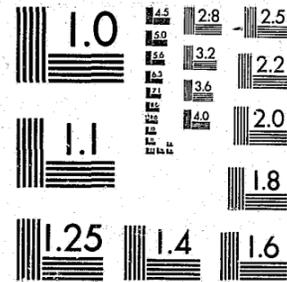


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X
A COHORT STUDY OF THE RELATIONSHIP OF
JUVENILE CAREERS TO ADULT CRIMINAL CAREERS

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INTRODUCTION

Although research on juvenile delinquency and adult crime has occupied the time of a sizeable proportion of the behavioral scientists during the last 50 years, sociologists in particular, there have been relatively few longitudinal studies of birth cohorts and even fewer studies in which official data have been combined with interview data. This study, following the lead of Wolfgang, Figlio, and Sillin's *Delinquency in a Birth Cohort*, begins to fill the gap in our knowledge of the relationship between juvenile delinquency and adult crime.

We have commenced by presenting the data in an ecological framework following the Chicago tradition of Park, Burgess, McKenzie, Shaw, and McKay, whose pioneering efforts did more perhaps than that of any others to dramatize the impact of the organization of society on official rates of delinquency and crime. Having shown how delinquency and crime are spatially concentrated in some respects and widely dispersed in others, how a large proportion of official delinquency and crime is generated by relatively few persons from each cohort but yet so widespread that over 80% of the males from each cohort have their names in the police records (if moving vehicle violations are included) at some time during their lives, we then turn to an examination of continuities in careers.

Here we find that even those who commence their official careers at an early age discontinue at such a rate that relatively few may be characterized as having a continuing record of police contacts. Still, the interview data and official police records do reveal that an early police contact, delinquent friends, place of residence, and other variables are predictive of serious police involvement during the juvenile period, the intermediate period, and on into adult life.

[Map 1 about here]

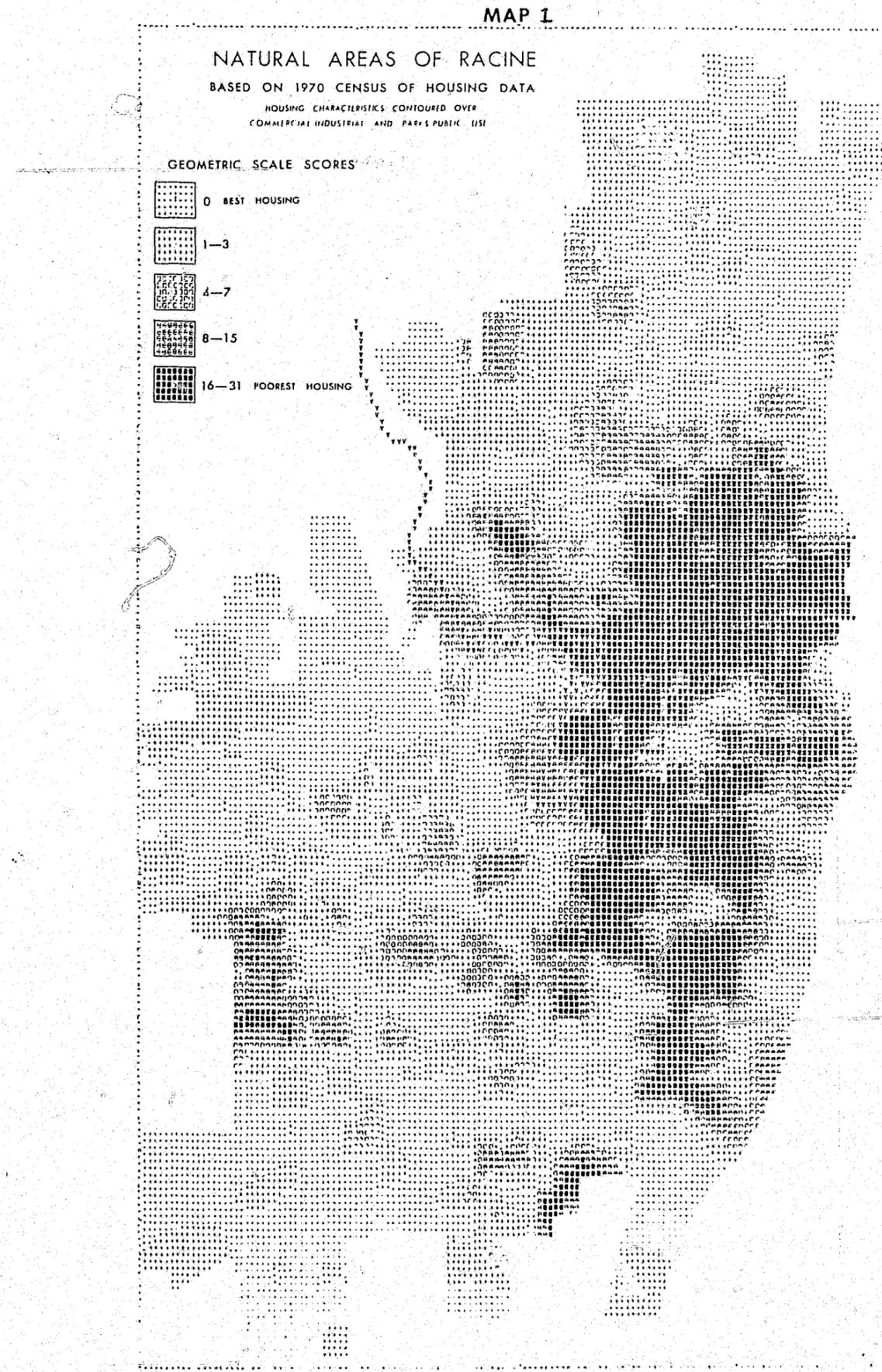
In concluding we ask, to what extent are the findings a product of behavior differences on the part of some members of each cohort and to what extent are they a product of early labelling?

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). 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.¹ Data have also been obtained by interviewing 333 persons from the 1942 cohort and 566 persons from the 1949 cohort.² 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.³

The block-by-block housing characteristics of all blocks in Racine (as represented by Geometric scores generated from U.S. Census of housing data for 1970) are shown on Map 1 on the next page.⁴ These data were utilized in the

[Map 1 about here]

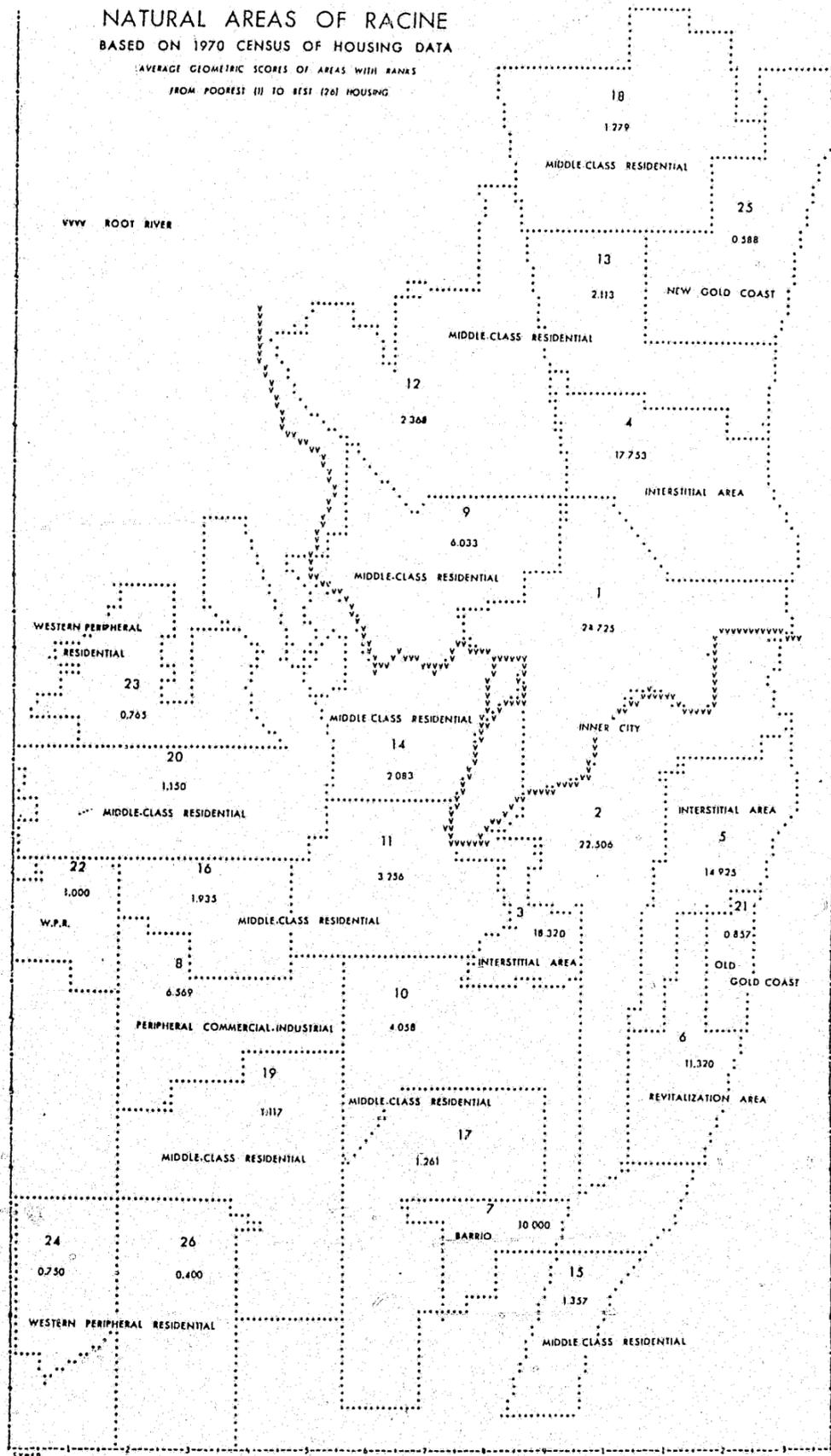


NATURAL AREAS OF RACINE

BASED ON 1970 CENSUS OF HOUSING DATA

AVERAGE GEOMETRIC SCORES OF AREAS WITH RANKS

FROM POOREST (1) TO BEST (26) HOUSING



MAP 2

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

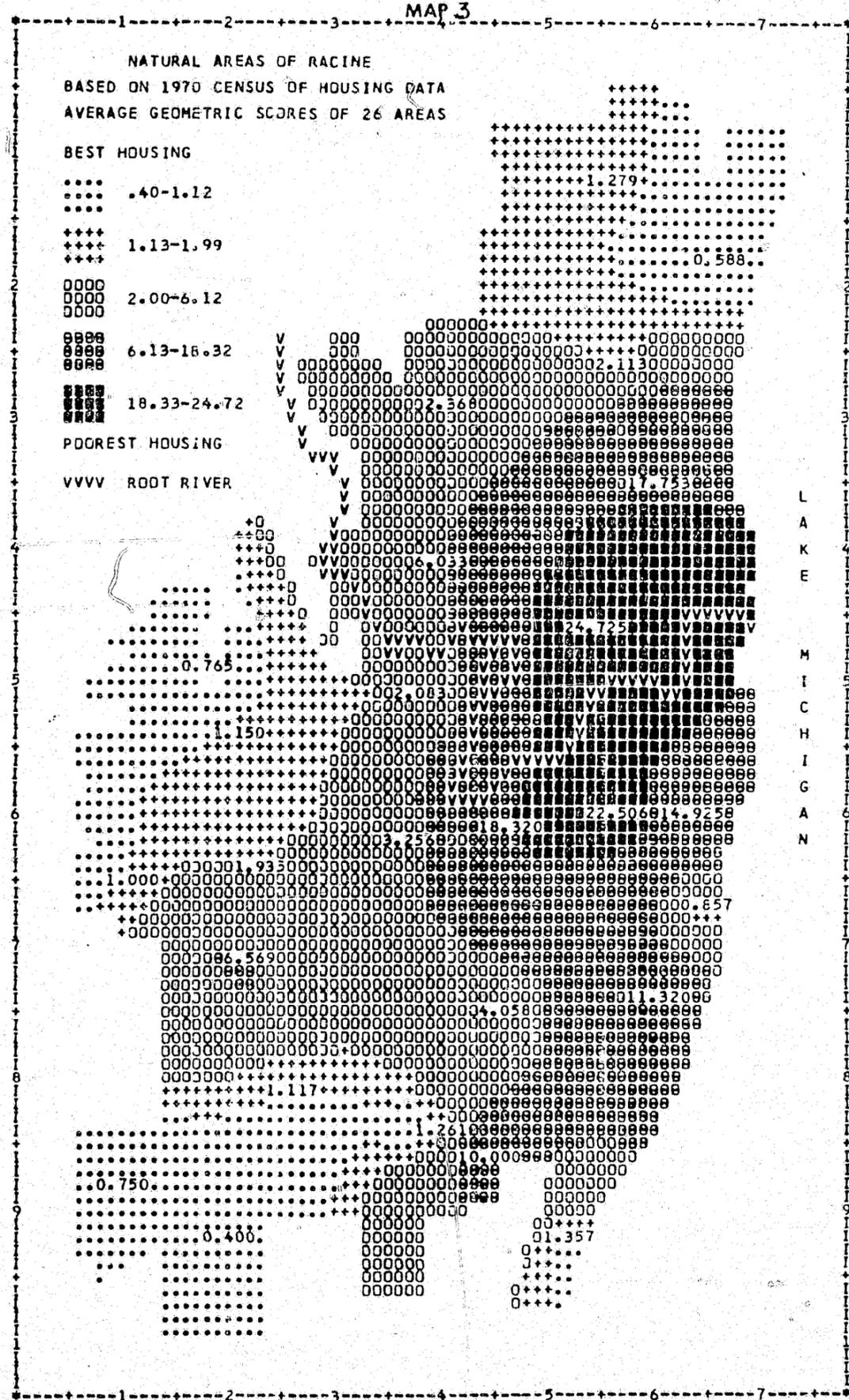
0000 2.00-6.12

8888 6.13-18.32

8888 18.33-24.72

POOREST HOUSING

VVVV ROOT RIVER



MAP 3

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[Map 2 and 3 about here]

development of 26 relatively homogenous residential areas shown on Map 2. The average geometric scores of each of these areas were utilized in developing the five computer-contoured areas shown on Map 3 to assist the reader in visualizing the spatial distribution of socioeconomic status in Racine.

POLICE CONTACTS: CONCENTRATION AND DISPERSION

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. The spatial aspect of concentration and dispersion is shown on Maps 4 through 7 and will be referred to more specifically as we proceed.

As each cohort moved through the age periods 6 through 17, 18 through 20, and 21 or over, increasingly larger proportions of each had at least one police contact so that almost two-thirds had had a police contact at some time during their careers. While there was variation by socioeconomic status (51% of the White males in the 1942 cohort and 59% of the 1949 cohort from the inner city compared to 30% and 44% 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% for males in

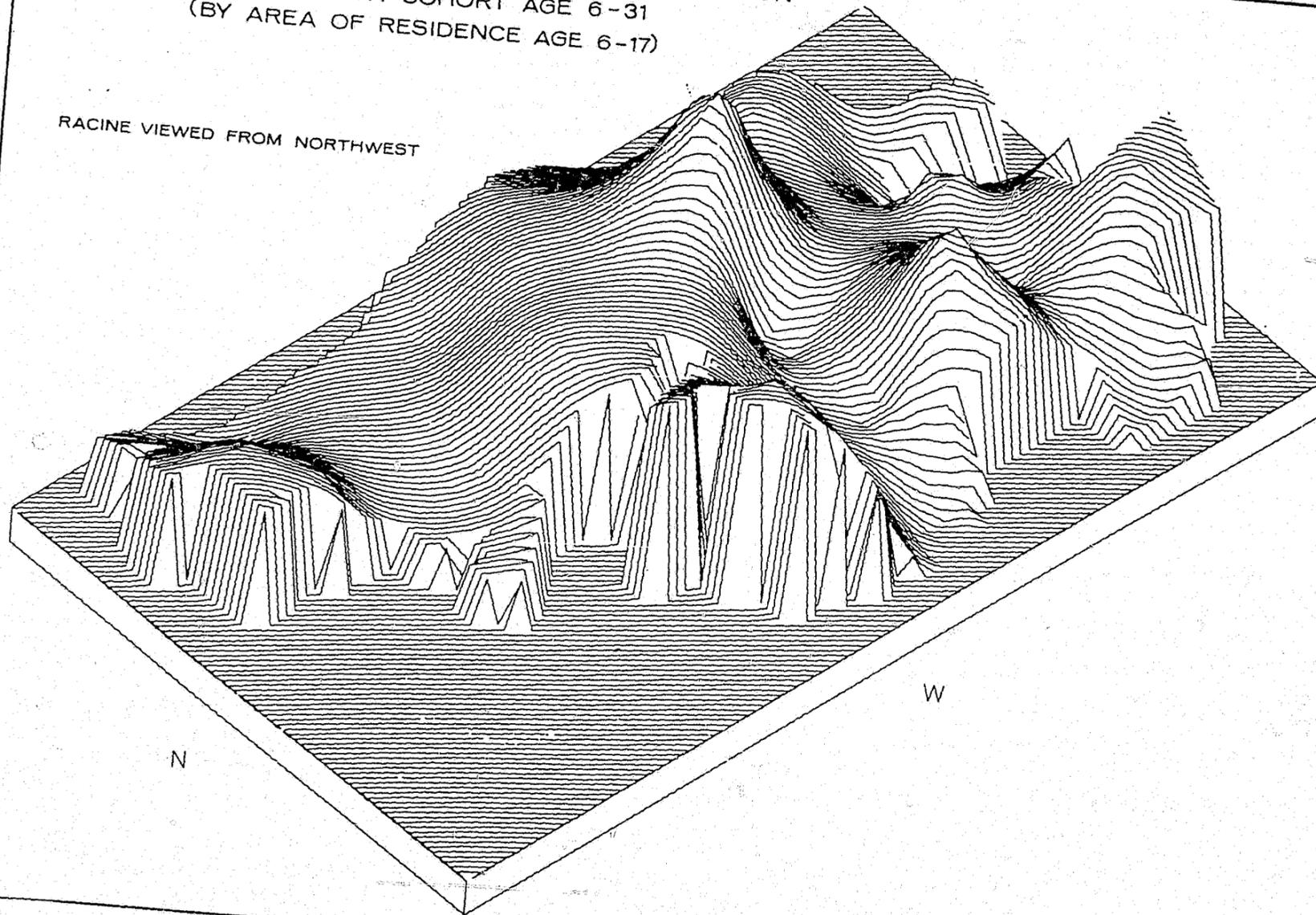
the 1942 cohort and 82% for the males in the 1949 cohort. Similarly, while only 24% of the females in the 1942 cohort and 33% in the 1949 cohort had a non-traffic police contact at some time during their careers, 48% and 52% respectively had a contact if traffic offenses were included.

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% of the White males in the 1942 cohort who had five or more non-traffic contacts were responsible for 75% of the total number of non-traffic contacts by persons in the cohort; 21% of the 1949 cohort were responsible for 77% of the non-traffic contacts. If we turn to more serious reasons for police contacts, felonies, we find that 11.5% of the White males in the 1942 cohort were responsible for 100% of their felonies and 12.5% in the 1949 cohort were responsible for all of that cohort's White male felonies. Put differently, 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. The highest concentration of felonies was found for White females with 2.2% of the 1942 cohort and 3.7% of the 1949 cohort accounting for all of the felonies. And going even further, 4.3% of the White males in the 1942 cohort (the recidivists, 2 to 4 contacts and chronics, 5 or more contacts) 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.

MAP 4

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



N

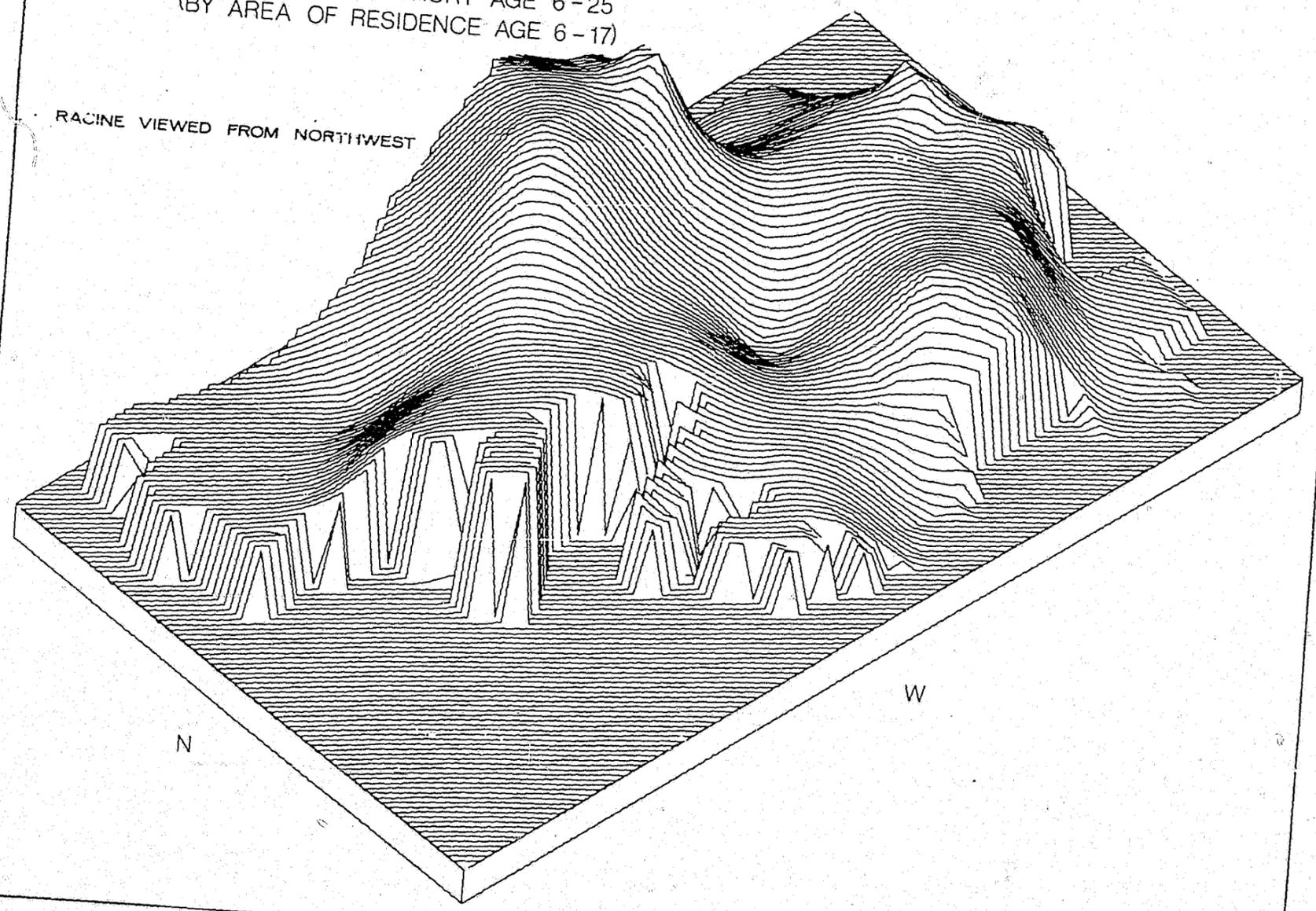
W

Y

MAP 5

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



[Maps 4 and 5 about here]

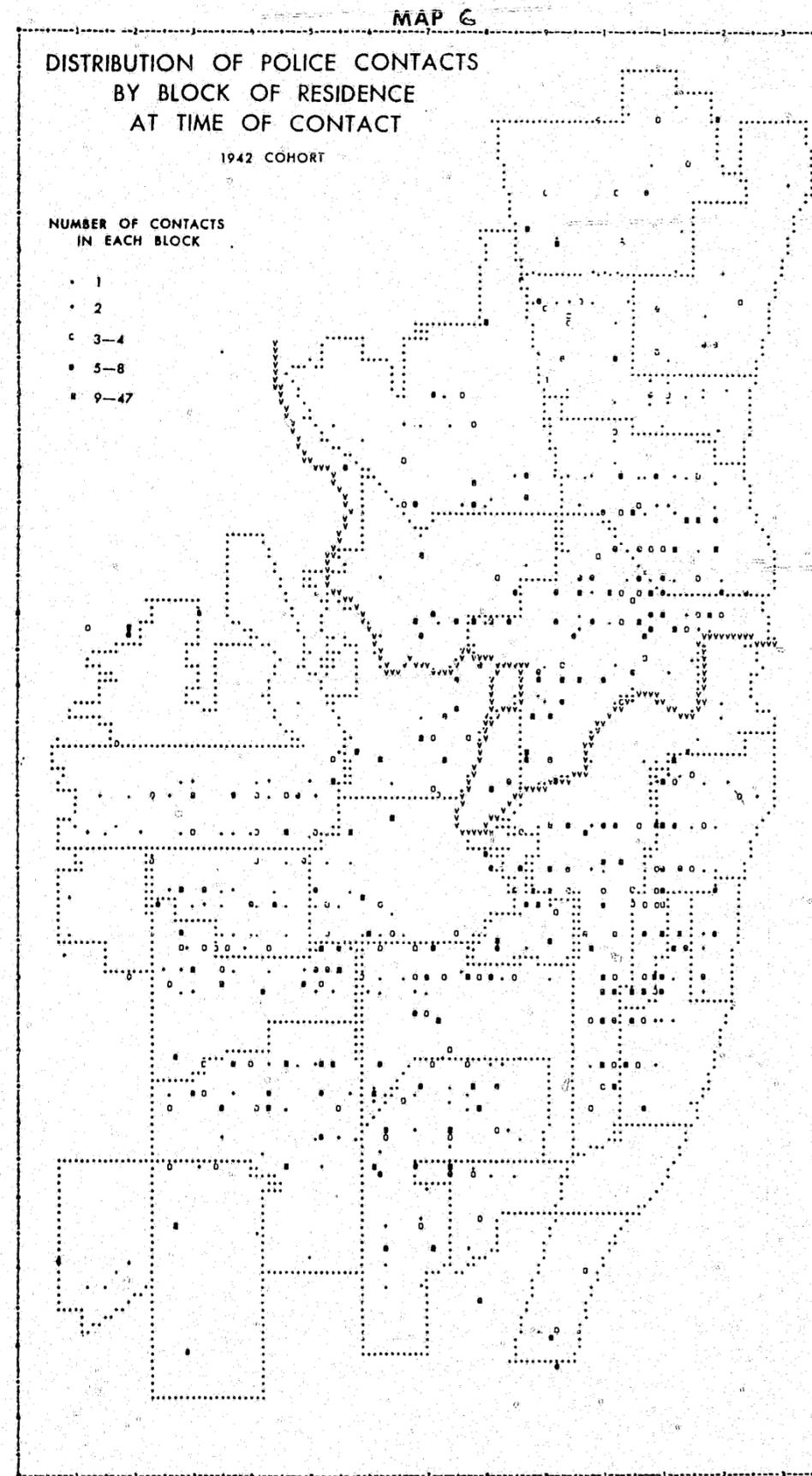
When the spatial distribution of delinquency and crime is presented as measured by average number of police contacts for persons according to their most frequent area of residence during the ages 6 through 17 (considering place of socialization as a determinant of size of total delinquent and criminal careers), 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), presented in 3 dimensional form on Maps 4 and 5.

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 the 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 6 through 9. The average number of contacts per block in each area and by residents per block in each area are shown on Maps 10 through 13.

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.

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

[Maps 6 through 13 about here]



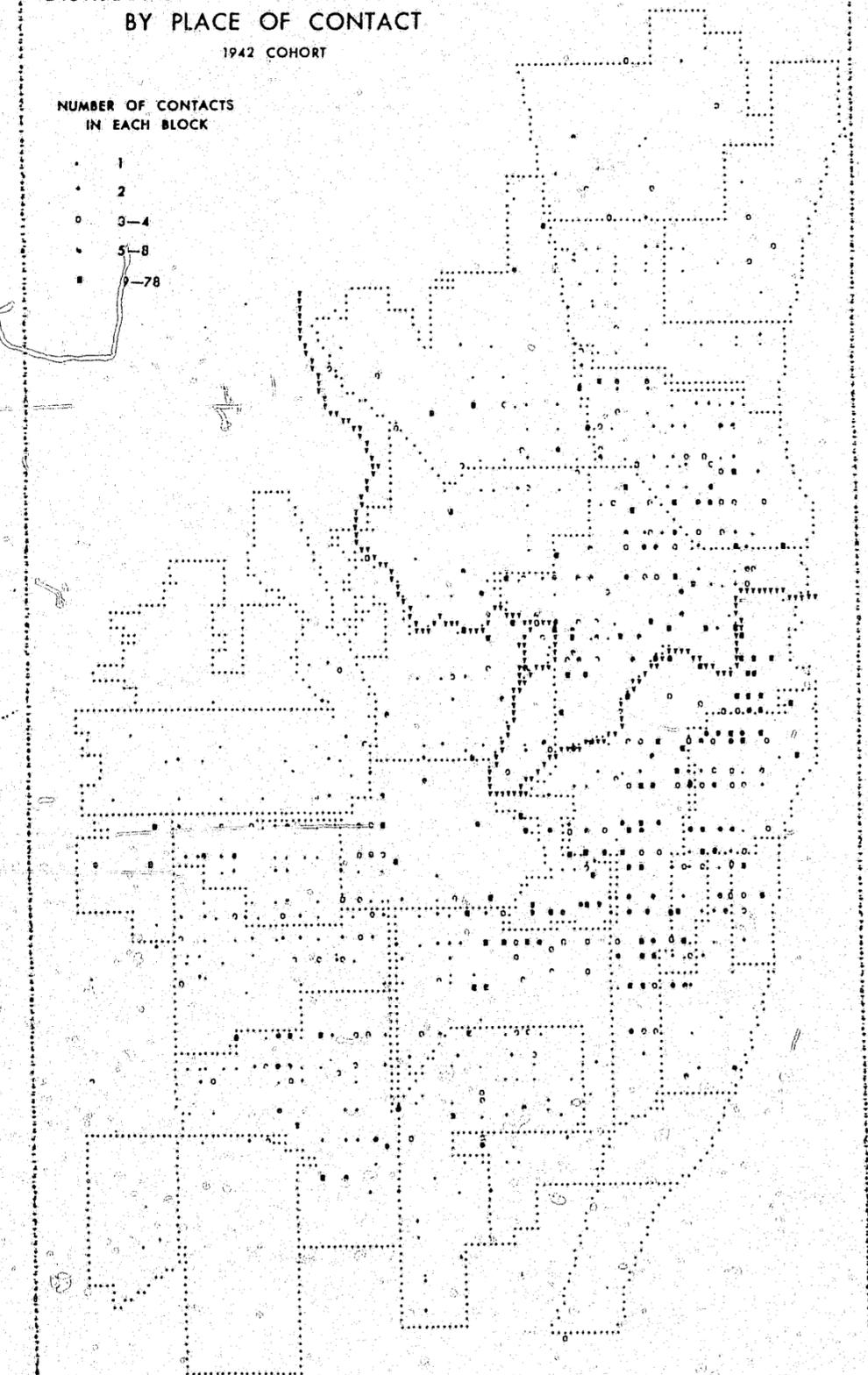
MAP 7

DISTRIBUTION OF POLICE CONTACTS
BY PLACE OF CONTACT

1942 COHORT

NUMBER OF CONTACTS
IN EACH BLOCK

- 1
- 2
- ◻ 3-4
- 5-8
- 9-78



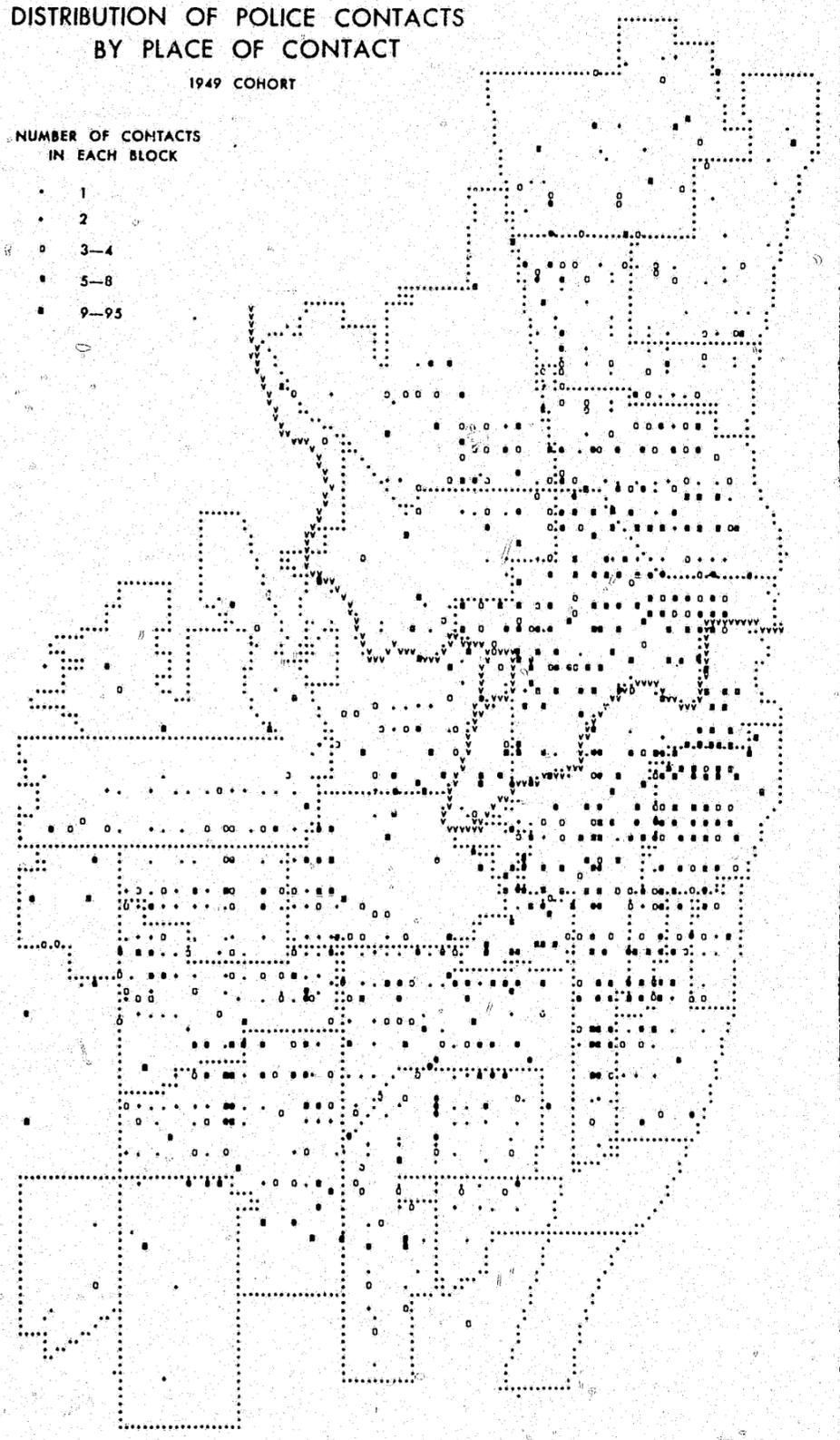
MAP 8

DISTRIBUTION OF POLICE CONTACTS
BY PLACE OF CONTACT

1949 COHORT

NUMBER OF CONTACTS
IN EACH BLOCK

- 1
- 2
- ◻ 3-4
- 5-8
- 9-95



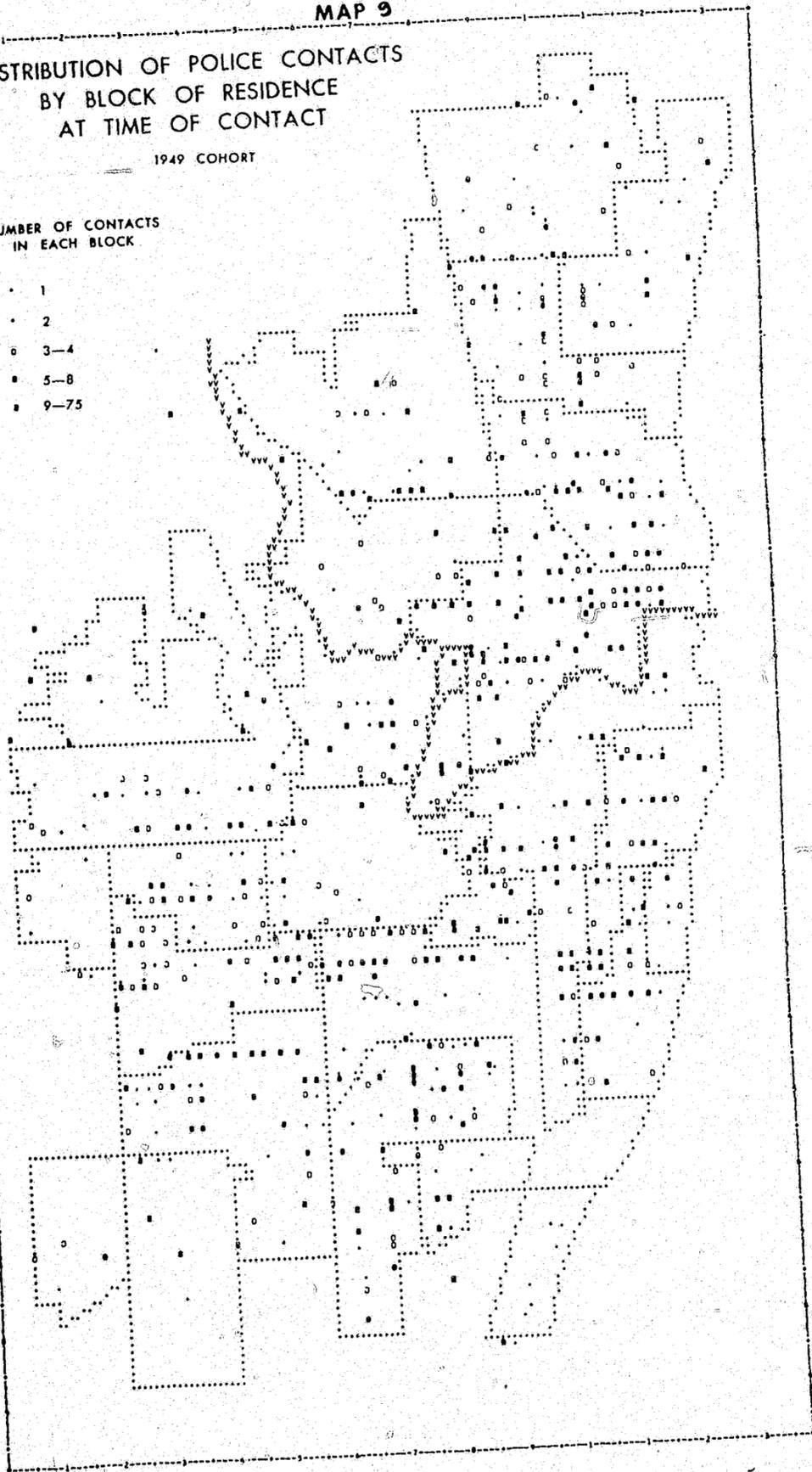
MAP 9

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



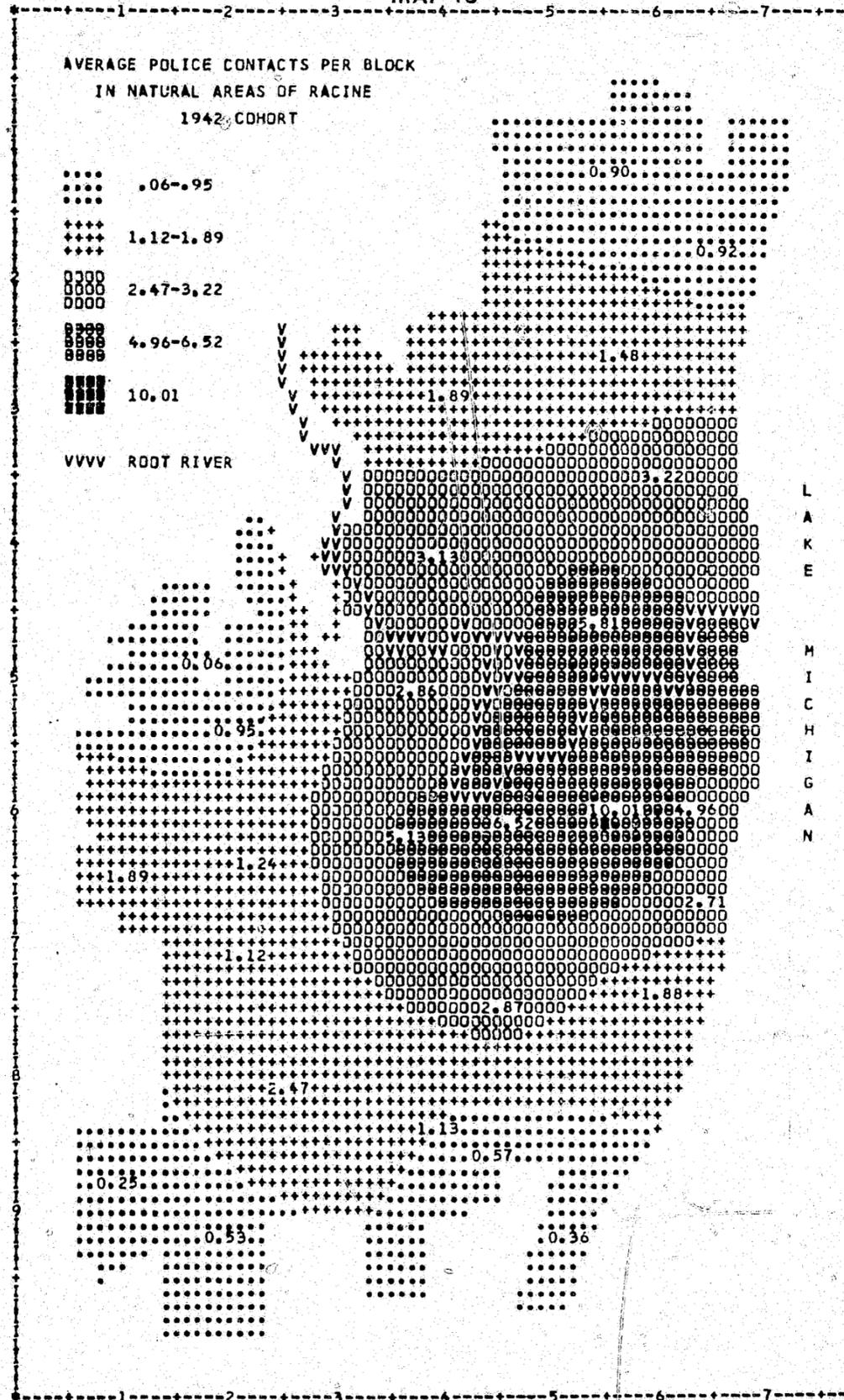
MAP 10

AVERAGE POLICE CONTACTS PER BLOCK
IN NATURAL AREAS OF RACINE

1942 COHORT

- 0.06-0.95
- ++++ 1.12-1.89
- 0000 2.47-3.22
- 8888 4.96-6.52
- |||| 10.01

VVVV ROOT RIVER

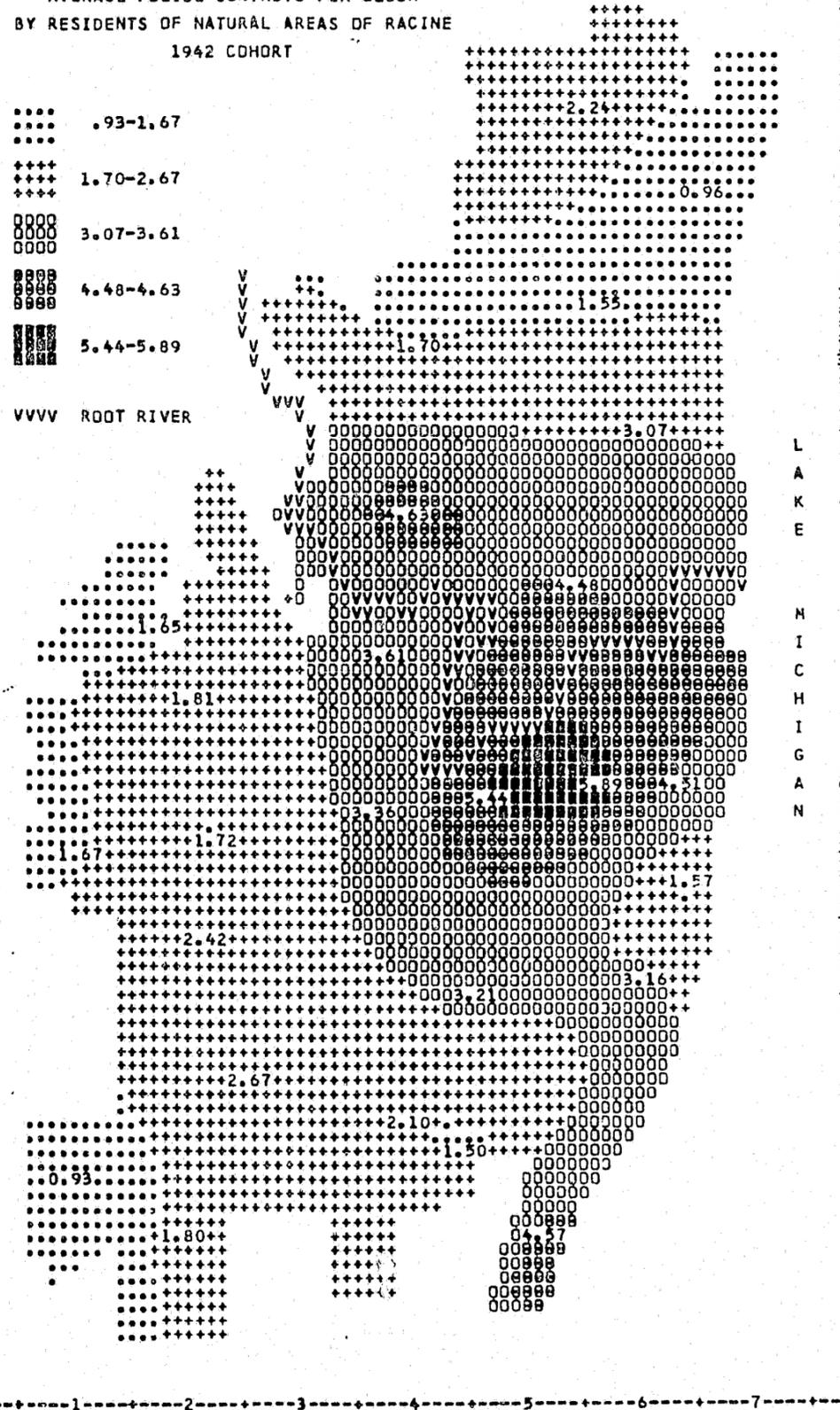


MAP 31

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

-93-1.67
- ++++ 1.70-2.67
- 0000 3.07-3.61
- 8888 4.48-4.63
- ||||| 5.44-5.89

VVVV ROOT RIVER



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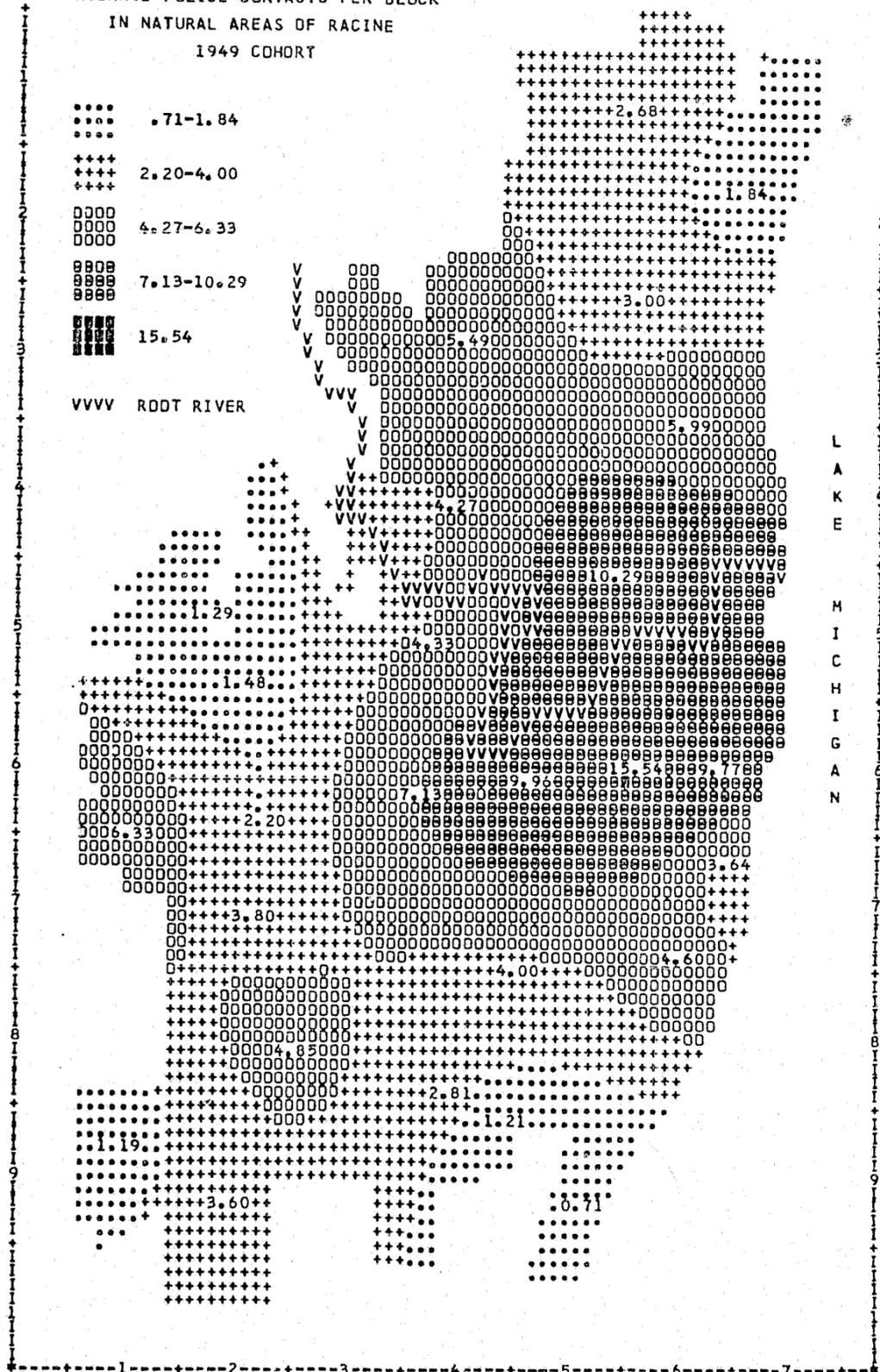
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MAP 12

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



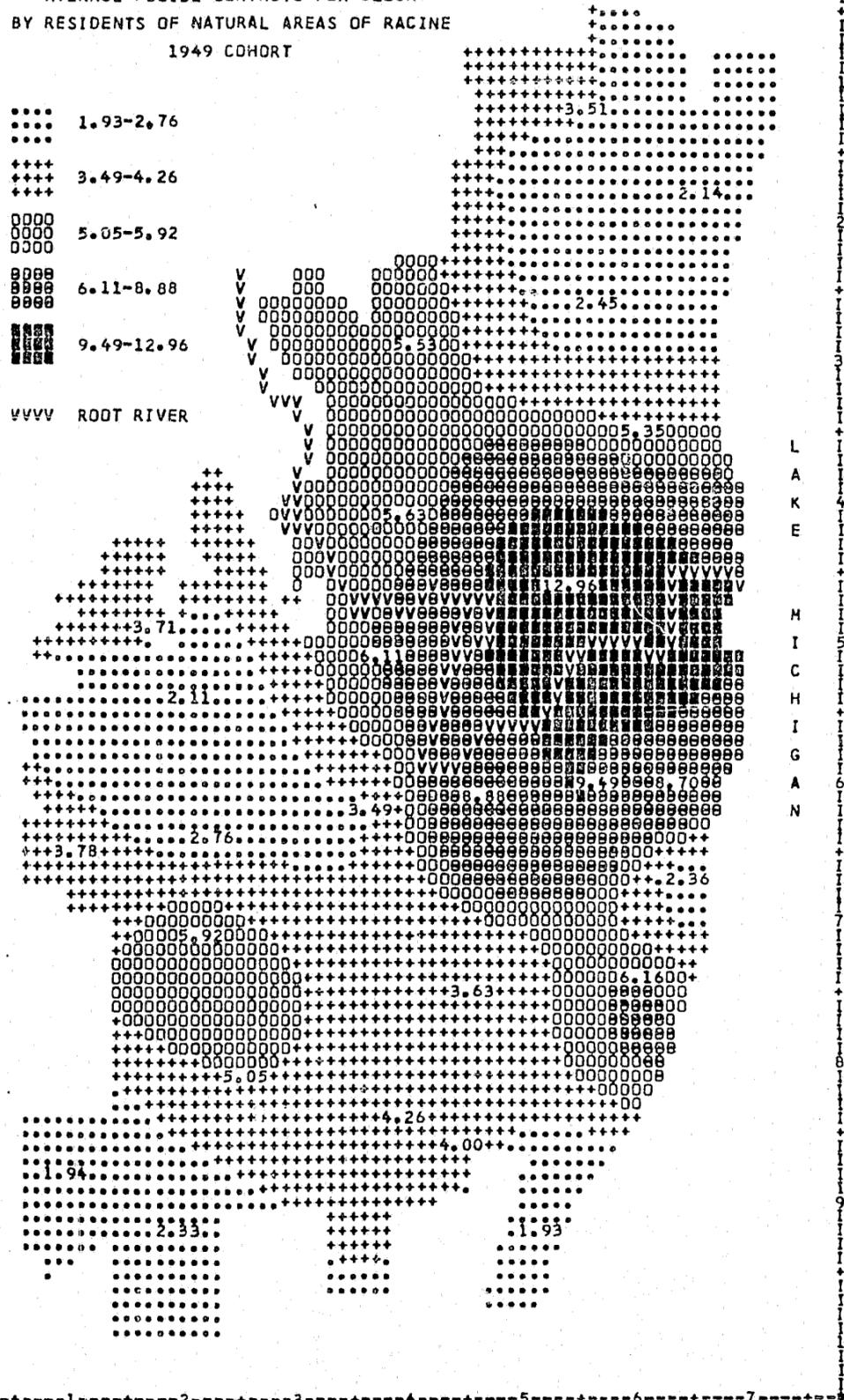
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MAP 13

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
 VVVV ROOT RIVER



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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. 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). And although 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 from that area or contiguous areas. 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.

Although 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: 1) 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, 2) 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 3) almost half of the females did have police contacts at one time or another.

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 Incurigibility or runaway were the next most frequent reasons for police contact.

Although the differences were not always large, males had more serious reasons (six-point seriousness scale)⁵ 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. 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.

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.

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 argues for the inclusion of police contacts for traffic offenses in determining size of total delinquent and criminal careers.

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 in seriousness over time.

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. 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.

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. At the same time 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. The probability of a felony contact for males in either cohort, however, 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. Black males

who had at least one police contact during the age period 6 through 17 were more likely than any others in the 1942 cohort to have at least one police contact 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.

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. 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.

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 for both traffic and non-traffic offenses, particularly the latter.

With few exceptions in either cohort, however, 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.

Although 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, total male contacts during the juvenile period, traffic and non-traffic, increased efficiency in predicting non-traffic offenses during the 18 through 20 and/or 21 or older period beyond that obtained for either traffic or non-traffic offenses alone. 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 the relationships obtained over those based on only the number of police contacts.

THE INTERVIEWS

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 brief discussion of the interview data follows in order that inputs to 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 prior to presentation of the regression and multiple discriminant function analyses combining contact and interview data.

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 ages 6 through 17 in the 1942 cohort where the mean number of police contacts was .7 for high and 4.0 for low occupational level (3.4 vs. 5.6 for 1949). For the age period 18 through 20, the Black difference remained 1.8 vs. 3.4 (1942) and 3.7 vs. 4.5 (1949). Again, at the age period 21 or older, the Black difference remained 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.

While there were no significant relationships between number of police contacts and regularity of employment of head of household, 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.

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 seriousness scores. The tendency has been in the opposite direction, the data suggesting 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 and higher seriousness scores than others.

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. Thus, 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. Furthermore, 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 and seriousness of police contacts of respondents before and after full time employment among those who commenced work at an early age. For example, if first full time employment was at the age of 17 or earlier, contacts were more frequent after employment. For the females in the 1942 cohort, however, contact rates and seriousness measures were higher after first full time employment than before, regardless of age of first full time job.

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. 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.

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 adults 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.

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. 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. 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 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?

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?

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.

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 of their life, self-concept was related to police contacts, particularly for the males during the juvenile period. When 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.

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.

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. 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.

PREDICTING SERIOUSNESS OF AN OFFICIAL CRIMINAL CAREER

The next step was to utilize multiple regression in an attempt to predict seriousness of official criminal careers (as previously defined) 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.⁶ This was, of course, a prelude to subsequent analyses utilizing data from the 1976 interviews.⁷

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

Without presenting the results of each multiple regression analysis in detail, it should be noted that age at first contact made the greatest contribution to R^2 for both cohorts, the other variables making very small contributions. In predicting intermediate scores, juvenile scores replaced age at first contact as the most important predictor. And when we proceeded

to the prediction of adult seriousness scores, the combined juvenile-intermediate score became the best predictor. However, it should be noted that the R^2 values of .497 and .342 (proportion of variance explained for juvenile seriousness scores) for the 1942 and 1949 cohorts declined to .296 for the 1942 cohort and increased to .397 for the 1949 cohort for the adult seriousness scores.

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 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?

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. 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. Other variables were eliminated after an examination of the zero-order correlation matrices indicated that they were uncorrelated with the dependent variables. 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. Two general points should be made regarding the findings. First, within cohorts there is a difference in the prediction 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 prediction 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 variables 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.

The best predictors of 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. The major portion of the explained variance in juvenile seriousness scores is accounted for by age at first contact, this variable alone explaining about 54% out of 57% of the variance, and in the 1949 cohort, 31% out of 44% of the variance.

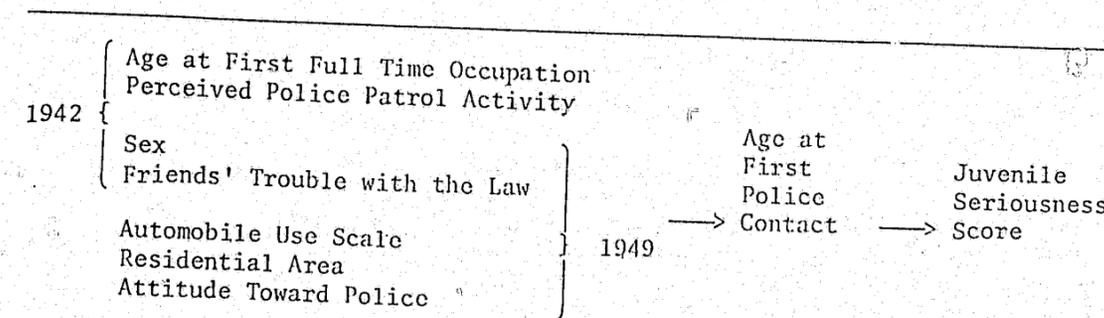
Given the relative importance of age at first police contact as a predictor, an appropriate subsidiary analysis continued to be required to determine the antecedents of this variable, i.e., what variables best predict age at first police contact? A number of variables previously mentioned were

subjected to selection procedures with age at first police contact as the dependent variable.⁸

Only two variables appeared 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 were 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. These variables, however, accounted for only 26% and 21% of the variance, respectively, in the 1942 and 1949 cohorts.

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 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

Figure 1



common to both cohorts, other variables unique to each cohort also appear to exert an influence.

We next turned to the problem of predicting intermediate seriousness scores. Specifically, a high intermediate seriousness score was related to 1) a high juvenile seriousness score, 2) a negative attitude toward police, and 3) in the 1942 cohort, a higher age at marriage but in the 1949 cohort, a lower age at marriage. These three variables were the only predictors selected in the 1942 cohort and accounted for 34% ($R^2=.343$) of the variance in the dependent variable. However, in the 1949 cohort, four additional variables were included as 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 accounted for 33% ($R^2=.333$) of the variance in intermediate seriousness scores.

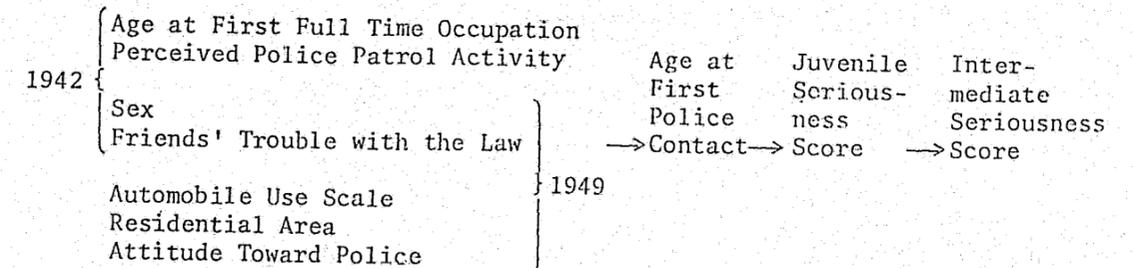
It should be noted that the selected predictors of intermediate seriousness scores are less effective than those for juvenile seriousness scores in terms of explained variance. In part, this may be due to the relative shortness of the intermediate period which results in less variability of the seriousness 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 scores can be gauged by comparing the R^2 values for the full model

with a reduced model which contains only juvenile seriousness scores as a predictor in each of the respective cohorts; 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.

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

Figure 2



Continuing the analysis, the same procedures were followed in selecting the best predictors of adult seriousness scores for both cohorts. The one variable common across cohorts, intermediate seriousness scores, was also the most important among the selected predictors based on the magnitude of the standardized coefficients. Apart from this common variable, the two cohorts were quite different in terms of the variables operating as predictors. In the 1942 cohort, high adult seriousness scores were 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,

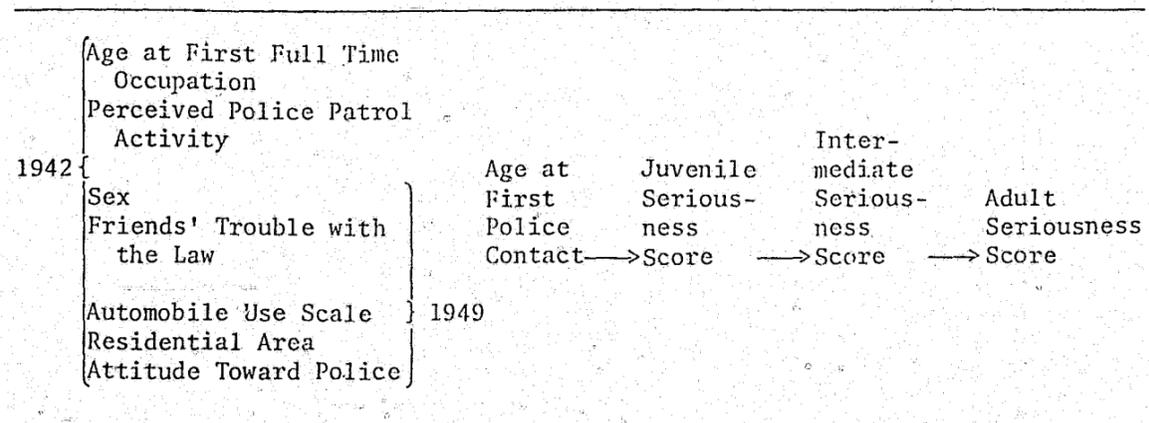
In the 1949 cohort, high adult seriousness scores were associated with: 1) a large number of children in one's family of orientation, 2) low present occupational status, 3) higher age at marriage, and 4) higher juvenile seriousness scores.

The eight predictor variables in the 1942 cohort explained about 38% ($R^2=.376$) of the variance in the dependent variable while the five predictors in the 1949 cohort accounted 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.

As before, most of the variability in the dependent variable was accounted for by a single variable--intermediate seriousness scores. A reduced model containing only intermediate seriousness scores as the predictor variable explained 25% of the 1942 cohort's variance ($R^2=.254$) of a total of 38% explained variance and 58% ($R^2=.582$) of the seriousness scores for the 1949 cohort of the total of 61%.

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

Figure 3



at first police contact. The earlier first police contact occurs, the higher the juvenile seriousness score will be. While there are differences between cohorts we should expect that historical circumstances are responsible for periodic changes in the chain of events or sets of circumstances that generate frequent and serious police contacts among both juveniles and adults. We are still left, however, with the problem of determining the conditions that account for variability in age at first contact--why do some individuals begin their official criminal careers earlier than others?

CONCLUSION

All of this 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 generated a somewhat 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.

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 but only some are caught), 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.

FOOTNOTES

* Prepared under Grant Numbers 76JN-99-0008, 76JN-99-1005 and 77JN-99-0019 from the National Institute for Juvenile Justice and Delinquency Prevention, Law Enforcement Assistance Administration, U.S. Department of Justice. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

¹ 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.

² 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 reassignment 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.

³ 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.

⁴ These Geometric scores are based on 1970 U.S. Census Block Data, with high scores indicative of overcrowding, high proportion of renters, absence of plumbing, low rental values, and low property values.

⁵ 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.

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.

⁶ 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 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.

⁷ A lengthier version of this analysis has been presented in Michael R. Olson, "Predicting Seriousness of Official Police Contact Careers: An Exploratory Analysis," unpublished manuscript.

⁸ 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.

END