

A COHORT STUDY OF THE  
/ RELATIONSHIP OF ADULT CRIMINAL CAREERS  
TO JUVENILE CAREERS

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## A COHORT STUDY OF THE RELATIONSHIP OF ADULT CRIMINAL CAREERS TO JUVENILE CAREERS

### INTRODUCTION

Most of the findings in this longitudinal study of delinquency and crime are based on detailed records of police contacts with two cohorts of people, the first was born in 1942 (there are 1352 persons in this group) and the second was born in 1949 (there are 2099 in this group). These are referred to as the 1942 cohort and the 1949 cohort. The reasons for police contacts, their seriousness in the eyes of the law, the place of residence of persons with contacts at the time of each contact, and other data are utilized in determining who is most likely to engage in delinquent behavior, who will cease delinquent behavior as they grow older, and who will continue into adult criminal activity.<sup>1</sup> Data have also been obtained by interviewing 333 persons from the 1942 cohort and 566 persons from the 1949 cohort.<sup>2</sup>

Table 1 presents the basic numbers for each cohort as now available at this stage of the analysis, indicating marked cohort similarity in the number with police contacts and the number referred. Table 2 presents the number and percent of each race/ethnic group in the area at the time of interviewing and the number and percent interviewed of each group in the area and in the cohort. These interviews focused upon the processes by which juveniles either came to engage in behaviors that brought them into contact with the police or did not, and reasons why they, now adults, behave in such a way as to either have or not have contact with the police.

Inasmuch as the validity of analyses of extent or incidence of police contact depends upon the time the persons were actually present in the community, a verification of presence (through parents' addresses until 18) in Racine was initiated through reference to City Directories and Telephone Directories. This painstaking location and verification process was continued in Racine during the interviewing phase for anyone whose presence could not be established by those means available in Iowa City.<sup>3</sup> The block-by-block housing characteristics of 26

<sup>1</sup> Juvenile and adult contacts with the police were obtained from the files of the Juvenile Bureau and Records Division of the Racine Police Department. Married names located in the Records Section of the Racine Health Department provided a basis for following females throughout their careers.

<sup>2</sup> Our original goal was to interview all of the minority members and 25% of the White members of each cohort. A first refusal almost always resulted in re-assignment of another interviewer. Substitution in the case of Whites was not considered until we were convinced that the respondent was no longer in the community or other possibilities had been exhausted. Essentially all whom we intended to interview among the Whites were interviewed (constituting over 40% of those available in each instance). The percentages of Chicanos and Blacks interviewed from among those available exceeds 50%. Comparisons of the characteristics of persons interviewed from each cohort with those who were not interviewed and with all persons with continuous residence from each cohort indicates that those who were interviewed are representative of each of the larger groups.

<sup>3</sup> Persons with continuous residence are those missing no more than three years between age 6 and June 1, 1974, the cut-off date for data collection. Depending on the type of analysis involved we have utilized either entire cohorts, only those persons with continuous residence, or only those who were interviewed.

TABLE 1. COMPARISON OF NUMBER AND PERCENT OF PERSONS PROGRESSING THROUGH SYSTEM FOR COHORT AND FOR PERSONS INTERVIEWED FROM EACH COHORT

In Cohort	<u>Continuous Residents</u>		<u>With Police Contacts</u>		<u>Referred to Courts or Agency</u>		<u>Court Dispositions or Sanctions</u>
	N	N %	N %	N %	N %		
1942	1352	633 (46.8)	434 (68.5)	251 (57.8)			?
1949	2099	1297 (61.8)	896 (69.0)	538 (60.0)			?
1955	2684	?	?	?			?
	<u>Persons Interviewed</u>		<u>With Police Contacts</u>		<u>Referred to Courts or Agency</u>		<u>Court Dispositions or Sanctions</u>
1942	333		227 (68.1)	80 (35.2)			?
1949	556		379 (68.1)	151 (39.8)			?

TABLE 2. RELATIONSHIP OF COHORT MEMBERS AVAILABLE IN RACINE AND INTERVIEWED TO SIZE OF COHORTS

	<u>White</u>		<u>Chicano</u>		<u>Black</u>	
	M	F	M	F	M	F
<i>1942 Cohort</i>						
Number in Cohort	639	638	9	15	31	20
In Racine Area 1976	362	329	4	9	19	13
Interviewed	145	158	2	8	10	10
% of Cohort in Area	56.7	51.6	44.4	60.0	61.3	65.0
% of in Area Interviewed	40.1	48.0	50.0	88.9	52.6	76.9
% of Cohort Interviewed	22.7	24.8	22.2	53.3	32.3	50.0
<i>1949 Cohort</i>						
Number in Cohort	974	931	33	28	74	59
In Racine Area 1976	569	454	19	22	49	43
Interviewed	230	229	17	20	32	28
% of Cohort in Area	58.4	48.8	57.6	78.6	66.2	72.9
% of in Area Interviewed	40.4	50.4	89.5	90.9	65.3	65.1
% of Cohort Interviewed	23.6	24.6	51.5	71.4	43.2	47.5

residential locations are shown on Maps 1 and 2 on the next page. Each residential area is labeled on Map 3 on the following page. It should also be noted that we have placed each in one of five Natural Areas. The block residential data for 1970 are shown in computer-contoured form on Maps 4 and 5. Average geometric scores were utilized in developing the five computer-contoured areas shown on Maps 6 and 7. These maps may be of some help in visualizing the spatial distribution of socioeconomic status in Racine.

#### POLICE CONTACTS AND REFERRALS

Police contacts for alleged delinquent and criminal behavior are highly concentrated in some areas of the community and among some individuals in each group, both in terms of the recurrence of contacts and the seriousness of behavior that generates police contacts. At the same time, police contacts are widely dispersed in that most people, regardless of where they reside, have at least one or two contacts with the police sometime during their lives.

More specifically, we find that while only 43 percent of the White males in the 1942 cohort had a non-traffic police contact between the ages of 6 through 17, 60 percent of the Black males did so. For the 1949 males, 50 percent of the Whites had a contact but 81 percent of the Blacks did so. Contact rates for females were much lower, less than half as high. Rates were higher for the inner city than in higher socioeconomic status areas but Black-White comparisons could not be made in this respect because there were so few Blacks outside the inner city. As each cohort moved through the age periods 6 through 17, 18 through 20, and 21 or over, increasingly larger proportions of each group had at least one police contact so that almost two-thirds of the Whites and 9 out of 10 Blacks had had a police contact at some time during their careers. While there was variation by socioeconomic status (from 51 percent in the 1942 cohort and 59 percent of the White males in the inner city to 30 percent and 44 percent in the outer ring of areas had police contacts for non-traffic offenses during the ages 6 through 17) at least half of the Whites in even the best socioeconomic status areas had a police contact by the age of either 33 or 26. Delinquency and crime were in fact White behaviors outside the inner city. Thus, police contacts for delinquency and crime were spread throughout the cohorts. The proportion who had police contacts at one time or another during their career was even greater when traffic offenses were included, 85 percent for males in the 1942 cohort and 82 percent for the males in the 1949 cohort. Similarly, while only 24 percent of the females in the 1942 cohort and 33 percent in the 1949 cohort had a non-traffic police contact at some time during their careers, 48 percent and 52 percent respectively had a contact if traffic offenses were included.

At the same time that we must recognize that delinquency and crime are widely dispersed throughout the community we must also realize that an extremely high degree of concentration is present if we consider the percentage of each group who are responsible for the great majority of the police contacts which take place. For example, those 22 percent of the White males in the 1942 cohort who had five or more non-traffic contacts were responsible for 75 percent of the total number of non-traffic contacts by persons in the cohort; 21 percent of the 1949 cohort were responsible for 77 percent of the non-traffic contacts. If we turn to more serious reasons for police contacts, felonies, we find that 11.5 percent of the White males in the 1942 cohort were responsible for 100 percent of their felonies and 12.5 percent in the 1949 cohort were responsible for all of that cohort's White male felonies.

PLOT OF RACINE, WISCONSIN 1960

GEOMETRIC PLOT OF 4-12-73

## NATURAL AREAS OF RACINE

BASED ON 1960 CENSUS OF HOUSING DATA

### LEGEND




#### HOUSING AREAS

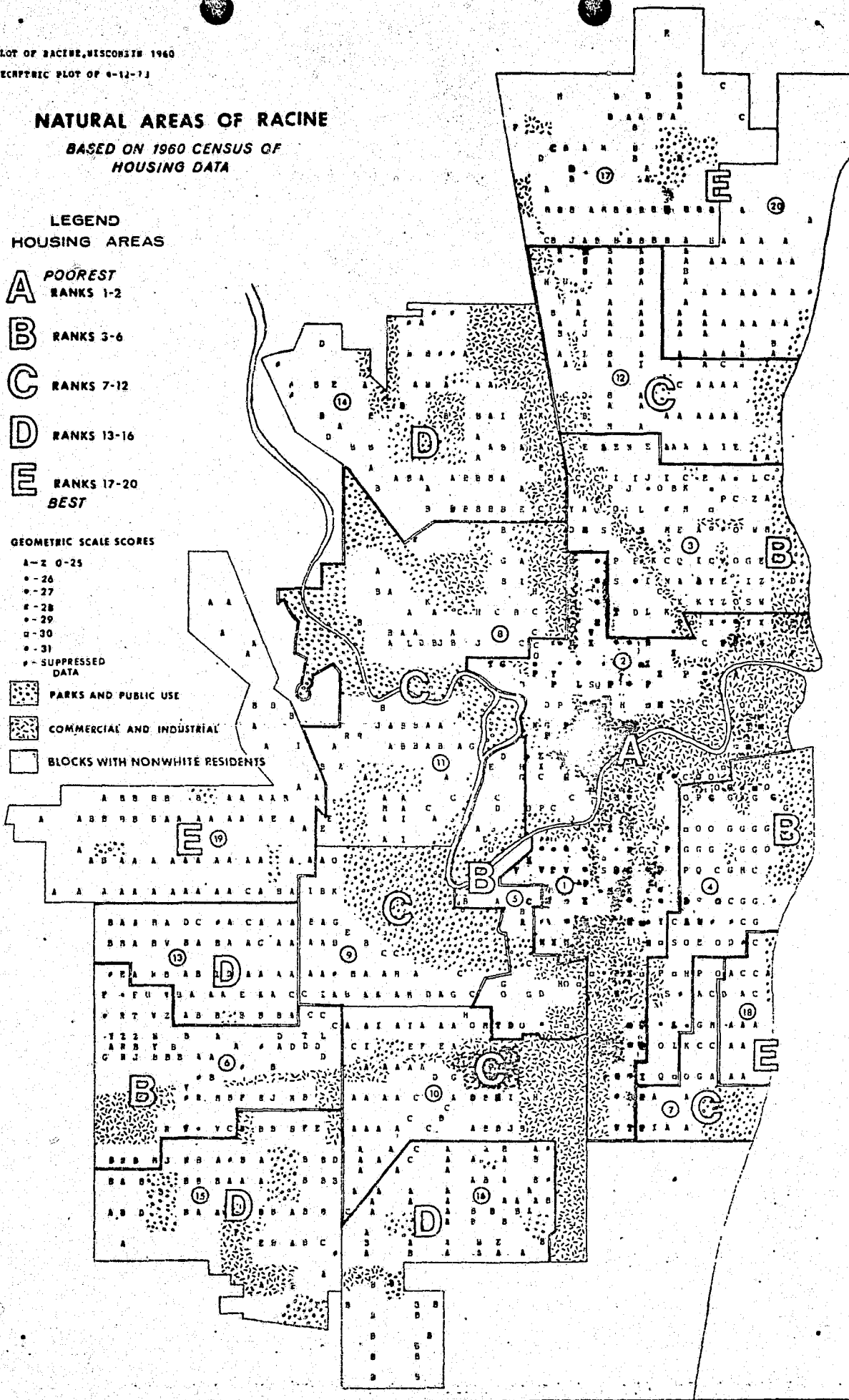
- A** POOREST  
RANKS 1-2
- B** RANKS 3-6
- C** RANKS 7-12
- D** RANKS 13-16
- E** RANKS 17-20  
BEST

#### GEOMETRIC SCALE SCORES

A-Z 0-25

- -26
- -27
- -28
- -29
- -30
- -31
- - SUPPRESSED DATA

-  PARKS AND PUBLIC USE
-  COMMERCIAL AND INDUSTRIAL
-  BLOCKS WITH NONWHITE RESIDENTS






PLOT OF RACINE, WISCONSIN 1970  
 GEOMETRIC PLOT OF 4-12-73

# NATURAL AREAS OF RACINE BASED ON 1970 CENSUS OF HOUSING DATA

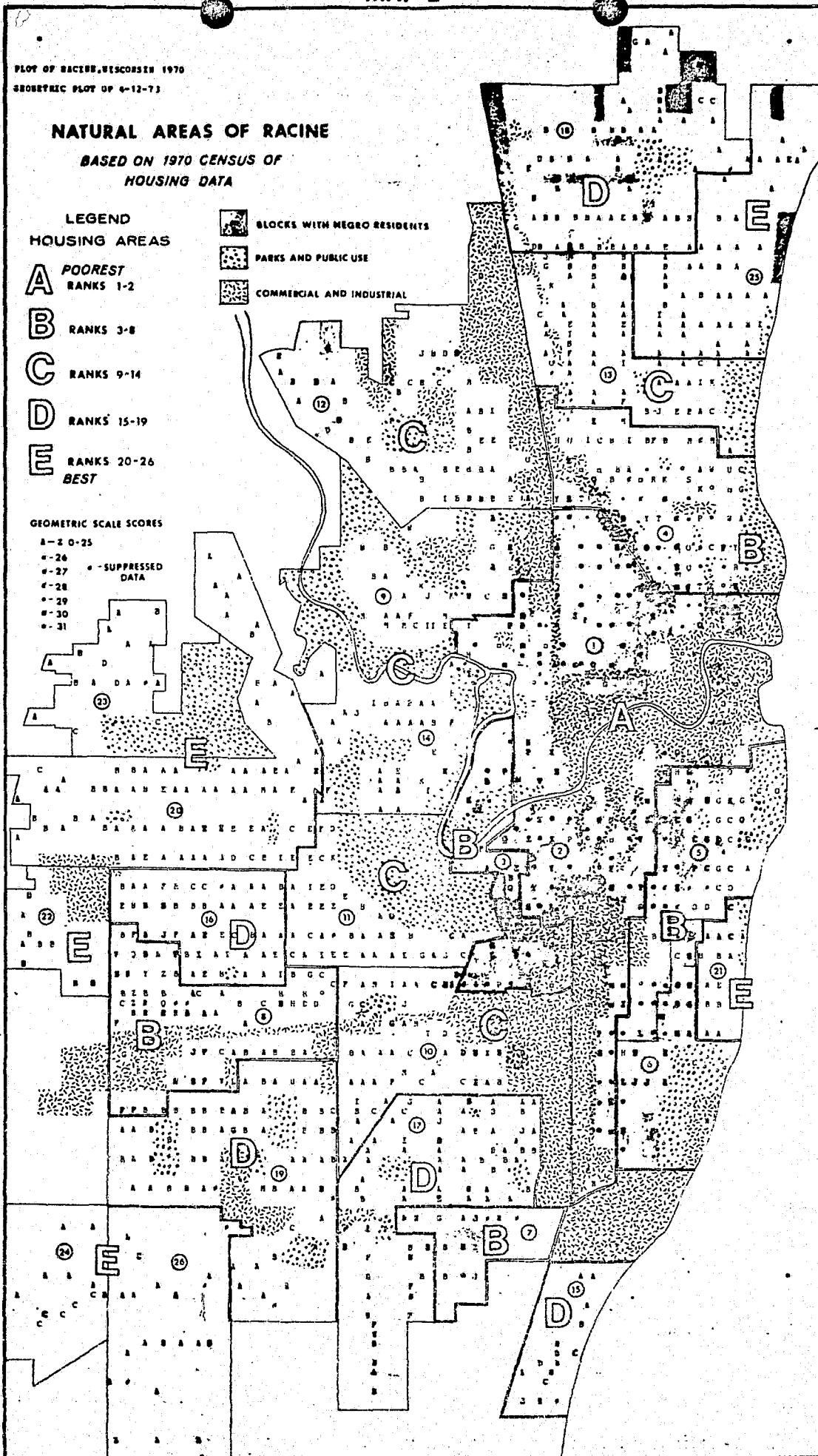
## LEGEND HOUSING AREAS

- A** POOREST  
RANKS 1-2
- B** RANKS 3-8
- C** RANKS 9-14
- D** RANKS 15-19
- E** RANKS 20-26  
BEST

-  BLOCKS WITH NEGRO RESIDENTS
-  PARKS AND PUBLIC USE
-  COMMERCIAL AND INDUSTRIAL

## GEOMETRIC SCALE SCORES

- A-2 0-25
- 26
- 27
- 28
- 29
- 30
- 31
- SUPPRESSED DATA



**BASED ON 1970 CENSUS OF  
HOUSING DATA**

**A POOREST  
RANKS 1-2**

**B** RANKS 3-8.

**C RANKS 9-14**

## D RANKS 15-19

**E** RANKS 20-26  
**BEST**

 PARKS AND PUBLIC USE

**COMMERCIAL AND INDUSTRIAL**

**MIDDLE-CLASS  
RESIDENTIAL**

**NEW  
GOLD<sup>®</sup>  
COAST**

INTERSTITIAL  
AREA

MIDDLE-CLASS  
⑨ RESIDENTIAL

WESTERN  
PERIPHERAL  
(23)  
RESIDENTIAL

INNER CITY

**MIDDLE-CLASS** (14)  
**RESIDENTIAL**

MIDDLE-CLASS  
RESIDENTIAL

INTERSTITIAL  
(B) AREA

INTERSTITIAL  
AREA

W.P.R. 

MIDDLE-CLASS  
(10) D (11) RESIDENTIAL

**OLD  
GOLD  
COAST**

PERIPHERAL  
B COMMERCIAL-  
INDUSTRIAL

MIDDLE-CLASS  
RESIDENTIAL

REVITALIZATION  
AREA

MIDDLE-CLASS  
RESIDENTIAL D

**BARRIC**

WESTERN  
PERIPHERAL  
RESIDENTIAL

**MIDDLE-CLASS  
RESIDENTIAL**

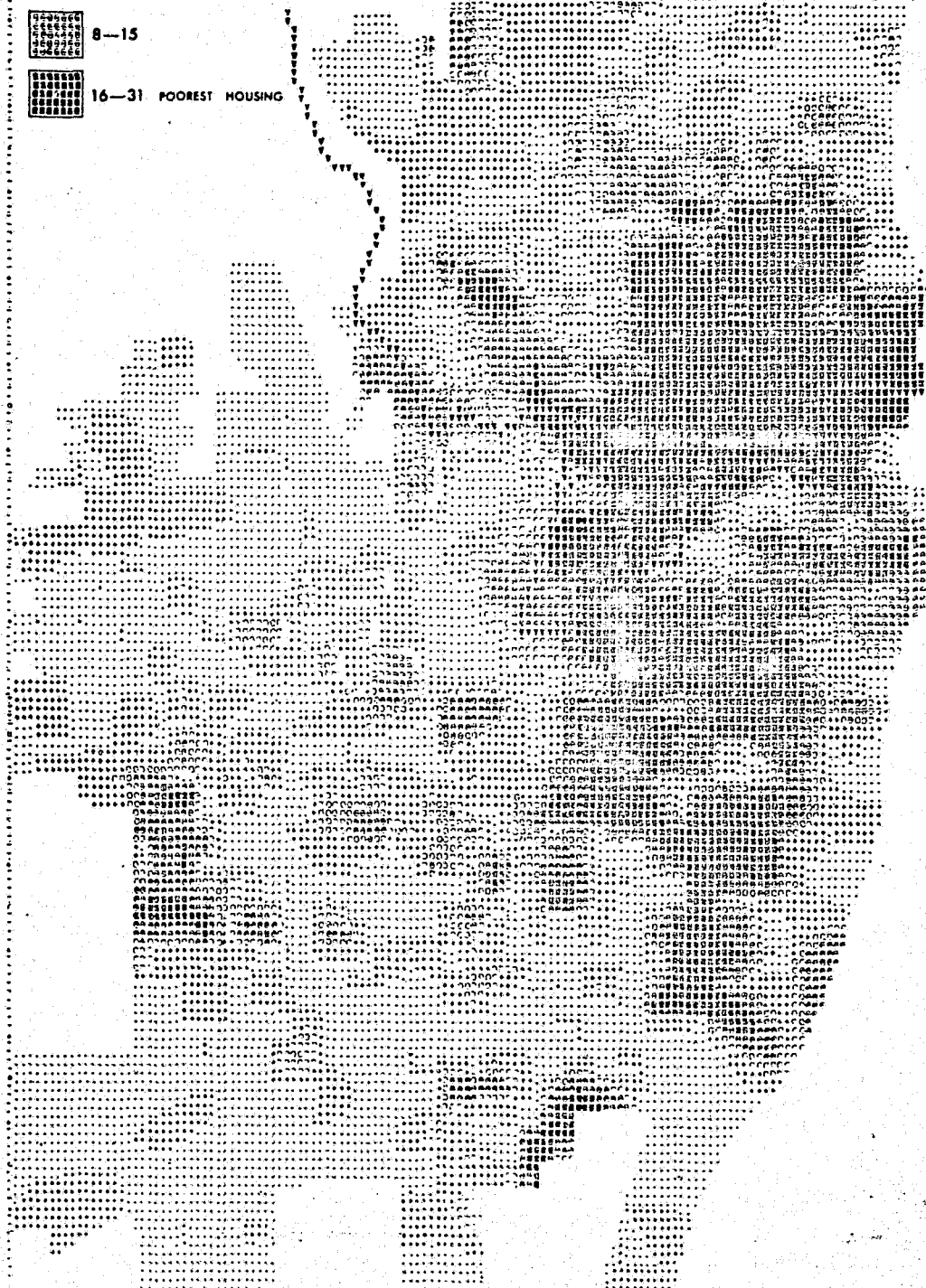
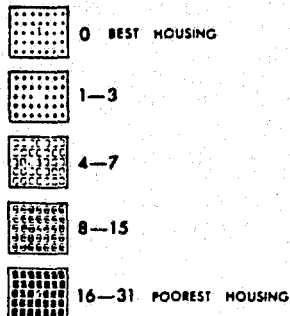


# NATURAL AREAS OF RACINE

BASED ON 1970 CENSUS OF HOUSING DATA

HOUSING CHARACTERISTICS CONTOURED OVER  
COMMERCIAL, INDUSTRIAL AND PARKS PLOTS

## GEOMETRIC SCALE SCORES

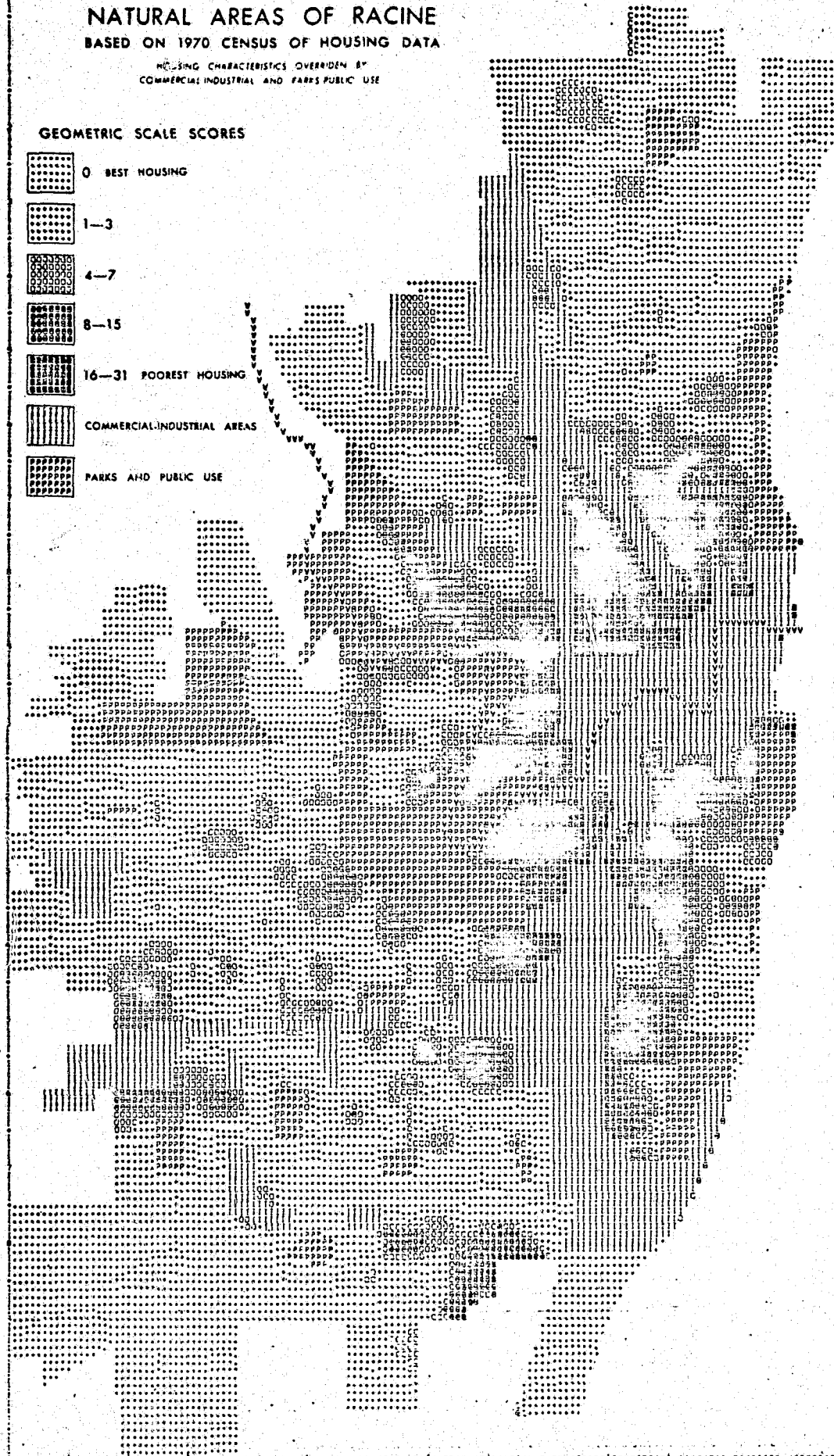
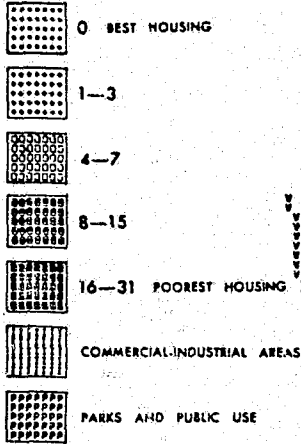


# NATURAL AREAS OF RACINE

## BASED ON 1970 CENSUS OF HOUSING DATA

HOUSING CHARACTERISTICS OVERRIDDEN BY  
COMMERCIAL/INDUSTRIAL AND PARKS/PUBLIC USE

### GEOMETRIC SCALE SCORES



NATURAL AREAS OF RACINE

BASED ON 1960 CENSUS OF HOUSING DATA  
AVERAGE GEOMETRIC SCORES OF 20 AREAS

BEST HOUSING

0000 .048-1.333

++++ 1.334-2.571

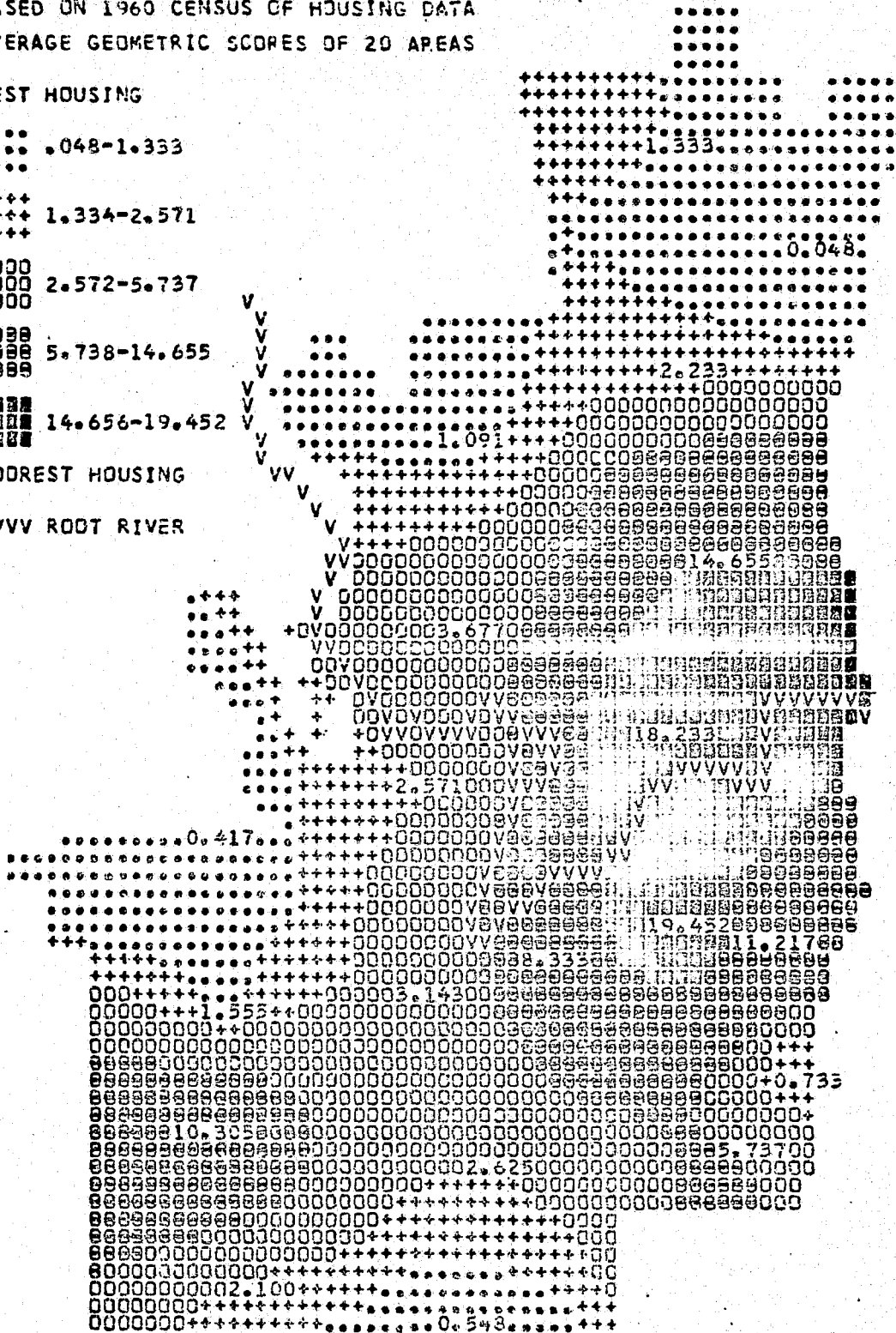
0000 2.572-5.737

0000 5.738-14.655

0000 14.656-19.452

POOREST HOUSING

VVVV ROOT RIVER



L  
A  
K  
E  
  
M  
I  
C  
H  
I  
G  
A  
N

NATURAL AREAS OF RACINE  
 BASED ON 1970 CENSUS OF HOUSING DATA  
 AVERAGE GEOMETRIC SCORES OF 26 AREAS

BEST HOUSING

..... .40-1.12

+++++ 1.13-1.99

0000 2.00-6.12

8888 6.13-18.32

8888 18.33-24.72

POOREST HOUSING

VVVV ROOT RIVER



The Concentration, Spatial Distribution, and  
Race/Ethnic Sex Composition of Persons with Police Contacts

The following additional statements about the distribution of persons with police contacts, the distribution of contacts with the police, and rates, i.e., the number of occurrences per person in the cohort or some segment of the cohort, provide a basis for comprehension of the nature of the problem of delinquency and crime in the 1942 and 1949 cohorts.

1) A disproportionately small number of persons were responsible for a disproportionately large number of all police contacts. In the 1942 cohort 5.0% were responsible for 41.4% of the contacts and in the 1949 cohort 5.1% for 44.5% of the contacts.

2) When contacts were divided into traffic and non-traffic contacts and controlled for race/ethnicity|sex, the group with the highest concentration for non-traffic contacts was White females where 10.1% of the 1942 cohort accounted for 79.5% of the contacts and 14.9% of the 1949 cohort accounted for 83.3% of the contacts. The same percentage of White males accounted for about 20.0% fewer of their non-traffic contacts. Black and Chicano contacts, while concentrated, were considerably less so.

3) When contacts were divided into felonies and non-felonies and controlled for race/ethnicity|sex, the group with the highest concentration for felonies was White females with 2.2% of the 1942 cohort and 3.7% of the 1949 cohort accounting for all of the felonies. As previously mentioned it took only 11.5% and 12.6% of the 1942 and 1949 cohorts to account for all of the White male felonies. Black and Chicano concentration was again less than that for Whites.

4) When the members of each cohort were divided into four categories of those with: no contacts, 1 contact, 2-4 contacts (recidivists), and 5 or more contacts (chronics), and controlled for traffic vs. non-traffic contacts and felony vs. non-felony contacts, the concentration of contacts among recidivists and chronics became even more apparent. For example, 4.3% of the White males in the 1942 cohort (the recidivists and chronics) were responsible for 64.7% of the felony contacts and 5.3% of those from the 1949 cohort were responsible for 72.4% of the felonies. While felonies were not as concentrated among Blacks and Chicanos, recidivists and chronics may be identified as a source of most of the delinquency and crime in their groups.

5) When persons in each cohort were distributed throughout their natural areas of principal juvenile residence (the period 6 through 17), there was some decline in the proportion of male Whites with police contacts from the center of the city outward for most age periods. However, the most notable statistic is the large proportion in each area who did have police contacts at one time or another.

6) When persons in each cohort were distributed throughout their natural areas of principal juvenile residence (as above) but on a basis of whether they had traffic or non-traffic police contacts (some were in one but not the other and some in both), the differences between Whites and Blacks were greater for non-traffic than for traffic contacts, Blacks having more non-traffic contacts, but for both categories a greater percentage of the Blacks had contacts in most age periods and all age periods combined. Still, about two-thirds of the White males had contacts for both non-traffic and traffic offenses.

7) The race/ethnic composition of persons from each cohort in each natural area who had police contacts in each age period or all age periods combined was roughly the same as the race/ethnic composition of persons whose principal residence was that natural area or combination of natural areas during the ages 6 through 17.

8) When the spatial distribution of delinquency and crime is presented as measured by average number of police contacts for persons according to their most frequent area of residence during the ages 6 through 17, we find the classical pattern of high rates in the inner city with lower rates on the periphery, a pattern similar to that of the spatial distribution of people in the community according to socioeconomic status (Maps 8 and 9 and in 3 dimensional form on Maps 10 and 11).

9) The average number of police contacts per block within the 26 subareas by persons residing in these areas at the time of their police contacts systematically decreases from the inner city outward, for the 1942 cohort from 5.2 in inner city subareas 1 and 2 to 1.1 in "Gold Coast" subareas 21 and 25 and for the 1949 cohort from 11.3 to 2.2 for these areas. A similar but not quite so systematic decline per block was found for police contacts occurring within the 26 subareas. The distribution of contacts by place of contact and residence of persons with contacts is shown on Maps 12 through 15. The number and average number of contacts per block in each area and by residents per block in each area are shown on Maps 16 through 19 and 20 through 23.

10) About 80% of the contacts by Blacks were generated by those residing in the inner city areas 1 and 2, as were 50% of the Chicano contacts, but only 15% or less of the White contacts. While fewer, 60% to 75%, of the Black police contacts took place in these areas, and only 40% to 50% of the Chicanos did so, 25% to 30% of the White contacts were in these inner city areas. In other words, the area of White activity is more concentrated than are the areas of residence for contact-responsible Whites.

11) The extremes of concentration and dispersion of place of contact vs. place of residence are illustrated by the fact that 50.0% of all the contacts for everyone in the 1949 cohort residing in Area 1 were in Area 1 while only 5.6% of the contacts of those who lived in Area 26 actually took place in Area 26. Likewise, there are areas which contribute contacts to most other areas and there are areas that contribute contacts to very few other areas. There are also areas in which contacts are generated by persons from most other areas and areas in which very few contacts are generated by persons from outside.

12) While persons from some areas (this is more true of Blacks and Chicanos) have most of their police contacts in their area of residence or in contiguous areas, persons from other areas have relatively few of their contacts in their area of residence or contiguous areas (this is more true for Whites).

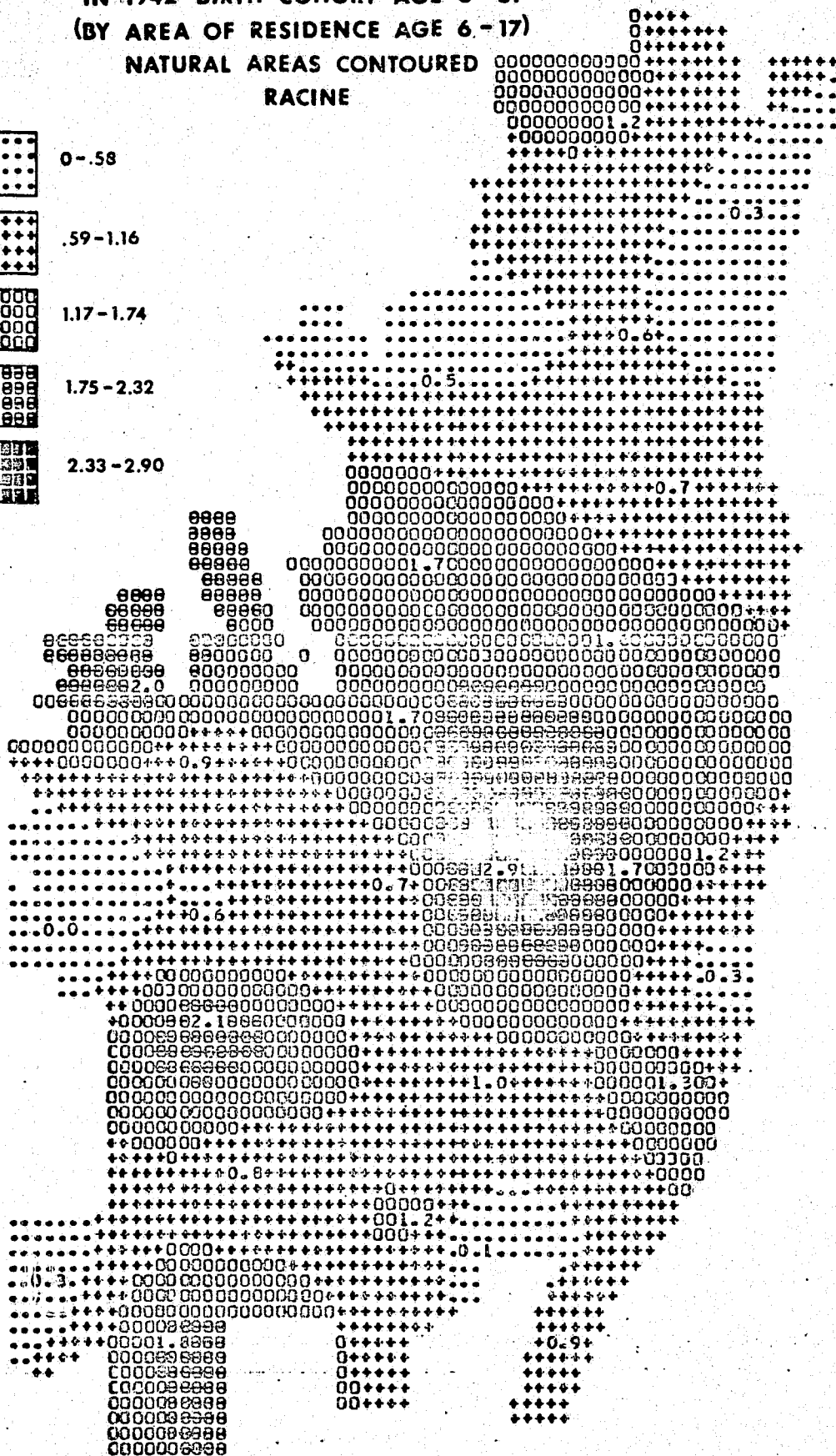
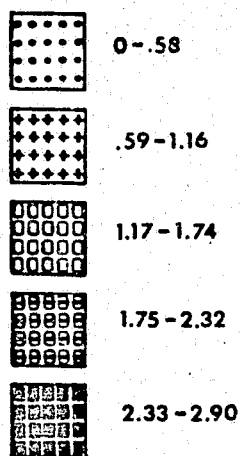
13) While some areas are characterized by having a large proportion of their police contacts generated by persons who reside in neither that area nor contiguous areas but in many widely dispersed areas, others are characterized by having most of their police contacts generated by persons from that area or contiguous areas.

14) While White males had police contacts at a greater average distance from their homes than did Black males, for most types of contacts Chicanos (who resided for the most part in an outlying barrio) had their contacts farthest from home of all. Females had their contacts closer to home for more types of contacts than did males.

15) Black males had the highest overall rate of police contact in the 1942 cohort while Chicanos and Whites had similar but lower rates. In the 1949 cohort Black males had the highest contact rates except for the age period 6 through 17 where Chicanos were highest; Whites were consistently lowest. In the 1942 cohort there was little female race/ethnic difference in police contact rates, Whites, Blacks, and Chicanos alternating ranks depending on age periods or combinations thereof. Black females, however, had the highest rate in the 1949 cohort and Whites the lowest.



# NATURAL AREAS CONTOURED RACINE

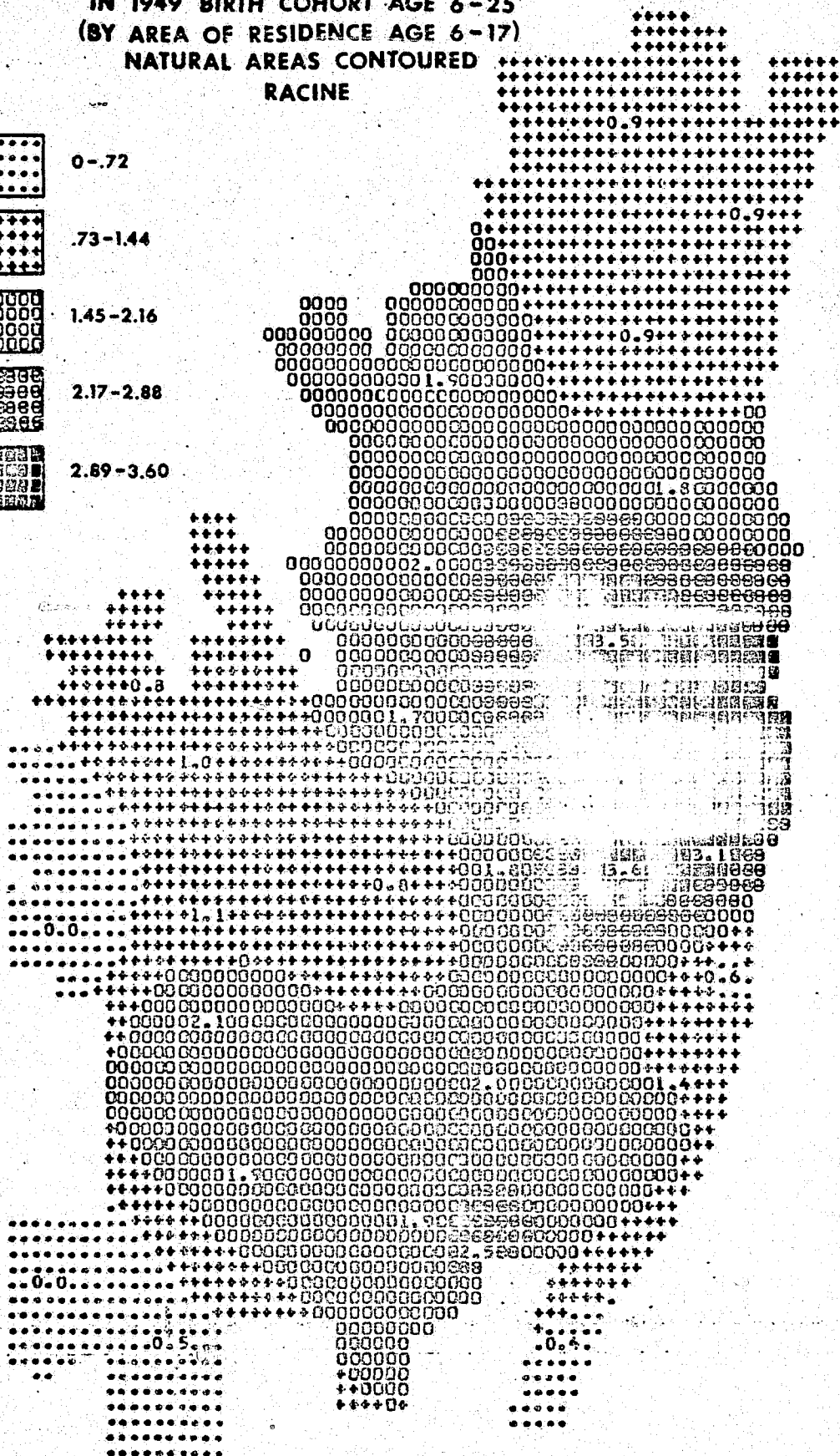
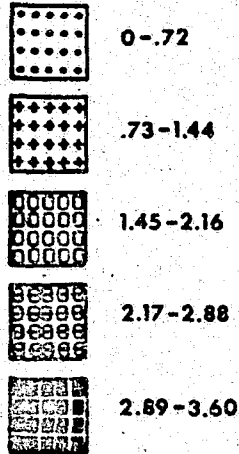


# MAP 9

## AVERAGE NUMBER OF POLICE CONTACTS PER PERSON

IN 1949 BIRTH COHORT AGE 6-25  
(BY AREA OF RESIDENCE AGE 6-17)

NATURAL AREAS CONTOURED  
RACINE

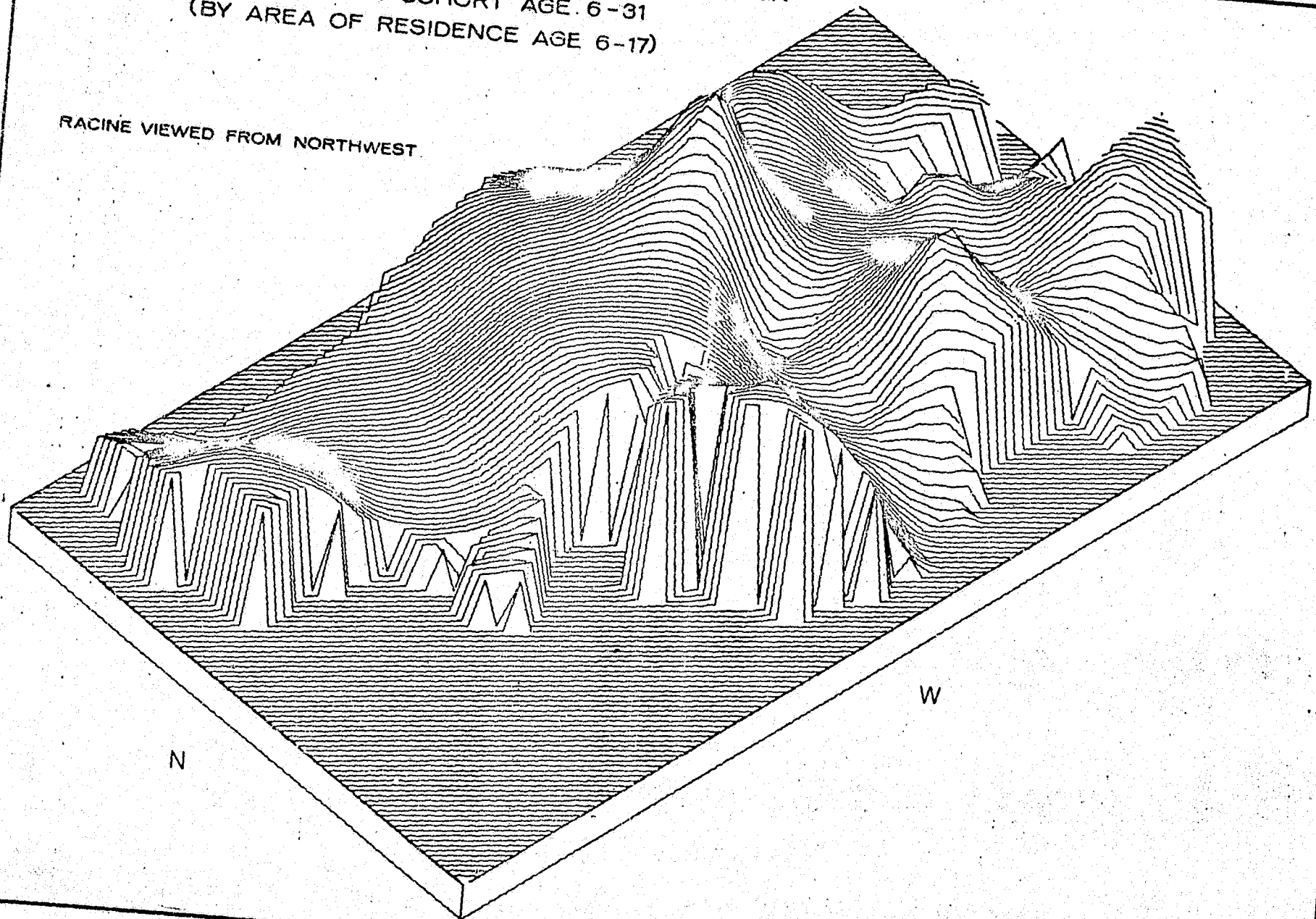




MAP 10

AVERAGE NUMBER OF POLICE CONTACTS PER PERSON  
IN 1942 BIRTH COHORT AGE 6-31  
(BY AREA OF RESIDENCE AGE 6-17)

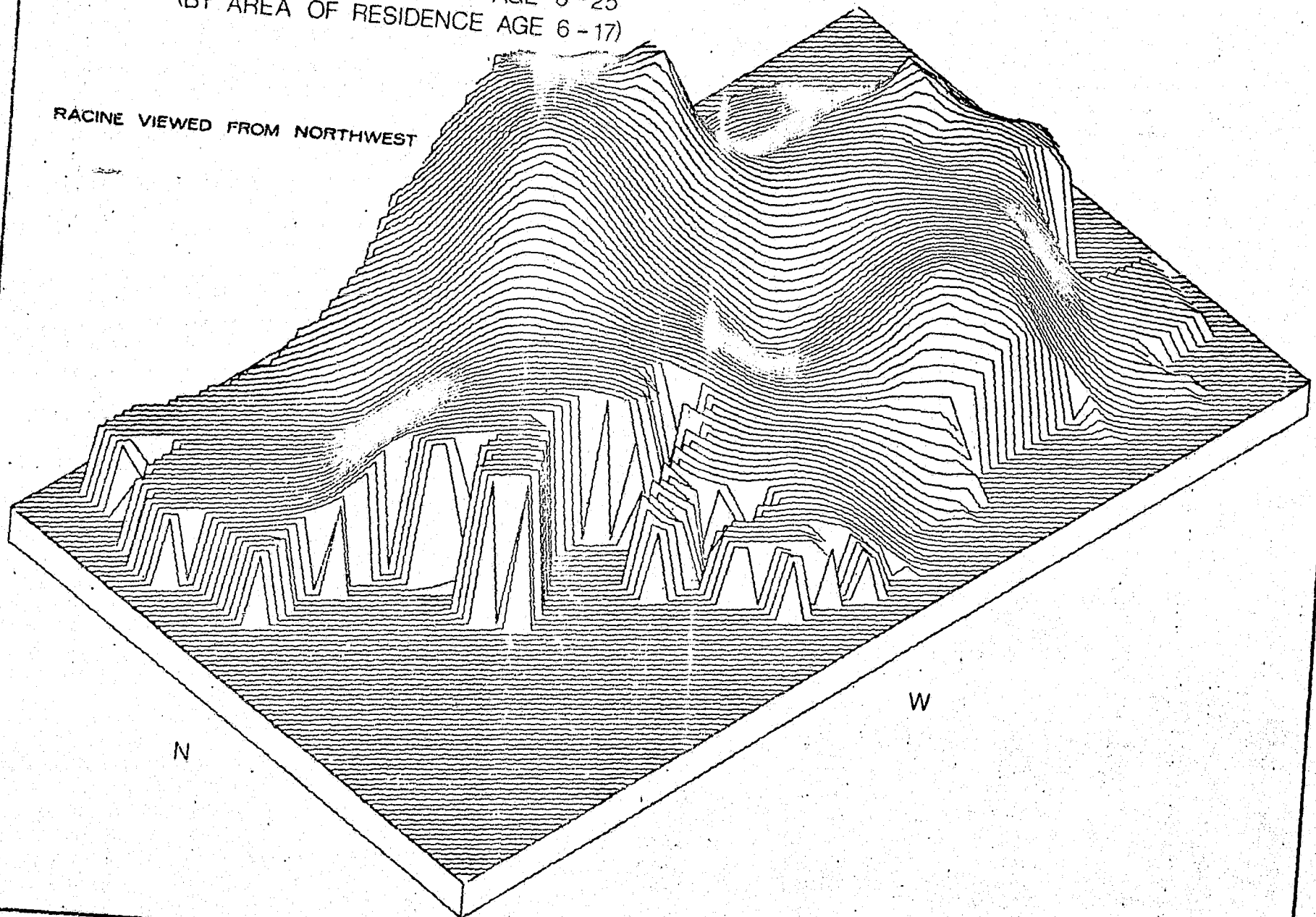
RACINE VIEWED FROM NORTHWEST



MAP 11

AVERAGE NUMBER OF POLICE CONTACTS PER PERSON  
IN 1949 BIRTH COHORT AGE 6-25  
(BY AREA OF RESIDENCE AGE 6-17)

RACINE VIEWED FROM NORTHWEST



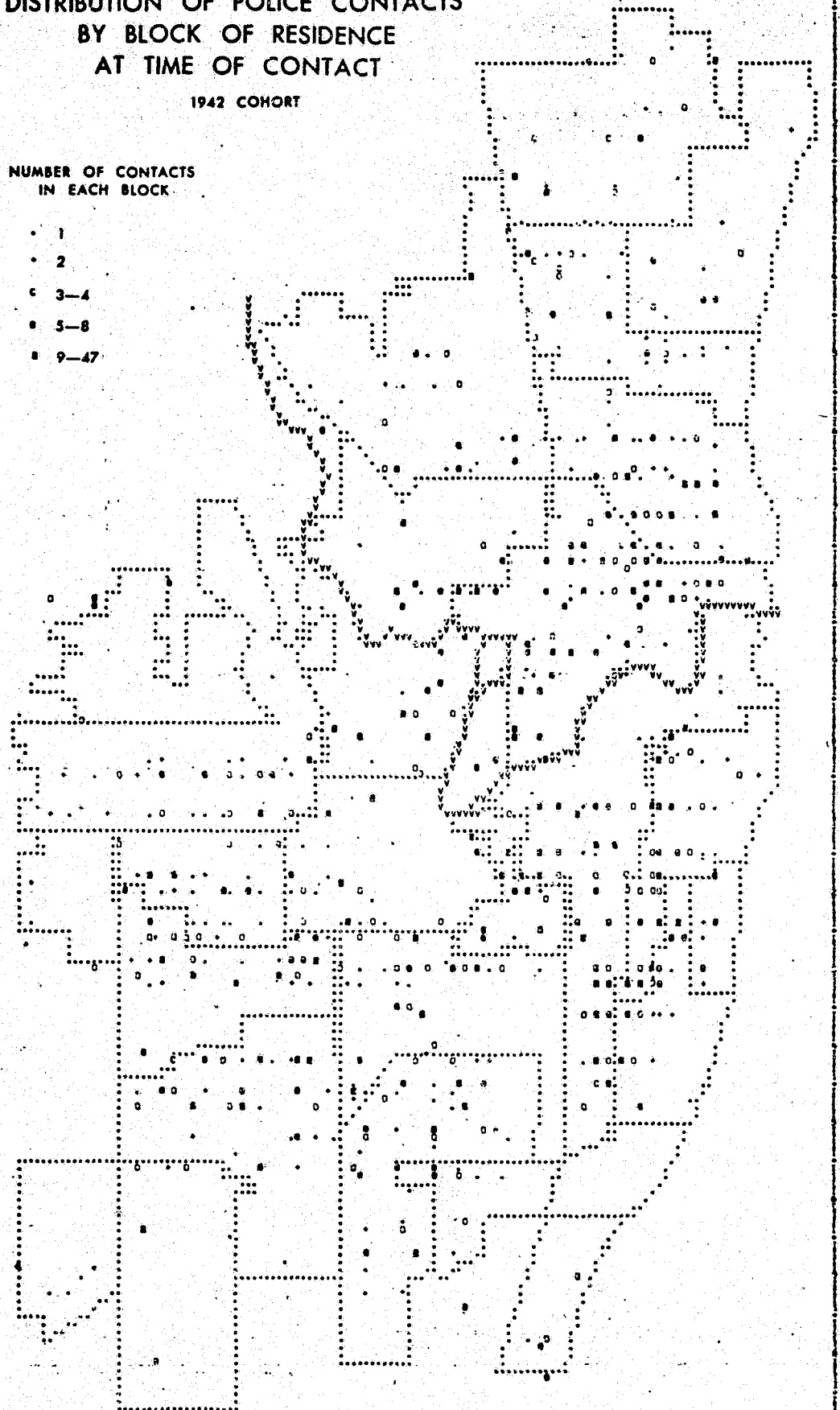
# MAP 12

## DISTRIBUTION OF POLICE CONTACTS BY BLOCK OF RESIDENCE AT TIME OF CONTACT

1942 COHORT

NUMBER OF CONTACTS  
IN EACH BLOCK

- 1
- 2
- 3-4
- 5-8
- 9-47

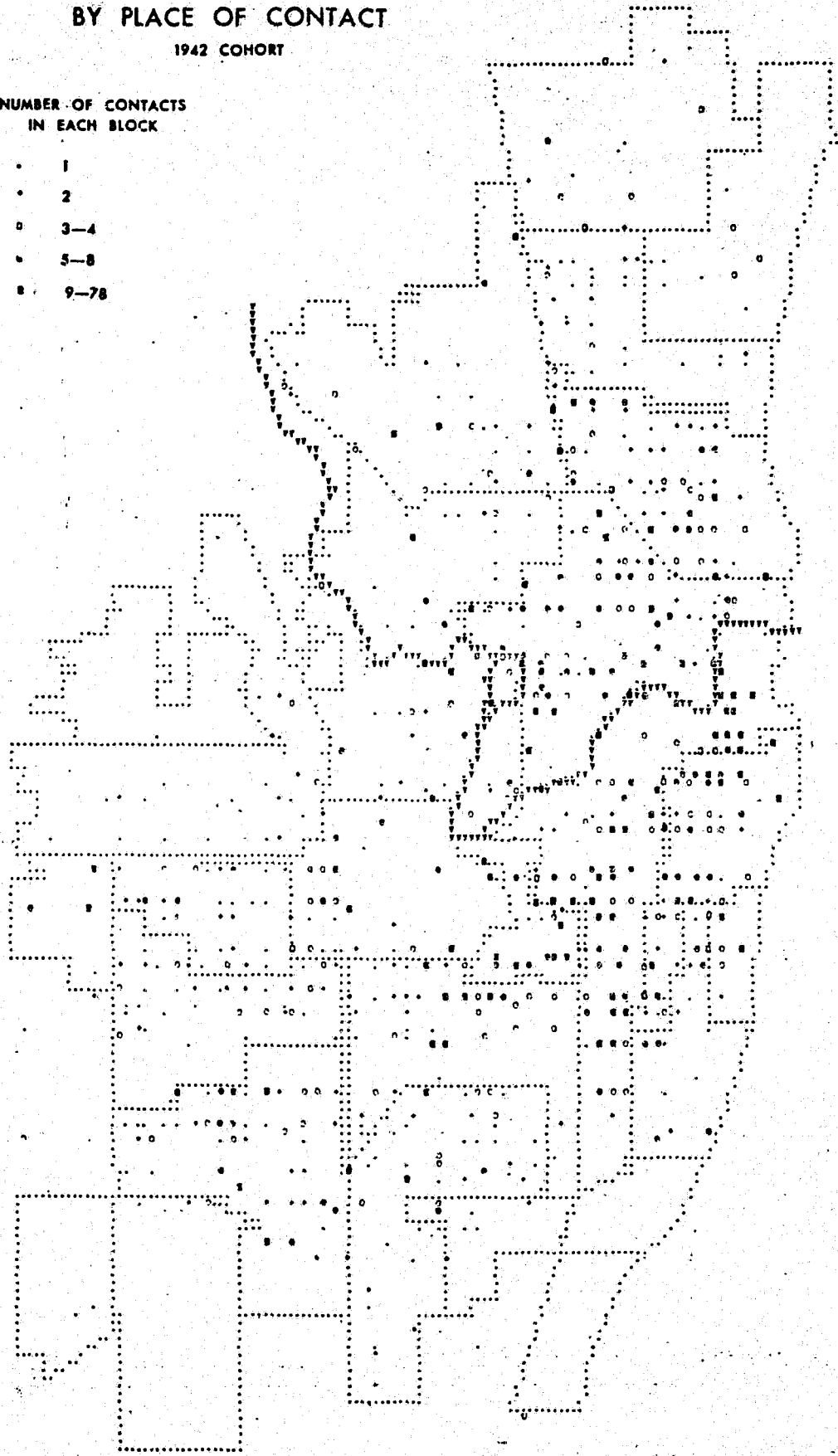


# DISTRIBUTION OF POLICE CONTACTS BY PLACE OF CONTACT

1942 COHORT

NUMBER OF CONTACTS  
IN EACH BLOCK

- 1
- 2
- ◻ 3-4
- 5-8
- 9-78

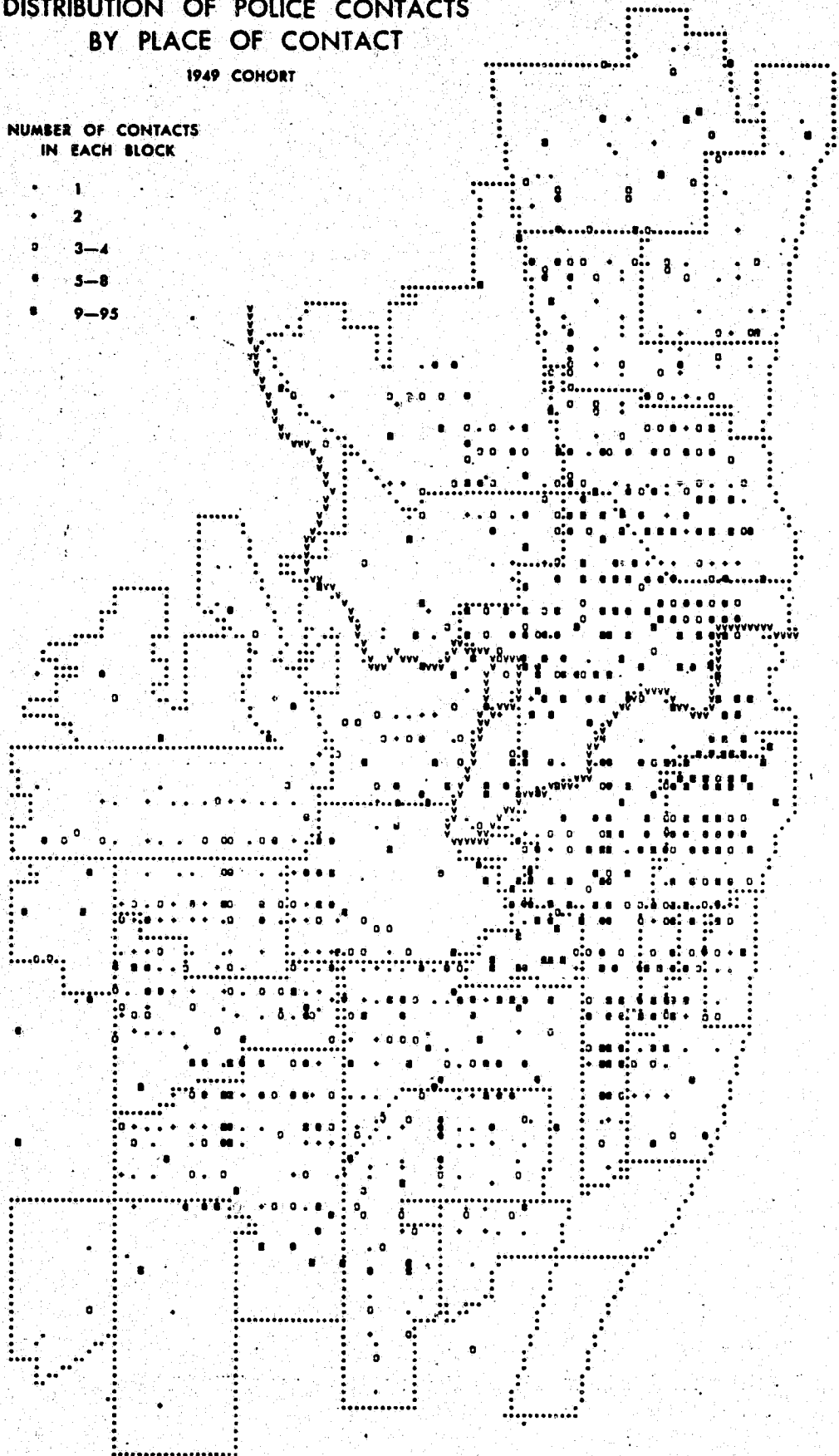


# DISTRIBUTION OF POLICE CONTACTS BY PLACE OF CONTACT

1949 COHORT

NUMBER OF CONTACTS  
IN EACH BLOCK

- 1
- 2
- ◻ 3-4
- 5-8
- 9-95

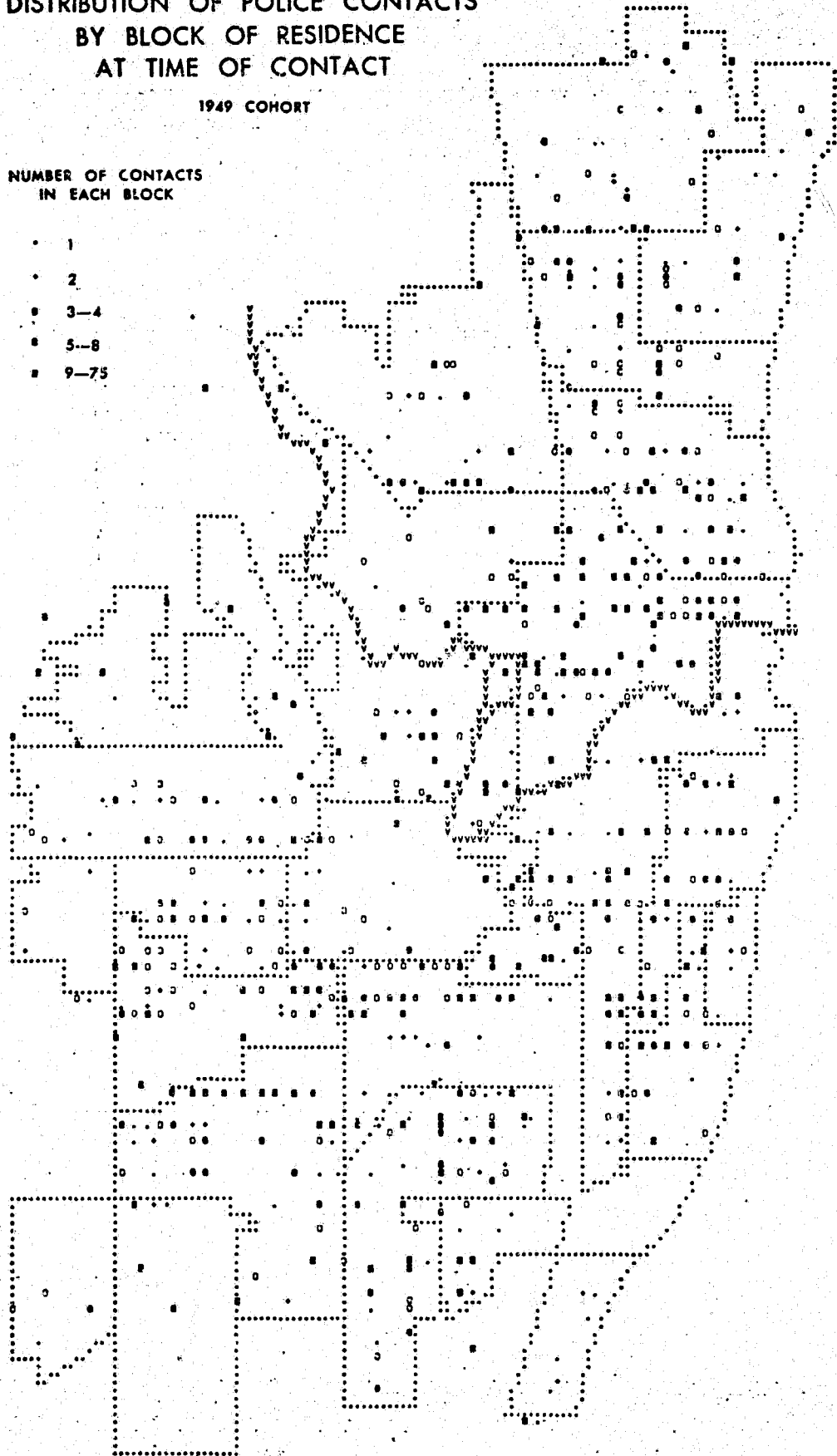


DISTRIBUTION OF POLICE CONTACTS  
BY BLOCK OF RESIDENCE  
AT TIME OF CONTACT

1949 COHORT

NUMBER OF CONTACTS  
IN EACH BLOCK

- 1
- 2
- 3-4
- 5-8
- 9-75





NUMBER OF POLICE CONTACTS  
BY RESIDENTS OF NATURAL AREAS OF RACINE  
1942 COHORT

15-28

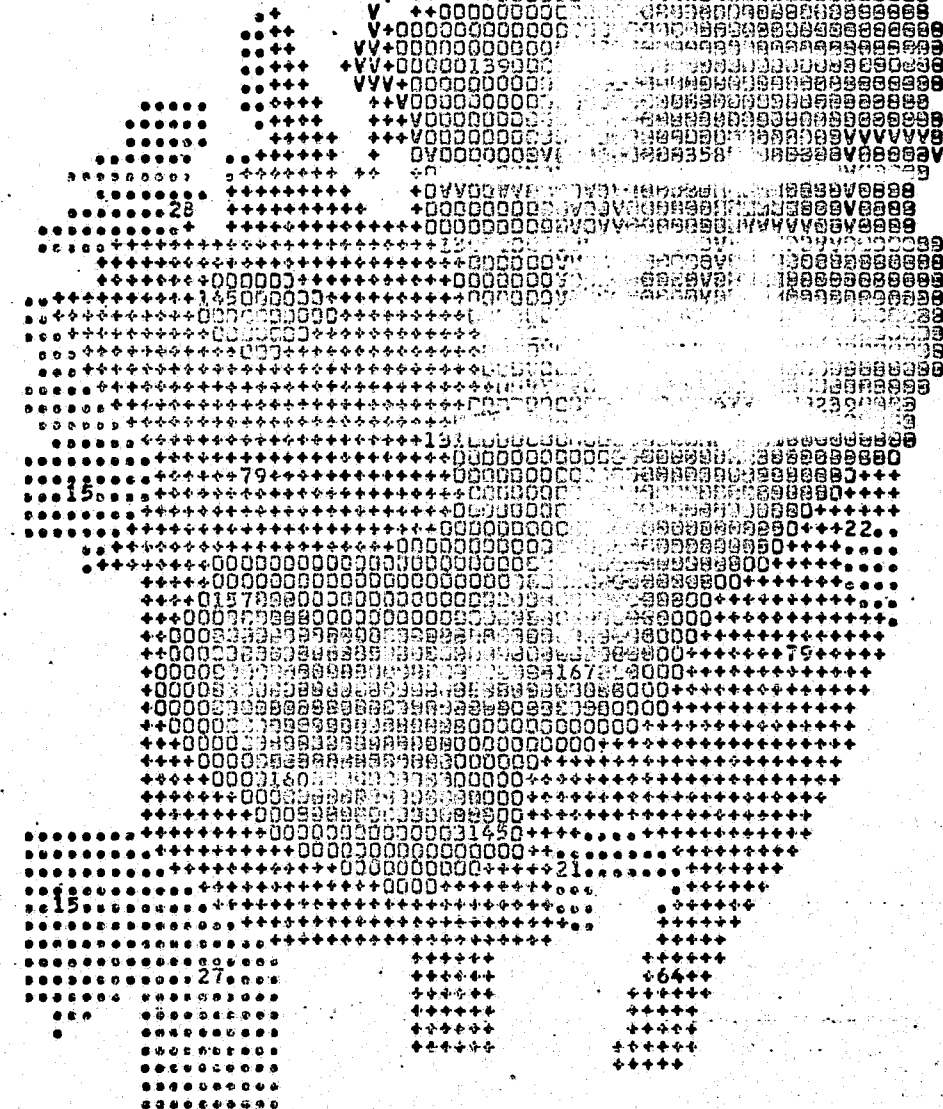
49-97

130-145

152-249

358-477

ROOT RIVER



L  
A  
K  
E  
  
M  
I  
C  
H  
I  
G  
A  
N



# MAP 18

NUMBER OF POLICE CONTACTS  
IN NATURAL AREAS OF RACINE  
1949 COHORT

10-57

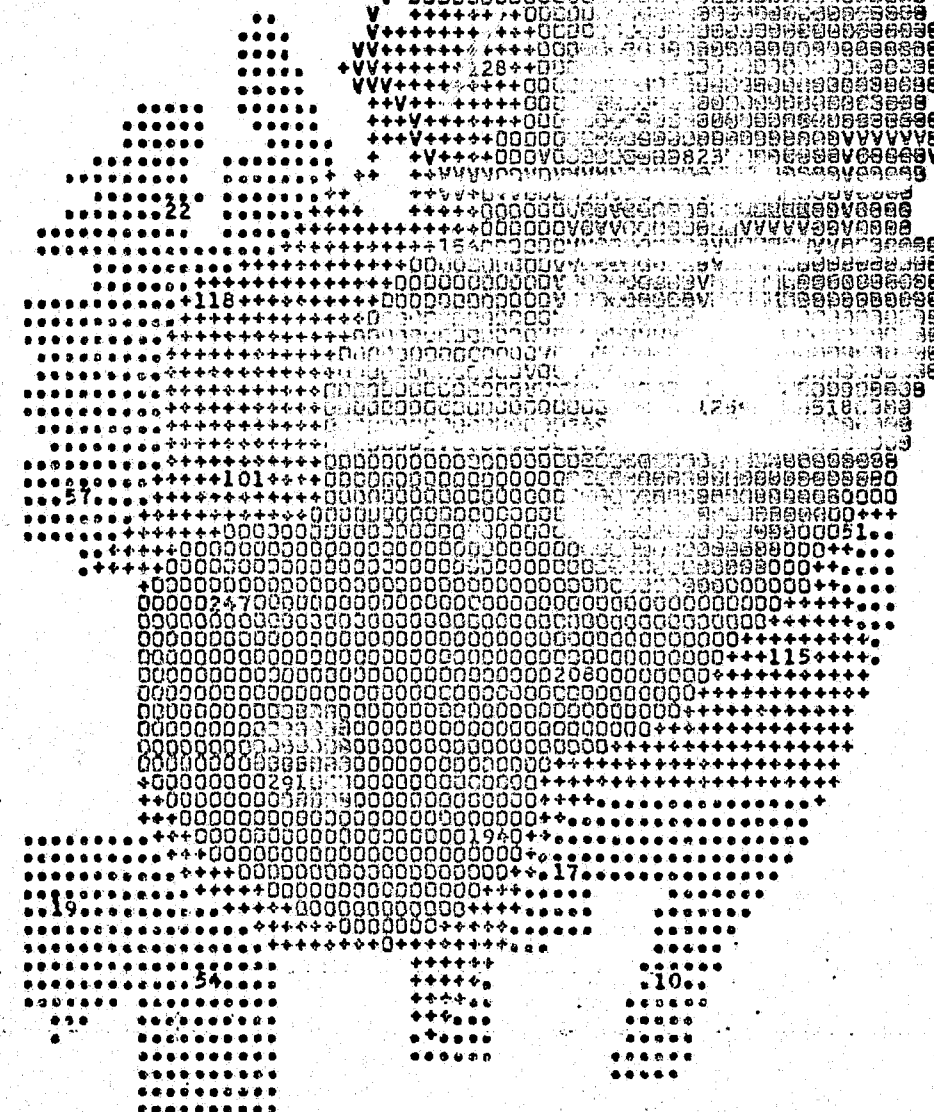
94-128

156-249

278-518

823-1259

ROOT RIVER



NUMBER OF POLICE CONTACTS  
BY RESIDENTS OF NATURAL AREAS OF RACINE  
1949 COHORT

27-63

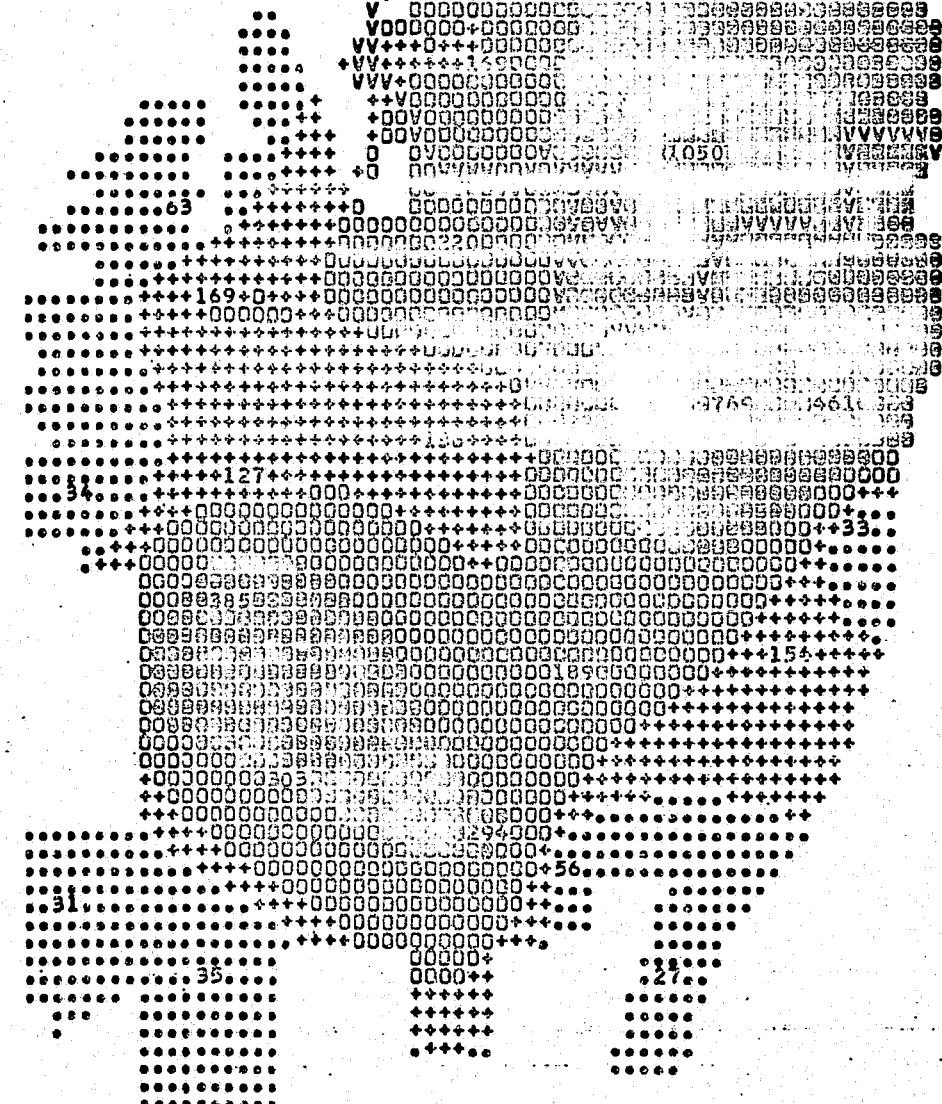
109-154

169-239

294-461

769-1050

ROOT RIVER



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A  
K  
E  
  
H  
I  
C  
H  
I  
G  
A  
N

# MAP 20

## AVERAGE POLICE CONTACTS PER BLOCK IN NATURAL AREAS OF RACINE 1942 COHORT

0000 0.06-0.95

++++ 1.12-1.89

0000 2.47-3.22

0000 4.96-6.52

0000 10.01

VVVV ROOT RIVER



L  
A  
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# MAP 21

## AVERAGE POLICE CONTACTS PER BLOCK BY RESIDENTS OF NATURAL AREAS OF RACINE 1942 COHORT

..... .93-1.67

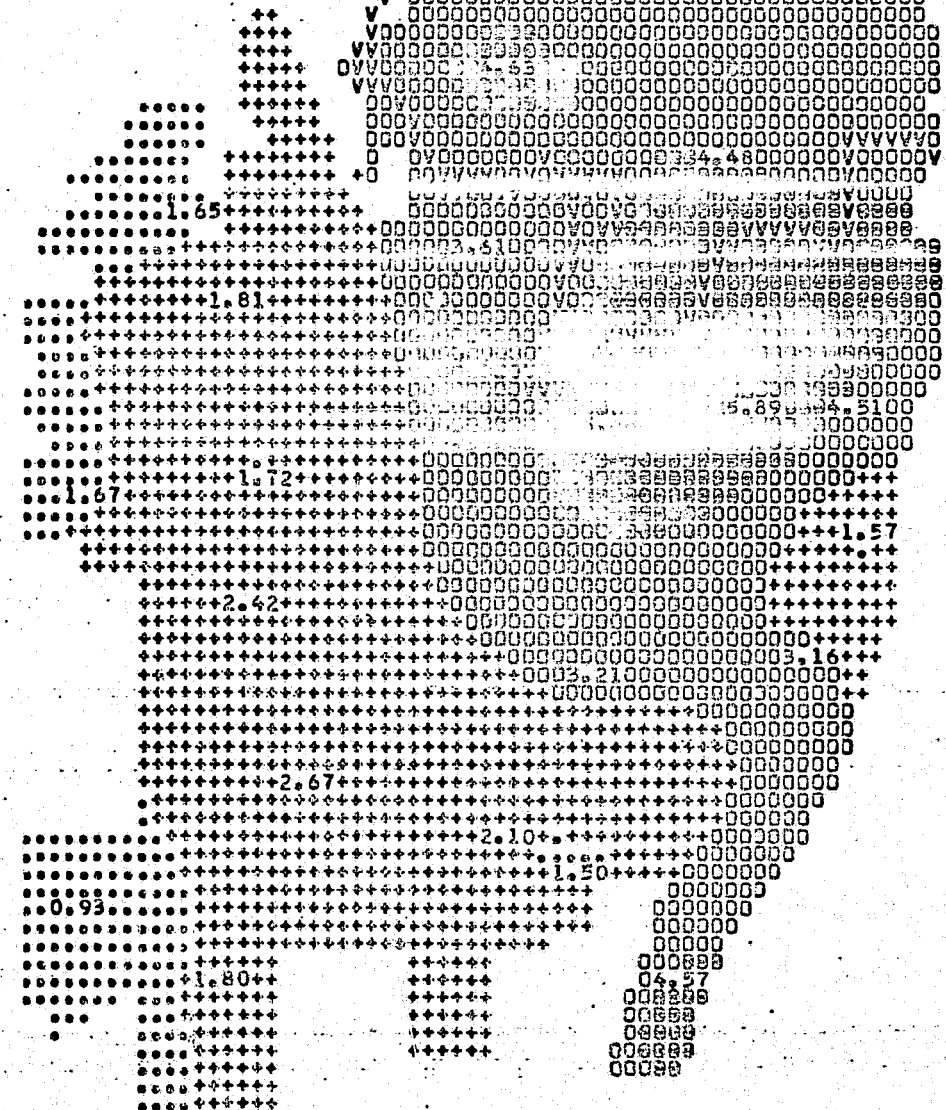
+++++ 1.70-2.67

00000 3.07-3.61

00000 4.46-4.63

00000 5.44-5.99

VVVV ROOT RIVER



LAK E M I C H I G A N

# MAP 22

## AVERAGE POLICE CONTACTS PER BLOCK IN NATURAL AREAS OF RACINE 1949 COHORT

..... .71-1.84

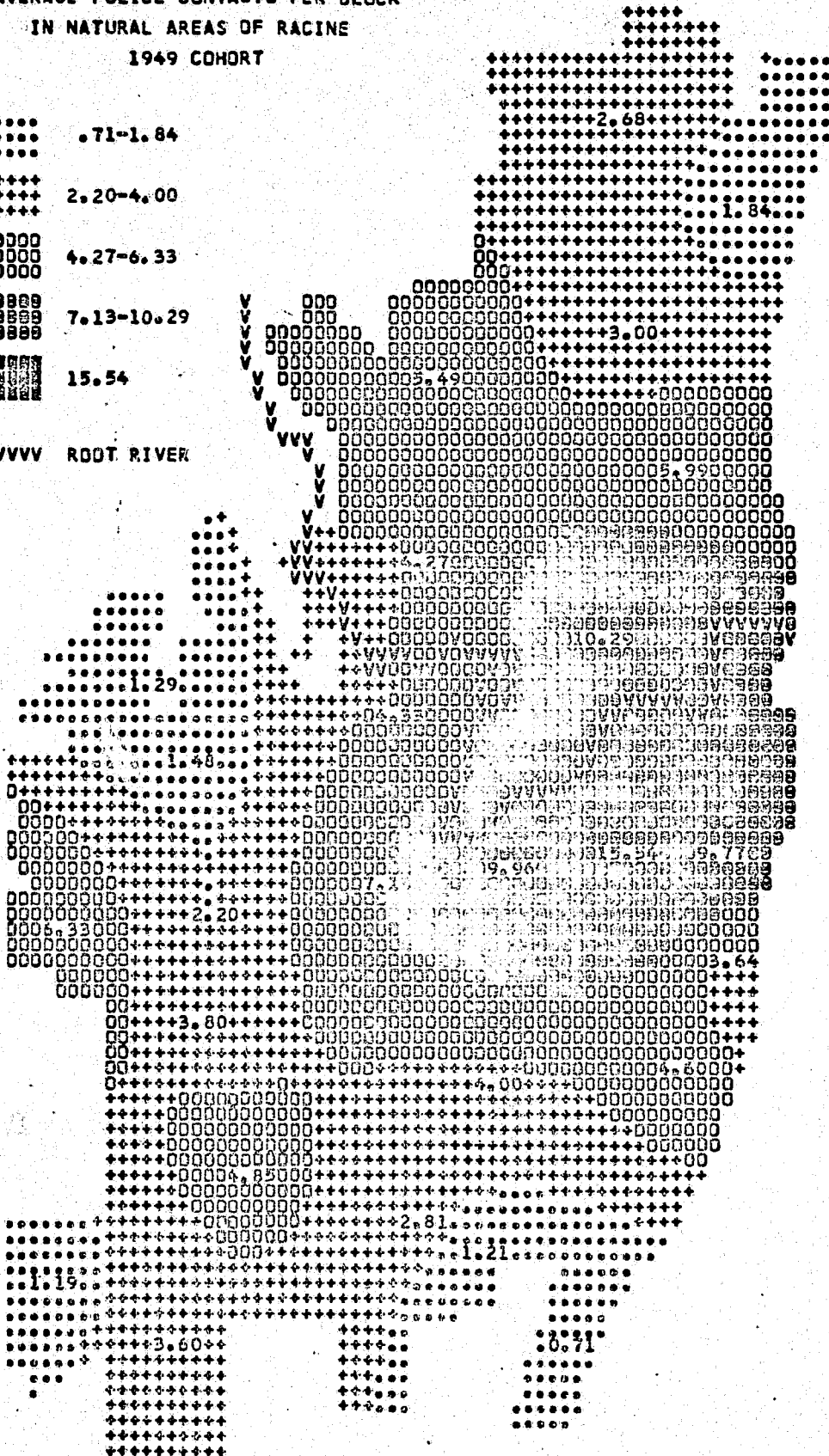
++++ 2.20-4.00

0000 4.27-6.33

8888 7.13-10.29

||||| 15.54

VVVV ROOT RIVER



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# MAP 23

## AVERAGE POLICE CONTACTS PER BLOCK BY RESIDENTS OF NATURAL AREAS OF RACINE 1949 COHORT

1.93-2.76

3.49-4.26

5.05-5.92

6.11-8.88

9.49-12.96

ROOT RIVER



L  
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16) While Black males had higher police contact rates in almost every respect than did Whites, and Chicanos more often than not had higher contact rates than Whites, and males always higher than females, neither delinquency nor adult crime should be defined as a male minority group problem in these cohorts for three reasons:

a) minority groups make up such a small proportion of the total cohort and were so concentrated in the inner city that in most areas police contacts were White contacts, b) in the inner city where Blacks and Chicanos did make up a disproportionate part of the cohort they did not have such a disproportionately higher rate of police contact as to focus attention upon them as the basis of the problem, and c) almost half of the females did have police contacts at one time or another.

#### The Measurement and Distribution of Serious Police Contacts

Seriousness was measured on a 6 point scale based on two elements, reasons for police contact and whether the contact was considered a felony, misdemeanor, or juvenile condition: (6) Felony Against the Person; (5) Felony Against Property; (4) Major Misdemeanor; (3) Minor Misdemeanor; (2) Juvenile Condition; (1) Contact for Suspicion, Investigation, or Information.

Reasons for police contact and the six-point type-seriousness scale permit one to make statements about the extent and distribution of seriousness in terms of frequency of contacts and proportion of persons with serious careers.

17) Over 60% of all police contacts in every race/ethnic|sex category where comparison was possible were for Moving vehicle violations, Disorderly conduct, or Suspicion, investigation, or information, while Theft, Liquor, and Incurrigibility or runaway were the next most frequent reasons for police contact.

18) Although the differences were not always large, males had more serious reasons (six-point seriousness scale) for police contact than did females in each cohort and in each age period. The proportion of serious contacts for both sexes was slightly greater in the 1949 cohort than in the 1942 cohort.

19) In both cohorts Black males made up a disproportionate share of those in the top three seriousness categories. Black females made up a disproportionate share of females from the 1949 cohort in all categories except felonies against the person.

20) Persons with 5 or more contacts (chronics) had a disproportional share of non-traffic and felony contacts among almost every race/ethnic|sex category in both cohorts.

21) When seriousness scores were computed for contacts in each cohort, the mean seriousness of male White contacts in each age period was less than that of Blacks in both cohorts. The Chicanos fell between the Whites and Blacks in all age periods for both cohorts except one. When seriousness scores for persons with contacts were computed, Black males had the highest mean seriousness in the 1942 cohort followed by Whites or Chicanos, depending on which age period was considered but Blacks and Chicanos alternated with the highest seriousness scores in the 1949 cohort. If the mean seriousness of persons in the cohort is considered, in the 1942 cohort Blacks have the highest scores while Chicanos and Whites are similar. In the 1949 cohort Black males again alternate with the Chicanos with Whites far below.

22) When seriousness of female contacts was measured in the three ways just described, males clearly had higher means for most race/ethnic|sex comparisons. Among the females there was less consistency in ranking the mean seriousness of contacts by race/ethnicity. The Chicano females with contacts have the lowest mean seriousness scores, particularly in the 1949 cohort, with Blacks most often highest and Whites in between. Among persons in the cohort in the 1942 group Blacks have higher mean seriousness scores overall than Chicanos and Whites although there is some shifting in ranks from age period to age period. In the 1949 cohort Blacks clearly have the highest mean scores followed by Chicanos and Whites.

23) When a grand seriousness score for each of the 26 residential areas was calculated by multiplying the average seriousness score of individual careers by the number of persons whose most frequent place of residence during the ages 6 through 17

was that area, the concentration of serious police contacts in the inner city was even more clearly shown (Maps 24 and 25).

24) Factor Analysis of police contact types and police contact types with a seriousness dimension added failed to reveal any meaningful constellations of contacts for males or females of either cohort. That moving vehicle violations were a part of Factor 1 for the 1942 cohort with continuous Racine residence and Factor 2 for the 1949 cohort supports our decision to have included police contacts for traffic offenses.

25) When curves were drawn representing seriousness of contacts by contact order from the first to Kth contact for each race/ethnic|sex group there was little evidence of progression for those with continuous residence in Racine.

26) When contacts for suspicion, investigation, and information as well as traffic contacts were eliminated prior to calculating seriousness curves by age of persons for various race/ethnic|sex segments of each cohort, there was a gradual rise for males and females, more so for Black males in the 1949 cohort and White females in both cohorts. When the same curves were calculated for contact order, the gradual rise was less apparent, and both White females for 1942 and Black females for 1949 declined.

#### Continuity in Careers

While a portion of each group had continuity in their careers, most people have discontinuous careers or contacts at only one period in their lives. The following statements summarize differences in career continuity from age period to age period, indicating that considerable variation in continuity exists on a basis of race/ethnicity|sex and the area in the community in which persons resided during their juvenile years.

27) Although the probability of having an initial police contact is very large, with more than 80% of all eligible males in either cohort having at least one recorded contact (for females it is 48% in the 1942 cohort and 52% in the 1949 cohort), and the probability of continuing from contact to contact is at least 80% for males, over half of the males with a first contact do drop out before their fifth contact, half of the females before their second contact. It could be said that although the probability of continuity is high, discontinuity from contact to contact is also sufficient that 90% of the males have ceased to have contacts by their 19th contact and 90% of the females by their 5th contact. Felony contacts disappear even more rapidly.

\* 28) Black males in the 1942 cohort who had one or more police contacts during the age period 6 through 16 were more likely than any others in the 1942 cohort to have one or more police contacts at each subsequent stage and least likely not to have police contacts at each subsequent stage if they failed to have a contact during the earliest period. In the 1949 cohort Black and Chicano males had similar patterns of progression. White females showed the least continuity from period to period if they had contacts at an early age period and Blacks the most but in neither cohort did female continuity even come close to that shown by the males. When each cohort was divided into those who resided in Area A and B vs. those who resided in Areas C, D, and E, White progression was greatest for those in Areas A and B.

29) The probability of a felony contact for males in either cohort is no more than 15% (for females less than 4%). The probability of not having a second felony is over 50% for the males and over 80% for females.

30) Prediction of whether or not a person who had a police contact at one age period would have a contact at a later age period yielded increases in predictability over marginal predictions of varying degrees depending on the correlation of contacts at one age period with contacts at another age period, or combinations of age periods and the distribution of the marginals in each age period or combinations of age periods.



# MAP 24

## GRAND SERIOUSNESS SCORES OF POLICE CONTACTS FOR 1942 BIRTH COHORT AGE 6-31 (BY AREA OF RESIDENCE AGE 6-17)

RACINE



0-69



70-199



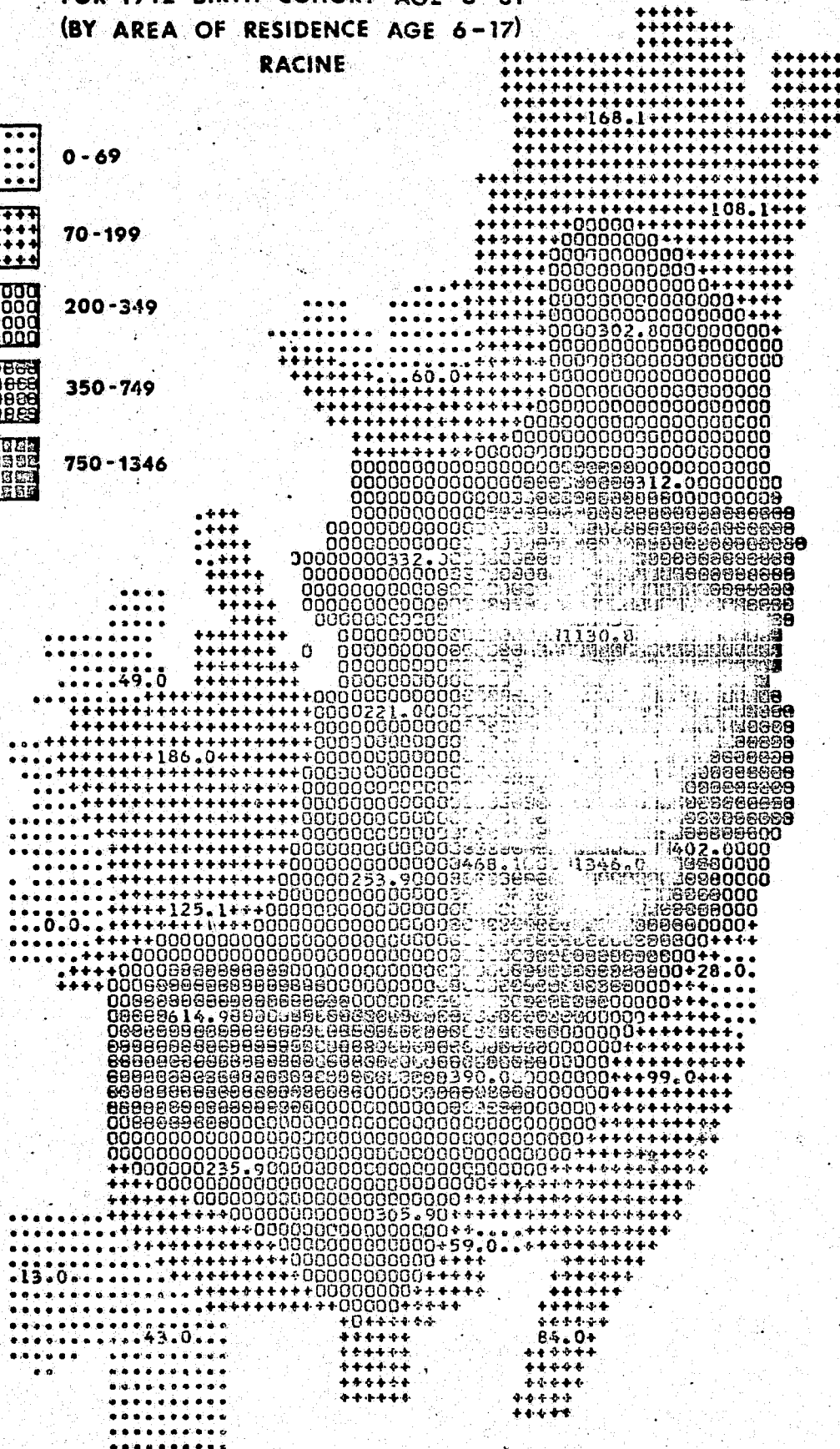
200-349



350-749



750-1346





31) The greatest increase in predictability over the marginals was for males from the 1949 cohort, predicting non-traffic contacts after the age of 18 from non-traffic contacts prior to 18.

32) When male contacts were divided into traffic and non-traffic contacts, continuity from period to period (if the proportion of persons with contacts in any combination of two time periods was defined as continuity) was greater for traffic than for non-traffic contacts in the 1942 cohort but the opposite in the 1949 cohort. In either case, continuity was greatest among those who lived within the inner city and its interstitial areas, where White continuity was more similar to that of Blacks than in other areas. While female continuity was far less than male continuity, that for White females, particularly in the inner city and its interstitial areas, was less than that for Black females.

33) With few exceptions in either cohort, male race/ethnic groups had no more than 25% who had police contacts for non-traffic offenses in all age periods or in the periods 6 through 17 and 18 through 20. The corresponding figure for females was approximately half of that. Inclusion of those males who had contacts in the period 6 through 17 and 21 or older raised the proportion of Whites with continuity between the juvenile and any adult period as much as 15% and that for Blacks with non-traffic continuity at least 40%. This had little effect on White female continuity but added about 30% to Black female continuity for the 1949 cohort.

34) When total male contacts during the juvenile period, traffic and non-traffic, were utilized in assessing continuity of careers consisting of only non-traffic offenses during the 18 through 20 and/or 21 or older period, greater continuity was present than for either traffic or non-traffic offenses alone.

35) Persons with a non-traffic offense as their first contact are more likely to have additional offenses and more serious additional offenses than are those with a first contact based on a traffic violation.

36) When the sizes of careers (number of police contacts) at various age periods were correlated with each other, the highest set of correlations was for Black males and the lowest for White females. When similar correlations for only persons whose principle residence was Area A or B were compared, White correlations increased while those for Chicanos and Blacks remained essentially the same.

37) When contacts were divided into traffic and non-traffic contacts, Black males in the 1942 cohort had the highest correlations between age periods for number of traffic contacts while those from the 1949 cohort had the highest correlations between age periods for non-traffic contacts. White female correlations were the lowest, whether in the inner city and interstitial areas or elsewhere.

38) Police contacts for suspicion, investigation, or information, traffic, and non-traffic reasons were so highly intercorrelated that all categories of contact should be included in multivariate analyses.

39) The Geometric scoring routine revealed that there were so many "error types" in terms of Guttman scaling procedures that no benefits would be derived from subjecting total careers or age periods to the Guttman scaling routine.

40) When seriousness scores of persons for a given age period with continuous residence in Racine were correlated with their seriousness scores for a following age period, there was only selective improvement in Taus over those based on only the number of police contacts.

#### Differential Patterns of Referral

Another way in which to examine continuities in delinquency and criminal careers consists of constructing a tree diagram in which the cohort is divided into three categories for the age period 6 through 17, one category consisting of those who had at least one contact and referral, those who had at least one contact, and those who had no contacts. Each group is then further divided for

the age period 18 through 20 in the same manner, producing a total of nine categories of combinations of contact and referral considering both age periods. These nine categories are in turn categorized in the same way for the age period 21 or older.

For the 1942 cohort only 2.5% had a contact at each age period while 31.4% had neither a contact nor referral at any age period. Those who had at least one contact and one referral had successively higher seriousness scores, increasing from a median of 7.4 to 10.67 to 34.0. The 1949 cohort presents a similar picture with 2.2% having a contact and referral at each age period and 30.9% having neither a contact nor referral at any age period. Those who had at least one contact and referral at each age period had successively higher seriousness scores increasing from 9.04 to 13.1 to 27.0.

By contrast it should be noted that those who had contacts at each age period but no referrals, had very stable median seriousness scores, 2.63, 2.61, and 3.50 for the 1942 cohort and 3.09, 2.13, and 2.88 for the 1949 cohort. Perusal of the three diagrams reveals that those with referrals always had higher median seriousness scores than did those who were not referred. Likewise, with few exceptions the groups who were referred at any stage went on to have higher seriousness scores at the next stage than those who were not referred.

Since we have found that referral rates are higher for the more serious reasons for police contact it would appear that at least at the first stage, seriousness of behavior leads to referral. At each subsequent stage, however, there is the problem of determining the effects of prior referrals on succeeding behavior and it may well be that referrals have as their consequence more serious delinquent and criminal behavior rather than the presumed deterrent effect. The answer to this question will come from our case-by-case, year-by-year analysis of the ensuing sanctions or other consequences of referral.

Given the fact that the proportion of Non-whites in juvenile and adult institutions in Wisconsin is three or four times greater than their proportion in contributing areas, one must conclude that minorities are either more delinquent and more criminal in their behavior than the majority or that step-by-step their behavior is more susceptible to formal disposition than is that of the majority. Detailed findings on referral patterns are summarized below.

41) The proportion of those with police contacts who were referred rather than counselled and released varied with race/ethnicity and sex, White males having the lowest referral rates among males, although in some comparisons not really much lower. Among the females the pattern of race/ethnic variation was less regular, with Blacks and Chicanos generally having the highest proportion of their contacts referred.

42) When contacts and referrals were plotted against age at time of contact on a series of curves it was found that the contact and referral curves of Blacks and Whites differed in several respects. White curves peaked more rapidly than did the Black curves and declined more rapidly, particularly the curve representing the proportion of those with contacts who were referred. Black curves, while they peaked later, had an earlier near-peak in the 1949 group and had referral curves that remained closer to the shape of their respective contact curves.

43) Cumulation of persons with contacts and persons referred by age produced curves with similar shapes for Blacks and Whites, although the Black contact curves rose more rapidly and reached their peaks before the White curves. By contrast, the White referral curves reached their highest points sooner than did the Black curves, the latter, however, reaching higher levels and continuing to rise for several years after passing the White peak.

44) Among White males from the 1942 cohort whose primary place of residence during the ages 6 through 17 was in Areas A through E, referral rates declined in the following more or less regular sequence: 36.6%, 34.8%, 30.3%, 25.9%, and 25.3%. For the 1949 cohort the decline was similar but not quite as regular: 32.4%, 32.4%, 27.3%, 29.4%, and 25.5%. This regularity was found for neither Blacks nor Chicano males nor for females of any group.

45) When the percentage of each race/ethnic|sex group referred by natural area of residence at time of referral was calculated, there was less decline in the percent of Whites referred, moving from the poorest to best residential areas, and no regularity for either Blacks or Chicanos nor for females of any group.

46) Higher percentages of Black and Chicano males than White males were referred from both cohorts, with the differences greater for traffic offenses than for F.B.I. Uniform Crime Part I or Part II offenses. For females in the 1949 cohort the Blacks were referred more frequently, the percentage being about twice as great as that for White females in every category except the F.B.I. Part II offenses.

47) When type-seriousness scores were dichotomized to determine the difference in percentage of serious and non-serious contacts referred by race/ethnicity and sex, only 14.9% of the female non-serious offense contacts in the 1942 cohort were referred while 33.3% of the serious contacts were referred. Among the females in the 1949 cohort 16.5% of the non-serious contacts were referred but 35.2% of the serious contacts. For the 1942 males, 29.4% of the non-serious contacts were referred but 54.5% of those that were serious. In the 1949 cohort 26.9% of the non-serious contacts but 51.3% of the serious contacts were referred by the police.

48) Black females have slightly lower percentages of referrals for both serious and non-serious contacts than do White females. Black males from the 1942 cohort have higher referral proportions for both serious (65.0% vs. 51.3%) and non-serious (34.7% vs. 29.3%) contacts than do the Whites. Among those from the 1949 cohort, non-serious referral proportions are the same while Whites have a higher referral percentage for serious contacts, 53.4% vs. 47.5% for the Blacks.

49) While Black males account for less than 15% of the contacts and only about 15% of those referred, they contribute disproportionately to the percent referred for the most serious categories. Similarly, they make up a disproportionate share of those referred for F.B.I. Uniform Crime Part I offenses (Index Offenses).

50) Minorities make up a disproportionate number of those referred because, however irregular and inconsistent the pattern between cohorts, they have more contacts, more contacts for more serious categories of behavior, and are also disproportionately referred even beyond what would be expected considering the categories of behavior into which their reasons for police contact fall.

51) The proportion of persons from both cohorts with a referral increases for both non-traffic and for traffic categories with the frequency of contacts. In other words, a larger proportion of the chronic offenders have had at least one of their contacts referred--a massing of contributions to the official records, referrals for the relatively small number of chronic offenders, regardless of what they have done.

52) Whether referrals are for non-felonies or felonies, that proportion of persons with a referral increases in each race/ethnic|sex group with frequency of contact categories, particularly among Black males with 5 or more contacts.

#### Summary of Police Contact Data

Police contacts are distributed throughout the community in much the same pattern as are the two cohorts that we have examined with the exception of considerable disproportionality in their occurrence within the inner city. Although the disproportionate number and seriousness of police contacts of Blacks

and to a lesser extent Chicanos can be related to their inner city and interstitial residence, this is not entirely the case. Outside the inner city delinquency and crime are White behaviors. Since Blacks and Chicanos constitute less than 10% of either cohort it is fallacious indeed to conclude that the problem of delinquency and crime centers on minority groups.

Most careers are not continuous and most delinquency does not lead to crime. Among those who have more than one police contact, careers are heterogeneous; factor analysis failed to show any meaningful grouping of reasons for police contact for any race/ethnic or sex group in either cohort. Composite scores of careers based on seriousness and type of contact provided little increase in predictive efficiency over simple number of police contacts. While we found relatively little systematic variation in referral rates by area of residence, Blacks are referred at disproportionately higher rates than Whites, even taking into consideration the nature and seriousness of offenses for which they have had contact and whether or not they have had single or multiple contacts.

The interviews were conducted in order to obtain data which might increase efficiency in predicting who will have adult police contacts, more frequent contacts, and contacts for more serious offenses over that obtained with police contact data alone. A series of summary statements follow in order that the data which go into the prediction device be better understood and that the relationship of these data to each other and to various measures of delinquency and crime be known before the regression and multiple discriminant function analyses combining contact and interview data are presented.

#### THE INTERVIEWS

##### Employment of Parents and Police Contacts by Respondents

53) There was little linear relationship between occupational level of the household in respondent's family and the number of contacts that respondents have had with the police at any age period, in either cohort, for either sex with the exception of Black males during the ages 6-17 where the means are .7 for high occupational level and 4.0 for low occupational level (1942) and 3.4 vs. 5.6 (1949). For the age period 18-20, the Black difference remains 1.8 vs. 3.4 (1942) and 3.7 vs. 4.5 (1949). Again, at the age period 21 or older, the Black difference remains but only for the 1949 cohort, 10.3 vs. 14.6 police contacts. Our initial conclusion then, is that occupational level of parents has its strongest and most consistent relationship to juvenile delinquency and adult crime among Black males.

54) There not only were no significant relationships between number of police contacts and regularity of employment but no visible relationships however the data were manipulated for any race/ethnic|sex or age period group of either cohort. Neither type-seriousness nor Geometric scores produced Taus above .100 with regularity of employment of head of household, but those who came from families where the head was not regularly employed did have delinquency score distributions that were either skewed toward the high end of the scale or less skewed toward the lower end than were those where the head was always regularly employed.

##### Occupational History of Respondents and Police Contacts

55) Responses to a series of questions on work while in high school were divided into four categories: 1) no work; 2) work during the summer only, 3) work during the school year, and 4) work all year around. No way of arranging the data (for the periods 6 through 17, 18 through 20, or 21 or over) in order to maximize the relationship produced a statistically significant difference for any group or for all race/ethnic groups combined.



56) Although data suggested that those who worked during the years in which most persons would have been in junior high and high school, particularly the males, during both the summer and school year, had more police contacts, higher Geometric scores, and higher type-seriousness scores than have others, there were no statistically significant differences.

57) When age at first full time job was taken into consideration those males who began working full time at age 17 or younger had more contacts during that period than did those who commenced work during each of the later periods, particularly in the 1949 cohort.

58) There seems little question but that juveniles from lower socioeconomic status homes entered the labor market earlier than did those at the other end of the continuum and since socioeconomic status is related to police contacts, early employment is correlated with police contacts. That many juveniles had police contacts in the course of their work suggests that the relationship of early entry into work and police contacts is heightened by the chance of police contacts while driving or riding to place of work and return.

59) When police contacts before age of first full time job and after age of first full time job were compared, we found very significant differences between the number of police contacts, type-seriousness scores, and Geometric scores of respondents before and after full time employment among those who commenced work at an early age. If first full time employment was at the age of 17 or earlier, contacts were more frequent after employment.

60) While it is impossible to say just how much of the difference in police contacts among those who commenced work at an early age can be attributed to added years of risk after work, a different kind of exposure as a result of going to work, or to lower socioeconomic status of those who entered work at an early age, the fact remains that those males who did commence work early were not prevented from having a disproportionate share of police contacts and higher type-seriousness and Geometric scores.

61) For the females in the 1942 cohort, contact rates and other measures were higher after first full time employment than before, regardless of age of first full time job.

62) Sizeable proportions (66% of the Black males from the 1949 cohort) said that the kinds of work available to them were not what they would really like to do but responses to this question had no significant relationship to number of police contacts, although White males from the 1949 cohort were more likely to have had police contacts if dissatisfied with the availability of preferred types of work than other race/ethnic|sex segments of those from either cohort.

63) There was little or no relationship between family income of respondents in 1976 and their record of police contacts as juveniles 6 through 17, youth 18 through 20, or 21 or older except for males at the later period. Skewness toward lower incomes in 1976 for those White and Black males from both cohorts with 5 or more contacts was even more noticeable for the 21 or older age period.

While this type of relationship was less apparent for females, those White and Black females from the 1949 cohort in the category of two through five police contacts for the age periods 6 through 17 and 18 through 20 were skewed toward lower income levels.

#### Family Type and Police Contacts

64) Less than 10% of those who were interviewed from each cohort were in the categories describing "some family type other than both parents present for the period 6 through 17 years of age, although among the Blacks about half of those in the 1942 cohort and one-third of those in the 1949 cohort were in various categories other than both parents present throughout the entire period.

Although there was some relationship between family type and seriousness and patterns of delinquency for young males, it was not as strong as the literature has suggested in the past, probably because most of the studies have been based on cases referred and there is a tendency to refer when both parents are not present in the home.

65) Respondents were asked, "Did either of your parents (to the best of your knowledge) ever do anything that could have gotten them into trouble with the police?" There was practically no relationship between responses to the question and number of police contacts for either male or female respondents from either cohort. Since one might argue that respondent reports on parental misbehavior may be based on faulty knowledge, we are not presenting these findings as evidence that there is no relationship between parental misbehavior and respondent's records of police contacts but only that respondents do not report their parents' behavior as consistent with their own police records.

66) Not only do police contacts decline after marriage but they declined significantly for males in both cohorts. Part of this decline must be attributed to the decline that we have found with age since those variables are intertwined. The same pattern was found for females from both cohorts with one exception: early marriage 17 through 20 was followed by significantly more police contacts and higher type-seriousness scores for those from the 1942 cohort. We conclude that parental family status is much less important than respondent family status.

#### Respondents' Perceptions of Themselves, Police, Peers and Police Contacts

67) The squirrel-cage effect (areas highly patrolled have more police contacts than other areas with the resulting statistics increasing the number of police officers in an area with further increases in police contacts) has been frequently considered as a factor in explaining the notably higher police contact rates in some areas than in others. If it has merit and if respondents have accurate perceptions of the extent to which their neighborhoods are patrolled, there should be a relationship between responses to, "When you were in junior high and high school, was your neighborhood heavily, moderately, or lightly patrolled by the police, or not patrolled at all?" and the frequency of police contacts by juveniles at the two earliest age periods. When patrolling responses were dichotomized (high and medium vs. low and not patrolled) it could readily be seen that a higher proportion of those from the low or not patrolled areas had had either no police contacts or very few contacts. The question remains, however, was patrolling in fact greater in the areas in which respondents perceived it to be and did this increase the number of police contacts or were these simply the low socioeconomic status areas in which juvenile misbehavior was perceived by the police to merit more official recognition by them?

68) Although responses to the question of "What kind of attitude did you and your 2 or 3 closest friends have toward the police when you were in junior high and high school?" were related to number of police contacts, it is difficult to say whether juvenile attitudes generate police contacts or police contacts generate juvenile attitudes. Is attitude toward the police predictive of continuity in careers or does continuity develop negative attitudes toward the police?

69) Sutherland's differential association hypothesis, tested and retested, was supported by responses to "Did any of your 2 or 3 closest friends get into trouble with the police during the junior high and high school years?" Significant correlations were found between friends with trouble and the number of police contacts 6 through 17 for both males and females in both cohorts. Males in both cohorts also had higher correlations than females.



70) Although relatively few persons (with the exception of Blacks) had adult friends who had been in trouble, for the 1949 males a sizeable and significant relationship was found between this variable and police contacts.

71) When we asked respondents to describe how they thought of themselves (delinquent vs. non-delinquent on a scale from 1 to 7) and how others thought of them during various periods in their life, self-concept was related to police contacts, particularly for the males during the juvenile period. While it might be emphasized that retrospective evaluations of one's self are not expected to correlate too highly with police records of contacts, it is even more interesting to note that there was even less correlation between conception of self after age 21 and police contact records at that time. When type-seriousness scores were correlated with self-concept, similar results were obtained; in each case the correlations were higher than for simply the number of police contacts and were present for all age periods. These higher correlations suggest that when seriousness of careers during a given period was considered, self-concepts were more in line with police records.

#### The Automobile and Police Contacts

72) Among those persons from the 1942 cohort who obtained their driver's licenses at the age of 16 or younger, police contacts were significantly greater after obtaining the license compared to before, producing a Tau of .416 for the males and .597 for the females. Males in the 1949 cohort produced a Tau of .326 and females .456. Among those who received their driver's licenses between the ages of 17 through 20 there were no significant differences in before and after police contacts.

#### Admitted Number of Police Contacts and Official Measures of Police Contact

73) Around 80% of the Whites in each cohort reported either the number of police contacts they had accurately or estimated the number to be a bit higher than was correct; only half of the Blacks (too few Chicanos interviewed) reported this accurately, the other half reporting fewer than our records showed. This suggested to us that Blacks do not have the same confidence in interviewers (as representatives of the community and the Racine Community Study) as do Whites.

74) Eighty-two percent of the males in each cohort said that they had done things for which they could have been caught but weren't. Among the females, 53% in the 1942 cohort and 58% in the 1949 cohort said that they had done so.

75) Of those males who had done things for which they could have been caught but weren't, 60% of the 1942 cohort and 65% of the 1949 cohort had police contacts. Among those males who said that they had not done things for which they could have been caught but weren't, 43% in the 1942 cohort and 31% in the 1949 cohort had police contacts for other reasons. Thus, those who did things for which they were not caught were also caught more often than those who did not do things for which they were not caught.

76) Of those Blacks who said that they had done things for which they could have been caught but were not, only 28% had no police contacts and of those who denied doing things for which they could have been caught but were not, 83% had police contacts.

77) When the number of police contacts recorded for each respondent before the age of 18 was compared with the number of police contacts that he/she said they had, more than half of each race/ethnic|sex group responded correctly and most of those who erred stated that they had had contacts when they did not have a record of police contacts.

78) When the distributions of total police contact records of persons interviewed in 1976 were compared with the distribution of their own descriptions of the contacts that they had with the police (first three mentions for each race/ethnic sex group) and the distributions of what the police said they were doing, and what they were really doing, the distributions of each were generally significantly different because some of the more serious offense categories were either seldom or never mentioned by respondents. Actually, the congruence of what respondent said that the police said respondent was doing and what respondent said he/she was really doing was considerably greater than what the 38% disagreement for the 1942 cohort and 32% disagreement for the 1949 cohort might suggest for the simple reason that most discrepancies could be explained by differences in perception, e.g. disorderly conduct and vagrancy were sometimes perceived by respondents as the consequence of drinking and/or mischevious behavior.

79) For both cohorts and both sexes within each cohort juvenile type-seriousness scores had either the highest or closer to the highest correlation with type-seriousness scores for the 18 through 20 period than did other measures with each other for these periods.

80) The best predictions of what will happen after the age of 21 were made from scores for the 18 through 20 period.

81) While number of police contacts at later periods may be predicted from number of police contacts at earlier periods as well as type-seriousness scores at later periods from earlier periods, we concluded that the type-seriousness measure was best for all purposes because persons in the juvenile and adult justice systems are more concerned about discovering or predicting who will continue to have more serious types of police contacts than who will have the greatest number of police contacts.

#### Summary of the Interview Data

Contrary to the general impression that regularity of employment and occupational level of parents should be related to delinquency and crime, we find that neither are consistently or highly correlated with number of police contacts, type-seriousness, or Geometric scores representing career patterns, with the exception of those for Black males. That socioeconomic status (as represented by either the larger Natural Areas [A through E] or subareas [1 through 26]) is related to delinquency cannot be denied, however, when the mean type-seriousness score for White males in the 1942 cohort during the juvenile plus 18 through 20 age period ranged from 1.9 in subarea 25 to 19.1 in subarea 3. In 1949 type-seriousness scores for White males for that period ranged from 4.1 to 10.9 in the same areas. This finding is consistent with our general position that some analyses should be based on areas rather than strata generated by income, occupation, or education.

Living in a society where the work ethic has dominated the older generation has given rise to as much fable as fact about the value of work *per se*. The matter is much more complex and involves the nature of the work that is available and whether or not it is seen as leading respondents toward their life goals. Without discounting the desirability of introducing youth to the importance of "gainful employment" as it has often been termed, we find little direct relationship between summer, school year, or early full time employment and the absence of police contacts or lower type-seriousness scores. The tendency has even been in the opposite direction of that expected, suggesting that controls for socioeconomic status are necessary to eliminate the contribution that socioeconomic status and its correlates make to careers.

Another belief adhered to with considerable ferocity is the assumed negative influence of various kinds of "broken homes." The importance of having two parents in the home, both biological, has been reified to the extent that when our codes of family type are mentioned people commence to applaud us for emphasizing the importance of the family. We found some, but not much, relationship between measures of delinquent and criminal careers and family type, that which appeared being mainly for females. Similarly, there was little relationship between respondents' perception of their parents' delinquent and criminal behavior and their own behavior.

But what did come out quite clearly is the decline in police contacts after marriage. Although we have shown that police contacts decline with age, we find that beyond this there is a decline after marriage. Delinquency of certain types, at least, must be thought of as normal youthful behavior before marriage. Thus, it is marital status of respondents themselves rather than of their parents that will be added to the prediction device as an important variable.

The effects of patrolling remain uncertain at this point as does attitude toward the police because it is really difficult to decide which comes first. Are the police, as representatives of the community whose presence and behavior is taken into consideration by juveniles determinants of their behavior and attitudes, or is it the juvenile's own behavior and attitudes that bring about police presence and subsequent interaction provocative of negative attitudes on part of the juvenile? While it is some of both, the retrospective nature of the data make this a difficult question. Data on associates require some thought as well. Having friends in trouble is to be expected for those who have had trouble and gives added support to the differential association hypothesis, but does not reveal who influences them.

Interpretation of the relationship of age at which a driver's license was obtained to police contacts was less difficult, with not only number of police contacts increasing after the license was obtained but type-seriousness and Geometric scores doing so as well, suggesting that more than traffic offenses accompany early-driver's licenses.

The lack of agreement between official records, admitted police contacts, and admitted behavior which could have resulted in police contacts indicates the desirability of constructing a measure of delinquency incorporating reported behavior, self-concept, and other attitudinal variables through multivariate scaling techniques.

#### MULTIPLE REGRESSION ANALYSIS AS A BASIS FOR PREDICTING CONTINUITIES IN CAREERS

##### Predicting Seriousness of An Official Criminal Career: From Police Contact and Demographic Data

The next step was to utilize multiple regression in an attempt to predict seriousness of official criminal careers more efficiently for three separate age periods (juvenile [ages 6-17], intermediate [ages 18-20], and adult [21 and older]) than had been possible with number of police contacts or seriousness of contacts or any other police contact or demographic variables.<sup>4</sup> This is, of course, a prelude to subsequent analyses which will use data from the 1976 interviews.

<sup>4</sup> The practical justification for these divisions rests on the legal distinction between juvenile and adult crime. In most jurisdictions, illegal acts committed by persons younger than 18 are viewed as delinquencies rather than as crimes *per se*. A separate juvenile justice system has developed to deal with

The dependent variables, seriousness of career for each age period, were produced by multiplying the frequency of contacts within offense seriousness categories by the associated seriousness weights and summing across categories. The six seriousness categories and the score for each follows: 1) felonies involving persons (score = 6); 2) felonies against property (5); 3) major misdemeanors (4); 4) misdemeanors (3); 5) juvenile status offense (2); and contacts for suspicion, or investigation (1). Table 3 lists each category and the specific offenses included in each.<sup>5</sup>

The independent variables used to predict juvenile career seriousness scores consist of four traditional correlates of crime: sex, race/ethnicity, age at

delinquency on the assumption that acts committed during this period of life should be treated differently from those committed later in life when individuals are assumed to be more responsible for their behavior. Thus, the seriousness of a juvenile career may be treated in the abstract as something distinct from an adult career. Because of the inconsistencies in existing age norms we have interjected an intermediate career segment between the juvenile and adult periods as a means of representing the transition from adolescence to adulthood. Although one may be an "adult" from the standpoint of criminal law at age 18, there are many other spheres of life in which adulthood does not occur until age 21 (e.g., entering into a legal contract). Thus, between ages 18 and 21, individuals may be treated as adults under some conditions but as non-adults for others. The process of becoming an adult, then, begins in earnest when individuals are 18 but is not fully complete until age 21, when all legal entitlements are obtained.

<sup>5</sup> The practical justification for using this scoring system rests on a legal distinction between felonies and misdemeanors. Criminal law specifies that illegal acts be treated as relatively serious (felonies) or as non-serious (misdemeanors). Among felonies, those against persons are the most serious of all violations while those against property are less serious (although more serious than misdemeanors). The scoring system here assigns felonies involving persons the highest (i.e., most serious) score (6) and felonies against property the second highest score (5). Certain acts, although normally considered felonious, may be dealt with as misdemeanors under specific circumstances at the discretion of law enforcement officials. For example, burglary is treated as a felony when a house is entered but as a misdemeanor when it involves a locked vehicle. In order to reflect this dual status, these offenses will be termed major misdemeanors and will receive a score of four (4). Other acts are invariably regarded as misdemeanors by the law. For example, vagrancy and disorderly conduct are never classified as felonies. Misdemeanors are given a score of three (3). With the advent of the juvenile justice system, age became a mitigating condition under the law. An offense committed by a juvenile is treated differently (usually in the direction of lenience) than if it had been committed by an adult. Additionally, a new set of offenses developed which could only be committed by the young, e.g., truancy, incorrigibility, runaway, ungovernability, the so-called juvenile status offenses. However, the catch-all vagrancy and disorderly statutes are also frequently invoked to deal with youthful misbehavior. The juvenile status offenses and vagrancy or disorderly conduct when committed by those under age 18 will be grouped together and will be scored two (2). The final category of offenses consists of instances when individuals were stopped on the street for suspicion, investigation, or information at the discretion of the police officer. No criminal allegations need necessarily have been involved. However, a stop for any of the above reasons usually carries an implication of at least potential wrongdoing and becomes part of an individual's contact record. These relatively minor incidents receive a score of one (1) in the scoring system.

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TABLE 3. SERIOUSNESS OF POLICE CONTACTS: ORDINAL RANKING OF 6 MAJOR CATEGORIES AND THE OFFENSES INCLUDED IN EACH\*

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Score

- 6 Felony Involving Persons: The following offenses are given a score of 6 when treated as felonies by the police.
- |                 |          |
|-----------------|----------|
| Robbery         | Homicide |
| Assault         | Escapee  |
| Sex Offenses    | Suicide  |
| Narcotics/Drugs |          |
- 5 Felony Against Property: The following offenses are given a score of 5 when treated as felonies by the police.
- |            |                              |
|------------|------------------------------|
| Burglary   | Forgery                      |
| Theft      | Fraud                        |
| Auto Theft | Violent Property Destruction |
- 4 Major Misdemeanor: The following offenses are given a score of 4 when treated as misdemeanors by the police.
- |                 |                              |
|-----------------|------------------------------|
| Robbery         | Assault                      |
| Escapee         | Fraud                        |
| Theft           | Violent Property Destruction |
| Narcotics/Drugs | Burglary                     |
| Weapons         | Forgery                      |
- 3 Misdemeanor: The following offenses are given a score of 3 when treated as misdemeanors by the police.
- |                    |                           |
|--------------------|---------------------------|
| Obscene Behavior   | Moving Traffic Violations |
| Disorderly Conduct | Other Traffic Offenses    |
| Vagrancy           | Gambling                  |
| Liquor Violations  | Family Problems           |
| Sex Offenses       | Other                     |
- 2 Juvenile Status: The following offenses are given a score of 2 when the contactee is under 18 years of age.
- |                    |                      |
|--------------------|----------------------|
| Vagrancy           | Incorrigible/Runaway |
| Disorderly Conduct | Truancy              |
- 1 Contact for Suspicion, Investigation, Information: The category is given a score of 1 when the complaint report indicates a contact for any of these reasons.

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\*The specific offenses listed here are similar to those used by Elliott and Voss (1974:82) and Wolfgang, *et al.*, (1972:68-69).

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first police contact<sup>6</sup> and type of residential area (a proxy for socioeconomic status). Being male, a minority group member, having a police contact at a younger age, and coming from a low socioeconomic status area of the community have historically been associated with higher levels of official crime. The question is, how much variability in career seriousness do these variables account for in a linear combination and, further, which variables have the greatest impact? In predicting intermediate seriousness scores the juvenile seriousness score can be added as a fifth predictor since it is now a temporal antecedent. Similarly, in predicting adult seriousness scores, the combined seriousness scores for the juvenile and intermediate periods will be used as a fifth predictor.

#### Juvenile Seriousness Scores

Table 4 presents the regression results for predicting juvenile seriousness scores for each cohort. Only standardized (beta;  $\beta$ ) coefficients, as indices of the relative importance of each variable, are presented in the tables in this report (the independent variables are not strictly interval). Unstandardized coefficients are available in the original research report.

TABLE 4. MULTIPLE REGRESSION RESULTS FOR PREDICTING JUVENILE SERIOUSNESS SCORES, BY COHORT

Variables	Standardized Coefficients ( $\beta$ )	
	1942	1949
Race	.030	-.049
Sex	-.075	-.092
Residential Area	-.003	-.080
Age at First Police Contact	-.677	-.522
$R^2$	.497	.342

With the exception of the race variable in the 1942 cohort, the results are in the expected direction. Those with high seriousness scores are males, minority group members, come from lower status residential areas, and had earlier contacts with the police. In the 1942 cohort, Whites tend to be more likely to have higher seriousness scores than do Blacks and Chicanos.<sup>7</sup> The  $R^2$  values indicate that the respective models are reasonably potent, accounting for 50% ( $R^2=.497$ ) of the variance in the 1942 cohort and 34% ( $R^2=.342$ ) in the 1949 cohort. The magnitude of the standardized coefficients indicates that most of the variability is related to age at first police contact. The other variables make very small contributions to explaining variability in seriousness scores. Why is it that some individuals have contacts at an earlier rather than later age, if at all? Later in this report we shall describe an analysis which attempts to determine the correlates of police

<sup>6</sup> Age at first police contact begins at age 6. This variable is modified for each period; in predicting juvenile seriousness scores, age at first contact would include ages 6 through 17; those who had their first contact after age 17 or who never had a contact would receive a score of 18. A similar modification is made for the intermediate and adult periods.

<sup>7</sup> None of the Chicano males in the 1942 cohort had a contact and few Black females had a serious contact during this period. By contrast, in the 1949 cohort both Black and Chicano males and females had more serious contacts than their White counterparts.



contact at an early age. The question is whether early contacts may be accounted for by differentials in exposure, differentials in visibility, or real differences in behavior on the part of those individuals who have early police contacts.

#### Intermediate Seriousness Scores

The prediction of intermediate seriousness scores includes the same four variables as before plus the juvenile seriousness score. The relationships shown in Table 5 are in the expected direction, including the race variable in the 1942 cohort. Juvenile seriousness score replaces age at first contact as the most important predictor in this age period. The remaining variables make relatively small contributions to predictiveness and there is a substantial reduction in explained variance compared to the juvenile period.

TABLE 5. MULTIPLE REGRESSION RESULTS FOR PREDICTING INTERMEDIATE SERIOUSNESS SCORE, BY COHORT

<u>Variables</u>	<u>Standardized Coefficients (β)</u>	
	<u>1942</u>	<u>1949</u>
Race	-.115	-.081
Sex	-.093	-.036
Residential Area	-.038	-.066
Age at First Police Contact	-.115	-.068
Juvenile Seriousness Score	.390	.431
R <sup>2</sup>	.282	.271

#### Adult Seriousness Scores

The prediction of adult seriousness scores proceeds as before except that juvenile seriousness score is replaced by a combined seriousness score for both the juvenile and intermediate periods as a predictor. Table 6 indicates that there is greater divergence between the cohorts for the adult period than in previous periods. In both cohorts the combined juvenile-intermediate seriousness score has the greatest input on adult seriousness scores. In the 1942 cohort, minority group status is also of moderate magnitude ( $\beta = .244$ ), becoming more important in this

TABLE 6. MULTIPLE REGRESSION RESULTS FOR PREDICTING ADULT SERIOUSNESS SCORES, BY COHORT

<u>Variables</u>	<u>Standardized Coefficients (β)</u>	
	<u>1942</u>	<u>1949</u>
Race	-.244	-.090
Sex	-.069	-.020
Residential Area	-.040	-.016
Age at First Police Contact	-.041	.021
Juvenile-Intermediate Seriousness Score	.415	.609
R <sup>2</sup>	.296	.397

period than during the two preceding ones. This is not the case for the 1949 cohort, however, where the juvenile-intermediate score (.609) is by far the most potent predictor.

The results of the analysis based on this information for members of both birth cohorts suggests that individuals become locked into the legal system primarily on the basis of the age at which they have their first recorded experiences with the police. The earlier that event occurs, the more likely a relatively serious official career is likely to develop with the seriousness of career at one stage of life influencing seriousness at later stages. The important theoretical and empirical question remains, what accounts for variation in age at first police contact? Why do some individuals get into trouble with the law earlier than others?

#### Predicting Seriousness of An Official Criminal Career From Interview Data

We next attempted to predict seriousness of official criminal careers on the basis of information derived from the 1976 interview schedule as well as seriousness scores based on recorded police contacts.<sup>8</sup> The objective was to develop a series of regression models which are predictive of juvenile, intermediate, and adult career seriousness scores in each cohort and further, to produce a single longitudinal model which describes the juvenile through intermediate through adult sequence as a whole.

Not all variables from the interview schedule are included in this analysis. Some variables were eliminated because they did not apply to all interviewees (e.g., questions asked only of those whose mothers worked outside of the home). Other variables were eliminated after an examination of the zero-order correlation matrices indicated that they were uncorrelated with the dependent variables.<sup>9</sup> The retained variables were re-examined to determine the degree of intercorrelation. If two (or more) intercorrelated variables measured similar things, the one with the lowest correlation with the dependent variable was eliminated.

Because the dependent variables reflect different stages of the life cycle, it was necessary to select independent variables appropriate for each of these stages. That is, variables reflecting events or conditions occurring during the respondent's juvenile period are needed to predict juvenile seriousness scores. These same variables may also be used to predict seriousness scores for the intermediate and adult periods since they are part of the individuals' biographies and may continue to exert some influence in later life. Thus, the predictors of adult seriousness scores would include not only variables reflecting conditions and events during this period but also variables from preceding age periods.

These procedures resulted in the selection of 26 potentially useful variables. Table 7 presents each variable and the manner in which it was measured.<sup>10</sup> Two

<sup>8</sup> This section of the report is a modified and shortened version of an unpublished research report by Michael R. Olson, "Predicting Seriousness of Official Police Contact Careers: An Exploratory Analysis."

<sup>9</sup> Zero-order correlation matrices were constructed for each total cohort and for males and females of each cohort in order to determine if sex differences were sufficiently different to require separate multiple regression analyses. While it seemed that they were, preliminary regression analyses indicated that the final results did not justify carrying out the entire analysis on this basis.

<sup>10</sup> These variables, in turn, were subjected to three multiple regression variable selection routines (i.e., stepwise forward selection [SF], backward elimination [BE],

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TABLE 7. INDEPENDENT VARIABLES

---

1. Group Ties\*

- 1 = Independent
- 2 = Multiple Group Oriented
- 3 = Single Group Oriented (Other than Family)
- 4 = Family Oriented

\*Cohort members were measured on this variable for 4 age periods: 6-13, 14-17, 18-20, 21 and older. Each constitutes a separate variable.

---

2. Employment Involvement During High School

- 1 = No Employment
  - 2 = Summer Only
  - 3 = School Year Only
  - 4 = Both School Year and Summer
- 

3. Attitude Toward School

- 0 = Negative
  - 1 = Slightly Negative
  - 2 = Slightly Positive
  - 3 = Positive
- 

4. Extent of Friends' Trouble with the Law: Juvenile Period  
(Geometric Scale)

- 1 = Low Friends' Trouble
  - ...
  - 31 = High Friends' Trouble
- 

5. Perceived Neighborhood Police Patrol Activity: Juvenile Period

- 1 = None
  - 2 = Light
  - 3 = Moderate
  - 4 = Heavy
- 

6. Attitude Toward Police: Juvenile Period

- 1 = Positive
  - 2 = Indifferent
  - 3 = Negative
- 

7. Personal Change: Juvenile Period

- 1 = Liked Myself as I Was
  - 2 = Wanted to be a Different Kind of Person
- 

8. Positive Influences from Significant Others: Juvenile Period

- 0 = No Positive Influence
  - ...
  - 5 = All Positive Influences
-

---

9. Negative Influences from Significant Others: Juvenile Period

0 = No Negative Influence

.

5 = All Negative Influences

---

10. Household Head Economic Involvement: Juvenile Period

1 = Mostly Unemployed

2 = Irregularly Employed

3 = Regularly Employed

---

11. Household Head Occupational Status: Juvenile Period

1 = Unemployed

2 = Agricultural Laborer

3 = Industrial Laborer

4 = Private Household Worker

5 = Maintenance, Service

6 = Operatives

7 = Craftsman, Foreman

8 = Clerical, Sales

9 = Professional, Managerial

---

12. Family Intactness: Juvenile Period

1 = Lived With Neither Parent

2 = Lived With One Parent

3 = Lived With Both Parents

---

13. Children in Family of Orientation: Juvenile Period

1 = Only Child

.

8 = 8 or More Children

---

14. Educational Attainment

1 = Less than 10 Years

2 = 10 to 12 Years

3 = High School Graduate

4 = College

---

15. Age at First Full-Time Occupation

1 = 13 years

.

16 = 28 Years (1949)

[22 = 34 years (1942)]

} \*

\*Code 22/16 indicates that cohort member had never had a full-time occupation up to the time of interview.

---

16. Status of First Full-Time Occupation\*

1 = Unemployed

.

9 = Professional, Managerial

\*Coded same as Household Head Occupational Status

---

---

17. Age at Marriage

1 = 16 years

:

14 = 29 years (1949)

[20 = 35 years (1942)]

} \*

\*Code 20/14 indicates cohort members had never married at time of interview.

---

18. Amount of Time Worked Since Education Completed

1 = Little of the Time

2 = Most of the Time

3 = All of the Time

---

19. Friends' Trouble with the Law: Adult Period (Geometric Scale)

0 = Low Friends' Trouble

:

31 = High Friends' Trouble

---

20. Status of Present Occupation\*

1 = Unemployed

:

9 = Professional, Managerial

\*Coded same as Household Head Occupational Status.

---

21. Present Income

1 = Low Income (<\$5000)

:

37 = High Income (\$37,000 - 37,900)

---

22. Status of Residential Area: Juvenile Period

1 = Low Status

:

6 = High Status

---

23. Self-Report Delinquencies: Juvenile Period

1 = Didn't Commit Delinquencies

2 = Committed Delinquencies

---

24. Age at First Police Contact

1 = 6 years

:

22 = 27 years (1949)

[27 = 32 years (1942)]

} \*

\*Code 22/27 indicates that cohort member never had a recorded police contact.

---

25. Automobile Use Scale: Juvenile Period

0 = Low Use

:

15 = High Use

---

---

26. Years Before Leaving Home\*

0 = 14 years

:

14 = 28 years (1949) } \*

[18 = 32 years (1942)] }

\*Code 14/18 indicates cohort member was still living with parents or family at time of interview.

---



general points should be made regarding the findings. First, within cohorts there is a difference in the predictive models over age periods; the model that best predicts juvenile seriousness is different from the one predicting intermediate or adult seriousness scores. This is not unexpected since it is conceivable that conditions and events that may be influential at one period in life are not as important later in life. Second, the predictive models vary across cohorts for a given dependent variable, i.e., the predictors of adult seriousness scores in the 1942 cohort are not the same as those for the same variable in the 1949 cohort. These cross-cohort differences tend to be slight in the case of juvenile seriousness scores but greater in the case of intermediate and adult seriousness scores.

#### Predicting Juvenile Seriousness Scores

Table 8 presents a cross-cohort comparison of the selected predictors when juvenile seriousness score is the dependent variable. The best predictors of

TABLE 8. SELECTED PREDICTORS OF JUVENILE SERIOUSNESS SCORES, BY COHORT

<u>Variables</u>	<u>Standardized Coefficients (8)</u>	
	<u>1942</u>	<u>1949</u>
Age at First Police Contact	-.690	-.421
Friends' Trouble with the Law	.143	.283
Household Head's Economic Involvement	.115	-.157
Attitude Toward Police	---	.102
$R^2$	.566	.438

and maximum  $R^2$  improvement [MRI]) associated with the Stepwise Procedure in Statistical Analysis System (SAS) computer package. The stepwise procedure associated with SAS was deemed more useful than its analog in the Statistical Package for Social Scientists (SPSS; Nie, *et al.*, 1975) for two primary reasons. First, it is much easier to specify a selection parameter in SAS compared to SPSS. SAS allows the user to specify a particular alpha level (e.g.,  $p < .05$ ) for each variable to be entered or deleted from a model. In contrast, SPSS requires the user to select a specific F-value as a selection parameter. This value will only be approximate for a given significance level under conditions of variation in degrees of freedom which occur in stepwise selection. Second, SPSS offers only one variable selection routine in its regression procedure, i.e., forward inclusion without deletion of variables already entered into the equation. However, SAS offers 5 different selection routines: 1) forward inclusion without the deletion option as in SPSS, 2) stepwise forward selection with a deletion option, 3) backward elimination, 4) maximum  $R^2$  improvement, and 5) minimum  $R^2$  improvement (Barr, 1976:251-252). The stepwise forward (SF), backward elimination (BE), and maximum  $R^2$  improvement (MR) techniques were the ones selected as most useful for present purposes. These routines do not necessarily produce the same final results although in most instances the results will be similar. The basic strategy employed here was to compare the outcomes of the SF and BE routines as a reliability check. To the extent that two different approaches produce the same final model, the credibility of that model is enhanced. The MRI routine was to be used as an arbiter if there was disagreement between the SF and BE approaches. However, this turned out to be an unnecessary step since, in all cases, SF and BE produced identical final models.

juvenile seriousness are nearly identical in both the 1942 and 1949 cohorts: age at first police contact, extent of friends' trouble with the law, and household head's economic involvement. One additional variable, attitude toward police, acts as a predictor in the 1949 but not the 1942 cohort. The signs of the coefficients indicate that a higher seriousness score is associated with 1) a lower age at first contact, 2) having friends who have had more serious trouble with the law, and 3) in the 1949 cohort, having a negative attitude toward the police. The signs associated with regularity of household head's employment reverse across cohorts. In the 1942 cohort, the positive sign indicates that higher seriousness is associated with greater regularity of employment while in the 1949 cohort, a negative sign indicates an association with less regular employment.

The three variables comprising the 1942 cohort model account for nearly 57% ( $R^2=.566$ ) of the variance in juvenile seriousness scores while the four variables in the 1949 model account for 44% ( $R^2=.438$ ) of the variance. The relative size of the standardized coefficients within cohorts indicates that age at first police contact continues to account for most of the variability in each model in each cohort.

The relative importance of age at first contact was further gauged by a model in which it was the only predictor variable and the resulting  $R^2$  values compared with those obtained in the full model in Table 8. As Table 9 indicates, the major portion of the explained variance in juvenile seriousness scores is accounted for by age at first police contact. In the 1942 cohort, this variable alone explains about 54% out of 57% of the variance, and in the 1949 cohort, 31% out of 44% of the variance.

TABLE 9. COMPARISON OF  $R^2$  VALUES FOR REDUCED AND FULL MODELS IN PREDICTING JUVENILE SERIOUSNESS SCORES, BY COHORT

	$R^2$	
	1942	1949
Full Model*	.566	.438
Reduced Model**	.541	.307
Difference	.025	.131

\*Full model includes the variables presented in Table 8 for each cohort.

\*\*Reduced model includes only age at first police contact as a predictor variable.

Given the relative importance of age at first police contact as a predictor, an appropriate subsidiary analysis continued to be required to determine the antecedents of this variable, i.e., what variables best predict age at first police contact? A number of variables previously described were subjected to the SAS selection procedures with age at first police contact as the dependent variable.<sup>11</sup> The results of this analysis are presented in Table 10.

<sup>11</sup> The initial model, before selection, included employment during high school, amount of education, attitude toward school, age moved out of home, age at first job, age at marriage, number of siblings, sex, who respondent lived with while growing up, regularity of household head's employment, status of household head's occupation, race, social area of residence, self-reported delinquency, wanting to be a different person, attitude toward police, automobile use scale, extent of friends' trouble with the law, and perceived police patrol activity.

TABLE 10. PREDICTORS OF AGE AT FIRST POLICE CONTACT

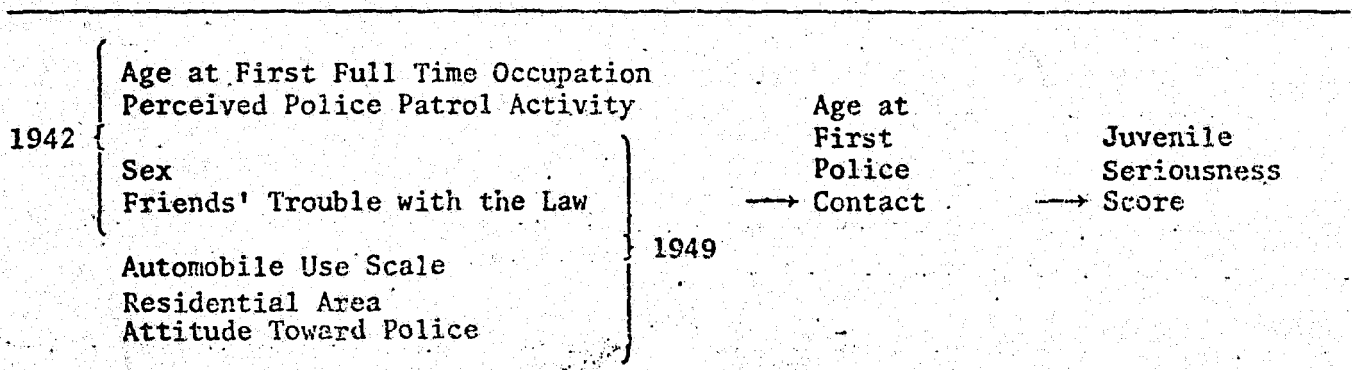
Variables	Standardized Coefficients ( $\beta$ )	
	1942	1949
Sex	-.296	-.180
Juvenile Friends' Trouble with the Law	-.230	-.163
Age at First Full Time Occupation	.128	---
Perceived Police Patrol Activity	-.184	---
Automobile Use Scale	---	-.148
Residential Area	---	.141
Attitude Toward Police	---	-.123
$R^2$	.265	.214

Only two variables appear in common as predictors across cohorts: sex and juvenile friends' trouble with the law. Being male and having friends in more serious trouble with the police are related to lower age at first police contact. In the 1942 cohort, it was also found that lower age at first police contact was associated with lower age at first full time employment and perceived heavy police patrol activity in one's neighborhood. In the 1949 cohort, in addition to the two common variables, three others operated as predictors of age at first contact. Here, higher levels of automobile use, lower status of social area of residence, and more negative attitude toward the police were associated with lower age at first police contact.

In general, the variables selected by SAS as predictors of age at first police contact were not good ones in the sense that they accounted for only 26% and 21% of the variance, respectively, in the 1942 and 1949 cohorts. This is reflected to some extent in the low absolute size of the standardized coefficients. This suggests that the information from the interview schedule, at least as coded and incorporated into the analysis, is not tapping the most important determinants of age at first contact. It is also possible that variables other than those considered are presumably more important in their influence.

The analysis thus far suggests that the following preliminary model (Figure 1) represents the basic sequence in predicting juvenile seriousness scores. Juvenile seriousness scores are most strongly related to age at first police contact: the lower the age at first contact, the higher the seriousness score. In turn, the

Figure 1



antecedents of age at first contact seem to vary to some extent by cohort. Although sex and degree of friends' trouble with the law are common to both cohorts, other variables unique to each cohort also appear to exert an influence. Neither model, however, accounts for much of the variability in age at first contact.

### Predicting Intermediate Seriousness Scores

Table 11 presents the results of the stepwise selection for the prediction of intermediate (ages 18-20) seriousness scores. A core of three variables appear to be common across both cohorts. Specifically, a high intermediate seriousness score is related to 1) a high juvenile seriousness score, 2) a negative attitude toward police, and 3) in the 1942 cohort, higher age at marriage but in the 1949 cohort, a lower age at marriage. These three variables are the only predictors selected in the 1942 cohort and account for 34% ( $R^2=.343$ ) of the variance in the dependent variable. However, in the 1949 cohort, four additional variables are included as

TABLE 11. SELECTED PREDICTORS OF INTERMEDIATE SERIOUSNESS SCORES

Variables	Standardized Coefficients (B)	
	1942	1949
Juvenile Seriousness Score	.519	.475
Attitude Toward Police	.153	.086
Age at Marriage	.098	-.106
Years Before Leaving Home	---	.143
Age at First Full Time Occupation	---	-.101
Residential Area	---	-.103
Perceived Police Patrol Activity	---	.075
$R^2$	.343	.333

predictors of high seriousness scores: 1) greater length of time lived at home, 2) lower age at first full-time job, 3) lower status of social area of residence, and 4) perception that one's neighborhood was heavily patrolled by police. The seven variables in the 1949 cohort account for 33% ( $R^2=.333$ ) of the variance in intermediate seriousness scores.

It should be noted that the selected predictors of intermediate seriousness scores are less effective than those for juvenile seriousness scores in terms of explained variance. In part, this may be due to the relative shortness of the intermediate period which results in less variability of the seriousness scores compared to greater variability during the longer juvenile period. For example, the range of juvenile and intermediate scores is 48 and 36, respectively, in the 1942 cohort and 114 and 84 in the 1949 cohort. With less variability among intermediate scores, it is more difficult to find adequate predictors.

Within cohorts, juvenile seriousness scores appear to be the most important predictors of intermediate seriousness scores judging by the relative size of the standardized regression coefficients. The relative importance of juvenile seriousness score can be gauged by comparing the  $R^2$  values for the full model (Table 11) with a reduced model which contains only juvenile seriousness score as a predictor in each of the respective cohorts. Table 12 indicates that 31% ( $R^2=.310$ ) of the total of 34% explained variance in the 1942 cohort is attributable to juvenile seriousness score alone. Similarly, 28% ( $R^2=.278$ ) of a total of 33% of the variance can be attributed to this variable in the 1949 cohort.

TABLE 12. COMPARISON OF  $R^2$  VALUES FOR REDUCED AND FULL MODELS IN PREDICTING INTERMEDIATE SERIOUSNESS SCORES, BY COHORT

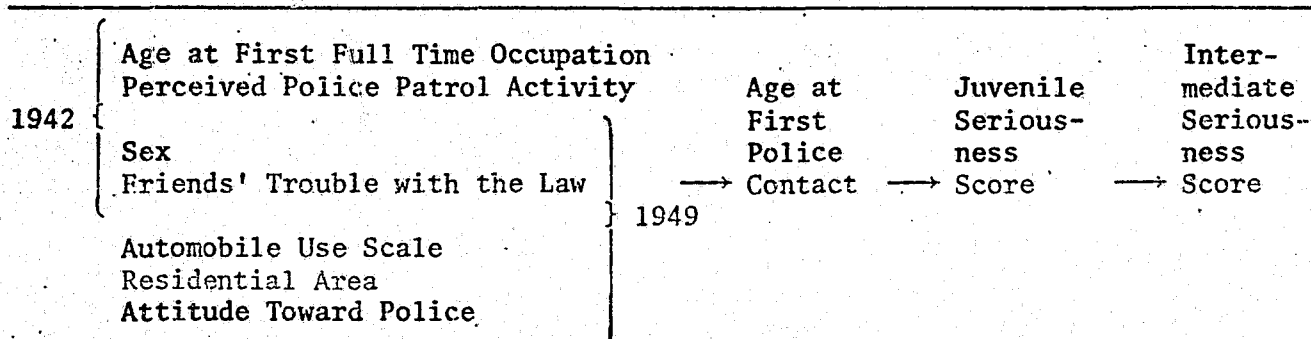
	$R^2$	
	1942	1949
Full Model*	.343	.333
Reduced Model**	.310	.278
Difference	.033	.055

\*Full model includes the variables in Table 11.

\*\*Reduced model includes only juvenile seriousness score as a predictor variable.

These findings suggest a further extension of Figure 1, in which juvenile seriousness score becomes the primary predictor of intermediate seriousness score (see Figure 2).

Figure 2



#### Predicting Adult Seriousness Scores

Table 13 presents the selected predictors of adult seriousness scores for both cohorts. The one variable common across cohorts, intermediate seriousness score, is also the most important among the selected predictors based on the magnitude of the standardized coefficients. Apart from this common variable, the two cohorts are quite different in terms of the variables operating as predictors. In the 1942 cohort, high adult seriousness scores are linked to: 1) high employment involvement in high school, 2) low educational attainment, 3) low family intactness, 4) low age at first police contact, 5) perceived light police patrol activity in one's neighborhood during youth, 6) low present income, and 7) greater extent of adult friends' trouble with the law. Alternately, in the 1949 cohort, high adult seriousness scores are associated with: 1) a large number of children in one's family of orientation, 2) low present occupational status, 3) higher age at marriage, and 4) higher juvenile seriousness scores.

The eight predictor variables in the 1942 cohort explain about 38% ( $R^2=.376$ ) of the variance in the dependent variable while the five predictors in the 1949 cohort account for 61% ( $R^2=.613$ ) of the variance in adult seriousness scores. The higher percentage of explained variance in the 1949 cohort seems to be due to the strong contribution of intermediate seriousness scores ( $\beta=.690$ ).

TABLE 13. PREDICTORS OF ADULT SERIOUSNESS SCORES

Variables	Standardized Coefficients ( $\beta$ )	
	1942	1949
Intermediate Seriousness score	.445	.690
Employment Involvement During High School	.090	---
Educational Attainment	-.103	---
Family Intactness	-.124	---
Age at First Police Contact	-.146	---
Perceived Police Patrol Activity	-.120	---
Present Income	-.078	---
Adult Friends' Trouble with the Law	.191	---
Children in Family of Orientation	---	.069
Status of Present Occupation	---	-.082
Age at Marriage	---	.108
Juvenile Seriousness Score	---	.113
$R^2$	.376	.613

As before, most of the variability in the dependent variable is accounted for by a single variable--intermediate seriousness score. Table 14 compares the  $R^2$  values of the full model in Table 13 with the reduced model containing only intermediate seriousness score as the predictor variable. In the 1942 cohort, 25% ( $R^2=.254$ ) of a total of 38% explained variance is attributed to intermediate seriousness scores while in the 1949 cohort 58% ( $R^2=.582$ ) of the total of 61% can be attributed to this variable.

TABLE 14. COMPARISON OF  $R^2$  VALUES FOR REDUCED AND FULL MODELS IN PREDICTING ADULT SERIOUSNESS SCORES, BY COHORT

	$R^2$	
	1942	1949
Full Model*	.376	.610
Reduced Model**	.254	.582
Difference	.122	.028

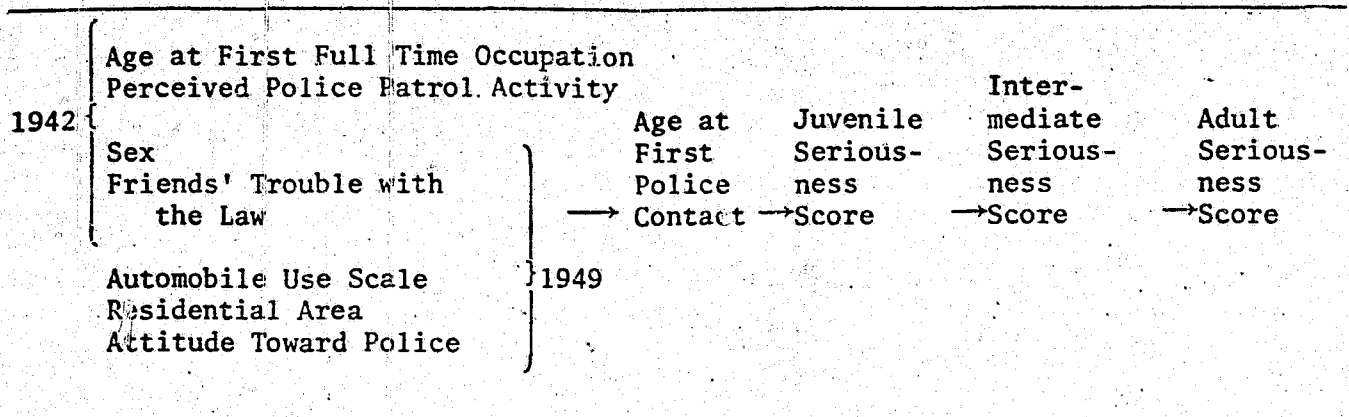
\*Full model includes the variables in Table 13.

\*\*Reduced model includes only intermediate seriousness score as a predictor variable.

Again, a further extension of the model in Figure 2 is required (see Figure 3). The results of the data-reduction procedure suggest this to be the most parsimonious model of the sequence of seriousness scores from the juvenile through the adult periods. The crucial link in the chain appears to be age at first police contact. The earlier first police contact occurs, the higher the juvenile seriousness score will be. We are still left with the problem of determining the



Figure 3



conditions that account for variability in age at first contact--why do some individuals begin their official criminal careers earlier than others? Although an attempt was made to provide a provisional answer to this question, it is clear that the information as coded from the interview schedule and included in these multiple regression analyses do not tap the important explanatory dimensions.

#### MULTIPLE DISCRIMINANT ANALYSIS AS A BASIS FOR DISCRIMINATING FREQUENCY AND SERIOUSNESS OF POLICE CONTACTS

Our next step was to utilize the SPSS multiple discriminant analysis technique in an effort to determine if there is a basis for constructing empirical typologies of delinquents and criminals in terms of frequency and seriousness of police contacts, employing the same independent variables as in the regression analyses described in the previous section. This analytic procedure manipulates the data in order to produce that linear combination of variables which maximizes the distinctiveness of two or more contact frequency or seriousness categories. The frequency categories previously employed in describing the concentration of serious delinquency and crime in a relatively small proportion of each cohort with multiple offenses were used in dividing each cohort into four groups, those with no police contacts, one contact, 2 to 4 contacts, and five or more contacts (we have added the no contact category to those utilized by Wolfgang, *et al.*).

The multiple discriminant analysis procedure was also followed in order to see if the data permitted discrimination between those who had at least one felony contact and those who did not, those who had at least one FBI Part I offense and those who did not, and those who had no contacts, contacts for juvenile status offenses, traffic offenses, or contacts for suspicion, investigation, or information and those with contacts for criminal offense categories. Each analysis was performed for three age periods, preadult ages 6 through 20, an adult period commencing at age 21, and a combination of the periods 6 through 20 and after age 21.

Although no more than 40 percent of the difference between frequency categories for the 1949 cohort and 35 percent for the 1942 cohort (combined preadult and adult period) were accounted for by the independent variables (these values were even smaller for each age period separately considered). There were, however, encouraging cross-cohort similarities and similarities between age periods. For example, those from both cohorts in the high contact category during the preadult period were most likely to have come from low socioeconomic status residential areas, to have had a negative attitude toward the police, to have made greater use of the automobile, and to have had friends in more serious trouble with the law. On the other hand, when each low versus high frequency was dichotomized commencing with

zero contacts versus 1 or more contacts, 0-1 versus 2 contacts, and so on, the discriminating variables were so inconsistent that classification on a basis of frequency of contact must be considered a very arbitrary decision--there is really no empirical basis for dividing frequency of contact in terms of the independent variables which are allegedly associated with frequency.

Less success was had in discriminating between serious and non-serious categories of contact whether serious be for felony contacts, Part I offenses contacts or whatever, with no more than 30 percent of the difference accounted for in any of the seriousness dichotomies for any age period or combination of age periods by the interview and place of residence data. The greatest similarity between cohorts and over age periods was found within the most serious category of each dichotomous pair. Within the felony - nonfelony dichotomy, for example, socioeconomic status of residential area, attitude toward the police, extent of juvenile friends' trouble with the law, and group ties during age 6 to 13 were consistently found to be characteristic of persons with felonies. Only two of these, socioeconomic status of residential area and attitude toward the police were associated with those who had contacts for Part I offenses or were in the criminal offense category of the third dichotomy (although several other variables were).<sup>12</sup>

This, of course, suggests why researchers arrive at conflicting conclusions about the antecedents and correlates of serious delinquent and criminal careers--each operational definition of frequency and seriousness of careers utilized in our own research generates a different set of relationships with commonality on only those variables which are the most powerful determinants. Furthermore, differences between age periods suggests that while there are consistencies over time, historical circumstances are responsible for periodic change in the chain of events or sets of circumstances that generate frequent and serious police contacts among both juveniles and adults.

## CONCLUSION

While police contacts for alleged delinquent and criminal behavior are widespread, patterns of concentration, particularly for those behaviors in which lower socioeconomic status persons can participate, are found in the inner city and its interstitial areas, the tradition for U.S. cities since at least the turn of the century. If we wish to make simple predictions to the effect that persons who reside in the inner city and its interstitial areas will have lengthier and more serious delinquent and criminal careers than those who live in better socioeconomic status areas, there is no problem. When we attempt to predict continuity in careers, whether it be on the frequency or seriousness dimension, the problem becomes more difficult for it is obvious that the relationship between juvenile and adult careers, or simply continuity in careers, is dependent upon what goes on in the minds of persons in positions of authority in the juvenile and adult justice systems as well as what goes on in the minds of the juveniles and adults who become recipients of their attention. While the data reveal, no matter how one looks at it, that the early onset of a juvenile career (as defined by contacts with the police at an early age) will result in the generation of more police contacts and more serious contacts than a later onset, the question remains as to whether or not an early onset of police contacts may be explained by an early onset of delinquent behavior, chance (i.e. everyone does these things), or early identification and labelling by the police as a person who will be observed more carefully as a consequence of his or her race/ethnicity and/or area of residence.

<sup>12</sup> Unpublished research report by Michael R. Olson, "An Examination of Criminal Typologies Based on Frequency and Seriousness of Contact with the Police."

**END**