index crimes, including larceny under \$50, in St. Louis County between 1971 and 1973 were residents of the City; among juvenile offenders, City residents represented approximately 22% of all Index apprehensions. During these same three years, over 65% of all City adults and 85% of all City juveniles arrested in St. Louis County for Index offenses, including larceny under \$50, were charged with a larceny crime.

The major findings of the study were:

- (1) no permanent geographic crime displacement occurred in St. Louis County following the initiation of the Impact Program in the City of St. Louis;
- (2) a temporary period of burglary displacement induced by the St. Louis Impact Program may have occurred in St. Louis County during the last quarter of 1972 and the first half of 1973; and
- (3) a substantial level of "attractive" crime displacement (increased crime attracted to a jurisdiction by changes within that jurisdiction) appears to have occurred in St. Louis County during 1973.

PREFACE

The initiation of the St. Louis High Impact Program in January of 1972 marked the beginning of an extensive anti-crime program in the City of St. Louis. Directed specifically at crimes of violence and burglary, Impact funds were used to support both expanded and innovative projects in almost every local criminal justice agency within the City. The favorable public response to the Program was evidenced by the fact that in a survey of 600 St. Louis residents in the spring of 1974, over 80% of those questioned indicated that they favored continuation of the St. Louis Police Department Foot Patrol Project, one of the most visible of the Impact projects.

The favorable acceptance of the Impact Program by both private citizens and criminal justice professionals within the City was not universally shared by law enforcement officials in the communities surrounding the City of St. Louis. Concern was expressed that if the High Impact projects were successful, increasing numbers of criminals and crimes would be driven from the City into neighboring jurisdictions. In response to this concern, a study was initiated in May of 1973 by the Missouri Law Enforcement Assistance Council (MLEAC) - Region 5, Floyd D. Richards, Director. The primary goal of the study was the investigation of the existence, extent, and nature of geographic crime displacement in the St. Louis area as a direct result of the High Impact Program.

The study was conducted under the direction of William W. Stenzel who is the principal author of this report. Assistance in the initial planning, implementation, and final report for the study were provided by Martin Braeske, Assistant Director of MLEAC - Region 5, and Dr. Nelson Heller, Director of the St. Louis Impact Evaluation Unit. Considerable assistance in the final editing of the report was provided by Grant Buby of the St. Louis Governmental Research Institute. Assisting with the data collection were Denise Corcoran, Bernard Flachsbart, Robert Meyers, Jane Voorhees, and Patricia Rupp who also contributed her special talents in the preparation of the many tables and figures contained in the final report. Richard Kolde, Programmer Analyst for the St. Louis Impact Evaluation Unit, offered invaluable guidance and assistance in the preparation and use of several computer programs utilized during the course of the study. The data processing required at the St. Louis

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The data used in this study could not have been collected without the kind cooperation of:

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TABLE OF CONTENTS

	Page
ABSTRACT	iii
PREFACE	v
TABLE OF CONTENTS	vii
LIST OF PLATES	x
LIST OF FIGURES	xi
LIST OF TABLES	xvi
SUMMARY	xxiii
CHAPTER I - Introduction	1
A. Purpose of the St. Louis High Impact Crime Displacement Study	1
B. Outline of the Report	1
C. St. Louis High Impact Anti-Crime Program	3
D. Crime Displacement in the St. Louis Area	4
E. Previous Crime Displacement Studies	7
CHAPTER II - Design of the St. Louis High Impact Crime Displacement Study	9
A. Crime Displacement - What Is It?	9
1. Elements of Change	9
2. Types of Change	11
3. Displacement Alternatives	12
B. Study Objectives	12
C. Study Definitions and Limitations	14
1. Introduction	14
2. Jurisdictions Examined	15
3. Types of Crime and Arrest Data Collected	16
4. Crime Categories Used in Report	19
5. Time Spans of the Collected Crime and Arrest Data	20
6. Beginning Date of the Impact Program	21
D. Interrupted Time-Series Analysis	23
CHAPTER III - Analysis of Index Crime Trends in the St. Louis Area	29
A. Crime Analysis Methods	29
B. Crime Trends in the City of St. Louis	33
C. Crime Trends in St. Louis County	44
D. Crime Trends in the Adjacent Municipalities	50
E. Observations and Conclusions	56

	Page
CHAPTER IV - Use of Arrest Residency Data to Measure Criminal Mobility and Crime Displacement	59
A. Introduction	59
B. Ideal Conditions for the Use of Residency Data	59
C. Validity Problems with the Use of Arrest Residency Data	60
1. Initial Conditions	61
2. Arrest Data Sample	62
3. Number of Crimes Per Criminal	65
D. Arrest Residency Data Reliability	65
1. False Data Given by Person Arrested	66
2. Police Department Processing	66
3. Processing of Juvenile Offenders	68
E. Interpretation of Arrest Residency Data	68
1. Different Arrest Rates	69
2. Jurisdiction Size	69
3. Population Changes	69
4. Distances Between Jurisdictions	70
CHAPTER V - Arrest Residency Trends in the City of St. Louis	73
A. Arrest Residency Data Collection	73
B. Adult Arrest Data	74
1. Annual Residency Distributions	74
2. Time-Series Distributions of Arrested St. Louis Adults	76
3. Observations and Conclusions	81
C. Juvenile Apprehension Data	82
1. Annual Residency Distributions	82
2. Time-Series Distributions of Apprehended St. Louis Juveniles	85
3. Observations and Conclusions	90
CHAPTER VI - Arrest Residency Trends in St. Louis County	93
A. Arrest Residency Data Collection	93
1. Adult Arrests	93
2. Juvenile Apprehensions	94
B. Adult Arrest Data	97
1. Annual Residency Distributions	97
2. Time-Series Distributions of Arrested St. Louis Adults	100
3. Observations and Conclusions	105

	Page
C. Juvenile Apprehension Data	106
1. Annual Residency Distributions	106
2. Time-Series Distributions of Apprehended St. Louis Juveniles	108
3. Observations and Conclusions	116
 CHAPTER VII - Arrest Residency Trends in the Adjacent Municipalities	 121
A. Arrest Residency Data Collection	121
1. Adult Arrests	121
2. Juveniles Apprehended	123
B. Adult Arrest Data	123
1. Annual Residency Distributions	123
2. Time-Series Distributions of Arrested St. Louis Adults	126
3. Observations and Conclusions	131
C. Juvenile Apprehension Data	133
1. Annual Residency Distributions	133
2. Time-Series Distributions of Apprehended St. Louis Juveniles	136
3. Observations and Conclusions	140
 APPENDIX A - Arrest Residency Data for the City of St. Louis	 143
 APPENDIX B - Arrest Residency Data for St. Louis County	 161
 APPENDIX C - Arrest Residency Data for the Adjacent Municipalities	 171
 REFERENCES	 189

LIST OF PLATES

PLATES		Facing Page
1.	Crime Shift: 1971-1973	xxxii
2.	Displaced Crime: 1973	xxxiv
3.	St. Louis Metropolitan Area	6
4.	Population Density	16
5.	Crime Displacement Study Area	16

LIST OF FIGURES

FIGURES		Page
2-1	Before-After Experimental Design with Control Group	24
2-2	Interrupted Time-Series Experimental Design	25
3-1	Annual Reported Crime in St. Louis City, 1964-1973	34
3-2	Moving Average Trend Based on Monthly Reported Impact Crimes for St. Louis City, 1971-1973	36
3-3	Projected Annual Impact Crimes in St. Louis City: Linear Regression Model Based on 1969-1971 Data	38
3-4	Projected Annual Person-to-Person Crimes in St. Louis City: Linear Regression Model Based on 1969-1971 Data	39
3-5	Projected Annual Burglaries in St. Louis City: Linear Regression Model Based on 1969-1971 Data	39
3-6	Projected Annual Impact Crimes in St. Louis City: Linear Projection of Three-Year Pre-Impact Average	40
3-7	Projected Annual Person-to-Person Crimes in St. Louis City: Linear Projection of Three-Year Pre-Impact Average	41
3-8	Projected Annual Burglaries in St. Louis City: Linear Projection of Three-Year Pre-Impact Average	41
3-9	Annual Non-Impact Index Crimes in St. Louis City, 1969-1973	43
3-10	Moving Average Trend Based on Monthly Reported Impact Crimes for St. Louis County, 1971-1973	45
3-11	Annual Reported Crime in St. Louis County, 1964-1973	46
3-12	Annual Clearance Rates in St. Louis County, 1967-1973	51

LIST OF FIGURES (continued)

FIGURES		Page
3-13	Moving Average Trend Based on Monthly Reported Impact Crimes in Adjacent St. Louis County Municipalities, 1971-1973	53
3-14	Annual Reported Crime in Adjacent St. Louis County Municipalities, 1967-1973	54
3-15	Annual Clearance Rates in Adjacent St. Louis County Municipalities, 1967-1973	57
4-1	Example of the Use of Residency Data to Measure Criminal Mobility Under Non-Ideal Conditions	63
5-1	Adult St. Louis Residents Arrested in St. Louis on Index Charges, 1966-1973	78
5-2	Adult St. Louis Residents Arrested in St. Louis on Impact Charges, 1966-1973	78
5-3	Adult St. Louis Residents Arrested in St. Louis on Person-to-Person Charges, 1966-1973	78
5-4	Adult St. Louis Residents Arrested in St. Louis on Burglary Charges, 1966-1973	79
5-5	Adult St. Louis Residents Arrested in St. Louis on Robbery Charges, 1966-1973	79
5-6	Juvenile St. Louis Residents Apprehended in St. Louis on Index Charges, 1966-1973	88
5-7	Juvenile St. Louis Residents Apprehended in St. Louis on Impact Charges, 1966-1973	88
5-8	Juvenile St. Louis Residents Apprehended in St. Louis on Person-to-Person Charges, 1966-1973	88
5-9	Juvenile St. Louis Residents Apprehended in St. Louis on Burglary Charges, 1966-1973	89

LIST OF FIGURES (continued)

FIGURES		Page
5-10	Juvenile St. Louis Residents Apprehended in St. Louis on Robbery Charges, 1966-1973	89
6-1	Data Contained on the St. Louis County Adult Arrest Card	93
6-2	St. Louis County Adult Arrest Coding	95
6-3	Data Contained on the St. Louis Juvenile Apprehension Card	97
6-4	Adult St. Louis Residents Arrested on Index Charges in St. Louis County, 1971-1973, By Quarter	102
6-5	Adult St. Louis Residents Arrested on Index Charges in St. Louis County, 1971-1973, By Quarter	102
6-6	Adult St. Louis Residents Arrested on Impact Charges in St. Louis County, 1971-1973, By Quarter	102
6-7	Adult St. Louis Residents Arrested on Person- to-Person Charges in St. Louis County, 1971-1973, By Quarter	103
6-8	Adult St. Louis Residents Arrested on Burglary Charges in St. Louis County, 1971-1973, By Quarter	103
6-9	Adult St. Louis Residents Arrested on Robbery Charges in St. Louis County, 1971-1973, By Quarter	103
6-10	Juvenile St. Louis Residents Apprehended on Index Charges in St. Louis County, 1969-1973	112
6-11	Juvenile St. Louis Residents Apprehended on Index Charges in St. Louis County, 1969-1973, By Quarter	112
6-12	Juvenile St. Louis Residents Apprehended on Index Charges in St. Louis County, 1969-1973	113

LIST OF FIGURES (continued)

FIGURES		Page
6-13	Juvenile St. Louis Residents Apprehended on Index Charges in St. Louis County, 1969-1973, By Quarter	113
6-14	Juvenile St. Louis Residents Apprehended on Impact Charges in St. Louis County, 1969-1973	114
6-15	Juvenile St. Louis Residents Apprehended on Impact Charges in St. Louis County, 1969-1973, By Quarter	114
6-16	Juvenile St. Louis Residents Apprehended on Person-to-Person Charges in St. Louis County, 1969-1973	115
6-17	Juvenile St. Louis Residents Apprehended on Person-to-Person Charges in St. Louis County, 1969-1973, By Quarter	115
6-18	Juvenile St. Louis Residents Apprehended on Burglary Charges in St. Louis County, 1969-1973	117
6-19	Juvenile St. Louis Residents Apprehended on Burglary Charges in St. Louis County, 1969-1973, By Quarter	117
6-20	Juvenile St. Louis Residents Apprehended on Robbery Charges in St. Louis County, 1969-1973	118
6-21	Juvenile St. Louis Residents Apprehended on Robbery Charges in St. Louis County, 1969-1973, By Quarter	118
7-1	Adult St. Louis Residents Arrested on Index Charges in Adjacent St. Louis County Municipalities, 1966-1973	128
7-2	Adult St. Louis Residents Arrested on Index Charges in Adjacent St. Louis County Municipalities, 1966-1973	128
7-3	Adult St. Louis Residents Arrested on Impact Charges in Adjacent St. Louis County Municipalities, 1966-1973	128

LIST OF FIGURES (continued)

FIGURES		Page
7-4	Adult St. Louis Residents Arrested on Person-to-Person Charges in Adjacent St. Louis County Municipalities, 1966-1973	129
7-5	Adult St. Louis Residents Arrested on Burglary Charges in Adjacent St. Louis County Municipalities, 1966-1973	129
7-6	Adult St. Louis Residents Arrested on Robbery Charges in Adjacent St. Louis County Municipalities, 1966-1973	129
7-7	Juvenile St. Louis Residents Apprehended on Index Charges in Adjacent St. Louis County Municipalities, 1966-1973	138
7-8	Juvenile St. Louis Residents Apprehended on Index Charges in Adjacent St. Louis County Municipalities, 1966-1973	138
7-9	Juveniles St. Louis Residents Apprehended on Impact Charges in Adjacent St. Louis County Municipalities, 1966-1973	138
7-10	Juveniles St. Louis Residents Apprehended on Person-to-Person Charges in Adjacent St. Louis County Municipalities, 1966-1973	139
7-11	Juvenile St. Louis Residents Apprehended on Burglary Charges in Adjacent St. Louis County Municipalities, 1966-197	139
7-12	Juvenile St. Louis Residents Apprehended on Robbery Charges in Adjacent St. Louis County Municipalities, 1966-1973	139

LIST OF TABLES

TABLES	Page
S-1	St. Louis City Residents Arrested in St. Louis County, 1971-1973, By Type of Charge xxix
S-2	St. Louis City Residents Arrested in Adjacent St. Louis County Municipalities, 1971-1973, By Type of Charge xxx
1-1	St. Louis Impact Projects as of June 1974. 5
1-2	St. Louis Standard Metropolitan Statistical Area (SMSA), Population and Crime Data 6
2-1	St. Louis Regional Population Data 17
2-2	St. Louis Regional Police Data 17
2-3	Adjacent Municipality Population Data 18
2-4	Adjacent Municipality Police Data 18
2-5	Index Crimes Included in Report Crime Categories 20
2-6	Time Periods for the Collected Crime and Arrest Data Used in this Report 22
3-1	Sample of a Four-Period Moving Average 32
3-2	Annual Reported Crime in St. Louis City, 1964-1973 34
3-3	Annual Reported Crime in St. Louis County, 1964-1973 46
3-4	Projected 1973 Reported Crime in St. Louis County Based on 1964-1971 Reported Crime 48
3-5	Projected 1973 Reported Crime in St. Louis County Based on 1969-1971 Reported Crime 48
3-6	Annual Clearances and Clearance Rates in St. Louis County, 1967-1973 51

LIST OF TABLES (continued)

TABLES		Page
3-7	Annual Reported Crime in Adjacent St. Louis County Municipalities, 1967-1973	54
3-8	Projected 1973 Reported Crime in Adjacent St. Louis County Municipalities Based on 1967-1971 Reported Crime	55
3-9	Projected 1973 Reported Crime in Adjacent St. Louis County Municipalities Based on 1969-1971 Reported Crime	55
3-10	Annual Clearances and Clearance Rates in Adjacent St. Louis County Municipalities, 1967-1973	57
5-1	Annual Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1966-1973	75
5-2	Percent of Adult St. Louis Residents Arrested in the City of St. Louis, 1966-1973, By Charge	77
5-3	Annual Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1966-1973	83
5-4	Percent of Juvenile St. Louis Residents Apprehended in the City of St. Louis, 1966-1973, By Charge	86
6-1	Sampling Statistics for Adult Arrests in St. Louis County, 1971-1973	96
6-2	Annual Residency Distributions of Adults Arrested on Index Crime Charges in St. Louis County, 1971-1973	98
6-3	Percent of Adult St. Louis Residents Arrested in St. Louis County, 1971-1973, By Charge, By Quarter	101
6-4	Annual Residency Distributions of Juveniles Apprehended on Index Crime Charges in St. Louis County, 1969-1973	107

LIST OF TABLES (continued)

TABLES	Page
6-5	Percent of Juvenile St. Louis Residents Apprehended in St. Louis County, 1969-1973, By Charge 109
6-6	Percent of Juvenile St. Louis Residents Apprehended in St. Louis County, 1969-1973, By Charge, By Quarter 110
7-1	Sampling Statistics for Adults Arrested on Index Charges in Adjacent St. Louis County Municipalities, 1966-1973 122
7-2	Sampling Statistics for Adults Arrested in Larceny Under \$50 Charges in Adjacent St. Louis County Municipalities, 1966-1973 122
7-3	Annual Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1966-1973 124
7-4	Percent of Adult St. Louis Residents Arrested in Adjacent St. Louis County Municipalities, 1966-1973, By Charge 127
7-5	Annual Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1966-1973 134
7-6	Percent of Juvenile St. Louis Residents Apprehended in Adjacent St. Louis Municipalities, 1966-1973, By Charge 137
A-1	Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1966 144
A-2	Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1967 145
A-3	Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1968 146

LIST OF TABLES (continued)

TABLES	Page
A-4	Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1969 147
A-5	Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1970 148
A-6	Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1971 149
A-7	Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1972 150
A-8	Residency Distributions of Adults Arrested on Index Crime Charges in the City of St. Louis, 1973 151
A-9	Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1966 152
A-10	Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1967 153
A-11	Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1968 154
A-12	Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1969 155
A-13	Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1970 156
A-14	Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1971 157
A-15	Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1972 158

LIST OF TABLES (continued)

TABLES	Page
A-16	Residency Distributions of Juveniles Apprehended on Index Crime Charges in the City of St. Louis, 1973 159
B-1	Residency Distributions of Adults Arrested on Index Crime Charges in St. Louis County, 1971 162
B-2	Residency Distributions of Adults Arrested on Index Crime Charges in St. Louis County, 1972 . 163
B-3	Residency Distributions of Adults Arrested on Index Crime Charges in St. Louis County, 1973 164
B-4	Residency Distributions of Juveniles Apprehended on Index Crime Charges in St. Louis County, 1969 165
B-5	Residency Distributions of Juveniles Apprehended on Index Crime Charges in St. Louis County, 1970 166
B-6	Residency Distributions of Juveniles Apprehended on Index Crime Charges in St. Louis County, 1971 167
B-7	Residency Distributions of Juveniles Apprehended on Index Crime Charges in St. Louis County, 1972 168
B-8	Residency Distributions of Juveniles Apprehended on Index Crime Charges in St. Louis County, 1973 169
C-1	Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1966 172
C-2	Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1967 173
C-3	Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1968 174

LIST OF TABLES (continued)

TABLES	Page
C-4	Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1969 175
C-5	Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1970 176
C-6	Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1971 177
C-7	Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1972 178
C-8	Residency Distributions of Adults Arrested on Index Crime Charges in Adjacent St. Louis County Municipalities, 1973 179
C-9	Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1966 180
C-10	Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1967 181
C-11	Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1968 182
C-12	Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1969 183
C-13	Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1970 184

LIST OF TABLES (continued)

TABLES		Page
C-14	Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1971	185
C-15	Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1972	186
C-16	Residency Distributions of Juveniles Apprehended on Index Crime Charges in Adjacent St. Louis County Municipalities, 1973	187

SUMMARY

This report presents the findings of an extensive investigation of the relationship between geographic crime displacement and the St. Louis High Impact Anti-Crime Program. This study was initiated by the Missouri Law Enforcement Assistance Council - Region 5 to provide a more comprehensive understanding of the extent and nature of criminal mobility in the St. Louis region; and, in particular, to determine whether the presence of the St. Louis High Impact Anti-Crime Program (hereinafter referred to as the Impact Program) acted as a catalyst in 1972 and 1973 to stimulate further criminal mobility from the City of St. Louis.

Initiated in 1972, the Impact Program is funded by the United States Department of Justice through the Law Enforcement Assistance Administration. The program provides \$20,000,000 to the City of St. Louis for the planning, implementation, and evaluation of anti-crime projects directed at the rapid reduction of stranger-to-stranger and burglary offenses. In this report, murder, rape, robbery and aggravated assault are defined as stranger-to-stranger crimes.

The results of this study are based on the analysis of crime and arrest data collected for the City of St. Louis, plus the 93 municipalities and unincorporated areas of St. Louis County. The primary purpose in collecting the arrest data was to obtain the residency of criminals operating in each jurisdiction. This residency information was used as a measure of criminal mobility in this report. Crime and arrest data for several years prior to the beginning of the Impact Program were collected to provide a basis on which pre-Impact trends could be established. The projection of these trends into the Impact years, 1972 and 1973, provided the "control" results which were used to measure the significance of the changes in the crime and arrest patterns following the beginning of the Impact Program.

The specific objectives of the study were established to test the major components of a crime displacement scenario. This scenario hypothesizes a logical sequence of events which directly relates increased criminal mobility to the Impact Program. Briefly, the scenario states that with the introduction of the Impact Program into the City of St. Louis, the operational projects were both effective and adequate enough to be perceived by a significant number of criminals in the City as increasing the risk of their

apprehension or conviction. In response to this increased risk, crime was reduced in the City, not by deterrence, but by the displacement of criminals to the surrounding jurisdictions.

The validity of this hypothesis relies upon both the reaction of criminals in St. Louis to the Impact Program and the increased presence of these criminals in St. Louis County. The validation of these components constitute the specific goals of the study. The first objective attempts to establish that criminals within the City of St. Louis perceived and reacted to the Impact Program. Criminal reaction within the City is measured by an analysis of changes in the St. Louis crime patterns following the initiation of the Impact Program. The second and third objectives attempt to detect the presence and origin of crime changes; first, in all of St. Louis County, and then in a selected group of adjacent municipalities which share a common border with the City (see Chapter II). The second objective attempts to establish through an examination of annual crime data that subsequent to the beginning of the Impact Program significant crime increases occurred in St. Louis County and the adjacent municipalities. On the basis of arrest residency data the third objective attempts to establish that following the initiation of the Impact Program a significant increase occurred in both the number and proportion of crimes committed by St. Louis residents in both St. Louis County and the adjacent municipalities.

Each objective is listed below, followed by the major observations obtained from the analysis of the crime and arrest data. It is important to note that in collecting the several years of crime and arrest data from each jurisdiction examined in this report, the number of pre-Impact years for which data could be obtained and upon which the observations below are made varied considerably from jurisdiction to jurisdiction (see Table 2-6). It should also be noted that in the observations presented below, the "Index" crime category does not include larceny under \$50 (see Table 2-5).

OBJECTIVE 1: Determination of the Perception and Reaction of Criminals in St. Louis to the Impact Program.

(1) The St. Louis Impact Program did not achieve its goal of a 5% reduction of City-wide Impact crime in two years. In fact, between 1971 and 1973, the annual number of reported Impact crimes in St. Louis rose by 1.9% (see Table 3-2).

(2) All Index crime categories, except auto theft, increased in 1973 over 1972, ending a three-year downward trend in the City of St. Louis. Crimes against persons increased by 5.6% over 1972 and reported burglaries increased by 8.3% (see Table 3-2).

(3) The number of reported burglaries declined from 18,876 in 1971 to 17,577 in 1972 -- a decline of 6.9%. The 1972 total was over 1,000 burglaries below the estimated 1972 total obtained from a linear projection of 1969-1971 annual burglary totals. The decrease in 1972 did not continue into 1973, however, when reported burglaries increased to the highest annual total since 1969 (see Table 3-2 and Figure 3-5).

(4) The evaluations of individual Impact projects indicated that some selected projects, for example the Burglary Prevention Unit and the Operation IDENT project, were effective during the first two years of the Impact Program. These evaluations of project effectiveness, however, were based on the reduction of crime only among project participants instead of the appropriate base population for the entire City.

OBJECTIVE 2: Determination of Crime Trend Changes in St. Louis County and the Adjacent Municipalities Following the Initiation of the Impact Program.

(1) Index crimes increased steadily in St. Louis County during the 10 year period, 1964-1973. The number of such crimes for the County increased each year by an average of almost 15% (see Table 3-3).

(2) For 1972 and 1973, the increase in Index crimes in St. Louis County was greater than the estimated crime growth projected from the pre-Impact data. The total number of Index crimes reported in 1973 exceeded both geometric and linear projections of the 1969-1971 data by 1,400 to 2,200 crimes, equivalent to a 5% to 8% increase in the annual level above the projected growth (see Table 3-5).

(3) Index crimes increased steadily in the adjacent municipalities from 1967 to 1973. Reported Index crimes rose by more than an average of 11% per year (see Table 3-7).

(4) For 1972 and 1973, the increase in reported Index crimes in the adjacent municipalities was less than the projected Index crime level. The number of reported Index crimes in 1973, 6,043, was approximately

4% less than the projected total of 6,295. All Index crime categories except robbery recorded crime increases in the adjacent municipalities which were below the linearly projected levels for 1973. The number of reported robberies increased by 50% during these two years, a growth rate only slightly greater than projected from the pre-Impact data (see Table 3-9).

(5) St. Louis County experienced a substantial increase in burglaries in late 1972 and all of 1973. This increase is evident in the moving average trend computed from the monthly reported burglary totals for the entire County (see Figure 3-10).

(6) In 1972, both St. Louis County and the adjacent municipalities experienced a significant reduction in burglary clearance rates. The County rate of 14.1% was over 6% less than any burglary clearance rate recorded since 1966. In 1973, however, both the County and the adjacent municipalities recorded significantly higher burglary clearance rates. The County rate of 26.1% was almost twice as high as the 1972 rate (see tables 3-6 and 3-10).

(7) The 1973 clearance rates for Impact crimes were the highest recorded since 1966 for both St. Louis County and the adjacent municipalities. Between 1972 and 1973, the County rate rose from 18.8% to 29.5%, and the adjacent municipality rate rose from 20.3% to 25.9% (see tables 3-6 and 3-10).

OBJECTIVE 3: Determination of the Changes in the Extent and Nature of Criminal Mobility Between the City of St. Louis and Both St. Louis County and the Adjacent Municipalities Following the Initiation of the Impact Program.

(1) Almost all persons arrested in the City of St. Louis for Index offenses are residents of the City. Between 1966 and 1973, 90% of all the adults and 95% of all the juveniles arrested were City residents (see tables 5-1 and 5-3).

(2) A substantial number of all persons arrested in St. Louis County are City residents. Between 1971 and 1973, City residents constituted over 30% of all the adults arrested for Index crimes (see Table 6-2).

(3) For 1969-1973, City juveniles represented from 12% to 22% of all apprehensions of juveniles for Index crimes in St. Louis County. Both the number and proportion

of City juveniles apprehended annually in St. Louis County declined since 1969; while 370 City juveniles were apprehended in 1969 (21.6% of all juvenile apprehensions), only 202 (12.3% of the total) were apprehended in 1973 (see Table 6-4).

(4) Between 1966 and 1973, approximately one half of all the adults arrested for an Index crime in the adjacent municipalities were City residents. The number of arrested City adults increased from 105 in 1966 to 236 in 1973. Although the number of arrested City adults more than doubled, the proportion of City residents to all arrests for Index crimes remained relatively constant: the 105 arrests of City adults in 1966 represented 56.8% of all the adult Index arrests while the 236 such arrests in 1973 were 51.8% of the total (see Table 7-3).

(5) From 1966 to 1973, City juveniles made up approximately 34% of all apprehensions of juveniles for Index crimes in the adjacent municipalities. Similar to the pattern of juvenile apprehensions for the entire County, both the number and proportion of apprehended City juveniles declined from 1969 when 194 City juveniles were apprehended for Index offenses (42.4% of all juvenile Index apprehensions) compared to only 85 City residents apprehended in 1973 (30.9%) for such offenses (see Table 7-5).

(6) A substantial increase in the number of adult City residents arrested for burglary in the St. Louis County occurred in the last quarter of 1972 and the first two quarters of 1973. The number of City adults arrested in those three quarters was 84% greater than the total arrested for the same period a year earlier. The number of County residents arrested for burglary increased only 28% during this same period. No corresponding increase was observed for City juveniles (see tables 6-3 and 6-6).

(7) With the beginning of the Impact Program in St. Louis, the number of City adults arrested for Impact offenses in St. Louis County increased substantially. A total of 493 City adults was arrested in 1973 in the County, a 50% increase over the 327 arrested in 1971. Despite this large increase in arrests, the percentage of City residents arrested for Impact offenses rose less than 3% during this two-year period. This small percentage increase indicates that an equally substantial increase in the number of Impact arrests of non-City residents also occurred

during this same period. A summary of both the number and proportion of City residents arrested in St. Louis County on various types of charges is presented in Table S-1.

(8) No substantial increase in either the number or proportion of City residents arrested for any Index crime, except robbery, occurred in the adjacent municipalities between 1971 and 1973. A summary of both the number and proportion of City residents arrested in the adjacent municipalities is presented in Table S-2.

Based on these observations, and supported by the data presented in this report, the major findings of this study are:

1. No permanent geographic crime displacement from St. Louis City into the adjacent municipalities was caused by the St. Louis Impact Program.

This conclusion follows directly from the failure of the data to confirm any of the major components of the crime displacement scenario. Whether because of ineffective or inadequate projects, the fact remains that, through the end of 1973, the Impact Program had not reduced reported Impact crime in the City of St. Louis. Hence, even if perceived by criminals in St. Louis, the Impact projects did not succeed in either persuading or forcing a substantial number of them either to cease their criminal activities, or to change the geographic location of their activities to other jurisdictions.

Examination of the crime levels in the adjacent municipalities also failed to indicate any significant changes. Reported Index crime did increase in 1972 and 1973, but at rates below the average annual increases recorded during the pre-Impact years 1969-1971. Examination of the arrest residency data also failed to indicate any substantive change in either the number or proportion of City residents arrested in the adjacent municipalities following the beginning of the Impact Program.

The only crime category for which the components of the crime displacement scenario were not uniformly rejected was robbery. Examination of the robbery crime and arrest data produces inconclusive results. For example, the 1973 reported robbery level in the adjacent municipalities exceeded the linear projection of the 1969-1973 data, but fell below the geometric projection based on the same years. The arrest data indicate that, between 1971 and 1973, the number of City residents arrested for robbery in the adjacent municipalities increased by 11 and the proportion of City residents increased by 11.4%.

Table S-1

ST. LOUIS CITY RESIDENTS ARRESTED

IN ST. LOUIS COUNTY, 1971-1973^a

BY TYPE OF CHARGE

CHARGE	St. Louis City Adults		St. Louis City Juveniles		TOTAL	
	1971	1973	1971	1973	1971	1973
Index Crime ^b Including Larceny Under \$50	1659 (39.2)	1752 (36.2)	699 (22.2)	753 (23.6)	2358 (31.9)	2505 (31.6)
Index Crime Excluding Larceny Under \$50	816 (33.4)	894 (30.7)	260 (16.9)	202 (12.3)	1076 (26.8)	1096 (24.1)
Impact (Murder, Rape, Robbery, Aggravated Assault, and Burglary)	327 (22.9)	493 (25.7)	102 (10.1)	109 (9.7)	429 (17.6)	602 (19.8)
Person-to-Person (Murder, Rape, Robbery, and Aggravated Assault)	129 (19.5)	199 (22.2)	23 (15.2)	22 (12.2)	152 (18.7)	221 (20.5)
Burglary	198 (26.0)	294 (28.8)	79 (9.2)	87 (9.3)	277 (17.1)	381 (19.4)
Robbery	59 (39.1)	90 (39.1)	16 (24.2)	22 (29.3)	75 (34.6)	112 (36.7)

a. Figures in parentheses represent percentage of arrestees who were St. Louis City residents.

b. Estimated on the basis of a 20% sample of arrests for larceny under \$50 for St. Louis City adults.

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table S-2

ST. LOUIS CITY RESIDENTS ARRESTED IN
ADJACENT ST. LOUIS COUNTY MUNICIPALITIES^a, 1971-1973^b

BY TYPE OF CHARGE

CHARGE	St. Louis City Adults		St. Louis City Juveniles		TOTAL	
	1971	1973	1971	1973	1971	1973
Index Crime ^c Including Larceny Under \$50	580 (57.9)	614 (61.5)	440 (48.1)	445 (53.2)	1020 (53.2)	1059 (57.7)
Index Crime Excluding Larceny Under \$50	209 (49.6)	236 (51.8)	132 (41.4)	85 (30.9)	341 (46.1)	321 (43.9)
Impact (Murder, Rape, Robbery, Aggravated Assault, and Burglary)	108 (43.2)	126 (43.6)	56 (28.3)	44 (23.0)	164 (36.6)	170 (35.4)
Person-to-Person (Murder, Rape, Robbery, and Aggravated Assault)	54 (46.2)	62 (40.5)	16 (33.3)	15 (28.8)	70 (42.4)	77 (27.6)
Burglary	54 (40.6)	64 (47.1)	40 (26.7)	29 (20.9)	94 (33.2)	93 (33.8)
Robbery	25 (52.1)	34 (65.4)	13 (39.4)	15 (46.9)	38 (46.9)	49 (58.3)

- a. Includes Clayton, Jennings, Maplewood, Pine Lawn, Richmond Heights, University City, and Wellston.
- b. Figures in parentheses represent percentage of arrestees who were St. Louis City residents.
- c. Estimated on the basis of a 20% sample of arrests for larceny under \$50 for St. Louis City adults.

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Further, the 1973 clearance rates for the adjacent municipalities do not support the argument that City residents were, in fact, committing the crimes, but were not being arrested. If this objection to the use of the arrest data is valid, then the lack of apprehensions would be reflected in lower clearance rates. Actually, the 1973 clearance rates for the adjacent municipalities were higher for both Index and Impact crime categories than in 1972. In addition, the 1973 clearance rate for Impact crimes was 5% higher than in 1971, the last full year before the beginning of the Impact Program.

2. No permanent geographic crime displacement from the City of St. Louis into St. Louis County was caused by the Impact Program.

This conclusion also follows from the failure of the crime and arrest data to support all of the major components of the crime displacement scenario. As before, the initial component in the scenario relates to criminal reaction in the City of St. Louis to the Impact Program. As discussed above, the 1973 crime data for the City do not indicate any City-wide effect on Impact crime. The crime data for St. Louis County, however, do support the second component of the scenario, that is, the presence of displaced criminals may be evidenced by increasing crime. Although Index crime had been increasing continuously for a number of years in St. Louis County, the reported increases coincident with the presence of the Impact Program in the City of St. Louis exceeded both the 1973 linear and geometric projections based on pre-Impact crime data. Examination of the arrest information for the entire County indicated that while the number of arrested City residents increased significantly after the beginning of the Impact Program, the proportion of City residents remained relatively the same. The 1973 clearance rates for St. Louis County were uniformly higher than those reported in 1972, mitigating the suggestion that the crime increases were committed primarily by unapprehended City residents.

The conclusion that no continuing crime displacement into St. Louis County was initiated by the Impact Program is based on the absence of any visible crime reduction in the City of St. Louis; the lack of any increase in the proportion of City residents arrested in the County; and finally, on the existence of a viable alternative hypothesis presented in Conclusion 3 which takes into consideration both the increase in the County crime level and the increase in the number of arrested City residents.

3. A substantial level of "attractive" crime displacement appears to have occurred in St. Louis County following the initiation of the Impact Program.

The use of the arrest residency data to distinguish between "attractive" and "repulsive" crime displacement is presented in Chapter IV. Repulsive crime displacement occurs when criminals are forced to move out of a particular jurisdiction because of some change within that jurisdiction -- e. g., the initiation of the Impact Program in the City of St. Louis. Under the proper conditions, the existence of this type of displacement can be evidenced by an increase in both the number and proportion of City residents arrested in neighboring jurisdictions. Attractive crime displacement occurs when a change within one or more jurisdictions attracts criminals from surrounding jurisdictions -- e. g., the opening of a new residential area in St. Louis County. The detection of attractive displacement relies upon the assumption that criminals will be attracted from all the surrounding jurisdictions and that, while the number of arrested persons from each jurisdiction will increase, the proportion of arrested persons from each jurisdiction will remain relatively constant.

Both the crime and arrest data support the hypothesis that, beginning in mid-1972, some change within St. Louis County created a substantial degree of attractive crime displacement. Both the number of arrested residents and non-residents increased significantly, but the relative proportion of each remained nearby constant. The fact that the most rapidly increasing crimes during this period were burglary and larceny suggests that the primary change was the continued increase in the number of new homes and shopping centers throughout St. Louis County. Plate 1, Crime Shift: 1971-1973, indicates the change in the proportion of City residents arrested in St. Louis County for Index crimes between 1971 and 1973. Only those municipalities with at least 25 arrests in each year are shaded.

4. A temporary period of burglary displacement to St. Louis County and the adjacent municipalities created by the St. Louis Impact Program may have occurred in late 1972 and early 1973.

This conclusion is the result of applying the appropriate burglary crime and arrest data to each component of the crime displacement scenario. As reported earlier, the total number of reported burglaries for the City of St. Louis, in 1972, declined by 6.9% and fell substantially below the 1972 linear projection based on the 1969-1971

Crime Shift: 1971-1973

Legend

(Percent Change in the Number of City Residents Arrested for Index Crimes comparing 1971 and 1973 Arrests by Municipalities)

Increase		Decrease
	2.6% to 5.0%	
	5.1% to 7.5%	
	7.6% to 10.0%	
	More Than 10.1%	

Less Than 2.5% Change

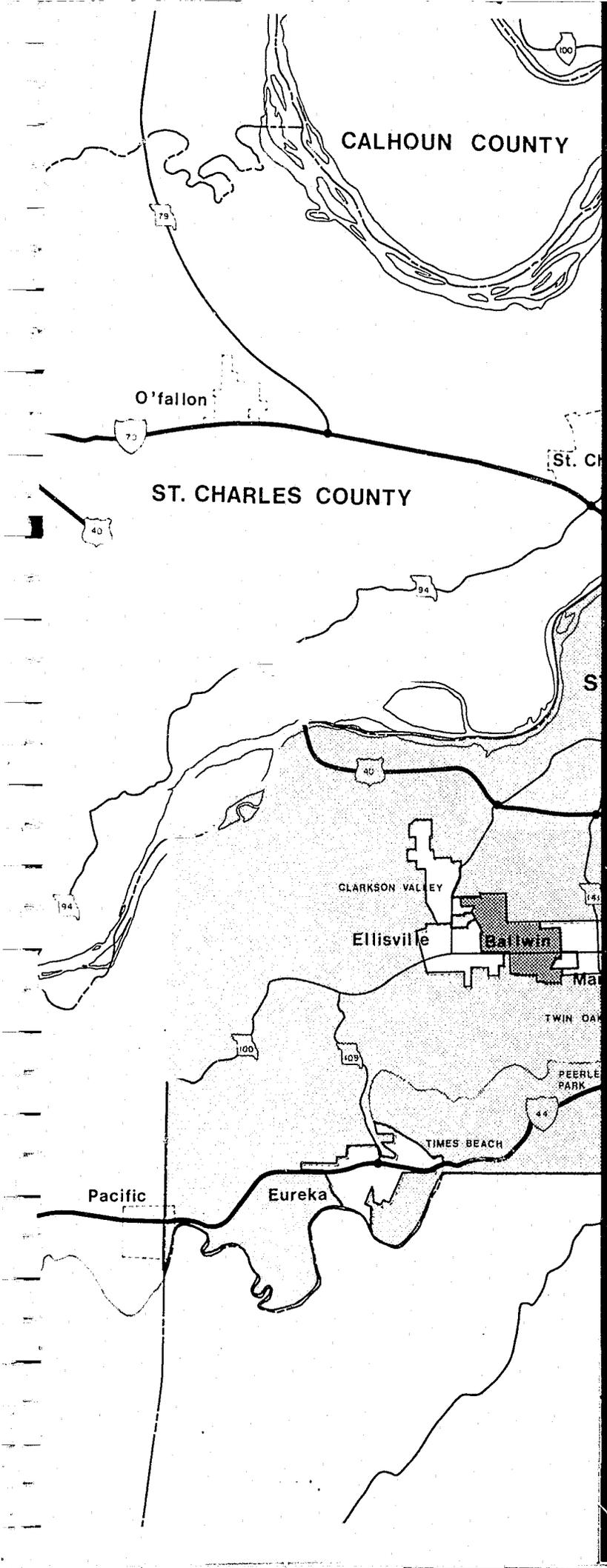
DATA PROVIDED BY THE ST. LOUIS COUNTY DEPARTMENT OF POLICE, THE ST. LOUIS METROPOLITAN POLICE DEPARTMENT AND LOCAL LAW ENFORCEMENT AGENCIES.



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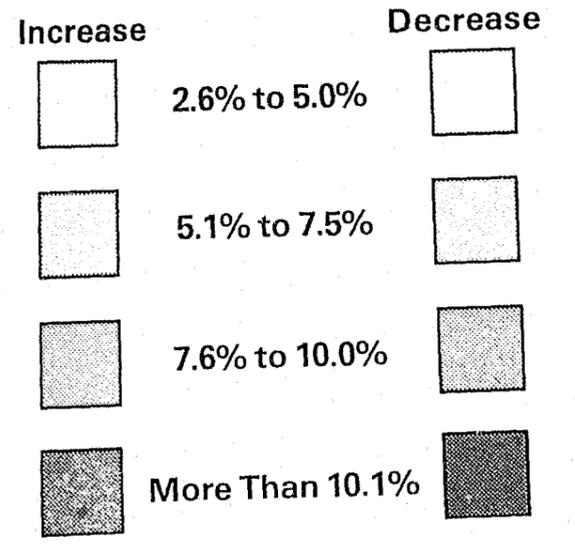
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Crime Shift: 1971-1973

Legend

(Percent Change in the Number of City Residents Arrested for Index Crimes comparing 1971 and 1973 Arrests by Municipalities)



Less Than 2.5% Change

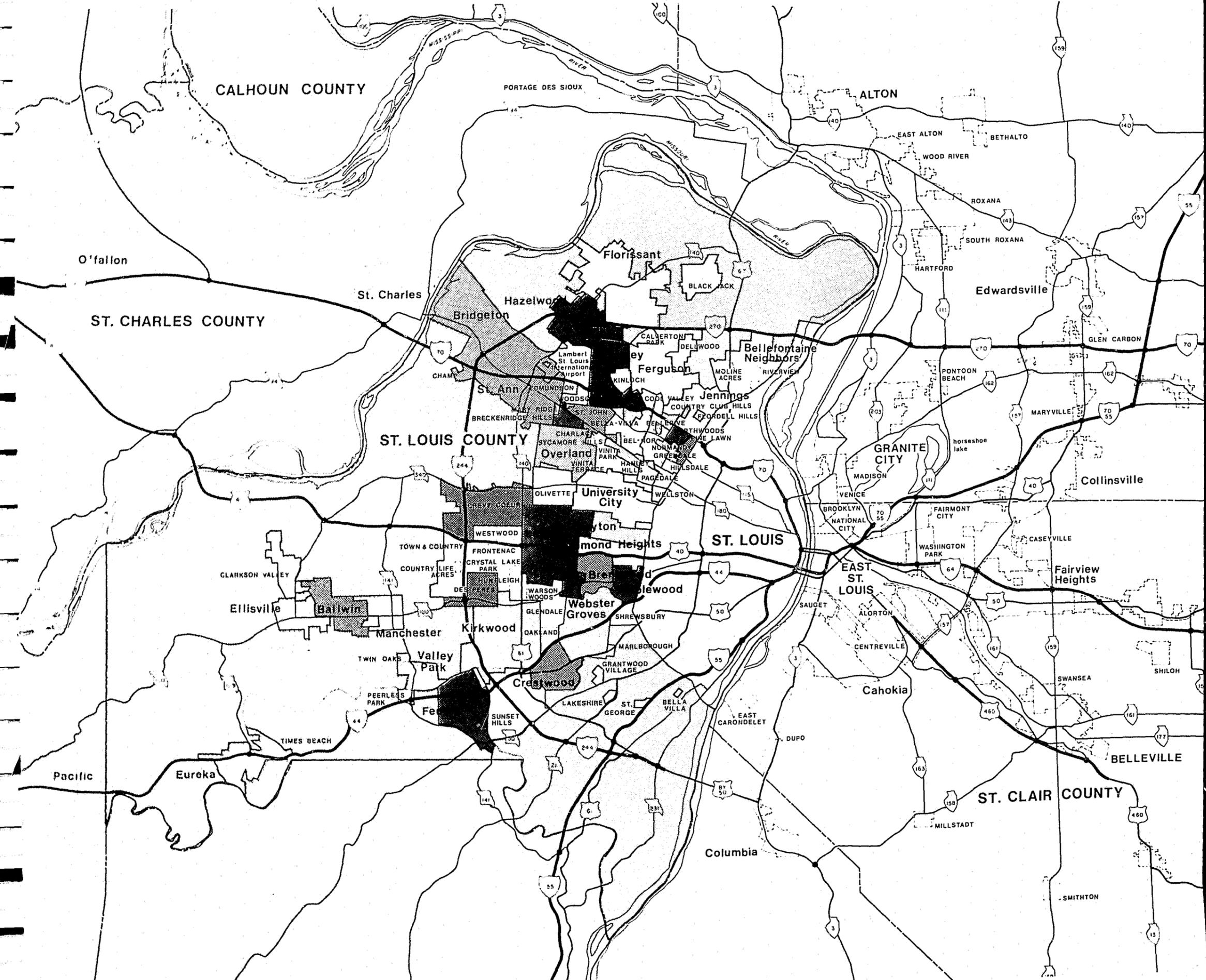
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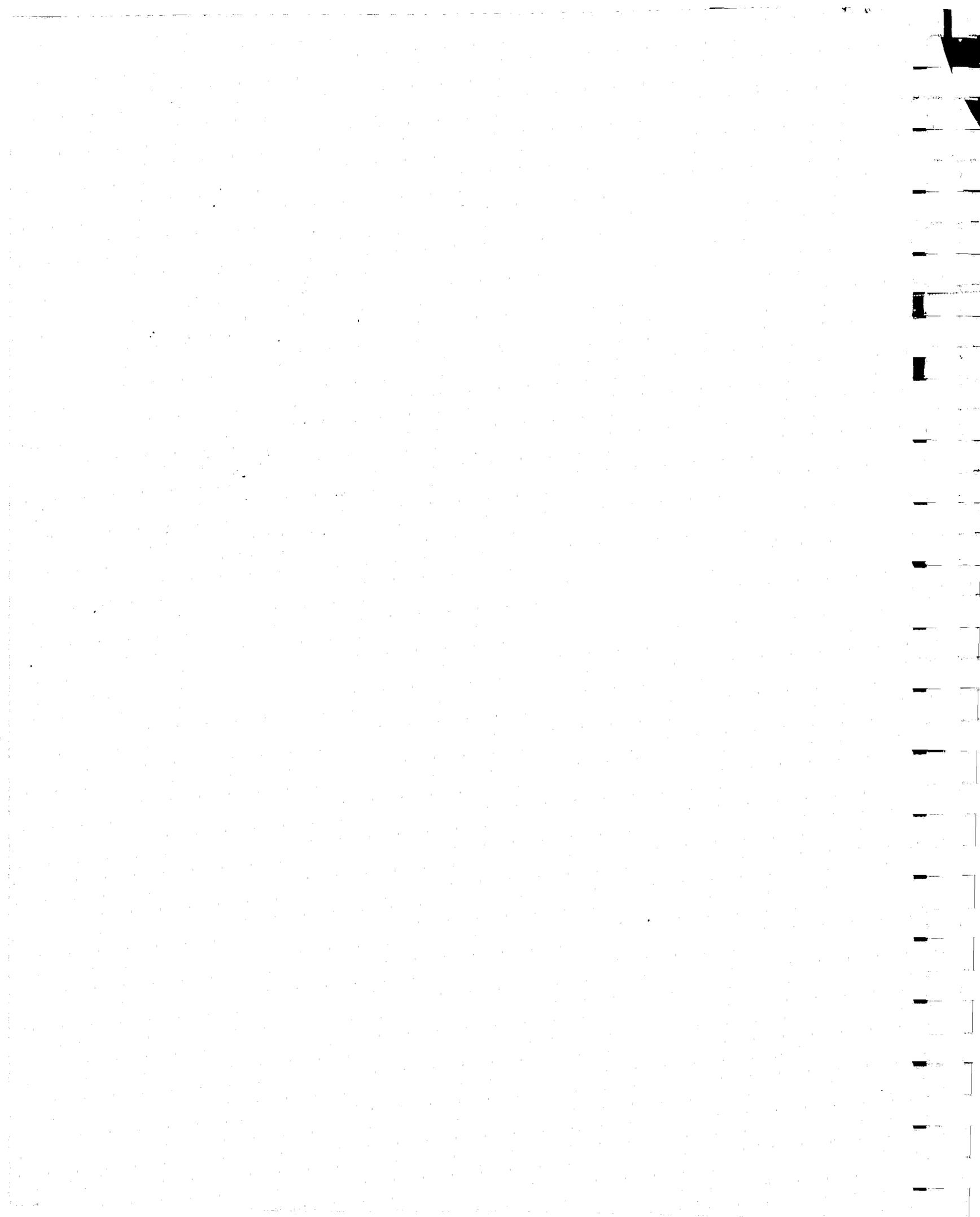


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burglary data. The monthly number of reported burglaries for both St. Louis County and the adjacent municipalities reversed their downward trend in July 1972 and the seasonally adjusted monthly burglary totals continued to increase consistently through June 1973. At the same time, both the number and proportion of City residents arrested for burglary in the entire County and in the adjacent municipalities increased significantly in the last quarter of 1972 and the first half of 1973.

The temporary nature of this displacement to St. Louis County suggests that a substantial number of City criminals reacted to the initial publicity and visibility of the Impact Program projects by temporarily altering the location of their activities. After approximately a year, however, the newness of the projects had faded; the continued deterrence of crime depended, not on appearances, but on performance. As discussed above, the cumulative effect of the Impact Program on City-wide burglary in 1973 was non-existent.

Although not a direct element of the scenario, it is interesting to note that burglary clearance rates for both the County and the adjacent municipalities fell significantly in 1972 and rose again in 1973. The lower clearance rates during the period of burglary displacement to the County and the adjacent municipalities perhaps reflect the fact that the police departments in these jurisdictions did experience greater difficulties when attempting to apprehend non-resident burglars.

5. A substantial number of all Index crimes in St. Louis County and the adjacent municipalities are committed by residents of the City of St. Louis.

This conclusion has been included to emphasize the fact that, despite the lack of evidence to substantiate any continuing crime displacement created specifically by the St. Louis Impact Program, a substantial level of inter-jurisdictional crime has existed between St. Louis County and the City of St. Louis for a number of years. This statement relies entirely upon the assumption that the proportion of crimes committed by City residents can be estimated from the proportion of City residents among all those arrested for Index crimes in St. Louis County.

The arrest data for the County indicate that, from 1971 to 1973, approximately 25% of all persons arrested for Index offenses were City residents. For the same time period, the arrest data for the adjacent municipalities indicate that approximately 45% of all arrestees for Index

crimes were City residents. Plate 2, Displaced Crime: 1973, illustrates the proportion of City residents arrested in each St. Louis County municipality which recorded at least 25 Index arrests in 1973. The St. Louis Criminal Justice System Description, 1973 issued by the Missouri Law Enforcement Assistance Council - Region 5 documented the fact that the majority of criminals in the City of St. Louis reside in the northern half of the City. The shadings in St. Louis County generally indicate a decreasing proportion of arrested City residents as the distance from the northern half of St. Louis increases. The two darkest areas adjacent to the City both contain extensive shopping areas, and the two dark areas to the west of the City are high-income, residential communities.

Whatever the reasons for mobility to one area or another, the data clearly indicate that criminals are no more likely to "work" exclusively within their home jurisdictions than the hundreds of thousands of commuters who travel from suburbia to the city and back again each day. Recognition of the regional nature of crime, as for many other urban problems, represents only the first small step in the long process required to plan, initiate, and coordinate the regional programs which can legitimately focus on the complete problem.

Displaced Crime: 1973

Legend

(City Residents as Percent of Total Index Arrests by Municipality in 1973)

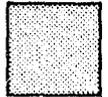
0 to 10.0%



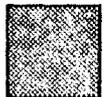
10.1% to 20.0%



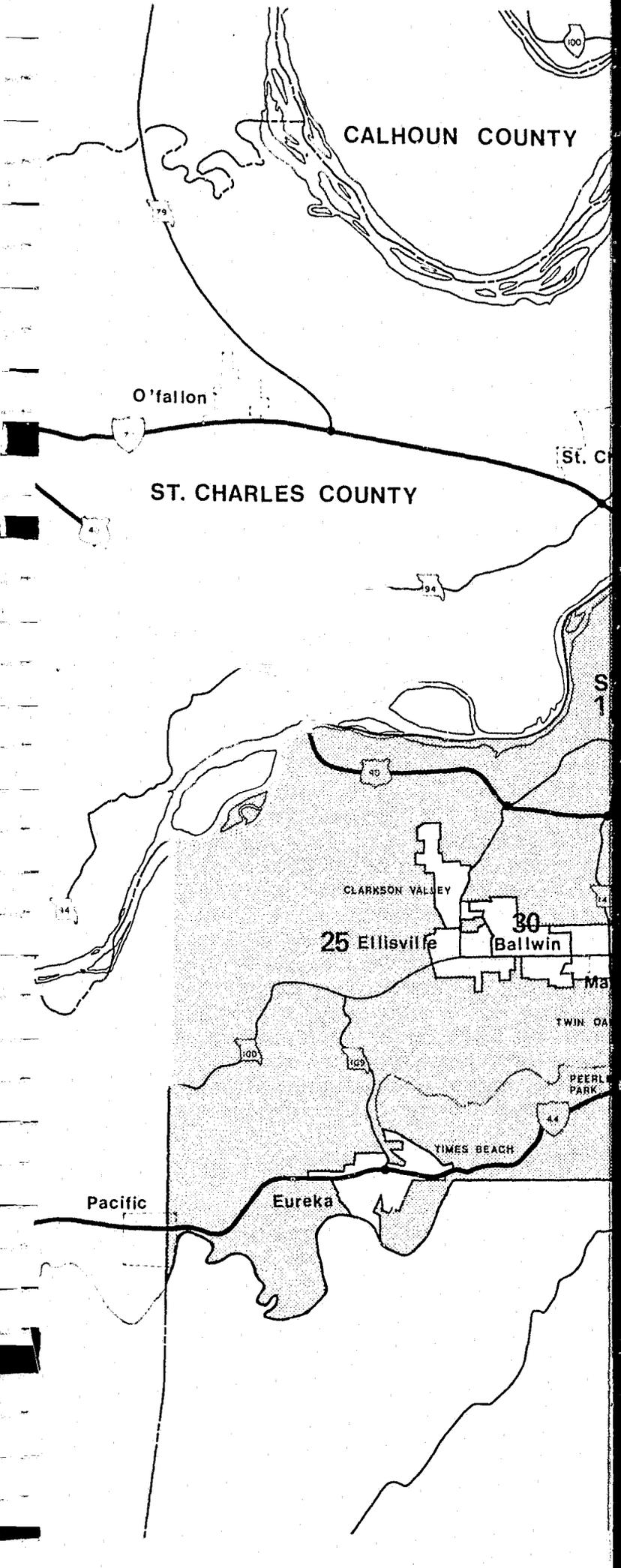
20.1% to 30.0%



30.1% to 40.0%



Over 40.1%



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Scale 0 3/4 3 Miles

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Displaced Crime: 1973

Legend

(City Residents as Percent of Total Index Arrests by Municipality in 1973)

0 to 10.0%



10.1% to 20.0%



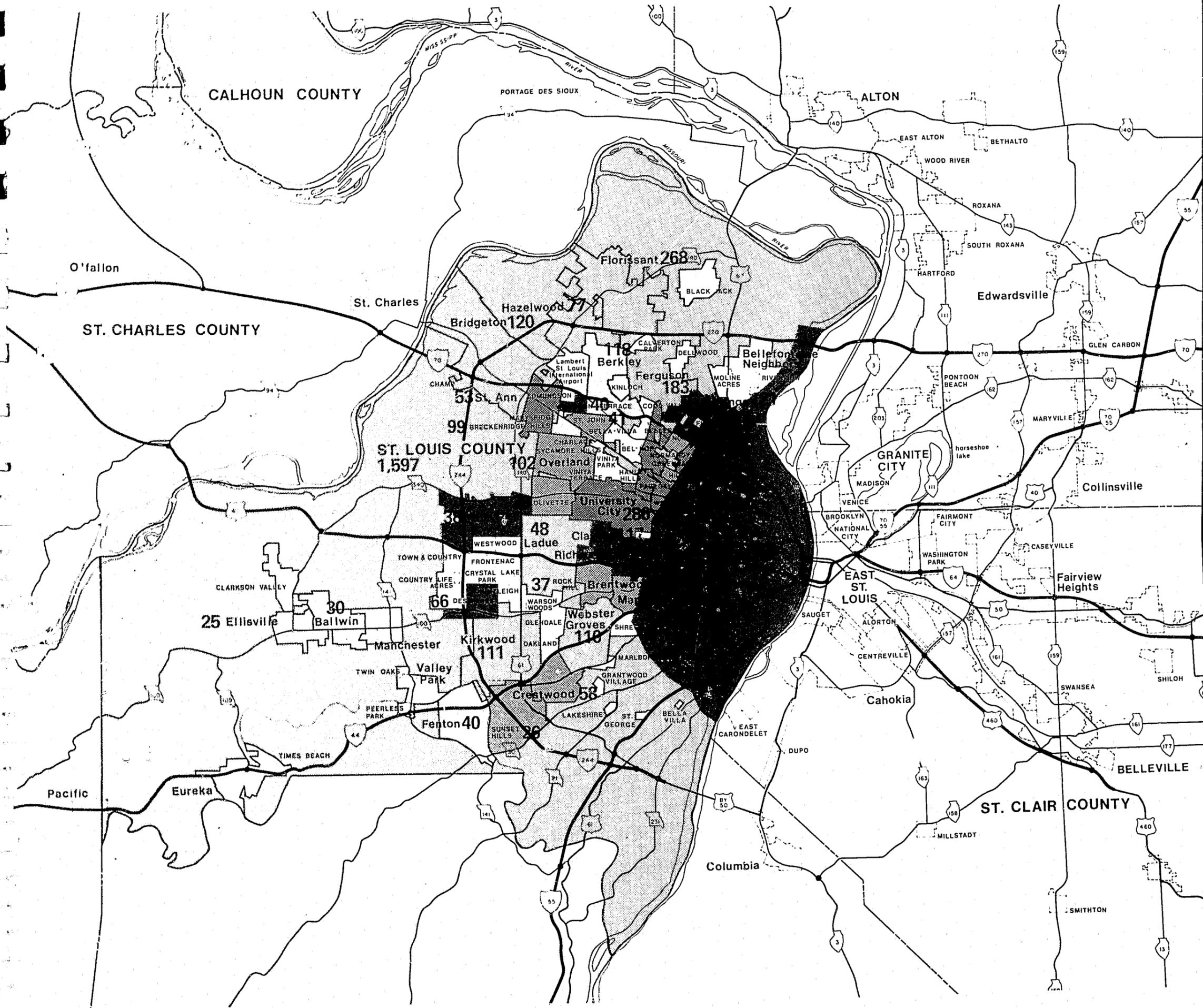
20.1% to 30.0%



30.1% to 40.0%



Over 40.1%



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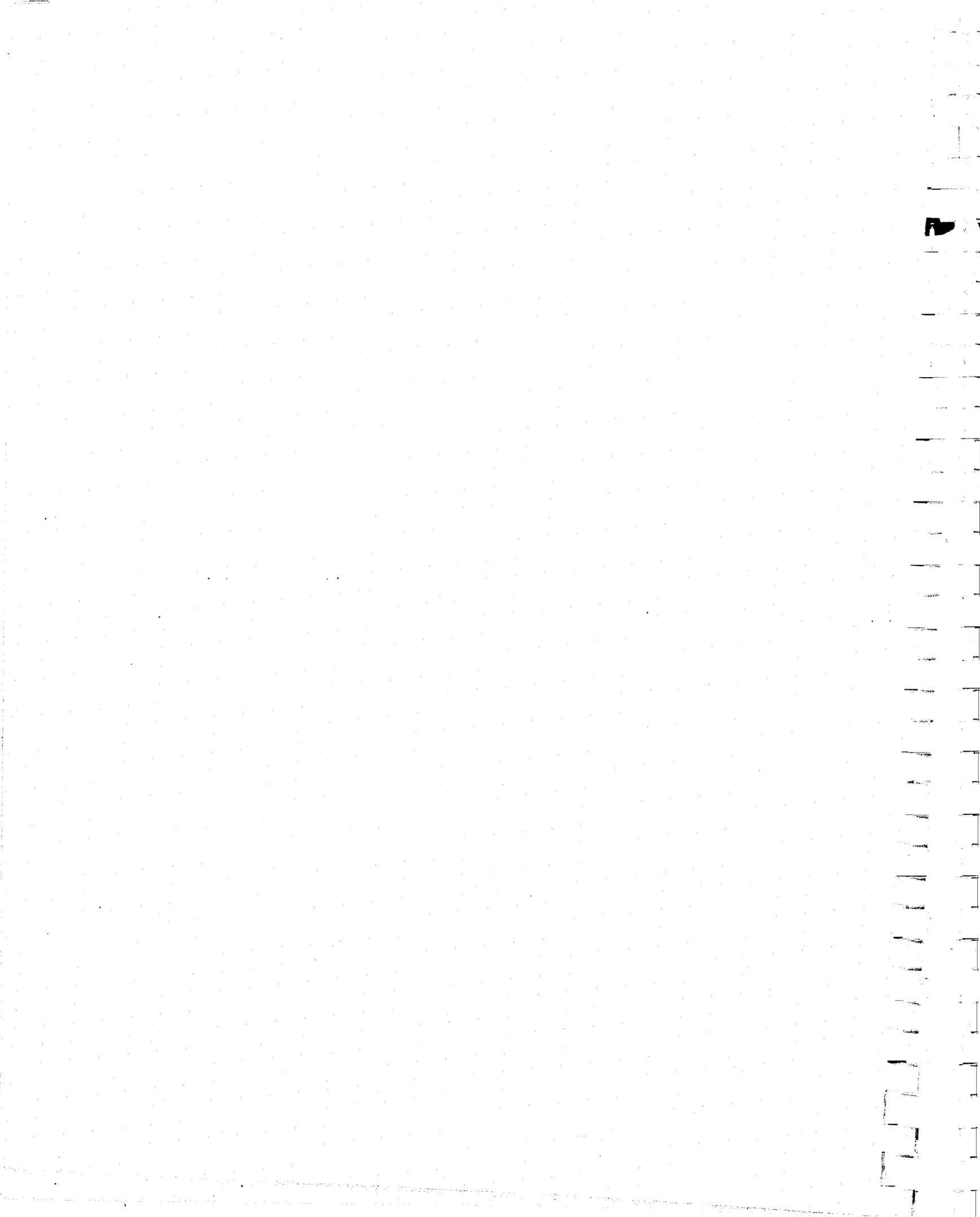


Scale Miles
0 3/4 3

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CHAPTER I

INTRODUCTION

A. Purpose of the St. Louis High Impact Crime Displacement Study

With the introduction of the Impact Program into the City of St. Louis in 1972, a unique set of circumstances was created particularly conducive to an examination of the crime displacement phenomenon: (1) a significant and relatively long-term anti-crime program was introduced into only one jurisdiction of a large metropolitan area; (2) the crime and arrest reporting procedures for most of the jurisdictions of interest were at least partially computerized, thus enabling rapid processing of data both prior to and following the introduction of the anti-crime program; and (3) a genuine commitment existed on the part of the Law Enforcement Assistance Administration, both on the Federal and local level, to provide the necessary financial support for such an investigation.

The purpose of this study was to examine the existence, extent, and nature of crime displacement in the St. Louis area as a direct result of the St. Louis Impact Program in 1972 and 1973. The study was conducted under the direction of the Missouri Law Enforcement Assistance Council-Region 5, and funded as part of the St. Louis Impact Evaluation Program. Extensive crime and arrest residency data were collected from the City of St. Louis; and the 93 municipalities, and unincorporated areas of St. Louis County. Data from the years prior to the beginning of the Impact Program were used to establish crime and arrest residency projections into 1972 and 1973 for each jurisdiction. These projections were used as standards against which the significance of observed changes in the reported crime and arrest residency trends subsequent to the beginning of the Impact Program could be determined.

B. Outline of the Report

The report is divided into seven chapters and three appendixes. The remainder of this chapter presents a brief description of the St. Louis Impact Program, and the geographic and political structure of the St. Louis area. Chapter I concludes with a discussion of recently completed studies of crime displacement in Washington, D.C. and Northwoods, Missouri, a municipality in St. Louis County.

Chapter II deals with the design of the St. Louis Crime Displacement Study. It contains a discussion of the basic elements of the displacement phenomenon which led to the development of a hypothetical crime displacement scenario. The validation of the major components of the hypothesized scenario provide the basis for the specific objectives of the study. Chapter II concludes with a presentation of the key definitions and limitations of the study, and the use of interrupted time-series as a research device to detect social change.

Chapter III is devoted to an analysis of the crime data collected from the City of St. Louis and St. Louis County. Using moving average and regression models, the changes in the crime trends following the beginning of the Impact Program are identified and examined for significance for the City of St. Louis, St. Louis County, and the adjacent municipalities, a selected group of St. Louis County communities each sharing a common border with the City.

Chapter IV deals exclusively with the conditions under which residency information collected from arrest records can be used to measure criminal mobility and crime displacement. Several validity and reliability problems associated with the use of arrest residency data are presented along with the procedures and assumptions adopted in the study to eliminate or control these difficulties.

Chapter V is the first of three chapters which present the extensive arrest residency information collected. It contains residency data on all adult and juvenile arrests for Index offenses in the City of St. Louis from 1966 through 1973. Residency arrest data for both adults and juveniles apprehended for Index offenses in St. Louis County are presented in Chapter VI. County adult arrest data is included from 1971 through 1973. County juvenile apprehension data are presented for 1969 through 1973. Chapter VII contains the adult and juvenile arrest residency information for the adjacent municipalities. Residency data for every Index arrest between 1966 and 1973 are presented.

The three appendixes each contain additional adult and juvenile arrest residency data not presented in Chapters V, VI, and VII. Appendix A presents arrest information for the City of St. Louis. Appendix B contains arrest data for St. Louis County and Appendix C contains additional data for adults and juveniles arrested in the adjacent municipalities.

C. St. Louis High Impact Anti-Crime Program

In January 1972, the High Impact Anti-Crime Program was announced for the City of St. Louis and seven other major U. S. cities. The three-year program represents a unique effort by the Department of Justice through the Law Enforcement Assistance Administration (LEAA) to aid urban governments in their efforts to reduce major crime. The program provides \$20,000,000 to each city for projects directed at specific crime-reduction goals. The initial planning, project implementation, fiscal monitoring and final evaluation of the projects in each city has been, and remains, the responsibility of the local government. Primary administrative control at the local level has been emphasized to enable each recipient city to promote those projects which it believes best suited to the economic, social, and criminal justice needs of that community.

In the City of St. Louis, the Impact Program host agency is the St. Louis Commission on Crime and Law Enforcement. Created in 1969, the Commission is an agency of the Mayor's office, with the responsibility of promoting improved coordination between local criminal justice agencies. During the first two years of the Impact Program, financial monitoring of the project grants, together with technical and evaluation assistance, was provided by the St. Louis Region 5 Office of the Missouri Law Enforcement Assistance Council.

Although the specific projects initiated in each city were determined by the local planning process, all Impact Program projects were required by LEAA to have as their primary goal the reduction of "Impact" offenses -- i. e., stranger-to-stranger crimes and burglary. In addition to identifying a common set of target crimes, quantitative reduction goals within the time-frame of the Impact Program were also specified. The Impact Program in each city will be considered successful if the target crimes are reduced on a city-wide basis by 5% in two years and by 20% in five years.

During the first six months of 1972, initial planning efforts in the City of St. Louis were directed at identifying the needs and problems of local criminal justice agencies. Proposals for specific projects were received and evaluated from the St. Louis Metropolitan Police Department, the adult and juvenile correctional facilities, the Appellate, Circuit, and Juvenile courts, the local State Probation and Parole Office, the Circuit Attorney's office, and several private citizen's groups. The initial grant awards were announced by late spring.

Once of the first projects to be implemented was the St. Louis Metropolitan Police Department Foot Patrol, which began operation in July 1972. By the spring of 1973, more than 40 projects had been authorized which involved most agencies in the local criminal justice system. Entering its third and final year of operation, the St. Louis Impact Program has retained its initial vitality through a continuous process of monitoring and evaluation to assess the effectiveness of each project, and to identify the underlying causes for success or failure. A complete list of the 34 St. Louis Impact projects and the host agency for each, as of June 1974, is shown in Table 1-1.

D. Crime Displacement in the St. Louis Area

The St. Louis Standard Metropolitan Statistical Area (SMSA) consists of the City of St. Louis plus seven surrounding counties extending over a two-state area as shown in Plate 3, St. Louis Metropolitan Area. The City of St. Louis and the counties of St. Louis, St. Charles, Franklin, and Jefferson, are in Missouri; and Madison, St. Clair and Monroe counties are in Illinois. An interesting feature of the St. Louis SMSA is the fact that the City of St. Louis is not part of the political structure of St. Louis County, but rather is a separate political entity which, by the State Constitution, constitutes both a city and a county.

Table 1-2 presents some of the major geographic, demographic and crime data for the eight major political jurisdictions of the SMSA. Although the City of St. Louis contained approximately 80% of the SMSA population at the turn of the century, by 1970 the continuing growth, both of the surrounding, incorporated areas ringing the City, and especially of St. Louis County, had reduced the City's population to only 25% of the SMSA total. In addition, between 1950 and 1970, the total population of the City declined by more than 25%. The final 1970 Census count of 622,000 persons was 235,000 less than the 857,000 population peak recorded in 1950. Despite its diminishing population, the City of St. Louis continues to report the highest crime totals and crime rates in the SMSA. The existence of the great number of political entities in the SMSA extending over two states (93 municipalities in St. Louis County alone) has tended to retard the development of coordinated planning efforts directed at common social and economic problems which transcend jurisdictional boundaries. These problems include area-wide rapid transit; air and water pollution; trash disposal; health services; location of a second major airport; development of port facilities; area-wide support of zoos,

Table 1-1

ST. LOUIS IMPACT PROJECTS

AS OF JUNE 1974

PROJECT	HOST AGENCY
Juvenile Supervision Assistance Project	Juvenile Court
Providence Educational Center	Juvenile Court
Circuit Court Diagnostic Treatment Center	Juvenile Court
Improvement of Court Automation	22nd Judicial Circuit
Expanded Circuit Court Improvement	22nd Judicial Circuit
St. Louis Court Improvement	Missouri Court of Appeals, St. Louis District
Research Department	Missouri Court of Appeals, St. Louis District
Circuit Attorney Criminal Investigation Unit	Circuit Attorney
Circuit Attorney's Improved Crime Reporting Process	Circuit Attorney
Probation and Parole Service Project	St. Louis Court of Criminal Corrections
Operation IDENT	St. Louis Metropolitan Police Department
Foot Patrol	St. Louis Metropolitan Police Department
Burglary Prevention Unit	St. Louis Metropolitan Police Department
Evidence Technician Unit	St. Louis Metropolitan Police Department
Police Youth Corps	St. Louis Metropolitan Police Department
Team Counseling-Hard Core Delinquents	St. Louis Metropolitan Police Department
Citizen's Reserve	St. Louis Metropolitan Police Department
Multi-Media Crime Prevention	St. Louis Metropolitan Police Department
Mounted Patrol	St. Louis Metropolitan Police Department
Community Service Officer	St. Louis Metropolitan Police Department
FLAIR (Fleet Location and Information Recorder)	St. Louis Metropolitan Police Department
Community Treatment Centers	St. Louis Department of Welfare
St. Louis City Corrections Service Project	St. Louis Department of Welfare
Aftercare Missouri Hills	St. Louis Division of Children's Services
Work-Skills Development at Missouri Hills	St. Louis Division of Children's Services
Intensive Aftercare	Missouri Board of Training Schools
Intensive Supervision Unit	Missouri Board of Probation and Parole
Pre-Trial Release	Missouri Board of Probation and Parole
Project to Reduce Truancy (PISA)	St. Louis Board of Education
Treatment Alternative to Street Crime (TASC)	St. Louis State Hospital
Student Work Assistance	Mayor's Council on Youth
Tenant Security Uplift	St. Louis Public Housing Authority
Increased Impact Visibility	St. Louis Commission on Crime and Law Enforcement
Adult Corrections and Probation and Parole Admin. Info. Syst.	Regional Justice Information System (REJIS)

Source: St. Louis High Impact Evaluation Unit.

Table 1-2

ST. LOUIS STANDARD METROPOLITAN STATISTICAL AREA (SMSA)

POPULATION AND CRIME DATA

MAJOR JURISDICTIONS	Area (Sq. Miles)	Total Population				Black Population		Reported Index Crimes**		
		1960	1970	Change	% Change	1970	%	1971	1972	% Change
City of St. Louis	61	750,026	622,236	-127,790	-17.0	254,191	40.9	44,409	44,008	-0.9
St. Louis County	510	703,532	951,671	248,139	35.3	45,495	4.8	22,211	28,318	27.5
St. Charles County	551	52,499	92,954	40,455	77.1	1,155	1.2	N.A.	1,200*	-
Franklin County	934	44,566	55,116	10,550	23.7	594	1.1	N.A.	800*	-
Jefferson County	668	66,377	105,248	38,871	58.6	816	0.8	N.A.	1,700*	-
Madison County	733	224,689	250,934	26,245	11.7	13,053	5.2	5,598	6,495	16.0
St. Clair County	673	262,509	285,176	22,667	8.6	63,512	22.3	7,942	10,287	29.5
Monroe County	382	15,507	18,831	3,324	21.4	19	0.1	160	141	-11.9
TOTAL SMSA	4512	2,119,705	2,382,166	262,461	11.0	378,835	15.9	-	-	-

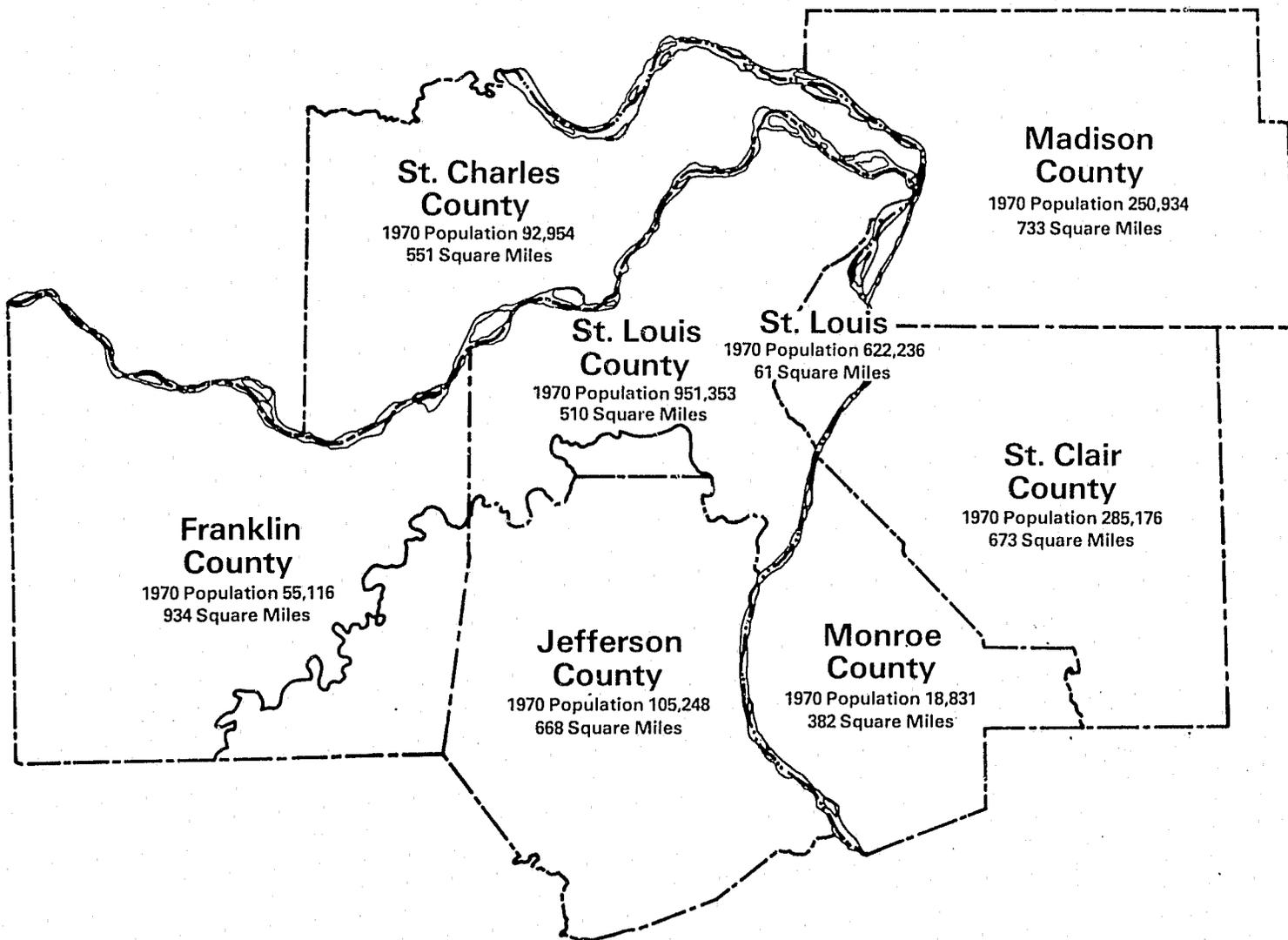
N.A. -- Not Available

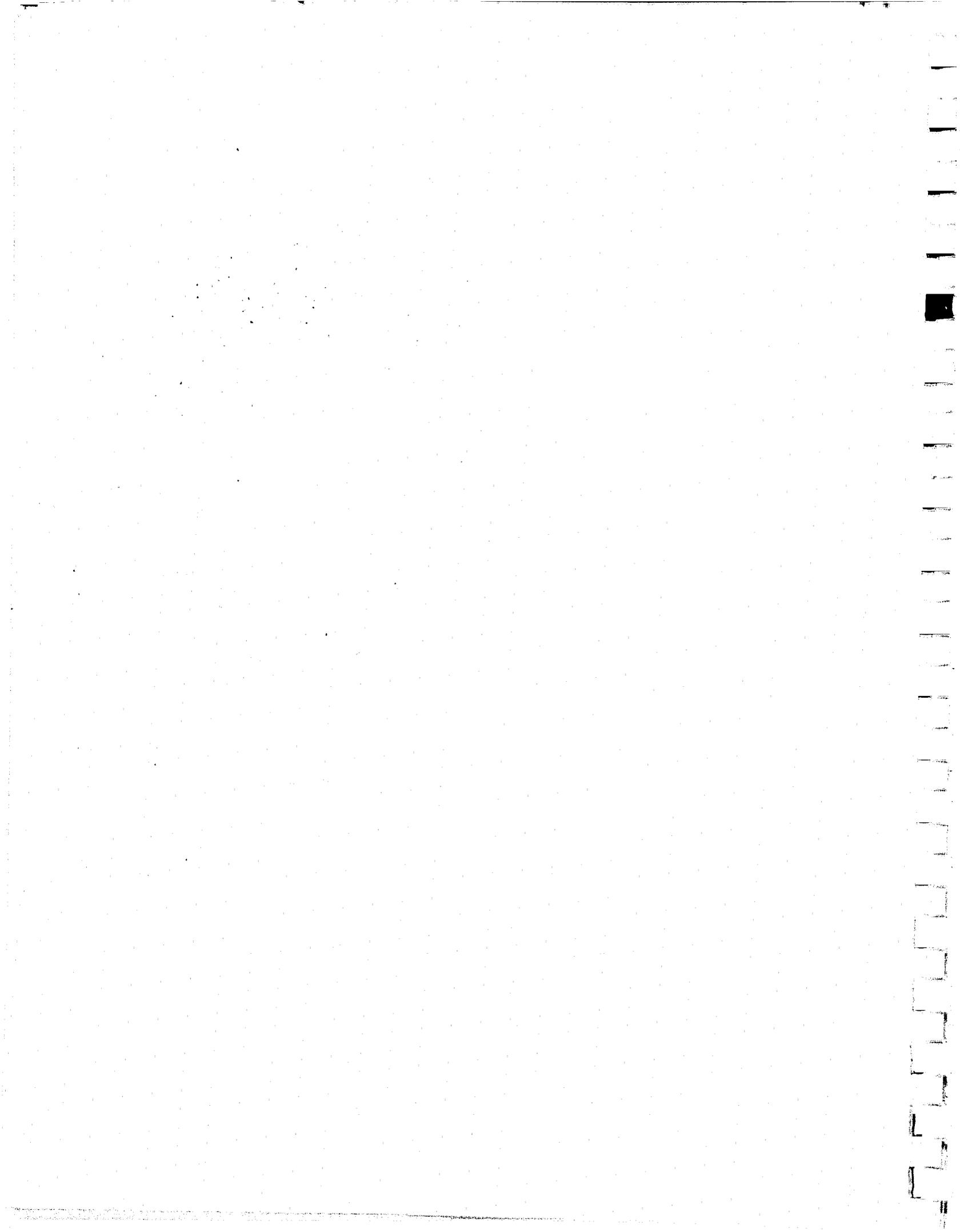
* -- Estimated from data obtained from the Uniform Crime Reporting Section of the FBI.

** -- Larceny under \$50 excluded.

- Sources: (1) 1960 Census of Population and Housing, St. Louis SMSA, Bureau of the Census, United States Department of Commerce.
 (2) 1970 Census of Population and Housing, St. Louis SMSA, Bureau of the Census, United States Department of Commerce.
 (3) Criminal Justice System Description-1972, Missouri Law Enforcement Assistance Council - Region 5.
 (4) Crime in Illinois-1972, Illinois Department of Law Enforcement.

St. Louis Metropolitan Area





museums, and the St. Louis Symphony; and area-wide control of crime. Although the recognition of the need for regional planning and coordination seems to be increasing, major governmental planning and decision-making in the St. Louis area continue to be made primarily on a fragmented, localized basis. Locally, Impact Program provisions required that funds could be spent only for projects exclusively within the City of St. Louis. Spokesmen for criminal justice agencies in the surrounding jurisdictions promptly protested that crime was a regional problem and should be combated as such. The use of a crime reduction program in only one area, they claimed, would not deter crime, but would, in fact, merely displace it to neighboring jurisdictions which had been excluded from the Impact Program.

To date, neither the proponents, or detractors of the crime displacement theory in the St. Louis region, have offered direct evidence to substantiate their claims. Most frequently, rising crime totals in the jurisdictions outside the City are cited as proof of the displacement phenomenon. However, no mention is made of the fact that crime has been continually rising in these same jurisdictions since long before the existence of the Impact Program.

E. Previous Crime Displacement Studies

Despite the continual advocacy of the crime displacement theory by criminal justice officials and researchers, surprisingly little critical work has been directed at the accurate measurement and understanding of this phenomenon. Typical of the small number of previous attempts is the recently completed report by the Metropolitan Washington Council of Governments. This study measured the level of inter-jurisdictional crime in Washington, D.C. and the surrounding jurisdictions in Maryland and Virginia, by tabulating the residency of all persons arrested in 1972 in each community for Index and narcotic offenses. The study concluded that almost 20% of all persons arrested in the Washington metropolitan area for such offenses did not live in the jurisdiction in which they were arrested. The rate of inter-jurisdictional crime tended to be higher in the suburban areas than in the District of Columbia. The tabulated rate was 30.3% in the Maryland suburbs, 20.6% in the Virginia suburbs, and only 9.7% in the District of Columbia. Of the seven Index crimes, the highest rate was reported for larceny, 35.5%, and the lowest for aggravated assaults, 12.9%.

The study also reviewed the results of earlier studies in the Washington, D. C. area to determine whether any significant changes could be detected in the level of

inter-jurisdictional crime over a number of years. Referring to several previous studies, one of which was conducted as early as 1939, the report concluded that the rate of inter-jurisdictional crime had remained relatively constant. This result is significant in light of the recent massive Federal commitment to reduce crime in the District of Columbia.

The most recent study completed in St. Louis area was done for the Northwoods Missouri Police Department in 1972 by the Extension Division of the University of Missouri-St. Louis. The residency of each person arrested in Northwoods from December 1971 through November 1972 was tabulated. The 185 adult arrests and 74 juvenile apprehensions examined revealed that 63% of all of the adults, and 52% of all of the juveniles, arrested were not residents of Northwoods. The usefulness of these rates is difficult to evaluate, however, since the Northwoods municipality has a total area of only 0.66 square miles and is surrounded by municipalities of relatively equal population densities extending at least five miles in every direction. No attempt was made in the Northwoods study to determine the underlying causes of the observed rates or to investigate whether inter-jurisdictional crime rates were changing with time.

The emphasis in both of the studies cited above was on the measurement of the level of inter-jurisdictional crime during a relatively short period of time. At best, these studies can be categorized as static pictures of criminal mobility which shed little light on the underlying causes. To adequately explore plausible cause-and-effect relationships between the characteristics and changes in the criminal's environment and the extent and nature of his mobility, it is necessary to measure inter-jurisdictional crime rates, both in the presence and absence of each of the hypothesized causes of criminal mobility.

DESIGN OF THE ST. LOUIS HIGH IMPACT CRIME DISPLACEMENT STUDY

A. Crime Displacement - What Is It?

One of the difficulties in discussing the phenomenon of crime displacement is the absence of any commonly accepted vocabulary. In place of precise terms a variety of colorful buzz-words have evolved which inadequately describe what is in reality a complex phenomenon. Such descriptions as "the mercury effect," "the toothpaste effect," "crime-spillover," and "inter-jurisdictional crime" have been used by various authors in discussing changes in criminal behavior and the crime displacement problem. Further hindering critical examination of the phenomenon is the political environment in which the discussion of crime displacement is often embroiled. Police officials often find the displacement argument a convenient crutch to use when asked to explain rising crime in their own jurisdictions. Crime committed by "outsiders" has the simplistic appeal that fits well into the requirements of today's news capsule environment. In addition, police officials in a city which has instituted Federally-financed anti-crime projects often find it convenient to ignore the displacement problem, or to view the arguments as political devices by the surrounding jurisdictions to siphon off some of the Federal monies. In this atmosphere of claims, counter-claims, and hot headlines, little critical analysis of the issues has been attempted. Despite the confusing vocabulary associated with the subject and the lack of empirical analysis to support news headlines, some common ideas can be extracted from the limited amount of crime displacement literature that exists.

1. Elements of Change

Central to all displacement discussions is the concept that the criminal perceives some change in his crime environment, and that these changes to one or more of the input variables in his internal risk/gain equation cause him to re-evaluate his criminal behavior. The principal risks present in most criminal acts are those of apprehension and conviction. In the most elementary terms, the probability of apprehension is the criminal's operational definition of police effectiveness. His perception of changes in police tactics is translated internally into a

new arrest probability which is then weighed against the potential gain of continuing his present criminal pattern. The significance of criminal perception was evidenced by the importance which the St. Louis Police Department attached to the "visibility" of the Foot Patrol Project, one of the first police Impact projects to be implemented in the City of St. Louis.

The criminal's perception of conviction risk is less directly tied to the actions of a single criminal justice agency, but is related to his awareness and reaction to the effectiveness of the Circuit Attorney's office, the firmness of the judicial system, and the quality of correctional services. Perceived changes in any of these agencies are eventually assimilated by the criminal and translated into some measure of risk. The direct relationship between a decrease in crime-on-the-street and improvements in these agencies is hypothesized by a number of Impact projects which exist within the prosecutorial, judicial and correctional agencies of the City.

While the criminal is more likely to be aware of these risks in his own crime environment, the perception of apprehension and conviction probabilities in the surrounding jurisdictions enables him to assess internally the relative risk associated with criminal behavior in each area. Consequently, perceived changes in either the apprehension or conviction probabilities in any jurisdiction alter the relative risk, not only for criminals in that jurisdiction, but also for those operating in neighboring jurisdictions.

A variety of changes can alter the gain which a criminal envisions for his efforts. Target hardening techniques such as improved locks on doors and windows may not increase the likelihood of apprehension, but can significantly increase the effort required to obtain the same gain. Over a longer period of time, neighborhood deterioration will tend to reduce the sources of gain from a particular area. In turn, the opening of a new business, shopping center, or housing development presents a new "market" to the criminal, who must reassess the relative potential gain associated with each market within his range.

Two observations are immediately obvious. The environment in which a criminal determines his behavior is constantly being altered, not only by law enforcement pressures, but also by social, economic, and demographic changes. Secondly, the change process is continuous. It is unrealistic to assume that the criminal operates in a static environment only occasionally disrupted by some altered law enforcement pressure. The causes of criminal

behavior are many, varied, and continually changing.

Crime displacement can be considered as either attractive or repulsive. This dichotomy is made in order to distinguish between the source of the primary elements of change in the criminal's environment. Attractive displacement refers to any changes occurring in a jurisdiction which induce the shift of criminal activity to that jurisdiction. These changes may involve an increase in the potential gain because of an increasing number of targets -- e. g., a new residential development or shopping center; or the change may be related to a reduced risk made possible by a police force which demonstrates a lessening of effectiveness in preventing or solving crimes.

Repulsive displacement, on the other hand, refers to any changes in a jurisdiction which cause crimes to be shifted to other jurisdictions -- e. g., increased police patrol in high crime neighborhoods. One special kind of change which may increase criminal mobility, but is difficult to categorize, is the opening of transportation links, primarily expressways, which create easy passage from one part of a metropolitan region to another. The opening of a highway provides a kind of selective displacement process in which only those communities immediately serviced by the highway are likely to be affected.

In this report the principal element of change to be investigated is the introduction of the Impact Program into the City of St. Louis, beginning in mid-1972. The investigation of the repulsive displacement effect of the Impact Program, however, must be made within the context of the major social and demographic changes which continue to characterize the St. Louis region. Specifically, the rapid economic and population growth of St. Louis County must be considered in seeking the causes of crime displacement both attractive and repulsive.

2. Types of Change

In the simplest terms, faced with an altered environment due to either law enforcement pressure or social change, the criminal may decide to:

- Continue the same criminal behavior (null effect);
- Cease his criminal behavior (deterrent effect); or
- Alter his criminal behavior (displacement effect).

Evaluations of criminal justice projects which focus only on the change in the target crime may easily confuse the displacement of the crime with deterrence. The opportunity

for this confusion exists because of the many possible varieties of crime displacement.

3. Displacement Alternatives

The major types of displacement a criminal can make in his behavior are:

- Geographic - continuation of the same crime type and tactics, but in a different location;
- Crime type - change from one crime type to another;
- Temporal - change the time of committing a particular crime type; and
- Tactical - change one or more of the tactics of his criminal activity.

In most instances a criminal is continually making minor adjustments to all of the above alternatives in an effort to optimize his gain for a minimum risk. These minor kinds of displacement represent part of the inherent noise level one encounters in analyzing periodic crime data. A more complete discussion of crime displacement alternatives is presented in a report by Michael D. Maltz (see Evaluation of Crime Control Programs, National Institute of Law Enforcement and Criminal Justice, April 1972).

B. Study Objectives

As indicated in the Introduction, the purpose of this report is to examine the existence, extent, and nature of geographic crime displacement in the St. Louis area as a direct result of the Impact Program. Specific objectives to accomplish this purpose were established with the use of the following hypothetical crime displacement scenario. Beginning in 1972, a series of anti-crime projects was introduced into the City of St. Louis and funded through the Impact Program. With the initiation of these projects, criminals operating in the City observed the increased risk and/or decreased gain associated with continued activity in the City and shifted their operations to neighboring jurisdictions, not included in the Impact Program. This geographic displacement of criminals, if it occurred, resulted in a rise in the number of reported Index crimes and an increase in the rate of inter-jurisdictional arrests of City residents in the jurisdictions surrounding the City of St. Louis.

This study sought to determine the validity of this scenario of crime displacement through an empirical analysis

of its major components. The identification and analysis of these components represent the central focus of the remainder of this report. The three objectives of the study are:

Objective 1: Determination of the Perception and Reaction of Criminals in St. Louis to the Impact Program.

The first component of the hypothetical scenario deals with the fact that the criminal operating in the City of St. Louis must become aware of, and then react to, the existence of the Impact Program. Criminal reaction on a City-wide basis can be estimated by an examination of crime trends in the City both prior to and following the initiation of the Impact Program. An analysis of reported crime in the City of St. Louis for 1964 through 1973 is presented in Chapter III.

If a significant decrease in crime is found, further investigation is needed to determine whether this reduction is merely the continuation of the pre-Impact trend. If the crime reduction represents a genuine altering of the trend, then further examination is required to determine what proportion of the crime reduction has occurred because of displacement. However, if no significant crime reduction is found on a City-wide basis, it becomes difficult to prove displacement.

Objective 2: Determination of Crime Trend Changes in St. Louis County and the Adjacent Municipalities Following the Initiation of the Impact Program.

Another major component of the crime displacement scenario is the conjecture that a significant and timely increase in reported crime will occur in surrounding jurisdictions not included in the Impact Program. An analysis of crime data for these jurisdictions is presented in Chapter III, following the discussion of crime in the City.

As in examination of City crime data, the significance of reported crime totals must take into account crime trends before the initiation of the Impact Program. Recognition of pre-Impact trends is particularly important because of the rapid economic and population growth experienced in many of the surrounding jurisdictions during the last 20 years. Not unexpectedly, these are the same jurisdictions which have consistently reported substantial annual crime increases for the last 5 to 10 years.

Objective 3: Determination of the Changes in the Extent and Nature of Criminal Mobility Between the City of St. Louis and Both St. Louis County and the Adjacent Municipalities Following the Initiation of the Impact Program.

The final component of the crime displacement scenario attempts to directly relate the presence of the Impact Program in the City of St. Louis to increasing crime in the surrounding jurisdictions. If criminals driven from the City by the Impact Program are committing more crime in the surrounding jurisdictions, then both the number and proportion of City residents arrested in those jurisdictions should show an increase. The same criteria used to determine significant changes in the reported crime totals must also be applied, to determine whether the number and proportion of City residents arrested have changed because of the Impact Program or whether the observed levels are merely the continuation of pre-Impact trends.

A more thorough discussion of the limitations and uses of arrest residency data to measure criminal mobility is presented in Chapter IV. Arrest data for the City of St. Louis, St. Louis County, and the adjacent municipalities are presented in Chapters V, VI, and VII.

C. Study Definitions and Limitations

1. Introduction

As with any project which involves a considerable amount of field data collection, the desire to produce results as complete as possible had to be weighed against the limited resources and time available for data collection. The primary purpose in examining crime and arrest data for a number of years in this study was to obtain crime and arrest residency trends based on pre-Impact data. In many jurisdictions, however, the residency of the person arrested was not included in any routinely produced arrest report. Hence, obtaining residency information required an examination of the original booking sheet produced for each arrest - a slow and tedious task.

The following sections identify the specific jurisdictions included in this report, the kinds of arrest and crime data collected, the crime categories used, and the time periods covered by the data. Additional discussions of the limitations of reported crime data are presented in Chapter III. Validity and reliability difficulties associated with the use of arrest data are discussed in Chapter IV, and the methods used to collect the arrest data

are described in Chapters V, VI, and VII.

2. Jurisdictions Examined

This report examines the existence and extent of geographic crime displacement between the City of St. Louis and both St. Louis County, and a selected group of municipalities within the County. This decision was influenced by the availability of data for the County; and by the fact that 65% of the population and a majority of the total reported Index crime in the three counties immediately adjacent to the City (St. Louis, St. Clair, and Madison) exist in St. Louis County. In addition to the unincorporated areas, comprising about 325 square miles, St. Louis County now consists of 93 incorporated municipalities, covering approximately one-third of the County's area and containing slightly less than two-thirds of the County population. Most of these municipalities obtain police services by maintaining their own police departments or by contracting for services with a neighboring municipality or the St. Louis County Police Department, which has full responsibility for providing police services to all unincorporated areas of the County.

Despite the presence of over 60 separate police agencies in the County, most of the data sought were obtained at one location. The processing of all crime and arrest information in St. Louis County has been done for a number of years at the Bureau of Central Police Records of the St. Louis County Police Department, (hereinafter referred to as "Central Records"). A duplicate copy of the booking sheet for every arrest in St. Louis County is forwarded to Central Records and kept on file for three years. This central file of booking sheets was this study's source of residency information for St. Louis County for the period 1971 to 1973.

In order to obtain arrest residency information for years prior to 1971, it was necessary to examine arrest booking sheets maintained by the individual municipalities. Because of the time-consuming nature of such examination, only seven municipalities were chosen. In order to obtain a profile of inter-jurisdictional arrests in a smaller geographic area immediately adjacent to the City, these municipalities included Clayton, Jennings, Maplewood, Pine Lawn, Richmond Heights, University City, and Wellston. All these municipalities share a common border with the City of St. Louis and are collectively referred to in this report as the adjacent municipalities (see Plate 5, Crime Displacement Study Area).

An additional advantage in examining these particular

municipalities was the fact that, contrary to the general trend of rapid population growth in St. Louis County, these communities have experienced relatively little population change over the last 10 years. Some of the major demographic and police data for the City of St. Louis and St. Louis County are presented in tables 2-1 and 2-2, and for the adjacent municipalities in tables 2-3 and 2-4.

3. Types of Crime and Arrest Data Collected

In collecting both crime and arrest information, only Index offenses and charges were examined. The validity of this restriction was based on the fact that the Impact Program, the element of change under investigation in this report, is directed at only the most serious of the Index offenses (murder, rape, robbery, aggravated assault, and burglary). Thus, while this limitation helped significantly to reduce the volume of data to be collected, the range of crimes included in this report is broader than the target crimes of the Impact Program itself. As used in this report, the seven Index offenses are:

Murder - the unlawful killing of a human being with malice aforethought. Any death due to a fight, argument, quarrel, assault or commission of a crime is included. Not included are attempts to kill, suicides, accidental deaths, justifiable homicides, or negligent manslaughter.

Rape - the carnal knowledge of a female forcibly and against her will. All attempts to rape are counted, but carnal abuse, statutory rape and other sex offenses are not included.

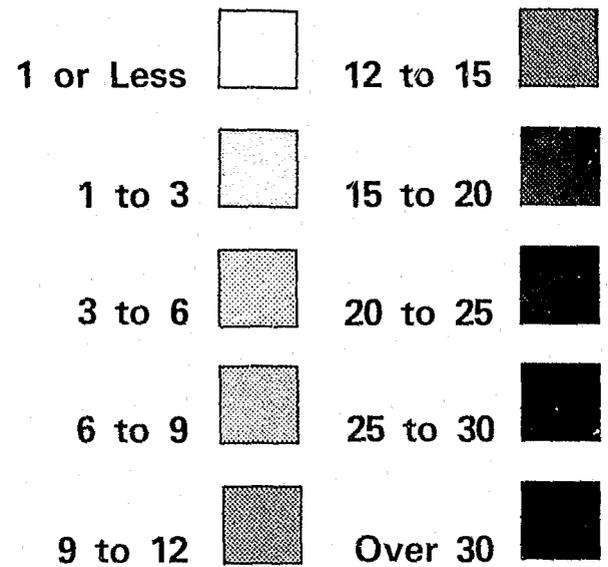
Robbery - the felonious and forcible taking of, or attempting to take, the property of another, against his will, by violence or by putting him in fear. The element of personal confrontation is always present.

Aggravated Assault - the unlawful attack by one person upon another for the purpose of inflicting severe bodily injury, usually accompanied by the use of a weapon or other means likely to produce death or great bodily harm. Attempts are also included, since it is not necessary that an injury result from an aggravated assault when a gun, knife, or other weapon is used which could result in serious personal injury if the crime were successfully carried out. Common assault is not an Index crime and is not included in the assault totals used in this report.

Population Density

Legend

(Number of Persons per Acre in 1970)



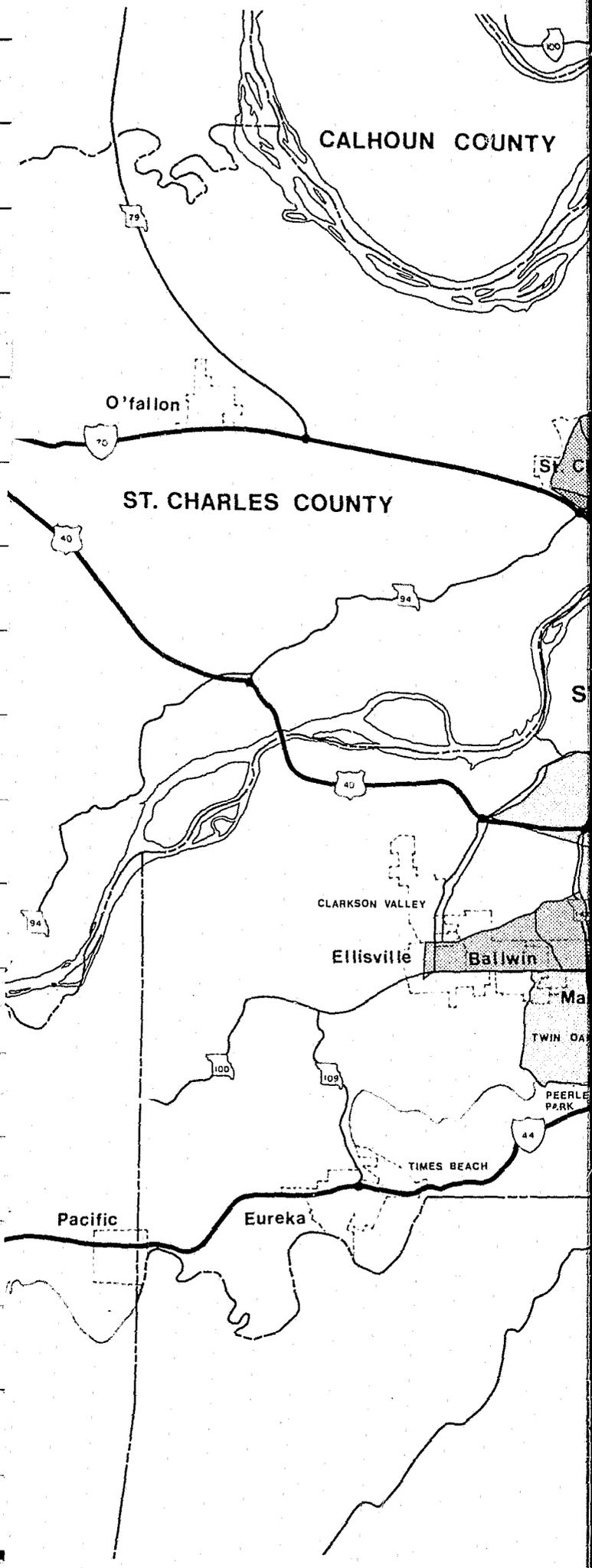
DATA SOURCE: U. S. BUREAU OF THE CENSUS, 1970



The preparation of this map was financed in part through a planning grant from the Missouri Law Enforcement Assistance Council

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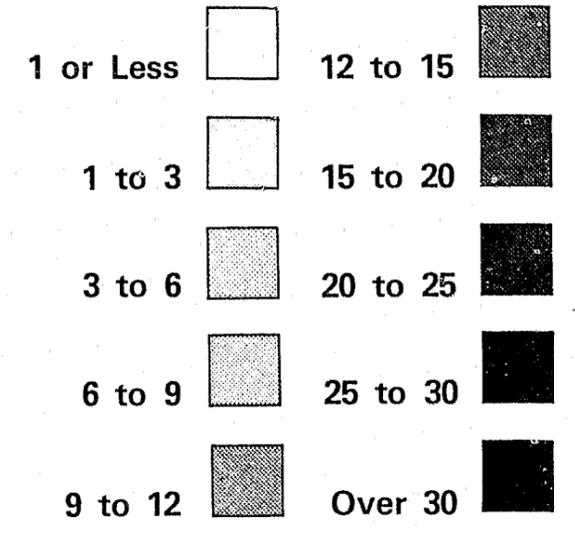
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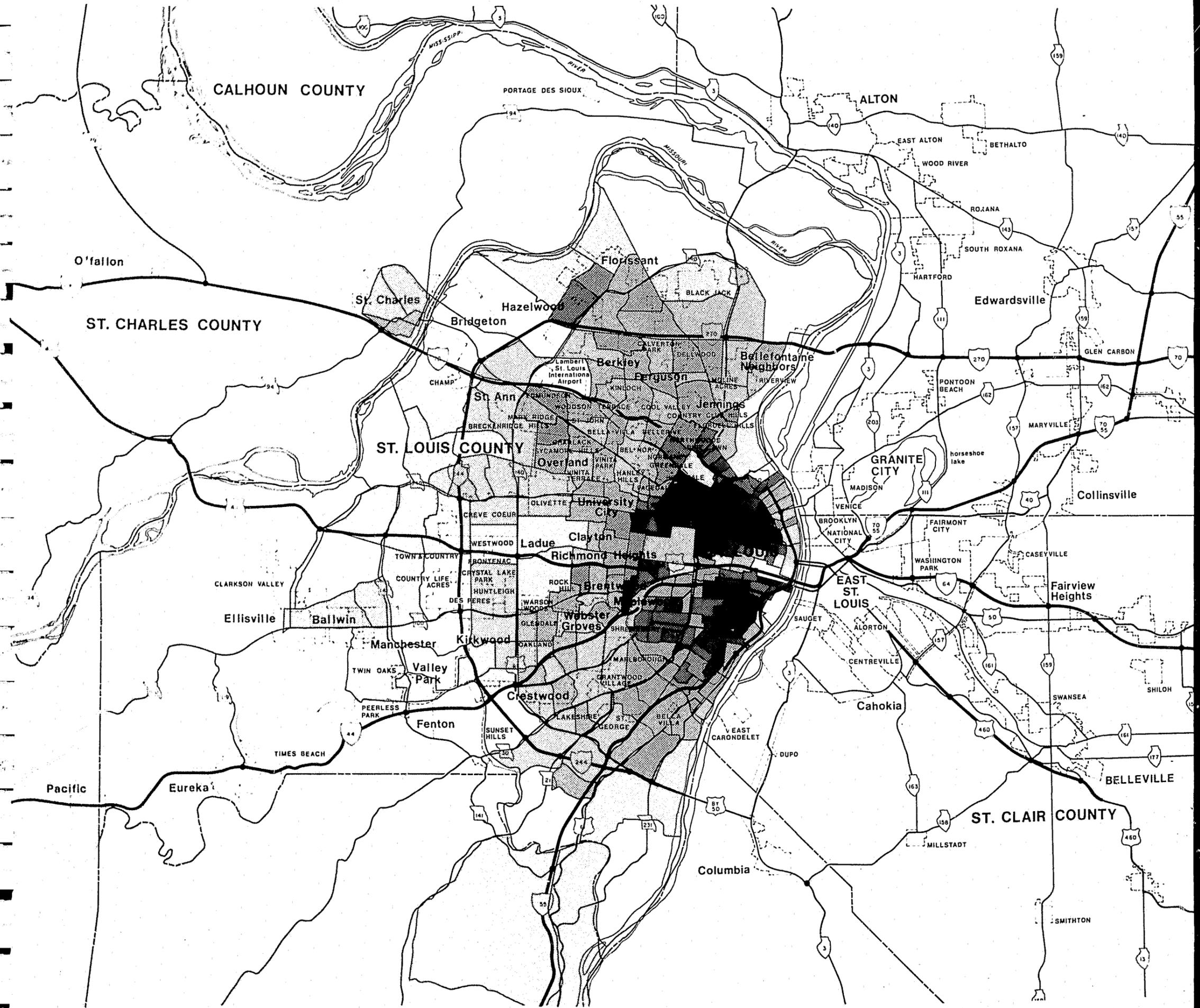
Population Density

Legend

(Number of Persons per Acre in 1970)



DATA SOURCE: U. S. BUREAU OF THE CENSUS, 1970

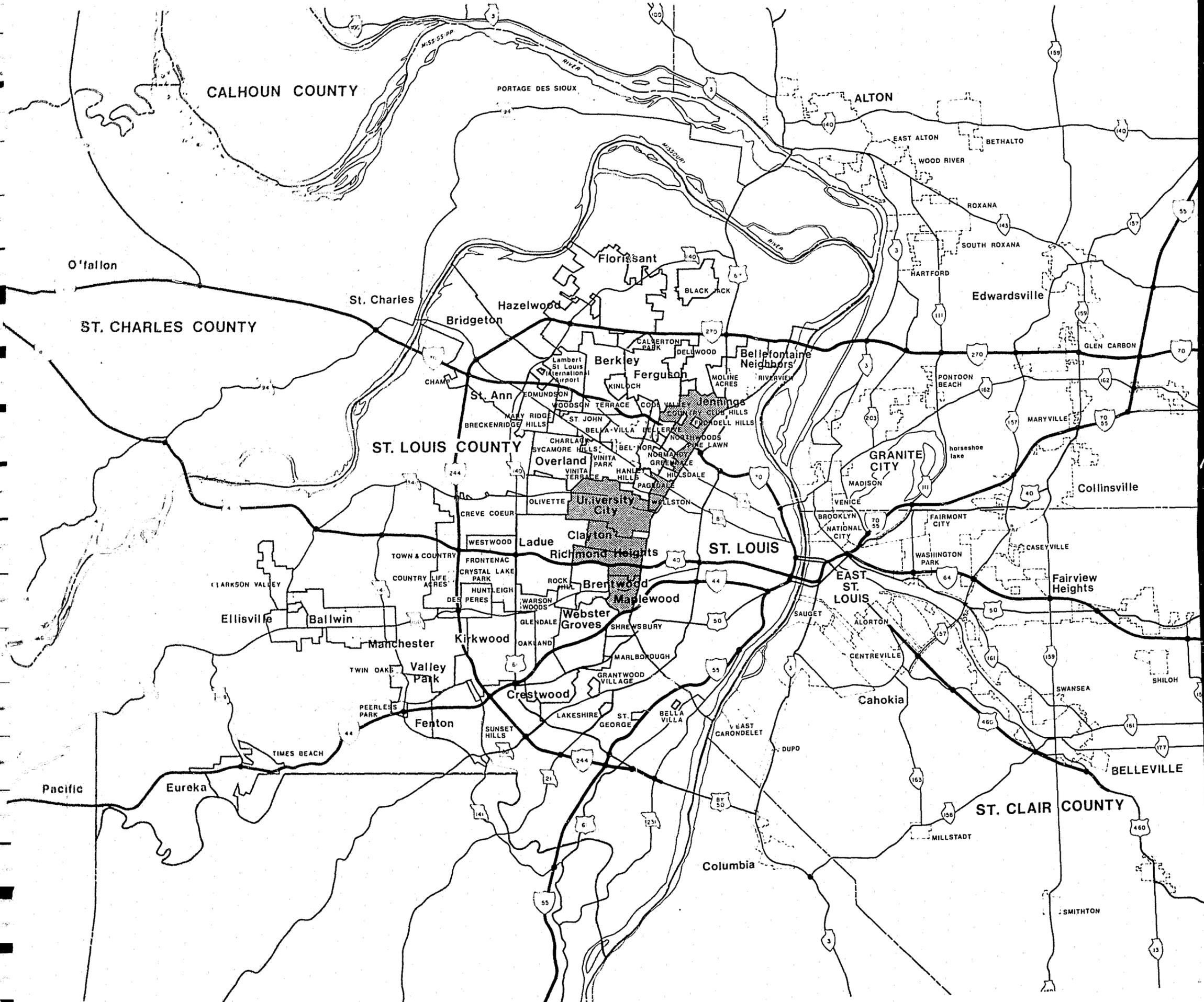


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Crime Displacement Study Area



Scale Miles
0 3/4 3

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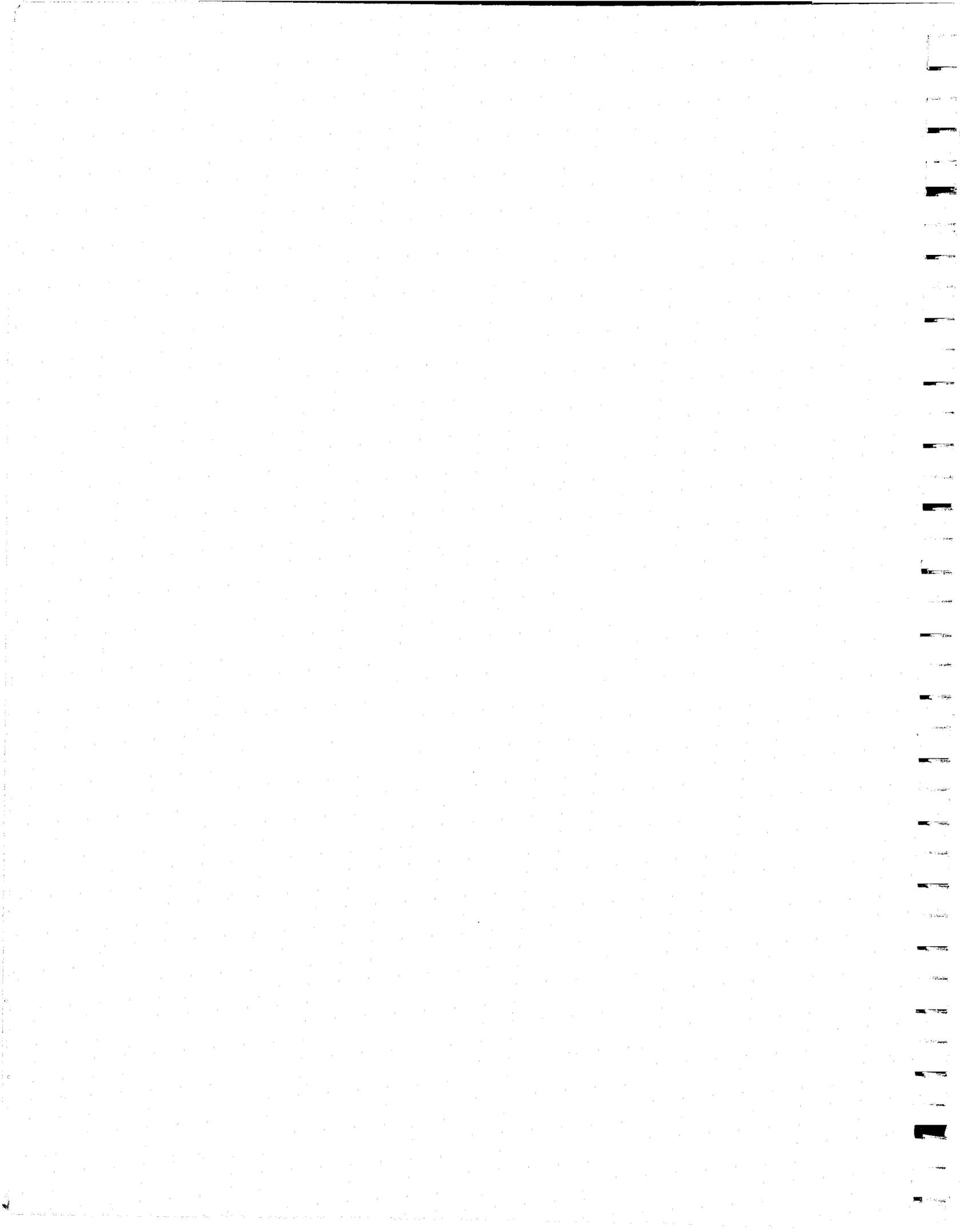


Table 2-1

ST. LOUIS REGIONAL POPULATION DATA

JURISDICTION	Area Sq. Miles	Population		Population Change		Black Population	
		1960	1970	Count	Percent Change	1970 Count	1970 Percent
City of St. Louis	61.2	750,026	622,236	-127,790	-17.0	254,191	40.9
St. Louis County	499.0	703,352	951,671	+248,139	+35.3	45,495	4.8
Unincorporated Areas	325.9	180,979	325,595	+144,616	+79.9	7,495	2.3
Incorporated Areas	173.1	522,553	626,076	+103,523	+19.8	38,000	6.1
Non-Adjacent	155.5	393,174	504,012	+110,838	+28.2	19,555	3.9
Adjacent*	17.6	129,379	122,064	- 7,325	- 5.7	18,445	15.1

* -- Clayton, Jennings, Maplewood, Richmond Heights, University City, and Wellston.

- Sources: (1) 1960 Census of Population and Housing, St. Louis SMSA, United States Department of Commerce.
 (2) 1970 Census of Population and Housing, St. Louis SMSA, United States Department of Commerce.
 (3) 1970 Census of Population, General Population Characteristics, Missouri, United States Department of Commerce.
 (4) Fact Book - St. Louis County, St. Louis County Department of Planning, 1973.

Table 2-2

ST. LOUIS REGIONAL POLICE DATA

JURISDICTION	1972 Police Budget (000 omitted)	Per Capita Expense ^a	Full-time ^b Police	Police Per 1000 Population ^a
City of St. Louis	\$33,581 ^c	\$53.99	2232	3.59
St. Louis County	22,663	23.81	1633	1.72
Unincorporated Areas	7,528	23.33	515	1.58
Incorporated Areas	15,135	24.17	1118	1.79
Non-Adjacent	11,752	23.32	861	1.71
Adjacent	3,383	27.71	257	2.11

- a. Based on 1970 population estimates.
 b. Authorized total.
 c. Police fiscal year runs from April 1 through March 31.

- Sources: (1) 1972 Annual Report - St. Louis Metropolitan Police Department.
 (2) Fact Sheet - 1973, Bureau of Planning and Research, St. Louis County Department of Police.

Table 2-3

ADJACENT MUNICIPALITY POPULATION DATA

MUNICIPALITY	Area (Sq. Miles)	Population		Population Change		Black Population	
		1960	1970	Count	Percent Change	1970 Count	1970 Percent
Clayton	2.537	15,245	16,222	+ 977	+ 6.4	239	1.5
Jennings	3.772	19,965	19,379	- 586	- 2.9	100	0.5
Maplewood	1.566	12,552	12,785	+ 233	+ 1.9	252	2.0
Pine Lawn	.577	6,767	6,517	- 250	- 3.7	1955	30.0
Richmond Heights	2.308	15,622	13,802	-1820	-11.7	1770	12.8
University City	5.996	51,249	46,309	-4940	- 9.6	9281	20.0
Wellston	.841	7,979	7,050	- 929	-11.6	4848	68.8
TOTAL	17.597	129,379	122,064	-7325	- 5.7	18445	15.1

Sources: (1) 1960 Census of Population, General Population Characteristics, Missouri, United States Department of Commerce.
 (2) 1970 Census of Population, General Population Characteristics, Missouri, United States Department of Commerce.
 (3) Fact Sheet-1973, Bureau of Planning and Research, St. Louis County Department of Police.

Table 2-4

ADJACENT MUNICIPALITY POLICE DATA

MUNICIPALITY	1972 Police Budget (000 omitted)	Per Capita Expense ^a	Full-time ^b Police	Police Per 1000 Population ^a
Clayton	\$670	\$41.30	54	3.33
Jennings	593	30.58	37	1.91
Maplewood	295	23.09	20	1.56
Pine Lawn	122	18.72	12	1.84
Richmond Heights	363	26.30	27	1.96
University City	1083	23.38	80	1.73
Wellston	257	36.42	27	3.83
TOTAL	\$3383	\$27.71	257	2.11

a. Based on 1970 population estimates.

b. Authorized total.

Source: Fact Sheet-1973, Bureau of Planning and Research, St. Louis County Department of Police.

Burglary - housebreaking, safe-cracking, or unlawful entry of a structure to commit a felony or theft, even though no force was used to gain entrance. Attempts to commit such acts are included.

Larceny - the taking, or the attempt to take, of property of another with the intent to deprive him of ownership. All larcenies and thefts resulting from pocket-picking, purse snatching, shoplifting, larcenies from autos, thefts of auto parts, thefts of bicycles, etc., are included. In Missouri, grand larceny includes only thefts where the value of goods stolen is \$50 or more. Until 1973, only larceny over \$50 was counted as an Index crime. Since then, however, all larceny offenses, both over and under \$50, are considered Index crimes. Since most of the time period covered by this report is before 1973, only larceny over \$50 will be counted as an Index offense, unless otherwise indicated.

Auto Theft - the theft or attempted theft of a motor vehicle. This includes all motor vehicles which run on the surface and not on rails. Excluded are the taking of a motor vehicle for temporary use such as in family situations, or unauthorized use by others having lawful access to the vehicle.

In the discussions to follow, person-to-person crimes are defined to include murder, rape, robbery and aggravated assault. Impact crimes are defined as all person-to-person crimes plus burglary -- i. e., the first five Index crimes defined above.

One difficulty in comparing crime and arrest statistics between different jurisdictions is the lack of uniformity in the classification of crimes and arrests. There is little that the researcher can do to control for these differences when statistics from different jurisdictions must be compared. At a minimum, conclusions must be drawn only in the most obvious of situations. Somewhat safer is the analysis of crime and arrest figures for a number of years from the same jurisdiction. Even the apparent comparability of crime reporting within the same police department, however, can be misleading if procedural changes have been introduced which have altered the crime reporting process or the grounds on which arrests can be made.

4. Crime Categories Used in Report

A standard set of crime categories is used in this

report to present the crime and arrest data from each jurisdiction. These categories include not only individual crimes such as burglary and robbery, but also groupings such as person-to-person and Impact crimes. The set of crime categories and the specific Index offenses included in each are shown in Table 2-5. It is important to note that these categories are not mutually exclusive. In this report, Index crime will refer to Index crime without larceny under \$50, unless otherwise indicated.

Table 2-5

INDEX CRIMES INCLUDED IN
REPORT CRIME CATEGORIES

<u>Index (with Larceny under \$50)</u>	Murder, Rape, Robbery, Aggravated Assault, Burglary, Auto Theft, Larceny over and under \$50
<u>Index (without Larceny under \$50)</u>	Murder, Rape, Robbery, Aggravated Assault, Burglary, Auto Theft, Larceny over \$50
<u>Impact</u>	Murder, Rape, Robbery, Aggravated Assault, and Burglary
<u>Person-to-Person</u>	Murder, Rape, Robbery, and Aggravated Assault
<u>Burglary</u>	Burglary
<u>Robbery</u>	Robbery

5. Time Span of the Collected Crime and Arrest Data

Since the primary element of change investigated in this report is the presence of the Impact Program in the City of St. Louis, it was necessary to obtain data for periods both prior to and following the beginning of the Program. The resulting time-series data for crime and arrests may be considered as having been derived from quasi-experiments in which pre-Impact trends can be compared with corresponding trends during the Impact Program, and tested for significant changes. Although conceptually simple, this mode of analysis has only recently been explored as a rigorous research

methodology for analysis of social change. The methodological considerations and limitations inherent in this technique have been most frequently discussed by D. T. Campbell in several papers (see "From Description to Experimentation: Interpreting Trends as Quasi-Experiments", Chapter 12, in Problems in Measuring Change, Chester W. Harris, ed., University of Wisconsin Press, Madison, Wisconsin, 1963). A further discussion of this technique is presented in Section D of this chapter.

To adequately establish an analytical basis for trends prior to the beginning of the Impact Program, attempts were made to collect several years of pre-Impact crime and arrest data from each jurisdiction under consideration. Table 2-6 summarizes the time span of the crime and arrest data collected for the City of St. Louis, St. Louis County, and the adjacent municipalities. The time spans of the collected data were dictated primarily by the availability of crime and arrest information at the St. Louis Metropolitan Police Department and Central Records in St. Louis County. Consequently it was not always possible to obtain data for the same time periods from each jurisdiction.

6. Beginning Date of the Impact Program

Inherent in the use of an interrupted time-series analysis to detect the introduction of a new social program is the knowledge of exactly when that program was introduced. This is a difficult question to answer with respect to the Impact Program in St. Louis. Although initial announcement of the Program was made in January 1972, the first project was not actually implemented until July that year. Depending upon the model adopted, a reasonable argument can be made for any one of several distinct starting dates. It can be suggested that the first announcement of the program, together with the continuing publicity associated with the planning of the individual projects through the spring of 1972, would have been apparent to criminals in the City who then would have begun to change their behavior patterns. Another view is that displacement effects would have begun only when the first Impact projects became visible, i. e., about July 1972. Yet another perspective is that since all projects require an initial period to become fully effective, the main thrust of the initial Impact projects would not have been significant until early in 1973. Although there is probably some validity in each of these arguments, in this report, when monthly or quarterly data are examined, July 1972 will be used as the beginning date of the Impact Program. When annual data are examined, 1972 will be used as the first year of the Program. To avoid completely the difficulty of determining an exact starting date for the Impact Program, comparisons are frequently

Table 2-6

TIME PERIODS FOR THE COLLECTED CRIME AND ARREST DATA

USED IN THIS REPORT

CRIME DATA

<u>Jurisdiction</u>	<u>Time Period</u>
City of St. Louis	1964-1973
St. Louis County	1964-1973
Adjacent Municipalities	1967-1973

ADULT ARREST DATA

<u>Jurisdiction</u>	<u>Time Period</u>
City of St. Louis	1966-1973
St. Louis County	1971-1973
Adjacent Municipalities	1966-1973

JUVENILE ARREST DATA

<u>Jurisdiction</u>	<u>Time Period</u>
City of St. Louis	1966-1973
St. Louis County	1969-1973
Adjacent Municipalities	1966-1973

offered in this report between data from 1971, the last complete calendar year prior to the beginning of the Impact Program, and 1973, the first complete year following the initiation of the Program.

D. Interrupted Time-Series Analysis

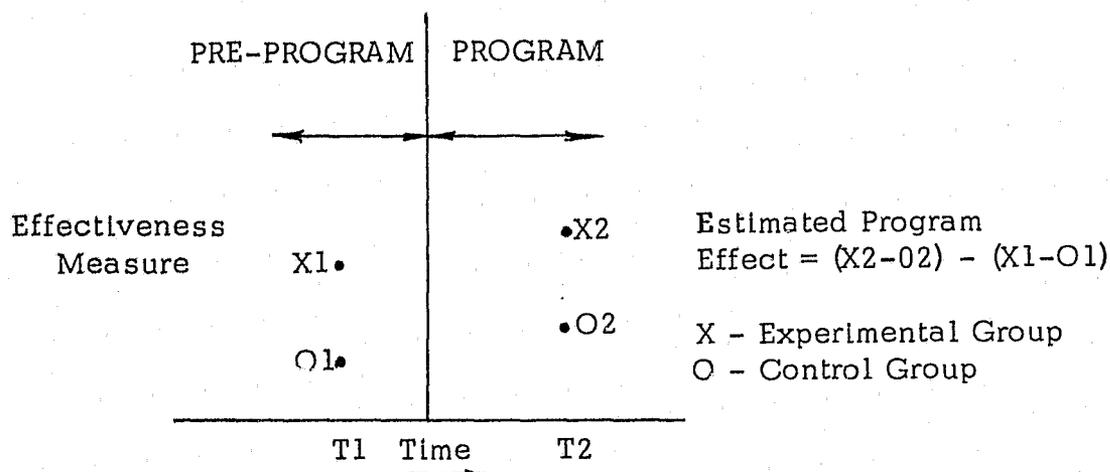
Social researchers have long struggled with the difficulties of testing specific cause and effect relationships within complex social processes which cannot possibly be subjected to the experimental control of the laboratory. To more accurately detect the changes associated with the introduction of new social programs, increasing use is being made of experimental designs based on time-series analysis.

The experimental design still most frequently used to evaluate the effectiveness of new programs is the simple before-after design illustrated in Figure 2-1. With this design, the net effect of the program is measured by the observed change in the experimental group compared to the change in the control group. For those cases in which the persons or areas selected for the experimental and control groups can be randomly chosen, this simple design is experimentally sound. In many instances, however, the selection of the control group becomes an extremely tenuous if not impossible task. For example, social programs which offer assistance to participants who volunteer for help obtain experimental groups which are particularly difficult to match. Theoretically, the control group for such a project would consist of a collection of persons who had volunteered for help, but would not receive any benefit from the program. Although methodologically feasible, the political environment of most social projects does not lend itself to the selective denial of services.

The introduction of a new program on a city-wide basis frequently requires that a control area outside the city be selected. The use of a "similar" area as a control has been used in some evaluations, but often these designs are more scientific than scientific. One of the assumptions of the before-after design is that no interaction of effect occurs between the experimental and control groups. This assumption is usually only valid for similar areas if the two regions are geographically separated. This separation in distance, however, frequently tends to reduce the similarities required for the two areas. If a non-similar control area is accepted, then the assumption must be made that each area will be equally exposed to and influenced by all factors which cannot be experimentally controlled.

Figure 2-1

BEFORE-AFTER EXPERIMENTAL DESIGN
WITH CONTROL GROUP

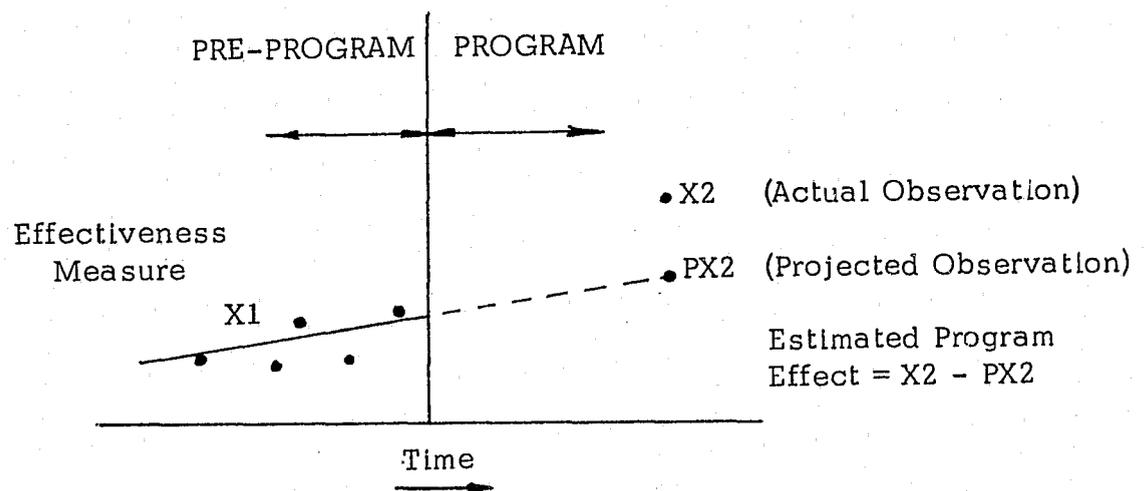


As a result of the difficulties associated with obtaining valid control groups, many programs, particularly in the criminal justice area, use the before-after design with no control group at all. In those cases, the net effect of the program is measured solely by the change in the experimental group. The loss of a control group necessitates the assumption that during the period T2-T1, no fundamental changes occur to the persons or areas involved, other than the presence of the program being evaluated. This assumption is particularly suspect for the environment in which many social programs are introduced. Frequently it is the very turmoil of that environment which has initiated the presence of new social programs. As a consequence, the absence of the control group usually means that no sound basis exists from which the significance of the observed effect can be measured. This lack of significance usually prevents the researcher from being able to answer the question, "Would this change have occurred if the program had not been present?"

Some of the difficulties introduced by the absence of a control group can be minimized with the use of the interrupted time-series design, illustrated in Figure 2-2. This design seeks to compensate for the lack of a control group by using the trend of several pre-program observations as a standard against which the observed effectiveness of the program can be judged. Several observations are made prior to the beginning of the program in order to project what the effectiveness measure would have been without the new program. The difference between the projected value, PX2, and the observed value, X2, is used as a measure of program effectiveness. This design is used in this report to explore the relationship between the St. Louis Impact Program and reported crime and arrest levels in both the City of St. Louis and St. Louis County, including the adjacent municipalities.

Figure 2-2

INTERRUPTED TIME-SERIES EXPERIMENTAL DESIGN



In addition to providing a basis from which to determine the significance of observed changes, the time-series design also eliminates or reduces several methodological problems which arise when no control group is used. Specifically, in terms of examining arrest data for several years, both before and after the beginning of the Impact Program, the major advantages gained with a time-series design rather than a simple before-after design are:

- (1) The projection of the pre-Impact trend reflects the cumulative effect of all of the factors influencing the number of persons arrested which are not changed with the introduction of the Impact Program. For example, the steady migration of City residents into St. Louis County for a number of years has perhaps changed the residency distribution of persons arrested in the County. These changes, continuing for a number of years, would be reflected in the arrest data used to determine the pre-Impact trend -- the trend which, in turn, is used to estimate the projected number of arrests following the beginning of the Impact Program. Use of the before-after design provides no method to capture, or control for, the numerous demographic and economic factors which influence the number of arrests.
- (2) Since the pre-Impact trend is determined from the number of arrests recorded for several years prior to the Impact Program, the estimated projections are based on a pre-Impact trend line which tends to reduce the effect of momentary deviations in the data. Hence, sudden changes in the number of arrests due to abnormal circumstances are minimized. Illustrative of factors which can create what appear to be unusual numbers of arrests include: unusual changes in the weather, brief local crime crack-downs, and data processing errors. The before-after design is particularly susceptible to this problem. If the "before" measurement is obtained when a sharp deviation in the number of arrests occurs, the net change in effectiveness can be highly distorted.

One difficulty which both designs are unable to account for unless a control group is used is the simultaneous occurrence of other major events with the beginning of the Impact Program. For example, if the St. Louis Metropolitan Police Department had initiated a new manpower schedule designed to better allocate motorized patrol personnel at the same time that the Foot Patrol Project was implemented, the final project data would be affected by the compounded effect of both the manpower schedule and the Foot Patrol Project. In fact, the validity of the results of a time-series design are threatened whenever a major influencing event occurs any time after the beginning of the program. Since the probability that other events will occur increases with time, the validity of the time-series design actually decreases as the post-period is extended.

A more complicated version of the time-series design uses several observations during the existence of the program to obtain an effectiveness trend which can be compared with the trend established exclusively on pre-program data. The analysis techniques for this type of design are necessarily more complicated and have not yet been fully developed for use in the most general cases. For this reason, this design has only seen limited use and frequently has only been used to identify the qualitative behavior of the effectiveness measure after the introduction of the program to be evaluated. An excellent example of the use of the time-series design is presented by Gene V. Glass in "Analysis of Data on the Connecticut Speeding Crackdown as a Time-Series Quasi-Experiment," Law and Society Review, Vol. 3, 1968.

CHAPTER III

ANALYSIS OF INDEX CRIME TRENDS IN THE ST. LOUIS AREA

This chapter presents a brief discussion of the difficulties inherent in the use of reported crime statistics, and the guidelines and techniques which are used in this report for the analysis of the crime information. Following this discussion, crime data from the City of St. Louis, St. Louis County, and the adjacent municipalities are examined to determine whether any significant changes in the crime trends occurred following the beginning of the St. Louis Impact Program.

A . Crime Analysis Methods

The integrity and usefulness of all analytical techniques and tests which are used to extract information from social data are usually limited by the reliability and validity of the input data itself. In attempting to measure the level of crime in a community, the primary source is the reported crime statistics compiled by the local police department. Unfortunately, examination of the way in which crimes are reported, classified, and processed indicates that serious deficiencies exist in reported crime statistics as a measure of total crime. Recent victimization studies sponsored by LEAA in several United States cities have indicated that from perhaps one-third to two-thirds of all crime incidents are never reported to the police -- and therefore never included in the official crime statistics.

The validity of reported crime totals is further weakened by the lack of uniformity between police departments in the classification and processing of crimes which are reported. This lack of uniformity makes the comparison of crime statistics between communities a questionable exercise. In this report, the analysis of the crime data will only focus on reported crime for a number of years within the same jurisdiction. While avoiding the differences in unreported crime and crime classifications between jurisdictions, even the examination of crime data from the same jurisdiction assumes that the changes in the reported crime levels reflect genuine changes in the actual crime rate and are not changes induced by improved administrative processing of the crimes

which are reported. Despite all these difficulties, police crime statistics which have been collected for a number of years remain as one of the few measures of total crime available for analysis.

The purpose of examining crime statistics for a number of years is to establish pre-Impact trends from which changes in the crime patterns following the initiation of the Impact Program can be identified. In this report, the analysis of the crime data in each jurisdiction involves:

- (1) determination of the pre-Impact crime trend for each crime category of interest;
- (2) use of the pre-Impact crime trends to estimate projected crime levels after the beginning of Impact Program; and
- (3) comparison of the projected crime totals with the actual crime levels reported during the Impact Program.

Although conceptually simple, the steps described above are not easily accomplished because of the nature and small amount of the crime data available. A number of analytical tools do exist, many of which were first developed for the analysis of economic time-series, which can be used to establish pre-Impact crime trends. These devices range from the simplest and most obvious, i.e., graphic presentation of the data, to highly complicated tools such as spectral analysis. In determining which techniques to use, the power of more sophisticated analytical tools must be weighed against the reliability and volume of the data available; the "price" of using more complicated models is the increased volume and reliability of the data required. Simpler analytical techniques usually require less data and fewer prior assumptions, but are also unable to provide results with the same level of significance. Neither the volume nor reliability of the crime data available for this report justified the use of highly complicated estimating tools. In fact, in the analysis of both the crime and arrest data, wherever possible, the simplest methods, requiring the fewest assumptions, have been used to establish trends and detect changes in the crime and arrest patterns. Among the techniques used in this report are:

1. Graphic Presentation - Regardless of the volume of data or the certainty of its integrity, graphic display is a well-accepted maxim of time-series analysis. Erroneous

conclusions arising from the application of inappropriate models can often be avoided if the time-series graph is first examined. It is also often true that a small amount of data does not legitimately justify the application of even the most elementary analytical methods. In these situations, the graphic display of the data provides a minimum vehicle upon which trends can at least be qualitatively established.

2. Regression Models - This technique is frequently used when a functional relationship between the independent and dependent variables is sought. A specific functional relationship is hypothesized and the coefficients of the function are determined with the use of several observations from the variables of interest. Simple measures exist which indicate the appropriateness of the model for the observed data. Usually functional models are hypothesized from an examination of the graphic display of the data and from any prior knowledge of the underlying causal relationships between the variables. The usefulness of these models is not that the true functional relationship is always found, but rather that an empirical formula is obtained which may very accurately predict the value of the dependent variable for values of the independent variables within given ranges. In the sections to follow, several years of pre-Impact crime data are used to derive simple functional relationships between the annual reported crime and the reporting year. These models are then used to project crime levels for future years. The two models used in this report are:

a. Linear Model

This model assumes that the annual crime level is increasing or decreasing by a constant number of crimes each year. The functional form is

$$C = A + BY$$

where

C = annual reported crime

Y = reporting year

A, B = coefficients in the formula estimated with pre-Impact data.

With this formula, the annual crime level changes by a constant B crimes per year. Use of this model is suggested whenever the annual data indicate a relatively constant annual change without significant cycles or changes in the trend.

b. Geometric Model

This model assumes that the annual crime level is increasing or decreasing by a constant percent each year. The functional form is

$$C = A(1+B)^Y$$

where

C = annual reported crime

Y = reporting year

A,B = coefficients in the formula estimated with pre-Impact data

The annual crime level changes by 100B% per year. Use of this model is suggested whenever the crime data indicate that the increase or decrease for each year is proportional to the total crime level of the preceding year.

3. Moving Average Model - This is a commonly used method to estimate the trend when there is evidence of periodic cycles in the data; e.g., monthly reported crime data usually reveal an annual periodic cycle in which reported crime peaks in July and August and ebbs during February and March. The data in Table 3-1 illustrate the relatively simple arithmetic calculations required for this technique.

Table 3-1

SAMPLE OF A FOUR-PERIOD

MOVING AVERAGE

1	2	3	4	5
Period	Amount	Moving Total	Moving Average = col. 3 ÷ 4	Centered Moving Average
1	10			
2	12			
3	12			
4	14	48	12.00	
5	11	49	12.25	12.125
6	13	50	12.50	12.375
7	12	50	12.50	12.500
8	15	51	12.75	12.625

The sample data in column 2 represent crime totals reported on a quarterly basis. Since the data are known to have an annual periodic cycle, a four quarter moving average is used to estimate the trend. In column 3, each moving total is the sum of the current period plus the three previous quarters; e. g., the moving total in period 6 equals 50, the sum of periods 3, 4, 5, and 6. The moving average in column 4 is computed by dividing each moving total by four, the number of periods included in the moving total. The calculations are particularly simple once the first moving average has been computed; e. g., the moving total required for period 5 is obtained by merely subtracting the period 1 data from the moving total for period 4 and adding the period 5 amount. Hence, for period 5, the new moving total is 49 ($49 = 48 - 10 + 11$) and the moving average equals 12.25 ($12.25 = 49 \div 4$). The moving average shown in column 4 indicates a steady upward trend which would have been more difficult to observe from the quarterly data in column 2. When monthly data are used and an annual periodic cycle is present, the moving total is the sum of 12 periods and is divided by 12 to obtain the moving average.

With the procedure described above, an $N+1$ period moving average is computed with the sum of the current period plus N previous periods. More frequently used is a moving average model in which the average is computed with the sum of the current period plus $N+2$ previous periods and $N+2$ following periods. This latter model produces averages which, in a mathematical sense, are the best estimates of the trend level. The moving average model based only on previous periods, however, more accurately identifies the specific periods in which trend changes occur. Since the primary purpose in examining the crime data in this report is to explore the hypothesis that crime trend changes coincided with the initiation of the Impact Program, it is particularly important that the moving average model accurately indicate the exact periods of any trend changes. To satisfy this requirement, only moving averages based on previous period data are used in this report.

In the example shown above, the computed moving average applies to the end of the most recent period. An estimate of the trend at the midpoint of each period can be obtained by averaging the moving averages at the beginning and end of the period. The centered moving averages for the sample data are shown in column 5 of Table 3-1.

B. Crime Trends in the City of St. Louis

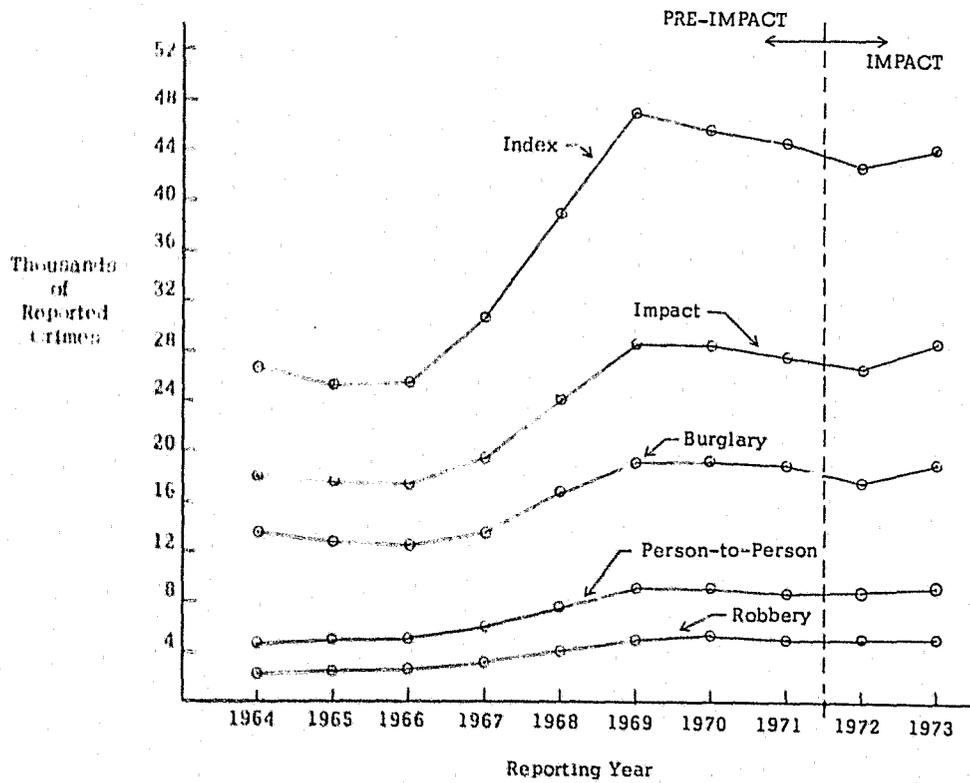
Table 3-2 presents the annual reported crime in the City of St. Louis for the 10-year period, 1964-1973.

Table 3-2
ANNUAL REPORTED CRIME
IN ST. LOUIS CITY

CRIME CATEGORY	1964-1973								1972	1973	% Change 1971 to 1973
	PRE-IMPACT							IMPACT			
	1964	1965	1966	1967	1968	1969	1970	1971			
Index	26692	25750	25798	30826	39054	47164	45915	44409	42580	44008	-0.9
Impact	18088	17671	17354	19649	24161	28381	28358	27781	26354	28304	1.9
Person-to-Person	4625	5010	5038	6020	7440	9308	9347	8905	8777	9271	4.1
Burglary	13463	12661	12316	13629	16721	19073	19011	18876	17577	19033	0.8
Robbery	2202	2293	2451	3193	4180	4957	5296	4956	4844	5177	4.5

Sources: (1) Annual Reports, 1964-1972, St. Louis Metropolitan Police Department.
 (2) Monthly Crime Reports, 1973, Computer Division, St. Louis Metropolitan Police Department.

Figure 3-1
ANNUAL REPORTED CRIME
IN ST. LOUIS CITY
 1964-1973



Sources: (1) Annual Reports, 1964-1972, St. Louis Metropolitan Police Department.
 (2) Monthly Crime Reports, 1973, Computer Division, St. Louis Metropolitan Police Department.

This information is graphically shown in Figure 3-1. The most dominant feature of this period is the dramatic rise in crime from 1966 through 1969. During that three-year interval, Index crimes rose from 25,798 in 1966 to 47,164 in 1969, an increase of 83%. This meteoric rise in crime is even more significant in view of the decreasing population of the City during the 1960's. During this same period, Impact crimes increased 64%, burglaries increased 55%, and person-to-person crimes rose 85%.

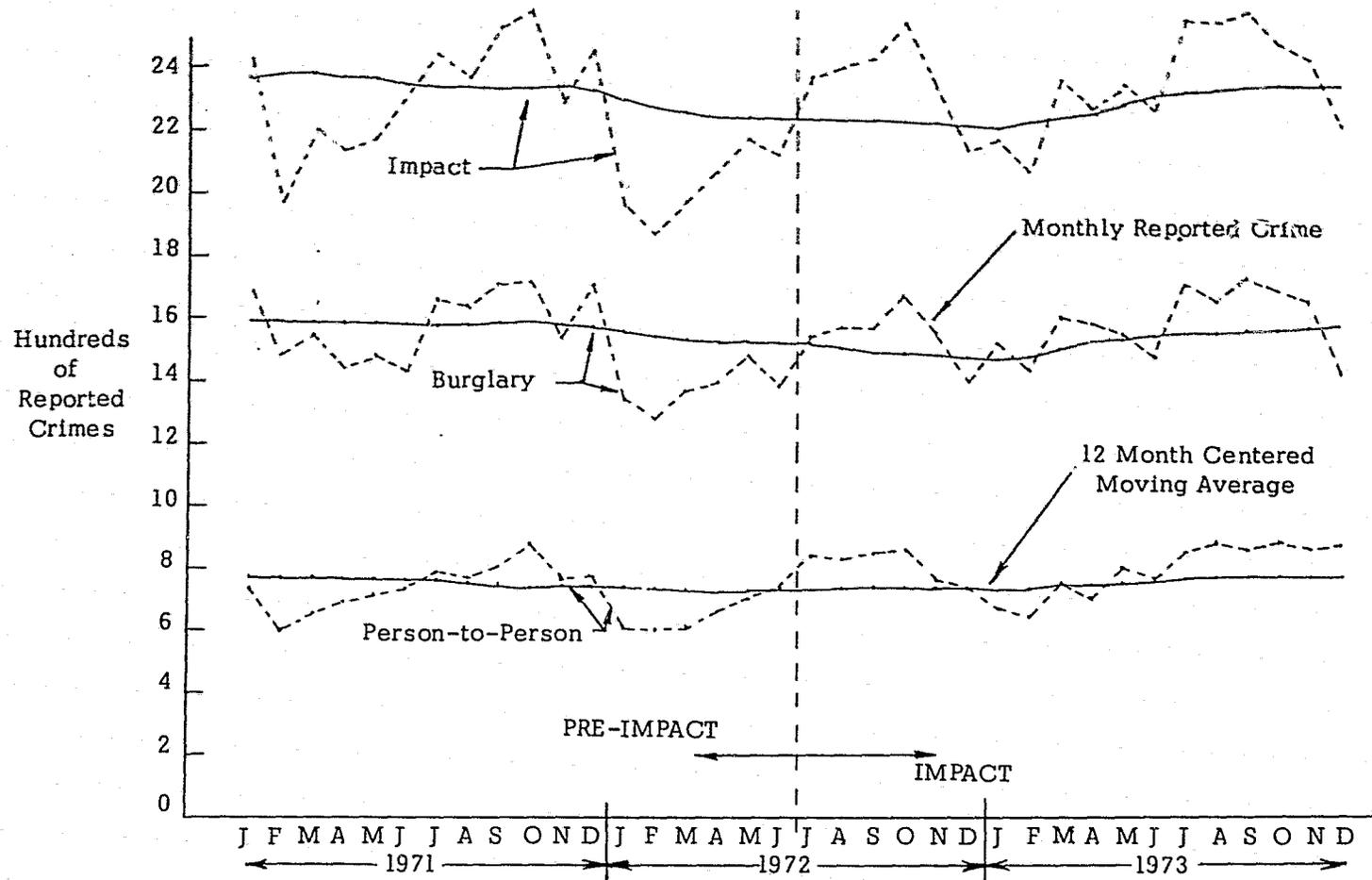
Almost as remarkable was the change in the crime trend beginning in 1970. During the next three years, including the first year of the Impact Program, the level of reported crime decreased steadily in all of the crime categories shown in Table 3-2. Surprisingly, despite the existence of the Impact Program, the downward trend did not continue in 1973; instead, relatively modest increases occurred in all crime categories. As indicated in the last column of Table 3-2, the 1973 crime levels exceeded those of 1971, the last full year before the Impact Program, in all categories except total Index crimes. The sharpest increase during this two year period occurred in the number of reported robberies, which rose 4.5%.

Figure 3-2 shows the reported monthly crime levels for total Impact crimes, burglaries, and person-to-person crimes for the three-year period 1971-1973. The 12-month centered moving average for each crime category estimates the underlying trend with the seasonal variations removed. These moving averages indicate the same phenomenon noted in the annual data -- that there was no significant reduction in City-wide crime during 1971 to 1973. In fact, beginning in early 1973, the 12-month moving average for Impact crimes began a steady rise which continued for the entire year.

The presence of these distinct periods of increasing and decreasing crime levels suggests that the determination of the pre-Impact crime trends cannot be satisfactorily based on all eight years of the annual crime data prior to the Impact Program, shown in Figure 3-1. Rather the trends should be restricted to a more limited number of years immediately preceding the beginning of the Impact Program. Consequently, in this report, the projected 1972 and 1973 crime levels for each crime category are based on the three pre-Impact years, 1969-1971. These projections for total Impact crimes, burglaries, and person-to-person crimes are shown in figures 3-3 through 3-8. Included in each figure are the actual reported crime levels for each year plus the two-year Impact goal defined as a 5% reduction of the 1973 projected crime level.

Figure 3-2

MOVING AVERAGE TREND BASED ON
MONTHLY REPORTED IMPACT CRIMES FOR ST. LOUIS CITY
1971-1973



Source: Monthly crime reports, 1971-1973, Computer Division, St. Louis Metropolitan Police Department.

In figures 3-3, 3-4, and 3-5, the crime projections are determined from a linear regression model using the 1969-1971 annual data. For each crime category, these three years of pre-Impact data produce a decreasing crime trend. Examination of the projected number of Impact crimes (Figure 3-3) indicates that the actual reported level of Impact crimes was considerably below the projected Impact crime level for 1972. In 1973, however, the total number of reported Impact crimes in the City of St. Louis not only failed to meet the 5% reduction goal, but even rose above the projected 1973 level. The projected levels for person-to-person crimes and burglaries shown in figures 3-4 and 3-5 clearly indicate that the reduction of reported Impact crimes in 1972 was due almost exclusively to a sharp decline in the number of burglaries. The number of person-to-person crimes reported in 1972 was almost exactly equal to the projected level for that year. Both crime categories, however, contributed to the total increase in Impact crime in 1973.

In figures 3-6, 3-7, and 3-8, the pre-Impact crime trend for each crime category is the average of the three pre-Impact years 1969-1971, equivalent to a linear regression model with zero slope. Again, despite a higher 1973 crime projection and corresponding Impact goal for each crime type, the reported 1973 crime level exceeded both the goal and the projection in every category.

From this examination of both the annual and monthly City crime data, it is apparent that after the first two years of implementation, no absolute reduction in City-wide Impact crime occurred. Despite the absence of any such reduction, it is possible that the Impact Program was "successful" during that period in the sense that City-wide Impact crime was reduced by at least 5% below the expected crime level. To explore that possibility an estimate of what the City-wide crime level would have been in 1972 and 1973 had the Impact Program not existed was made. Comparison of the reported 1973 crime levels with the projections and Impact goals clearly indicates that not only did City-wide Impact crime remain above its Impact goal, but even rose above the projected Impact crime level.

Two hypothesis seem most appropriate in view of the data presented: either the St. Louis Impact Program had a negligible effect on City-wide crime during 1972 and 1973; or the Impact Program success was not apparent because the crime projections did not identify the real crime increases which would have occurred in the City during 1972 and 1973 without the Impact Program. If the second hypothesis is true, then it is reasonable to expect that non-Impact crimes would have exhibited greater increases

Figure 3-3

PROJECTED ANNUAL IMPACT CRIMES

IN ST. LOUIS CITY

-LINEAR REGRESSION MODEL BASED ON 1969-1971 DATA-

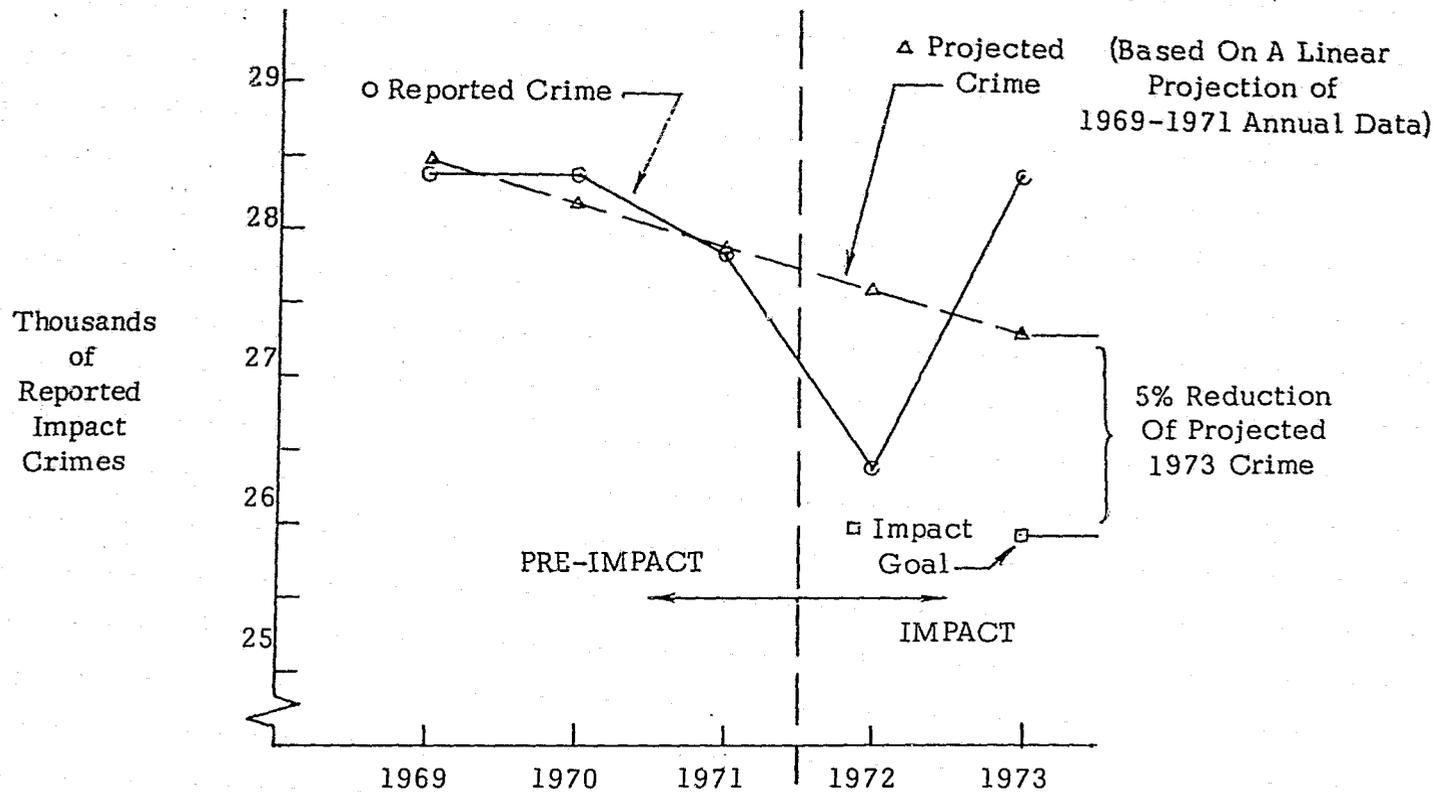


Figure 3-4
PROJECTED ANNUAL PERSON-TO-PERSON CRIMES
IN ST. LOUIS CITY
-LINEAR REGRESSION MODEL BASED ON 1969-1971 DATA-

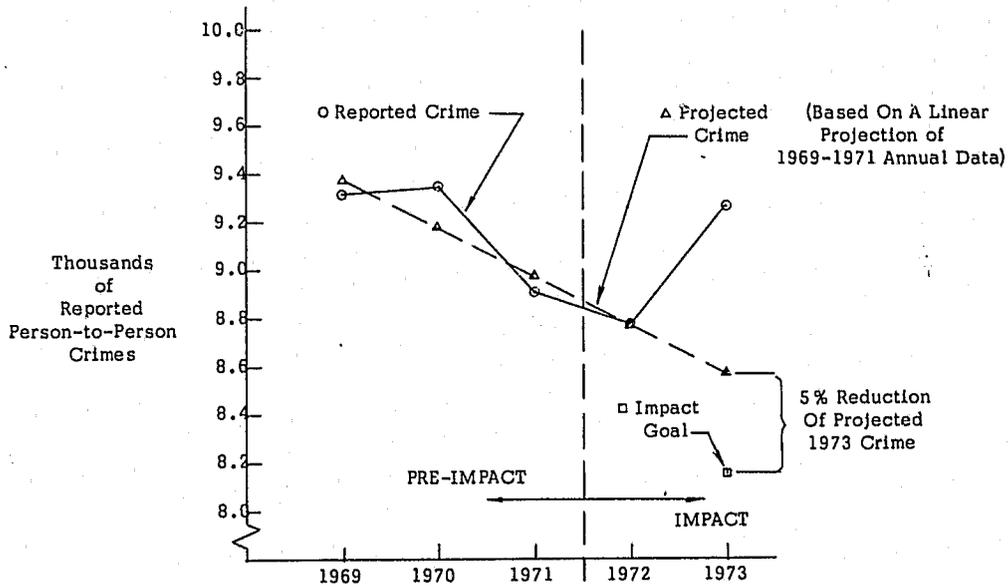


Figure 3-5
PROJECTED ANNUAL BURGLARIES
IN ST. LOUIS CITY
-LINEAR REGRESSION MODEL BASED ON 1969-1971 DATA-

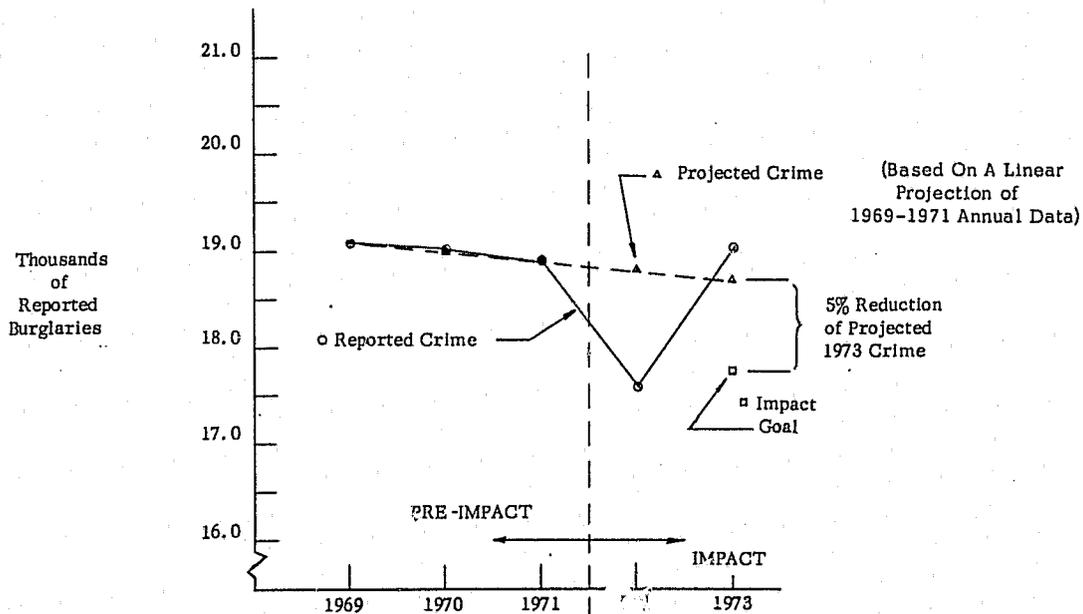


Figure 3-6

PROJECTED ANNUAL IMPACT CRIMES

IN ST. LOUIS CITY

-LINEAR PROJECTION OF THREE-YEAR PRE-IMPACT AVERAGE-

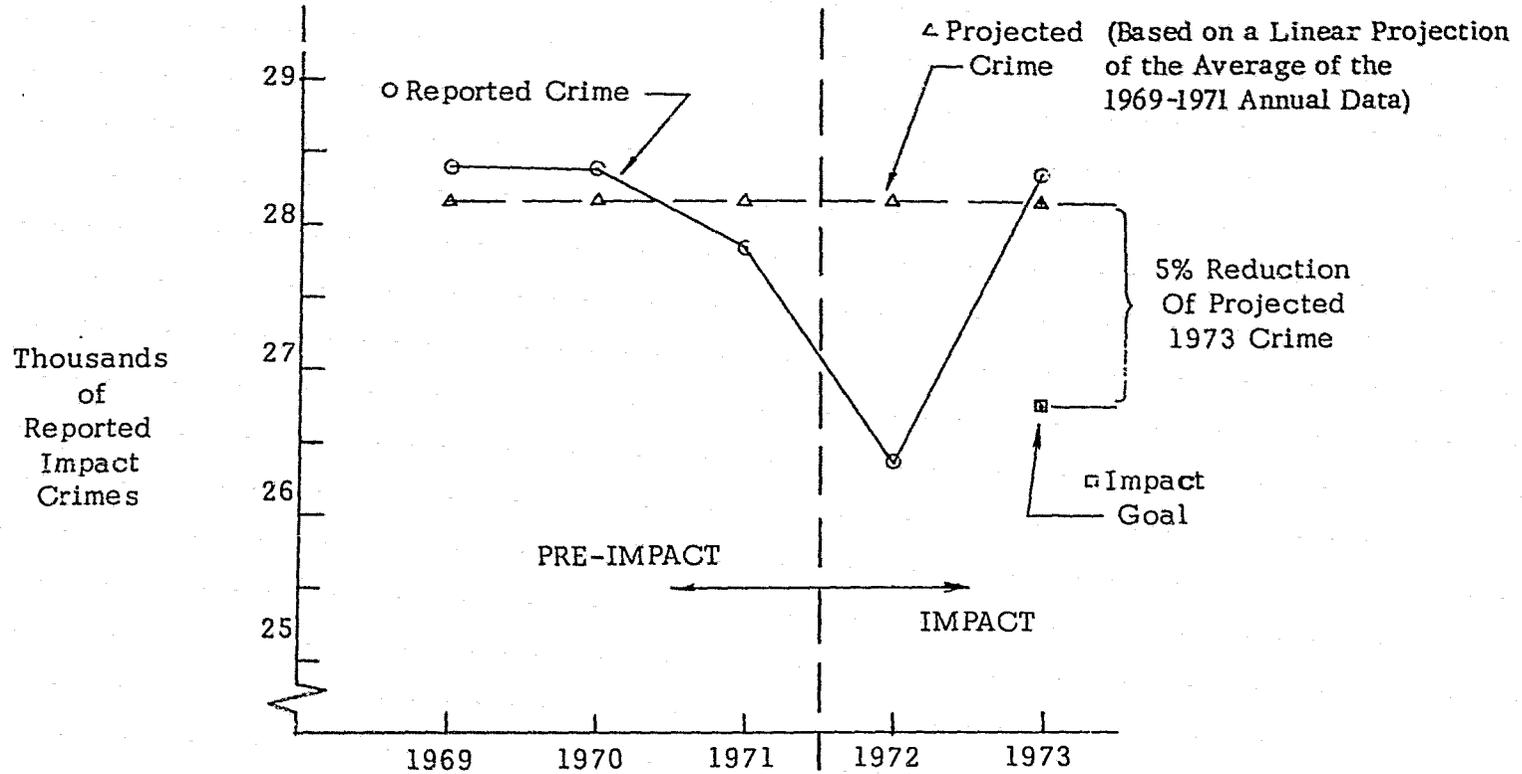


Figure 3-7

PROJECTED ANNUAL PERSON-TO-PERSON CRIMES

IN ST. LOUIS CITY

-LINEAR PROJECTION OF THREE-YEAR PRE-IMPACT AVERAGE-

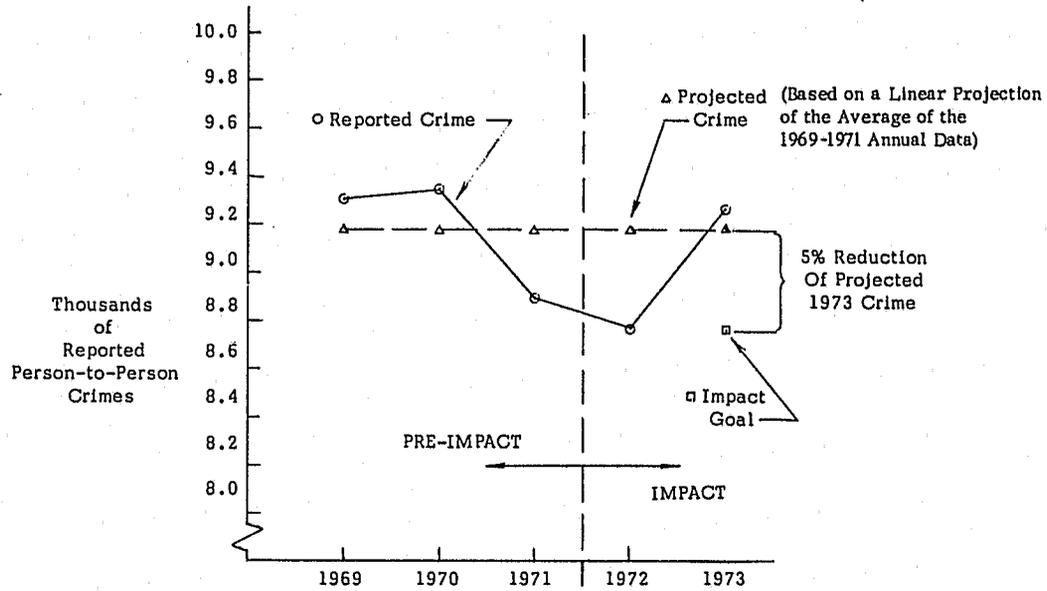
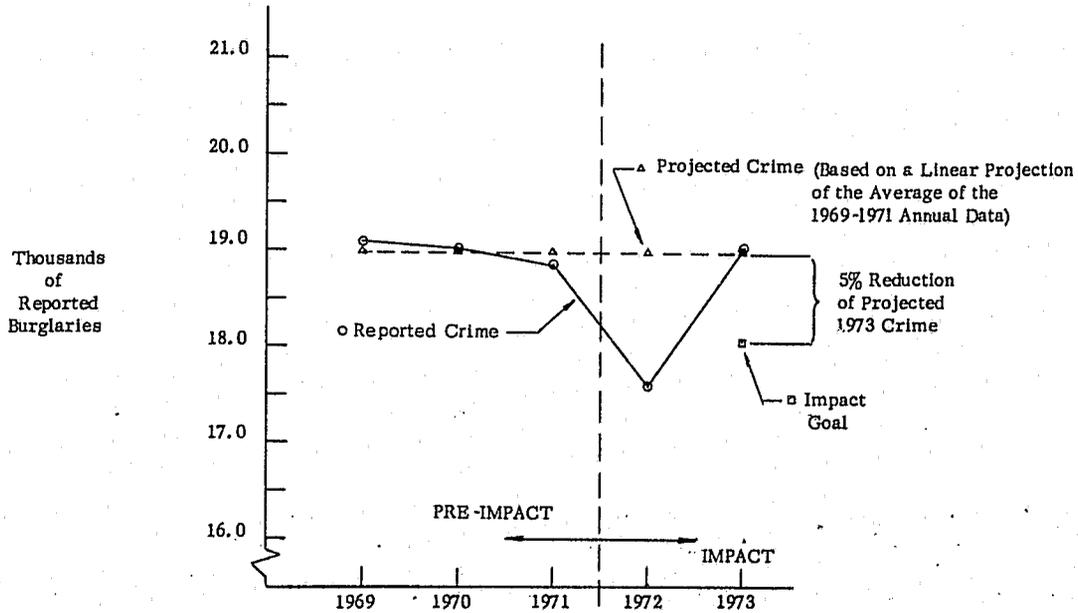


Figure 3-8

PROJECTED ANNUAL BURGLARIES

IN ST. LOUIS CITY

-LINEAR PROJECTION OF THREE-YEAR PRE-IMPACT AVERAGE-



than Impact crimes following the beginning of the Impact Program. Certainly, if successful, it is expected that the Impact Program would have some effect on all crime categories. However, since the Impact Program target crimes were systematically used to formulate the kinds of projects implemented and to identify the target populations, the primary effect of successful projects should have been to reduce Impact crime.

Figure 3-9 presents the annual reported level of the two non-Impact Index crimes, larceny over \$50 and auto theft. There was no increase in these non-Impact crimes during 1972 and 1973. The similar behavior of the Impact and non-Impact crime trends lends credence to the first hypothesis presented above, i. e., that during its first two years of operations, 1972 and 1973, the St. Louis Impact Program had a negligible effect on City-wide crime.

It is important to note that this conclusion is not necessarily in conflict with the success claimed for some of the individual Impact projects -- e. g., Operation IDENT and the Burglary Prevention Unit. Success for these projects was measured in terms of the burglary rate for those residences joining Operation IDENT and businesses surveyed by the Burglary Prevention Unit versus the burglary rate for non-participant and participants prior to joining the projects. While participant burglary rates did show significant reductions during 1973, the coinciding rise in City-wide burglary indicates that, although the projects may have been effective for the homes and businesses contacted, the projects were not adequate enough to have a significant impact on City-wide burglary. In addition, while some projects may have only been inadequate, it is also certainly possible that some Impact projects may not have been either effective or adequate. The final resolution between the effectiveness of the individual projects and the adequacy of the entire Impact Program will have to be addressed in the final City-wide Impact Program evaluation.

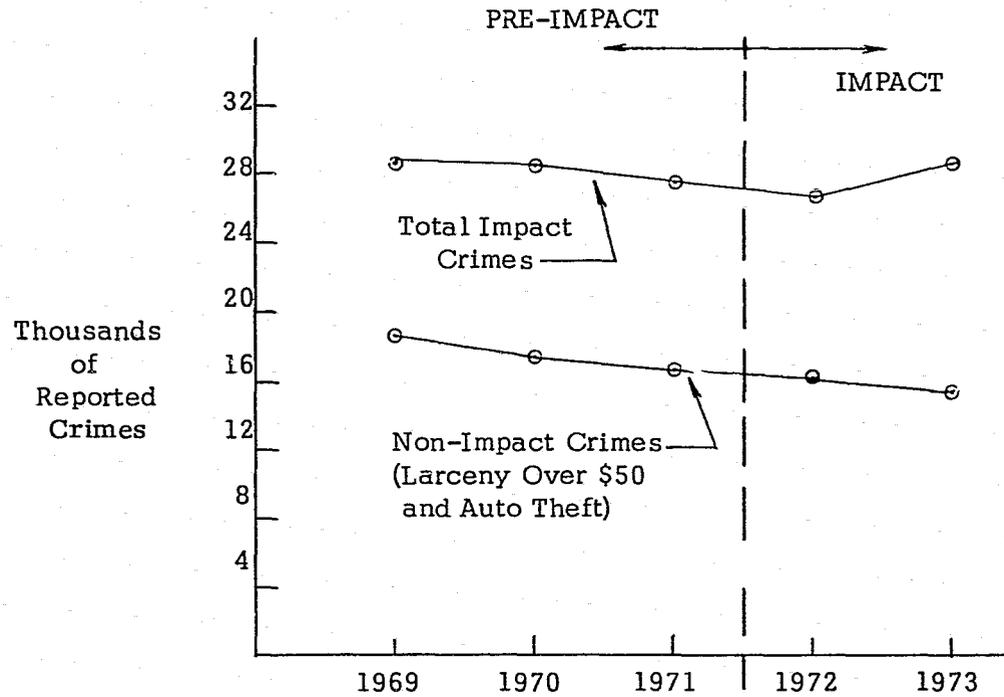
Other than for the sharp decline in burglary in 1972, the lack of any significant City-wide crime reduction during the first two years of the St. Louis Impact Program indicates that the Program was either not perceived by a significant number of criminals; or, if perceived, not effective or adequate enough to force criminals to deter or displace their criminal activities. The decrease in reported burglaries in 1972, however, may indicate that the Impact Program was initially successful in reducing the number of burglaries. The subsequent increase in burglaries in 1973, despite the continued presence of the Impact projects, suggests, however, that either the 1972 reduction was not related to the Impact Program; or, that after the initial effects of the publicity and visibility

Figure 3-9

ANNUAL NON-IMPACT INDEX CRIMES

IN ST. LOUIS CITY

1969-1973



Sources: (1) Annual Reports, 1969-1972, St. Louis Metropolitan Police Department.
(2) Monthly Crime Reports, 1973, Computer Division, St. Louis Metropolitan Police Department.

of the Impact projects had worn away, they were either ineffective or inadequate to sustain the initial burglary reduction.

The examination of crime and arrest data for St. Louis County and the adjacent municipalities will be used to determine the extent to which the burglaries that did not occur in the City of St. Louis in 1972 were, in fact, displaced to the County and the adjacent municipalities.

C. Crime Trends in St. Louis County

The examination of crime data from St. Louis County and the adjacent municipalities in the County is particularly important because rising crime in these jurisdictions during 1972 and 1973 was frequently cited as evidence of geographic crime displacement due to the presence of the St. Louis Impact Program. Almost always absent from these claims, however, was any discussion of the crime trends suggested by the reported crime totals in the years prior to the beginning of the Impact Program. This is a particularly crucial omission when examining reported crime for St. Louis County.

To illustrate how the examination of data for a limited number of years may lead to an overstatement of the extent of increasing crime, consider the monthly data for St. Louis County shown in Figure 3-10. While the moving average trend for person-to-person crimes reveals no major change with the beginning of the Impact Program, there obviously appears to have been a sharp increase in the moving average for burglary. This coincidence of a "sudden" increase in the burglary trend in St. Louis County and the initiation of the Impact Program in the City of St. Louis has frequently been offered as firm evidence that crime was driven into the County by the Impact Program.

The significance, however, of this rise in the burglary trend is lessened considerably when the patterns of both reported burglary and all the Index crime categories are examined for several years prior to the Impact Program. Table 3-3 presents the annual reported crime for all of St. Louis County for 1964 through 1973. This annual information is shown graphically in Figure 3-11. The 10 years of crime data presented in Figure 3-11 clearly illustrate that increases in burglary and any of the Index crime categories in any one year do not represent unusual or "sudden" increases in crime. Over this 10 year period, the number of Index crimes increased over 220%, burglary rose 205% and robbery increased over 400%, an average of almost 20% per year.

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1 OF 3

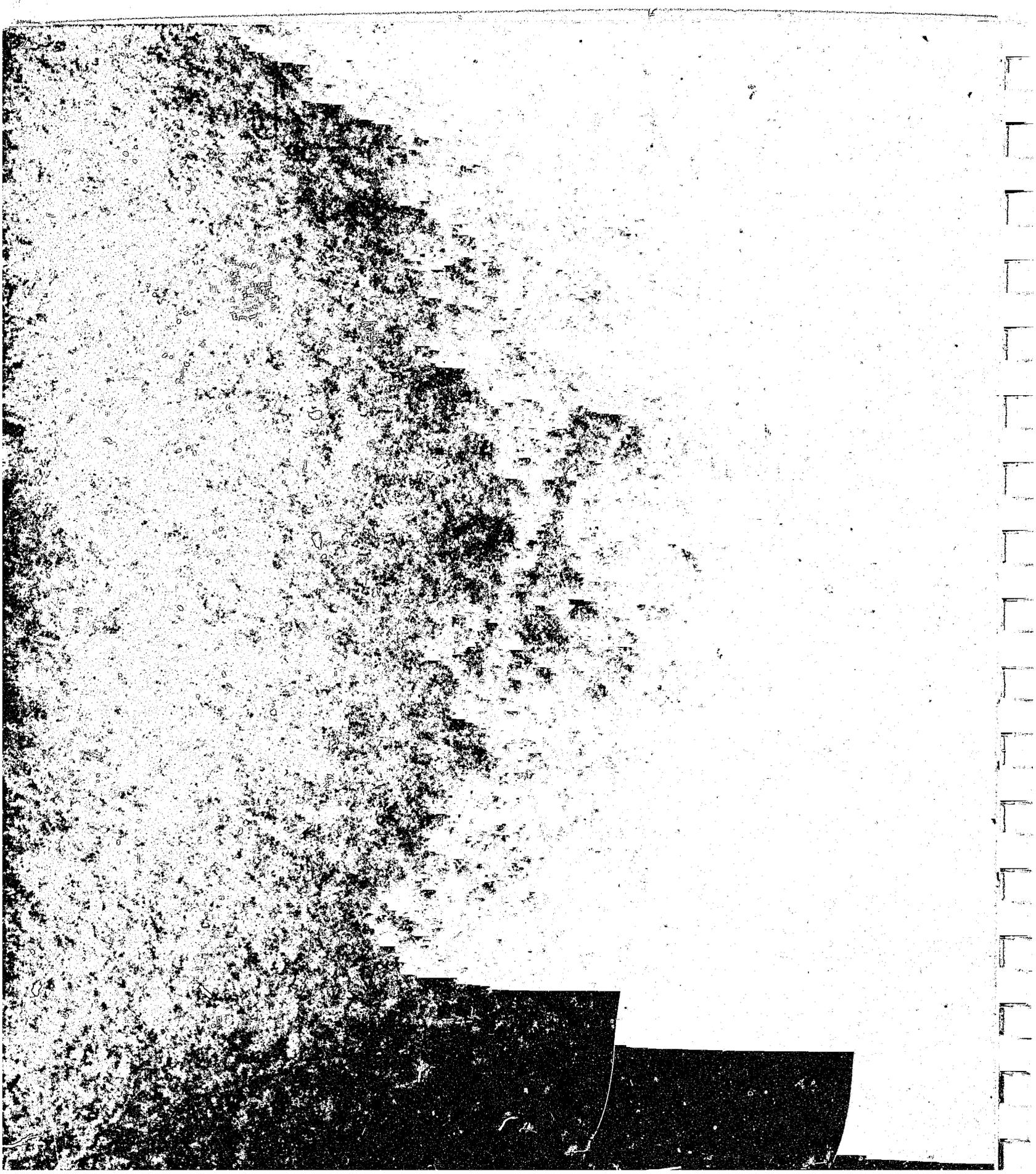
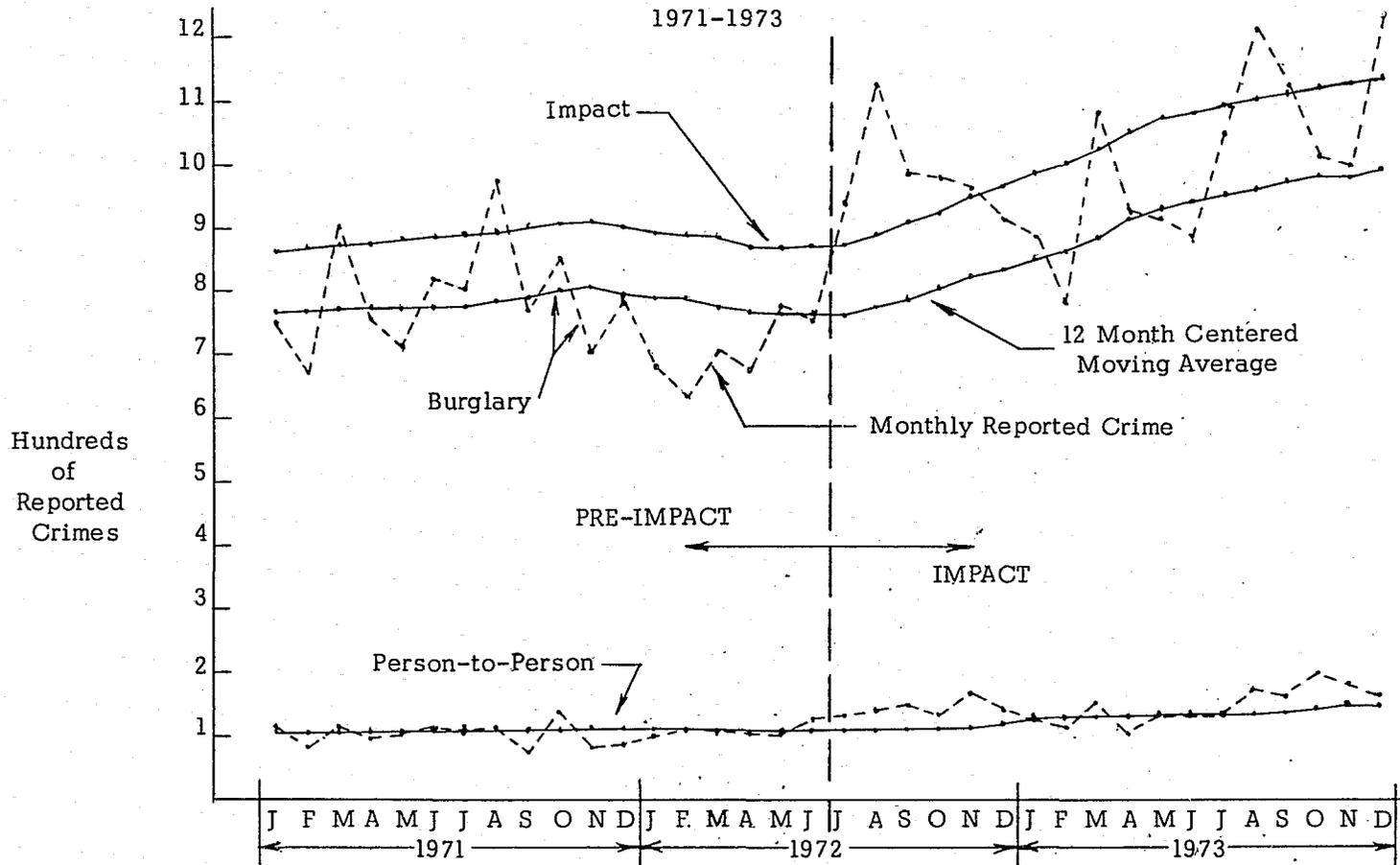


Figure 3-10

MOVING AVERAGE TREND BASED ON
MONTHLY REPORTED IMPACT CRIMES FOR ST. LOUIS COUNTY



Source Bureau of Central Police Records, St. Louis County Department of Police.

Table 3-3

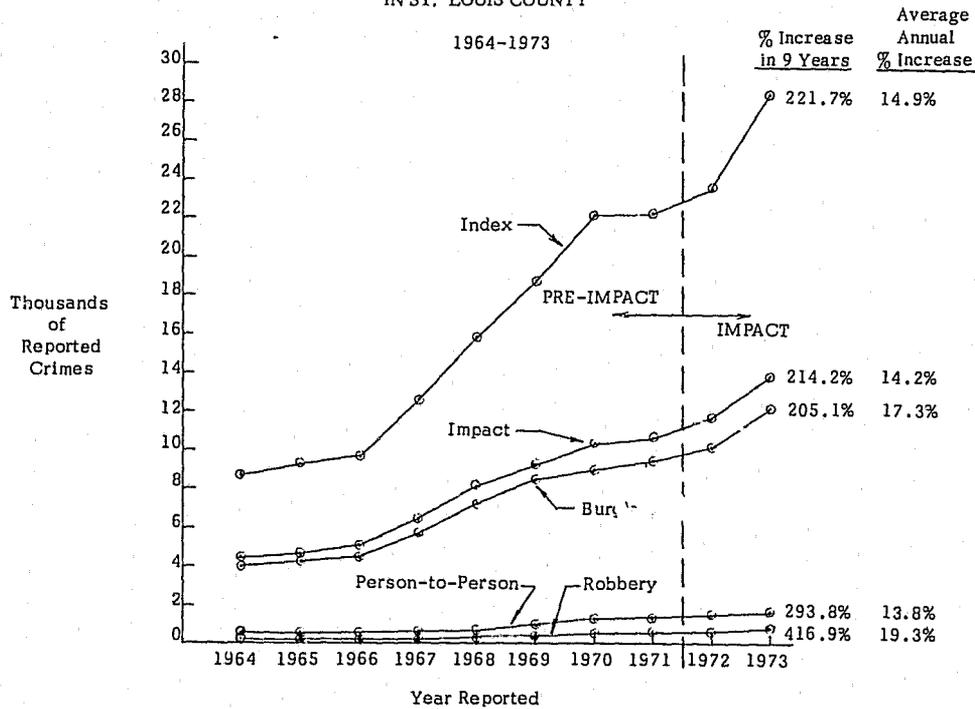
ANNUAL REPORTED CRIME
IN ST. LOUIS COUNTY
1964-1973

CRIME CATEGORY	PRE-IMPACT									Average Annual Growth Rate - %	
	1964	1965	1966	1967	1968	1969	1970	1971	1972		1973
<u>Index (Total Co.)</u>	8804	9309	9839	12634	15977	18798	22080	22211	23641	28318	14.9
Unincorporated Areas	2692	2927	3181	3811	4592	5379	6393	6045	7077	8398	13.8
Municipalities	6112	6382	6658	8823	11385	13419	15687	16166	16564	19920	15.4
<u>Impact</u>	4431	4770	5059	6431	8121	9262	10294	10765	11717	13920	14.2
Unincorporated Areas	1542	1757	1911	2341	2609	3000	3383	3258	3820	4409	12.1
Municipalities	2889	3013	3148	4090	5512	6262	6911	7507	7897	9511	15.3
<u>Person-to-Person</u>	454	520	554	643	884	1002	1251	1273	1570	1788	17.3
Unincorporated Areas	156	196	183	197	242	257	309	269	361	411	10.4
Municipalities	298	324	371	446	642	745	942	1004	1209	1377	20.2
<u>Burglary</u>	3977	4250	4505	5788	7237	8620	9035	9492	10147	12132	13.8
Unincorporated Areas	1386	1561	1728	2144	2367	2743	3074	2989	3459	3998	12.3
Municipalities	2591	2689	2777	3554	4870	5877	5961	6503	6688	8134	14.7
<u>Robbery</u>	189	240	266	305	405	422	610	586	773	977	19.3
Unincorporated Areas	37	63	53	66	68	80	97	77	122	151	13.2
Municipalities	152	177	213	239	337	342	513	509	651	826	20.7

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Figure 3-11

ANNUAL REPORTED CRIME
IN ST. LOUIS COUNTY



Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table 3-3 also indicates the annual crime levels during 1964 through 1973 for all County municipalities as well as the unincorporated area of the County. The unincorporated region, with approximately one-third of the total County population, had roughly the same proportion of the total County crime -- with the noticeable exception of robbery, which occurred far more frequently in the municipalities. Surprisingly, despite an 80% increase in the population of the unincorporated area during the 1960's compared to only a 20% population growth in the municipalities, (see Table 2-1) the annual crime growth during 1964 to 1973 was higher for the municipalities. This crime increase is only one symptom of the fact that many of the older municipalities adjacent to St. Louis are no longer refuges from the social and economic illnesses of the core city, but have become, in many respects, extensions of the City and are now experiencing the familiar urban problems of congestion, decaying housing, racial tensions, and increasing crime.

To determine whether any relevant increases in crime occurred in St. Louis County with the beginning of the St. Louis Impact Program, projections of the expected annual crime for 1972 and 1973 were made on the basis of pre-Impact data for two time intervals. The first period consisted of eight years, 1964-1971; the second interval contained only three years, 1969-1971, identical to the time interval basis for the City crime projections. The longer interval was included since the annual reported crime levels for the County did not exhibit the distinct cycles of increasing and decreasing crime evident in the City data. For each time interval, two projection models were utilized: the first projections were based on a linear model which assumes a constant annual change in the level of reported crime; the second set of projections were based on a geometric model which assumes a constant percent change in the number of crimes per year.

Projections based on the eight-year period, 1964-1971, are presented in Table 3-4. For each crime category, the estimated 1971 crimes, the annual growth factor, and the projected 1973 crimes from both projection models are shown. As an example, on the basis of the 1964-1971 crime data for St. Louis County, the linear model estimates a total of 10,986 Impact crimes in 1971 and an annual increase of 1,027 Impact crimes per year. These estimates yield a projected 1973 total of 13,040 Impact crimes. The geometric model estimates a 1971 total of 11,585 crimes with an annual increase of 15.5% per year yielding a projected 1973 total of 15,455 Impact crimes.

Table 3-4

PROJECTED 1973 REPORTED CRIME

IN ST. LOUIS COUNTY

-BASED ON 1964-1971 REPORTED CRIME -

CRIME CATEGORY	LINEAR MODEL			GEOMETRIC MODEL			REPORTED 1973 CRIME
	Estimated 1971 Crime	Annual Growth (Crimes/Year)	Projected 1973 Crime	Estimated 1971 Crime	Annual Growth (%/Year)	Projected 1973 Crime	
Index	22787	2237	27261	24087	16.7%	32804	28318
Impact	10986	1027	13040	11585	15.5%	15455	13920
Person-to-Person	1280	131	1552	1356	17.7%	1879	1788
Burglary	9793	909	11611	10334	15.4%	13762	12132
Robbery	594	62	718	634	18.5%	890	977

Table 3-5

PROJECTED 1973 REPORTED CRIME

IN ST. LOUIS COUNTY

-BASED ON 1969-1971 REPORTED CRIME -

CRIME CATEGORY	LINEAR MODEL			GEOMETRIC MODEL			REPORTED 1973 CRIME
	Estimated 1971 Crime	Annual Growth (Crimes/Year)	Projected 1973 Crime	Estimated 1971 Crime	Annual Growth (%/Year)	Projected 1973 Crime	
Index	22738	1707	26152	22792	8.7%	26931	28318
Impact	10860	752	12364	10875	7.8%	12641	13920
Person-to-Person	1312	136	1584	1317	12.7%	1674	1788
Burglary	9485	436	10357	9489	4.9%	10450	12132
Robbery	621	82	785	627	17.8%	870	977

Although not shown, the 1972 crime projections for each crime category can be obtained by applying the annual growth factors to the estimated 1971 crimes. As an example, the 1972 linear projection for Impact crimes is 12,013 ($10,986 + 1,027 = 12,013$). The 1972 projections can be compared with the reported crime figures shown in Table 3-3.

The actual number of reported Impact crimes in the County in 1973 was 13,920, a figure midway between the two projections discussed above. For Index, Impact, person-to-person, and burglary crimes, the actual 1973 reported crime levels exceed the linear model projections, but are below the projections based on the geometric model. The 1973 reported robbery level exceeds both projections.

The results of using both projection models with data from the three-year interval, 1969-1971, are shown in Table 3-5. The growth factors for both models again indicate annual increases for all crime categories, but at rates considerably less than those estimated by the models using data from the eight-year period. As an example, the eight-year linear model estimated that Impact offenses were increasing at a rate of 1,027 crimes per year, yet the three-year model estimated the annual growth at only 752 Impact crimes. The decline in the Impact crime growth rate for the geometric model is even more pronounced -- from 15.5% for the eight-year model to only 7.8% for the three-year model. Similar declines are evident for the other crime categories, with the greatest decrease occurring in burglary. The only crime which did not slow its annual growth rate was robbery. Without exception, the actual 1973 reported crime levels exceeded both the linear and geometric projections for 1973 based on the 1969-1971 pre-Impact data. This same result was also obtained when the 1972 reported crime levels were compared with the 1972 projections from both models based on the three-year interval 1969-1971.

In reviewing the results of both models over both time periods, the evidence appears to be conclusive that a significance increase occurred in the number of reported robberies in St. Louis County during 1972 and 1973. The 977 robberies reported in 1973 far exceeded the highest projection obtained from either model -- 890 robberies from the geometric model based on 1964-1971 data. For the other crime categories, the picture is less definitive because of the significant slow down in the crime increases during the 1969-1971 period. On the basis of the eight-year period, 1964-1971, the reported 1973 crime levels consistently fall between the projections of the two models. When the three-year period of 1969-1971 is used, however,

the crime projections support the claim that the annual crime rate for St. Louis County increased significantly following the beginning of the St. Louis Impact Program.

To retain consistency with the time period of analysis used for the City of St. Louis, the final conclusions on the crime trends for St. Louis County are based on the application of the models to the three-year interval only. On the basis of these projections, it appears that a significant increase in crime occurred in St. Louis County in both 1972 and 1973.

Closer examination of the projections and reported crime totals in Table 3-5 indicates that almost all of the increase in reported crime above the projected levels in 1972 and 1973 was due to the increase in the number of reported burglaries. For example, the total number of reported Index crimes for St. Louis County was 2,166 more than the 1973 linear projection, while the total number of reported burglaries alone in 1973 exceeded the linear projected burglary level by 1,775, almost 82% of the total increase. The monthly moving average for burglary in Figure 3-10 clearly illustrates that, beginning in August 1972, the burglary trend turned upward and continued to climb through the rest of 1972 and all of 1973.

The annual clearance rates for St. Louis County are shown in Table 3-6, and are graphically presented in Figure 3-12. In 1972, the burglary clearance rate dropped sharply to only 14.1%, over 6% below the clearance rate reported for the previous year. A complete reversal occurred, however, in 1973, when the County-wide burglary clearance rate rose to 26.1%, the highest recorded rate since at least 1966. In fact, it should be noted that the clearance rates for all crime categories shown in Table 3-6 increased in 1973, some rather substantially, over 1972. The rapid decline and rise of the burglary rate was not indictative of a similar decrease and rise for all crime categories; the clearance rate for person-to-person crimes increased in both 1972 and 1973.

D. Crime Trends in the Adjacent Municipalities

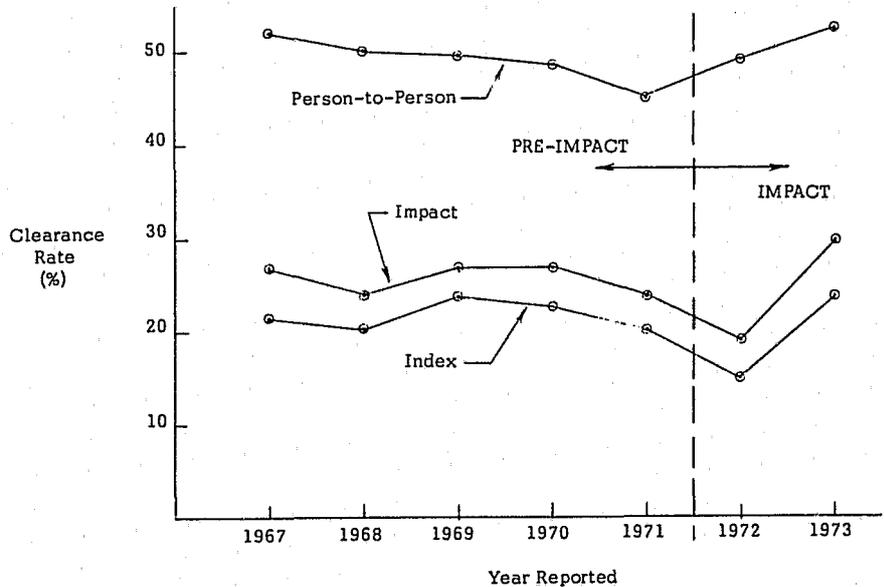
Examination of the annual crime data for the adjacent municipalities is of particular importance, because the most extensive arrest data were collected for those seven jurisdictions. As indicated earlier, these communities were selected because each shares a common border with the City and, consequently, is the first jurisdiction encountered when traveling west or northwest from the City. This proximity would suggest that these municipalities are the most likely to experience geographic crime displacement from the City of St. Louis.

Table 3-6
ANNUAL CLEARANCES AND CLEARANCE RATES
IN ST. LOUIS COUNTY
1967-1973

CRIME CATEGORY	PRE-IMPACT					IMPACT	
	1967	1968	1969	1970	1971	1972	1973
Index	2789 22.1%	3256 20.4%	4327 23.0%	4988 22.5%	4525 20.4%	3525 14.9%	6491 22.9%
Impact	1759 27.4%	1929 23.8%	2549 27.5%	2827 27.4%	2529 23.5%	2206 18.8%	4103 29.5%
Person-to-Person	336 52.3%	446 50.5%	492 49.1%	608 48.6%	575 45.2%	772 49.2%	939 52.5%
Burglary	1423 24.6%	1483 20.5%	2057 23.9%	2219 24.5%	1954 20.6%	1434 14.1%	3164 26.1%
Robbery	80 26.2%	123 30.4%	100 23.7%	202 33.1%	153 26.1%	202 26.1%	292 29.9%

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Figure 3-12
ANNUAL CLEARANCE RATES
IN ST. LOUIS COUNTY
1967-1973



Source: Bureau of Central Police Records, St. Louis County Department of Police.

The same difficulties in determining what represents a legitimate crime increase, instead of merely the continuation of a crime trend, must be dealt with in examining crime data for the adjacent municipalities. As indicated above, the relevance of crime increases in 1972 and 1973 must be determined by comparisons with projected crime levels based on pre-Impact data.

Figure 3-13 presents the monthly moving averages for Impact, burglary, and person-to-person crimes in the adjacent municipalities. As with the County-wide data, the moving average for the person-to-person crimes does not demonstrate any significant change with the beginning of the Impact Program. The burglary moving average, however, had a sharp upturn in mid-1972, coinciding with the implementation of the first Impact police project. In addition, reported burglaries in August 1972 were the highest monthly total recorded through the end of 1973.

The annual reported crime levels for the adjacent municipalities from 1967 to 1973 are shown in Table 3-7 and graphically presented in Figure 3-14. The increase in crime during these seven years was significant, both in absolute numbers and in terms of annual rates. The reported annual total for each crime category shown more than doubled during this period. The average increase in Index crimes was over 11% per year, with robbery having an annual increase of 19%.

To establish 1973 crime projections, the linear and geometric models were used again over two time intervals. The first projections were based on all five of the pre-Impact years shown in Table 3-7, i.e., 1967-1971; the second set of projections was based on the same three-year period, 1969-1971, used for the analysis of both the City and County crime data. The five-year projections are presented in Table 3-8. For Index, Impact, and burglary crimes the reported 1973 crime levels were less than the 1973 projections obtained from either model. This indicates that, for these crime categories, the rate of crime growth lessened following the beginning of the Impact Program. Person-to-person crimes and robberies continued to increase at a rate similar to that of the pre-Impact period, 1967-1971. The reported crime levels for these two categories fall between the projections from the two models.

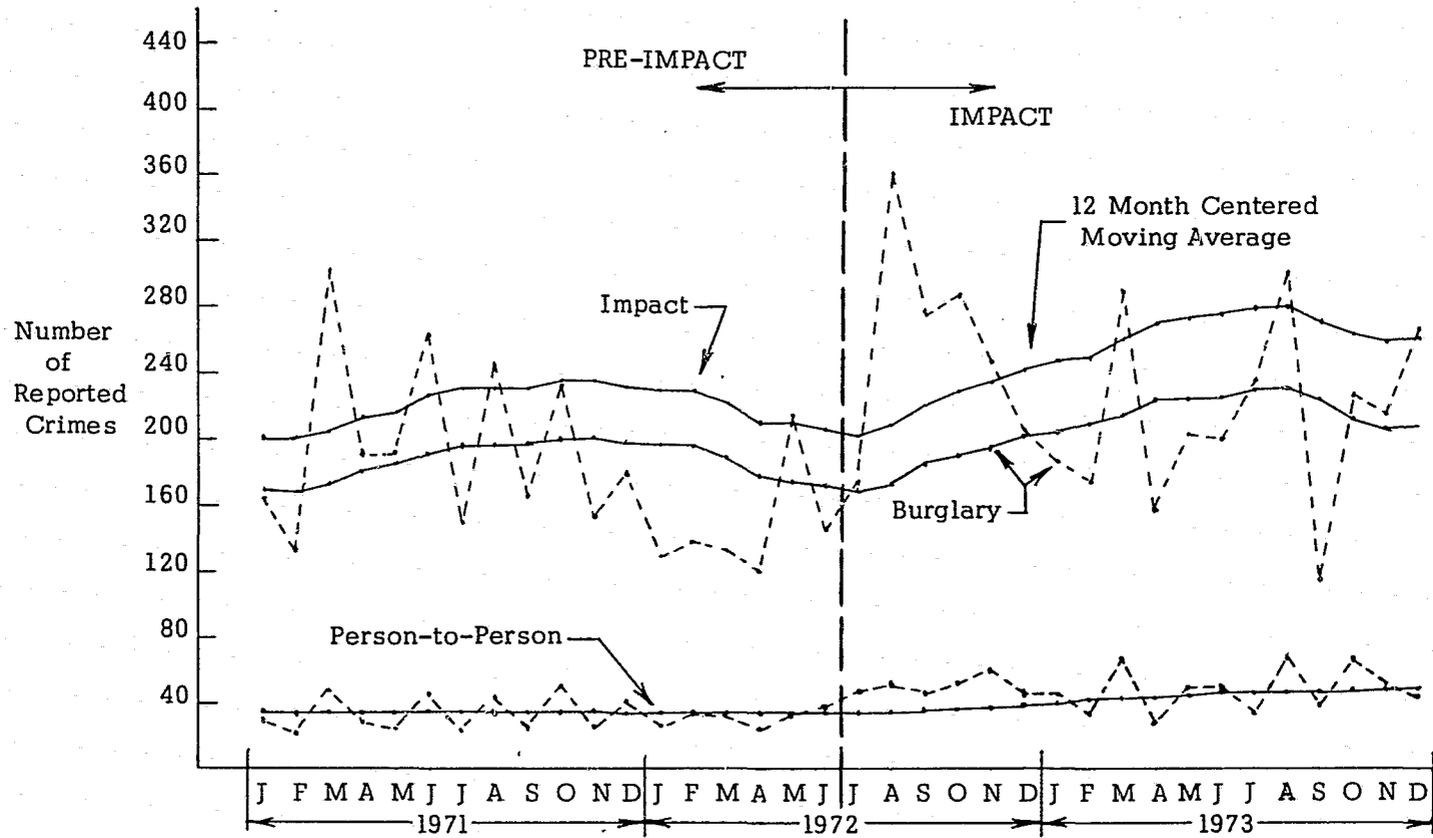
When the 1973 crime projections, made on the basis of the three-year period, 1969-1971, are compared with the reported 1973 crime levels (Table 3-9), the same crime trends as indicated above for the adjacent municipalities are evident. For Index, Impact, and burglary crimes, the reported 1973

Figure 3-13

MOVING AVERAGE TREND BASED ON MONTHLY REPORTED IMPACT CRIMES

IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

1971-1973



Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table 3-7

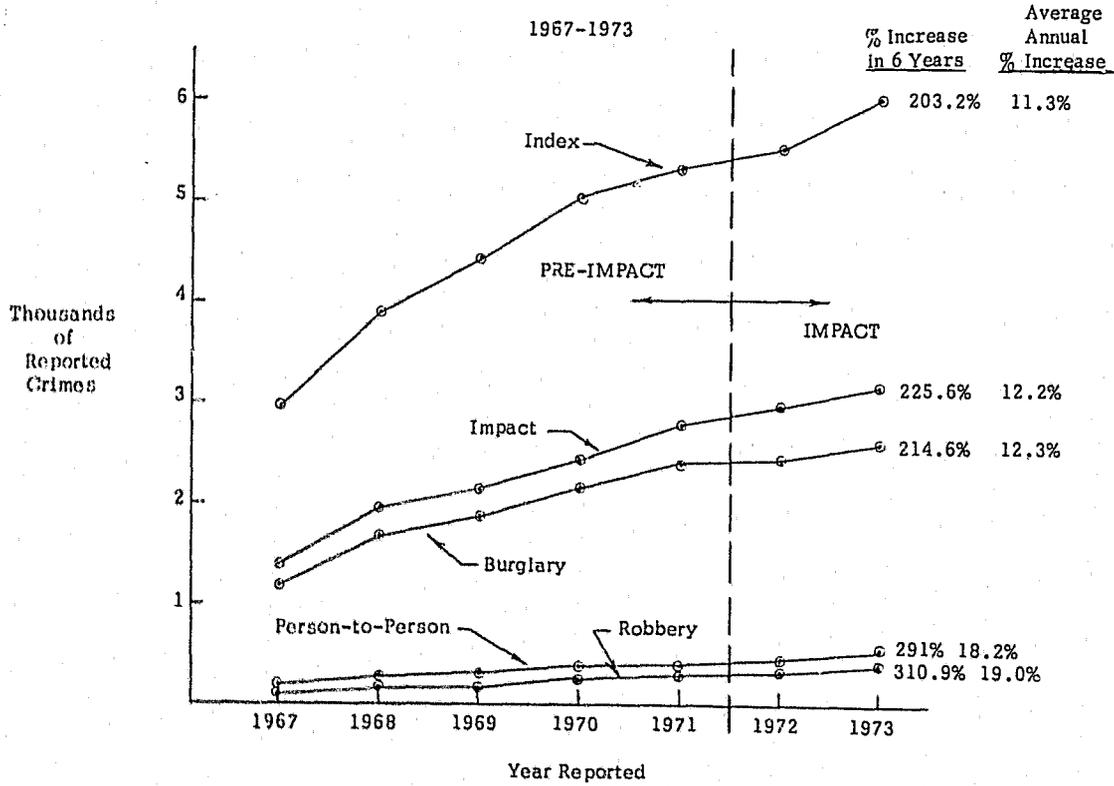
ANNUAL REPORTED CRIME IN
ADJACENT ST. LOUIS COUNTY MUNICIPALITIES
1967-1973

CRIME CATEGORY	PRE-IMPACT					IMPACT		Average Annual Growth Rate-%
	1967	1968	1969	1970	1971	1972	1973	
Index	2972	3862	4395	5033	5314	5479	6043	11.3
Impact	1404	1974	2169	2429	2780	2927	3172	13.2
Person-to-Person	201	276	297	411	410	492	590	18.2
Burglary	1203	1698	1872	2018	2370	2435	2582	13.3
Robbery	129	179	178	257	268	305	401	19.0

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Figure 3-14

ANNUAL REPORTED CRIME IN
ADJACENT ST. LOUIS COUNTY MUNICIPALITIES



Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table 3-8

PROJECTED 1973 REPORTED CRIME IN
 ADJACENT ST. LOUIS COUNTY MUNICIPALITIES
 -BASED ON 1967-1971 REPORTED CRIME -

CRIME CATEGORY	LINEAR MODEL			GEOMETRIC MODEL			REPORTED 1973 CRIME
	Estimated 1971 Crime	Annual Growth (Crimes/Year)	Projected 1973 Crime	Estimated 1971 Crime	Annual Growth (%/Year)	Projected 1973 Crime	
Index	5478	583	6644	5614	15.3%	7461	6043
Impact	2793	321	3435	2873	17.0%	3936	3172
Person-to-Person	429	55	539	444	20.0%	639	590
Burglary	2363	265	2893	2428	16.5%	3296	2582
Robbery	273	36	345	281	20.0%	405	401

Table 3-9

PROJECTED 1973 REPORTED CRIME IN
 ADJACENT ST. LOUIS COUNTY MUNICIPALITIES
 -BASED ON 1969-1971 REPORTED CRIME -

CRIME CATEGORY	LINEAR MODEL			GEOMETRIC MODEL			REPORTED 1973 CRIME
	Estimated 1971 Crime	Annual Growth (Crimes/Year)	Projected 1973 Crime	Estimated 1971 Crime	Annual Growth (%/Year)	Projected 1973 Crime	
Index	5375	460	6295	5386	10.0%	6512	6043
Impact	2766	306	3378	2770	13.2%	3550	3172
Person-to-Person	431	57	545	433	17.5%	598	590
Burglary	2336	249	2834	2336	12.5%	2958	2582
Robbery	279	45	369	283	22.7%	426	401

crime levels fall below the projections of both models; the reported 1973 robbery and person-to-person crime levels fall between the two projections.

These results suggest that no significant increase occurred in the annual level of reported crime for the adjacent municipalities during 1972 and 1973. In fact, the comparison of the projected and reported crime levels indicates that for Index, Impact and burglary crimes, the annual growth rates declined slightly in both 1972 and 1973.

The annual clearance rates for the adjacent municipalities are shown in Table 3-10 and graphically presented in Figure 3-15. The burglary clearance rate for 1972 does not exhibit the same sharp decline that occurred for St. Louis County in 1972, although the rate for the adjacent municipalities was the lowest since at least 1966. Following the same pattern observed for the County, the burglary clearance rate increased in 1973 to 21.9%, the highest rate since 1969, and the clearance rate for person-to-person crimes increased in both 1972 and 1973. In fact, the clearance rates for all the crime categories shown increased in 1973 over 1972.

E. Observations and Conclusion

Examination of the annual crime data for the City of St. Louis, St. Louis County, and the adjacent municipalities has produced the conclusions set forth below.

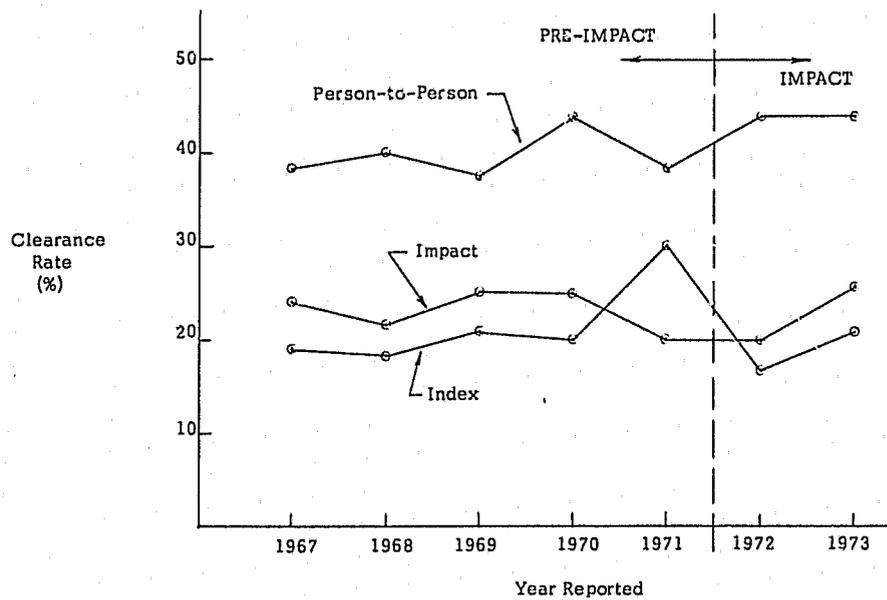
- (1) The St. Louis Impact Program had a negligible effect on Impact crime in the City of St. Louis during 1973, the first complete calendar year following the beginning of the Program.
- (2) The number of reported burglaries in the City of St. Louis declined significantly in 1972.
- (3) There was a significant increase in the annual growth rate for all Index crimes in St. Louis County in 1972 and 1973.
- (4) The number of reported burglaries in St. Louis County increased sharply during the last half of 1972 and continued to rise throughout 1973.
- (5) There was a significant decline in the County-wide clearance rate for burglary in 1972.
- (6) There was no distinguishable increase in the annual growth of reported crime in the adjacent municipalities during 1972 and 1973.

Table 3-10
ANNUAL CLEARANCES AND CLEARANCE RATES IN
ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

CRIME CATEGORY	PRE-IMPACT					IMPACT	
	1967	1968	1969	1970	1971	1972	1973
Index	570 19.2%	692 17.9%	949 21.6%	1002 19.9%	1573 29.7%	913 16.7%	1277 21.1%
Impact	336 23.9%	429 21.7%	554 25.5%	613 25.2%	575 20.7%	591 20.3%	821 25.9%
Person-to-Person	76 37.8%	111 40.2%	111 37.4%	180 43.7%	156 38.0%	213 43.6%	256 43.8%
Burglary	260 21.6%	318 18.7%	443 23.7%	433 21.4%	419 17.7%	378 15.6%	565 21.9%
Robbery	23 17.8%	48 27.0%	37 20.8%	81 31.5%	71 26.5%	80 26.5%	119 29.7%

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Figure 3-15
ANNUAL CLEARANCE RATES IN
ADJACENT ST. LOUIS COUNTY MUNICIPALITIES
1967-1973



Source: Bureau of Central Police Records, St. Louis County Department of Police.

In terms of the crime displacement scenario, analysis of the City crime data does not support the first component, except for the decline in burglary in 1972. Generally, the data indicate that the Impact Program did not, to any significant degree, act as an element of change except for the decline in City-wide burglary in 1972. The St. Louis County crime data, however, do offer some support for the validity of the second component. A real increase in crime occurred in 1972 and 1973 in St. Louis County coincident with the Impact Program, both in the County's unincorporated areas and its municipalities -- but not in the adjacent municipalities. Most of the crime increase was due to a significant rise in the number of reported burglaries. The 1972 burglary clearance rate for the County declined to the lowest level since at least 1966.

CHAPTER IV

USE OF ARREST RESIDENCY DATA TO MEASURE CRIMINAL MOBILITY AND CRIME DISPLACEMENT

A. Introduction

The remainder of this report presents detailed residency information about persons arrested in the City of St. Louis, St. Louis County, and the adjacent municipalities, both before and after the beginning of the Impact Program. The residency data are used to test the hypothesis that there has been a substantial increase in both the number and proportion of City residents arrested in the jurisdictions outside the City of St. Louis since the initiation of the Impact Program. This hypothesis represents the third component of the crime displacement scenario.

The purposes of this chapter are to describe first, the use of arrest residency data as a measure of criminal mobility and crime displacement. Next, to present several validity and reliability problems associated with the use of the collected arrest information, and finally, to identify the data collection and analysis procedures used to control or eliminate these problems. In those instances where control was not obtained, the assumptions used in this study are presented.

B. Ideal Conditions for the Use of Residency Data

To identify the conditions under which arrest residency data provide a direct measure of criminal mobility and crime displacement, consider the theoretical situation in which the residency of every criminal who commits a crime is known. With this ideal situation, now consider a metropolitan region which consists of only three jurisdictions: A, B, and C, in which all of the crimes committed in each jurisdiction are committed only by residents of that jurisdiction. Further suppose that an intensive anti-crime program is initiated in only jurisdiction A, and subsequent crime information for areas B and C indicate the presence of criminals from area A (residents of A).

With this set of conditions and the availability of residency data, several observations can be made about the level of criminal mobility and crime displacement. The number of crimes committed by area A residents in area B

provides a direct measure of the level of criminal mobility from A to B. In the example presented above, the level of criminal mobility between each of the jurisdictions was zero, prior to the anti-crime program. After the anti-crime program was initiated in area A, the increase in mobility from A to B was directly indicated by the increase in the number of crimes committed by area A residents in area B.

The change in the proportion of crimes committed by residents from each jurisdiction can be used to identify the nature of observed changes in the criminal mobility patterns. If criminal mobility into area B increases because of changing conditions in area A, then it must be true, under these ideal conditions, that only criminals of area A will be displaced. Hence, the proportion of crimes committed by area A residents in area B will show an increase. If, however, crime increases in area B because of changing conditions within area B, then the increased criminal mobility would consist not only of area A residents, but of residents from all surrounding jurisdictions (in this case areas A and C). Consequently, the relative proportion of crimes committed by residents from each of the outside jurisdictions would not be significantly altered.

In summary, under these ideal conditions, the number of crimes committed in a particular jurisdiction by residents from each of the neighboring jurisdictions serves as a direct measure of criminal mobility. Observed over time, this measure provides an indicator by which changes in the level of criminal mobility can be identified. The observed relative proportion of crimes committed by residents from each of the surrounding jurisdictions can be used to identify the nature of the changes in the criminal mobility patterns. Constant relative proportions during a period of increased criminal mobility indicate that crime is increasing in a particular jurisdiction because of changing conditions within that jurisdiction which are attracting criminals. If, however, the relative proportion of crimes committed by the residents of a neighboring jurisdiction increases during a period of increasing criminal mobility from that neighboring jurisdiction, this set of conditions suggests that criminals are being displaced by changing conditions within that neighboring jurisdiction.

C. Validity Problems With the Use of Arrest Residency Data

In the section above, it is shown that criminal residency information, under ideal conditions, provides a direct measure of mobility and displacement. For this study, criminal residency data were collected from police

arrest records in all of the jurisdictions examined in this report. The process of translating the concept of criminal residency into an operational measure which is based on arrest data which were originally collected and stored under less than ideal conditions introduces several threats to the use of the residency data as a valid measure of mobility and displacement. The discussion of these validity threats constitutes the remainder of this section.

1. Initial Conditions In the theoretical example presented above, an initial condition was imposed that, prior to the introduction of the anti-crime program in Area A, all the crimes committed in each jurisdiction were committed only by residents of that jurisdiction. The value of that condition was that when the anti-crime program was introduced into area A, the only criminals who could possibly be displaced were residents of area A. Consequently, the residency of the criminal served as a label which indicated not only where he lived but, more importantly, his previous area of criminal activity. What is the loss in the validity of the residency data when this ideal condition does not hold?

To explore this problem, consider again the imaginary metropolitan region, but with a set of non-ideal conditions. Assume now, within each jurisdiction, that an equal number of crimes is committed by criminals from A, B, and C. As before, suppose that an anti-crime program is introduced into area A and that some criminals are displaced. What distribution of residencies will be observed in areas B and C following this action? The question becomes more difficult in this example, because some residents of all three jurisdictions are present in area A prior to the beginning of the anti-crime program. For the sake of simplicity, assume that the displaced criminals from area A (those leaving the area) consist of an equal number of residents from each jurisdiction. This is not an unreasonable assumption, since an equal number of residents from each jurisdiction were active in area A initially, and most anti-crime projects focus equally on all criminals regardless of their residency.

To complete this example, the distribution of the displaced criminals into areas B and C must be determined. One method for distributing these criminals is to use the residency distributions of the criminals already active in areas B and C. For example, examination of the crimes heretofore committed in areas B and C may indicate that for every 100 crimes committed by area A residents, 60% were committed in area B and 40% in area C. These same proportions can be used to distribute the displaced area A

residents. In a similar manner, the residents of areas B and C who are displaced would be distributed according to their respective prior distributions in these jurisdictions.

A detailed example using these non-ideal initial conditions and assumptions is presented in Figure 4-1. In Item 1 the crime and residency distributions are shown for each jurisdiction prior to the introduction of the anti-crime program into area A. Item 7 indicates the redistribution of crimes and criminals after beginning the anti-crime program. Closer examination of this redistribution indicates that some of the interpretative capability of the residency data has been lost; because of displacement from area A, a total of 27 more crimes has been committed in area B, but only one-third of the increase was committed by residents of area A. In fact, the relative proportion of crimes committed by residents from each jurisdiction did not change. Examination of the residency data continues to provide evidence of changes in the level of criminal mobility. However, without other supporting evidence, the ability of the data to detect the nature of these changes, i. e., the type of displacement, has been significantly reduced. In this report the patterns of criminal mobility, as measured by arrest residency data, are supplemented by detailed analyses of the crime trends in both the City of St. Louis and the surrounding jurisdictions.

The second example presented above also indicates that, if an anti-crime program is introduced into a jurisdiction in which the non-resident criminal population is very high, the ability of the criminal residency data to distinguish the nature of changes in criminal mobility patterns is reduced. However, if the non-resident criminal population is non-existent or very small, then criminal residency information provides a valid measure of both criminal mobility and crime displacement. The several years of residency data obtained for both adults and juveniles arrested in the City of St. Louis (see Chapter V), indicate that over 90% of the criminal population active in the City during 1966 to 1973 were St. Louis residents -- a proportion high enough to support the valid use of the arrest residency data to measure both mobility and displacement, from the City of St. Louis to neighboring jurisdictions.

2. Arrest Data Sample Another initial condition which cannot be achieved is knowledge of the residency of the perpetrator of every crime. Within the St. Louis region, clearance rates by arrest for all Index crimes vary between 20 and 30%. Under ideal sampling conditions, a 20% sample of the parent population is usually more than

Figure 4-1

EXAMPLE OF THE USE OF RESIDENCY

DATA TO MEASURE CRIMINAL

MOBILITY UNDER NON-IDEAL CONDITIONS

1. Distribution of criminals before the initiation of the anti-crime program:

Area	Total Crime	Residency Distribution* Of Criminals		
		<u>A</u>	<u>B</u>	<u>C</u>
A	900	300	300	300
B	90	30	30	30
C	60	20	20	20

2. Initiation of the anti-crime program reduces crime in area A by 10%, i.e., 90 crimes.
3. One-half of the crime reduction is due to displacement, and one-half is due to deterrence: i. e.,

Total crime reduction = 90 (10% of 900)
 50% displaced = 45
 50% deterred = 45

4. Residency distribution of displaced criminals ,

Total crimes (criminals)
 displaced = 45
 residency { area A = 15
 area B = 15
 area C = 15

5. A priori residency distributions in areas B and C:

Residency Area	Distribution in	
	<u>B</u>	<u>C</u>
A	30 (60%)	20 (40%)
B	30 (60%)	20 (40%)
C	30 (60%)	20 (40%)

6. Distribution of displaced area A residents

To area B = 9 (60% of 15)
 To area C = 6 (40% of 15)
15

7. Final redistribution of criminals after initiation of the anti-crime program:

Area	Total Crime	Residency Distribution Of Criminals		
		<u>A</u>	<u>B</u>	<u>C</u>
A	810	270	270	270
B	117	39	39	39
C	78	26	26	26

* Assumes one crime per criminal

adequate to provide a sound basis for statistical analysis. This would be equally true for the sample of criminals who are arrested so long as that sample is representative of the population of all criminals. Even biases within the sample are permissible so long as it can be demonstrated or assumed that they are independent of the variables of interest, i. e., so long as the biases do not distort the sample residency distribution.

Several characteristics of the arrest data which may introduce some bias into the residency sample are presented below. A brief discussion is presented with each characteristic indicating the procedures and assumptions utilized in this study to control or eliminate the potential bias associated with each characteristic.

- a. The arrest sample contains some individuals who are not criminals. This bias was controlled in the study by including only arrests for which the person was directly charged with an Index offense. No arrests were included in which a person was:
 - (1) retained by the police for questioning and released without having a direct charge placed against him, or
 - (2) arrested and charged with suspicion of an Index crime.
- b. The police charging procedures are not the same for residents and non-residents. In this study, it was assumed that the seriousness of the charge brought against an individual was not dependent on his residency.
- c. The probability of arrest is significantly lower for professional criminals. This bias is not important unless the more professional criminal is more likely to change his crime location than less experienced criminals. If this is true, then arrest residency distributions will underestimate the extent of criminal mobility. This bias is controlled to a limited degree by use of time-series analysis of arrest data. Although the level of criminal mobility may be underestimated, the analysis of the time-series can still accurately detect changes in the criminal mobility patterns if the degree of bias remains constant. Another check against this bias is the examination of clearance rates. If professional criminals are committing more crimes in a jurisdiction and are not being apprehended, then the clearance rates should decrease.

- d. The probability of arrest is significantly lower for non-resident criminals. The existence of this bias would result in an estimate of criminal mobility below its true level. Time-series analysis can still be used to detect changes in the mobility patterns so as long as the bias remains relatively constant. Also, an increase in the number of non-resident criminals should be reflected in decreasing clearance rates.

3. Number of Crimes Per Criminal In the ideal situation described in Section B above, it was possible to associate the residency of the criminal with every crime. In this report, estimates of the residency distributions for different jurisdictions and for the same jurisdiction in different years were obtained from samples based on police arrest records. Use of these samples to estimate the residency distributions of all crimes is valid so long as it can be assumed that the average number of crimes committed by each criminal is not residency-related. The bias that is introduced if this assumption fails can result in either an over- or underestimation of the true crime residency distribution. That is, if the average number of crimes is higher for residents than for non-residents, the sample residency distribution will overestimate the true level of crime mobility; if the average number of crimes is higher for non-residents, the crime mobility level will be underestimated. Despite the error in estimating the level of crime mobility, the examination of the mobility level over time can still be used to detect when changes in the mobility pattern occurred.

4. Time of Arrest In collecting the arrest data for this report, it was not always possible to determine the date of the actual crime for which the person was arrested. Hence, in all of the data presented in chapters V, VI, and VII, the time indicated is the arrest date, not the date the offense occurred. Obviously this introduces a timelag, since an arrest may occur several days or weeks after a crime has been committed. No adjustment of the arrest dates was attempted in this report to compensate for this timelag effect.

D. Arrest Residency Data Reliability

In addition to the numerous validity problems associated with the use of the arrest residency data, a number of reliability difficulties are also present. This section discusses several sources of data error that were identified during the course of this study. In some cases, these observations refer to agency procedures which lessen the

the effectiveness of their records processing system, either by not fully utilizing the system as designed or by not controlling the quality of the processing. These deficiencies deserve comment, not only because they weaken the conclusions of this study, but also because they are deficiencies. Significant effort is required to advance police records systems from mere passive describers of police efforts to active indicators which can assist criminal justice planners in better understanding the complex relationship between police behavior and criminal response.

1. False Data Given by Person Arrested In addition to errors introduced by the routine processing of arrest information, those data items which are elicited directly from the person arrested are particularly vulnerable to falsification. Unfortunately, included among these data items is the residency of the individual. This problem was partially controlled by having every address validated for authenticity by house number, street name, and municipality. While this screening of the data eliminated those addresses which did not exist, it could not identify those instances in which the person gave a valid address which was not his true residency. If it is assumed that deliberate falsification was not residency-related, then this error source would not have biased the residency distribution obtained from the arrest sample. The validation of over 100,000 addresses during this study indicated that the number of invalid addresses given by arrested individuals was very small -- less than 1%. In the residency distribution tables presented in chapters V, IV, and VII, invalid addresses are included in the unknown residency category.

2. Police Department Processing In the course of this study, the processing of arrest data by several police agencies was observed. In general, the potential for significant error in the data obtained from these agencies existed primarily because of the lack of properly trained personnel to oversee and coordinate the enormous volume of information processed.

a. City of St. Louis Since 1966, the St. Louis Metropolitan Police Department has maintained an automated arrest file which represents one of the most advanced systems in the country. The use of the system for this study revealed several deficiencies in system implementation. Although designed to record many data items about the arrested person in great detail, many items were found to be incomplete or contained information which had not been adequately updated. This gap

between system design and system implementation had a direct effect on the quality of the arrest residency information obtained. Although the residency coding system is designed to indicate the exact municipality of any residency in the entire St. Louis metropolitan region, inadequate training in the use of the residency code resulted in only a partial use of the code for non-residents arrested in the City. As a consequence of this lack of training, beginning in late 1970 all, non-City residents from Missouri were given the same residence code -- one which indicated only the State of Missouri as their residence. Similarly, all Illinois residents arrested in St. Louis were coded only as residing in the State of Illinois. The result of these coding deficiencies was that no definitive information about the extent of criminal mobility from the surrounding jurisdictions into the City of St. Louis was available from the automated arrest file.

- b. St. Louis County Central Records Central Records in the St. Louis County Police Department has the significant task of collecting, coordinating, and producing crime and arrest reports for over 60 police agencies in St. Louis County. Although the total number of arrests processed is less than the number recorded in the City of St. Louis, the lack of uniformity in reporting practices by the various police agencies introduces numerous additional difficulties for this office.

As each arrest report is received at Central Records, one arrest card is keypunched to summarize the major arrest information. These cards are used to provide monthly and annual arrest reports which summarize the numbers and kinds of arrests for each municipality. Although the cards are then stored at Central Records, their use essentially ends with the publication of the arrest reports. Unfortunately, the limited use of these cards has meant that no card editing is used to detect and eliminate coding and keypunching errors. Despite the very real possibilities for such errors, there is no reason to believe that these processing deficiencies introduced any errors which were directly correlated with the residency of the arrested individual.

3. Processing of Juvenile Offenders Another source of error in the arrest data arises from the informal process involved with the apprehension and charging of juvenile offenders. Considerable discretion is exercised by juvenile officers in determining the best course of action for each juvenile arrested. Since contact with juvenile authorities is often the first experience many persons have with the criminal justice system, an informal approach in which the juvenile officer seeks to counsel the youth and his parents to avoid further problems is very commonly used. The informality of this system unfortunately also frequently extends to the maintenance of juvenile apprehension records. These records often are viewed as unnecessary when the youth is merely turned over to his parents. As with many of the processing difficulties described above, if the errors are randomly distributed, it can be assumed that no serious bias is introduced into the residency data.

Unfortunately, the localized nature of the juvenile apprehension process may produce errors which do result in a residency bias. Juvenile officers in a municipality often view their primary responsibility as extending only to the juveniles of their city. The success of their performance is frequently measured only in terms of how well resident juveniles are handled. Their only responsibility for non-resident juveniles apprehended in their jurisdiction is to record their apprehension and pass them immediately into the Juvenile Court System. With this rather parochial structure of accountability, the informality of the system becomes directed primarily at resident juveniles.

Determination of the extent to which juvenile records accurately reflect the numbers and kinds of juveniles who are actually apprehended would have involved an effort far beyond the scope of this study. A limited control of the juvenile reporting process within each jurisdiction was obtained through an examination of the residency distributions of juveniles, both before and after the beginning of the Impact Program. This control did not insure the accuracy of the estimated level of mobility, but did provide insights into the changes in juvenile mobility patterns coincident with the St. Louis Impact Program.

E. Interpretation of Arrest Residency Data

The purpose of this section is to discuss those variables which may directly influence the number and proportion of criminals arrested, even after accounting for all of the validity and reliability problems described above. Awareness of these variables becomes particularly important when the comparison of arrest residency data between two jurisdictions is attempted.

1. Different Arrest Rates It is very possible that despite similar levels of reported crime, two municipalities may report different numbers of arrests. These differences may arise when:

- a. the two police departments vary considerably in the number of men and total resources which they have available;
- b. the departments have significantly different policies regarding the use of arrest as an instrument of police control; and
- c. the two communities vary considerably in any number of geographic, demographic, or economic factors which can affect police performance.

2. Jurisdiction Size Both the number and proportion of arrests of non-residents may be influenced to a considerable degree by the geographic size and total population of a jurisdiction. If the jurisdiction-of-interest contains almost all of the regional population, e. g., the St. Louis SMSA, the proportion of non-residents arrested will be extremely low. As the size of the jurisdiction-of-interest becomes smaller, however, and the surrounding population increases, the potential for a higher level of non-resident arrests also increases. It would not be reasonable, for example, to expect that University City (see Plate 5, Crime Displacement Study Area), a city of approximately 46,300 surrounded by a population of more than 2.3 million, to have the same level of non-resident crime as the entire St. Louis SMSA. Continuing this argument even further, consider a jurisdiction-of-interest consisting of only one city block. Within this jurisdiction, the situation has now been reversed and the expected level of resident crime (crime committed by residents of that block) would be very low. The logical conclusion of this conceptual experiment is supported in the arrest data shown in chapters V, VI, and VII, i. e., in general, the larger the jurisdiction-of-interest, the lower the proportion of non-residents arrested.

This relativity in the number and proportion of non-residents arrested with respect to jurisdiction size and population means that a direct comparison of arrest residency distributions between two municipalities is not possible unless compensating adjustments, made for size and population, are applied to one or both of the jurisdictions.

3. Population Changes Certainly within the eight-year interval covered by the arrest data in this report, (1966-1973), the general population of the St. Louis SMSA did not remain static. The population of the City of St.

Louis continued to decline while the surrounding suburban areas continued their rapid population growth. Growth in the older municipalities, close to the City, however, slowed considerably. In fact, the adjacent municipalities actually lost population during the 1960's (see Table 2-3).

Of more immediate interest are the residency shifts of the criminal population, and the effect these shifts had on the residency distributions obtained from the arrest samples. If it is assumed, first, that the migration patterns of the criminal population in the St. Louis region mirror those of the general population, and, second, that those patterns continue for several years, it would be reasonable to expect that the number of arrested criminals living in the City of St. Louis would also decrease.

An alternate hypothesis is that criminal population migration patterns vary from those of the general population, and that the very social and economic pressures which induce criminal behavior also serve to inhibit migration. Examination of this phenomenon would require the ability to trace individual criminals for several years to adequately measure their residency migration patterns and the subsequent effect on arrest residency distributions.

Whatever criminal population shifts occurred over time, the influence of these shifts on the residency distributions in the jurisdictions-of-interest have become part of the arrest trends of the pre-Impact data. In this report, it is assumed that any significant changes induced by the Impact Program have been indicated by changes in the arrest trends. Hence, while population shifts may slowly change the various proportion levels, those shifts should not have hindered the accurate detection of rapid changes induced by the Impact Program.

4. Distances Between Jurisdictions A variable which influences the number and proportion of non-residents criminals is the distance separating any two communities. Travel mileage provides one measure of the "distance" between two communities. It does not, however, adequately measure the increased accessibility that occurs between jurisdictions joined by a new expressway; the travel mileage between the jurisdictions remains constant, but the traffic flow may substantially increase. Travel time provides a more accurate measure incorporating both distance and accessibility. Plate 2, Displaced Crime, 1973, in the Summary gives some indication that, as the distance from the City of St. Louis increases, the level of criminal mobility from the City decreases. The increased mobility along the highway

corridors to the northwest and southwest of the City supports the hypothesis that both geographic distance and accessibility influence the level of criminal mobility.

CHAPTER V

ARREST RESIDENCY TRENDS IN THE CITY OF ST. LOUIS

A. Arrest Residency Data Collection

Arrest data for the City of St. Louis were obtained for eight complete years, 1966-1973, from the automated arrest files maintained by the St. Louis Metropolitan Police Department. The adult arrest file is stored on a disk pack which permits rapid access to each individual arrest record. Connected to on-line terminals, the system provides the Police Department with a rapid and efficient arrest check capability. Files on juvenile apprehensions are stored exclusively on magnetic tapes which are used primarily to produce statistical arrest reports.

Since both the adult and juvenile arrest records for St. Louis contained all of the information required for this report, including the residency of the persons arrested, no additional coding to supplement the arrest data was required. A series of computer programs was written to examine each individual arrest records in both the adult and juvenile files and to extract selected information from each Index arrest. Use of these programs ultimately produced a computer tape for each file containing an abbreviated record for every Index arrest in the City of St. Louis from 1966-1973. The information recorded for each arrest included: (1) date of arrest, (2) charge, (3) residency, (4) age, and (5) sex.

To insure the confidentiality of the data, no names were included on either the adult or juvenile tapes so constructed. The final adult arrest tape contained entries from over 70,000 Index arrest records on file at the St. Louis Metropolitan Police Department. The juvenile apprehension tape contained data from over 30,000 apprehension records recorded during this same eight-year period.

The charge code placed in the arrest record for the automated system is designed to identify the specific State and local statutes which the person has violated. Since each Index crime category includes a variety of specific offenses, during the screening of the arrest records, it was necessary to translate the coded charge on each arrest record into the appropriate Index crime. This process was possible for all charges except those relating to larceny-type offenses. Since many of the charge codes for larceny

do not indicate the monetary value of the property stolen, only the total number of arrests for all larceny offenses could be obtained for City arrests. Arrests for negligent manslaughter, common assault, suspicion of any Index offense, all Part II crimes, and fugitive transfers were not included in the City arrest data used for this report.

During the process of obtaining the City arrest information, it was discovered that the residency codes were not properly designated in the records for non-City residents. When the automated arrest file was first created, an elaborate coding system was designed which used a 10-character field to uniquely identify any house number, street, or major geographic point in the City. This same code could also be used to identify every municipality in the St. Louis SMSA. Beginning in late 1970, the use of the individual municipality codes was discontinued. All persons arrested in the City who resided elsewhere in Missouri were given a residency code designating only the State of Missouri. Likewise, all non-City residents from Illinois were given the same residency code designating only the State of Illinois. This failure to fully utilize the residency codes meant that no detailed residency distributions for non-City residents arrested after 1970 were obtained.

B. Adult Arrest Data

1. Annual Residency Distributions The annual residency distributions for all adult Index and larceny arrests in the City of St. Louis for 1966-1973 are presented in Table 5-1. The Missouri residency category contains those persons arrested in the City who were Missouri residents in jurisdictions other than the City of St. Louis or St. Louis County. These data clearly indicate that almost all adults arrested in the City of St. Louis were also City residents. The proportion of non-resident adults among the annual arrest totals did not exceed 10% in any one of the eight years shown. In fact, the proportion of resident adults among all of the adult Index arrests remained remarkably constant during these eight years: the proportion only varied between a maximum of 93.1% (1966) and a minimum of 90.1% (1973), a difference of only 2.0%.

Despite the almost constant proportion of City residents among all of the adult arrests, the number of apprehended City residents declined in every year except 1970. The 1973 total of 6,651 City adults arrested is 31% below the 9,711 adults arrested in 1966. The annual number of arrests from 1966 to 1973 does not correlate at all with crime trends in the City during this same period. While the annual number of arrests declined steadily, the reported crime level was cycling -- crime rose sharply from 1966 to 1970, declined slowly from 1970 to 1972, and then rose again in 1973 (see Figure 3-1).

Table 5-1

ANNUAL RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES
IN THE CITY OF ST. LOUIS
1966-1973

RESIDENCY	PRE-IMPACT						IMPACT	
	1966	1967	1968	1969	1970	1971	1972	1973
City of St. Louis	9711 (93.1)	8895 (91.6)	8541 (91.8)	8341 (91.4)	8555 (90.1)	7788 (90.3)	6962 (90.3)	6651 (90.1)
St. Louis County	328 (3.1)	399 (4.1)	391 (4.2)	452 (5.0)	395** (4.2)	15** (0.2)	64** (0.8)	106** (1.4)
Missouri	123 (1.2)	149 (1.5)	126 (1.4)	144 (1.6)	306** (3.2)	625** (7.2)	487** (6.3)	452** (6.1)
Illinois	161 (1.5)	141 (1.5)	143 (1.5)	133 (1.5)	168 (1.8)	137 (1.6)	127 (1.6)	127 (1.7)
Other	106 (1.0)	123 (1.3)	98 (1.1)	54 (0.6)	72 (0.8)	59 (0.7)	66 (0.9)	43 (0.5)
Unknown	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	10429 (100.0)	9707 (100.0)	9299 (100.0)	9124 (100.0)	9497 (100.0)	8624 (100.0)	7706 (100.0)	7379 (100.0)

* - Includes larceny under \$50 offenses

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

The annual number of St. Louis County and Missouri residents arrested reveals the residency coding failure which began in late 1970. From 1966 to 1970, a range of between 328 and 452 County adults were arrested annually. In 1971, however, this figure dropped to the unbelievable low of only 15 arrests while the number of Missouri residents arrested jumped to 625, more than a 100% increase over the previous year.

The residency distributions for each Index crime category for each year between 1966 and 1973 are presented in Appendix A (tables A-1 through A-8). These residency distributions indicate that the proportion of adult City residents arrested was very close to 90% for every crime category. For example, in 1973 (see Table A-8), the highest proportion of arrested City adults was 92.2%, (for murder), and the lowest proportion was 87.5% (for auto theft). The crime categories which had the highest proportion of arrested residents over the three-year period, 1971-1973, were burglary, assault, and robbery while the lowest proportion of residents were arrested for auto theft and larceny (see tables A-6, A-7, and A-8).

Some interesting differences appear when the distribution of adult residents arrested in the City of St. Louis is compared with the distribution of adult County residents arrested in St. Louis County. Based on 1973 data for all Index and larceny arrests, over 40% of the arrested City adults were charged with crimes against persons, while fewer than 25% of all County adults were arrested for similar crime in St. Louis County (see Appendix B, Table B-3). Over 35% of all adult City residents arrested for an Index offense were charged with either robbery or assault, while fewer than 22% of all County adults arrested in St. Louis County were charged with these offenses.

2. Time-Series Distributions of Arrested St. Louis Adults This section will deal exclusively with the arrest data for St. Louis City adults. The annual number and proportion of City residents arrested in St. Louis for each of the crime categories used in this report are summarized in Table 5-2. These data are presented as time-series graphs for each crime type in figures 5-1 through 5-5.

Although the time-series graph for each crime category is presented, a detailed discussion is not included for each in this section because of the considerable overlapping of data among the categories. The three time-series discussed below are: Index arrests with larceny under \$50, person-to-person arrests, and burglary arrests.

Table 5-2

PERCENT OF ADULT ST. LOUIS RESIDENTS ARRESTED

IN THE CITY OF ST. LOUIS, 1966-1973

BY CHARGE

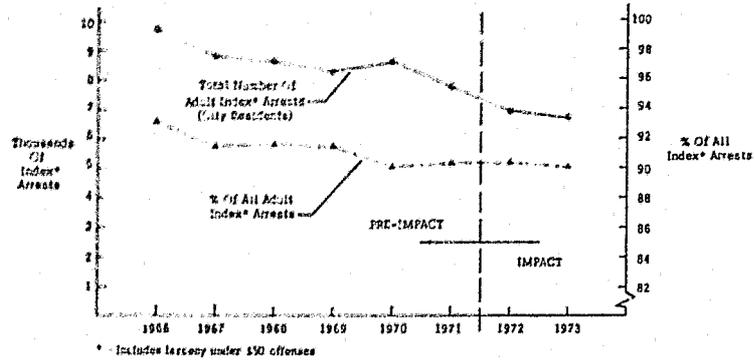
CHARGES	PRE-IMPACT						IMPACT	
	1966	1967	1968	1969	1970	1971	1972	1973
Index With Larceny Under \$50	93.1* 9711**	91.6 8895	91.8 8541	91.4 8341	90.1 8555	90.3 7788	90.3 6962	90.1 6651
Index Without Larceny Under \$50	NOT AVAILABLE							
Impact	94.3 5739	91.9 5107	92.6 5118	92.0 4886	91.5 5153	91.1 4756	91.4 4302	90.6 3974
Person-To-Person	94.0 1945	92.2 1962	92.4 2179	92.7 2398	90.9 2704	91.4 2503	91.3 2676	89.9 2725
Burglary	94.3 3794	91.7 3145	92.6 2939	91.3 2488	92.1 2449	90.7 2253	91.6 1626	91.9 1249
Robbery	90.9 647	89.6 655	89.1 755	90.4 773	90.2 948	92.2 802	91.2 869	89.3 865

* - Percent of adult St. Louis residents among all adults arrested in the City of St. Louis for these charges.

** - Number of adult St. Louis residents arrested in the City of St. Louis.

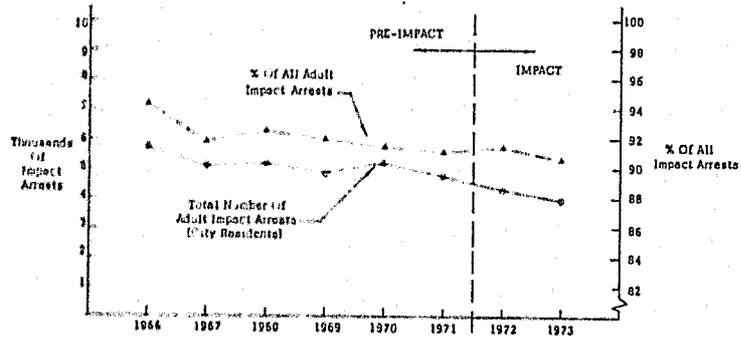
Source: Computer Division, St. Louis Metropolitan Police Department.

Figure 5 1
 ADULT ST. LOUIS RESIDENTS ARRESTED
 IN ST. LOUIS ON INDEX* CHARGES
 1966-1973



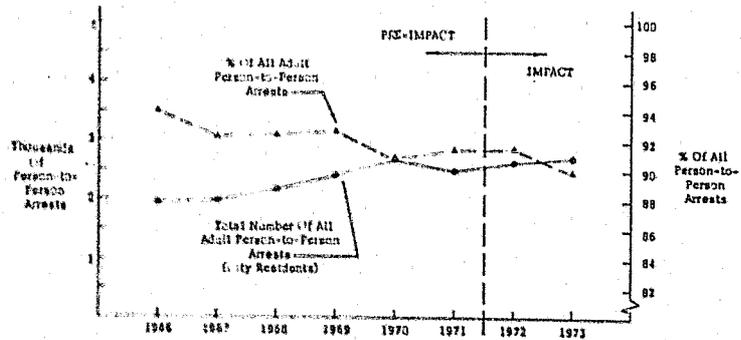
Source: Computer Division, St. Louis Metropolitan Police Department.

Figure 5 2
 ADULT ST. LOUIS RESIDENTS ARRESTED
 IN ST. LOUIS ON IMPACT CHARGES
 1966-1973



Source: Computer Division, St. Louis Metropolitan Police Department.

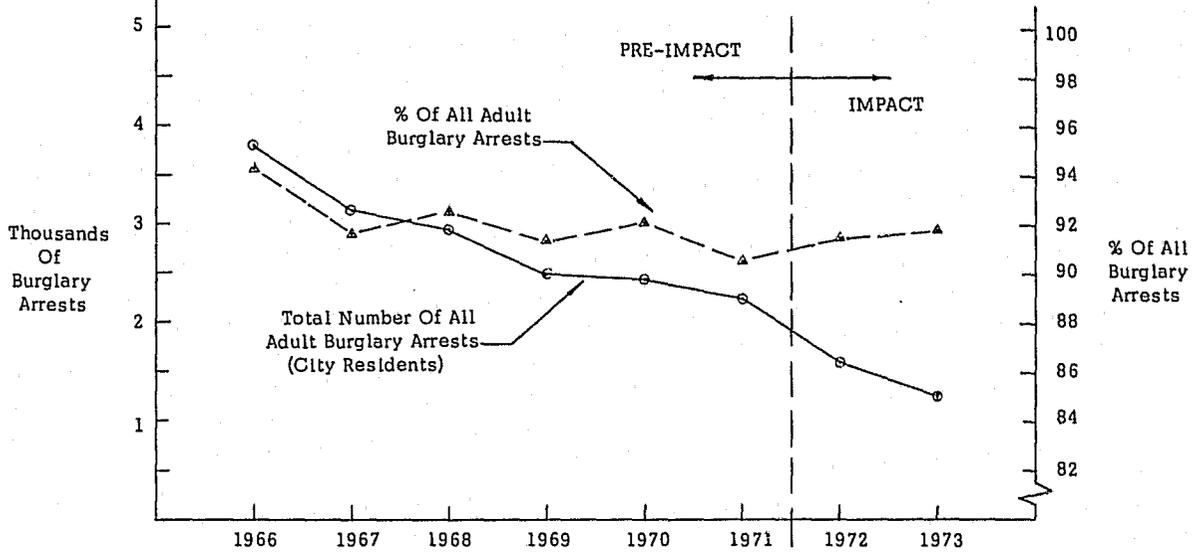
Figure 5 3
 ADULT ST. LOUIS RESIDENTS ARRESTED
 IN ST. LOUIS ON PERSON TO PERSON CHARGES
 1966-1973



Source: Computer Division, St. Louis Metropolitan Police Department.

Figure 5-4

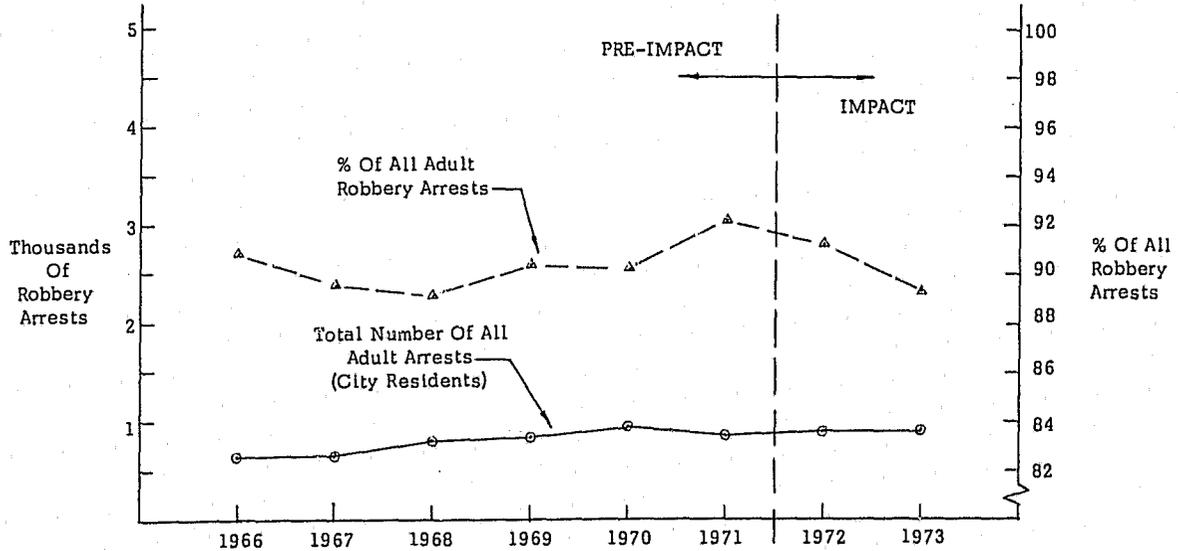
ADULT ST. LOUIS RESIDENTS ARRESTED
IN ST. LOUIS ON BURGLARY CHARGES
1966-1973



Source: Computer Division, St. Louis Metropolitan Police Department.

Figure 5-5

ADULT ST. LOUIS RESIDENTS ARRESTED
IN ST. LOUIS ON ROBBERY CHARGES
1966-1973



Source: Computer Division, St. Louis Metropolitan Police Department.

- a. Index arrests with larceny under \$50 -- (Figure 5-1)
Figure 5-1 shows that the total number of City adults arrested in St. Louis for Index and larceny under \$50 offenses declined steadily from 1966 except for a slight increase in 1970. The annual number of arrests declined 31% during the eight-year period, 1966-1973. No change is evident in the trend for either the number or proportion of arrested City adults following the beginning of the Impact Program.
- b. Person-to-person arrests -- (Figure 5-3)
The overall decline in the number of arrested City adults masks the increase in the number of arrests for person-to-person crimes which occurred during 1966 through 1973. The 2,725 arrests in 1973 were the highest annual total recorded since at least 1966 and represented almost a 9% increase since 1971. Despite the increasing number of arrests, the proportion of City adults among all arrests for person-to-person crimes declined irregularly from 1966 through 1973. This indicates that there was an even more rapid increase in the number of non-City residents arrested for crimes against persons during this period.
- c. Burglary arrests - (Figure 5-4) The number of City adults arrested for St. Louis burglaries decreased every year from 1966 to 1973. During that eight-year period, the annual total decreased by over 67% -- from 3,794 arrests in 1966 to only 1,249 in 1973. With the beginning of the Impact Program, the rate of decrease became even greater. Between 1971 and 1973, burglary arrests fell from 2,253 to only 1,249, a reduction of 44% in only two years. This reduction, however, is not the result of fewer reported burglaries, since the 19,033 burglaries reported in 1973 was the highest annual total since 1969. Since 1967, the proportion of City adults involved in burglary arrests has risen and fallen irregularly between 92.6% and 90.7%. The 1973 level of 91.9% was almost identical to the 91.7% level reported six years earlier in 1967. The fact that the proportion of City adults arrested for City burglaries increased in both 1972 and 1973 indicates that the number of non-City residents arrested for burglary decreased sharply with the beginning of the Impact Program; the 109 non-resident adults arrested for St. Louis burglaries in 1973 represented a 53% reduction from the 231 arrested in 1971 (see tables A-6 and A-8).

3. Observations and Conclusions The following observations and conclusions are based on an examination of adult arrest residency data for the City of St. Louis for the years, 1966 through 1973.

- a. Almost all adults arrested for St. Louis Index and larceny under \$50 offenses from 1966 through 1973 were City residents. Non-City residents did not represent more than 10% of all adults arrested for Index and larceny under \$50 offenses in any year from 1966 through 1973. The high proportion of City residents existed, not only for all such arrests in total, but also for each of the major Index crime categories including all larceny offenses (see tables A-1 through A-8). The highest annual proportion of non-City residents arrested for any Index crime category was only 14.4%, for auto theft in 1970 (see Table A-5).
- b. The total number of City adults arrested for Index and larceny under \$50 offenses committed in St. Louis declined steadily from 1966 to 1973. Except for 1970, the total number of City adults arrested for Index and larceny under \$50 declined every year from 1966, with an eight-year reduction of more than 31%. This reduction in such arrests was primarily the result of a significant decline in the number of City adults arrested for burglary; from 1966 to 1973, burglary arrests declined from 3,794 to 1,249, a reduction of 67% (see Table 5-2).
- c. The total number of City adults arrested in St. Louis for crimes against persons increased steadily from 1966 to 1973. Between 1966 and 1973, the annual number of arrests for person-to-person crimes increased by more than 40%. An increase was recorded in every year except 1970 (see Table 5-2).
- d. The proportion of City adults apprehended in St. Louis for crimes against persons increased significantly from 1966 to 1973. In 1966, only 20% of all City adults arrested for Index and larceny under \$50 offenses were charged with one of the person-to-person crimes. By 1973, however, the proportion had increased to 41% of all arrested City residents, doubling the 1966 value (see Table 5-2).

- e. The total number of adults arrested in St. Louis for burglary decreased significantly with the beginning of the Impact Program. From 1971 to 1973, the total number of adults arrested for burglary in St. Louis declined over 45%. The number of City adults arrested for this crime fell from 2,253 to only 1,249, a 44% reduction; and the number of non-City residents decreased from 231 to only 109, a two-year reduction of over 50% (see tables A-6 and A-8). The burglary arrest and crime data coincident with the Impact Program are particularly difficult to comprehend. Despite the presence of the Impact program in the City of St. Louis since mid-1972, fewer burglary arrests were made and more burglaries were reported in 1973 than in 1971.

C. Juvenile Apprehension Data

i. Annual Residency Distributions The annual residency distributions for all juvenile Index and larceny apprehensions for 1966-1973 are presented in Table 5-3. These data clearly indicate that very few non-City residents were apprehended on Index or larceny charges in the City of St. Louis during that period. For each of the eight years shown, the proportion of City residents never fell below 95% of all juvenile Index and larceny apprehensions. Paralleling the rapid decrease in City adult arrests, the number of apprehended City juveniles also declined rapidly in the early 1970's. From a peak of 5,241 apprehensions in 1969, the 1,942 apprehensions in 1973 represented a four-year decline of more than 62%. Although the proportion of City juvenile residents remained very high, there was a slow decline during the 1966-1973 period, thereby indicating a slightly increased mobility level for non-City juveniles.

An alternate explanation for the slight decrease in the proportion of City juveniles is that the recording of apprehended non-City juveniles has been improved. This explanation is supported by the data from the police juvenile files for 1966 and 1967 which indicated that every juvenile apprehended was a City resident, an obviously implausible result. The nature of the data from 1968 to 1970 suggests that the recording of non-City residents into the juvenile apprehension files actually began in 1968. When the arrest records for 1968-1973 are examined, the decline in the proportion of City juvenile residents becomes much smaller, only 2.5% for the six years.

Table 5-3

ANNUAL RESIDENCY DISTRIBUTIONS OF
JUVENILES APPREHENDED ON INDEX* CRIME CHARGES

IN THE CITY OF ST. LOUIS

1966-1973

RESIDENCY	PRE-IMPACT						IMPACT	
	1966	1967	1968	1969	1970	1971	1972	1973
City of St. Louis	3516 (100.0)	4062 (100.0)	5092 (97.9)	5241 (97.9)	3996 (96.9)	3363 (96.6)	2367 (95.6)	1942 (95.4)
St. Louis County	0 (0.0)	0 (0.0)	62 (1.2)	69 (1.3)	67** (1.6)	2** (0.1)	10** (0.4)	8** (0.4)
Missouri	0 (0.0)	0 (0.0)	17 (0.3)	14 (0.3)	34** (0.8)	94** (2.7)	61** (2.5)	51** (2.5)
Illinois	0 (0.0)	0 (0.0)	25 (0.5)	25 (0.5)	20 (0.5)	18 (0.5)	39 (1.6)	29 (1.4)
Other	0 (0.0)	0 (0.0)	3 (0.1)	3 (0.1)	7 (0.2)	5 (0.1)	0 (0.0)	6 (0.3)
Unknown	0 (0.0)							
TOTAL	3516 (100.0)	4062 (100.0)	5199 (100.0)	5352 (100.0)	4124 (100.0)	3482 (100.0)	2477 (100.0)	2036 (100.0)

* - Includes larceny under \$50 offenses

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

Beginning in 1971, the juvenile data also suffer from the same lack of detailed residency coding for non-City residents noted for the adult arrests. The sharp drop in the number of St. Louis County residents in 1970, with an almost equal increase in the number of Missouri residents, clearly illustrates this fact.

The rise and fall of the annual number of juvenile apprehensions between 1966 and 1973 coincide remarkably well with the crime trends in the City of St. Louis during the same period. Both the number of juvenile apprehensions and the level of Index crime peaked in 1969 (see Figure 3-1). As indicated in Section B above, no similarity was evident between the City crime trends and the pattern of annual adult arrests in St. Louis.

The residency distributions for each Index crime category for each year between 1966 and 1973 are presented in Appendix A (tables A-9 through A-16). These residency distributions indicate that City juveniles represented a very high proportion of the apprehensions in all crime categories, although some interesting differences are apparent. These tables reveal that, from 1966 to 1973, relatively few non-City juveniles were apprehended for burglary; the proportion of apprehended City juveniles never fell below 97% for this crime. Despite the small number of non-City juveniles apprehended for burglary, however, a relatively large number were apprehended for larceny crimes. Although the proportion never exceeded 10%, more non-City juveniles were apprehended annually for larceny than for any other Index offense.

The distributions of City juveniles among the crime categories presented in tables A-9 through A-16 offer some interesting contrasts when compared with the distributions of arrested City adults. As expected, the proportion of arrestees for person-to-person crimes is greater among City adults than juveniles. In 1973, 41% of all City adults arrested for an Index crime committed in St. Louis were charged with a person-to-person crime (see Table A-8), compared to only 24.9% of all apprehended City juveniles (see Table A-16). Although the proportion of City juveniles apprehended for crimes against persons increased from 1966 to 1973, the rise was considerably smaller than that for arrested City adults. From 1968 to 1971, the proportion rose from 14.1% to 25.2% for all apprehended City juveniles, but remained near 25% for the 1971-1973 period.

Another interesting contrast between the City adult and juvenile arrest patterns appears in the number of apprehensions for burglary and larceny. Since burglary is

considered a more serious crime than larceny, it is expected that burglary would appear relatively more frequently among adult arrests. The arrest data, however, indicate the opposite. From 1971-1973, more City juveniles were apprehended for burglary than for larceny in St. Louis (see tables A-14 through A-16) while more City adults were arrested for larceny than for burglary (see tables A-6 through A-8). This observation is particularly interesting, since subsequent examination of juvenile apprehensions in St. Louis County indicated that County juveniles were apprehended for County larcenies far more frequently than for County burglaries (see tables B-4 through B-6). The greater frequency of larceny charges among County juveniles indicates perhaps that the higher level of such crime in the County is accentuated by the presence of numerous shopping centers.

Comparing the crime distributions of City and County juveniles apprehended in their home jurisdictions illustrates the greater involvement in crimes against property by County juveniles. In 1973, less than 7% of all County juveniles apprehended for an Index or larceny offense in St. Louis County were charged with a person-to-person crime (see Table B-6) compared to nearly 25% of all the City juveniles apprehended in St. Louis (see Table A-16). It should be noted that comparisons between jurisdictions must be cautiously made. Differences in the data can frequently arise primarily because of administrative differences in the processing and classification of apprehended juveniles.

2. Time-Series Distributions of Apprehended St. Louis Juveniles The annual number and proportion of City juveniles apprehended in St. Louis for each of the major crime categories is presented in Table 5-4. These data were the basis for the time-series graphs presented for each crime type in Figures 5-6 through 5-10. The three time-series discussed below are: Index apprehensions, including larceny under \$50; person-to-person apprehensions; and burglary apprehensions.

- a. Index apprehensions with larceny under \$50 -- (Figure 5-6) This figure clearly illustrates the very rapid decline in the number of City juvenile apprehensions which began in 1970. The much slower decline in the proportion graph since 1968 indicates that the number of juvenile apprehensions for City crimes decreased for both City and non-City residents. This rapid decline in juvenile apprehensions has been cited by local criminal justice officials as evidence of

Table 5-4

PERCENT OF JUVENILE ST. LOUIS RESIDENTS APPREHENDED
 IN THE CITY OF ST. LOUIS, 1966-1973
 BY CHARGE

CHARGES	PRE-IMPACT						IMPACT	
	1966	1967	1968	1969	1970	1971	1972	1973
Index With Larceny Under \$50	100.0* 3516**	100.0 4062	97.9 5092	97.9 5241	96.9 3996	96.6 3363	95.6 2367	95.4 1942
Index Without Larceny Under \$50	← NOT AVAILABLE →							
Impact	100.00 1856	100.0 2162	98.9 2657	98.6 2901	97.7 2431	97.6 2146	97.0 1433	96.3 1198
Person-To-Person	100.0 470	100.0 601	98.5 717	98.7 857	97.4 952	97.8 833	97.0 616	94.3 484
Burglary	100.0 1386	100.0 1561	99.0 1940	98.5 2044	97.8 1579	97.4 1313	97.0 817	97.6 714
Robbery	100.0 259	100.0 368	99.0 423	98.5 475	96.6 520	97.8 416	97.9 285	93.0 244

* - Percent of juvenile St. Louis residents among all juveniles apprehended in the City of St. Louis for these charges.

** - Number of juvenile St. Louis residents apprehended in the City of St. Louis.

Source: Computer Division, St. Louis Metropolitan Police Department.

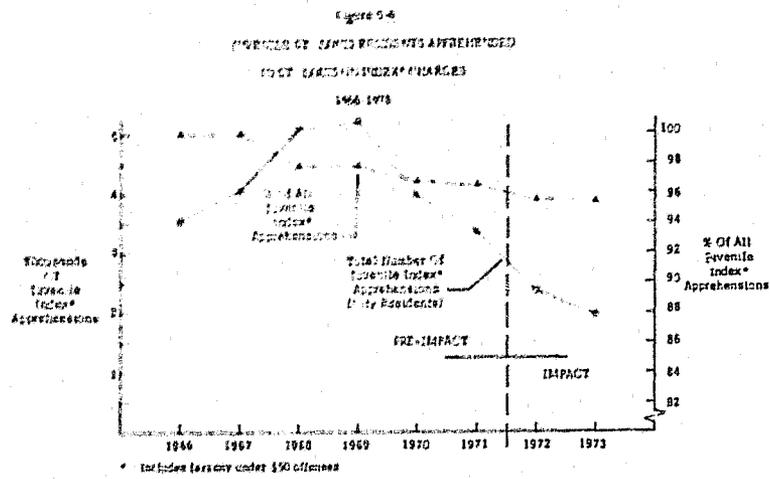
a decreased amount of juvenile crime in St. Louis. While it may be possible that juvenile crime did decrease, substantiation of the fact requires more than a reduced number of apprehensions.

If decreasing numbers of juvenile apprehensions imply a reduction in juvenile crime, then it is reasonable to assume that a declining number of adult arrests indicates a reduction in adult crime. The 1973 arrest and crime data for the City of St. Louis do not support these assumptions. For example, the level of reported burglary in the City rose to its highest annual level in four years (see Table 3-3), but the number of adults and juveniles arrested for burglary declined (see tables 5-2 and 5-4). Other factors which may have more significantly contributed to the rapid decline in City juvenile apprehensions between 1969 and 1973 are: (1) a decrease in the total population of the City, and (2) administrative changes at the St. Louis Juvenile Court designed to reduce the number of juveniles being processed.

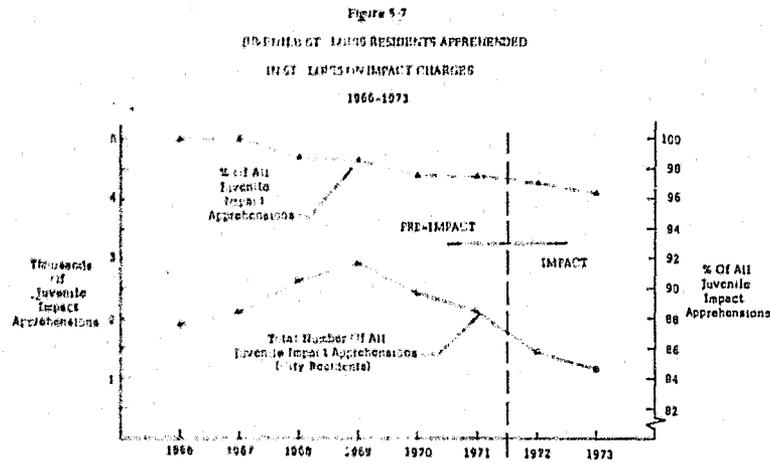
The number and proportion of the apprehended City juveniles did not exhibit any significant changes in their downward trend following the beginning of the St. Louis Impact Program.

- b. Person-to-person apprehensions -- (Figure 5-8)
The number of City juvenile residents apprehended for person-to-person crimes declined sharply following the initiation of the Impact Program. The 484 apprehended City juveniles in 1973 represented a 43% reduction from the 852 apprehended in 1971. This decline is in direct contrast to the increase in the number of City adults arrested for person-to-person crimes in these two years. The significance of this decrease in the number of juvenile apprehensions is lessened by the fact that the number of City juveniles apprehended in St. Louis declined in all crime categories in 1973 at approximately the same rate.

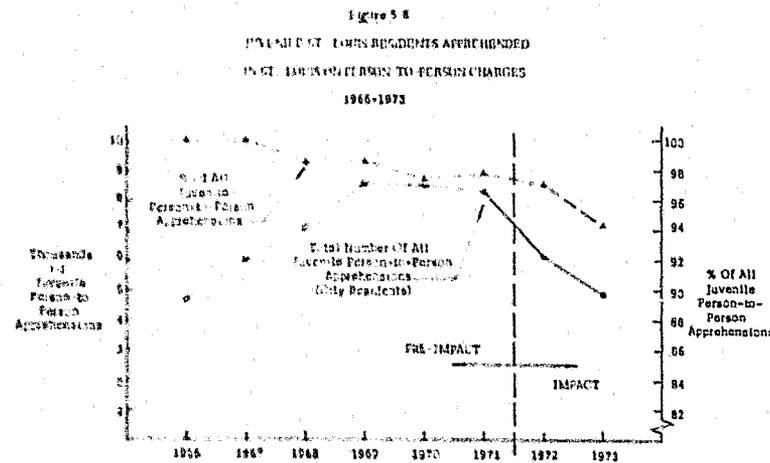
The decline in the proportion of City juvenile residents arrested in St. Louis for person-to-person crimes in 1973 paralleled a similar decline observed for City adult residents. The decline in the adult proportion, however, occurred despite the fact that the total number of adults arrested for person-to-person crimes actually increased from 1972 to 1973 (see Table 5-2).



Source: Computer Division, St. Louis Metropolitan Police Department.



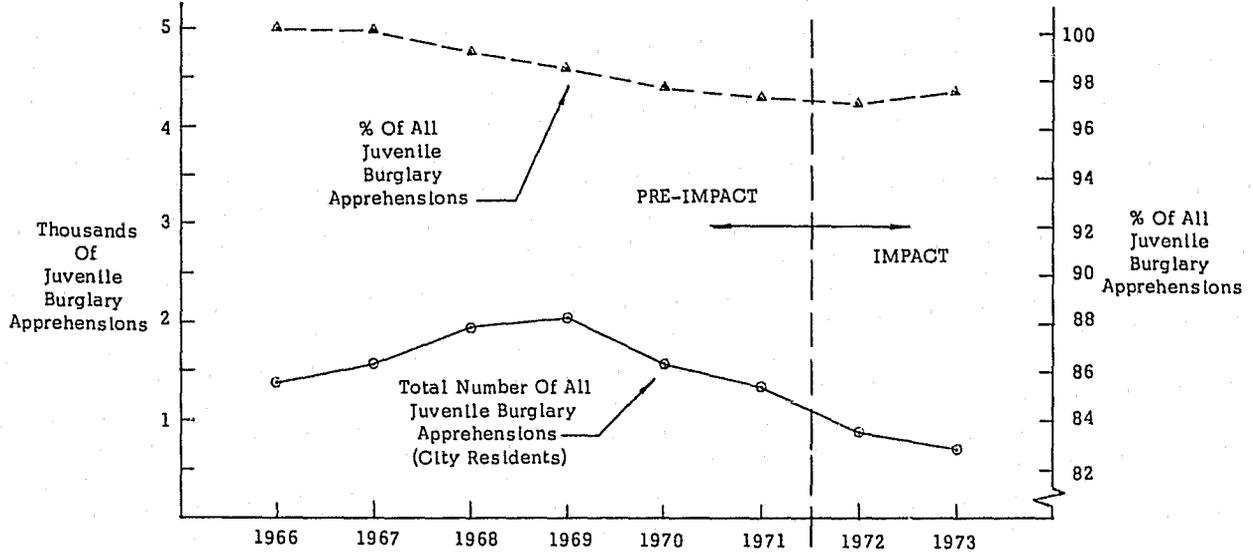
Source: Computer Division, St. Louis Metropolitan Police Department.



Source: Computer Division, St. Louis Metropolitan Police Department.

Figure 5-9

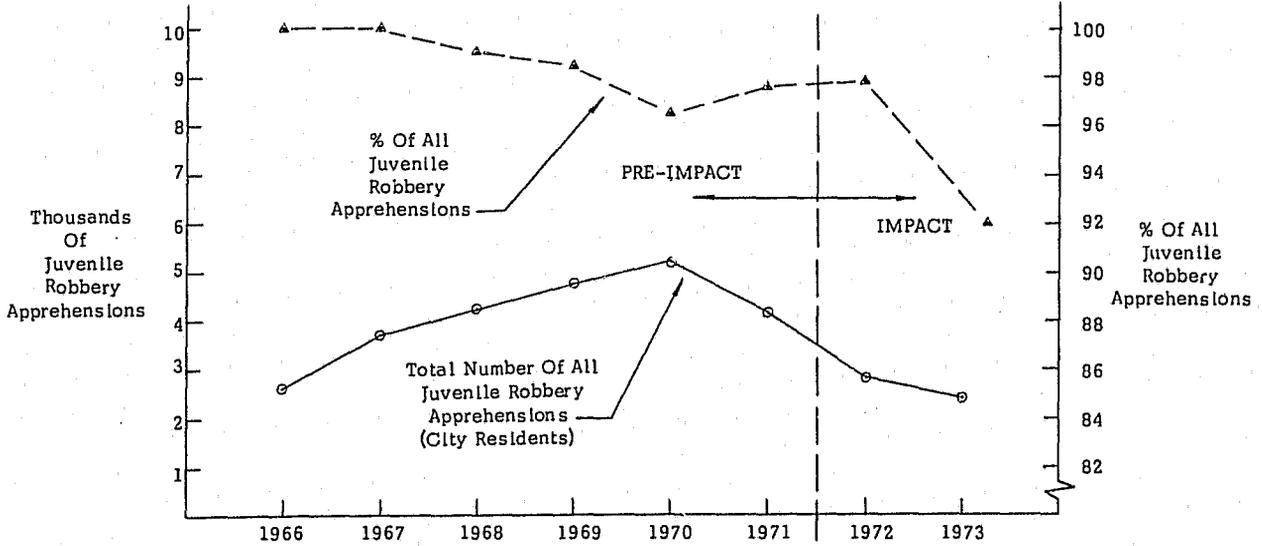
JUVENILE ST. LOUIS RESIDENTS APPREHENDED
IN ST. LOUIS ON BURGLARY CHARGES
1966-1973



Source: Computer Division, St. Louis Metropolitan Police Department.

Figure 5-10

JUVENILE ST. LOUIS RESIDENTS APPREHENDED
IN ST. LOUIS ON ROBBERY CHARGES
1966-1973



Source: Computer Division, St. Louis Metropolitan Police Department.

- c. Burglary apprehensions -- Figure 5-9) The annual number of City juveniles apprehended for St. Louis burglaries declined steadily after reaching a peak of 2,044 apprehensions in 1969. This downward trend, however, slowed in 1973 and, for the first time since at least 1968, the proportion of apprehended City juveniles increased. This result is in contrast to the significant decrease in the number of City adults arrested for burglary in 1973 (see Table 5-2). Worthy of note is the fact that, for both adult and juvenile arrests, burglary is the only crime category for which the proportion of City residents, both adult and juvenile, increased after the beginning of the Impact Program. These increases in proportions occurred despite the fact that the number of burglary arrests decreased substantially for both City adults and juveniles. This result indicates that the number of non-City residents arrested for burglary in the City decreased at a rate even greater than that observed for City residents.

3. Observations and Conclusions The following observations and conclusions are based on an examination of juvenile apprehension residency data for the City of St. Louis for the period 1966 through 1973.

- a. Almost all juveniles apprehended for St. Louis Index and larceny under \$50 offenses from 1966 through 1973 were City residents. Non-City residents did not represent more than 5% of all juvenile apprehensions for Index and larceny crimes in the City of St. Louis in any year from 1966 through 1973 (see Table 5-3). The high proportion of arrested City juveniles existed for all Index and larceny under \$50 crime categories (see tables A-9 through A-16). The highest proportion of non-City residents was arrested for larceny crimes, but few non-City residents were apprehended for burglary.
- b. The number of City juveniles apprehended for St. Louis Index and Larceny under \$50 crimes declined sharply from 1969 to 1973. In the four-year period 1969-1973, the number of City juveniles apprehended for Index and larceny crimes declined by 62%, from 5,241 to 1,942 (see Table 5-4). The rate of decrease in apprehensions in 1972 and 1973 was very similar to the trend established during the pre-Impact years, 1969-1971.

- c. A substantial proportion of City juveniles were apprehended in 1971-1973 for crimes against persons committed in St. Louis. For the period 1971-1973, approximately 25% of all City juveniles apprehended for a St. Louis Index and larceny under \$50 offense were charged with either murder, rape, assault, or robbery (see tables A-14 through A-16). During this same period, less than 10% of all County juveniles apprehended in St. Louis County for Index and larceny under \$50 offenses were charged with a person-to-person crime (see tables B-4 through B-6).
- d. The proportion of City juveniles apprehended in St. Louis for burglary increased with the beginning of the Impact Program. Although the number of City juveniles arrested for St. Louis burglaries decreased by over 45% from 1971-1973 (see Table 5-4), the proportion increased from 97.4% to 97.6%. This slight increase is worth noting, however, since the proportion of City juveniles arrested for all other crime categories continued to decline after the beginning of the Impact Program. A similar increase in the proportion of burglary arrests also occurred in 1973 for City adults.

CHAPTER VI

ARREST RESIDENCY TRENDS IN ST. LOUIS COUNTY

A. Arrest Residency Data Collection

1. Adult Arrests Adult arrest information for St. Louis County was obtained for three complete years, 1971-1973. The arrest data included all apprehensions for which persons were directly charged for an Index offense, including all arrests for larceny over \$50.00. Arrests, for negligent manslaughter, common assault, suspicion of any Index offense, all Part II crimes, and fugitive transfers were not included.

A booking sheet for every adult arrest in St. Louis County is eventually processed through Central Records of the St. Louis County Police Department, where a single computer card summarizing the major arrest data is key-punched. The information placed on each arrest card is summarized in Figure 6-1.

Figure 6-1

DATA CONTAINED ON THE ST. LOUIS COUNTY ADULT ARREST CARD

- | | |
|---|---------------------------------|
| • Identifying Number of Arrest Report (CRB NO.) | • Year of Arrest |
| • Arresting Department | • Age |
| • Authority Arrested For | • Numerous Physical Identifiers |
| • Name | • Date of Arrest |
| • Race | • Time of Arrest |
| • Sex | • Charges |
| | • Criminal I.D. Number |

Despite the considerable amount of data placed on this arrest card, it contains no residency indicator. To obtain the required residency information, it was necessary to refer back to the original booking sheet associated with each arrest card. Fortunately, it was possible to establish a procedure which made it unnecessary to examine each of the more than 100,000 booking sheets received by Central Records during the period under study, 1971-1973. A copy of the arrest card for each Index and larceny under \$50 arrest for the three years was first placed on computer tape, with all names removed. This computer tape was then used to obtain a printed list of the identifying number (the Central Records Booking (CRB) number) placed on each booking sheet as it was processed through Central Records. With this list, the booking sheet for each arrest was easily found and the necessary residency data coded. This information was keypunched and used as input to a computer program which produced a master arrest tape with the arrest card and residency information combined (see Figure 6-2). The statistics for the number of arrest cards obtained, the number of booking sheets examined, and the final matching count for each year are shown in Table 6-1, as are the number of larcenies under \$50 which were coded and matched for each of the three years.

For the three-year period, 1971-1973, a total of 7,814 adult Index arrests for all of St. Louis County were matched with residency information for use in this report. This total represents over 97% of all of the Index arrest cards initially obtained from Central Records. The 3% loss occurred because it was not always possible to find the original booking sheet associated with each arrest card and also because of cumulative errors in the coding and keypunching of the residency data. All of the adult arrest data for St. Louis County is presented in Section B of this chapter.

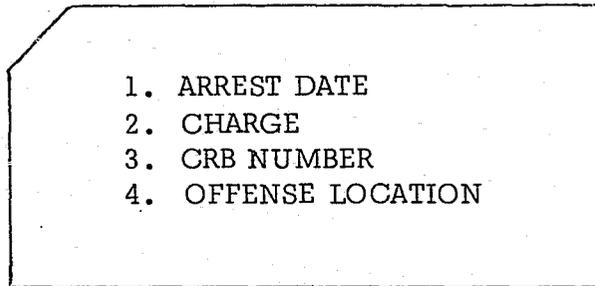
2. Juvenile Apprehensions Juvenile apprehension data were obtained for St. Louis County for five complete years, 1969-1973. Using the same charge restrictions described for the adult arrest data, only juveniles directly charged with an Index or larceny under \$50 offense were included in this report.

All juvenile apprehension reports are also processed through Central Records of the St. Louis County Police Department. There, a single computer card summarizing the apprehension information is keypunched from each booking report. The data placed on this apprehension card are summarized in Figure 6-3.

Figure 6-2

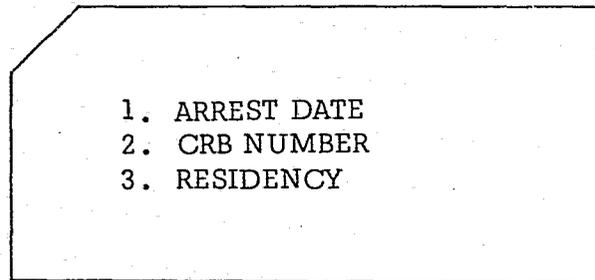
ST. LOUIS COUNTY ADULT ARREST CODING

ADULT ARREST CARD



Source: Bureau of Central Police Records,
St. Louis County Department of Police

ADULT CODED CARD



Sources: 1966-1970 Adjacent St. Louis County
Police Departments.
1971-1973 Bureau of Central Police Records,
St. Louis County Department of Police.

MERGED ADULT
ARREST FILE

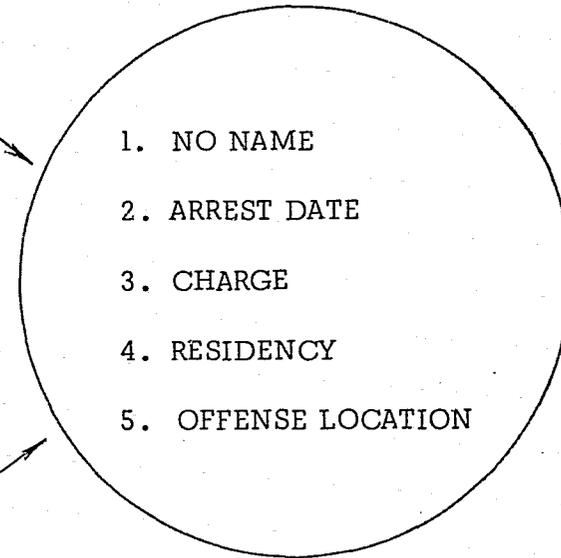


Table 6-1

SAMPLING STATISTICS FOR ADULT ARRESTS
IN ST. LOUIS COUNTY

1971-1973

INDEX ARRESTS	1971	1972	1973	TOTAL
Index Arrests Reported	2541	2481	3028	8050
Index Arrests Coded	2540	2474	2968	7982
Index Arrests Matched	2468	2435	2911	7814
Sample %	97.1	98.1	96.1	97.1

Source: Bureau of Central Police Records,
St. Louis County Department of Police.

LARCENY UNDER \$50 ARRESTS	1971	1972	1973	TOTAL
Larceny Under \$50 Arrests Reported	1766	1801	1834	5401
Larceny Under \$50 Arrests Coded	327	356	513	1196
Larceny Under \$50 Arrests Matched	327	350	489	1166
Sample %	18.5	19.4	26.7	21.6

Source: Bureau of Central Police Records,
St. Louis County Department of Police.

Figure 6-3

DATA CONTAINED ON THE
ST. LOUIS COUNTY JUVENILE APPREHENSION CARD

- | | |
|---|------------------|
| • Year of Arrest | • Sex |
| • Identifying Number Of Arrest Report (CRB NO.) | • Residency |
| • Arresting Department | • Age |
| • Authority Arrested For | • Date of Arrest |
| • Name | • Time of Arrest |
| • Race | • Charges |

Since the residency of the apprehended juvenile was included on this computer card, no additional coding was required. As with the adult data, the juvenile Index apprehension cards were placed on a computer tape with all names deleted. All residency information obtained from the 8,000 juvenile apprehension records for St. Louis County is presented in Section C of this chapter.

B. Adult Arrest Data

1. Annual Residency Distributions A summary of the residency distributions for all adult Index arrests in St. Louis County for 1971-1973 is presented in Table 6-2. The data indicate a sharp rise in the total number of arrests in 1973. This increase, however, was distributed among all of the residency categories in approximately the same proportion as existed in the earlier years. In fact, the relative proportion of arrests in each residency category changed very little during this three-year interval. The proportion of St. Louis County adults consistently represented slightly less than 60.0% of all County arrests, while the proportion of City adults arrested in the County for Index offenses declined slightly, from 33.1% in 1971 to 30.7% in 1973.

Table 6-2

ANNUAL RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES

IN ST. LOUIS COUNTY

1971-1973

RESIDENCY	1971		1972		1973	
	No.	%	No.	%	No.	%
St. Louis County	1444	(58.5)	1437	(59.0)	1700	(58.4)
City of St. Louis	816	(33.1)	781	(32.1)	894	(30.7)
Missouri	106	(4.3)	118	(4.8)	165	(5.7)
Illinois	44	(1.8)	50	(2.1)	53	(1.8)
Other	34	(1.4)	31	(1.3)	44	(1.5)
Unknown	24	(1.0)	18	(0.7)	55	(1.9)
TOTAL	2468	(100.0)	2435	(100.0)	2911	(100.0)

Source: Bureau of Central Police Records,
St. Louis County Department of Police.

Tables B-1 through B-3 in Appendix B present both the adult arrest residency distributions for each Index charge and the total distributions for the cumulative categories of person-to-person, Impact and Index arrests for each of the three years 1971-1973. Distinct differences can be observed in the residency distributions associated with the individual Index crime categories. Over the three-year period, the crime categories with the highest proportion of arrested City adults were larceny (both over and under \$50) and robbery. In fact, more City than County adults were arrested and charged with larceny in each of the three years. If larceny under \$50 is included as an Index crime, then over two-thirds of all adult City residents arrested for Index offenses in St. Louis County were charged with larceny. This is considerably higher than the 50% larceny charge rate for St. Louis County adults.

For the 1971-1973 period, approximately 85% of all City adults arrested for Index and larceny under \$50 offenses were charged with either burglary or larceny compared to 70% of all arrested County adults (see tables B-1 through B-3). This greater concentration of adult City residents among burglary and larceny arrests reflects the relatively few City adults who were arrested for murder, rape, and, in particular, assault. These crimes of violence are more frequently the result of spontaneous behavior which does not involve the premeditated decision to commit a crime in another jurisdiction. The only person-to-person crime in which City adults represented a substantial number and proportion of the arrests was robbery.

The propensity of City adults to commit crimes against property in St. Louis County is also reflected in the residency distributions of the cumulative crime categories. Tables B-1 through B-3 reveal that adult City residents represented approximately 20% of all adults arrested for person-to-person crimes in the County. When burglary was added to create the Impact category, the proportion of City adults increased to 25% and the further inclusion of larceny over \$50 and auto theft increased the proportion to 36%. Stated in another way, among all adult City residents arrested for Index crimes in St. Louis County, approximately 20% were arrested for person-to-person crimes and 80% for crimes against property. Among all County adults arrested for Index crimes, however, one-third were arrested for person-to-person crimes and two-thirds for crimes against property.

2. Time-Series Distributions of Arrested St. Louis Adults This section will examine the mobility patterns of adult City residents arrested in St. Louis County, both before and after the beginning of the St. Louis Impact Program. The basic data for this examination are shown in Table 6-3, which presents the number and proportion of City adults arrested during each quarter of the period 1971-1973. These data are presented as time-series graphs for each crime category in Figures 6-4 through 6-9.

The examination of the residency distributions for the St. Louis County indicates that adult City residents were most frequently arrested for larceny, burglary, and robbery. Although the time-series for each crime category is presented in this section, a detailed discussion is not included for each, because of the considerable overlapping of the data among the categories. The three time-series discussed below are: Index arrests with larceny under \$50, burglary arrests, and robbery arrests.

- a. Index arrests with larceny under \$50 -- (Figure 6-4) Examination of the time-series for the number of City adults arrested for Index and larceny under \$50 offenses reveals a three-phase process. During the six pre-Impact quarters shown, the number of arrested City residents varied, without significant trend, between 335 and 435, representing between 34% and 43% of all arrests for such crimes in St. Louis County. Following the initiation of the Impact Program, the number of arrested City adults rose to 500 in both the last quarter of 1972 and the second quarter of 1973. In fact, the total number of City adults arrested from October 1972 through June 1973 was over 24% higher than the number arrested during the same nine months one year earlier.

The proportion of City adults also increased during these three quarters, but only very slightly. The highest proportion obtained, 44.6% in the last quarter of 1972, was only 5.7% higher than the quarterly proportion recorded a year earlier. Both the number and proportion of adult City residents returned to pre-Impact levels during the last two quarters of 1973.

- b. Burglary arrests -- (Figure 6-8) The burglary time-series exhibits greater variability, because of the lower number of arrests recorded in each quarter. During each of the six pre-Impact quarters, an average of 50 adult City

Table 6-3

PERCENT OF ADULT ST. LOUIS RESIDENTS ARRESTED

IN ST. LOUIS COUNTY, 1971-1973

BY CHARGE, BY QUARTER

CHARGE	PRE-IMPACT								IMPACT			
	1971				1972				1973			
	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec
Index With Larceny Under \$50 ^a	40.3 ^b 412 ^c	42.6 435	35.3 386	38.9 426	38.3 418	34.2 335	38.7 405	44.6 500	38.0 465	40.7 500	34.6 414	34.0 372
Index Without Larceny Under \$50	33.8 196	36.5 213	31.0 213	31.4 194	30.5 191	31.7 170	32.2 209	33.9 211	32.2 248	35.8 249	26.8 197	28.2 200
Impact	25.9 93	24.3 76	21.4 86	20.5 72	24.7 92	25.2 83	20.8 76	27.8 110	27.9 145	31.4 144	20.5 96	23.0 108
Person-to-Person	26.4 46	15.6 22	12.9 22	22.3 40	20.8 38	20.0 35	23.0 31	23.2 45	28.3 60	22.2 46	17.8 45	21.3 48
Burglary	25.4 47	31.4 54	27.7 64	19.0 33	28.6 54	31.0 48	19.5 45	32.2 65	27.6 85	38.9 98	23.6 51	24.5 60
Robbery	49.1 27	26.3 5	37.0 10	34.0 17	32.4 11	33.3 13	36.0 18	37.3 22	46.2 24	45.3 24	30.0 21	38.2 21

- a. Estimated on the basis of a 20% sample of charges for larceny under \$50 for St. Louis City adults.
 b. Percent of adult St. Louis residents among all adults arrested in St. Louis County for these charges.
 c. Number of adult St. Louis residents arrested in St. Louis County.

Source: Bureau of Central Police Records, St. Louis County Department of Police.

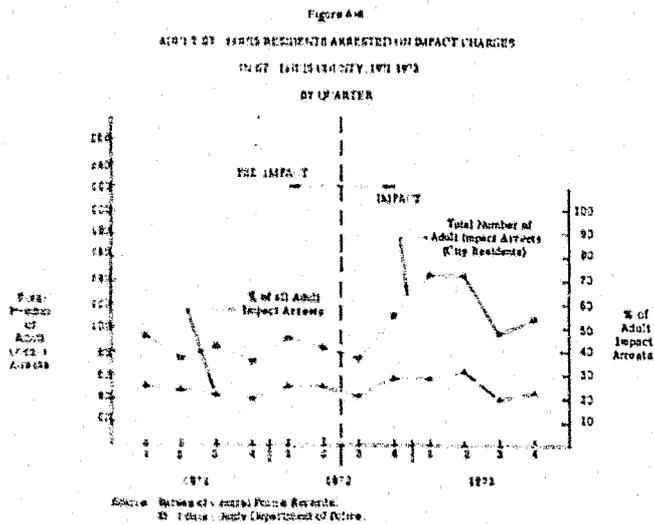
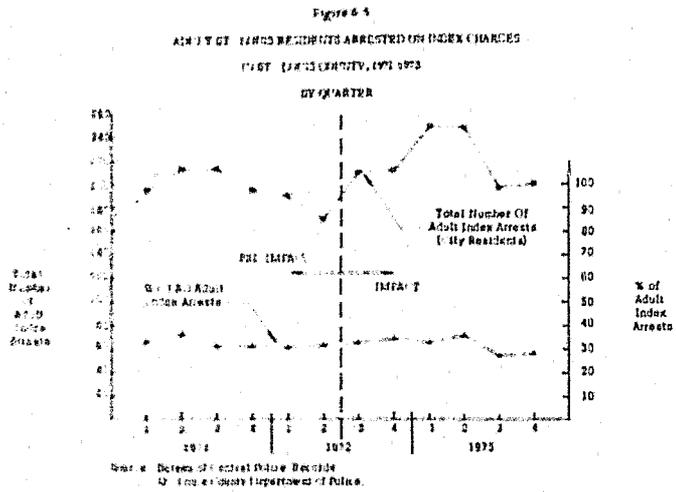
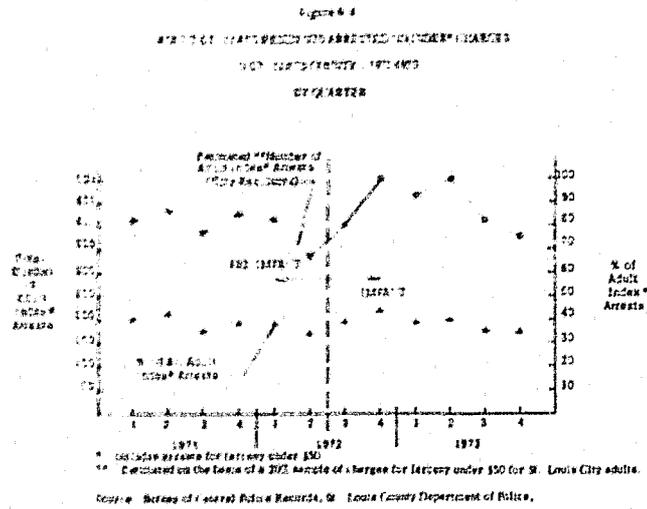
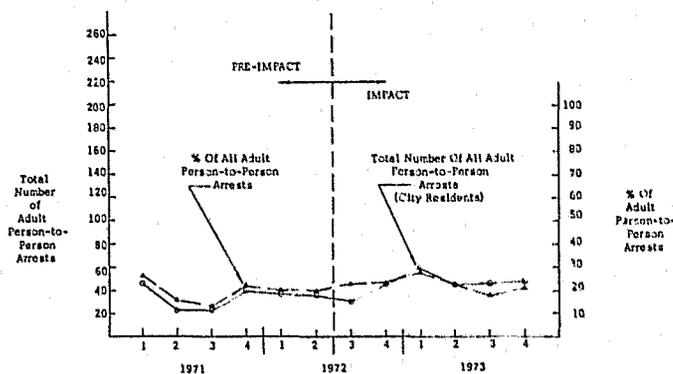
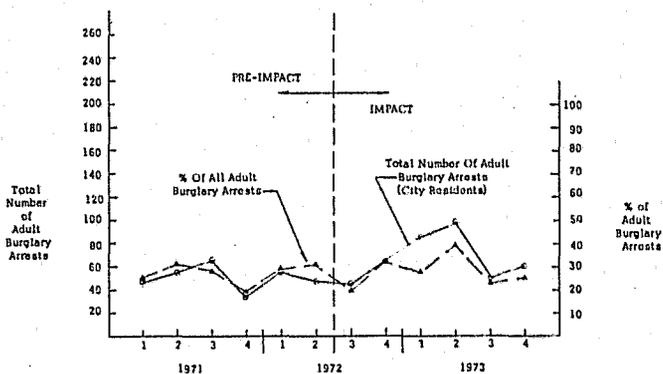


Figure 6-7
 ADULT ST. LOUIS RESIDENTS ARRESTED ON PERSON-TO-PERSON CHARGES
 IN ST. LOUIS COUNTY, 1971-1973
 BY QUARTER



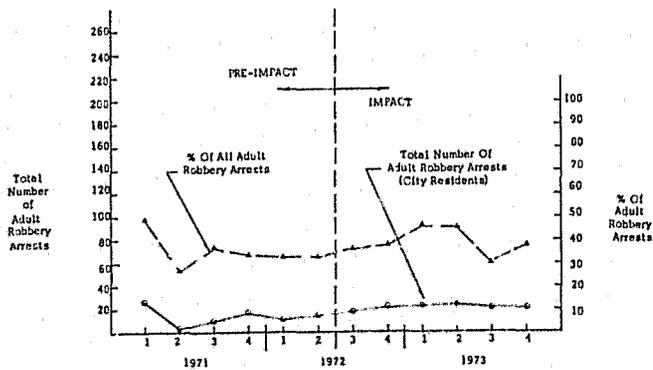
Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

Figure 6-8
 ADULT ST. LOUIS RESIDENTS ARRESTED ON BURGLARY CHARGES
 IN ST. LOUIS COUNTY, 1971-1973
 BY QUARTER



Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

Figure 6-9
 ADULT ST. LOUIS RESIDENTS ARRESTED ON ROBBERY CHARGES
 IN ST. LOUIS COUNTY, 1971-1973
 BY QUARTER



Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

residents were arrested for burglary. They represented approximately 27% of all adults arrested for burglary in the County. Following the beginning of the Impact Program, a sharp increase occurred in the total number of arrested City adults. Between October 1972 and June 1973, 248 adult City residents were arrested for burglary -- an 84% increase over the number arrested during the same period one year earlier.

A similar, but much less significant increase also occurred in the proportion of arrested City adults during these same three quarters. From October 1972 through June 1973, City adults represented approximately 33% of all arrests for burglary in St. Louis County; an increase of 7% over the proportion of City adults arrested one year earlier.

Both the number and proportion of adult City residents arrested for burglary returned to pre-Impact levels in the last half of 1973.

- c. Robbery arrests -- (Figure 6-9) One difficulty in analyzing the trend of City adults arrested for robbery in St. Louis County is the very small number of arrests during each quarter of the year. An average of only 13 City adults were arrested in each of the four quarters prior to the beginning of the Impact Program. Despite the low average number of arrests during this period, adult City residents represented between 32% and 37% of all arrests for robbery in St. Louis County

During the first four quarters following the initiation of the Impact Program, an average of 22 adult City residents were arrested for robbery in each quarter -- an increase of nine arrests per quarter. The average quarterly proportion of City adults among all robbery arrests rose to 41% during the first year after the beginning of the Impact Program -- approximately a 7% increase over the average quarterly proportion of City adults among all robbery arrests during the four quarters immediately preceding the beginning of the Impact Program.

The number of adult City residents arrested for robbery during the last two quarters of 1973 followed the pattern of neither the Index with larceny under \$50 nor burglary arrest data which returned to pre-Impact levels (see Table 6-3); instead the number remained at 21 robbery arrests per quarter. Despite the increased number of arrests, the proportion of arrested City adults returned to the average proportion recorded during the pre-Impact quarters.

3. Observations and Conclusions The following observations and conclusions were obtained from the examination of adult arrest residency data for St. Louis County for the period 1971-1973.

- a. A substantial level of criminal mobility into St. Louis County by adult St. Louis residents existed before the Impact Program began in 1972. The residency summary in Table 6-2 indicates that adult City residents represented over 33% of all arrests for Index crimes in St. Louis County in 1971, the last pre-Impact year.
- b. Crimes committed in the County by St. Louis adults consisted almost exclusively of crimes against property. Approximately 85% of all adult City residents arrested for Index offenses (including larceny under \$50) during 1971 through 1973 in the County were charged with either burglary or larceny, compared to only 70% of all adult County residents arrested for Index and larceny offenses (see tables B-1 through B-3).
- c. The crime most frequently committed in the County by City adults was larceny. For the period, 1971-1973, City adults represented over 45% of all adult arrests for larceny, including that under \$50, in St. Louis County. In fact, more City than County adults were arrested and charged with larceny during this three-year period (see tables B-1 through B-3).

Over two-thirds of all City adults arrested for Index and larceny under \$50 crimes in St. Louis County were charged with larceny, compared to less than 50% of all County adults arrested for such crimes. This high percentage of arrests for larcenies, which include both stealing and shoplifting, may be directly related to the existence of numerous shopping

centers throughout St. Louis County. These centers are usually located, by design, along major expressways or intersections which maximize their accessibility for both customers and criminals alike.

- d. The number of adult City residents arrested in St. Louis County temporarily increased following the initiation of the Impact Program.

During the last quarter of 1972 and the first half of 1973, the number of City adults arrested for Index and larceny under \$50 offenses increased by approximately 95 arrests per quarter -- a 24% increase from the average of 393 arrested City residents during the same period one year earlier (see Table 6-3). This increase is also evident in the individual time-series for burglary and robbery. The number of City adults apprehended for Index offenses (including larceny under \$50) and for burglary crimes returned to pre-Impact levels in the second half of 1973. The number of arrests for robbery, however, remained above the average pre-Impact level.

- c. The proportion of adult City residents arrested in St. Louis County temporarily increased following the initiation of the Impact Program.

An increase of approximately 7% in the proportion of City residents arrested for Index offenses (including larceny under \$50), burglary, and robbery occurred in the last quarter of 1972 and the first half of 1973 (see Table 6-3). The proportion of City adults arrested for each crime category, however, returned to pre-Impact levels in the last half of 1973.

C. Juvenile Apprehension Data

1. Annual Residency Distributions A summary of the residency distributions for all juvenile Index apprehensions in St. Louis County between 1969 and 1973 is presented in Table 6-4. This five-year summary indicates that both the number and proportion of apprehended City juveniles declined from 1969 to 1973. As expected, the proportion of City juveniles apprehended in the County was less than the corresponding figure for arrested City adults; in 1972 and 1973, City juveniles represented only 12% of all juveniles apprehended in the County for Index crimes, while City adults represented approximately 32% of all adults arrested for such crimes.

Table 6-4

ANNUAL RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ST LOUIS COUNTY

1969-1973

RESIDENCY	PRE-IMPACT			IMPACT	
	1969	1970	1971	1972	1973
St. Louis County	1289 (75.5)	1528 (84.3)	1250 (81.1)	1330 (85.7)	1395 (85.1)
City of St. Louis	370 (21.6)	257 (14.2)	260 (16.9)	188 (12.1)	202 (12.3)
Other	45 (2.6)	25 (1.4)	31 (2.0)	28 (1.8)	38 (2.3)
Unknown	3 (0.2)	3 (0.2)	1 (0.1)	6 (0.4)	4 (0.2)
TOTAL	1707 (100.0)	1813 (100.0)	1542 (100.0)	1552 (100.0)	1639 (100.0)

Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

Tables B-4 through B-8 in Appendix B present the juvenile residency distributions by individual crime category for each of the five years. These annual data suggest that relatively few juveniles, whether from the City or the County, were involved in person-to-person crime in St. Louis County. Over 85% of all juveniles apprehended in the County for Index offenses were charged with either burglary, auto theft, or larceny over \$50; burglary alone accounted for approximately 50% of all Index apprehensions.

When only crimes against property in the County are considered, some differences appear in the crime patterns of County and City juveniles. County juveniles were more frequently apprehended for burglary, while City juveniles were more likely to be apprehended for larceny. Over 52% of all County juveniles apprehended for Index offenses committed in the County during 1971 through 1973 were charged with burglary, while fewer than 18% were charged with larceny over \$50. For all City juveniles apprehended for Index offenses in the County during these same three years, however, 35% were charged with larceny over \$50 and fewer than 32% were charged with burglary. If apprehensions for larceny under \$50 committed in the County from 1971 through 1973 are also considered, then over 80% of all apprehended City juveniles were charged with larceny, while the corresponding proportion for County juveniles was less than 54% (see tables B-6 through B-8).

After burglary and larceny, City juveniles were next most frequently apprehended in the County for auto thefts. That crime, however, appeared to be a diminishing juvenile activity. Only 207 juveniles were apprehended in the County for auto thefts in 1973, compared with 417 in 1969. The number of City juveniles apprehended for auto thefts declined from 98 in 1969 to only 17 in 1973 (see tables B-4 through B-8).

The Index crime category with the highest proportion of City juveniles in 1973 was robbery. However, the actual number apprehended, 22, represented less than 11% of all City juveniles apprehended in St. Louis County. The number of City juveniles charged with robbery did not exceed 35 in any year between 1969 and 1973 (see tables B-4 through B-8).

2. Time-Series Distributions of Apprehended St. Louis Juveniles The time-series data for the number and proportion of City juveniles apprehended annually in St. Louis County for 1969-1973 are presented in Table 6-5. The number and proportion of juveniles apprehended during each quarter of this same time interval are presented in Table 6-6. Figures 6-10 through 6-21 graphically present

Table 6-5

PERCENT OF JUVENILE ST. LOUIS RESIDENTS APPREHENDED

IN ST. LOUIS COUNTY, 1969-1973

BY CHARGE

CHARGES	PRE-IMPACT			IMPACT	
	1969	1970	1971	1972	1973
Index With Larceny Under \$50	26.3 ^a 770 ^b	20.4 666	22.2 699	20.6 669	23.6 753
Index Without Larceny Under \$50	21.6 370	14.2 257	16.9 260	12.1 188	12.3 202
Impact	16.7 169	9.3 109	10.1 102	8.1 79	9.7 109
Person-to-Person	23.0 32	20.0 45	15.2 23	19.0 40	12.2 22
Burglary	15.7 137	6.8 64	9.2 79	5.1 39	9.3 87
Robbery	30.0 24	26.9 35	24.2 16	30.1 34	29.3 22

a. Percent of juvenile St. Louis residents among all juveniles apprehended in St. Louis County for these charges.

b. Number of juvenile St. Louis residents apprehended in St. Louis County

Source: Bureau of Central Police Records, St. Louis County Department of Police .

Table 6-6

PERCENT OF JUVENILE ST. LOUIS RESIDENTS APPREHENDED

IN ST. LOUIS COUNTY, 1969-1973

BY CHARGE, BY QUARTER

CHARGES	PRE-IMPACT												IMPACT							
	1969				1970				1971				1972				1973			
	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec
Index With Larceny Under \$50	20.3 ^a 110 ^b	25.8 186	26.1 270	32.1 294	24.4 188	15.6 120	21.0 198	20.7 160	20.8 160	27.7 216	18.6 163	22.1 160	21.8 173	19.3 150	19.8 198	21.8 148	19.9 145	24.7 164	26.5 254	22.6 190
Index Without Larceny Under \$50	14.0 44	12.9 51	24.8 149	31.4 126	19.2 82	7.9 37	16.7 92	12.2 46	17.3 65	21.6 72	13.8 62	15.7 61	13.2 51	9.2 36	12.4 57	13.7 44	8.0 30	12.3 42	16.8 87	10.5 43
Impact	8.2 14	8.3 21	19.3 75	28.6 59	13.3 36	5.9 18	11.7 41	5.7 14	9.4 22	13.8 31	9.1 27	8.5 22	8.6 21	6.0 13	8.4 26	9.0 19	5.8 15	12.1 28	13.3 47	6.7 19
Person-to-Person	13.8 5	5.7 2	13.0 3	48.8 22	50.0 19	7.8 5	23.9 17	7.6 4	9.8 5	16.1 5	17.9 7	20.0 6	18.3 9	30.0 9	12.8 10	22.6 12	6.1 3	10.2 4	21.5 11	9.5 4
Burglary	6.7 9	8.7 19	19.7 72	22.9 37	7.3 17	5.4 13	8.6 24	5.1 10	9.3 17	13.4 26	7.8 20	7.0 16	6.1 12	2.1 4	6.9 16	4.4 7	5.7 12	12.5 24	12.0 36	6.2 15
Robbery	21.7 5	9.0 2	16.6 2	65.2 15	62.0 18	12.5 5	27.2 9	10.7 3	23.5 4	15.7 3	29.4 5	30.7 4	45.0 9	61.5 8	16.3 8	29.0 9	25.0 3	28.5 4	39.2 11	19.0 4

a. Percent of juvenile St. Louis residents among all juveniles apprehended in St. Louis County for these charges.

b. Number of juvenile St. Louis residents apprehended in St. Louis County

Source: Bureau of Central Police Records, St. Louis County Department of Police.

the time-series for both the annual and quarterly data for each crime category. The time-series based on the annual arrest data serves to highlight the overall trends in the mobility of City juveniles. The quarterly time-series permits a more detailed examination of the mobility patterns immediately before and after the beginning of the Impact Program.

Since the residency distributions indicated that juvenile crime in St. Louis County consisted almost exclusively of burglary and larceny, the discussion below will be based on the examination of three time-series: Index apprehensions with larceny under \$50, Impact apprehensions, and burglary apprehensions.

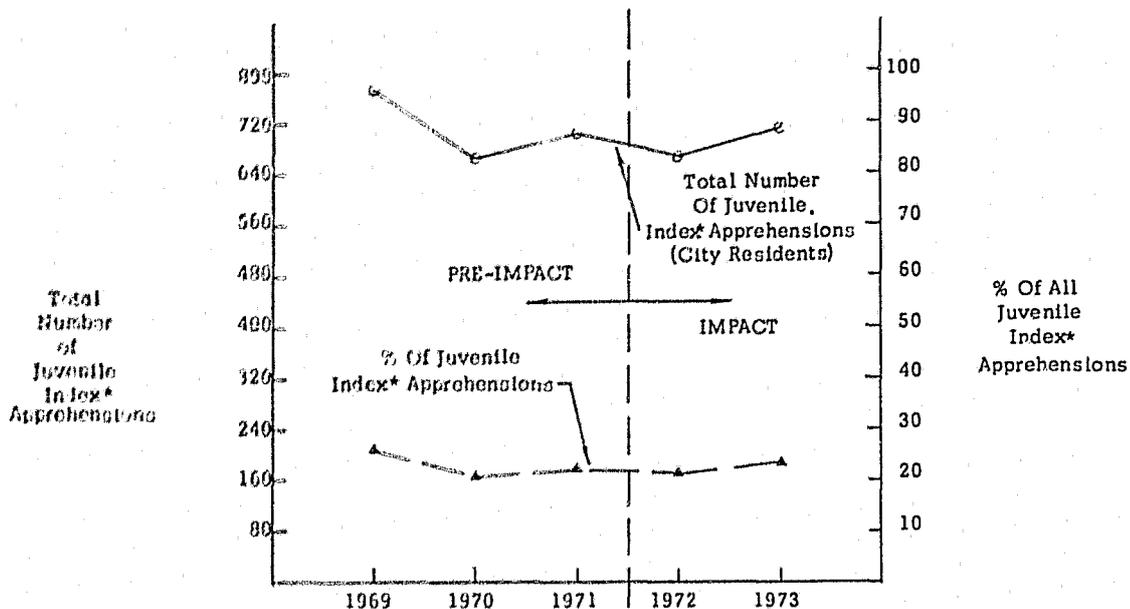
- a. Index apprehensions, with larceny under \$50 -- (figures 6-10 and 6-11) The time-series of the annual number of juveniles apprehended for Index offenses and larceny under \$50 in the County (Figure 6-10) indicates that the number of apprehended City juveniles increased by 54 between 1971 and 1973 -- an increase of 7.7%. The proportion of City juveniles apprehended for these crimes changed very little during these two years -- from 22.2% in 1971 to 23.6% in 1973.

The quarterly time-series for the number of apprehended City juveniles (Figure 6-11) does not exhibit the same increase in the number of apprehensions following the beginning of the Impact Program that was observed for City adults (see Section B above). In fact, no significant change is apparent in the number of apprehended City juveniles in either the last two quarters of 1972 or the first two quarters of 1973. The local rise in apprehensions in the third quarter of 1972 appears to be a regular seasonal variation; local peaks appear in the third quarter of every year shown except 1971. Whether the increase in both the number and proportion of apprehended City juveniles in the third quarter of 1972 represents a legitimate increase or only a momentary peak cannot be answered until data for 1974 are analyzed.

- b. Impact arrests -- (figures 6-14 and 6-15) The annual time-series for the number of St. Louis juveniles apprehended for Impact offenses committed in the County (Figure 6-14) shows a downward trend from 1969 through 1972. During these four years, the number of annual apprehensions declined by over 50%. This downward trend was reversed, however,

Figure 6-10

JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON INDEX* CHARGES
IN ST. LOUIS COUNTY,
1969-1973

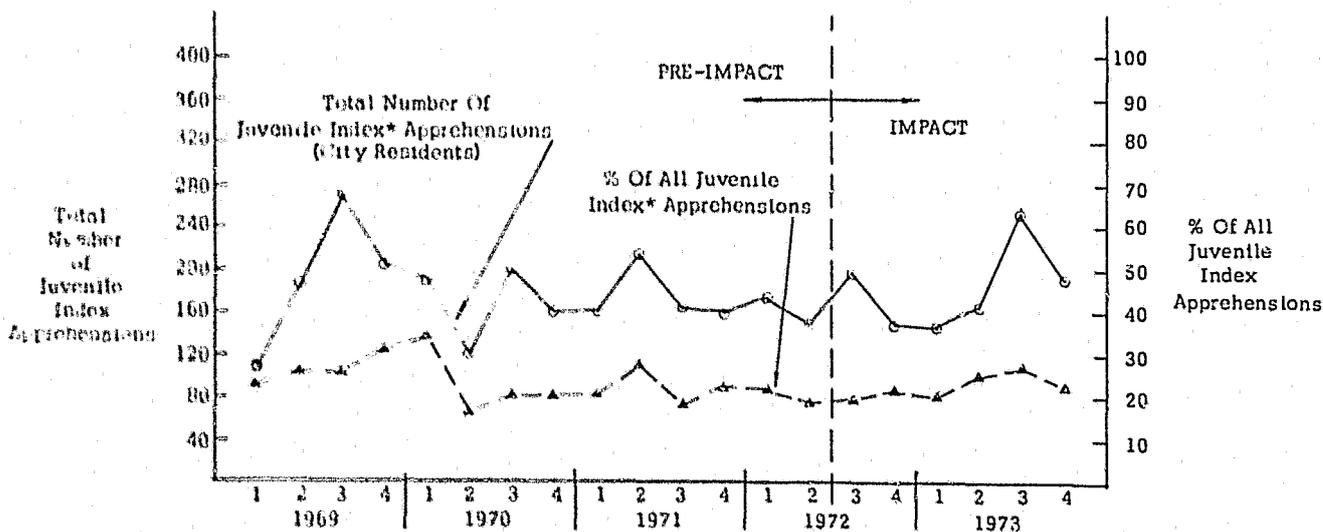


* Includes arrests for larceny under \$50.

Source: Bureau of Central Police Records, St. Louis County Department of Police

Figure 6-11

JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON INDEX* CHARGES
IN ST. LOUIS COUNTY, 1969-1973
BY QUARTER

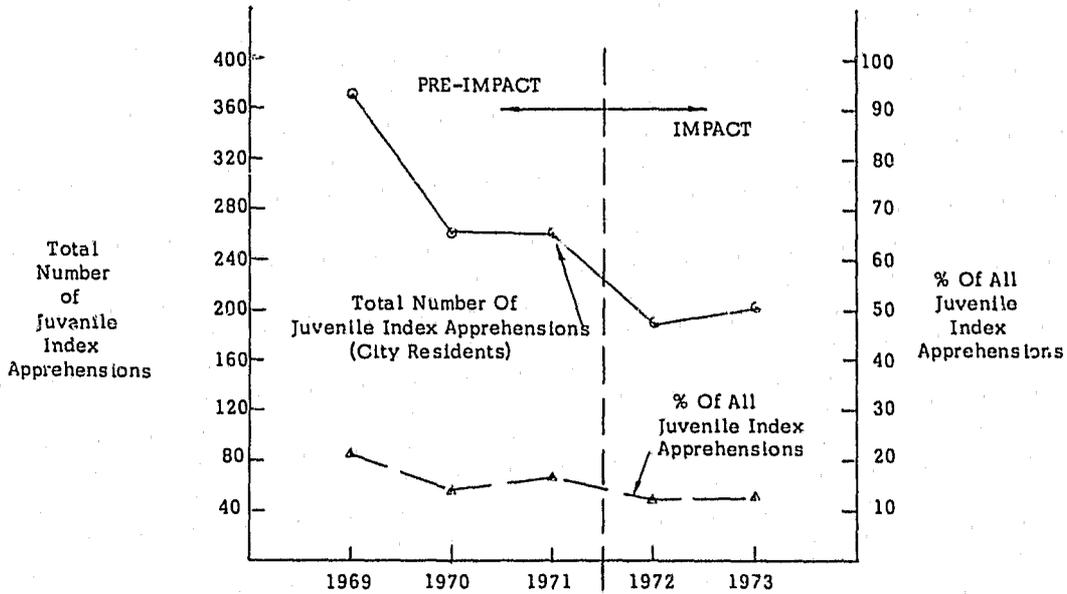


* Includes arrests for larceny under \$50

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Figure 6-12

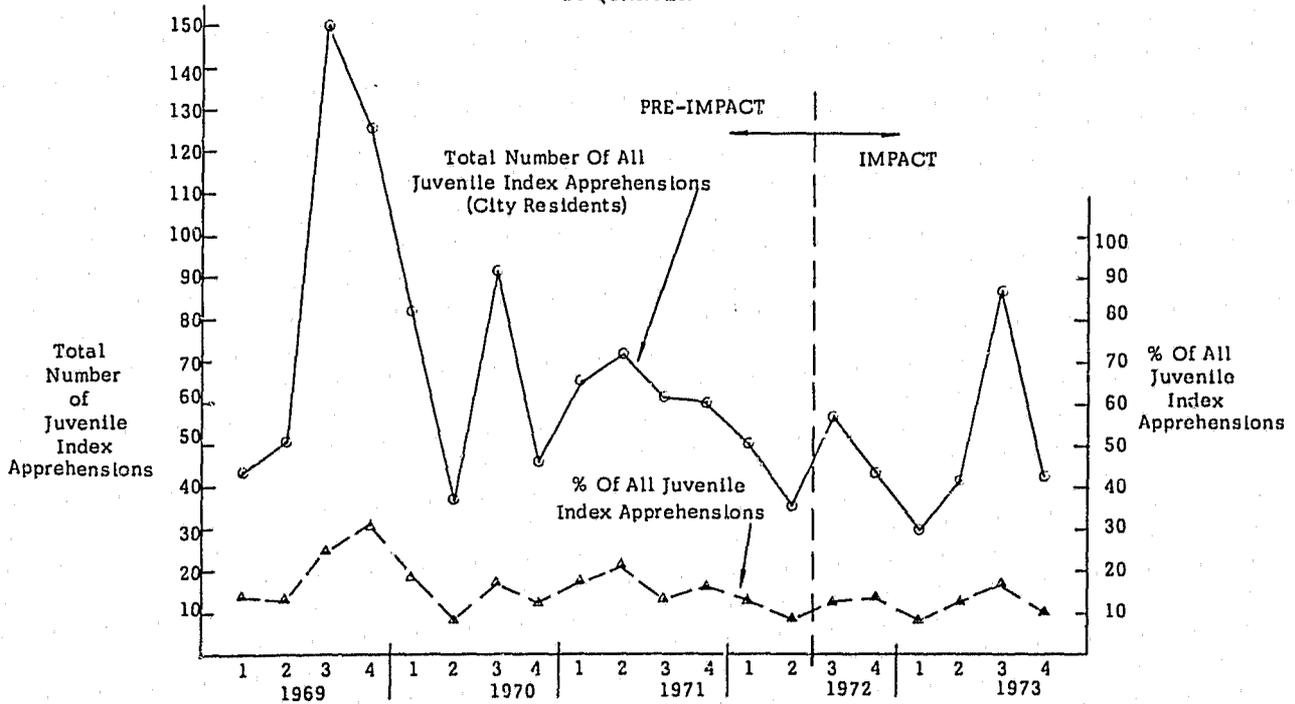
JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON INDEX CHARGES
IN ST. LOUIS COUNTY
1969-1973



Source: Bureau of Central Police Records,
St. Louis County Department of Police.

Figure 6-13

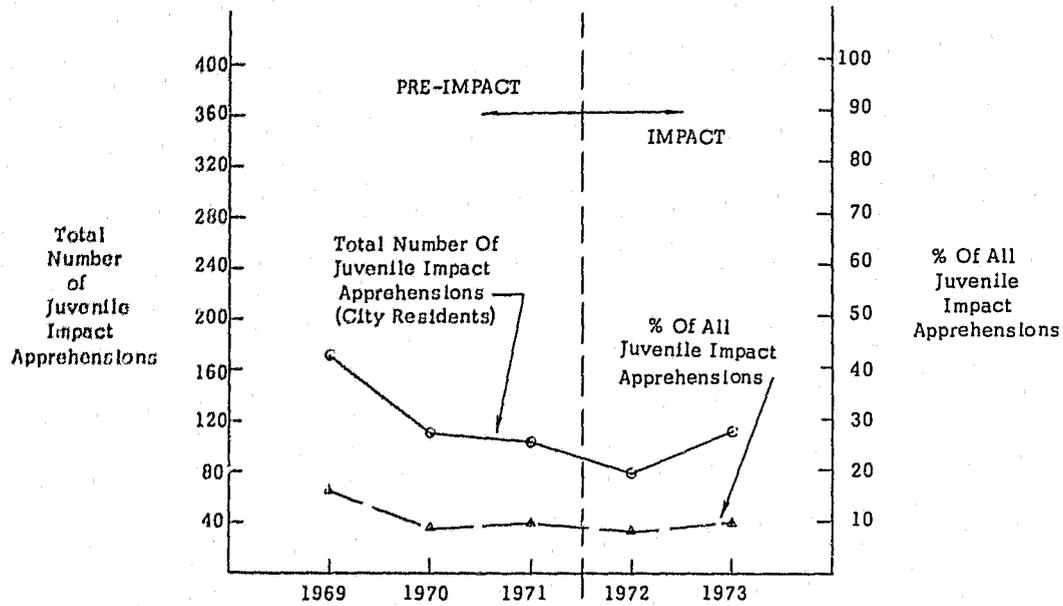
JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON INDEX CHARGES
IN ST. LOUIS COUNTY, 1969-1973
BY QUARTER



Source: Bureau of Central Police Records,
St. Louis County Department of Police.

Figure 6-14

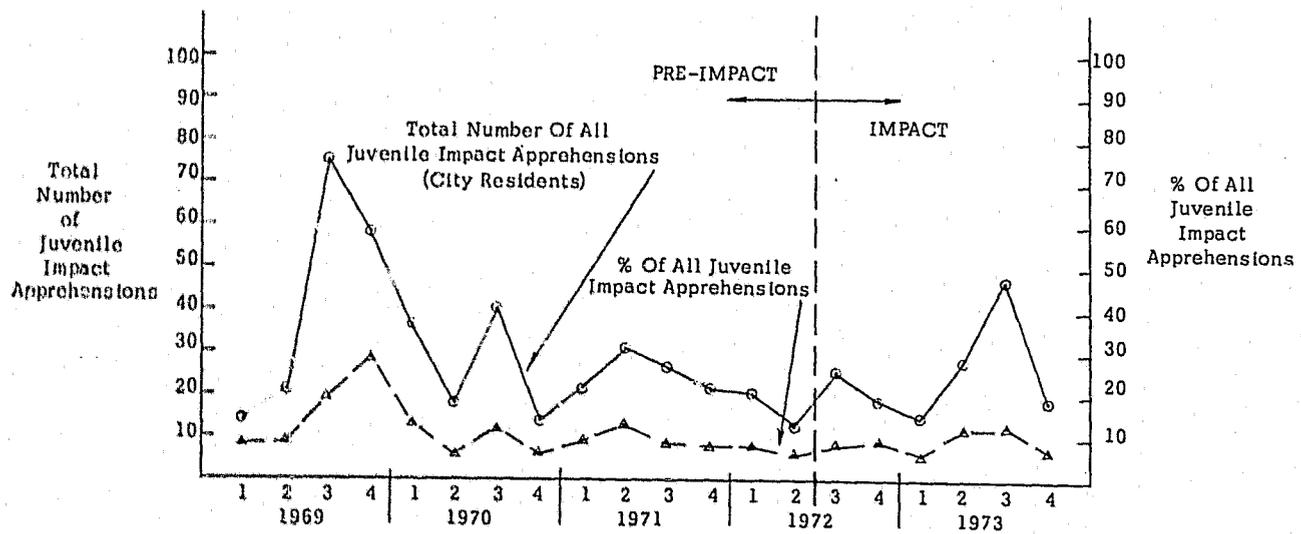
JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON IMPACT CHARGES
 IN ST. LOUIS COUNTY,
 1969-1973



Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

Figure 6-15

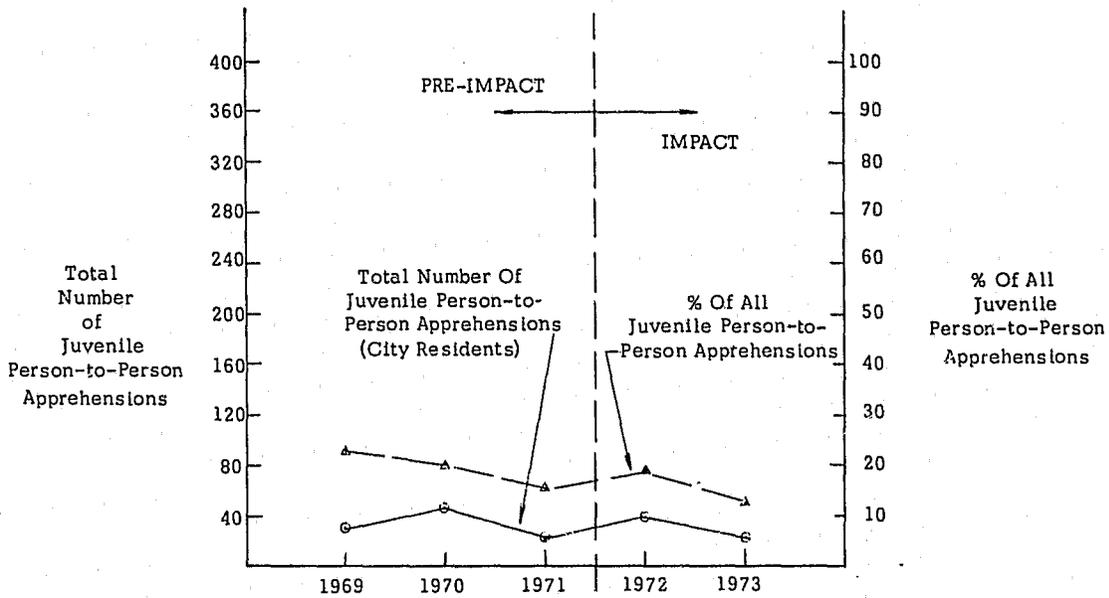
JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON IMPACT CHARGES
 IN ST. LOUIS COUNTY, 1969-1973
 BY QUARTER



Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

Figure 6-16

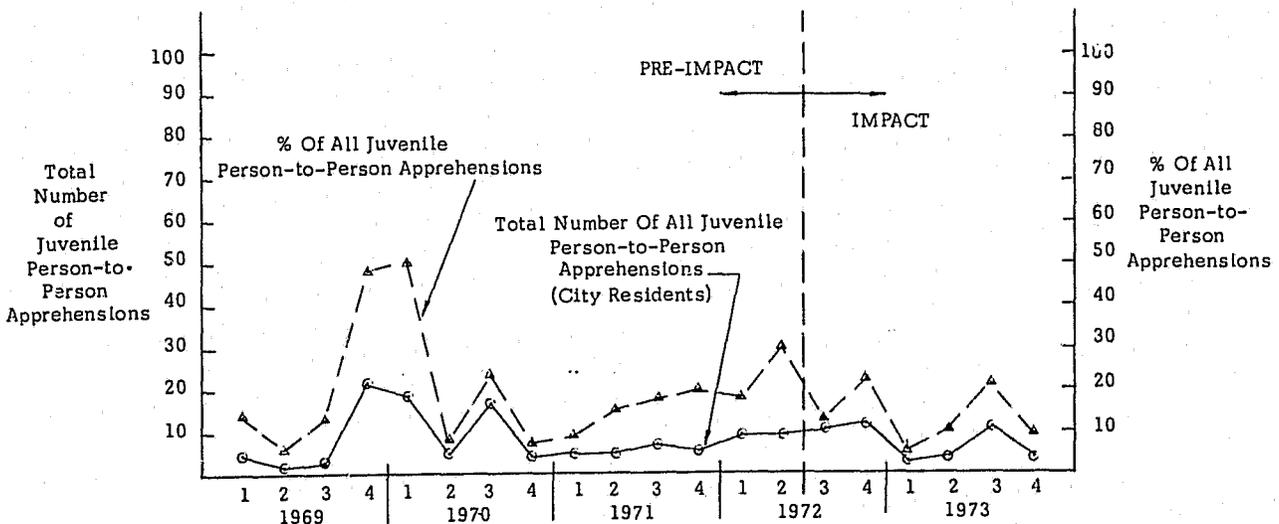
JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON PERSON-TO-PERSON CHARGES
 IN ST. LOUIS COUNTY,
 1969-1973



Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

Figure 6-17

JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON PERSON-TO-PERSON CHARGES
 IN ST. LOUIS COUNTY, 1969-1973
 BY QUARTER



Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

in 1973; the number of apprehended City juveniles increased by 38%. The proportion time-series, however, has remained almost constant since 1970. This indicates that the changes in the number of apprehensions for County Impact crimes have been proportionately distributed among County and City juveniles alike.

Although the quarterly time-series for the proportion of apprehended City juveniles (Figure 6-15) reveals no abrupt increases with the beginning of the Impact Program, the number of juveniles apprehended in the third quarter of 1973 represented the highest quarterly total since 1969. Without 1974 data, it is not possible to determine whether this local peak signals a genuine increase in the number of juvenile apprehensions.

- c. Burglary arrests -- (figures 6-18 and 6-19)
The time-series for annual burglary apprehensions (Figure 6-18) exhibits the same characteristics that were identified for Impact crimes in Figure 6-14. Although the number of City juveniles apprehended in the County in 1973 was the highest annual total since 1969, the significance of this increase is lessened considerably by the relatively stable proportion of apprehended City juveniles. The proportion in 1973 was only 0.1% higher than that recorded in 1971.

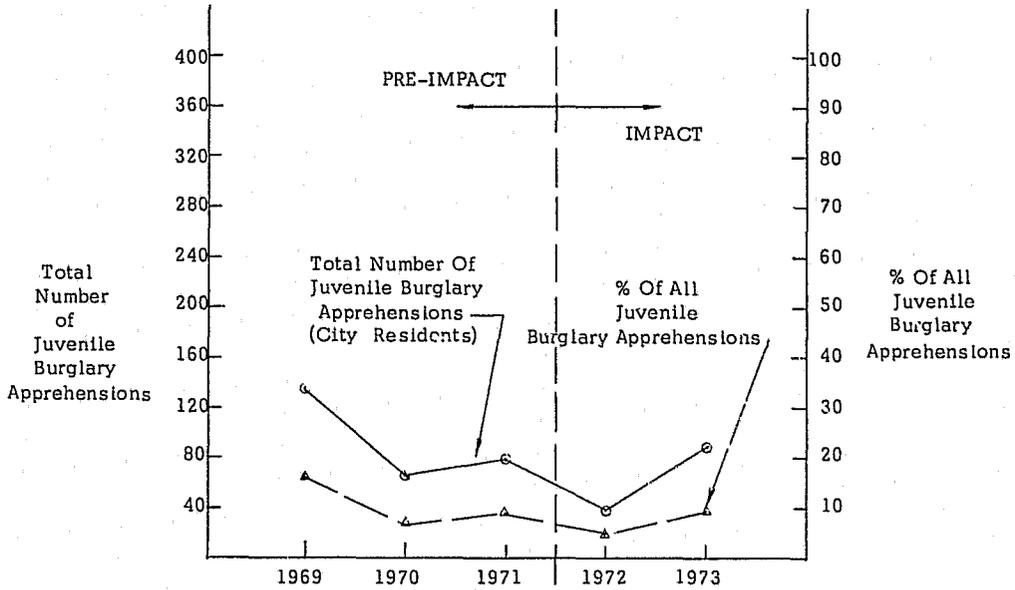
The quarterly time-series (Figure 6-19) indicates the same pattern of increase in the number of City juvenile apprehensions for County burglaries in the third quarter of 1973 that was observed for Impact and Index juvenile apprehensions. The significance of the rise in the proportions of apprehended City juveniles in the second and third quarters of 1973 cannot be determined because of the lack of 1974 data.

3. Observations and Conclusions The following findings were obtained from an examination of juvenile apprehensions for crimes committed in St. Louis County from 1969 through 1973:

- a. The number of City juveniles apprehended in St. Louis County for Index crimes decreased substantially between 1969 and 1973. In 1969, 370 City juveniles were apprehended in St. Louis County for Index crimes; these City juveniles represented 21.6% of all juveniles apprehended in the County for such crimes. In 1973, the

Figure 6-18

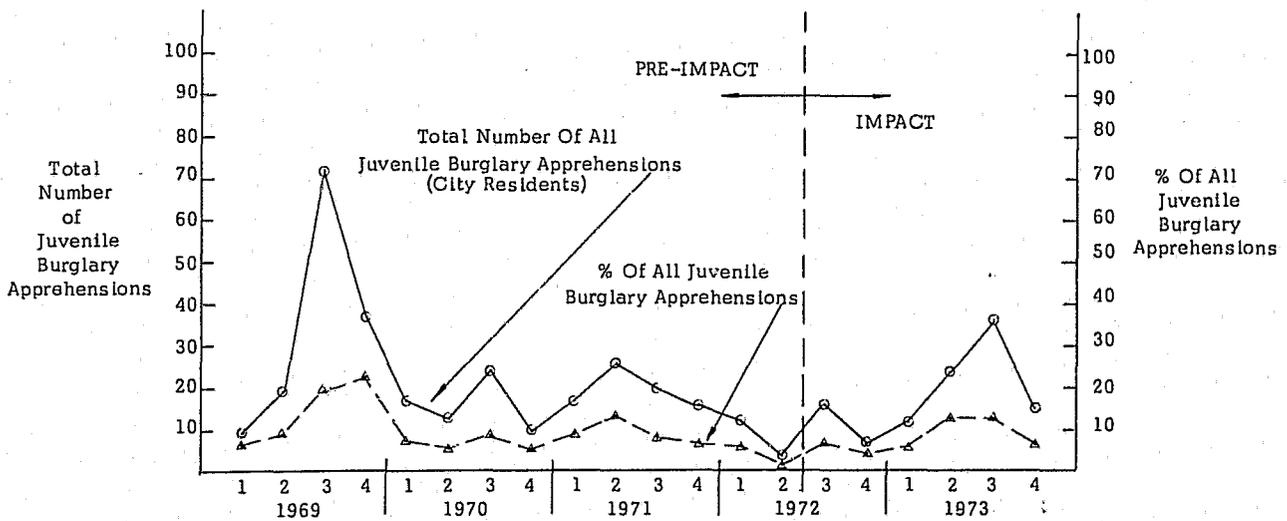
JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON BURGLARY CHARGES
 IN ST. LOUIS COUNTY,
 1969-1973



Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

Figure 6-19

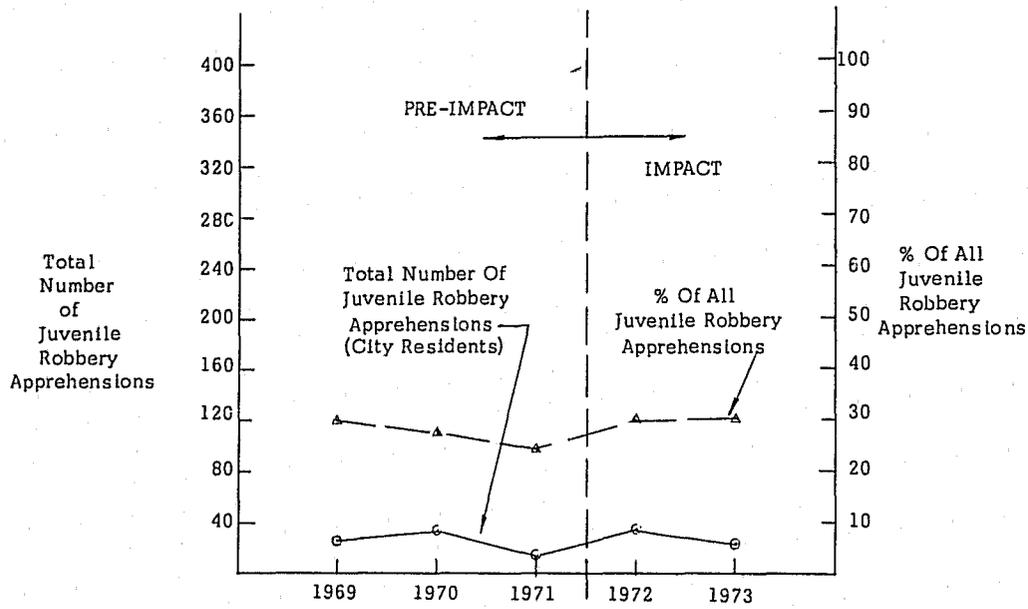
JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON BURGLARY CHARGES
 IN ST. LOUIS COUNTY, 1969-1973
 BY QUARTER



Source: Bureau of Central Police Records,
 St. Louis County Department of Police.

Figure 6-20

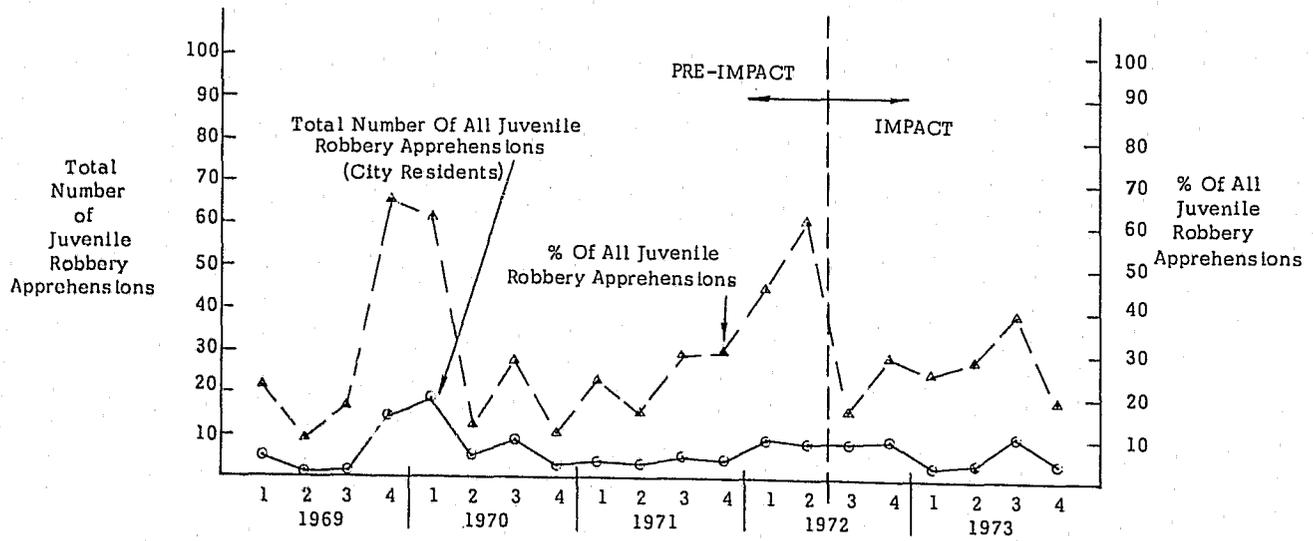
JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON ROBBERY CHARGES
IN ST. LOUIS COUNTY,
1969-1973



Source: Bureau of Central Police Records,
St. Louis County Department of Police.

Figure 6-21

JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON ROBBERY CHARGES
IN ST. LOUIS COUNTY, 1969-1973
BY QUARTER



Source: Bureau of Central Police Records,
St. Louis County Department of Police.

number of City juveniles apprehended for Index offenses declined to 202 apprehensions -- only 12.3% of all juveniles apprehended in the County for Index crimes. Consequently, between 1969 and 1973, the number of apprehended City juveniles declined by over 45% and the proportion of City juveniles apprehended in the County for Index offenses declined by 9.3% (see Table 6-5).

- b. The number of City juveniles apprehended in St. Louis County for Index crimes during 1971 to 1973 was substantially less than the number of City adults arrested in the County for similar crimes. In each year from 1971 through 1973, at least three times as many City adults as City juveniles were apprehended for Index crimes in St. Louis County. City adults constituted over 30% of all of the adults arrested for these crimes in the County during these three years. On the other hand, fewer than 17% of all juveniles apprehended during these same three years for Index offenses in the County were City juveniles (see Table 6-5 and tables B-1 through B-3).
- c. City juveniles were apprehended in St. Louis County almost exclusively for crimes against property. In 1973, as the most recent example, over 97% of all City juveniles apprehended for Index and larceny under \$50 crimes committed in the County were charged with either burglary, larceny, or auto theft (see Table B-8).
- d. City juveniles apprehended in the County were charged with less serious property crimes than were County juveniles. During 1971 to 1973, over 32% of all County juveniles apprehended for Index and larceny under \$50 offenses in the County were charged with burglary, and fewer than 45% were charged with larceny under \$50. Less than 10% of all City juveniles apprehended for Index and larceny under \$50 crimes in the County were charged with burglary and over 69% were charged with larceny under \$50 (see tables B-6 through B-8).
- e. The number of City juveniles apprehended in St. Louis County did not significantly increase with the beginning of the Impact Program. For Index, Impact, and burglary offenses, a decrease in the number of City juveniles apprehended in St. Louis County occurred in 1972, followed by an increase in 1973 (see Table 6-5).

The increase in each crime category occurred primarily in the last half of 1973, and did not coincide with the temporary increase in the number of City adults arrested in St. Louis County during the first two quarters of 1973. Between 1971 and 1973, the total number of City juveniles apprehended for Index offenses declined by 58 apprehensions -- a decrease of over 22% (see Table 6-5).

- f. The proportion of City juveniles apprehended in St. Louis County did not increase with the beginning of the Impact Program. For Index, Impact and burglary crimes, the proportion of City juveniles apprehended in the County declined in 1972. Between 1971 and 1973, the proportion of City juveniles apprehended for Index crimes declined from 16.9% to 12.3%. Similarly the proportion of City juveniles among all juveniles apprehended for Impact offenses in the County declined from 10.1% in 1971 to 9.7% in 1973.

CHAPTER VII

ARREST RESIDENCY TRENDS IN THE ADJACENT MUNICIPALITIES

A. Arrest Residency Data Collection

It will be remembered that, to obtain a more comprehensive view of the arrest patterns in St. Louis County prior to the initiation of the Impact Program, additional arrest information was obtained for several St. Louis County municipalities which share a common border with the City of St. Louis -- Clayton, Jennings, Maplewood, Pine Lawn, Richmond Heights, University City, and Wellston. The geographic location of these municipalities is shown in Plate 5, Crime Displacement Study Area, and some of the major demographic and police characteristics of these communities are presented in tables 2-3 and 2-4.

1. Adult Arrests As described in Chapter VI, residency information for adult arrests in St. Louis County was obtained from the original booking sheet for each arrest. The coded residency data was combined with the information contained on the adult arrest card produced by Central Records of the St. Louis County Police Department to provide the base data file for this report. Although a permanent file of every arrest card is maintained at Central Records, the booking sheets are retained for only three years, then destroyed. This data file of adult arrests for the County thus has necessarily been limited to only the years 1971 through 1973, because of the unavailability of booking sheets prior to 1971 at Central Records.

With the absence of any central file of arrest reports prior to 1971, additional information for the adjacent municipalities could be obtained only by visiting the police agency in each selected municipality and collecting residency data for the 1966-1970 period from their arrest files.

With these additional data, eight complete years of residency distribution patterns were obtained for each of the adjacent municipalities. Tables 7-1 and 7-2 present the number of arrests for which data were secured for each year during this period. The lower sample percentages for Index charges during 1966-1970 reflect the increased difficulties encountered with data collection in the individual municipalities. A primary obstacle was the fact that no unique identifying number or name was available to directly relate each arrest card to a particular booking sheet. Consequently, the matching of each arrest card to its original booking sheet was accomplished on the basis of secondary indicators -- such as arresting department, date and time of arrest, charge, and sex and age of the offender.

Table 7-1

SAMPLING STATISTICS FOR ADULTS ARRESTED ON INDEX CHARGES IN
 ADJACENT ST LOUIS COUNTY MUNICIPALITIES,
 1966-1973

	1966	1967	1968	1969	1970	1971	1972	1973	TOTAL
Total Index Arrests Reported	212	284	400	328	452	427	438	473	3014
Total Index Arrests Coded	189	256	367	317	431	N.A.	N.A.	N.A.	-
Total Index Arrests Matched	185	243	353	299	418	421	438	456	2813
Sample %	87.3	85.6	88.3	91.2	92.5	98.6	100.0	96.4	93.3

N.A. - Not Available

Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
 1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Table 7-2

SAMPLING STATISTICS FOR ADULTS ARRESTED IN LARCENY UNDER \$50 CHARGES IN
 ADJACENT ST LOUIS COUNTY MUNICIPALITIES
 1966-1973

	1966	1967	1968	1969	1970	1971	1972	1973
Total Larceny Under \$50 Arrests Reported	158	172	232	299	392	582	601	541
Total Larceny Under \$50 Arrests Coded	149	170	229	294	384	N.A.	N.A.	N.A.
Total Larceny Under \$50 Arrests Matched	146	163	216	279	375	100	122	129
Sample %	92.4	94.8	93.1	93.3	95.7	17.2	20.3	23.8

N.A. - Not Available

Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
 1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Another factor which apparently contributed to the degradation of the matching statistics was the age of the data itself; generally the more recent the data, the higher the percentage of match between arrest card and booking sheet. When coding the arrest residency data in the individual departments, all larcenies under \$50 for 1966-1970 were examined and the corresponding sample percentages for these years are shown in Table 7-2. Since the 1971-1973 data for the adjacent municipalities were collected at Central Records, only a 20% sample of all arrests for larceny under \$50 was obtained for these years.

Information on adult arrests in the adjacent St. Louis County municipalities is presented in Section B of this chapter.

2. Juvenile Apprehensions To obtain sufficient juvenile apprehension data for the adjacent municipalities required examination of apprehension reports on file in the police departments of those municipalities for the years 1966 through 1968. Juvenile apprehension cards which included residency information for 1969-1973 were available from Central Records. Data on juvenile apprehensions for 1966 to 1968 were not obtained for two of the municipalities: Maplewood and Pine Lawn. In Maplewood, the juvenile apprehension reports prior to 1969 were no longer on file. In Pine Lawn, no convenient or systematic procedure was available for screening the reports and the decision was made not to expend the considerable resources which would have been necessary to locate the estimated 100 apprehension reports of interest. The juvenile apprehension information for the adjacent municipalities is presented in Section C of this chapter.

B. Adult Arrest Data

1. Annual Residency Distributions A summary of the residency distributions for all adult Index arrests in the adjacent municipalities for 1966-1973 is presented in Table 7-3. The "adjacent municipalities" residency category may more easily be understood if the seven municipalities are considered jointly as one jurisdiction separate from St. Louis County; and if any person residing in any one of these seven municipalities is considered a "resident" of this artificial jurisdiction.

The annual summary data indicate that the proportion of adult "residents" arrested for Index crimes in the adjacent municipalities from 1971 through 1973 was considerably below the proportion of adult County residents arrested in St. Louis County (see Table 6-2). This reduction in the

Table 7-3

ANNUAL RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

1966-1973

RESIDENCY	PRE-IMPACT						IMPACT	
	1966	1967	1968	1969	1970	1971	1972	1973
Adjacent Municipalities	45 (24.3)	70 (28.8)	108 (30.6)	109 (36.5)	133 (31.8)	126 (29.9)	158 (36.1)	140 (30.7)
City of St. Louis	105 (56.8)	130 (53.5)	190 (53.8)	143 (47.8)	194 (46.4)	209 (49.6)	205 (46.8)	236 (51.8)
St. Louis County	30 (16.2)	28 (11.5)	39 (11.0)	25 (8.4)	68 (16.3)	71 (16.9)	61 (13.9)	62 (13.6)
Other	4 (2.2)	7 (2.9)	9 (2.5)	14 (4.7)	15 (3.6)	13 (3.1)	12 (2.7)	10 (2.2)
Unknown	1 (0.5)	8 (3.3)	7 (2.0)	8 (2.7)	8 (1.9)	2 (0.5)	2 (0.5)	8 (1.8)
TOTAL	185 (100.0)	243 (100.0)	353 (100.0)	299 (100.0)	418 (100.0)	421 (100.0)	438 (100.0)	456 (100.0)

Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

"resident" proportion supports the hypothesis advanced in Chapter IV that, as the relative size and population of a jurisdiction decrease, so will the proportion of residents among all the arrests within that jurisdiction.

As evident in Plate 5, Crime Displacement Study Area, the adjacent municipalities are bounded by St. Louis County to the west and by the City of St. Louis to the east. The data in Table 7-3 indicate, however, that the County and City did not contribute equally to crime in the adjacent municipalities during 1966 through 1973. City adults consistently represented from 45% to 55% of all of the Index arrests in the adjacent municipalities, a percentage several times larger than the proportion of arrested St. Louis County adults.

During the eight-year period under consideration, the number of adult City residents arrested in the adjacent municipalities increased from 105 in 1966 to 236 in 1973, a rise of 125%. At the same time, the number of adult "residents" arrested rose from 45 to 140, an increase of over 210%. Despite these rapid increases in the number of apprehensions, the relative proportion of arrests for each residency category remained fairly stable. Between 1966 and 1973, the proportion of adjacent municipality adults arrested on Index charges varied irregularly between 24.3% and 36.5%. The proportion of City adults arrested on Index charges varied between 46.4% and 56.8%.

The annual residency distributions by crime type are presented in tables C-1 through C-8 in Appendix C. These annual summaries indicate the substantial level of activity by City adults in the adjacent municipalities in every crime category. As an example, in 1973, City adults represented over 65% of all larceny and robbery arrests, and over 42% of all persons apprehended for rape, burglary and auto theft. The proportion of arrested City adults was significantly higher in the adjacent municipalities than in St. Louis County as a whole. For example, while City adults represented only 22% of all arrests for person-to-person offenses on a County-wide basis in 1973, they accounted for 40% of all arrests for these crimes in the adjacent municipalities. For all Impact offenses, City adults constituted 26% of all arrests in the entire County and over 44% in the adjacent municipalities in 1973; and for Index crimes, the proportion of City adults was 31% County-wide and 52% in the adjacent municipalities (see tables B-3 and C-8).

The distribution of City adults among the crime categories is very similar to the County-wide distribution. From 1971 through 1973 approximately 75% of all City adults arrested for Index offenses in the adjacent municipalities were charged with either burglary, larceny over \$50, or auto theft. When larceny under \$50 is included, over 60% of all City adult arrests in the adjacent municipalities during these three years were on charges of larceny alone (see tables C-6 through C-8).

Between 1971 and 1973, a total of 262 adult residents of the adjacent municipalities were arrested for burglary, larceny over \$50, and auto theft. Over 62% of these apprehensions were for burglary and fewer than 18% were for larceny over \$50. During this same period, 487 City adults were arrested for these same three types of crimes. Fewer than 37% were apprehended for burglary, but over 50% were charged with larceny over \$50.

2. Time-Series Distributions of Arrested St. Louis Adults The time-series based on the adult arrest data for the adjacent municipalities are particularly interesting because of the availability of six full years of pre-Impact information. These data provide a much clearer picture from which the mobility trends of arrested City adults can be determined.

The annual number and proportion of City residents arrested in the adjacent municipalities for each crime category are presented in Table 7-4. The time series graphs based on this data appear in figures 7-1 through 7-6.

The following observations are based on the time-series for total Index arrests, including larceny under \$50, burglary arrests, and robbery arrests.

- a. Index arrests with larceny under \$50 -- (Figure 7-1) The number of City adults arrested in the adjacent municipalities for Index and larceny under \$50 offenses rose from 185 in 1966 to 581 in 1971, an increase of almost 215%. This rapid upward trend in the number of arrested City adults did not continue in 1972 and 1973; although the number of arrests continued to increase, it was only by 33 City adults, a mere 6% rise from 1971.

The proportion time-series consists of two distinct phases. During the period from 1966 through 1970, the proportion of adult City residents arrested in the adjacent municipalities declined slowly from 55.9% in 1966 to 49.9% in 1970.

Table 7-4

PERCENT OF ADULT ST. LOUIS RESIDENTS ARRESTED
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES, 1966-1973
BY CHARGE

CHARGE	PRE-IMPACT						IMPACT	
	1966	1967	1968	1969	1970	1971	1972	1973
Index With Larceny Under \$50 ^a	55.9 ^b 185 ^c	54.7 222	51.5 293	49.5 286	49.9 396	58.0 581	57.2 594	61.5 614
Index Without Larceny Under \$50	56.8 105	53.5 130	53.8 190	47.8 143	46.4 194	49.6 209	46.8 205	51.8 236
Impact	52.7 48	39.4 41	45.2 94	38.8 62	38.2 91	43.2 108	38.5 105	43.6 126
Person-to-Person	54.8 23	29.1 16	32.5 37	32.9 24	34.3 36	46.2 54	38.8 47	40.5 62
Burglary	51.0 25	51.0 25	60.6 57	43.7 38	41.4 55	40.6 54	38.2 58	47.1 64
Robbery	71.4 15	46.7 7	81.8 18	60.0 9	59.6 28	52.1 25	43.1 22	65.4 34

a. Number and percent of arrests for 1971-1973 estimated on the basis of a 20% sample of charges for larceny under \$50 for St. Louis adults.

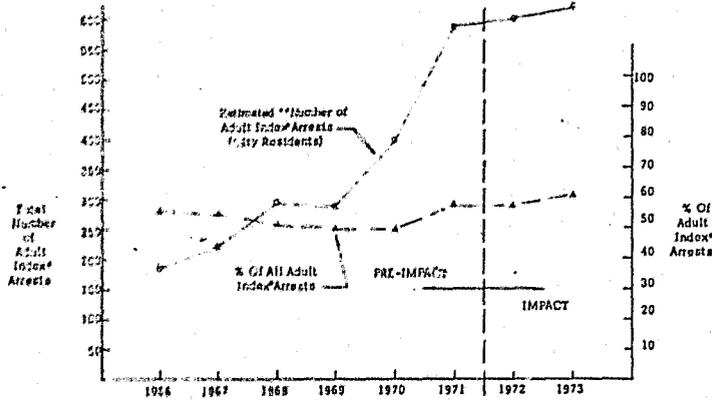
b. Percent of adult St. Louis residents among all adults arrested in the adjacent St. Louis County municipalities for these charges.

c. Number of adult St. Louis residents arrested in adjacent St. Louis County municipalities.

Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.

1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

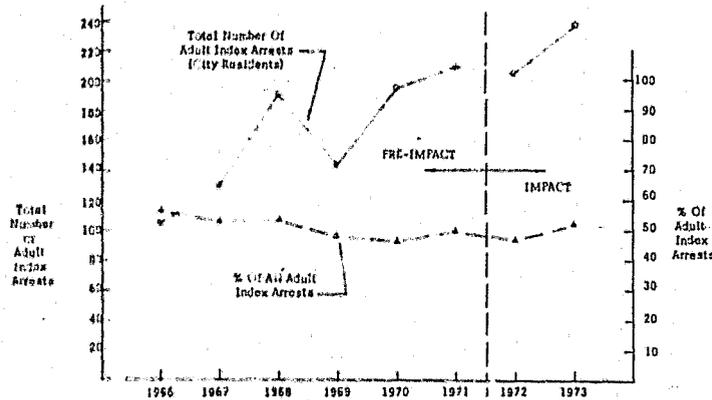
Figure 7.1
 ADULT ST. LOUIS RESIDENTS ARRESTED ON INDEX* CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES
 1966-1973



* Includes arrests for larceny under \$50
 ** Number and percent of arrest for 1971-1973 estimated on the basis of a 20% sample of charges for larceny under \$50 for St. Louis adults.

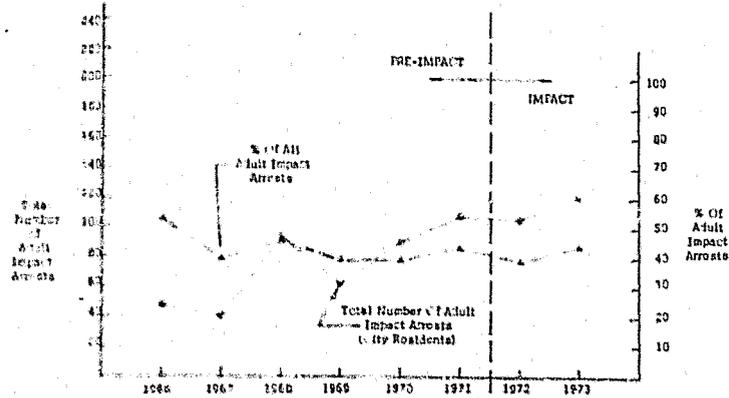
Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
 1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7.2
 ADULT ST. LOUIS RESIDENTS ARRESTED ON INDEX CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES
 1966-1973



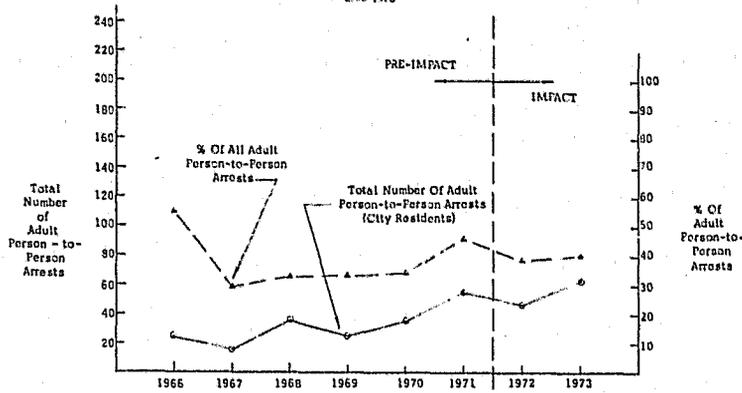
Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
 1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7.3
 ADULT ST. LOUIS RESIDENTS ARRESTED ON IMPACT CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES
 1966-1973



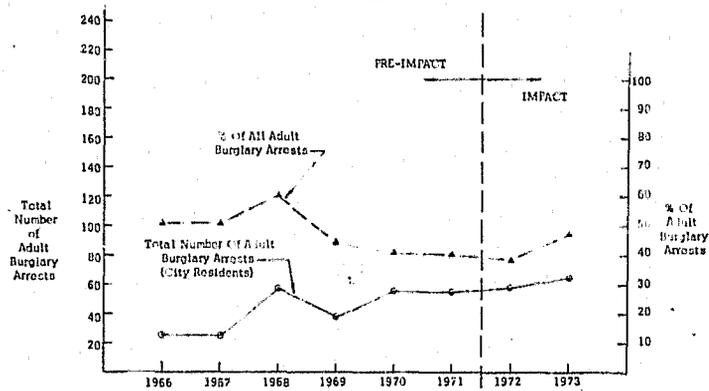
Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
 1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-4
ADULT ST. LOUIS RESIDENTS ARRESTED ON PERSON-TO-PERSON CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES,
 1966-1973



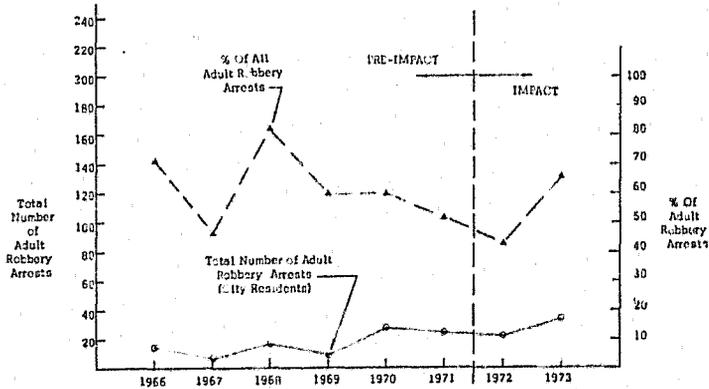
Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
 1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-5
ADULT ST. LOUIS RESIDENTS ARRESTED ON BURGLARY CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES,
 1966-1973



Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
 1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-6
ADULT ST. LOUIS RESIDENTS ARRESTED ON ROBBERY CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES,
 1966-1973



Sources: 1966-1970 Arrest records of police departments in adjacent municipalities.
 1971-1973 Bureau of Central Police Records, St. Louis County Department of Police.

This was followed by an increase to 58.0% in 1971. From 1971 through 1973, the proportion of adult City residents increased only 3.5%.

It should be noted that while the total number of City adults arrested in the adjacent municipalities increased by more than 230% during the eight years, 1966-1973, the proportion of arrested City adults remained between 49% and 62% of all arrests. These figures indicate that the increase in the total number of arrests in the adjacent municipalities did not consist solely of City adults, but included adults from all jurisdictions. This result suggests that, to a considerable degree, criminals were attracted to the adjacent municipalities, rather than repulsed from other areas.

b. Burglary arrests -- (Figure 7-5) The number of adult City residents arrested in the adjacent municipalities for burglary increased irregularly from 25 in 1966 to 55 in 1970. Between then and 1973, the increase in the annual number of arrests slowed considerably; the 64 arrests in 1973 represented an increase of only nine apprehensions over a three-year period. The proportion of City adults arrested for burglary in the adjacent municipalities decreased from 51.0% in 1966 to 40.6% in 1971. Despite the beginning of the Impact Program, the proportion further declined to 38.2% in 1972. This downward trend was reversed, however, in 1973 when the proportion increased to 47.1% despite an increase of only six arrests. The burglary arrest data for the adjacent municipalities indicate that the rise in the proportion of City adults arrested for burglary in 1973 was caused primarily by a sharp drop in the number of adjacent municipality adults arrested for burglary in that year. In 1972, 72 adult "residents" were arrested for burglary in the adjacent municipalities; in 1973, only 41 were arrested -- a 43% reduction (see tables C-7 and C-8).

c. Robbery arrests -- (Figure 7-6) The number of arrests of City adults for robbery in the adjacent municipalities during the pre-Impact years 1966-1971, indicates that a slow, irregular increase occurred. The highest number of arrests for robbery during these six years was reached in 1970, when 28 City adults were apprehended. After a decline to 22 arrests in 1972, the number rose again to 34 in 1973, nine more than the last full pre-Impact year.

The proportion time-series displays considerable variability because of the small annual number of adult City residents arrested in the adjacent municipalities for robbery. From a peak proportion of 81.8% (18 arrests) in 1968, the proportion of City adults declined to 43.1% (22 arrests) in 1972. The 22.3% increase to 65.4% in 1973 was caused by an increase of only 12 arrests between 1972 and 1973.

3. Observations and Conclusions The following observations and conclusions are based on an examination of adult arrests for Index crimes in the seven adjacent municipalities from 1966 through 1973:

- a. The proportion of City adults arrested for Index crimes was significantly higher in the adjacent municipalities than in St. Louis County. During 1971-1973, adult City residents represented almost 50% of all arrests for Index crimes in the adjacent municipalities, but only 32% in the entire County. For both the Impact and person-to-person crime categories, City adults accounted more than 41% of the arrests in the adjacent municipalities during these years. However, they represented only 25% of the Impact arrests, and 21% of the person-to-person arrests, for the County (see tables B-1 through B-3 and C-6 through C-8).
- b. The number of City adults arrested in the adjacent municipalities for Index offenses increased rapidly during the pre-Impact years, 1966-1971. The number of City adults arrested for Index crimes in the adjacent municipalities increased from 105 in 1966 to 209 in 1971, almost a 100% increase. If arrests for Index and larceny under \$50 offenses are considered, the number of arrested City adults tripled during the pre-Impact years -- from 185 in 1966 to 581 in 1971 (see Table 7-4).
- c. The proportion of City adults arrested in the adjacent municipalities for Index offenses declined during the pre-Impact years, 1966-1971.

The proportion of City adults arrested for Index offenses in the adjacent municipalities declined from 56.8% in 1966 to 49.6% in 1971 -- a 7.2% decrease in five years. It is interesting to note that if arrests for Index and larceny under

\$50 offenses are considered, the proportion of City adults arrested for these crimes increased from 55.9% in 1966 to 58.0% in 1971 -- a small increase of 2.1% (see Table 7-4).

- d. City adults arrested in the adjacent municipalities were charged almost exclusively with crimes against property. During the three-year period 1971-1973, 1,789 City adults were arrested in the adjacent municipalities for Index and larceny under \$50 offenses; 1,626 of these City adults (over 90%) were charged with either burglary, larceny (both over and under \$50) or auto theft. Over 60% of all City adults arrested for Index and larceny under \$50 crimes were charged with larceny (see tables C-6 through C-8).
- e. No significant increase occurred in the number of City adults arrested in the adjacent municipalities with the beginning of the Impact Program. In 1972, the number of City adults arrested for Index crimes, including larceny under \$50, in the adjacent municipalities increased by 13 from 1971 -- an increase of only 2.2%. In 1973, the number of arrested City adults increased by 20 -- a 3.4% increase. Hence during the two-year period coincident with the Impact Program, the total number of arrested City adults only increased by 6%. This represents an insignificant rise when compared with the sharp increase in the number of City adults arrested in the two-year period immediately preceding the initiation of the Impact Program; the number of adult City residents arrested for Index and larceny under \$50 offenses in the adjacent municipalities increased from 286 in 1969 to 581 in 1971 -- a 103% increase (see Table 7-4).
- f. No significant increase occurred in the proportion of City adults arrested in the adjacent municipalities with the beginning of the Impact Program. From 1971 to 1973, the proportion of City adults arrested for Index crimes, including larceny under \$50, increased 3.5% -- from 58.0% in 1971 to 61.5% in 1973. Almost no change occurred in the proportion of City adults arrested for Impact crimes; the proportion increased only 0.4% -- from 43.2% in 1971 to 43.6% in 1973.

These small changes for the cumulative crime categories appear to be in conflict with the substantial increases observed for both the burglary and robbery categories in 1973. The 6.5% increase in the proportion of City adults arrested for burglary, however, was primarily caused by a drop in the number of adult residents of the adjacent municipalities arrested for burglary, not by any significant increase in the number of arrested City adults. Whether the 13.3% rise in the proportion of City adults arrested for robbery in 1973 was the result of a genuine increase in the mobility level of City adults is difficult to assess. The small number of annual arrests and the absence of any 1974 arrest data do not permit firm conclusions to be drawn.

C. Juvenile Apprehension Data

The eight years of juvenile apprehension data presented in this section consist of residency information obtained from the individual police departments for 1966 to 1968, and from the juvenile apprehension cards produced by Central Records for 1969 through 1973. Juvenile residency data for the 1966-1968 period were obtained from only five municipalities: Clayton, Jennings, Richmond Heights, University City, and Wellston. No juvenile data were collected from Maplewood or Pine Lawn for these three years. Residency information from all seven municipalities was available for the 1969-1973 period, however.

1. Annual Residency Distributions The annual residency distributions for all juveniles apprehended in the adjacent municipalities for Index crimes during 1969 to 1973 are presented in Table 7-5. After rising to 194 apprehensions in 1969, the number of City juveniles apprehended for Index offenses in the adjacent municipalities declined significantly during the next four years. The 85 City juveniles apprehended for Index crimes in 1973 represented a 56% decrease from the 194 arrested in 1969.

The proportion of City juveniles arrested in the adjacent municipalities also decreased after 1969 despite the decline in the total number of apprehended juveniles -- that is, from all jurisdictions. The proportion of City juveniles apprehended in the adjacent municipalities for Index offenses during 1972 and 1973 was over 18% higher than the proportion of City juveniles apprehended in the entire County; City juveniles constituted over 30% of all juveniles apprehended for Index offenses in the adjacent municipalities in 1972 and 1973, but only 12% of all Index apprehensions in the entire County (see Table 6-4).

Table 7-5

ANNUAL RESIDENCY DISTRIBUTIONS OF
JUVENILES APPREHENDED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*

1966-1973

RESIDENCY	PRE-IMPACT						IMPACT	
	1966	1967	1968	1969	1970	1971	1972	1973
Adjacent Municipalities	73 (43.5)	162 (61.8)	144 (47.4)	247 (53.9)	315 (62.6)	150 (47.0)	206 (62.6)	159 (57.8)
City of St. Louis	79 (47.0)	74 (28.2)	143 (47.0)	194 (42.4)	131 (26.0)	132 (41.4)	100 (30.4)	85 (30.9)
St. Louis County	5 (3.0)	24 (9.2)	13 (4.3)	12 (2.6)	52 (10.3)	35 (11.0)	21 (6.4)	29 (10.5)
Other	2 (1.2)	1 (0.4)	3 (1.0)	2 (0.4)	2 (0.4)	2 (0.6)	2 (0.6)	2 (0.7)
Unknown	9 (5.4)	1 (0.4)	1 (0.3)	3 (0.7)	3 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	168 (100.0)	262 (100.0)	304 (100.0)	458 (100.0)	503 (100.0)	319 (100.0)	329 (100.0)	275 (100.0)

* - 1966-1968 arrest data does not include Maplewood or Pine Lawn.

Sources: 1966-1968 Arrest records of police departments in adjacent municipalities.
1969-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Also evident in the annual summaries for Index apprehensions is the fact that several times as many City juveniles were apprehended in the adjacent municipalities as were juveniles from St. Louis County (excluding the seven adjacent municipalities). Both the adult and juvenile arrest data indicate that between 1966 and 1973 over 76% of all non-residents arrested in the adjacent municipalities for Index offenses were from the City of St. Louis (see tables 7-3 and 7-5).

Although the proportion of City residents was lower for juvenile apprehensions than for adult arrests in both the adjacent municipalities and the entire County, the relationship between the distance from the City and the change in the proportion of City residents appeared to be similar for both adults and juveniles. During 1971 to 1973, City adults constituted approximately 49% of all adults arrested for Index offenses in the adjacent municipalities and only 32% of all adults arrested for such crimes in the entire County -- a difference of 17%. During these same three years, approximately 34% of all juveniles apprehended in the adjacent municipalities and 16% of all juveniles apprehended in the County for Index offenses were City residents -- a difference of 18% (see tables 6-3, 6-4, 7-3, and 7-5).

The annual residency distributions for 1966 through 1973 for each crime category are presented in tables C-9 through C-16 in Appendix C. These annual summaries by crime type reflect the same general characteristics observed for the juvenile apprehension data for the entire County. Throughout the entire eight-year period, approximately 83% of all juveniles apprehended for Index offenses were charged with either burglary, larceny over \$50, or auto theft. Although both residents of the adjacent municipalities and City juveniles were arrested primarily for crimes against property, there was a distinct difference in the kind of property crime which each group committed. The 1973 data indicated that of all apprehended juveniles who lived in the adjacent municipalities, over 57% were charged with burglary, but only 14% with larceny over \$50. Among all apprehended City juveniles, however, only 34% were charged with burglary and 47% were charged with larceny over \$50.00. If apprehensions for larceny under \$50 are included, the differences become even more pronounced. Approximately 90% of all City juveniles apprehended in the adjacent municipalities for Index and larceny under \$50 crimes in 1973 were charged with larceny compared to only 55% of all arrested residents.

2. Time-Series Distributions of Apprehended St. Louis Juveniles Information on the annual number and proportion of City juveniles apprehended in the adjacent municipalities for 1966 through 1973 is presented in Table 7-6. The time-series graphs of each crime category are presented in figures 7-7 through 7-12. Following the pattern used in earlier sections, only three time-series will be discussed. Since property crimes accounted for almost all juvenile apprehensions in the adjacent municipalities, only Index apprehensions with larceny under \$50, Impact apprehensions, and burglary apprehensions will be examined.

- a. Index apprehensions, with larceny under \$50 -- (Figure 7-7) Between 1969 and 1973, the total number of City juveniles apprehended for Index and larceny under \$50 offenses in the adjacent municipalities varied only slightly. Except for 1970, when the number declined to 368, the annual number of apprehended City juveniles remained between 430 (1969) and 462 (1972) -- a difference of only 32 apprehensions. The 1973 total of 445 apprehensions was only five more than reported in the last pre-Impact year, 1971.

The proportion of City juveniles apprehended in the adjacent municipalities during 1968 to 1973 stabilized at approximately the 50% level. Except for 1970 when the proportion declined to 37.7%, the annual proportion of City juveniles apprehended for Index and larceny under \$50 crimes since 1968 remained between 48.1% (1971) and 53.2% (1973) -- a difference of only 5.1%.

- b. Impact apprehensions--(Figure 7-9) The annual number of City juveniles apprehended in the adjacent municipalities for Impact crimes decreased in each year between 1969 and 1973. The 1973 total was 12 less than that reported in 1971. The annual proportion of apprehended City juveniles declined during each of the Impact years; the 1973 value was 5.2% lower than the 1971 figures. Comparison of the time-series for juvenile apprehensions for Index offenses (including larceny under \$50) and Impact crimes indicates that the nature of the crime for which City juveniles were apprehended in the adjacent municipalities was changing. With a declining number of City juveniles apprehended for Impact offenses, the relatively constant number for apprehensions for Index and larceny under \$50 crimes reveals that an increasing number of City juveniles must have been apprehended for auto theft and larceny crimes (see figures 7-7 and 7-9). Examination of the arrest data in

Table 7-6

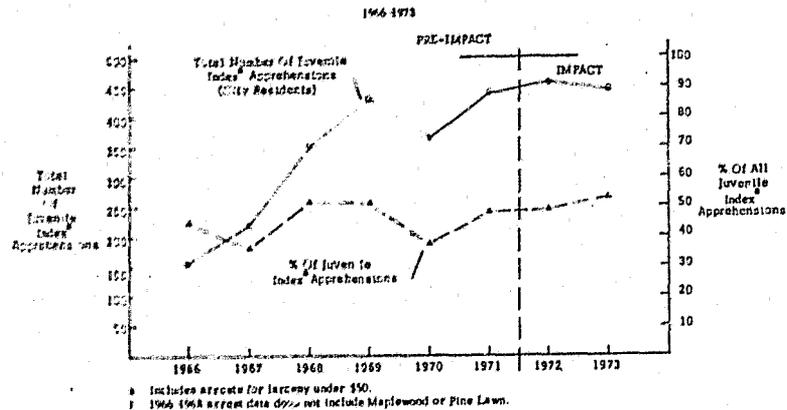
PERCENT OF JUVENILE ST. LOUIS RESIDENTS APPREHENDED
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES^a, 1966-1973
 BY CHARGE

CHARGE	PRE-IMPACT						IMPACT	
	1966	1967	1968	1969	1970	1971	1972	1973
Index With Larceny Under \$50	44.5 ^b 159 ^c	35.8 220	51.5 352	51.3 430	37.7 358	48.1 440	48.7 462	53.2 445
Index Without Larceny Under \$50	47.0 79	28.2 74	47.0 143	42.3 194	26.0 131	41.3 132	30.3 100	30.9 85
Impact	28.6 16	27.2 34	33.3 51	35.5 100	18.5 63	28.2 56	25.9 53	23.0 44
Person-to-Person	40.0 6	37.5 9	28.1 16	31.1 19	27.8 29	33.3 16	33.7 25	28.8 15
Burglary	24.4 10	24.8 25	36.5 35	36.8 81	14.4 34	26.6 40	21.5 28	20.8 29
Robbery	50.0 5	70.0 7	31.0 9	30.0 12	32.8 24	39.3 13	45.8 22	46.8 15

- a. 1966-1968 arrest data does not include Maplewood or Pine Lawn.
- b. Percent of juvenile St. Louis residents among all juveniles apprehended in the adjacent St. Louis County municipalities for these charges.
- c. Number of juvenile St. Louis residents apprehended in adjacent St. Louis County municipalities.

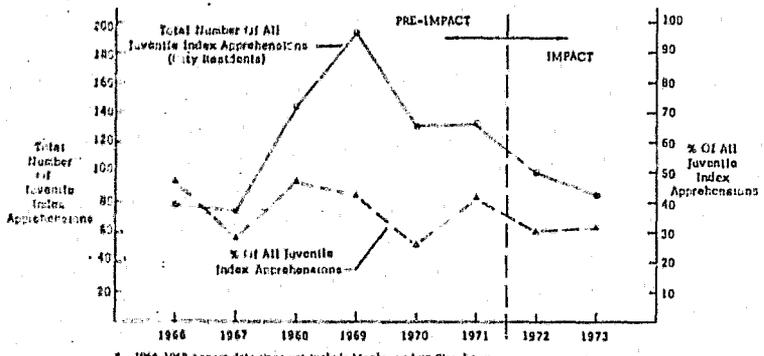
Sources: 1966-1968 Arrest records of police departments in adjacent municipalities.
1969-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-7
 JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON INDEX CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*,
 1966-1973



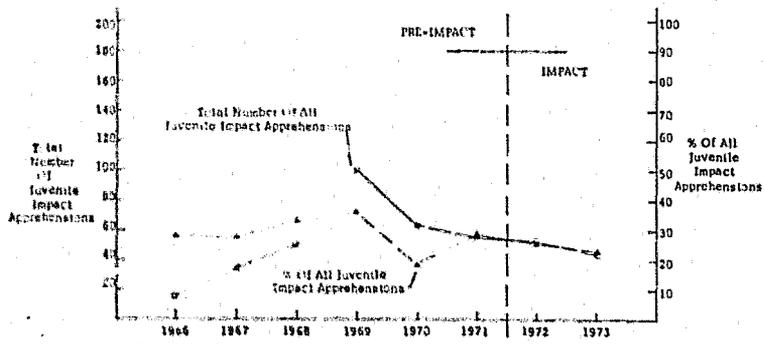
* Includes arrests for larceny under \$50.
 † 1966-1968 arrest data does not include Maplewood or Pine Lawn.
 Sources: 1966-1968 Arrest records of police departments in adjacent municipalities.
 1969-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-8
 JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON INDEX CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*,
 1966-1973



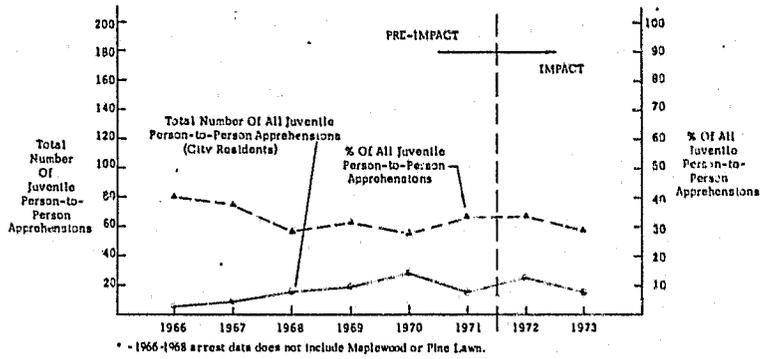
* 1966-1968 arrest data does not include Maplewood or Pine Lawn.
 Sources: 1966-1968 Arrest records of police departments in adjacent municipalities.
 1969-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-9
 JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON IMPACT CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*,
 1966-1973



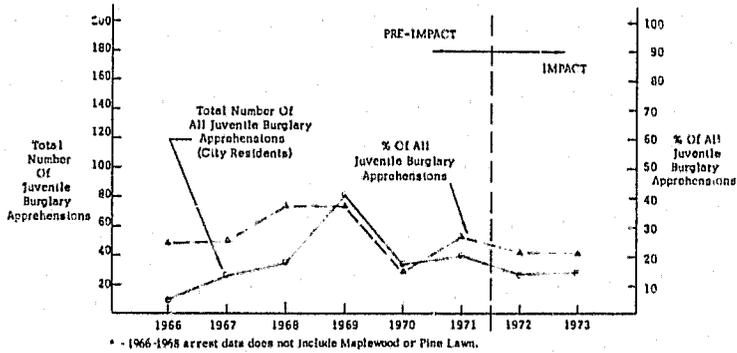
* 1966-1968 arrest data does not include Maplewood or Pine Lawn.
 Sources: 1966-1968 Arrest records of police departments in adjacent municipalities.
 1969-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-10
 JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON PERSON-TO-PERSON CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*,
 1966-1973



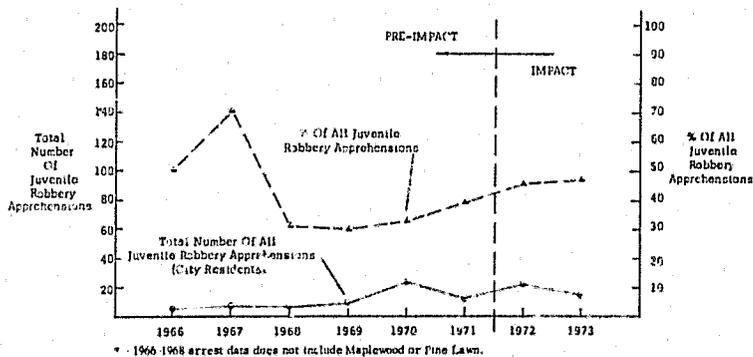
Sources: 1966-1968 Arrest records of police departments in adjacent municipalities.
 1969-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-11
 JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON BURGLARY CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*,
 1966-1973



Sources: 1966-1968 Arrest records of police departments in adjacent municipalities.
 1969-1973 Bureau of Central Police Records, St. Louis County Department of Police.

Figure 7-12
 JUVENILE ST. LOUIS RESIDENTS APPREHENDED ON ROBBERY CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*,
 1966-1973



Sources: 1966-1968 Arrest records of police departments in adjacent municipalities.
 1969-1973 Bureau of Central Police Records, St. Louis County Department of Police.

tables C-12 through C-16 indicate that the total number of juveniles (from all jurisdictions) apprehended in the adjacent municipalities for auto theft declined from 100 in 1969 to only 16 in 1973. These same tables reveal that the number of City juveniles apprehended for larceny under \$50 in the adjacent municipalities increased from 236 in 1969 to 360 in 1973 -- an increase of 52%.

- c. Burglary apprehensions -- (Figure 7-11)
The burglary apprehension data indicate that both the number and proportion of City juveniles apprehended in the adjacent municipalities declined from 1971 through 1973. In that two-year period, the number of apprehensions decreased by 11 and the proportion declined by 5.8%.

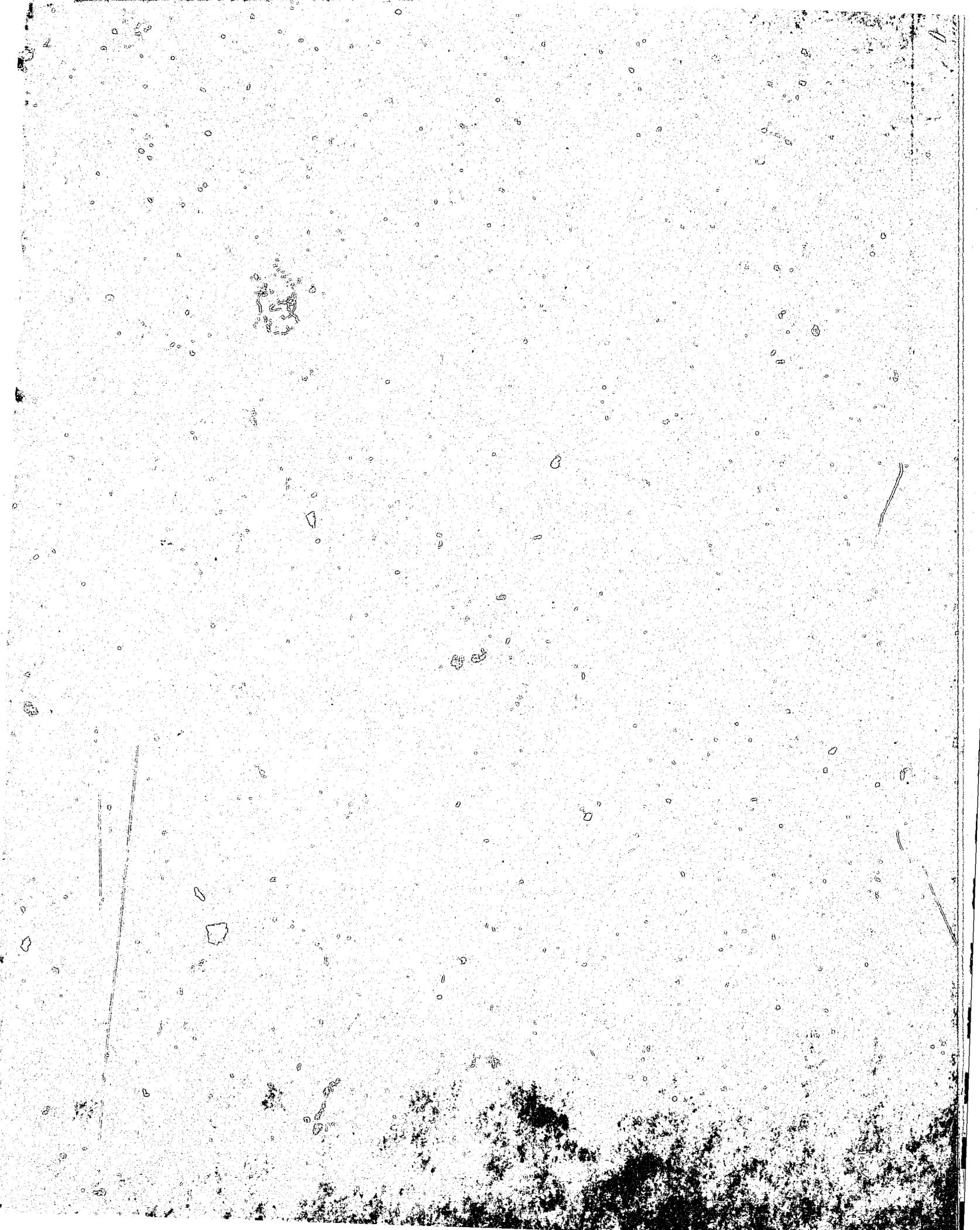
C. Observations and Conclusions

The following observations and conclusions were obtained from an examination of juvenile apprehensions for Index crimes in the adjacent municipalities for the period 1966-1973:

- a. City juveniles constituted a substantial proportion of all juvenile index apprehensions in the adjacent municipalities during the period 1966 through 1973. During the period 1966 through 1973, City juveniles never represented less than 25% (1970) of all juveniles apprehended for Index crimes in the adjacent municipalities (see Table 7-5). When apprehensions for larceny under \$50 are included, City juveniles never constituted less than 35% (1967) of all juveniles apprehended for such crimes in the adjacent municipalities (see Table 7-6).
- b. Both the number and proportion of City juveniles apprehended in the adjacent municipalities for Index crimes decreased significantly between 1969 and 1973. The number of City juveniles apprehended for Index crimes in the adjacent municipalities declined from 194 in 1969 to only 85 in 1973 -- a decrease of more than 56%. The proportion of City juveniles declined from 42.3% in 1969 to only 30.9% in 1973 (see Table 7-6).
- c. City juveniles apprehended in the adjacent municipalities were almost exclusively charged with crimes against property. From 1966 through 1973, the annual proportion of City juveniles apprehended for crimes against property always

CONTINUED

2 OF 3



exceeded at least 92% of all City juveniles apprehended in the adjacent municipalities for all Index crimes, including larceny under \$50 see Table 7-6).

- d. City juveniles were apprehended in the adjacent municipalities primarily for larceny offenses. From 1966 through 1973 over 39% of all City juveniles apprehended for an Index crime in the adjacent municipalities were charged with larceny over \$50, compared to less than 17% of all apprehended resident juveniles. Including apprehensions for larceny under \$50, the larceny charge rate for apprehended juveniles during this eight-year period increases to over 80% for City residents and slightly less than 51% for residents of the adjacent municipalities (see Table 7-6 and tables C-9 through C-16). In 1973, three times as many resident juveniles as City juveniles were apprehended for burglary in the adjacent municipalities. In that same year, however, larceny apprehensions included 164 resident juveniles and 400 City juveniles, a reverse ratio of more than 2.3 to 1 (see Table C-16).
- e. No increase occurred in the number of City juveniles apprehended for either Index or Impact crimes in the adjacent municipalities with the beginning of the Impact Program. Between 1971, the last complete pre-Impact year, and 1973, the first complete year after the beginning of the Impact Program, the total number of City juveniles apprehended in the adjacent municipalities for Index crimes declined from 132 to only 85 -- a decrease of more than 35%. During these same two years, the number of City juveniles apprehended for Impact crimes declined from 56 to 44 -- a decrease of over 21% (see Table 7-6).
- f. No increase occurred in the proportion of City juveniles apprehended for either Index or Impact crimes in the adjacent municipalities with the beginning of the Impact Program. The proportion of City juveniles among all juveniles apprehended in the adjacent municipalities for Index crimes declined from 41.3% in 1971 to 30.9% in 1973. For Impact offenses, the proportion of City juveniles declined slightly from 28.2% in 1971 to 23.0% in 1973.

APPENDIX A

ARREST RESIDENCY DATA FOR THE
CITY OF ST. LOUIS

Table A-1

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES
IN THE CITY OF ST. LOUIS

-1966-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person-to-Person	Impact	Index*
City of St. Louis	95 (92.2)	155 (95.0)	647 (90.9)	1048 (95.9)	3794 (94.3)	3382 (91.8)	590 (89.5)	1945 (94.0)	5739 (94.3)	9711 (93.1)
St. Louis County	3	4	31	23	113	125	29	61 (2.9)	174 (2.9)	328 (3.2)
Missouri	1	3	11	9	48	40	11	24 (1.2)	72 (1.2)	123 (1.2)
Illinois	0	1	18	7	66	85	14	26 (1.3)	62 (1.0)	161 (1.5)
Other	4	0	4	5	29	49	15	13 (0.6)	42 (0.7)	106 (1.0)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	103 (100.0)	163 (100.0)	711 (100.0)	1092 (100.0)	4020 (100.0)	3681 (100.0)	659 (100.0)	2069 (100.0)	6089 (100.0)	10429 (100.0)

* - Includes larceny under \$50 offenses

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A -2

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES
IN THE CITY OF ST. LOUIS

-1967-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person-to-Person	Impact	Index*
City of St. Louis	157 (94.0)	156 (88.6)	655 (89.6)	994 (94.2)	3145 (91.7)	2990 (91.6)	798 (89.7)	1962 (92.2)	5107 (91.9)	8895 (91.6)
St. Louis County	8	14	36	36	152	112	41	94 (4.4)	246 (4.4)	399 (4.1)
Missouri	0	1	12	12	54	51	19	25 (1.2)	79 (1.4)	149 (1.5)
Illinois	1	3	15	9	36	64	13	28 (1.3)	64 (1.2)	141 (1.5)
Other	1	2	13	4	41	44	18	20 (0.9)	61 (1.1)	123 (1.3)
Unknown	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	167 (100.0)	176 (100.0)	731 (100.0)	1055 (100.0)	3428 (100.0)	3261 (100.0)	889 (100.0)	2129 (100.0)	5557 (100.0)	9707 (100.0)

* - Includes larceny under \$50 offenses

Source: Computer Division, St. Louis Metropolitan Police Department,

Table A -3

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES
IN THE CITY OF ST. LOUIS

-1968-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person-to-Person	Impact	Index*
City of St. Louis	157 (93.4)	176 (91.1)	755 (89.1)	1091 (94.7)	2939 (92.6)	2648 (91.5)	775 (88.2)	2179 (92.4)	5118 (92.5)	8541 (91.8)
St. Louis County	6	7	41	34	122	118	63	88 (3.7)	210 (3.8)	391 (4.2)
Missouri	3	5	22	9	38	36	13	39 (1.7)	77 (1.4)	126 (1.4)
Illinois	1	2	18	14	37	54	17	35 (1.5)	72 (1.3)	143 (1.5)
Other	1	3	11	3	35	35	10	18 (0.8)	53 (1.0)	98 (1.1)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	168 (100.0)	193 (100.0)	847 (100.0)	1151 (100.0)	3171 (100.0)	2891 (100.0)	878 (100.0)	2359 (100.0)	5530 (100.0)	9299 (100.0)

* - Includes larceny under \$50 offenses

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-4

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES
IN THE CITY OF ST LOUIS

-1969-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person-to-Person	Impact	Index*
City of St. Louis	202 (93.5)	184 (92.0)	773 (90.4)	1239 (94.1)	2488 (91.3)	2662 (91.5)	793 (87.6)	2398 (92.7)	4886 (92.0)	8341 (91.4)
St. Louis County	8	14	38	46	137	138	71	106 (4.1)	243 (4.6)	452 (5.0)
Missouri	1	1	17	13	56	32	24	32 (1.2)	88 (1.7)	144 (1.6)
Illinois	3	1	20	12	30	56	11	36 (1.4)	66 (1.2)	133 (1.5)
Other	2	0	7	6	14	19	6	15 (0.6)	29 (0.5)	54 (0.6)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	216 (100.0)	200 (100.0)	855 (100.0)	1316 (100.0)	2725 (100.0)	2907 (100.0)	905 (100.0)	2587 (100.0)	5312 (100.0)	9124 (100.0)

* - Includes larceny under \$50 offenses

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-5

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES
IN THE CITY OF ST LOUIS

-1970-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person-to-Person	Impact	Index*
City of St. Louis	250 (88.3)	237 (91.8)	948 (90.2)	1269 (91.6)	2449 (92.1)	2689 (88.6)	713 (85.6)	2704 (90.9)	5153 (91.5)	8555 (90.1)
St. Louis County**	17	14	51	57	75	132	49	139 (4.7)	214 (3.8)	395 (4.2)
Missouri**	9	3	24	40	79	108	43	76 (2.6)	155 (2.8)	306 (3.2)
Illinois	5	3	18	17	31	76	18	43 (1.4)	74 (1.3)	168 (1.8)
Other	2	1	9	2	24	27	7	14 (0.5)	38 (0.7)	72 (0.8)
Unknown	0	0	0	0	0	1	0	0 (0.0)	0 (0.0)	1 (0.0)
TOTAL	283 (100.0)	258 (100.0)	1050 (100.0)	1385 (100.0)	2658 (100.0)	3033 (100.0)	830 (100.0)	2976 (100.0)	5634 (100.0)	9497 (100.0)

* - Includes arrests for larceny under \$50

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A -6

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES

IN THE CITY OF ST. LOUIS

-1971-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person-to-Person	Impact	Index*
City of St. Louis	209 (87.0)	207 (92.8)	802 (92.2)	1285 (91.3)	2253 (90.7)	2516 (89.6)	516 (86.8)	2503 (91.4)	4756 (91.1)	7788 (90.3)
St. Louis County**	2	0	1	1	2	9	0	4 (0.1)	6 (0.1)	15 (0.2)
Missouri**	19	14	46	92	188	203	63	171 (6.2)	359 (6.9)	625 (7.2)
Illinois	2	2	13	23	27	57	13	40 (1.5)	67 (1.3)	137 (1.6)
Other	8	0	7	5	14	23	2	20 (0.7)	34 (0.7)	59 (0.7)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	240 (100.0)	223 (100.0)	869 (100.0)	1406 (100.0)	2484 (100.0)	2808 (100.0)	594 (100.0)	2738 (100.0)	5222 (100.0)	8624 (100.0)

* - Includes arrests for larceny under \$50

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-7

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES
IN THE CITY OF ST. LOUIS

-1972-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person-to-Person	Impact	Index*
City of St. Louis	186 (89.4)	185 (89.8)	869 (91.2)	1436 (91.7)	1626 (91.6)	2254 (88.5)	406 (89.2)	2676 (91.3)	4302 (91.4)	6962 (90.3)
St. Louis County**	2	6	9	12	9	22	4	29 (1.0)	38 (0.8)	64 (0.8)
Missouri**	13	13	63	85	105	176	32	174 (5.9)	279 (5.9)	487 (6.3)
Illinois	5	2	9	16	23	62	10	32 (1.1)	55 (1.2)	127 (1.6)
Other	2	0	2	16	11	32	3	20 (0.7)	31 (0.7)	66 (0.9)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	208 (100.0)	206 (100.0)	952 (100.0)	1565 (100.0)	1774 (100.0)	2546 (100.0)	455 (100.0)	2931 (100.0)	4705 (100.0)	7706 (100.0)

* - Includes arrests for larceny under \$50

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-8

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX* CRIME CHARGES

IN THE CITY OF ST LOUIS

-1973-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person-to-Person	Impact	Index*
City of St. Louis	178 (92.2)	193 (89.7)	865 (89.3)	1489 (90.0)	1249 (91.9)	2437 (89.6)	240 (87.5)	2725 (89.9)	3974 (90.6)	6651 (90.1)
St. Louis County**	2	2	13	21	15	51	2	38 (1.3)	53 (1.2)	106 (1.4)
Missouri**	12	17	63	108	70	160	22	200 (6.6)	270 (6.2)	452 (6.1)
Illinois	0	2	17	25	18	56	9	44 (1.5)	62 (1.4)	127 (1.6)
Other	1	1	10	11	6	13	1	23 (0.8)	29 (0.7)	43 (0.5)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	<u>193</u> (100.0)	<u>215</u> (100.0)	<u>968</u> (100.0)	<u>1654</u> (100.0)	<u>1358</u> (100.0)	<u>2717</u> (100.0)	<u>274</u> (100.0)	<u>3030</u> (100.0)	<u>4388</u> (100.0)	<u>7379</u> (100.0)

* - Includes arrests for larceny under \$50

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A -9

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX* CRIME CHARGES
 IN THE CITY OF ST LOUIS

-1966-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person -to- Person	Impact	Index *
City of St. Louis	18 (100.0)	30 (100.0)	259 (100.0)	163 (100.0)	1386 (100.0)	1327 (100.0)	333 (100.0)	470 (100.0)	1856 (100.0)	3516 (100.0)
St. Louis County	0	0	0	0	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0	0	0	0
Illinois	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0
TOTAL	18 (100.0)	30 (100.0)	259 (100.0)	163 (100.0)	1386 (100.0)	1327 (100.0)	333 (100.0)	470 (100.0)	1856 (100.0)	3516 (100.0)

* - Includes arrests for larceny under \$50

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A -10

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX* CRIME CHARGES
 IN THE CITY OF ST. LOUIS

-1967-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny *	Auto Theft	Person -to- Person	Impact	Index *
City of St. Louis	13 (100.0)	37 (100.0)	368 (100.0)	183 (100.0)	1561 (100.0)	1459 (100.0)	441 (100.0)	601 (100.0)	2162 (100.0)	4062 (100.0)
St. Louis County	0	0	0	0	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0	0	0	0
Illinois	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0
TOTAL	13 (100.0)	37 (100.0)	368 (100.0)	183 (100.0)	1561 (100.0)	1459 (100.0)	441 (100.0)	601 (100.0)	2162 (100.0)	4062 (100.0)

* - Includes arrests for larceny under \$50

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-11

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX* CRIME CHARGES
 IN THE CITY OF ST. LOUIS

-1968-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person -to- Person	Impact	Index*
City of St. Louis	14 (100.0)	62 (98.4)	423 (99.0)	218 (97.3)	1940 (99.0)	1736 (97.3)	699 (95.8)	717 (98.5)	2657 (98.9)	5092 (97.9)
St. Louis County	0	1	3	4	11	28	15	8 (1.1)	19 (0.7)	62 (1.2)
Missouri	0	0	0	0	6	2	9	0 (0.0)	6 (0.2)	17 (0.3)
Illinois	0	0	1	2	1	16	5	3 (0.4)	4 (0.1)	25 (0.5)
Other	0	0	0	0	0	2	1	0 (0.0)	0 (0.0)	3 (0.1)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	14 (100.0)	63 (100.0)	427 (100.0)	224 (100.0)	1958 (100.0)	1784 (100.0)	729 (100.0)	728 (100.0)	2686 (100.0)	5199 (100.0)

* - Includes larceny under \$50 offenses

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-12

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX* CRIME CHARGES
 IN THE CITY OF ST. LOUIS

-1969-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person -to- Person	Impact	Index*
City of St. Louis	18 (100.0)	49 (98.0)	475 (98.5)	315 (99.0)	2044 (98.5)	1627 (97.1)	713 (96.8)	857 (98.7)	2901 (98.6)	5241 (97.9)
St. Louis County	0	0	5	2	24	19	19	7 (0.8)	31 (1.1)	69 (1.3)
Missouri	0	1	0	0	5	6	2	1 (0.1)	6 (0.2)	14 (0.3)
Illinois	0	0	2	1	1	20	1	3 (0.3)	4 (0.1)	25 (0.5)
Other	0	0	0	0	0	2	1	0 (0.0)	0 (0.0)	0 (0.0)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	18 (100.0)	50 (100.0)	482 (100.0)	318 (100.0)	2074 (100.0)	1674 (100.0)	736 (100.0)	868 (100.0)	2942 (100.0)	5352 (100.0)

* - Includes larceny under \$50 offenses

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-13

RESIDENCY DISTRIBUTIONS OF
JUVENILES APPREHENDED ON INDEX* CRIME CHARGES

IN THE CITY OF ST. LOUIS

-1970-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person -to- Person	Impact	Index*
City of St. Louis	21 (100.0)	41 (95.3)	520 (96.6)	270 (98.9)	1579 (97.8)	1063 (95.6)	502 (95.6)	852 (97.4)	2431 (97.7)	3996 (96.9)
St. Louis County**	0	1	9	2	20	25	10	12 (1.4)	32 (1.3)	67 (1.6)
Missouri**	0	1	4	0	10	11	8	5 (0.6)	15 (0.6)	34 (0.8)
Illinois	0	0	4	1	2	12	1	5 (0.6)	7 (0.3)	20 (0.5)
Other	0	0	1	0	2	0	4	1 (0.1)	3 (0.1)	7 (0.2)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	21 (100.0)	43 (100.0)	538 (100.0)	273 (100.0)	1613 (100.0)	1111 (100.0)	525 (100.0)	875 (100.0)	2488 (100.0)	4124 (100.0)

* - Includes larceny under \$50 offenses

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-14

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX* CRIME CHARGES
 IN THE CITY OF ST. LOUIS

-1971-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person -to- Person	Impact	Index*
City of St. Louis	20 (95.2)	63 (100.0)	416 (97.8)	334 (97.3)	1313 (97.4)	849 (94.8)	368 (94.8)	833 (97.8)	2146 (97.6)	3363 (96.6)
St. Louis County**	0	0	0	0	1	1	0	0 (0.0)	1 (0.0)	2 (0.1)
Missouri**	1	0	9	8	32	26	18	18 (2.1)	50 (2.3)	94 (2.7)
Illinois	0	0	0	1	1	16	0	1 (0.1)	2 (0.1)	18 (0.5)
Other	0	0	0	0	0	3	2	0 (0.0)	0 (0.0)	5 (0.1)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	21 (100.0)	63 (100.0)	425 (100.0)	343 (100.0)	1347 (100.0)	895 (100.0)	388 (100.0)	852 (100.0)	2199 (100.0)	3482 (100.0)

* - Includes larceny under \$50 offenses

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A-15

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX* CRIME CHARGES
 IN THE CITY OF ST. LOUIS

-1972-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person -to- Person	Impact	Index*
City of St. Louis	8 (100.0)	55 (90.1)	285 (97.9)	268 (97.8)	817 (97.0)	781 (92.9)	153 (95.0)	616 (97.0)	1433 (97.0)	2367 (95.6)
St. Louis County**	0	0	0	1	7	1	1	1 (0.2)	8 (0.5)	10 (0.4)
Missouri**	0	4	6	4	18	23	6	14 (2.2)	32 (2.2)	61 (2.5)
Illinois	0	2	0	1	0	35	1	4 (0.6)	4 (0.3)	39 (1.6)
Other	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	8 (100.0)	61 (100.0)	291 (100.0)	274 (100.0)	842 (100.0)	840 (100.0)	161 (100.0)	635 (100.0)	1477 (100.0)	2477 (100.0)

* - Includes larceny under \$50 offenses

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

Table A -16

RESIDENCY DISTRIBUTIONS OF
JUVENILES APPREHENDED ON INDEX* CRIME CHARGES
IN THE CITY OF ST. LOUIS

-1973-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny*	Auto Theft	Person -to- Person	Impact	Index*
City of St. Louis	8 (100.0)	37 (97.3)	244 (92.0)	195 (96.5)	714 (97.6)	700 (93.7)	44 (97.7)	484 (94.3)	1198 (96.3)	1942 (95.4)
St. Louis County**	0	0	1	0	1	6	0	1 (0.2)	2 (0.2)	8 (0.4)
Missouri**	0	0	15	5	13	17	1	20 (3.9)	33 (2.7)	51 (2.5)
Illinois	0	0	4	1	0	24	0	5 (1.0)	5 (0.4)	29 (1.4)
Other	0	1	1	1	3	0	0	3 (0.6)	6 (0.5)	6 (0.3)
Unknown	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	8 (100.0)	38 (100.0)	265 (100.0)	202 (100.0)	731 (100.0)	747 (100.0)	45 (100.0)	513 (100.0)	1244 (100.0)	2036 (100.0)

* - Includes larceny under \$50 offenses

** - See Chapter IV for discussion of residency reliability for this year and jurisdiction.

Source: Computer Division, St. Louis Metropolitan Police Department.

APPENDIX B

ARREST RESIDENCY DATA FOR

ST. LOUIS COUNTY

Table B-1

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES

IN ST. LOUIS COUNTY

-1971-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny* Under \$50	Person -to- Person	Impact	Index
St. Louis County	0 (0.0)	33 (64.7)	82 (54.3)	374 (82.4)	493 (64.7)	302 (39.7)	160 (56.7)	143 (43.7)	489 (73.8)	982 (68.9)	1444 (58.5)
City of St. Louis	7 (100.0)	9 (17.6)	59 (39.1)	54 (11.9)	198 (26.0)	394 (51.8)	95 (33.7)	156 (47.7)	129 (19.5)	327 (22.9)	816 (33.4)
Missouri	0	6	2	15	32	41	10	11	23 (3.5)	55 (3.9)	106 (4.3)
Illinois	0	2	3	0	22	8	9	9	5 (0.8)	27 (1.9)	44 (1.8)
Other	0	1	4	7	7	9	6	3	12 (1.8)	19 (1.3)	34 (1.4)
Unknown	0	0	1	4	10	7	2	5	5 (0.8)	15 (1.1)	24 (1.0)
TOTAL	7 (100.0)	51 (100.0)	151 (100.0)	454 (100.0)	762 (100.0)	761 (100.0)	282 (100.0)	327 (100.0)	663 (100.0)	1425 (100.0)	2468 (100.0)

* - 18.5% sample

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table B-2

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ST. LOUIS COUNTY

-1972-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny* Under \$50	Person -to- Person	Impact	Index
St. Louis County	23 (82.1)	47 (83.9)	96 (52.7)	318 (75.5)	494 (63.6)	317 (44.8)	142 (53.8)	139 (39.7)	484 (70.5)	978 (66.8)	1437 (59.0)
City of St. Louis	4 (14.3)	8 (14.3)	64 (35.2)	73 (17.3)	212 (27.3)	323 (45.7)	97 (36.9)	170 (48.6)	149 (21.7)	361 (24.7)	781 (32.1)
Missouri	0	1	5	15	37	47	13	22	21 (3.1)	58 (4.0)	118 (4.8)
Illinois	0	0	7	8	17	10	8	7	15 (2.2)	32 (2.2)	50 (2.1)
Other	1	0	5	4	11	7	3	3	10 (1.5)	21 (1.4)	31 (1.3)
Unknown	0	0	5	3	6	3	1	9	8 (1.2)	14 (1.0)	18 (0.7)
TOTAL	28 (100.0)	56 (100.0)	182 (100.0)	421 (100.0)	777 (100.0)	707 (100.0)	264 (100.0)	350 (100.0)	687 (100.0)	1464 (100.0)	2435 (100.0)

* - 19.4% sample

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table B-3

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ST. LOUIS COUNTY

-1973-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny* Under \$50	Person -to- Person	Impact	Index
St. Louis County	19 (59.4)	60 (60.0)	117 (50.9)	415 (77.6)	617 (60.4)	319 (44.2)	153 (56.3)	200 (40.9)	611 (69.1)	1228 (64.0)	1700 (58.4)
City of St. Louis	11 (34.4)	28 (28.0)	90 (39.1)	70 (13.1)	294 (28.8)	322 (44.7)	79 (29.0)	229 (46.8)	199 (22.2)	493 (25.7)	894 (30.7)
Missouri	1	6	12	24	60	44	18	30	43 (4.8)	103 (5.4)	165 (5.7)
Illinois	1	2	1	6	23	15	5	11	10 (1.1)	33 (1.7)	53 (1.8)
Other	0	2	3	9	7	10	13	9	14 (1.6)	21 (1.1)	44 (1.5)
Unknown	0	2	7	11	20	11	4	10	20 (2.2)	40 (2.1)	55 (1.9)
TOTAL	32 (100.0)	100 (100.0)	230 (100.0)	535 (100.0)	1021 (100.0)	721 (100.0)	272 (100.0)	489 (100.0)	897 (100.0)	1918 (100.0)	2911 (100.0)

* - 26.7% sample

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table B-4

RESIDENCY DISTRIBUTIONS OF
JUVENILES APPREHENDED ON INDEX CRIME CHARGES

IN ST. LOUIS COUNTY

-1969-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
St. Louis County	0 (0.0)	8 (100.0)	54 (67.5)	42 (87.5)	721 (82.4)	158 (57.2)	306 (73.4)	781 (63.8)	104 (74.8)	825 (81.4)	1289 (75.5)
City of St. Louis	3 (100.0)	0 (0.0)	24 (30.0)	5 (10.4)	137 (15.7)	103 (37.3)	98 (23.5)	400 (32.7)	32 (23.0)	169 (16.7)	370 (21.6)
Other	0	0	1	1	15	15	13	43	2 (1.4)	17 (1.7)	45 (2.6)
Unknown	0	0	1	0	2	0	0	1	1 (0.7)	3 (0.3)	3 (0.2)
TOTAL	3 (100.0)	8 (100.0)	80 (100.0)	48 (100.0)	875 (100.0)	276 (100.0)	417 (100.0)	1227 (100.0)	139 (100.0)	1014 (100.0)	1707 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table B-5

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ST. LOUIS COUNTY

-1970-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
St. Louis County	0 (0.0)	29 (87.9)	94 (72.3)	56 (90.3)	866 (91.7)	217 (68.7)	266 (81.1)	980 (67.9)	179 (79.6)	1045 (89.4)	1528 (84.3)
City of St. Louis	0 (0.0)	4 (12.1)	35 (26.9)	6 (9.7)	64 (6.8)	92 (29.1)	56 (17.1)	409 (28.3)	45 (20.0)	109 (9.3)	257 (14.2)
Other	0	0	0	0	13	6	6	53	0 (0.0)	13 (1.1)	25 (1.4)
Unknown	0	0	1	0	1	1	0	2	1 (0.4)	2 (0.2)	3 (0.2)
TOTAL	0 (100.0)	33 (100.0)	130 (100.0)	62 (100.0)	944 (100.0)	316 (100.0)	328 (100.0)	1444 (100.0)	225 (100.0)	1169 (100.0)	1813 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table B-6

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ST. LOUIS COUNTY

-1971-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
St. Louis County	0 (0.0)	10 (83.3)	50 (75.8)	65 (89.0)	761 (89.0)	186 (65.3)	178 (70.9)	1085 (67.3)	125 (82.8)	886 (88.1)	1250 (81.1)
City of St. Louis	0 (0.0)	1 (8.3)	16 (24.2)	6 (8.2)	79 (9.2)	91 (31.9)	67 (26.7)	439 (27.2)	23 (15.2)	102 (10.1)	260 (16.9)
Other	0	1	0	2	15	7	6	85	3 (2.0)	18 (1.8)	31 (2.0)
Unknown	0	0	0	0	0	1	0	3	0 (0.0)	0 (0.0)	1 (0.1)
TOTAL	0 (100.0)	12 (100.0)	65 (100.0)	73 (100.0)	855 (100.0)	285 (100.0)	251 (100.0)	1612 (100.0)	151 (100.0)	1006 (100.0)	1542 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table B-7

RESIDENCY DISTRIBUTIONS OF
JUVENILES APPREHENDED ON INDEX CRIME CHARGES

IN ST. LOUIS COUNTY

-1972-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
St. Louis County	0 (0.0)	12 (100.0)	79 (69.9)	76 (89.4)	708 (92.3)	260 (77.8)	195 (80.9)	1152 (67.7)	167 (79.5)	875 (89.6)	1330 (85.7)
City of St. Louis	0 (0.0)	0 (0.0)	34 (30.1)	6 (7.1)	39 (5.1)	64 (19.2)	45 (18.7)	481 (28.3)	40 (19.0)	79 (8.1)	188 (12.1)
Other	0	0	0	3	14	10	1	63	3 (1.4)	17 (1.7)	28 (1.8)
Unknown	0	0	0	0	6	0	0	5	0 (0.0)	6 (0.6)	6 (0.4)
TOTAL	0 (100.0)	12 (100.0)	113 (100.0)	85 (100.0)	767 (100.0)	334 (100.0)	241 (100.0)	1701 (100.0)	210 (100.0)	977 (100.0)	1552 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table B-8

RESIDENCY DISTRIBUTIONS OF
JUVENILES APPREHENDED ON INDEX CRIME CHARGES

IN ST. LOUIS COUNTY

-1973-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
St. Louis County	5 (100.0)	8 (100.0)	52 (69.3)	88 (94.6)	827 (88.2)	233 (74.4)	182 (87.9)	921 (59.4)	153 (84.5)	980 (87.6)	1395 (85.1)
City of St. Louis	0 (0.0)	0 (0.0)	22 (29.3)	0 (0.0)	87 (9.3)	76 (24.3)	17 (8.2)	551 (35.5)	22 (12.2)	109 (9.7)	202 (12.3)
Other	0	0	1	5	21	3	8	74	6 (3.3)	27 (2.4)	38 (2.3)
Unknown	0	0	0	0	3	1	0	4	0 (0.0)	3 (0.3)	4 (0.2)
TOTAL	5 (100.0)	8 (100.0)	75 (100.0)	93 (100.0)	938 (100.0)	313 (100.0)	207 (100.0)	1550 (100.0)	181 (100.0)	1119 (100.0)	1639 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police

APPENDIX C

ARREST RESIDENCY DATA FOR THE
ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

Table C-1

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1966-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	1 (100.0)	3 (50.0)	2 (9.5)	3 (21.4)	19 (38.8)	10 (14.3)	7 (29.2)	35 (24.0)	9 (21.4)	28 (30.8)	45 (24.3)
City of St. Louis	0 (0.0)	0 (0.0)	15 (71.4)	8 (57.1)	25 (51.0)	48 (68.6)	9 (37.5)	80 (54.8)	23 (54.8)	48 (52.7)	105 (56.8)
St. Louis County	0	3	4	3	4	10	6	25	10 (23.8)	14 (15.4)	30 (16.2)
Other	0	0	0	0	1	1	2	2	0 (0.0)	1 (1.1)	4 (2.2)
Unknown	0	0	0	0	0	1	0	4	0 (0.0)	0 (0.0)	1 (0.5)
TOTAL	1 (100.0)	6 (100.0)	21 (100.0)	14 (100.0)	49 (100.0)	70 (100.0)	24 (100.0)	146 (100.0)	42 (100.0)	91 (100.0)	185 (100.0)

Source: Arrest records of police departments in the adjacent municipalities.

Table C-2

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1967-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	3 (50.0)	3 (42.9)	6 (40.0)	20 (74.1)	17 (34.7)	14 (13.9)	7 (18.4)	29 (17.8)	32 (58.2)	49 (47.1)	70 (28.8)
City of St. Louis	2 (33.3)	4 (57.1)	7 (46.7)	3 (11.1)	25 (51.0)	68 (67.3)	21 (55.3)	92 (56.4)	16 (29.1)	41 (39.4)	130 (53.5)
St. Louis County	1	0	1	3	3	14	6	28	5 (9.1)	8 (7.7)	28 (11.5)
Other	0	0	0	1	2	3	1	12	1 (1.8)	3 (2.9)	7 (2.9)
Unknown	0	0	1	0	2	2	3	2	1 (1.3)	3 (2.9)	8 (3.3)
TOTAL	6 (100.0)	7 (100.0)	15 (100.0)	27 (100.0)	49 (100.0)	101 (100.0)	38 (100.0)	163 (100.0)	55 (100.0)	104 (100.0)	243 (100.0)

Source: Arrest records of police departments in the adjacent municipalities.

Table C-3

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1968-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	2 (50.0)	2 (50.0)	3 (13.6)	48 (57.1)	21 (22.3)	16 (16.3)	16 (34.0)	60 (27.8)	55 (48.2)	76 (36.5)	108 (30.6)
City of St. Louis	1 (25.0)	2 (50.0)	18 (81.8)	16 (19.0)	57 (60.6)	69 (70.4)	27 (57.4)	103 (47.7)	37 (32.5)	94 (45.2)	190 (53.8)
St. Louis County	1	0	1	15	14	6	2	36	17 (14.9)	31 (14.9)	39 (11.0)
Other	0	0	0	3	2	3	1	11	3 (2.6)	5 (2.4)	9 (2.5)
Unknown	0	0	0	2	0	4	1	6	2 (1.8)	2 (1.0)	7 (2.0)
TOTAL	4 (100.0)	4 (100.0)	22 (100.0)	84 (100.0)	94 (100.0)	98 (100.0)	47 (100.0)	216 (100.0)	114 (100.0)	208 (100.0)	353 (100.0)

Source: Arrest records of police departments in the adjacent municipalities.

Table C-4

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1969-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	5 (100.0)	3 (60.0)	5 (33.3)	26 (54.2)	36 (41.4)	18 (19.4)	16 (34.8)	72 (25.8)	39 (53.4)	75 (46.9)	109 (36.5)
City of St. Louis	0 (0.0)	1 (20.0)	9 (60.0)	14 (29.2)	38 (43.7)	59 (63.4)	22 (47.8)	143 (51.3)	24 (32.9)	62 (38.8)	143 (47.8)
St. Louis County	0	0	0	4	7	11	3	44	4 (5.5)	11 (6.9)	25 (8.4)
Other	0	1	1	2	6	1	3	17	4 (5.5)	10 (6.3)	14 (4.7)
Unknown	0	0	0	2	0	4	2	3	2 (2.7)	2 (1.3)	8 (2.7)
TOTAL	<u>5</u> (100.0)	<u>5</u> (100.0)	<u>15</u> (100.0)	<u>48</u> (100.0)	<u>87</u> (100.0)	<u>93</u> (100.0)	<u>46</u> (100.0)	<u>279</u> (100.0)	<u>73</u> (100.0)	<u>160</u> (100.0)	<u>299</u> (100.0)

Source: Arrest records of police departments in the adjacent municipalities.

Table C-5

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1970-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	2 (25.0)	12 (25.5)	34 (68.0)	52 (39.1)	14 (12.0)	19 (30.2)	71 (18.9)	48 (45.7)	100 (42.0)	133 (31.8)
City of St. Louis	0 (0.0)	2 (25.0)	28 (59.6)	6 (12.0)	55 (41.4)	75 (64.1)	28 (44.4)	202 (53.9)	36 (34.3)	91 (38.2)	194 (46.4)
St. Louis County	0	4	4	8	18	21	13	78	16 (15.2)	34 (14.3)	68 (16.3)
Other	0	0	2	1	5	5	2	19	3 (2.9)	8 (3.4)	15 (3.6)
Unknown	0	0	1	1	3	2	1	5	2 (1.9)	5 (2.1)	8 (1.9)
TOTAL	0 (100.0)	8 (100.0)	47 (100.0)	50 (100.0)	133 (100.0)	117 (100.0)	63 (100.0)	375 (100.0)	105 (100.0)	238 (100.0)	418 (100.0)

Source: Arrest records of police departments in the adjacent municipalities.

Table C-6

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1971-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	2 (33.3)	13 (27.1)	24 (42.9)	51 (38.3)	12 (10.3)	24 (44.4)	14 (14.0)	39 (33.3)	90 (36.0)	126 (29.9)
City of St. Louis	7 (100.0)	4 (66.7)	25 (52.1)	18 (32.1)	54 (40.6)	82 (70.1)	19 (35.2)	64 (64.0)	54 (46.2)	108 (43.2)	209 (49.6)
St. Louis County	0	0	8	11	22	19	11	17	19 (16.2)	41 (16.4)	71 (16.9)
Other	0	0	2	2	6	3	0	3	4 (3.4)	10 (4.0)	13 (3.1)
Unknown	0	0	0	1	0	1	0	2	1 (0.9)	1 (0.4)	2 (0.5)
TOTAL	7 (100.0)	6 (100.0)	48 (100.0)	56 (100.0)	133 (100.0)	117 (100.0)	54 (100.0)	100 (100.0)	117 (100.0)	250 (100.0)	421 (100.0)

* - 17.2% sample

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table C-7

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1972-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny* Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	1 (33.3)	2 (40.0)	15 (29.4)	32 (51.6)	72 (47.4)	21 (18.3)	15 (30.0)	16 (13.1)	50 (41.3)	122 (44.7)	158 (36.1)
City of St. Louis	2 (66.7)	2 (40.0)	22 (43.1)	21 (33.9)	58 (38.2)	76 (66.1)	24 (48.0)	79 (64.8)	47 (38.8)	105 (38.5)	205 (46.8)
St. Louis County	0	1	14	6	18	15	7	18	21 (17.4)	39 (14.3)	61 (13.9)
Other	0	0	0	3	3	3	3	5	3 (2.5)	6 (2.2)	12 (2.7)
Unknown	0	0	0	0	1	0	1	4	0 (0.0)	1 (0.4)	2 (0.5)
TOTAL	3 (100.0)	5 (100.0)	51 (100.0)	62 (100.0)	152 (100.0)	115 (100.0)	50 (100.0)	122 (100.0)	121 (100.0)	273 (100.0)	438 (100.0)

* - 20.3% sample

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table C-8

RESIDENCY DISTRIBUTIONS OF
ADULTS ARRESTED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1973-

179

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50*	Person -to- Person	Impact	Index
Adjacent Municipalities	2 (100.0)	6 (42.9)	11 (21.2)	54 (63.5)	41 (30.1)	13 (11.0)	13 (26.5)	16 (12.4)	73 (47.7)	114 (39.4)	140 (30.7)
City of St. Louis	0 (0.0)	6 (42.9)	34 (65.4)	22 (25.9)	64 (47.1)	86 (72.9)	24 (49.0)	90 (69.8)	62 (40.5)	126 (43.6)	236 (51.8)
St. Louis County	0	1	4	8	26	12	11	15	13 (8.5)	39 (13.5)	62 (13.6)
Other	0	1	2	1	1	5	0	7	4 (2.6)	5 (1.7)	10 (2.2)
Unknown	0	0	1	0	4	2	1	1	1 (0.7)	5 (1.7)	8 (1.8)
TOTAL	2 (100.0)	14 (100.0)	52 (100.0)	85 (100.0)	136 (100.0)	118 (100.0)	49 (100.0)	129 (100.0)	153 (100.0)	289 (100.0)	456 (100.0)

* - 23.8% sample

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table C-9

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*

-1966-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	0 (0.0)	5 (50.0)	3 (60.0)	24 (58.5)	27 (33.3)	14 (45.2)	49 (25.9)	8 (53.3)	32 (57.1)	73 (43.5)
City of St. Louis	0 (0.0)	0 (0.0)	5 (50.0)	1 (20.0)	10 (24.4)	51 (63.0)	12 (38.7)	80 (42.3)	6 (40.0)	16 (28.6)	79 (47.0)
St. Louis County	0	0	0	0	2	2	1	53	0 (0.0)	2 (3.6)	5 (3.0)
Other	0	0	0	0	0	1	1	5	0 (0.0)	0 (0.0)	2 (1.2)
Unknown	0	0	0	1	5	0	3	2	1 (6.7)	6 (10.7)	9 (5.4)
TOTAL	0 (100.0)	0 (100.0)	10 (100.0)	5 (100.0)	41 (100.0)	81 (100.0)	31 (100.0)	189 (100.0)	15 (100.0)	56 (100.0)	168 (100.0)

* - Arrest data does not include Maplewood or Pine Lawn.

Source: Arrest records of police departments in the adjacent municipalities.

Table C-10

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*

-1967-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	1 (100.0)	3 (30.0)	11 (84.6)	71 (70.3)	51 (54.3)	25 (58.1)	109 (30.9)	15 (62.5)	86 (68.8)	162 (61.8)
City of St. Louis	0 (0.0)	0 (0.0)	7 (70.0)	2 (15.4)	25 (24.8)	31 (33.0)	9 (20.9)	146 (41.4)	9 (37.5)	34 (27.2)	74 (28.2)
St. Louis County	0	0	0	0	5	12	7	90	0 (0.0)	5 (4.0)	24 (9.2)
Other	0	0	0	0	0	0	1	2	0 (0.0)	0 (0.0)	1 (0.4)
Unknown	0	0	0	0	0	0	1	6	0 (0.0)	0 (0.0)	1 (0.4)
TOTAL	0 (100.0)	1 (100.0)	10 (100.0)	13 (100.0)	101 (100.0)	94 (100.0)	43 (100.0)	353 (100.0)	24 (100.0)	125 (100.0)	262 (100.0)

* - Arrest data does not include Maplewood or Pine Lawn.

Source: Arrest records of police departments in the adjacent municipalities.

Table C-11

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES*

-1968-

182

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	1 (100.0)	4 (80.0)	19 (65.5)	12 (54.5)	60 (62.5)	26 (26.3)	22 (42.3)	86 (22.7)	36 (63.2)	96 (62.7)	144 (47.4)
City of St. Louis	0 (0.0)	1 (20.0)	9 (31.0)	6 (27.3)	35 (36.5)	70 (70.7)	22 (42.3)	209 (55.1)	16 (28.1)	51 (33.3)	143 (47.0)
St. Louis County	0	0	1	4	1	1	6	70	5 (8.8)	6 (3.9)	13 (4.3)
Other	0	0	0	0	0	1	2	10	0 (0.0)	0 (0.0)	3 (1.0)
Unknown	0	0	0	0	0	1	0	4	0 (0.0)	0 (0.0)	1 (0.3)
TOTAL	1 (100.0)	5 (100.0)	29 (100.0)	22 (100.0)	96 (100.0)	99 (100.0)	52 (100.0)	379 (100.0)	57 (100.0)	153 (100.0)	304 (100.0)

* - Arrest data does not include Maplewood or Pine Lawn.

Source: Arrest records of police departments in the adjacent municipalities.

Table C-12

RESIDENCY DISTRIBUTIONS OF
JUVENILES APPREHENDED ON INDEX CRIME CHARGES
IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1969-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	3 (100.0)	24 (60.0)	10 (66.7)	131 (59.5)	23 (29.9)	56 (56.0)	117 (30.7)	37 (60.7)	168 (59.8)	247 (53.9)
City of St. Louis	3 (100.0)	0 (0.0)	12 (30.0)	4 (26.7)	81 (36.8)	51 (66.2)	43 (43.0)	236 (61.9)	19 (31.1)	100 (35.6)	194 (42.4)
St. Louis County	0	0	3	0	6	2	1	23	3 (4.9)	9 (3.2)	12 (2.6)
Other	0	0	0	1	0	1	0	4	1 (1.6)	1 (0.4)	2 (0.4)
Unknown	0	0	1	0	2	0	0	1	1 (1.6)	3 (1.1)	3 (0.7)
TOTAL	3 (100.0)	3 (100.0)	40 (100.0)	15 (100.0)	220 (100.0)	77 (100.0)	100 (100.0)	381 (100.0)	61 (100.0)	281 (100.0)	458 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table C-13

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1970-

184

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	11 (78.6)	40 (54.8)	14 (82.4)	174 (74.0)	28 (35.9)	48 (55.8)	161 (34.1)	65 (62.5)	239 (70.5)	315 (62.6)
City of St. Louis	0 (0.0)	3 (21.4)	24 (32.9)	2 (11.8)	34 (14.5)	43 (55.1)	25 (29.1)	237 (50.2)	29 (27.9)	63 (18.6)	131 (26.0)
St. Louis County	0	0	8	1	26	6	11	69	9 (8.7)	35 (10.3)	52 (10.3)
Other	0	0	0	0	0	0	2	4	0 (0.0)	0 (0.0)	2 (0.4)
Unknown	0	0	1	0	1	1	0	1	1 (1.0)	2 (0.6)	3 (0.6)
TOTAL	0 (100.0)	14 (100.0)	73 (100.0)	17 (100.0)	235 (100.0)	78 (100.0)	86 (100.0)	472 (100.0)	104 (100.0)	339 (100.0)	503 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table C-14

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1971-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	0 (0.0)	17 (51.5)	11 (73.3)	89 (59.3)	16 (24.6)	17 (30.4)	187 (31.4)	28 (58.3)	117 (59.1)	150 (47.0)
City of St. Louis	0 (0.0)	0 (0.0)	13 (39.4)	3 (20.0)	40 (26.7)	46 (70.8)	30 (53.6)	308 (51.7)	16 (33.3)	56 (28.3)	132 (41.4)
St. Louis County	0	0	3	1	20	3	8	87	4 (8.3)	24 (12.1)	35 (11.0)
Other	0	0	0	0	1	0	1	13	0 (0.0)	1 (0.5)	2 (0.6)
Unknown	0	0	0	0	0	0	0	1	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	0 (100.0)	0 (100.0)	33 (100.0)	15 (100.0)	150 (100.0)	65 (100.0)	56 (100.0)	596 (100.0)	48 (100.0)	198 (100.0)	319 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table C-15

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1972-

RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	2 (100.0)	26 (54.2)	21 (87.5)	93 (71.5)	42 (47.7)	22 (59.5)	168 (27.1)	49 (66.2)	142 (69.6)	206 (62.6)
City of St. Louis	0 (0.0)	0 (0.0)	22 (45.8)	3 (12.5)	28 (21.5)	36 (40.9)	11 (29.7)	362 (58.5)	25 (33.8)	53 (26.0)	100 (30.4)
St. Louis County	0	0	0	0	9	8	4	77	0 (0.0)	9 (4.4)	21 (6.4)
Other	0	0	0	0	0	2	0	12	0 (0.0)	0 (0.0)	2 (0.6)
Unknown	0	0	0	0	0	0	0	0	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	0 (100.0)	2 (100.0)	48 (100.0)	24 (100.0)	130 (100.0)	88 (100.0)	37 (100.0)	619 (100.0)	74 (100.0)	204 (100.0)	329 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

Table C-16

RESIDENCY DISTRIBUTIONS OF
 JUVENILES APPREHENDED ON INDEX CRIME CHARGES
 IN ADJACENT ST. LOUIS COUNTY MUNICIPALITIES

-1973-

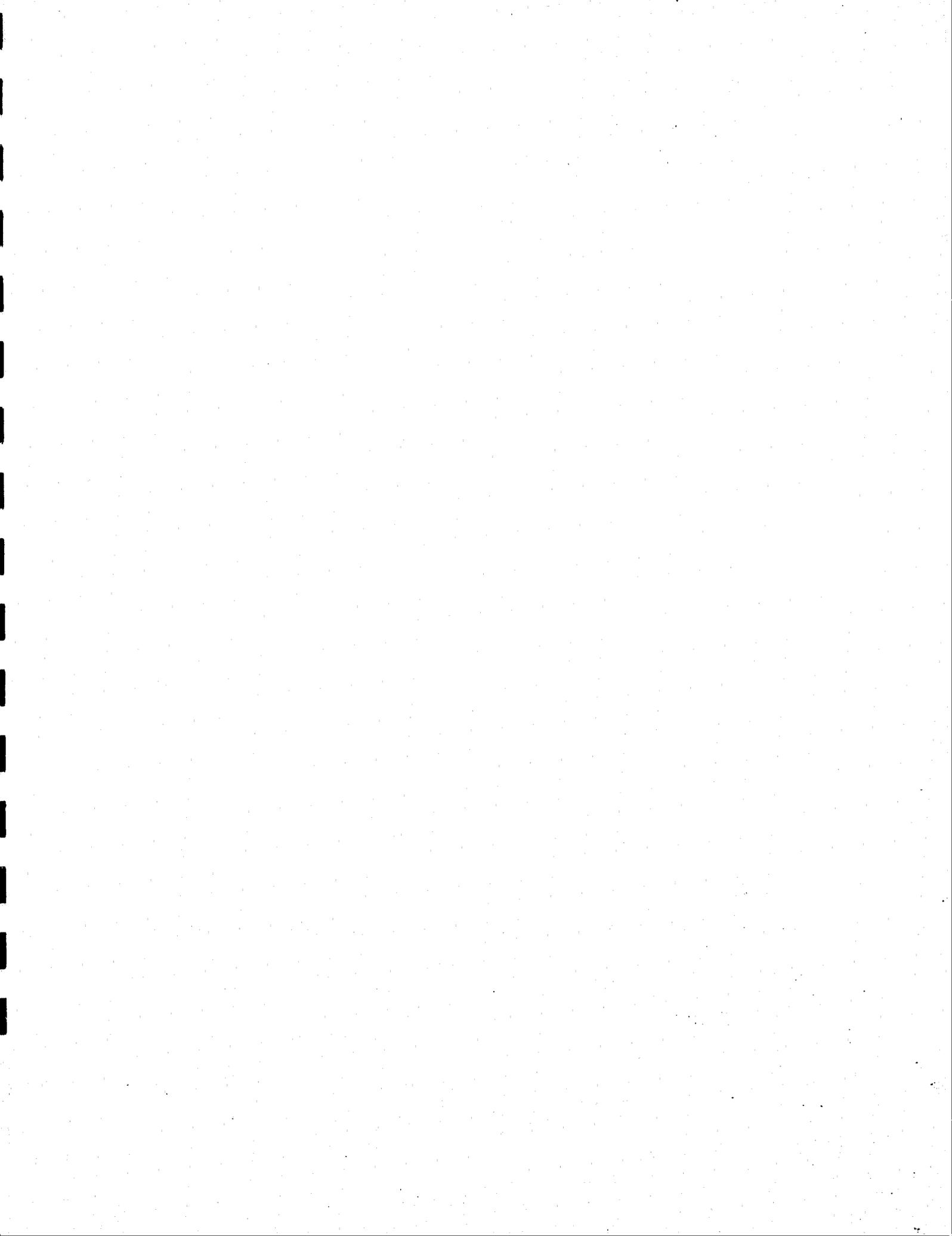
RESIDENCY	Murder	Rape	Robbery	Assault	Burglary	Larceny Over \$50	Auto Theft	Larceny Under \$50	Person -to- Person	Impact	Index
Adjacent Municipalities	0 (0.0)	0 (0.0)	13 (40.6)	20 (100.0)	92 (66.2)	23 (33.8)	11 (68.8)	141 (25.1)	33 (63.5)	125 (65.4)	159 (57.8)
City of St. Louis	0 (0.0)	0 (0.0)	15 (46.9)	0 (0.0)	29 (20.9)	40 (58.8)	1 (6.3)	360 (64.2)	15 (28.8)	44 (23.0)	85 (30.9)
St. Louis County	0	0	4	0	17	4	4	45	4 (7.7)	21 (11.0)	29 (10.5)
Other	0	0	0	0	1	1	0	12	0 (0.0)	1 (0.5)	2 (0.7)
Unknown	0	0	0	0	0	0	0	3	0 (0.0)	0 (0.0)	0 (0.0)
TOTAL	0 (100.0)	0 (100.0)	32 (100.0)	20 (100.0)	139 (100.0)	68 (100.0)	16 (100.0)	561 (100.0)	52 (100.0)	191 (100.0)	275 (100.0)

Source: Bureau of Central Police Records, St. Louis County Department of Police.

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