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CINCINNATI, 1929-1939

be accepted as fulfilling this part of the requirements for the degree of DOCTOR OF EDUCATION

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SCHOOL FINANCE IN CINCINNATI, 1929-1939

A dissertation submitted to
The Graduate Faculty of the Teachers College
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CHAPTER I

INTRODUCTION

The Problem

This study is concerned with a detailed analysis of the public vote upon the issues of school finance in the Cincinnati School District during the decade of 1930 to 1939 inclusive. The analysis is an attempt to search out and to identify the voting characteristics peculiar to the various populations that compose Cincinnati, with reference to their vote on issues of public school finance during the decade.

The Value of the Study

A decrease in school income.— Up until the last decade, school costs rose very rapidly in the United States. During every ten-year period since 1890 the costs have almost doubled. During the recent depression, however, and for the first time in the history of American education, school costs have decreased. From 1926 to 1934, the mean decrease in school costs in the United States was approximately 11 per cent.¹ As a result, school systems have been unable to maintain a level of education commensurate with the growing needs of the child.

¹ Frank W. Cyr, Arvid J. Burke, and Paul R. Mort, Paying for Our Public Schools, pp. 2-4. Scranton, Penn.: International Textbook Co., 1938.

Although the birth rate is declining, there can hardly be expected a resulting decrease in the need for school support, especially in view of the past curtailments in school budgets.²

Each year the Board of Education of the Cincinnati School District is obligated by law to prepare and adopt a budget for the ensuing year. The budget is built upon four general sources of income, namely, (1) a general property tax, as fixed by law, (2) the State Public School Fund, (3) miscellaneous sources, such as rentals, tuitions, special state subsidies, etc., and (4) a school levy to be voted upon by the citizens of the school district. The last named source is resorted to only when additional revenue is needed to supplement the other sources. If a school levy fails to carry, it may seriously handicap the system financially, resulting in a curtailment of school opportunities that directly affects the population of the whole community.

Added legislative limitations on school finance issues.- A critical study of the public vote on issues of public school finance seems more imperative today than before the depression. Because legislation in some states has limited the amount of income for schools, it is more difficult to finance a modern educational program. This is the case in Ohio. In 1933, just before the presentation of any of the issues involved in this study occurred, an amendment to the state constitution reduced the amount that could be levied on

²Ibid., p. 23.

property, without a special vote of the people, from fifteen mills to ten mills.³ As a result of this new legislation, the tax rate for the Cincinnati School District has been reduced approximately one-third.

A more limiting restriction has been placed on school issues concerning bonds for building purposes. In the same year, the citizens of Ohio voted an amendment to the constitution that raised the percentage of the favorable vote necessary to pass a levy for such purposes from 50 per cent to 65 per cent.⁴

Since the enactment of these two amendments, one special levy for operating expenses out of the five that were presented to the citizens of the district during the "nineteen thirties", and all six of the bond issues for buildings, have failed to carry. Three of the four special levies for operation that carried did so by only a slight margin. For twenty years before the enactment of the ten-mill levy for operating expenses, only one issue, that of 1921, failed to carry, and all the others carried with substantial margins. The result of the vote on issues of public school finance in the Cincinnati School District during the last decade makes it apparent that, with such limiting legislative restrictions on the special public school finance issues, the maintenance of a building program sufficient to house adequately all of its school children is subject to serious difficulty. It is also evident that the school income

³Page's Annotated Ohio General Code, 1926-1935, sec. 5625-2.

⁴Ibid., sec. 2293-23.

sufficient to maintain a modern educational program, even if instruction is conducted in inadequately housed buildings, has been seriously imperiled.

The value of the study lies in the recognition and identification of factors and forces associated with the composition of the various populations, which operate to bring about a favorable vote on issues of school finance in Cincinnati or tend to oppose a favorable vote on such issues. The identification of populations in Cincinnati whose vote on the issues of public school finance varies from the vote of the entire city may aid in discovering existing basal forces or factors instrumental in deciding the trend or direction of the vote.

Recognition and identification of the voting tendencies peculiar to the several populations of Cincinnati afford a better understanding of the essential measures, legislative or otherwise, for the improvement of the community and its educational program. The identification of the voting characteristics of certain populations in Cincinnati should be of service to other cities of the United States. Tendencies of populations in Cincinnati to vote on public school finance issues, revealed as a result of the study, may not be wholly in concordance with those of similar populations in other cities. However, the treatments employed in the recognition and identification of tendencies to vote on the issues should be useful in similar analyses in other cities.

Techniques and Limitations of the Study

Statistical treatment.- The problem of discovering and of recognizing the voting trends on issues of public school finance peculiar to the voting populations of Cincinnati calls for a statistical treatment. The more basal forces behind public behavior in its vote on matters of public school support will probably be found in an analysis of the characteristics of the various populations. The characteristics that mark these populations do not remain constant for any group, but the change is usually a slow process, and may extend over a period of many years. Such characteristics as property ownership, employment, racial groups, religion, or family size undoubtedly play their roles in the determination of the way the populations associated with each of these factors tend to vote on school support. They are more basal and they may be more influential than the immediate and shifting forces that are more easily detected; the latter are often used to explain the outcome of an issue, regardless of their relative significance.

Limitations. To attempt any treatment other than a statistical one would probably involve too great a task. The historical approach to such a problem would be most valuable in determining immediate factors that might have influenced the public vote on an issue. To illustrate, other community projects worthy of consideration may have been presented to the public before, or at the same time, the issue on school finance was presented. Such projects

would tend to change the trend of the vote on school support. Actions of the personnel of the school system, the Board of Education's action on some item of interest to a part of the public, and decisions that may have resulted in praise or criticism concerning some plan of action may have entered into the picture, so as to contribute to the vote favorably or otherwise. To say that such events as these play little or no part in the public's action on an issue of public school finance would be to ignore certain vital factors in the development of public attitudes.

The value of the interview in analyzing public tendencies to act on important issues is recognized to the extent that studies have been made, and are now in progress, in the determination of attitudes toward educational issues. Some of these studies will be reviewed later in this chapter. Because of the time required to make use of such techniques as the interview and the questionnaire methods, it was planned to omit them from the procedure in this study. Attention should be called, however, to the value of these techniques in the identification of contemporary voting trends on matters of public interest toward school support.

It is obvious that the use of any single technique of analysis of such a problem as the one suggested in this study will not reveal all of the voting characteristics of the various populations of Cincinnati. All three treatments suggested should reveal more exactly the state of affairs. The statistical treatment, the historical analysis, and the use of the interview and the questionnaire are so interrelated that to use only one technique will

not reveal adequately both the basic and the immediate forces that tend to define the public vote on school finance issues. This study, therefore, is limited to the extent that certain immediate and constantly shifting forces, arising in response to current events, are ignored. However, the value of the treatment is based on the fact that the deeper and more underlying forces that represent the composition of the various populations in the school district may be brought to light, according to their relative significance.

Sources of Information

The sources of information on which the study is based came chiefly from three agencies: the Department of Sociology, University of Cincinnati; the Bureau of School Research of the Cincinnati Public Schools; and the Board of Elections, Hamilton County. The Bureau of School Research, with offices located in the Board of Education Building, cooperated in furnishing the necessary data regarding school enrollments, materials concerning the issues on school finance, and most of the data relative to the returns of the vote on the issues. Returns that were not available at the Bureau of School Research were tabulated from the records at the Board of Elections. The returns of the vote for and against each issue, together with the total vote cast, were taken from the original precinct tabulations. The proceedings of the Board of Education for the period under study were also at the disposal of the writer, and proved valuable.

Through the cooperation of the Department of Sociology, University of Cincinnati, data of a census nature concerning many aspects of the populations of Cincinnati were gathered for the years, 1930 and 1935. With the exception of the school census enrollments for each year under study, and the voting returns for each issue, all other data of a census nature were tabulated from the records of the Department of Sociology at the University. The 1930 data, which came from the last named source, consist of the 1930 Federal Census Reports.

The 1935 Census.- In May, 1935, a regional census of Hamilton County was conducted by the Regional Department of Economic Security, with the cooperation of the Federal Emergency Relief Administration and later of the Works Progress Administration.⁵ With the completion of the tabulations of the census data, and when comparison was made with other known data concerning the area, it was discovered that "under-enumeration" had occurred. A solution for the technical problem of making due allowance for this under-enumeration was devised by L. A. Thompson, Jr., at that time director of the Research Bureau of the Ohio State Employment Service, and approved by

⁵The Regional Department of Economic Security, the Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: I, The Population of Hamilton County, Ohio, in 1935. Cincinnati: Cincinnati Employment Center, 1937. Pp. x + 118.

The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935. Cincinnati: Cincinnati Employment Center, 1937. Pp. ix + 253.

Warren S. Thompson and P. K. Whelpton of the Scripps Foundation for Research in Population Problems, Miami University. The methods developed for this readjustment made the census comparable with any federal census reports, and in addition, they provided more extensive data about that region than is customary in the federal census reports. Although many of the data in the 1935 Regional Census reports have already been adjusted for under-enumeration, some of these data are still in their unadjusted form. When data still unadjusted were used in this study, the writer corrected each item for under-enumeration by using the same techniques as employed and described in the readjustment instructions.⁶

Areas Included in the Study

The Cincinnati School District includes all of the area within the city limits and in addition some of the area lying outside and adjacent to the city limits. The adjacent areas comprise the city of Cheviot, a small portion of the city of Norwood, and the townships of Anderson, Columbia, Delhi, Green, Springfield, and Sycamore. The examination of the returns from each of the issues under consideration showed that the range of the vote from these combined areas outside of Cincinnati constituted from 3.3 per cent to 5.3 per cent of the total vote cast on the issues. The average vote cast from these combined areas on all of the issues under consideration was 4.7 per cent of the total vote.

⁶Ibid., II, p. 231.

With the exception of the returns of the vote on each of the issues, no other data from the sources of information were available for these outside areas, except Cheviot, where a small portion of the other census data was obtainable. Because complete data were unobtainable for all of these relatively small areas outside Cincinnati, it was deemed advisable to use in this study the populations within the city limits. Therefore, the study includes, not the total population of the school district, but over 95 per cent of it.

The Population Unit for the Study

An examination of the sources to be used in the study showed that all of the data, except those of the voting returns on the issues of school finance, are available in census tract form. The returns of the vote "for" and "against" each of the issues, together with the total vote cast, however, are tabulated in terms of the voting precinct, of which there are approximately 510. A number of precincts make up a ward, of which there are a total of twenty-six. In order to determine the most satisfactory population unit for the study, so that satisfactory and meaningful comparisons might be made and interpreted, a preliminary study was made of the voting precinct, the census tract, the ward, and the elementary school district.

The elementary school district.- An examination of the elementary school districts, of which there are approximately sixty-six, shows that boundaries of these districts are not permanent

from year to year, and that the populations within such districts are not always easy to determine. This is especially true if the populations are considered over a ten year period, because of the shifting of the boundary lines in order to accommodate overcrowded conditions in schools and because of shifting populations. In addition, such a unit is formed only with reference to the elementary pupils. Pupils of the secondary level in all probability attend schools outside of the elementary school district, in other parts of the city. Parents, therefore, may have interests in school matters as much outside of the district as they have within the school unit itself. The same is probably true of the interests of parents and citizens in terms of any other population unit. It is well to keep in mind, however, that the elementary school district, as established in Cincinnati, is not an area in which all the interests of its inhabitants in school matters are centered within the unit itself.

Another factor entered into the decision that the elementary school district should not be used in the study. All of the data, as mentioned previously, are in either census tract, precinct, or ward form, and none is in terms of the elementary school district. To use the latter as the population unit for the study, all forms of the data would need to be broken down, or built up, into the form suitable for the elementary district. The overlapping of the elementary school district boundaries, which change so often, would make this an impossible task. If such a population unit were used, many inaccuracies would be certain to result.

The precinct.- The existence of 508 or more voting precincts with their relatively small populations, together with their shifting boundaries and the fact that the number of precincts changes from year to year, makes such a population unit questionable for use in the study. Many of the populations of certain precincts are so small as to render comparisons almost meaningless, and the shifting boundaries would tend to confuse the planning of the study. Even though many of the data used in the study are available in terms of the precinct, this unit of population seems unsatisfactory for present purposes.

The ward and the census tract compared.- As mentioned earlier, the voting returns on each of the issues of public school finance were originally tabulated in terms of the precincts, and the more than five hundred precincts within the city were combined into twenty-six wards. It is interesting to note that in almost every case the precinct boundaries follow the ward boundaries, so that they seldom overlap. Except for the fact that all of the census data from the 1930 Federal Census reports and that the 1935 Regional Census reports have been tabulated in census tract units, the ward unit could most easily be used. However, since numerous and extensive data were already tabulated in census tract form, it was deemed advisable to retain the census tract as the population unit. The voting returns for each of the issues under study can more easily be built up into census tract data than the voluminous census tract data can be broken down, first into precinct units, and then built up into ward units.

In order to determine whether the ward is more valuable than the census tract as the population unit for the study, ward maps of Cincinnati were prepared and shaded, so as to reveal the extent of the vote in favor of the issues. One third of all the wards in the city whose per cent of favorable vote was highest were shaded alike; another third whose per cent of vote was not as high were shaded differently; and the last third of the wards whose per cent of favorable vote was lowest were shaded still differently. This was done for each of the issues under study. Next, census tract maps for the same issues were prepared. Thirty-five of the 107 census tracts whose per cent of favorable vote was highest were shaded alike. Thirty-six census tracts whose per cent of vote was next highest were then shaded the same, and the last thirty-six were then shaded. In this way, the wards and the census tracts were placed on a comparable basis, in terms of their percentages of favorable vote on each of the issues. Although most areas on both ward and census tract maps were shaded somewhat alike, it was evident from this comparison that the census tract data revealed differences not indicated by the ward data. Some parts of the wards for each issue would present a different picture when translated into census tract data. The latter data indicated given areas in favor of an issue, or against it, that the ward maps did not so reveal. As a result of this examination, the census tract was selected as the population unit for the present study.

Translation of the voting returns to census tract form.- All voting returns from the five hundred or more voting precincts were built up into census tract form. Precincts usually followed the boundaries of the census tracts, but they overlapped occasionally, so that in some instances parts of a precinct extended into two or more census tracts. The Bureau of Research of the Cincinnati Public Schools had carefully worked out a percentage apportionment of those precincts that overlapped to the respective census tracts. The percentages, as worked out by the Bureau of Research, were estimated by observation over a period of three years, and were the closest approximations of a correct apportionment that could be obtained.

Where precincts were found to belong to more than one census tract, the apportionment, as worked out by the Bureau of Research, was used in the build-up of the voting returns on issues into census tract form. Thus, all voting returns on each of the issues under consideration in the study were tabulated in terms of census tract units.

Review of Former Studies

In a survey of the literature relative to the present study, nothing was found by way of a statistical treatment of the analysis of voting on school finance issues. Many surveys on school finance and administration have been made, but little is revealed, so far, that has a direct bearing on the problem of determining the forces that characterize the public in its vote on matters of school

finance. A few studies have been made concerning the public vote on political issues and presidential election returns, which reveal certain characteristics of the voter's mind, but such investigations concern only indirectly the voting returns on matters of educational support.

The political intelligence of the typical voter.- An interesting study on the intelligence of the typical voter was made in 1928 by Seba Eldridge.⁷ With the help of students at the University of Kansas, Eldridge attempted to determine the political intelligence of 953 men and 297 women on matters of social and political significance. A true-false test was constructed from items that were considered by experts as non-controversial in nature and that were regarded as common knowledge of the average high school graduate. These items concerned three public questions: the League of Nations, the tariff, and compulsory arbitration of industrial disputes. The test was given to the 1250 subjects, composed of farmers, manual workers, business proprietors, non-professional "white-collar" workers, professional workers, housewives, and unclassified, just after they had declared their intention of voting in the coming election of 1928. The most significant finding of the study, judged from the results of the test, was that the political intelligence of the typical voter is exceptionally low. There was only a slight percentage with a

⁷ Seba Eldridge, Public Intelligence: A Study of the Attitudes and Opinions of Voters. University of Kansas Bulletin, XXXVI (June, 1935), No. 7. Lawrence, Kansas: University of Kansas, 1935. Pp. 1-101.

relatively high competency. The women ranked slightly higher than the men, but the difference was not significant. Farmers, business proprietors, and non-professional workers ranked lowest, while the professional class stood highest. Since schooling is looked upon as a preparation for civic responsibility, the relation between schooling and political intelligence should be significant. The correlation for all amounts of schooling up to and including high school graduation was negligible, however, while the association of schooling at college levels and political intelligence was found to be much more significant. Spatial mobility was positively correlated, but not highly. There appeared to be no relationship between age and political intelligence, as measured by the test.

Another similar study, but more extensive, was made by Hayes in 1932-33.⁸ An analysis of twenty-four statements, used as a questionnaire sent to 8,419 voters in thirty-seven states during the 1932 presidential election, was attempted. The statements making up the questionnaire were composed of contradictions, one

⁸ Samuel P. Hayes, Jr., "The Inter-Relations of Political Attitudes: I, Attitudes Toward Candidates and Specific Policies," Journal of Social Psychology, VIII (August, 1937), 459-482.

Samuel P. Hayes, Jr., "The Inter-Relations of Political Attitudes: II, Consistency of Voter's Attitudes," Journal of Social Psychology, X (August, 1939), 359-378.

Samuel P. Hayes, Jr., "The Inter-Relations of Political Attitudes: III, General Factors in Political Attitudes," Journal of Social Psychology, X (August, 1939), 378-398.

Samuel P. Hayes, Jr., "The Inter-Relations of Political Attitudes: IV, Political Attitudes and Party Regularity," Journal of Social Psychology, X (November, 1939), 459-482.

contradiction for every two statements. This made a series of contradictions on twelve major issues. The voters were divided into two groups in terms of their intended vote in 1932, sex, and occupation. A percentage of those who contradicted themselves was tabulated for each group, and the consistency of the voters was determined by means of tetrachoric correlation.

Many voters were found to subscribe to mutually contradictory statements concerning the issues. The women were generally responsible for a smaller proportion of contradictory statements, although they gave more doubtful answers than did the men; the effect thus lessened the number of the really inconsistent answers. The Socialist voters were much more consistent than were the members of the two major parties. The Republicans and the Democrats showed no substantial differences. The voters of the upper occupational groups were distinctly more consistent than were the voters in the lower groups.

Stimulation of the voter.-- Hartmann attempted to determine whether voters gave greater support to a party or candidate whose appeal is based upon "short-term" aims as compared with one whose "long-term" objectives are dominant.⁹ Just before the presidential election of 1936, he formulated two equally strong Socialist appeals, one based upon proximate ends, and the other with appeals founded upon more ultimate goals. Five thousand leaflets with the

⁹George W. Hartmann, "Immediate and Remote Goals as Political Motives," The Journal of Abnormal and Social Psychology, XXXIII (January, 1938), 86-99.

immediate objective approaches were distributed to one third of the householders in the city of Altoona, Pennsylvania, and an equal number with appeals based upon the long-term objectives were distributed to another one third of the householders. The remaining third of the householders of Altoona was used as a control group.

From the results of the election returns, Hartmann came to the conclusion that political propaganda is influential "only when it is an expression of present desires, sentiments, prejudices, interests, limitations, and properties of those to whom it is addressed."¹⁰ According to Hartmann, proximate ends are more impelling forces which influence the voters than the objectives which have ultimate approaches as their appeals. This conclusion was reached even though the experiment failed to establish quantitatively the relative strength of the immediate and the remote political aims.

In another study, Hartmann attempted to determine whether emotional appeals to the voter play a more important role in the winning of votes than appeals based upon rational thinking.¹¹ In 1935, Allentown, Pennsylvania, was divided into three types of wards, (1) an "emotional" area in which the inhabitants received a

¹⁰ Ibid., p. 98.

¹¹ George W. Hartmann, "A Field Experiment on the Comparative Effectiveness of 'Emotional' and 'Rational' Political Leaflets in Determining Election Results," The Journal of Abnormal Psychology, XXXI (April-June, 1936), 99-114.

vigorous sentimental approach urging the voters to support the Socialist ticket, (2) a "rational" area in which a more academic type of persuasion was used, and (3) a control area in which no Socialist literature was distributed. The results of the election returns revealed that the increase in the Socialist vote was greatest in those wards in which the emotional type of appeal was used. The increase in the Socialist vote was lowest in the wards used as a control group. Hartmann concluded that the emotional political appeal is a better instrument in the winning of votes than rational approaches.

Gosnell¹² conducted a controlled experiment in the stimulation of voting. He worked with two groups of 3,000 members each. To one group he made a non-partisan appeal to register and vote. Forty-two per cent of the stimulated persons registered after the first notice, as compared with 33 per cent of the control group. By the last day of registration, 75 per cent of the experimental group had registered, as against 65 per cent of the control group. In view of the large size of the population used, these results are highly significant differences.

Information of the public on school affairs.- An analysis of the information about the public school on the part of the

¹²H. F. Gosnell, "An Experiment in the Stimulation of Voting," American School Board Journal, XX (November, 1926), 689-694.

public was made by Todd.¹³ He collected 154,650 responses from 7,000 individuals on questions relative to the public schools of the locality in which these individuals were located. According to Todd, the school has the accepted responsibility of keeping the public advised concerning public education. The study revealed that the average citizen, in many cases a parent of a school child, has only 50 per cent of the minimum requirements of knowledge concerning the public school affairs of his community.

A decrease in the school building program.- The trend during the first part of the decade of 1930-1940, in terms of the amounts spent for school buildings, sites, and equipment, as shown by Grotz,¹⁴ was downward. Prior to 1925 the normal ratio of the capital outlay to expenditures was 20 per cent. In 1934 the ratio was only 5.5 per cent, not counting allotments from the Public Works Administration. If the Public Works Administration expenditures were included, the expenditures for the 1934-35 school year were approximately only 50 per cent of what they were a few years before. Grotz points out that the school-building program throughout the nation called for a distinct increase in expenditures for the next few years beyond 1935. It is

¹³William Hall Todd, What the Citizens Know About the Schools. Teachers College Contributions to Education, No. 279. New York: Teachers College, Columbia University, 1927. Pp. 86.

¹⁴Paul Grotz, "School Buildings, Sites, and Equipment Share Less and Less in the Educational Dollar, Chart No. 4," Architectural Forum, LXII (January, 1935), 1-7.

necessary to build not only buildings to accommodate larger enrollments in the secondary schools, but to replace the buildings no longer suited to modern educational needs.

A study was made of school-building expenditures in Ohio in relation to the economic conditions throughout the country.¹⁵ It was found that a decrease in the number of bond issues proposed and approved had resulted between 1928 and 1931. The analysis revealed that amounts expended annually for school buildings and grounds in Ohio increased enormously from 1915 to 1930. As the index of construction costs increased, the amount of building increased, and as the building costs fell, the amount of building decreased.

A comparison of the expenditures for various items in the public schools from 1930 to 1935 was made by Erisman.¹⁶ He found that, in general, all expenditures decreased. The percentage of current expense used for instruction remained fairly constant for each of the cities studied. The reductions in general control costs were greater in educational administration than in business administration. The study also showed that taxable property per pupil in average daily attendance decreased

¹⁵T. C. Holy and W. E. Arnold, "School Expenditures in Relation to School Building Costs," American School Board Journal, LXXXV (July, 1932), 41-42.

¹⁶Robert A. Erisman, "A Comparison of Public School Costs of the Eight Largest Ohio Cities." Unpublished Master's Thesis, Ohio State University, 1936. Pp. 92.

greatly over the five-year period.

In view of the fact that no building program has been financed in Cincinnati since 1924, that the average age of all Cincinnati school buildings is over forty years, and that there are now more than seventeen school buildings in the city more than fifty years old,¹⁷ it is appropriate to mention again the study made by Holy and Arnold.¹⁸ In their analysis of ten city surveys, they found that the average age of school buildings recommended for replacement in the ten cities was 47.6 years. They also discovered that the average age of all the buildings actually replaced in one of the largest cities studied was 43.2 years.

A study that proved of value in the present analysis is that of the survey of the Cincinnati Public Schools, made in 1935.¹⁹ The Cincinnati Public Schools, with the assistance of the Works Progress Administration, completed a fact-finding survey of the physical plant, including sites, buildings, equipment, and apparatus. The report of the survey included detailed measurements and specific enumerations of many aspects of the plant. Many of the findings of the report are reduced to ratios and per cents.

¹⁷ Federated Council of Cincinnati Teachers Organizations, Eight Hundred Thousand Children, 1829-1937. Cincinnati: Cincinnati Public Schools, 1938. Pp. 45.

¹⁸ T. C. Holy and W. E. Arnold, op. cit., p. 42.

¹⁹ United States Office of Education, Survey of the Cincinnati Public Schools. Cincinnati: The Cincinnati Bureau of Governmental Research, 1935. Pp. xxvii + 476.

Studies on attitudes toward school support.- In 1939 the Committee on Implementation of Studies in Secondary Education of the Council on Education planned a poll to determine the attitude of the public concerning youth and education.²⁰ In the formulation of questions to be used in the poll, it was assumed that

. . . certain basic social changes are running their courses and that secondary education among other things should be designed to assist our society to adjust to those changes with a maximum of benefit and a minimum of avoidable social friction.²¹

After lists were made of social changes that seemed most certain, topics were selected concerning which there was real doubt as to the probable state of public opinion, and on which information concerning public opinion would seem likely to be of great assistance. It was thought desirable to know (1) how much information the public possesses about social changes that are in progress, (2) the extent to which the public agrees with the statement of values that might be achieved through adjusting young people to these social changes, and (3) the opinion the public possesses about the educational policies and procedures proposed to help maintain or achieve these values in the face of social change.

Through the cooperation of the American Institute of Public Opinion, the poll was conducted covering a sample of 3819 individuals that were considered as representative of the entire adult

²⁰ National Education Association, Research Division, "What People Think About Youth and Education," Research Bulletin of the National Education Association, XVIII (November, 1940), 185-218.

²¹ Ibid., p. 191.

population of the United States.

The results of the poll disclosed, among other things, that the public generally is not raising objections to school expenditures. On the contrary, a substantial number, particularly among the younger adults, favor an increase in the amount of tax money allotted to education. There is, however, a considerable variance of public opinion on educational support, probably because of lack of information as to the objectives receiving major emphasis in schools today. According to the investigation, the American public has a generally favorable point of view toward the present day program of public education. Most people feel that education has improved in the past generation. Nearly all groups, especially the better educated and well-informed, think that education today is not over-emphasized.

In January, 1940, the Board of Education of Pittsburgh, Pennsylvania, commissioned the Division of Field Studies of the Institute of Educational Research at Teachers College, Columbia University, to survey the city's school system. With the use of some of the data of the survey, Frederick T. Rope made an individual study to discover those issues in Pittsburgh that are related particularly to the financial support of the public schools.²² A sampling technique, similar to that used by Gallup and Roper in their public opinion polls, was used in determining the views of

²² Frederick T. Rope, Opinion Conflict and School Support. Teachers College Contributions to Education, No. 838. New York: Teachers College, Columbia University, 1941. Pp. viii / 164.

the people of Pittsburgh on the question of financial support for the public schools of the city. The interview poll was directed to a representative cross section of the citizens of Pittsburgh, and the findings of the study are based on the responses of 1,464 Pittsburgh citizens. The poll was made to assess the community opinion in relation to financial issues; and to identify and appraise the influence of some factors which function in determining the structure of that opinion.

Several important conclusions are drawn from the analysis of the poll data. According to Rope, the people of Pittsburgh want broad educational services and are willing to pay for them. There is evidence of a desire by the citizens of Pittsburgh for an upward extension of free public education, and young adults are more favorably inclined than older persons. Willingness to support public education is found to a greater extent in the low economic groups. Relatively small differences in opinion about the support of public schools appear among religious groups and between school patrons and non-patrons. Democrats are more liberal about educational views on school support than are Republicans. Negro citizens are more vigorous than whites in their desire for educational services. Those persons who oppose school expenditures are more intense in their opinions than those favoring the maintenance and extension of school services. Rope concludes that citizens of Pittsburgh, however, fail to show a full understanding of taxation and state aid problems for education. They are not fully convinced that it is necessary to face the issue of increasing

taxes or curtailing school services.

An attempt is now being made to discover the relationship between the use leaders of Hartford, Connecticut, make of the public schools for their own education or for their children, and the attitude held by these people toward the amount that should be spent for public education.²³ One hundred and sixteen leading men and women in Hartford are being used as subjects, from whom most of the data for the study will be obtained by means of interviews and questionnaires.

Most of the studies mentioned above are somewhat removed from the proposed investigation and may have little or no bearing upon the present analysis. For the most part, they reveal only aspects that might be thought of as having to do with problems of the adequate financing of an educational program. Other more closely related studies, however, have not been found.

Summary

This study is an attempt to search out and to identify the voting characteristics specific to the various populations of Cincinnati in their vote on public school finance issues during the decade of 1930 to 1939 inclusive. The treatment employed is statistical in

²³ Charles M. Larcomb, "The Relationship Between Personal Interest in the Schools and Attitudes Toward Public School Tax Support." Proposed Doctor's Thesis, Yale University, 1941.

character.

The need for and value of the study are based on the fact that difficulty is being encountered in providing sufficient revenue for operation and building needs in the Cincinnati School District, so as to maintain adequately a modern educational program. This difficulty is due partly to the added legislative restrictions that have been placed upon taxation for school revenue for such purposes.

The data used as the basis for the study were gathered from the voting returns filed in the offices of the Board of Education and in the offices of the Board of Elections, together with the 1930 Federal Census reports and the Regional Census of Hamilton County of 1935. These materials of a census nature were gathered from the census records filed in the Department of Sociology, University of Cincinnati.

Areas of population within the Cincinnati School District, but extending outside the city limits, are not included in the study. Such areas are omitted from the study because data from the 1930 Federal Census and from the 1935 Regional Census are not adequate to supply the needed information about the respective populations of the outside districts. However, over 95 per cent of the total population of the Cincinnati School District is included in the study.

After careful examination of the population units that might have served as the population unit for the study, the census tract was selected. Any data employed in the study that were originally tabulated in terms of any other population unit were translated into census tract form. When overlapping of the boundaries of the population units and the census tract occurred, an apportionment worked

out by the Bureau of Research of the Cincinnati Public Schools was used in the translation.

Although many studies of problems of educational support and finance have been made, few related to the present study have been found. A careful survey of the literature concerning the behavior of the voting public reveals nothing that has a direct bearing on the problem. The few studies relating to an analysis of the public vote deal primarily with the vote on political issues and presidential returns.

CHAPTER II

DESCRIPTION OF SCHOOL FINANCE ISSUES PRESENTED TO THE PUBLIC IN CINCINNATI

Introduction

A short account of the issues of school finance that were presented to the Cincinnati public during the decade of 1930 to 1940 will help in understanding the need for school support and the problems encountered in the efforts of the school authorities to finance adequately the educational program. In this chapter an attempt will be made to describe such issues and the accompanying vote of the public.

Special Levies for Operating Expenses

As already mentioned in Chapter I, prior to 1934 the constitutional limit on property tax rates for Ohio, without a special vote of the people, was fifteen mills. In November, 1933, however, an amendment to the constitution was passed that set the maximum tax rate limit at ten mills, becoming effective in June, 1934.¹ Out of this ten mill levy must come the revenue for the support of city, county, and public activities. The proportion of this tax rate received by the Cincinnati School District fluctuated somewhat from year to year, but for 1933, the last year for the fifteen mill limit, the tax rate for schools was set at 6.37 mills, and in

¹Page's Annotated Ohio General Code, op. cit., sec. 5625-2.

1934 it had been reduced to 4.25 mills,² a reduction of 33.4 per cent.

An examination of the Cincinnati school revenue for the twenty-year period previous to the enactment of the new amendment showed that, even though the maximum levy was fifteen mills, it failed to supply all the revenue for the felt needs of the educational program, and that additional levies were voted upon by the citizens of the district for nearly every year throughout the period. The exceptions were for the years 1924, 1925, 1932, and 1933, when no special levies were presented. The only levy that failed to pass the public vote was the one of 1921. All of the levies proposed during this period, previous to the enactment of the restrictive amendment, were for the duration of the following calendar year, except the 1926 levy, which permitted a special levy each year following for five successive years, or from 1927 to 1931 inclusive. The data for the special levies for operating expenses that have been presented in the Cincinnati School District from 1914 to 1939 are shown in Table I.

It is interesting to note that, after the enactment of the amendment limiting the tax rate to ten mills, it became necessary for the Board of Education to present special levies for operating expenses each year following the amendment calling for much higher tax rates. For the twenty-year period before the enactment of the

² Publicity Material for Special Levy Campaign, Fall of 1934,
p. 2. Cincinnati: School Levy Campaign Committee, 1934.

TABLE I

SPECIAL SCHOOL LEVIES FOR OPERATING EXPENSES
PRESENTED DURING YEARS 1914-1939³

Fall of	Mills	Duration	Result	Votes For	Votes Against	Per Cent Favor- able Vote is of Total Vote
1914	0.49	1 year	Carried	60251	25680	70
1915	0.70	1 year	Carried	53925	31988	63
1916	1.00	1 year	Carried	60860	30226	67
1917	1.00	1 year	Carried	55423	29433	65
1918	0.82	1 year	Carried	49730	24593	67
1919	0.58	1 year	Carried	52086	27796	65
1920	1.25	1 year	Carried	85673	53469	62
1921	0.50	1 year	Failed	55920	60926	48
1922	0.50	1 year	Carried	74174	50814	59
1923	0.50	1 year	Carried	61780	48836	56
1926*	1.00	5 years	Carried	62459	42669	59
.....						
1934 [#]	1.50	1 year	Carried	92191	57818	61
1935	1.74	1 year	Carried	66052	65393	50
1936	2.00	3 years	Failed	90264	93312	49
1937	2.30	2 years	Carried	71548	69523	51
1939	2.20	3 years	Carried	80777	72094	53

* During the years 1926, 1927, and 1929 the amounts actually levied were 0.50, 0.78, and 0.90 mills respectively.

** Dotted line indicates the date after which the amendment limiting the tax rate to ten mills became effective.

[#] Only 0.26 mills were actually used, as a result of the adoption of the School Foundation Program by the state legislature.

³ Twenty-Five Year History of School Levies and Bond Issues in the City of Cincinnati School District. Cincinnati: Bureau of School Research, 1939. Pp. 1.

amendment the average yearly special tax levy for operating expenses, covering all twenty years, was 0.55 mills. In contrast, the average yearly tax rate for the eight years following the enactment of the amendment, and extending up to 1942, which includes the special three-year levy for 1939, was 1.65 mills.

The 1934 special tax levy.- In the fall of 1934 the Board of Education felt the effects of the reduction of the tax rate. It was found that the total revenue, including any balance on hand, would not exceed five million dollars. Even after the budget was reduced \$450,000 for the school year, 1935, a deficit of over one and one-half million dollars threatened, unless a special tax levy was presented. Accordingly, a special tax levy was presented to the voters, with the pledge of the Board to spend not more than the amount of the reduced budget, which amounted to approximately six and one-half million dollars.⁴ It was announced in the publicity campaigns that, if the levy did not pass, only 140 days of school out of the regular two hundred days could be held for the school year, 1934-1935.⁵ This special levy passed. During the events that followed, however, the State Legislature subsequently adopted the School Foundation Program, which provided more state revenue for schools in the district. As a result, only 0.26 mills of the 1.50

⁴ Proceedings of the Board of Education of the Cincinnati School District, September 11, 1934, p. 1. Cincinnati: Board of Education.

⁵ Publicity Material for Special Levy Campaign, Fall of 1934, op. cit., p. 2.

mill levy was needed for 1935.⁶

The 1936 special levy.- In 1936 the Board of Education appears to have adopted the policy of proposing the special levies for operating expenses for periods longer than one year. This change in policy was to ". . . save the tax-payer the annoyance of a publicity campaign each year, and to save interested persons the expense and the effort required by such campaigns" ⁷ Accordingly, the Board presented a tax levy of not more than two mills per year, for a three-year period, instead of one year. The Board took official action to levy not more than the same tax rate assessed in 1936 (1.74 mills), for the year 1937; and for the years 1938 and 1939 the tax rate was not to exceed 2.00 mills.⁸ The tax levy of 1.74 mills for 1937 was to provide additional revenue to the extent of one fifth of the amount of the anticipated budget of over seven million dollars.

This levy, however, did not pass by public vote. It failed to carry by a slight minority,⁹ so the additional revenue was not forthcoming. During the winter and spring of 1937, the flood of the Ohio River prevented the holding of school throughout the city for ten

⁶Twenty-Five Year History of School Levies and Bond Issues in the City of Cincinnati School District, op. cit., p. 1.

⁷Campaign Material for the Special School Levies, p. 5. Cincinnati: The Citizen's Campaign Committee for the School Levies, 1936.

⁸Proceedings of the Board of Education, op. cit., (September 14, 1936), p. 589.

⁹Ibid., XCII (November 13, 1936), p. 48.

days, and in a few of the schools for a longer period.¹⁰ In addition, the school year had to be shortened to 180 theoretical days, instead of the regularly scheduled two hundred. As a result, pupils were actually in school for a maximum of not over 170 days during the school year.¹¹

The special tax levy of 1937.- The failure of the 1936 special tax levy made it necessary to propose another one the following year. With slightly less than five and one half million dollars of anticipated school revenue in sight, the estimated budget for the year was set at \$7,340,610, which left a deficit of nearly two million dollars.¹² Unless a special levy could be acted upon favorably by the public, schools would probably be closed 26 per cent of the school year, or fifty-two days during 1937-1938. This would leave only 148 days of school.¹³ To meet this shortage, the Board of Education presented a special tax levy of 2.3 mills for the two-year period.¹⁴ Fortunately, this levy carried, but with a margin of only 1 per cent.¹⁵

¹⁰Ibid., XCIII (May. 24, 1937), p. 190.

¹¹Campaign Material of 1937, Special Tax Levy and School Bond Issue, p. 1. Cincinnati: Bureau of School Research, Cincinnati Public Schools, 1937.

¹²Ibid.

¹³Ibid.

¹⁴Proceedings of the Board of Education, op. cit., XCII (September 13, 1937), p. 257.

¹⁵Ibid., November 12, 1937, p. 289.

The special levy of 1939.- Realizing that a renewal of the levy would be necessary to finance adequately the educational program for the next few years, the Board proposed another special levy, this time for 2.2 mills and for a three-year period. The levy was to provide adequate income for the fiscal years of 1940, 1941, and 1942. The Board went on record as pledging itself to " . . . continue its consideration of the tax-payer, as well as its concern for the welfare of the children and youth in its charge," in that it would reduce the rate of the levy, as it did in 1935, if any unexpected source of additional income became available, or if all of the income from the special tax levy were not needed.¹⁶

In asking for the three-year period, the Board stressed the continuity of an educational program from year to year, and the avoidance of distractions in the school system " . . . which make their inroads upon efficiency and morale."¹⁷ The levy carried with a 53 per cent vote in its favor.

The Bond and Levy Issues for Buildings

Bond issues not successful.- A general study of all the issues of bonds and levies for school buildings reveals an unceasing effort by the school authorities to alleviate a serious overcrowding of schools and classrooms, to replace obsolete, temporary, and rented buildings, to provide adequate sites, playgrounds, and equipment, and

¹⁶ Ibid., XCIII (September 11, 1939), p. 17.

¹⁷ Ibid.

to eliminate unsanitary conditions and safety hazards. The presentation of bond issues each year during the decade resulted in disheartening failure, while the need for public approval and support increased. The number of school buildings that should have been replaced increased during the decade, and the problem of plant maintenance in the more obsolete structures became more difficult. Nevertheless, not one of the issues for buildings passed the required public vote of 65 per cent, regardless of how pressing the need was for more adequate and modern educational structures. Table II is a report on the bond issues and levies for buildings over the same period covered by Table I.

The last successful bond issue.- The last successful bond issue that passed the public vote was in 1924, when \$8,500,000 was provided for the purpose of ". . . erecting fireproof school houses, grading and landscaping the premises, [and] constructing walks and driveways therewith."¹⁸ The program for the use of such funds covered a five-year period, and the final portion of the bonds from this issue, amounting to \$2,300,000, was used in December, 1929.¹⁹

The results of the vote on the bond issue passed in 1924 showed that approximately 58 per cent of the total vote cast favored the issue. This issue was presented to the public while the provision for its passing was a favorable vote of 50 per cent or more. Had the new amendment, which required a favorable vote of 65 per cent, been in effect, the issue would have failed, as did all of the bond

¹⁸ Proceedings of the Board of Education, op. cit., XXXV (June 23, 1924), p. 380.

¹⁹ Ibid., XC (October 9, 1933), p. 17.

TABLE II
BOND ISSUES AND TAX LEVIES FOR BUILDINGS PRESENTED
IN CINCINNATI DURING YEARS 1914-1939²⁰

Fall of	Amount	Result	Votes for	Votes Against	Per Cent Favorable Vote is of Total Vote
1919	\$5,000,000	Carried	51523	27726	65
1924	\$8,500,000	Carried	84781	61990	58
.....					
1933	\$2,000,000	Failed	74578	83396	47
1935	\$3,300,000	Failed	71731	58015	55
1936	1 mill, 3 years	Failed	79752	87192	48
1937	\$6,000,000	Failed	69272	72043	49
1938 August	\$5,400,000	Failed	45113	39256	53
1938 November	\$ 250,000	Failed	91690	66078	58

* Dotted line denotes the date after which 65 per cent of the vote cast was required, in order for a building levy or a bond issue for buildings to carry. Previous to this date, the favorable vote required was 50 per cent.

issues presented after that date.

The need for buildings wide-spread.- An examination of the proceedings of the Board of Education and of the campaign literature on each of the issues was made to determine whether there was any indication that particular areas of the school district might have benefited materially in the passing of any issue at the expense of other areas.

²⁰ Twenty-Five Year History of School Levies and Bond Issues in City of Cincinnati School District, op. cit., p. 1.

Was a particular part of the city conscious of some benefit that might come to it, if the issue passed? Was any plan announced by the school authorities, in terms of a building program, that might have influenced one part of the city to vote for the issue, and another part to vote against it?

The canvass showed so wide-spread a need for more modern and adequate buildings that all parts of the city would have derived educational benefits from a building program, as a result of a favorable return from a bond issue. Each year a preliminary survey by the Committee on Buildings and Sites was made, and for the issues of 1933 and 1935 tentative recommendations were made for the expenditure of the moneys to be derived from the sale of bonds. From these proposed recommendations, it was evident that the program for buildings and grounds was of a general and wide-spread nature, and that no proposal was ever directed toward any part of the city at the expense of other parts. Eight buildings were recommended by the Board for the expenditure of funds from the levy proposed in 1933,²¹ and in 1935 the number of buildings recommended for additions or for entire reconstructions was raised to eleven. These were to be located in various parts of the city.²² The spirit of all action planned for erection of buildings and building programs indicated that the general welfare of the children of the whole school district

²¹ Proceedings of the Board of Education, op. cit., (October 9, 1933), p. 17.

²² Ibid., XCI (September 9, 1935), p. 383.

was uppermost in the minds of the Board and of the school authorities.

The Public School Survey of 1935.- The 1935 Survey of the Cincinnati Public Schools,²³ made with the cooperation of the United States Office of Education, revealed that the Board of Education had been modest in expressing the need for more modern buildings. The recommendations of the Survey stressed the need for all the proposals and recommendations made by the Board in the issue of 1933, and cited other needs in addition. The Survey gave a median score for all elementary school buildings within the district, based on a one thousand point rating scale, so low that many of them were pronounced as unsatisfactory for occupancy. The median score of the junior high schools and the high schools was only slightly better.²⁴ The importance of providing sites at appropriate times for future building needs was particularly stressed, and the lack of adequate school acreage for the playgrounds and premises of present school sites was noted.²⁵ As a result of the survey recommendations, \$786,000 was set aside in the proposed bond issue of 1935 for the acquisition of more lands for school buildings already built and for sites for future buildings.²⁶

²³United States Office of Education, Survey of the Cincinnati Public Schools. Cincinnati: Cincinnati Bureau of Governmental Research, 1935. Pp. xxvii + 476.

²⁴Ibid., p. 366.

²⁵Ibid., p. 395.

²⁶Proceedings of the Board of Education, op. cit., XCI (August, 1935), p. 371.

A long-time program for buildings.- It is not to be assumed that any of the issues for school buildings that were presented to the public were thought of by the school authorities as separate issues. Instead, the issues presented each time were considered as a part of a proposed building program extending over a number of years. This was emphasized in the publicity campaigns, one of which states:

The Board of Education has adopted a ten-year building program totaling \$14,650,000, as necessary to rehabilitate the physical plant. Of this amount, \$6,000,000 of bonds are being asked at the present time. This bond issue would be applied toward the total of the ten-year program. . . .²⁷

The program over the extended period of time was modified each year, inasmuch as the bond issues previous to that year had failed and the building needs tended naturally to mount in the later years. In addition to the amounts requested in each issue, the Board assumed the assistance of the Federal Emergency Administration of Public Works, to the extent of approximately 33 per cent of the total cost of construction. Thus, had any of the issues for the erection of buildings passed, the total amounts to be received would have been substantially greater than the amounts called for in the issues themselves.

Summary

For twenty years previous to the enactment of an amendment to the Ohio state constitution in 1933, which reduced the constitutional

²⁷ Special Tax Levy and School Bond Issue, Fall of 1937, p. 2.
Cincinnati: Cincinnati Public Schools, Bureau of School Research, 1937.

limit on property tax rates without a special vote of the people from fifteen mills to ten mills, all special school levies for operation passed the public vote, except that of 1921. The revenue derived from such school finance issues called for a relatively lower tax rate than those presented to the voting public after the 1933 amendment was passed.

After 1933, when the amendment became effective, one special levy for operating expenses of the five presented failed to carry the public vote, and the others carried by only small margins. The change in the constitutional tax limit resulted in a reduction of school revenue of approximately one third without a special vote of the people of the school district. The reduction in the tax rate made it necessary for the school authorities to depend more upon the favorable passage of the special levies in order to maintain a modern educational program.

The bond issues for buildings of 1919 and for 1924 carried the public vote with substantial majorities above the 50 per cent requirement. After the enactment of an amendment to the state constitution in 1933, however, which required a favorable vote of 65 per cent for such bonds and levies, none of the six bond issues or levies for building purposes carried by public vote.

CHAPTER III

GENERAL OVERVIEW OF THE PUBLIC VOTE OF CINCINNATI ON ISSUES OF SCHOOL FINANCE

Introduction

It is the purpose of this chapter to present the general pattern of the public vote on the issues of school finance in Cincinnati, in order to reveal the significance of any observed similarities among the results of the vote on the respective issues. Is the pattern of the vote on one issue similar to that of another issue, or does the result of the vote differ widely from issue to issue, without respect to any general design? If any similarities exist among the patterns on the several issues, do they conform more closely to those issues concerned with levies for operation as a group, and to bonds and levies for buildings as another group, or is there any observed difference in the general pattern of the two types?

If marked differences exist in the results of the vote from issue to issue without any degree of conformity in the areas with respect to the ratio of favorable and unfavorable votes, the study may involve a different type of treatment than if there is some consistency in the pattern of the vote from issue to issue. On the other hand, similarities in the pattern of the vote that reveal areas whose populations are more favorable or less favorable may be discovered. The vote on the bond issues for buildings may, itself, present a characteristic pattern of conformity. Likewise, the vote on

the levies for operation may present another particular but consistent design. It is also possible that the pattern of the vote for both bond issues for buildings and levies for operation may have some measure of resemblance. Recognition of similarity of pattern of the vote among the two types of school finance issues taken as a group, or taken separately, would establish credible reason to believe that some of the various populations tend to support or to oppose the issues of public school finance to a greater degree than the entire voting populations of Cincinnati. These are some of the problems this chapter will attempt to identify.

It is assumed that the compositions of the various populations within the city do not change to the degree that evidence of significant relationships would prove inconclusive. Over a period of a decade, unless some great force or event occurred that would necessitate movements of large populations from one section of the city to another, or unless there was a large influx of people whose attitudes were different from the already existing populations, one would expect the composition of the populations in given areas of the city to remain relatively constant.

Determination of areas of high and low favorable vote.- A comprehensive picture of the results of the vote for each of the issues involved in the study may be presented by means of maps. Population areas in which the percentage of the favorable vote was relatively high, or relatively low, can be easily observed. Thus, a general pattern of how the voting populations in the various areas in Cincinnati reacted toward a given issue can be studied, in order to

reveal the degree of consistency from year to year.

The percentage of favorable vote on all of the issues for each of the census tracts in Cincinnati was tabulated in order from highest to lowest. Approximately one third of the census tracts in which the vote was highest were placed in one group; the next third of the census tracts in which the vote was not as high were grouped together; and the remaining one third, in which the favorable vote was lowest, were placed in a third group.

Maps were then prepared for each of the eleven issues, so as to reveal the group of census tracts in which the percentage of favorable vote came highest. This was accomplished by shading these census tracts similarly. The next group, in which the percentage of votes was not as favorable, was shaded differently, and the last group of tracts, in which the favorable vote was lowest, was then represented on the maps. In this way, a general picture of the extent of favorable vote for each of the issues was revealed.

Map I represents a pattern of the percentage of favorable vote for the 1933 bond issue for buildings. Thirty-six of the 107 census tracts in the city voted 50 per cent or above in favor of the issue; thirty-five census tracts voted below 50 per cent and above 43.7 per cent in its favor; and the remaining thirty-six voted below 43.7 per cent in favor of the issue. The mean vote in favor of the 1933 bond issue for buildings is 48 per cent, as shown in Table II. Maps II, III, V, VII, and XI represent the voting patterns for the levies for operating expenses for the issues of 1934, 1935, 1936, 1937, and 1939 respectively. Maps IV, VI, VIII, IX, and X present the patterns

MAP I - PER CENT OF FAVORABLE VOTE ON THE 1933 BOND ISSUE FOR BUILDINGS

Census Tracts in Which the Percentage of Favorable Vote is

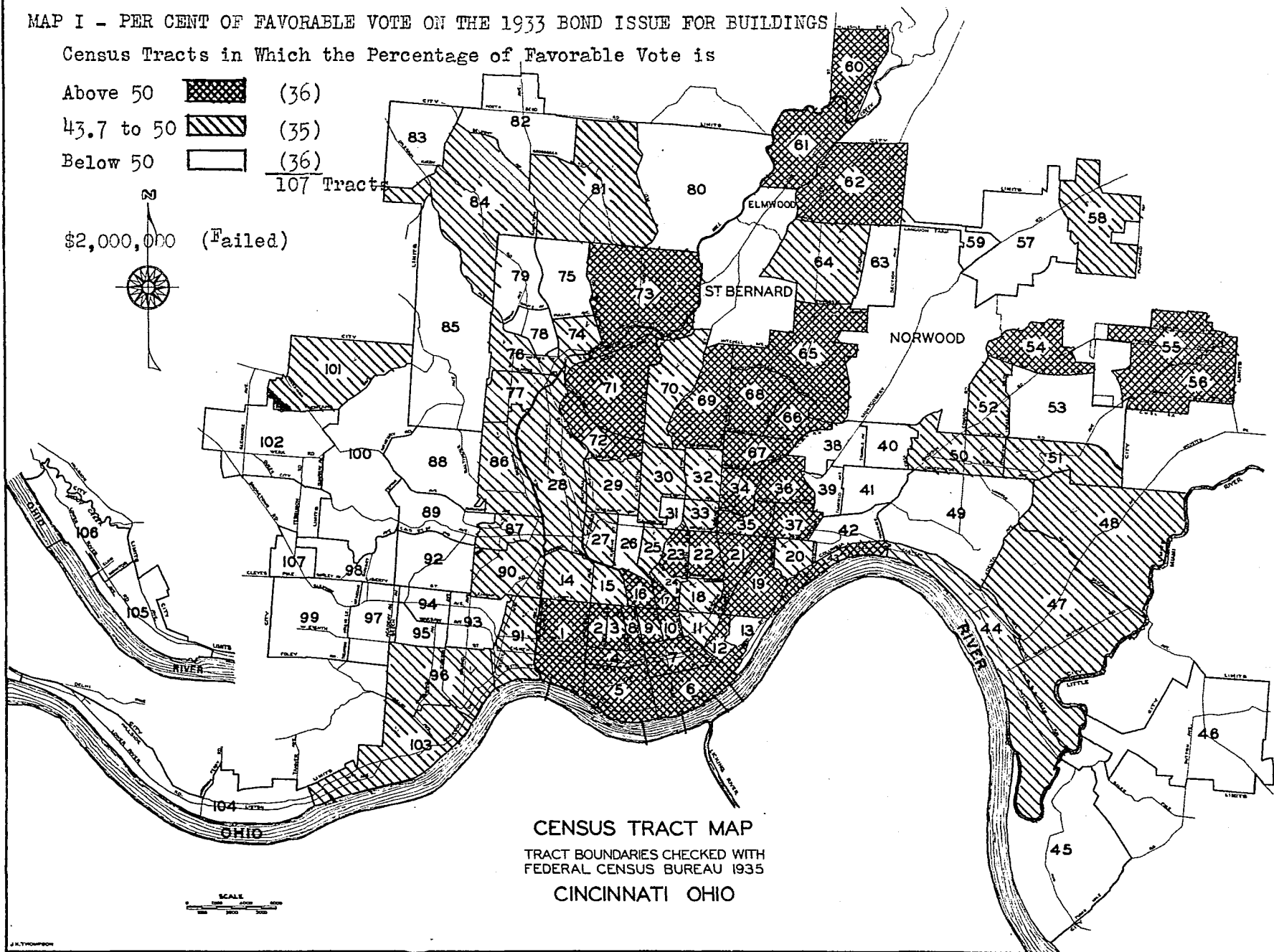
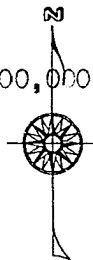
Above 50 (36)

43.7 to 50 (35)

Below 50 (36)

107 Tracts

\$2,000,000 (Failed)



CENSUS TRACT MAP

TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935

CINCINNATI OHIO

MAP II - PER CENT OF FAVORABLE VOTE ON 1934 LEVY FOR OPERATING EXPENSES

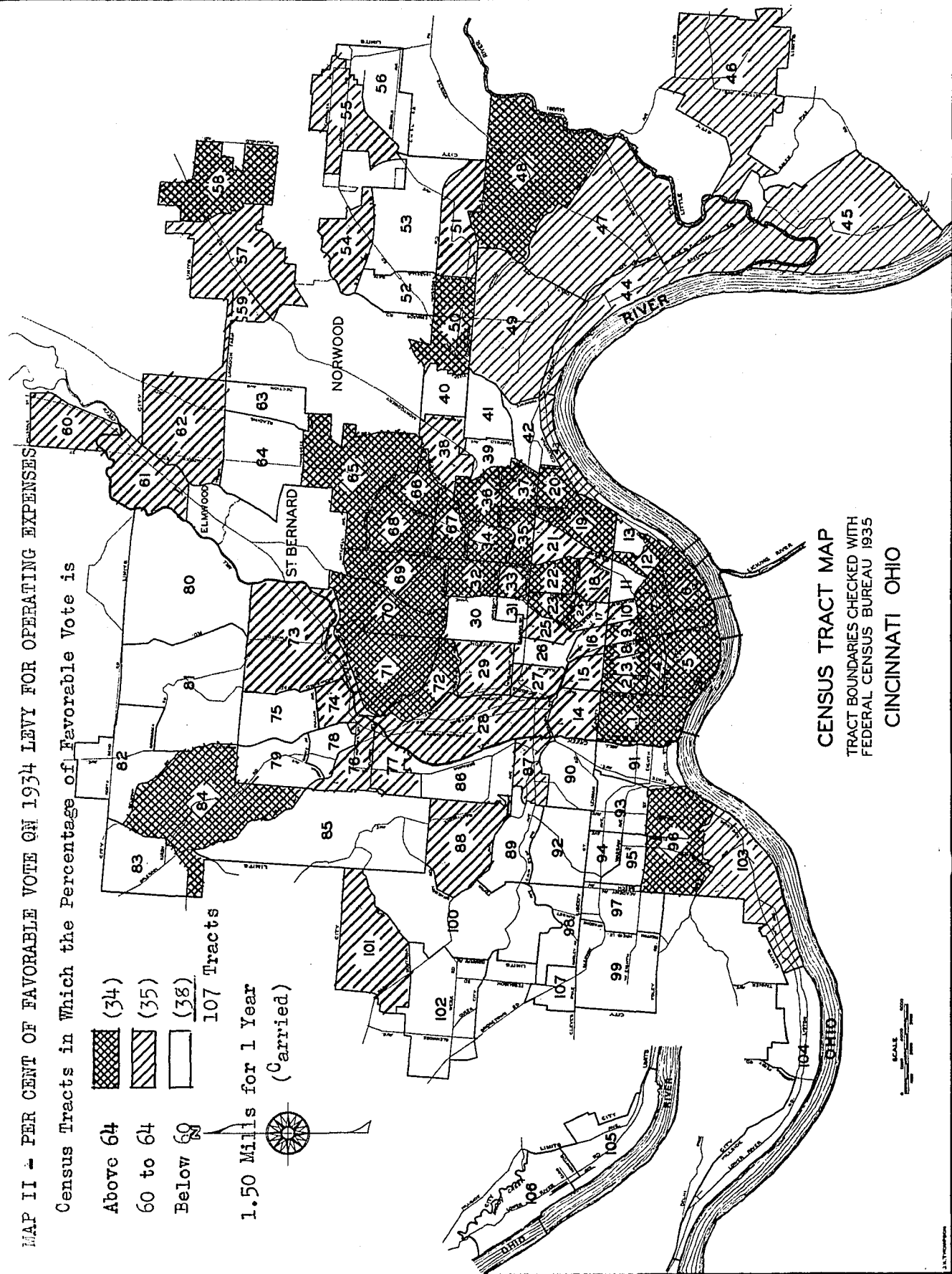
Census Tracts in Which the Percentage of Favorable Vote is

- Above 64 (34)
- 60 to 64 (35)
- Below 60 (38)

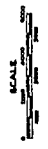
107 Tracts

1.50 Mills for 1 Year

(Carried)



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO



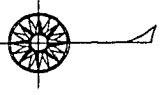
MAP III - PER CENT OF FAVORABLE VOTE ON THE 1935 LEVY FOR OPERATING EXPENSES

Census Tracts in Which the Percentage of Favorable Vote is

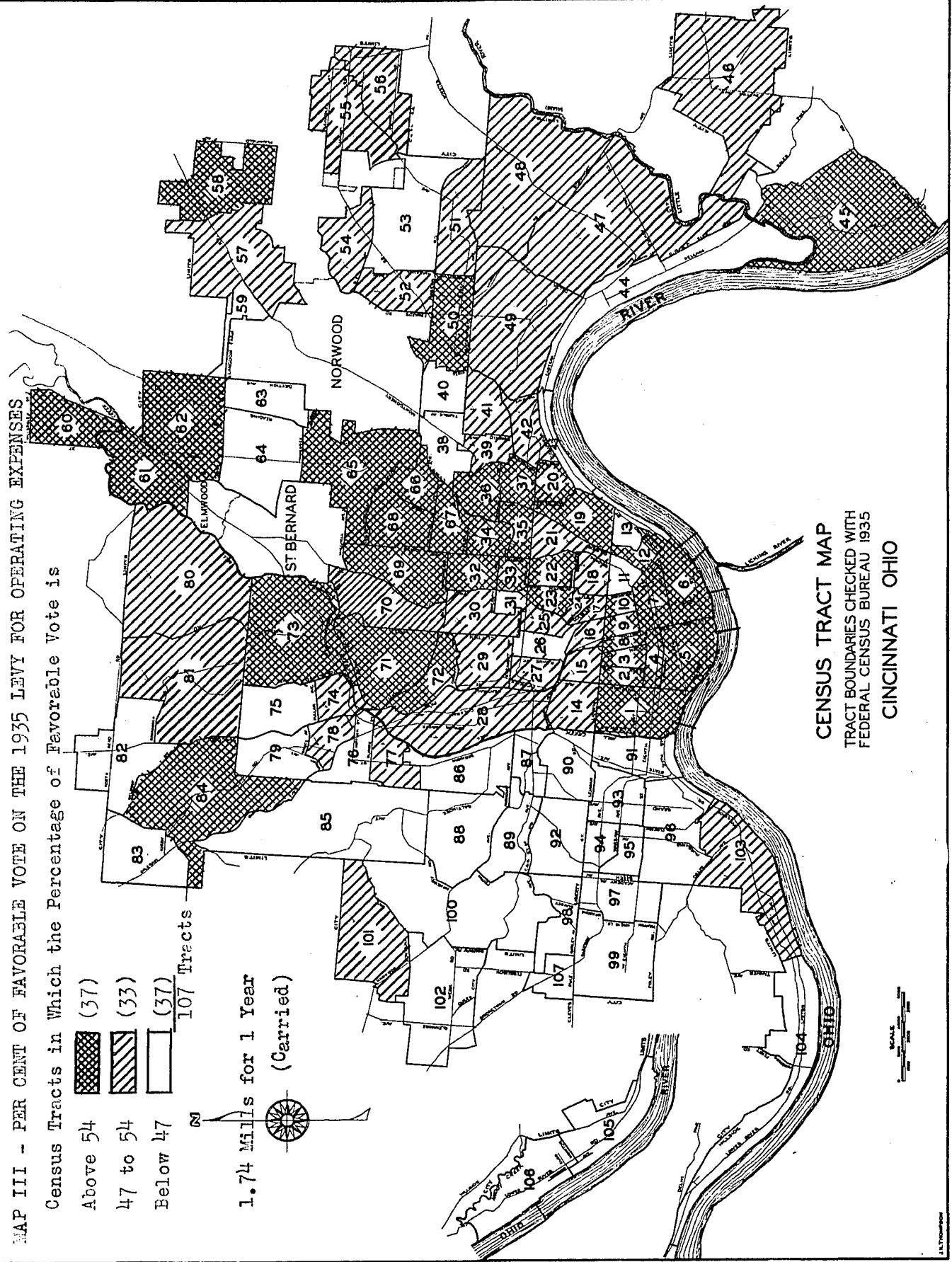
- Above 54 (37)
- 47 to 54 (33)
- Below 47 (37)

107 Tracts

1.74 Mills for 1 Year
(Carried)

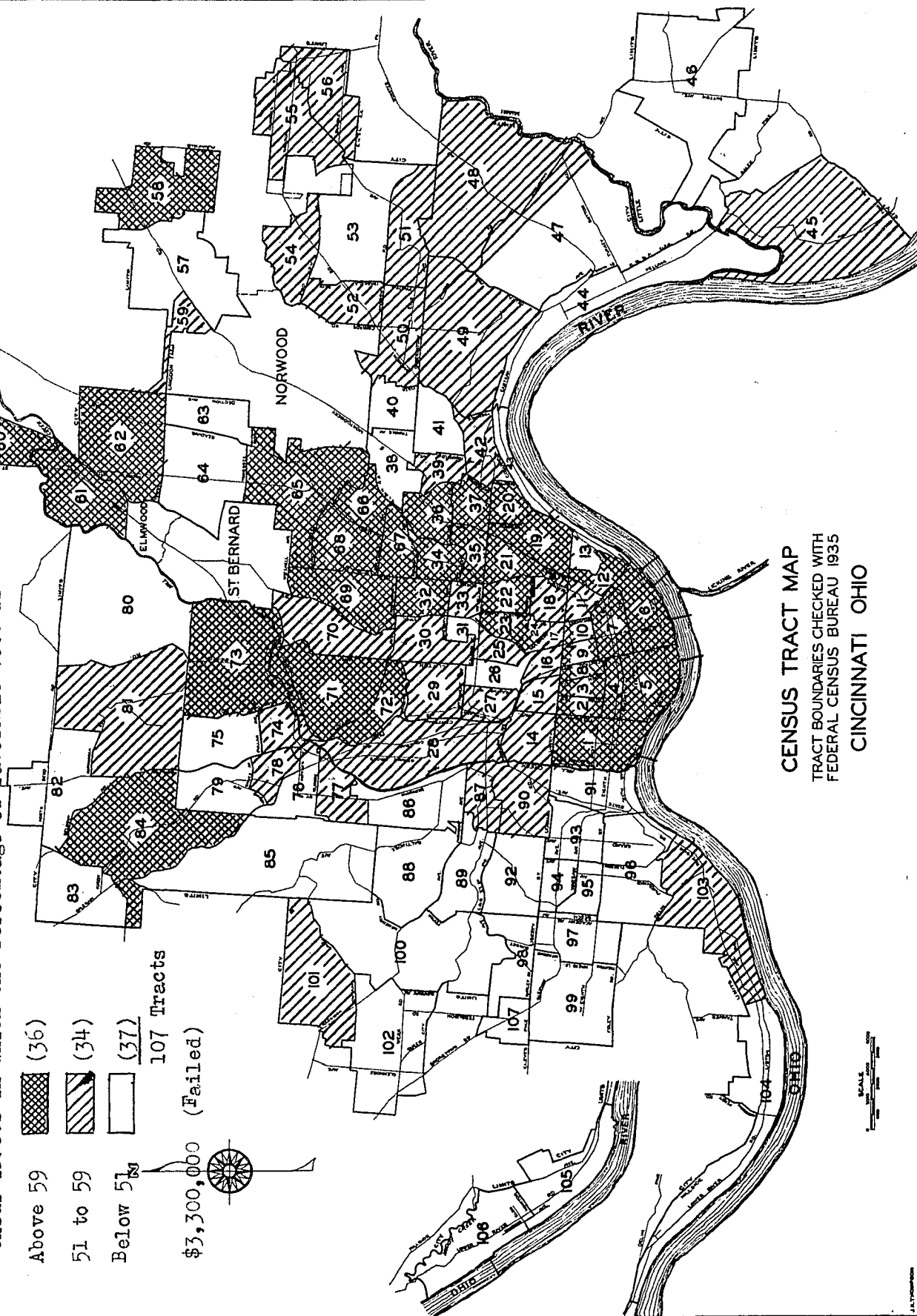
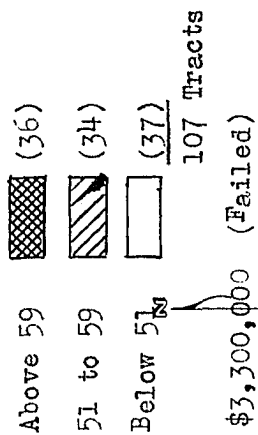


CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO



MAP IV - PER CENT OF FAVORABLE VOTE ON THE 1935 SCHOOL BOND ISSUE FOR BUILDINGS

Census Tracts in Which the Percentage of Favorable Vote is



MAP V - PER CENT OF FAVORABLE VOTE ON THE 1936 SCHOOL LEVY FOR OPERATING EXPENSES

Census Tracts in Which the Percentage of Favorable Vote is

Above 53 (36)

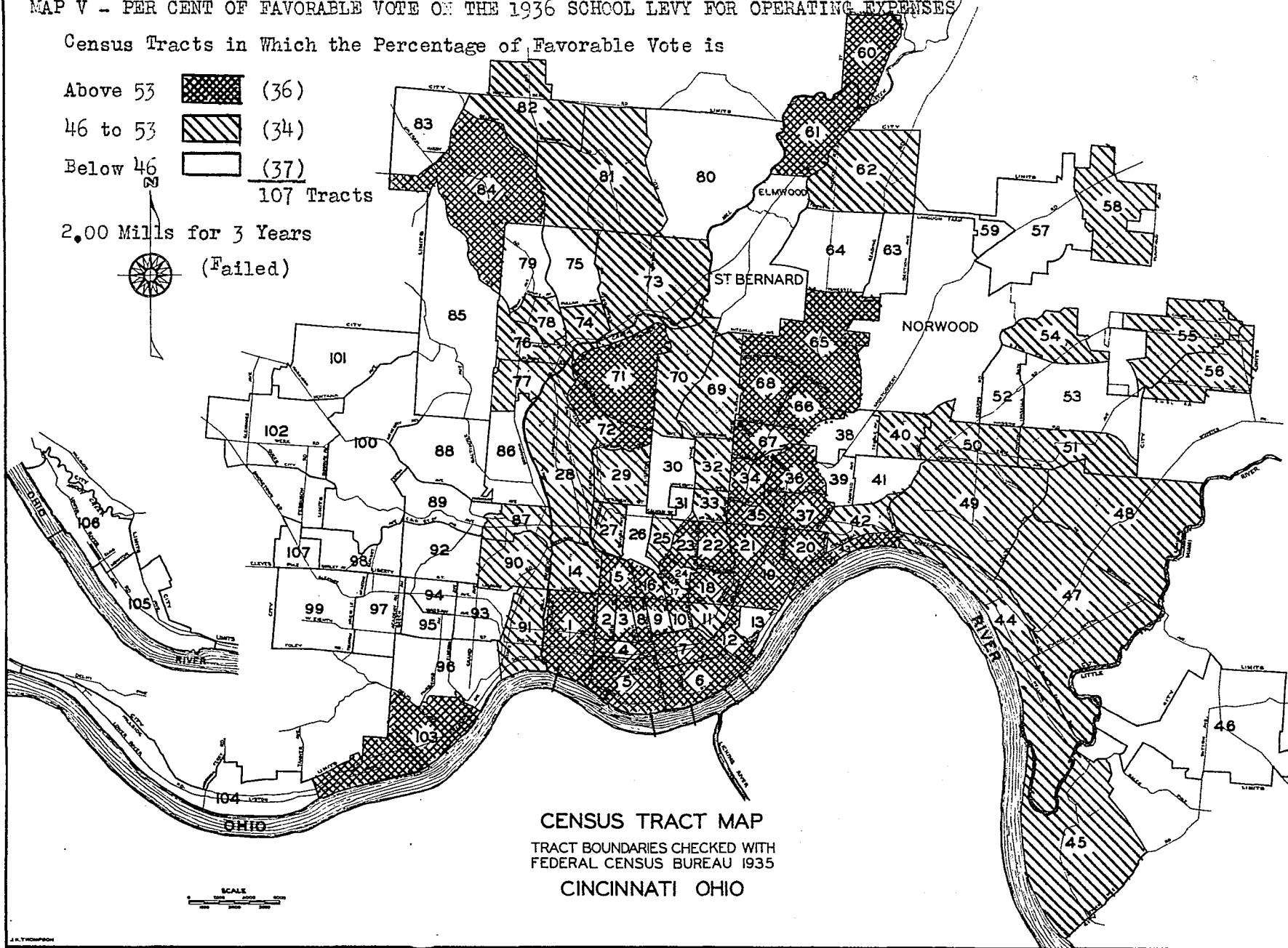
46 to 53 (34)

Below 46 (37)

107 Tracts

2.00 Mills for 3 Years

(Failed)



MAP VI - PER CENT OF FAVORABLE VOTE ON THE 1936 SCHOOL LEVY FOR BUILDING

Census Tracts in Which the Percentage of Favorable Vote is

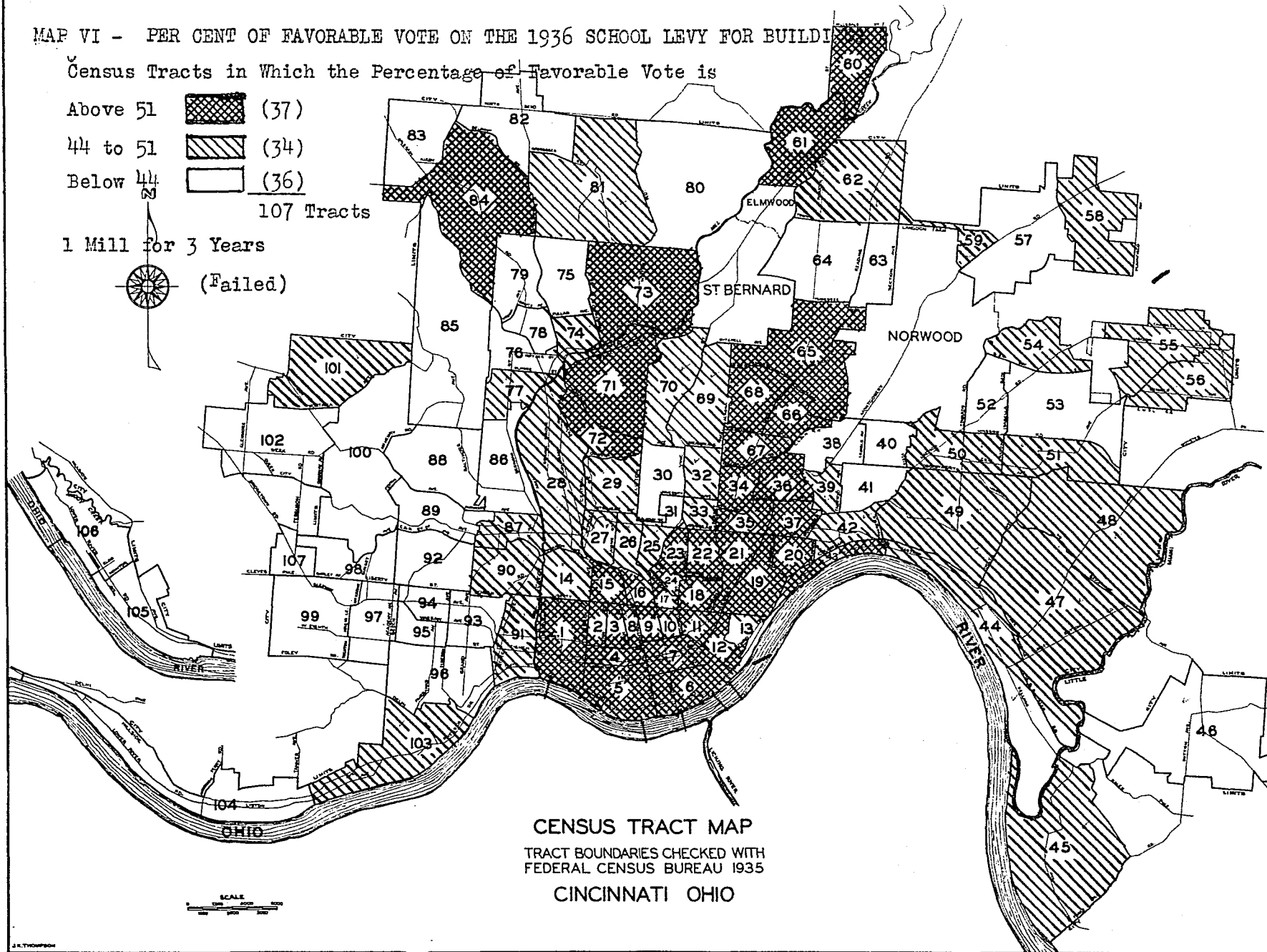
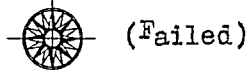
Above 51 (37)

44 to 51 (34)

Below 44 (36)

107 Tracts

1 Mill for 3 Years



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

MAP VII - PER CENT OF FAVORABLE VOTE ON THE 1937 SCHOOL LEVY FOR OPERATING EXPENSES

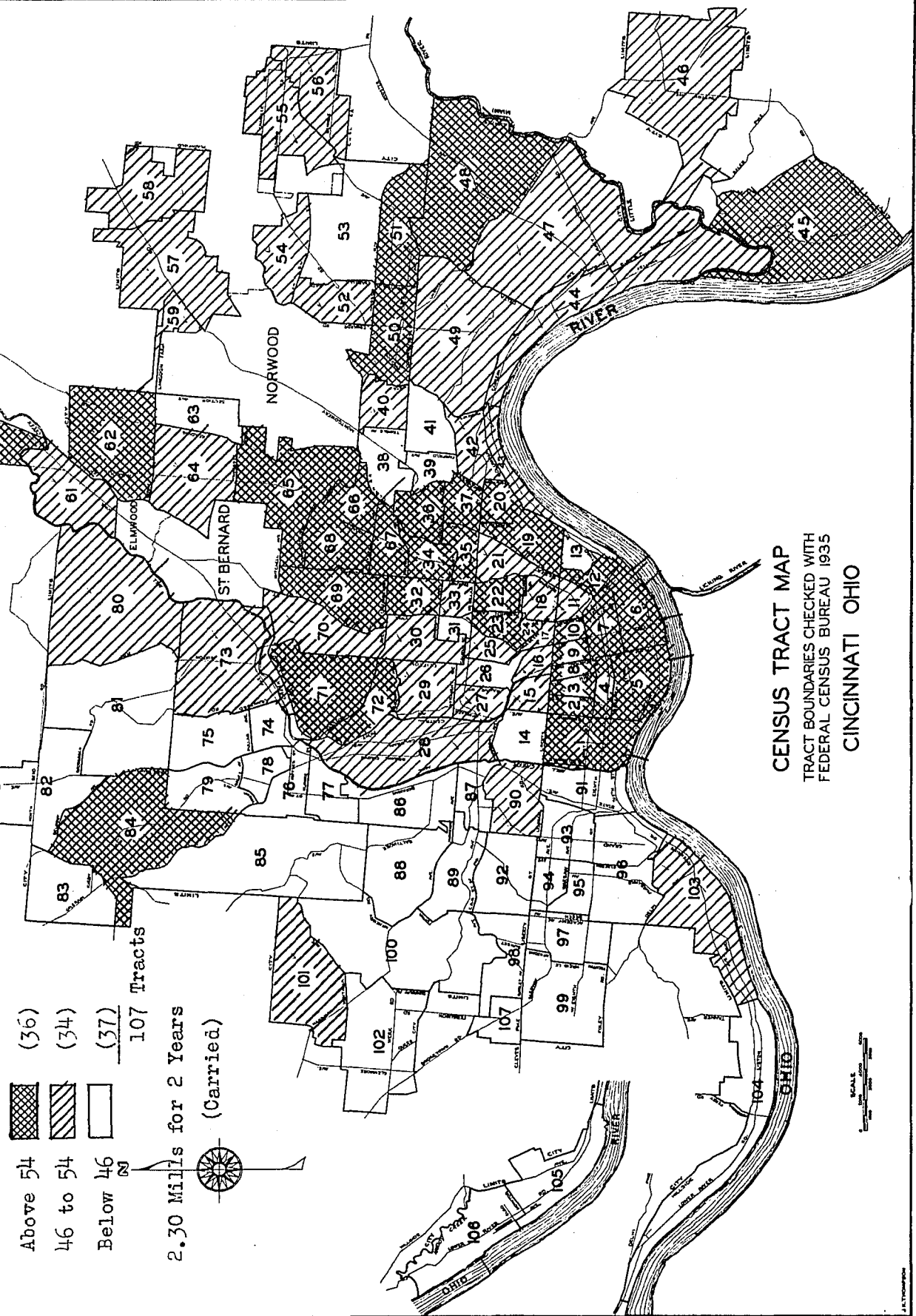
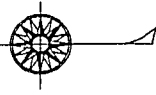
Census Tracts in Which the Percentage of Favorable Vote is

- Above 54 (36)
- 46 to 54 (34)
- Below 46 (37)

107 Tracts

2.30 Mills for 2 Years

(Carried)



CENSUS TRACT MAP

TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935

CINCINNATI OHIO

SCALE
1" = 1 MILE

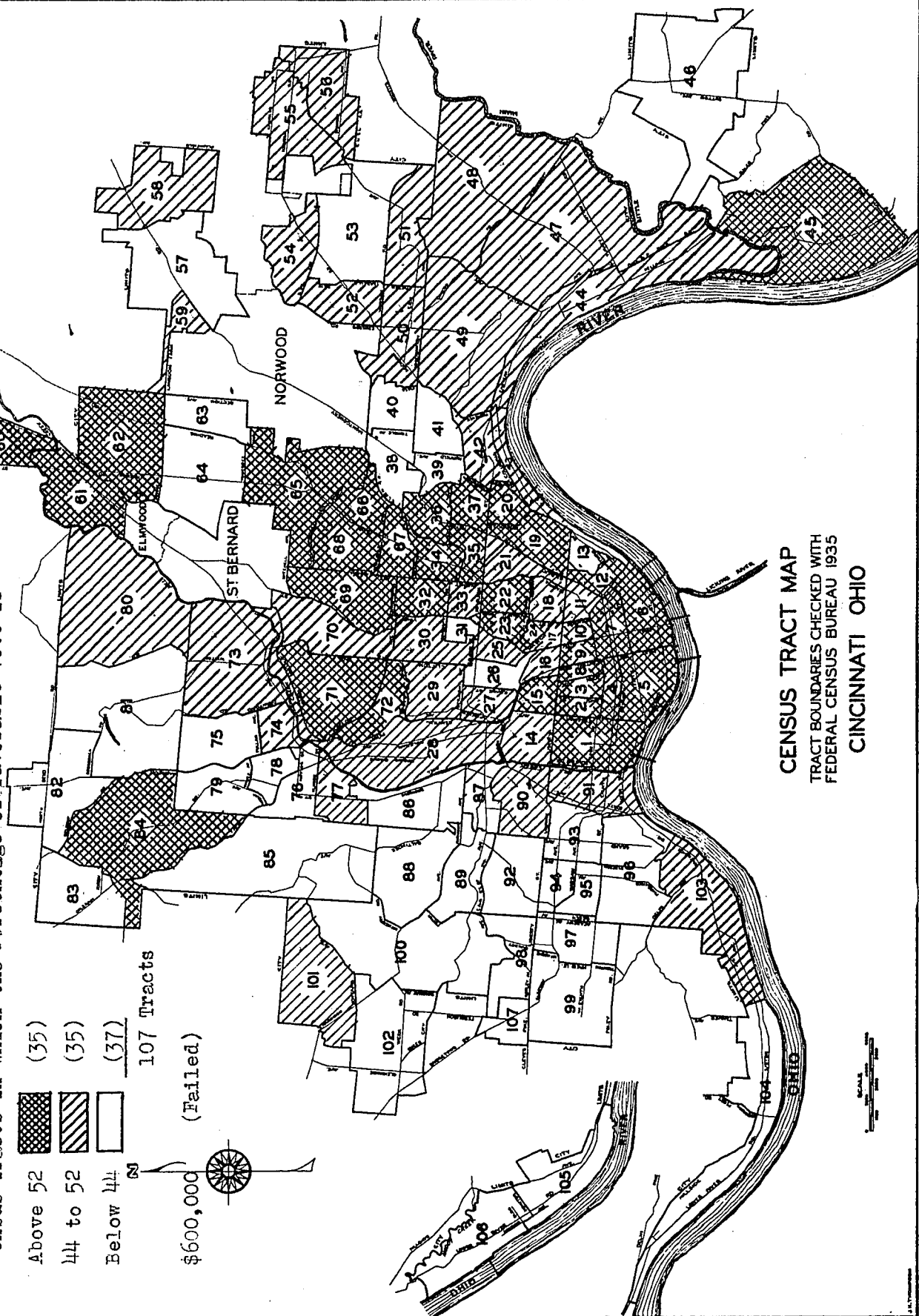
J. A. Thompson

MAP VIII - PER CENT OF FAVORABLE VOTE ON THE 1937 BOND ISSUE FOR BUILDING
Census Tracts in Which the Percentage of Favorable Vote is

- Above 52 (35)
- 44 to 52 (35)
- Below 44 (37)

107 Tracts

\$600,000 (Failed)



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

SCALE

MAP IX - PER CENT OF FAVORABLE VOTE ON THE AUGUST, 1938, SCHOOL BOND ISSUE FOR BUILDINGS

Census Tracts in Which the Percentage of Favorable Vote is

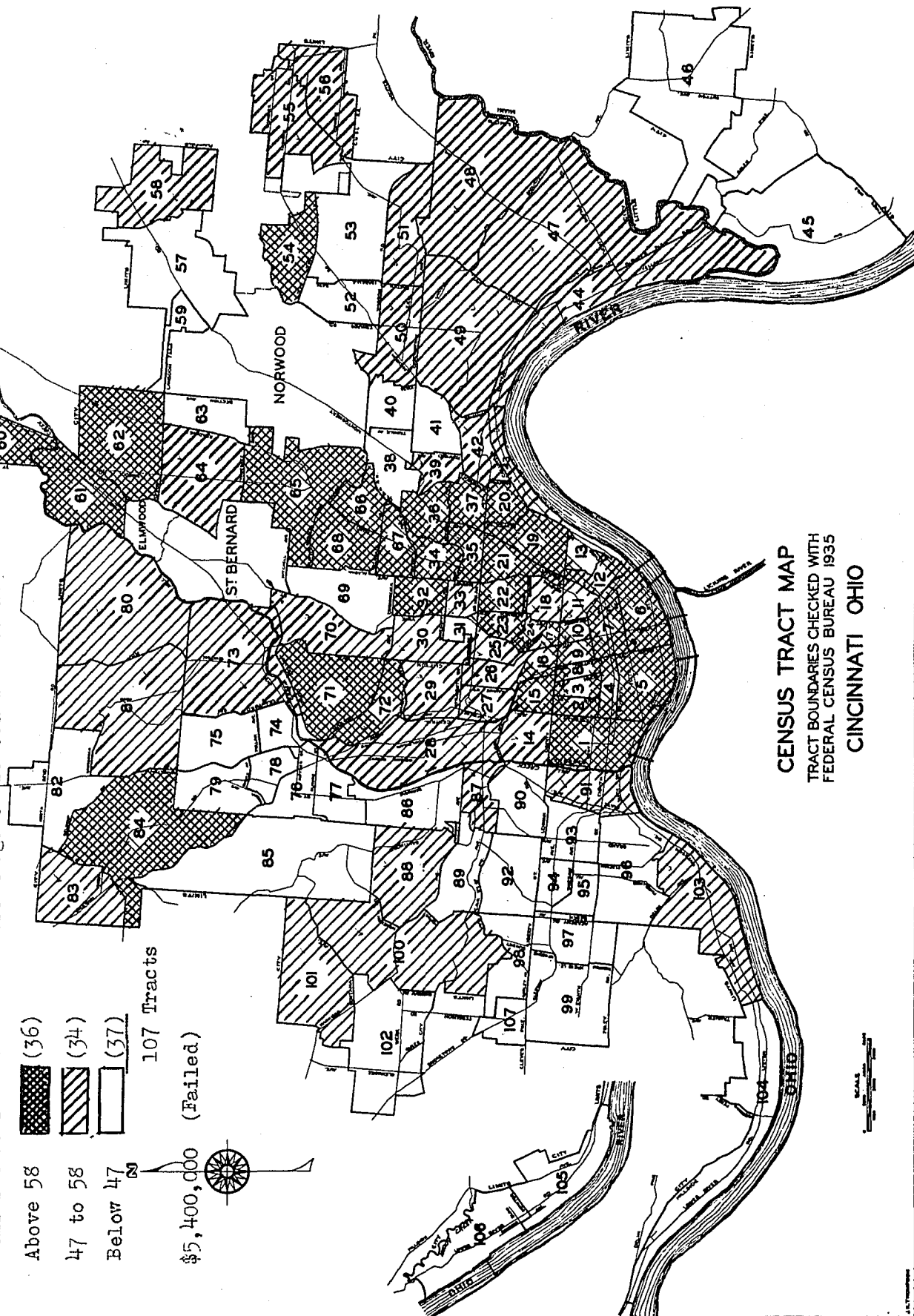
Above 58 (36)

47 to 58 (34)

Below 47 (37)

107 Tracts

\$5,400,000 (Failed)



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

SCALE
1" = 1 MILE

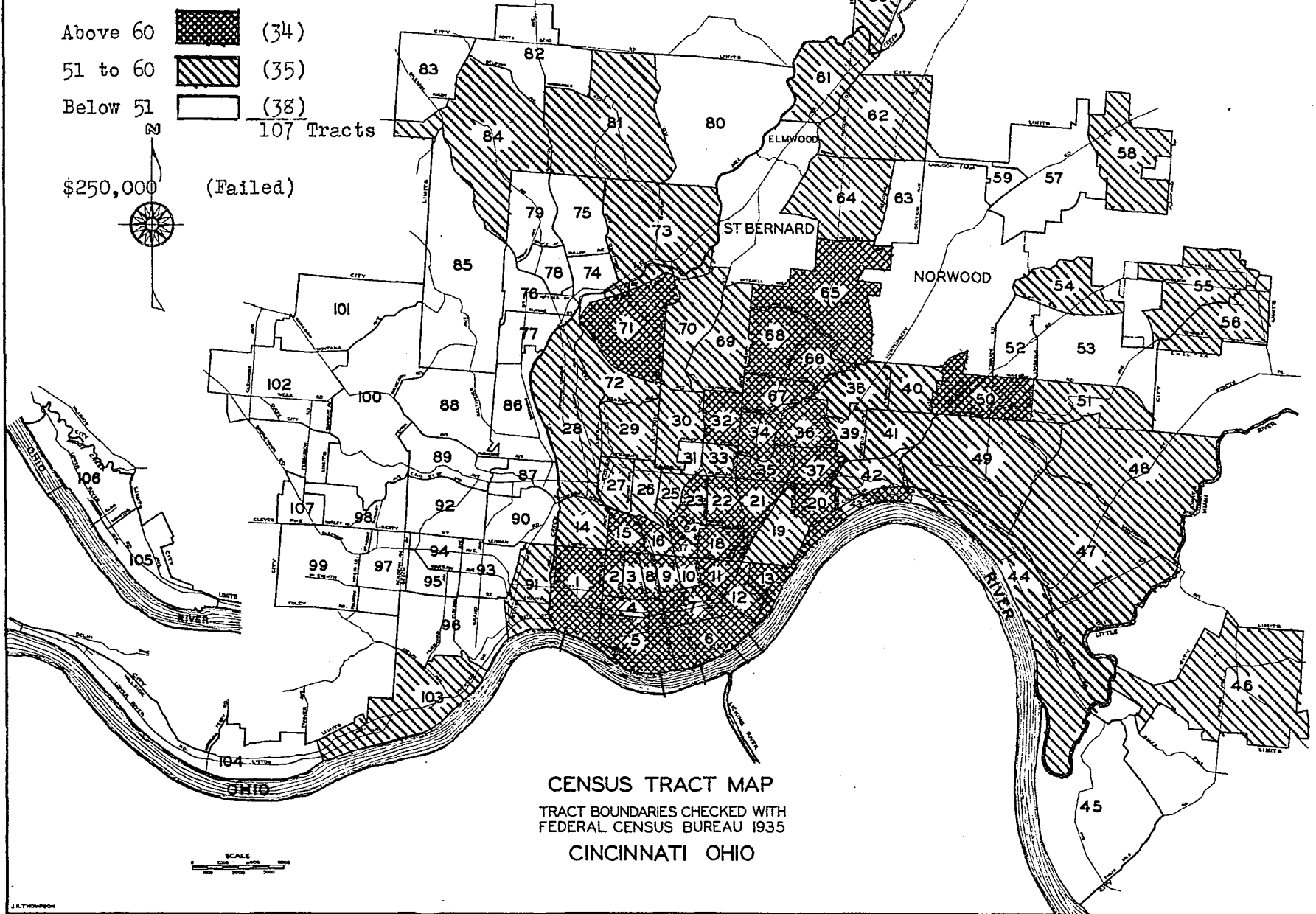
MAP X - PER CENT OF FAVORABLE VOTE ON THE NOVEMBER, 1938, SCHOOL BOND ISSUE FOR BUILDINGS

Census Tracts in Which the Percentage of Favorable Vote is

- Above 60 (34)
- 51 to 60 (35)
- Below 51 (38)

107 Tracts

\$250,000 (Failed)



MAP XI - PER CENT OF FAVORABLE VOTE ON THE 1939 SCHOOL LEVY FOR OPERATING EXPENSES

Census Tracts in Which the Percentage of Favorable Vote is

Above 56 (36)

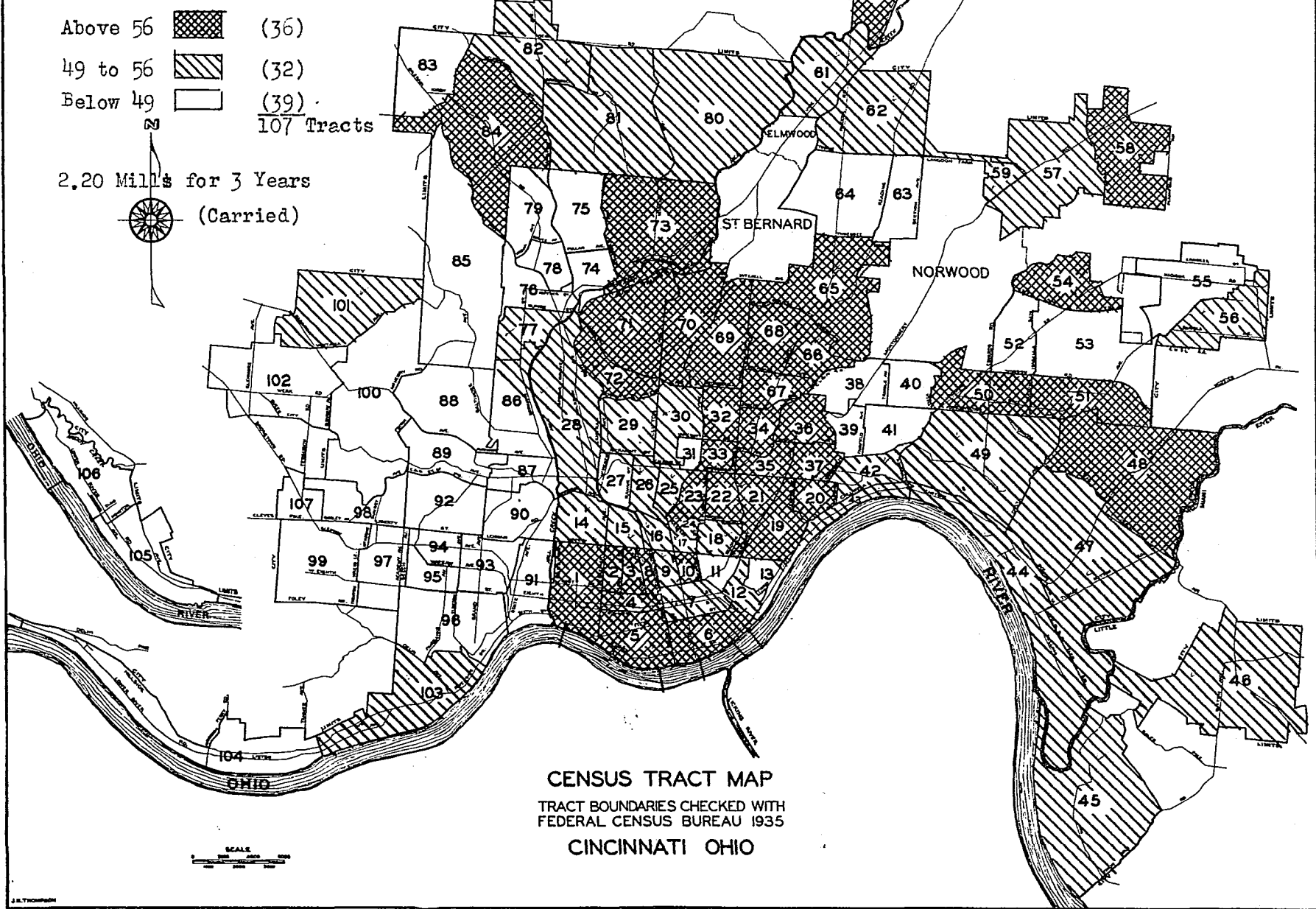
49 to 56 (32)

Below 49 (39)

107 Tracts

2.20 Mills for 3 Years

(Carried)



of favorable vote on the bond issues and levies for buildings for the issues of 1935, 1936, 1937, August, 1938, and November, 1938, respectively.

The consistency of the pattern of favorable vote.- An examination of the eleven maps representing the per cent of favorable vote on the eleven issues reveals a striking consistency of the general voting pattern. The maps indicate that the populations that vote highest in favor of the issues are fairly definitely within certain areas throughout the decade, and that the areas with the most favorable vote do not shift from year to year. Moreover, there are no marked differences in the patterns of the vote on either kind of school finance issue. The census tracts in which the vote is highest on the special levies for operating expenses give a similarly favorable vote on the bond issues and levies for buildings. The areas of lowest favorable vote remain almost constant from issue to issue during the decade. This striking resemblance of each of the maps, plotted in terms of the per cent of favorable vote for each census tract, implies the existence of some underlying forces that characterize the voting public of Cincinnati in its vote on public school finance issues.

The areas of highest favorable vote.- The maps reveal a relatively high vote in favor of all issues in the areas extending from the Ohio River, in the business section of the city, northward and slightly eastward to the city limits beyond St. Bernard and Elmwood. This area is almost unbroken in its voting pattern, except for the populations in the census tracts 63 and 64, in which the

vote for the issues is markedly low. Directly north of the main business section, represented by the first twelve census tracts, and better known as the Basin area, is a region in which the vote for the issues is relatively not as high. However, still farther northward, in the census tracts 71, 72, and 73, the favorable vote generally ranks among the highest third. A population that is strikingly high in its vote for the issues, while the adjacent areas remain in the lowest group, is that in census tract 84, in northwest Cincinnati.

In general, populations in the eastern areas of Cincinnati voted rather conservatively toward the issues of public school finance. Populations in the eastern census tracts reveal a favorable vote not as high as those of the central areas just described, but they show a higher percentage of vote for the issues than most populations in tracts in the western part of the city. There are some exceptions, however, in eastern areas of Cincinnati, where the vote for the issues is low enough to be grouped in the lowest third.

The areas of lowest favorable vote.- In general, all of the western half of Cincinnati voted strongly against all issues of public school finance during the decade of the study. With the exception of the populations in census tract 84, previously mentioned, only a few scattered tracts west of Mill Creek occasionally exceeded the required favorable vote so as to be ranked with the middle third. The other prominent area of low favorable vote on the issues is directly east of the central section of the city, and between Norwood and the large bend in the Ohio River. This

area consists of census tracts 38, 39, 40, and 41. The percentage of favorable vote is also somewhat lower in the northeastern part of the city than the median vote for the entire city. In addition to census tracts 62 and 63, others whose favorable vote on the issues is low are 52 and 53, immediately east of Norwood.

A few census tracts within the areas of high favorable vote on the issues are prominent in that their populations vote consistently against them. Census tracts 13 and 31 are of this character. Although the former tract is adjacent to populations whose vote is high enough to be placed in the highest third, the percentage of vote of its populations remains in the lowest group. Populations in census tract 31 likewise vote consistently low on every issue. Census tract 26 is also prominent in this respect for most of the issues. Both census tracts 26 and 31 are adjacent to areas whose populations vote somewhat more strongly in favor of the issues.

Intercorrelations Among the Issues

An attempt was made to determine whether relationships exist among the eleven issues on public school finance that were presented during the period covered by the study, by determining the correlation coefficients between the percentage of favorable vote for each pair of issues.

The percentage of favorable vote was tabulated for each of the 107 census tracts in Cincinnati. Correlation coefficients were computed between the percentages of favorable vote on the 1933 bond issue for buildings and those on each of the other ten issues on

TABLE III

INTERCORRELATIONS OF THE PERCENTAGE OF FAVORABLE VOTE
ON ISSUES OF PUBLIC SCHOOL FINANCE

	1933 Building Bond	1934 Operation Levy	1935 Operation Levy	1935 Building Bond	1936 Operation Levy	1936 Building Levy	1937 Operation Levy	1937 Building Bond	1938 Building Bond August Issue	1938 Building Bond November Issue	1939 Operation Levy
1933 Bond for Buildings...	.73		.74	.81	.77	.85	.80	.81	.81	.82	.76
1934 Levy for Operation.....			.90	.87	.88	.81	.81	.85	.78	.76	.91
1935 Levy for Operation.....				.95	.88	.82	.92	.91	.85	.76	.96
1935 Bond for Buildings.....					.89	.91	.95	.88	.91	.89	.92
1936 Levy for Operation.....						.96	.85	.94	.89	.83	.91
1936 Levy for Buildings.....							.87	.95	.93	.85	.85
1937 Levy for Operation.....								.81	.77	.85	.92
1937 Bond for Buildings.....									.93	.90	.89
1938 Bond for Buildings.....										.94	.88
1938 Bond for Buildings.....											.82
1939 Levy for Operation.....											

school finance. Coefficients were next computed between the percentages of favorable vote on the 1934 special levy for operation, and those on the remaining ten issues, and so on, until all of the fifty-five possible intercorrelations were computed. The intercorrelations of the percentage of favorable vote on the eleven issues covered in the study are presented in Table III. The coefficients vary in size, but the trend is toward relatively high correlations, which range from .73 to .96.

Each coefficient is found to be statistically significant. In other words, values of all obtained coefficients could hardly have happened by chance alone. The evidence from this part of the analysis is a confirmation of what has already been implied in the plotting of the extent of favorable vote on the maps. There is sufficient evidence that some individual populations in Cincinnati tend to vote consistently in favor of the issues on public school finance, and that certain other populations are inclined to oppose the issues. The problem remains to search out and recognize these populations, and to identify the characteristics that distinguish them from populations at large in Cincinnati.

Summary

By use of one map for each of the issues of public school finance represented in the study, a high degree of consistency is revealed among the various issues, with respect to the pattern of the favorable vote. In general, populations in given areas within Cincinnati vote much the same from issue to issue, and no marked

differences exist in the pattern of the vote between the special levies for operating expenses and the issues concerned with building programs.

Areas whose populations vote relatively high in favor of the issues extend from the census tracts in the Basin area northward and slightly eastward to the city limits beyond St. Bernard and Elmwood. The populations in the area in the western half of Cincinnati are noted for voting less favorably for the issues. Populations in most tracts in the northern and eastern portions of the city also vote relatively less favorably for the issues.

Correlation coefficients computed between the percentage of favorable vote for each pair of issues represented in the study also reveal statistically significant relationships with respect to the general pattern of the vote. The obtained r's range from .73 to .96, and could not have happened by chance alone. The consistency in the general pattern of the favorable vote, as shown by the employment of maps, and the obtained correlation coefficients imply the existence of some dominant forces that characterize the various voting populations of Cincinnati in their vote on issues of public school finance.

CHAPTER IV

NATIVITY AND RACE AND THE VOTE

The Populations of Cincinnati

General populations in 1935.- Between the years 1930 and 1935 the total population of Cincinnati increased from 451,160 to 473,421. Since the birth rate in Cincinnati has not been high enough for the population to maintain itself from 1930 to 1940,¹ this increase of 22,261 persons during the first half of the decade has been due largely to incoming migrants. Without any migration from outside the city, a decrease of 1,400 persons would have resulted, since during these five years deaths would have exceeded births by that number.²

Like most cities as large as Cincinnati, a larger proportion of persons between the ages of twenty and fifty are found among the total populations than is found in Ohio at large. Young adults at the most productive adult ages have moved from rural areas to Cincinnati, while persons under twenty have remained in the more rural areas. Likewise, older persons beyond fifty years of age who are not gainfully employed have moved back to rural areas, where the

¹ The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: I, The Population of Hamilton County, Ohio, in 1935, p. 27. Cincinnati: Cincinnati Employment Center, 1937.

² Ibid., p. 28.

cost of living is relatively lower.³ Since the birth rate is not sufficiently high to maintain the present population level, the elementary school enrollment is not likely to increase to any extent, and the high school enrollment is likely to increase only if greater proportions of children attend the schools of secondary level. The increase of persons in Cincinnati beyond twenty years of age has added to the number of potential voters who have the privilege of voting on issues concerned with public school support. Will such an increase in the proportion of persons of voting age result in a trend toward greater conservatism in support of school finance issues? Is it probable that an increasing number of voters who have no children of school age will have less interest in the financing of an adequate school program for other people's children? Questions such as these are worth a great deal of thought, although they are of such a nature that they cannot be answered in the present study.

Of the total population in Cincinnati in 1935, 388,458 persons, or 82 per cent, were native white. The proportion of foreign born has steadily declined since 1870 and, although the migration of Negroes has gradually increased until they amount to nearly 12 per cent of the total population, their rate of increase has not been as large as in other cities equally far south. As a result, Cincinnati is one of the larger cities whose proportion of native whites is

³Ibid., p. 13.

relatively high.⁴ The female population among the native whites exceeds that of the male by more than 2 per cent, probably due to the greater extent of migration of women from rural areas to the city.⁵

Foreign Born Populations

Foreign born populations have fallen from 71,310 in 1890 to 29,198 in 1935, with the rate of decrease more rapid during the later years. The Regional Census of 1935 reveals that most of Cincinnati's foreign born have been in the United States over thirty years, and that the proportion of foreign persons of younger years is exceedingly small. Only 10 per cent of all foreign born living in the city were under thirty years of age in 1935, and almost one third of the total number were over sixty years of age. Map XII represents the distribution of the foreign born populations in 1935, and Appendix II-A presents the number and the per cent of foreign born in the total population for the same year.

Areas of foreign born persons in Cincinnati in 1935.- In general, the more dense foreign born populations are found in those census tracts that extend from the Ohio River in the Basin directly east of the denser Negro areas, northward to St. Bernard and Norwood. The greatest proportion of foreign born populations is found in census

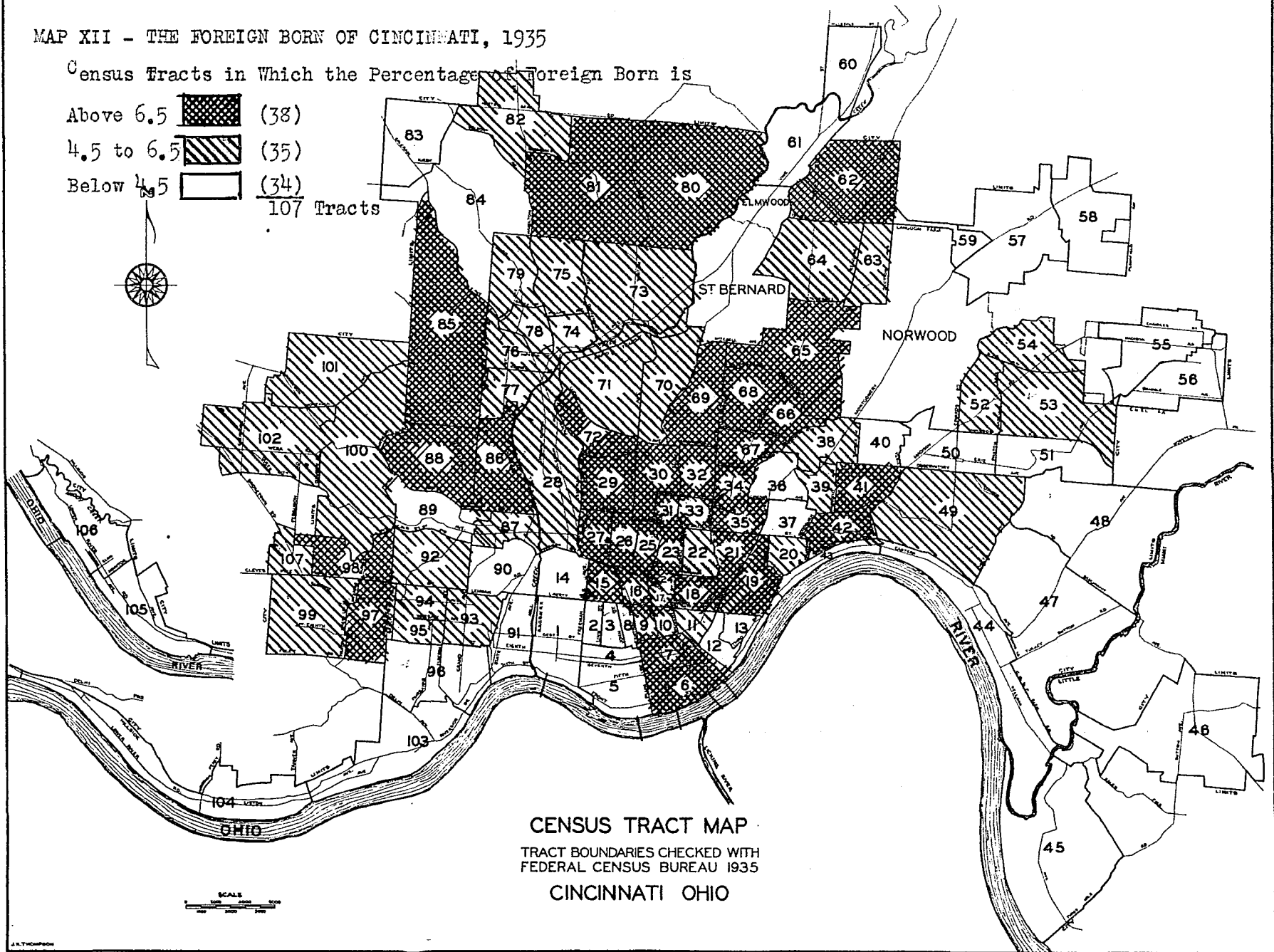
⁴Ibid., p. 6.

⁵The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, p. 11. Cincinnati: Cincinnati Employment Center, 1937.

MAP XII - THE FOREIGN BORN OF CINCINNATI, 1935

Census Tracts in Which the Percentage of Foreign Born is

Above 6.5		(38)
4.5 to 6.5		(35)
Below 4.5		(34)
107 Tracts		



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

tracts 66 to 69. Areas of lightest foreign born populations are found in those tracts that border the Ohio River and in the areas farther from the center of the city that border the city limits, especially to the east. Few foreign born are found in those tracts that have dense Negro populations. By far the greatest number of foreign born in Cincinnati came from northern and western Europe, especially from Germany.⁶

The vote of the foreign born on the issues.- An examination of the distribution of foreign born populations in the various census tracts of the city shows that where the proportions of foreign born are relatively high the favorable vote on each of the issues involved in the study is also relatively high. Conversely, where the percentages of foreign born are lower the vote in favor of the issue is relatively low. An example may be cited in the case of the 1935 levy for operation, as represented in Table IV. The average favorable vote on this levy is approximately 51 per cent. Forty-six of the 107 census tracts of the city have populations that voted above this mean per cent of 51, and the remaining sixty-one tracts have populations whose favorable vote was below the mean. In those tracts whose per cent of favorable vote is above the mean, the mean per cent of foreign born persons is 7.3, while the mean per cent of the foreign born populations residing in those tracts whose voters cast less favorable votes on the 1935 levy is 5.2 per cent. This results in a difference of 2.1 per cent between the two means of the per cent of foreign born persons living in census tracts whose voters voted more favorably or less

⁶ Studies in Economic Security: I, op. cit., p. 8.

TABLE IV

PER CENT OF FOREIGN BORN, 1935, IN CENSUS TRACTS IN AREAS
WHOSE POPULATIONS VOTE ABOVE AND BELOW
THE MEAN FAVORABLE VOTE

Issue	Mean Favorable Vote (Per Cent)	Tracts with Popu- lations Voting Above Mean Favorable Vote		Tracts with Popu- lations Voting Below Mean Favorable Vote		Difference in the Means
		No. of Tracts	Foreign Born (Mean %)	No. of Tracts	Foreign Born (Mean %)	
1933 Bond	48	43	7.274	64	5.241	2.033
1934 Levy	62	48	6.779	59	5.471	1.308
1935 Levy	51	46	7.259	61	5.152	2.107
1935 Bond	56	47	7.259	60	5.117	2.142
1936 Levy	50	44	6.861	63	5.465	1.396
1936 Levy*	48	53	6.811	54	5.319	1.492
1937 Levy	51	48	7.056	59	5.246	1.810
1937 Bond	49	48	7.194	59	5.164	2.030
1938 Bond August	54	47	6.891	60	5.405	1.486
1938 Bond November	59	42	7.542	65	5.111	2.431
1939 Levy	63	51	7.143	56	5.070	2.073

*

The second 1936 levy mentioned above is one for the financing of a building program. All other levies in the table are issues concerned with operating expenses. All bond issues are concerned with building programs.

favorably on the issue. Table IV presents the data on the percentages of foreign born for the other issues of the study, as well as for the issue cited above. All the differences between the mean percentage of foreign born in the two groups of census tracts reveal that the voting populations within the tracts having a relatively high percentage of foreign born persons yield a higher percentage of favorable vote on the issues of public school finance.

How significant these differences are between the mean per cent of foreign born living in those census tracts whose voting populations cast a relatively high favorable vote for an issue, and those living in tracts whose voters cast a less favorable vote, may be determined by the application of the "t-test".⁷ The hypothesis to be tested is that these two foreign born populations, divided on the basis of residence within census tracts whose populations yield relatively high and relatively low favorable votes on the issue in question, are drawn from identical populations. This is the same as saying that the outcome of the vote on the school issue is unaffected significantly by the proportion of foreign born persons in the total population. If this hypothesis is proved tenable, it means that the population composed of large numbers of foreign born in Cincinnati tend to vote no differently from populations of the city comprised mostly of native born persons. If, however, the hypothesis that there is no difference in the mean per cent of foreign born in the two populations

⁷ E. F. Lindquist, Statistical Analysis in Educational Research, pp. 56-58. Boston: Houghton Mifflin Co., 1940.

is disproved, there is reason to believe that the foreign born of Cincinnati tend to support issues of public school finance to a greater extent than those who are native born.

In testing for the significance of the difference between the means of the two samples of foreign born, as described above, t may be defined as the difference between the means of the two samples in question divided by the standard error of their difference.⁸ The best estimate of the standard error of the difference between the two means

may be defined as $\text{est'd } \sigma_{M_1 - M_2} = \sqrt{\left(\frac{\sum d_1^2}{n_1 + n_2 - 2} + \frac{\sum d_2^2}{n_1 + n_2 - 2}\right) \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}$,

in which M_1 and M_2 are the two means, and d_1 and d_2 represent the respective deviations of any measures from M_1 and M_2 . n_1 represents the number of measures in the sample whose mean is represented by M_1 , and n_2 represents the number of measures in the sample whose mean is represented by M_2 . t may now be defined as $t = \frac{M_1 - M_2}{\text{est'd } \sigma_{M_1 - M_2}}$,

$$\text{or } t = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum d_1^2}{n_1 + n_2 - 2} + \frac{\sum d_2^2}{n_1 + n_2 - 2}\right) \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \quad .^9$$

The t -test was employed to determine if a real difference exists between the per cent of foreign born in populations whose vote on the issues of the study is relatively high and the per cent of foreign born in populations whose vote is relatively low. Census tracts whose populations voted above the mean favorable vote on an issue are

⁸Ibid., pp. 56-57.

⁹Ibid.

considered as areas in which the vote on the issue is relatively high. Areas in which the vote is considered as relatively low are those census tracts whose populations voted below the mean favorable vote. The foreign born populations were divided on this basis. The test was used to determine the significance of the difference for each of the eleven issues of the study. Table V presents the results of these determinations.

The "Difference between the Means", as presented in Table V, is the difference between the per cent of foreign born in those census tracts whose populations cast relatively high favorable votes on an issue and in those tracts whose populations voted relatively low. This same difference is also given in Table IV. For the previously mentioned 1935 levy for operating expenses this difference is 5.2 per cent. The third column in Table V represents the standard error of this difference. In the fourth column of Table V, t is obtained by dividing the difference between the per cent of foreign born by the estimated standard error of the difference. Fisher's "TABLE OF t "¹⁰ was used to translate the values of t into the respective levels of significance, which were in turn interpreted in terms of probabilities of a true difference, as shown in the last column of Table V.

The statistic t is a ". . . measure of the divergence of fact from hypothesis. . . ." ¹¹ The probability of a true difference for any given issue, as presented in Table V, represents the number of

¹⁰Ibid., p. 53.

¹¹Ibid., p. 52.

TABLE V

THE MEAN PER CENT OF FOREIGN BORN IN CINCINNATI, 1935, IN
TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH
AND RELATIVELY LOW IN FAVOR OF THE ISSUES

Issue	Difference Between the Means	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Differ- ence Exists
1933 Bond	2.033	.790	2.574	99
1934 Levy	1.308	.753	1.737	92
1935 Levy	2.107	.795	2.650	99+
1935 Bond	2.142	.804	2.662	99+
1936 Levy	1.396	.771	1.811	93
1936 Levy [*]	1.492	.780	1.913	94
1937 Levy	1.810	.792	2.285	98-
1937 Bond	2.030	.797	2.546	99+
1938 Bond August	1.486	.797	1.863	94
1938 Bond November	2.431	.789	3.081	99+
1939 Levy	2.073	.780	2.658	99+

^{*}A levy concerned with the financing of a building program.
All other levies named above were for operating expenses. All bond
issues were concerned with building programs.

chances in one hundred that a real difference exists between the number of foreign born persons in areas whose populations vote relatively high in favor of the issue and in areas whose populations vote relatively low.

Inasmuch as the data on the foreign born populations used for this part of the study were gathered from the Regional Census of 1935, the more valid measures of t may be found with those concerned with the levy and the bond issues of 1935. Populations may have shifted from year to year and it is possible, though not probable, that important changes in the proportion of foreign born in the total population of some of the census tracts may have taken place. In order to determine how much migration among the census tracts had taken place, the percentages of foreign born in each census tract in 1930 were checked with those of 1935. Such an examination would indicate whether marked changes in the proportion of foreign born might have arisen, so as to make the measures of any differences of little value in those years farther away from 1935.

Although the percentage of foreign born in the total population of Cincinnati was higher in 1930 than in 1935 (7.7 per cent in 1930 as compared with 6.2 per cent in 1935), it was found that what few differences existed were of only a minor nature and concerned those tracts in which there were very few foreign born in either year. Census tracts in which resided a relatively heavy per cent of foreign born in 1930 remained much the same in 1935. Conversely, no noticeable increase took place in the per cent of foreign born in areas wherein the percentage was low in 1930. Although the values of t, as

indicated in Table V, that concern the levy and bond issues of 1935, may be slightly more valid than those related to other issues of earlier or later years, any true differences in the mean per cent of foreign born for these years before and after 1935 can be accepted with confidence as fairly accurate.

According to Table V, the chances in one hundred that there are true differences in the relative number of foreign born in populations that vote more in favor of the issues, as compared with populations that vote less favorably, vary from approximately ninety-two to over ninety-nine. Most of the measures are near the level of ninety-nine. For the two issues of 1935, the year when the Regional Census was taken, the measures for the chances in one hundred that a real difference exists with respect to the foreign born are both above ninety-nine. Most of the evaluations of differences between the means may be regarded as statistically significant. These evaluations indicate that, in general, populations of Cincinnati composed of relatively large numbers of foreign born tend to support issues of public school finance more than those populations of the city in which there are fewer foreign born.

Correlation coefficients between the per cent of foreign born in 1935 and the per cent of favorable vote on the levy and bond issues of the same year were computed and were found to be .326 and .276 respectively. Both values of r are statistically significant, which confirms the conclusion that the relationship between the relative number of foreign born in Cincinnati and the per cent of favorable vote on the issues is greater than could have happened by chance alone.

Negro Populations in Cincinnati

Regardless of the fact that the birth rate among the Negroes in Cincinnati is considerably lower than that required to replace the Negro population, the number of Negroes in the city has increased markedly during recent years.¹² In 1890 the total number of Negroes in Cincinnati was 8,179; in 1930 the number rose to 47,818; and in 1935 the total population of Negroes was 55,765. This recent growth has been due largely to the influx of large numbers from the rural south.¹³ Map XIII represents the distribution of Negroes in Cincinnati in 1935, and Appendix II-A gives the number and the per cent of Negro persons by census tracts for the same year.

Negro areas in Cincinnati.- The denser population of Negroes in Cincinnati, as represented by Map XIII, is concentrated in six census tracts in the Basin area, and in tracts 36 and 37 to the north and east. In fact, 79.5 per cent of all the Negroes of the city are located within these two areas, and another 9 per cent live in those census tracts immediately adjacent to them. Fifteen of the 107 census tracts of the city have no Negro populations, and forty-three others have fewer than 1 per cent Negroes in their total population. Only twenty-five tracts have more than 5 per cent of the total population belonging to the Negro race.

The vote of Negro populations on the issues.- The twenty-five census tracts whose populations contain 5 per cent or above of Negroes,

¹² Studies in Economic Security: I, op. cit., Appendix II, p. 98.

¹³ Ibid., p. 34.

MAP XIII - THE NEGRO POPULATION OF CINCINNATI, 1935

Census Tracts in Which the Percentage of Negroes is

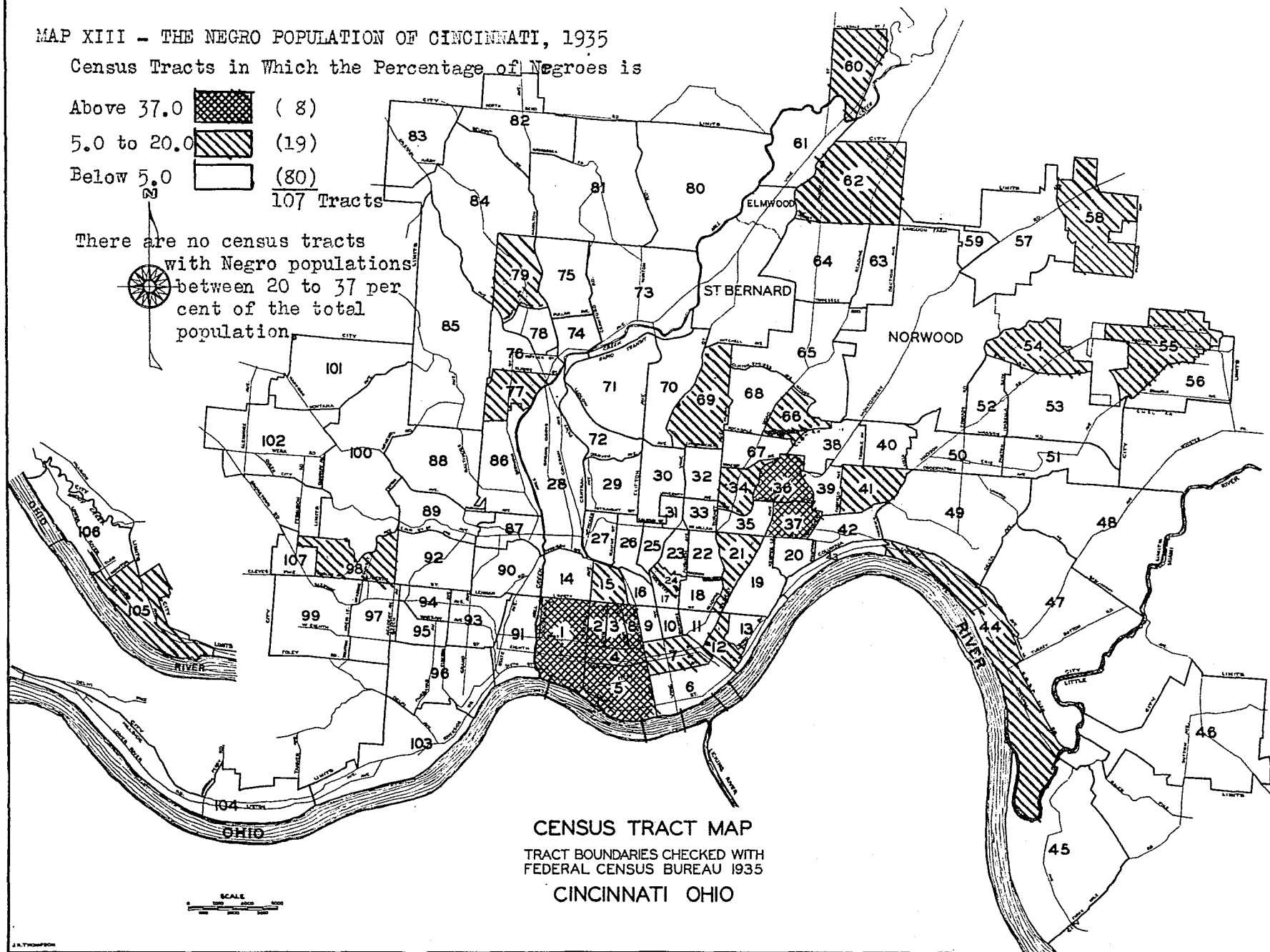
Above 37.0 (8)

5.0 to 20.0 (19)

Below 5.0 (80)

107 Tracts

There are no census tracts with Negro populations between 20 to 37 per cent of the total population.



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

and the fifty-eight tracts in which live no Negroes or fewer than 1 per cent, were used to test the hypothesis that the difference between the mean favorable vote on the issues, with respect to the relative number of Negroes in the total population, is zero. The issues on school finance employed for this part of the study are the bond issue of 1933, the bond and levy issues of 1935, and the 1939 levy. Since a high relationship exists among all issues covered by the study, as revealed in Chapter III, the use of these four issues will probably give accurate information as to the significance of the Negro vote on the issues of public school finance in Cincinnati.

Table VI presents the data on the differences between the per cent of favorable vote in those tracts whose populations consist of 5 per cent and above Negro, and in those tracts in which the Negro population is less than 1 per cent. All of the differences are statistically significant, which indicates with certainty that the two populations, one of which contains a fairly large number of Negroes, and the other of which has a Negro population almost negligible, are different populations, as regards their vote on the issues of public school finance. The populations in which the Negroes are present in larger numbers vote relatively more in favor of the issues than those in which the Negroes are almost absent to the extent that the difference in the results of the vote could not have happened by chance.

For the twenty-five census tracts with Negro populations above 5 per cent, correlation coefficients were computed between the per cent of Negro persons in 1935 and the per cent of favorable vote on

the 1935 levy for operation, and also on the per cent of favorable vote on the bond issue for buildings for the same year. Since the larger portion of Negroes in Cincinnati is concentrated in only a few census tracts, only those tracts in which there are 5 per cent or more Negroes were employed. The coefficient, r , between the per cent of Negroes in the total population and in the per cent of

TABLE VI

THE MEAN PER CENT OF FAVORABLE VOTE ON THE LEVY
AND BOND ISSUES OF 1933, 1935, AND 1939,
IN TWO NEGRO POPULATIONS, 1935

Issue	Mean Per Cent of Favorable Vote in		Difference $M_1 - M_2$	Est'd $\sigma M_1 - M_2$	Value of $\frac{t}{\sigma}$	Chances in 100 that True Difference Exists
	25 Tracts with Negro Populations Above 5.0%	58 Tracts with Negro Populations Below 1.0%				
1933 Bond	53.15	42.80	8.35	1.929	4.328	99+
1935 Levy	55.31	47.60	7.71	1.851	4.165	99+
1935 Bond	61.20	52.00	9.20	1.360	4.946	99+
1939 Levy	58.90	49.10	9.80	2.076	4.721	99+

favorable vote on the 1935 levy is .570, and that for the bond issue of the same year is .618. Both of these values of r are statistically significant.

The Interest of the Foreign Born and Negroes in the Issues

Eligible voters who voted on the issues.— The number of persons in a given population who are interested enough to go to the polls and vote on the issues of public school finance can be ascertained, and should merit some consideration. To what extent do citizens over

twenty-one years of age in certain populations in Cincinnati support or oppose issues of public school finance? In terms of the relative number of eligible voters who actually vote in those populations comprised of relatively large numbers of foreign born as compared with populations whose number of foreign born is relatively small, do the foreign born exhibit any difference in interest on such matters? What is the relative interest on the part of the eligible voters among the Negroes of Cincinnati? Other populations employed in the study may be investigated in order to reveal any differences in their respective interests toward public school finance issues.

Determination of eligible voters in 1935.- The exact number of persons twenty-one years of age and over in Cincinnati in 1935 cannot be determined from the data of the Regional Census of 1935. The Regional Census enumerated the persons in each of the census tracts in five-year intervals, so that those twenty years old were included in the group whose ages were twenty to twenty-four inclusive.¹⁴ In order to procure as close an approximation as possible of the exact number of eligible voters in each census tract, one fifth of the number of persons twenty to twenty-four years old inclusive were subtracted from the total number of persons over twenty years old. The result gave as close an approximation as could be made of all persons twenty-one years of age and over in Cincinnati by census tracts.

The number of foreign born who were not citizens in 1935¹⁵ were

¹⁴ Studies in Economic Security: II, op. cit., Table 3, pp. 14-49.

¹⁵ Ibid., Table 7, pp. 111-113.

then subtracted from the total twenty-one years old and over, as determined above. The result gave what is considered to be a rather close approximation of the total number of eligible voters in the city in 1935. Appendix II-B shows the result of these determinations of eligible voters by census tracts for the native white, foreign born, and negro populations. The determinations reveal that out of a total of 473,421 persons in Cincinnati in 1935, 324,774 persons were citizens of voting age. Of this total number of eligible voters, 264,183, or 81.4 per cent, were native white; 24,345, or 7.5 per cent, were foreign born; and 36,246, or 11.1 per cent, were Negro.

The interest of the foreign born in the issues.- The 1935 levy for operating expenses and the 1935 bond issue for buildings were employed to determine whether the difference between the per cent of voters actually voting in the tracts whose populations consist of relatively large numbers of foreign born persons, and those in which the number of foreign born is relatively small, is significant. Since the determination of the number of eligible voters was an approximation based upon the data from the Regional Census of 1935, only those issues on school finance for that year were used in this part of the study. The use of what is considered as a rather accurate estimation of the number of eligible voters in 1935 would prove somewhat questionable if issues of other years, based on the 1935 estimations, were considered. In view of the consistency of the pattern of favorable vote on all of the issues covered by the study, as disclosed in Chapter III, it is the

opinion of the writer that consideration of the two issues of 1935 will be sufficient for the purpose just described.

Census tracts whose populations consist of 6 per cent and above of foreign born were listed against those tracts whose foreign born are below 6 per cent. The mean per cent of citizens over twenty-one years of age was then determined for both populations, and the difference between these means was evaluated to determine the probability of a true difference between them. Table VII presents the data for the determinations of t for this part of the study.

TABLE VII

THE MEAN PER CENT OF ELIGIBLE VOTERS WHO VOTED ON THE LEVY
AND BOND ISSUES OF 1935 IN TWO POPULATIONS OF
FOREIGN BORN, 1935

Issue	Mean Per Cent of Voters Who Voted in		Difference $M_1 - M_2$	Est'd $\sigma M_1 - M_2$	Value of t	Chances in 100 that True Difference Exists
	65 Tracts with F'gn Born Above 6 Per Cent	42 Tracts with F'gn Born Below 6 Per Cent				
1935 Levy	41.05	40.15	0.93	2.069	0.450	32
1935 Bond	41.14	38.50	2.64	1.918	1.377	35

The mean per cent of eligible voters voting on the 1935 levy is 41.05 in those tracts with foreign born populations of 6 per cent and above, as compared with 40.15 in those tracts whose foreign born populations are below 6 per cent. The difference between the two means is 0.93. The estimated standard error of the difference is 2.069, and the resulting value of t is 0.450, which represents a probability of a true difference of approximately thirty-two out of one hundred

chances. The value of t for the 1935 bond issue, as shown in Table VII, is 1.377, which represents a probability of eighty-five chances in one hundred that a true difference exists.

The probability that a real difference exists is far too low to be statistically significant. The analysis reveals that the relative number of eligible voters who actually vote on issues of public school finance in two populations comprising relatively different numbers of foreign born is practically the same. Although it has been shown that populations in Cincinnati representing large numbers of foreign born tend to subscribe more to issues of public school finance than populations of the city composed of relatively few foreign born, the concern about the issues on the part of the foreign born populations is probably no different from that of populations of the city at large.

The interest of the Negroes in the issues.- Table VIII presents the data for the measures of the probability of a true difference between the means of the per cent of eligible voters who actually voted in areas whose populations consist of relatively large numbers of Negroes, and in areas in which the relative number of Negroes is small. In the twenty-four tracts whose Negro populations are 5 per cent and above, the mean per cent of voters in the total voting population is 31.04 for the 1935 levy, and 29.56 for the 1935 bond issue. In the eighty-three tracts whose Negro populations comprise less than 5 per cent of the total population, the mean per cent of voters who voted is 43.31 for the 1935 levy, and 42.61 for the bond issue. The difference between the means for the 1935 levy is 12.27 per cent, and for the 1935 bond issue the difference is 13.05 per cent. t for both measures is 6.051 and 6.375 respectively.

As revealed in Table VIII, the chances in one hundred that a true difference exists between the means of the per cent of eligible voters who voted in two populations comprised of relatively different numbers of Negroes are even greater than ninety-nine. It is certain, therefore, that the difference is statistically significant. The table, moreover, shows that the vote of populations containing large numbers of Negroes is relatively smaller than that of populations composed of nearly all white persons. Although the typical voter in areas of Cincinnati heavily populated with Negroes votes more highly in favor

TABLE VIII

THE MEAN PER CENT OF ELIGIBLE VOTERS WHO VOTED ON THE LEVY
AND BOND ISSUES OF 1935 IN TWO AREAS WITH RELATIVELY
DIFFERENT NEGRO POPULATIONS, 1935

Issue	Mean Per Cent of Voters Who Voted in		Differ- ence $M_2 - M_1$	Est'd $\sigma M_2 - M_1$	Value of t	Chances in 100 that True Difference Exists
	24 Tracts with Negro Pop. Above 5 Per Cent	83 Tracts with Negro Pop. Below 5 Per Cent				
1935 Levy	31.04	43.31	12.27	2.041	6.015	99+
1935 Bond	29.56	42.61	13.05	2.047	6.375	99+

of issues of public school finance, he does not sense fully his obligation in the use of the vote on such issues. From the evidence of the evaluations, there is good reason to believe that Negroes of Cincinnati are less interested or concerned about voting on matters of school support than are white populations of the city.

Native White Populations

Areas of native white populations, 1930.- The 1935 Regional Census listed all native white persons in Cincinnati in one group, and made no distinction between the native white born of native parents and the

native white born of foreign or mixed parentage. The 1930 Federal Census, however, listed these two populations separately.¹⁶ Appendix II-C shows that of a total of 308,328 persons over twenty-one years of age in Cincinnati in 1930, 157,747, or 51 per cent, were native white both of whose parents were native white. The number of native white persons, one or both of whose parents were foreign born, was 84,674, or 27.5 per cent of the total voting population.

Map XIV presents the distribution of persons in Cincinnati who were native white and of native parentage. The three areas claiming the greater percentages of such populations are located in the eastern part of Cincinnati, in those tracts that border the Ohio River both to the east and to the west, and in the census tracts to the extreme north. On the other hand, the areas of heavy populations of native white persons, one or both of whose parents were foreign born, are found in the western and central parts of the city, as shown by Map XV.

The vote of native white-native parentage populations.- The difference between the means of the per cent of native white persons in 1930, both of whose parents were native white, in areas whose populations voted relatively high and relatively low on the issues of the study was evaluated to determine the probability that true differences exist between them. The mean per cent of persons of native white-native parentage was determined in those census tracts whose voting populations cast votes more highly in favor of each issue, and also for those tracts whose populations vote less favorably. The

¹⁶
United States Federal Census of Cincinnati, Ohio, 1930, pp. 1-107. (Photostatic Copies).

MAP XIV - NATIVE WHITE PERSONS OF NATIVE PARENTAGE, 1930

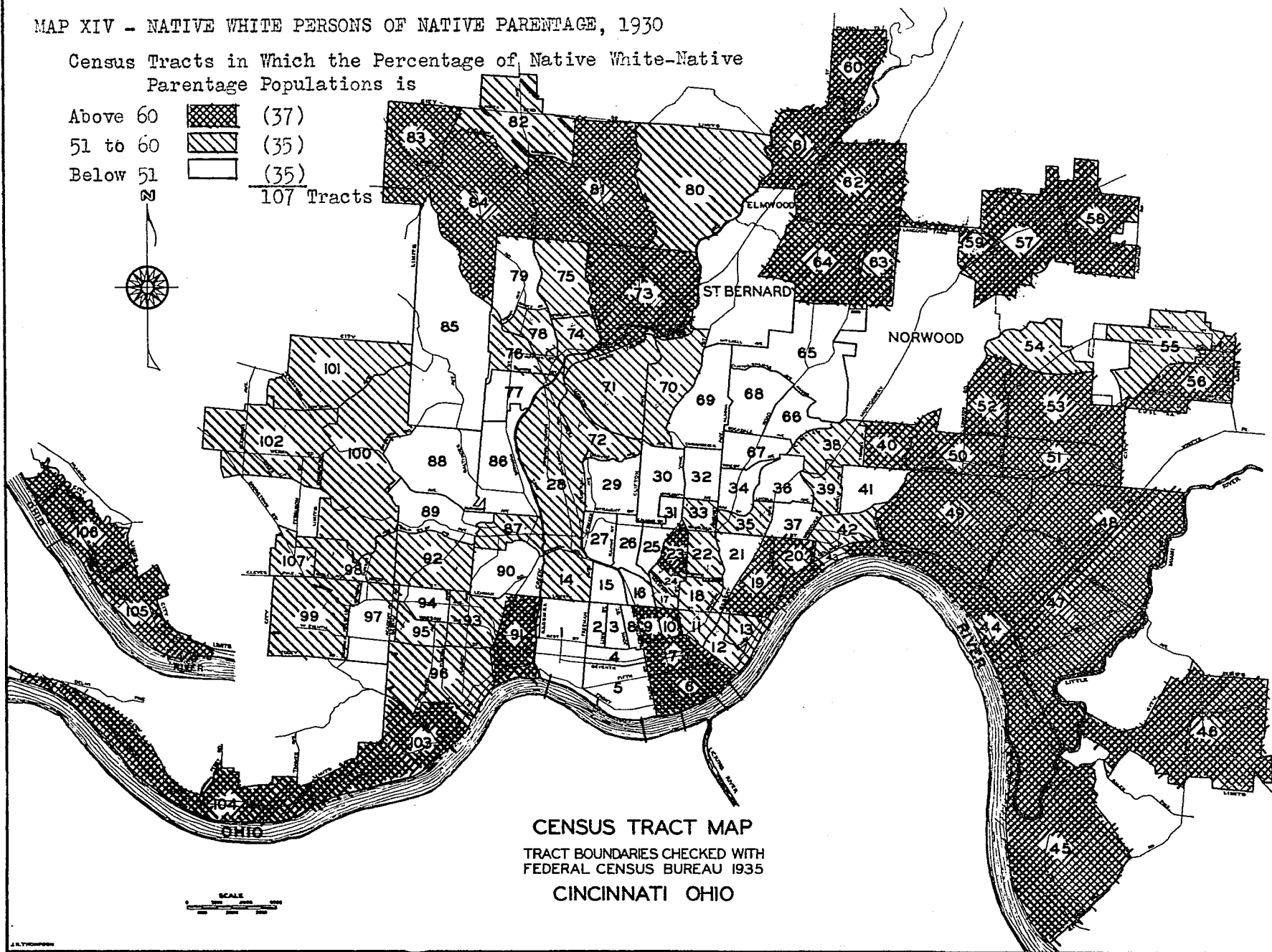
Census Tracts in Which the Percentage of Native White-Native Parentage Populations is

Above 60 (37)

51 to 60 (35)

Below 51 (35)

107 Tracts



CENSUS TRACT MAP

TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935

CINCINNATI OHIO

MAP XV - NATIVE WHITE PERSONS OF FOREIGN OR MIXED PARENTAGE, 1930

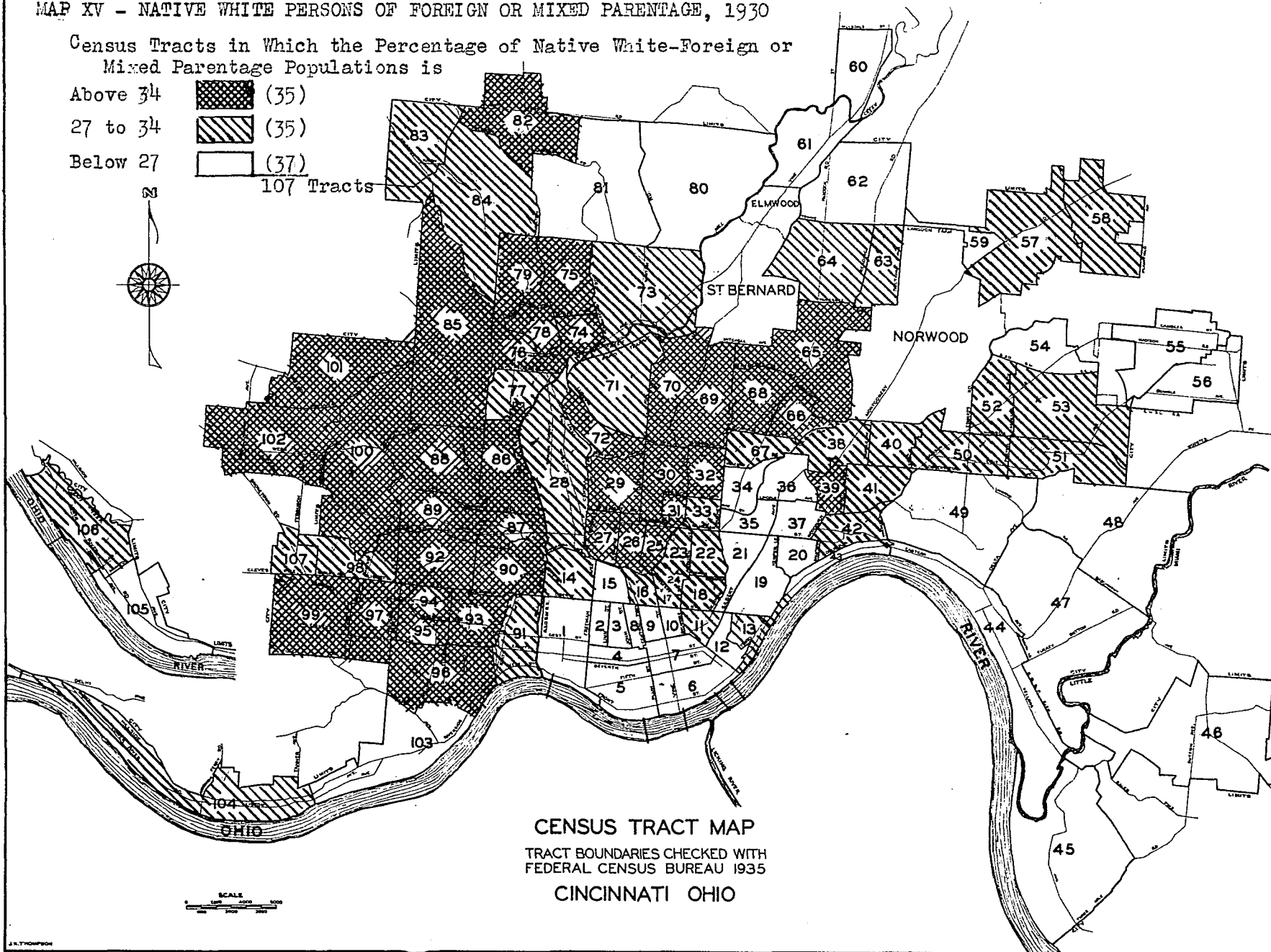
Census Tracts in Which the Percentage of Native White-Foreign or Mixed Parentage Populations is

Above 34 (35)

27 to 34 (35)

Below 27 (37)

107 Tracts



probability of a real difference between each of these means was then computed. Table IX presents the data for these evaluations.

The chances in one hundred that a true difference exists for the levy and bond issues that were presented to the public during the earlier part of the decade range from ninety-three to ninety-eight. Those issues presented between 1937 and 1939 have measures of t with probabilities of a true difference that are even lower, except for the bond issue of November, 1938. This issue has a probability of a true difference of approximately ninety-nine chances in one hundred. The more valid measures for the significance of a difference between the means of the two populations are probably for the issues presented during the earlier part of the decade, since the data for their determinations came from the 1930 Federal Census.

Although some of the chances in one hundred that a true difference exists between the two populations are somewhat lower than can be accepted, to reject the hypothesis that a true difference exists would be to ignore the fact that the valuations for the earlier years are almost all statistically significant within liberal standards. Some of the differences taken over the whole period of the study, however, could have happened by chance. The differences between the means, as presented in Table IX, reveal that populations consisting of relatively large numbers of native white persons born of native parentage tend to vote less in favor of the issues of public school finance than other populations classified in terms of nativity and race. But to accept these differences as being statistically significant would be to use rather questionable standards. Only part of the native

TABLE IX

THE PER CENT OF PERSONS OF NATIVE WHITE-NATIVE PARENTAGE, 1930,
IN TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH
AND RELATIVELY LOW IN FAVOR OF THE ISSUES

Issue	Mean Per Cent of Persons of Native White-Native Parentage in Tracts with Populations Voting		Differ- ence $M_2 - M_1$	Est'd $\sigma_{M_2 - M_1}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	50.60	56.40	5.80	2.425	2.392	98-
1934 Levy	51.40	56.10	4.70	2.559	1.836	93
1935 Levy	51.11	56.16	5.05	2.559	1.946	95
1935 Bond	50.81	56.55	5.74	2.550	2.251	97
1936 Levy	51.59	56.46	4.87	2.570	1.895	94
1936 Levy [*]	51.76	56.09	4.33	2.505	1.729	91
1937 Levy	52.25	55.41	3.16	2.510	1.259	81
1937 Bond	51.40	56.10	4.60	2.541	1.811	93
1938 Bond August	51.72	55.77	4.05	2.526	1.603	89
1938 Bond November	48.81	57.53	8.72	2.795	3.119	99
1939 Levy	52.00	55.77	3.77	2.595	1.453	35

^{*} A levy concerned with the financing of a building program. All other levies in the table are for operating expenses. All bond issues are concerned with building programs.

white populations, however, have been used for these evaluations of differences. The population consisting mostly of native white persons, one or both of whose parents are foreign born, may indicate differences more or less so significant that the question of whether native white populations of Cincinnati, in general, tend to vote differently on the issues from other populations may be answered more definitely.

The vote of the native white-foreign or mixed parentage populations.- Differences were evaluated in the same way as that just mentioned to determine whether voters among the populations composed of relatively large numbers of native white persons, one or both of whose parents are foreign born, vote differently from the entire city population. Table X presents the data for the measures of the probability of a true difference for each of the eleven issues employed in the study. The data reveal that such populations tend to vote less in favor of the issues, as shown by the differences between M_1 and M_2 . Moreover, these differences are highly significant, with all probabilities well above ninety-nine chances in one hundred.

If all native white populations of Cincinnati, regardless of the nativity of their parents, are combined into one population, it is quite evident that those populations composed of relatively large numbers of native white persons tend to vote less favorably for the issues than either population of the city representing large numbers of Negroes or foreign born persons. The differences between the mean per cent of native white persons with foreign or mixed parentage in two populations, classified in terms of the relative favorable vote on the issues, are statistically significant, with valuations so high as to make up for any valuations of differences between the mean per cent of

TABLE X

THE PER CENT OF PERSONS OF NATIVE WHITE-FOREIGN OR MIXED
PARENTAGE, 1930, IN TWO AREAS WHOSE POPULATIONS VOTE
RELATIVELY HIGH AND RELATIVELY LOW FOR THE ISSUES

Issue	Mean Per Cent of Persons of Native White-Foreign or Mixed Parentage in Tracts with Pop. Voting		Differ- ence $M_2 - M_1$	Est'd $\sigma M_2 - M_1$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	23.51	32.00	8.49	1.600	5.310	99+
1934 Levy	25.17	31.40	6.23	1.677	3.718	99+
1935 Levy	24.59	31.74	7.15	1.715	4.169	99+
1935 Bond	24.60	31.80	7.20	1.660	4.340	99+
1936 Levy	23.78	30.20	6.42	1.630	3.939	99+
1936 Levy [*]	24.60	32.70	8.10	1.598	5.075	99+
1937 Levy	23.95	32.50	8.55	1.575	5.429	99+
1937 Bond	23.85	32.60	8.75	1.572	5.566	99+
1938 Bond August	23.98	32.40	8.42	1.616	5.210	99+
1938 Bond November	24.90	31.11	6.21	1.715	3.620	99+
1939 Levy	24.75	32.22	7.47	1.616	4.622	99+

^{*} A levy concerned with the financing of a building program. All other levies in the table are for operating expenses. All bond issues are concerned with building programs.

native white persons of native parentage that are found to be slightly questionable as to their significance.

Because populations of Cincinnati composed of relatively large numbers of native white persons vote more against the issues than the voting populations of the entire city, there is reason to believe that native white populations, themselves, tend to oppose the issues to a greater extent than either the foreign born or the Negro populations of the city. Likewise, possibility that the Negroes and the foreign born of Cincinnati tend to support the issues of public school finance more so than the native white populations of the city appears rather likely. Because of the nature of the data from which these analyses were made, however, such inferences cannot be proved.

It is possible that the difference between the age levels of the foreign born and the native white population of foreign or mixed parentage may account for some of these differences toward school support in the matter of finance. It naturally follows that if the greater portion of the foreign born population in Cincinnati consists of older persons beyond middle age, as mentioned in the first part of the present chapter, the native white population of foreign or mixed parentage will be at least a generation younger. What factors influence this population consisting, for the most part, of a younger generation of native white persons to vote on public school support opposite the trend of the vote of populations comprised largely of their foreign born parents is interesting and merits consideration.

Why the populations of Cincinnati consisting of relatively large numbers of Negroes, likewise, tend to favor the issues of public school finance, while the populations of the city representing native

white persons, one or both of whose parents are foreign born, have tendencies of opposing them has not yet been revealed. At this point in the study, it is impossible to ascertain possible motives that prompt any of the populations studied in this chapter to react either favorably or unfavorably on the issues. However, investigations of other populations in Cincinnati that are intended as a part of the present study, with reference to the direction these populations take on matters of public school finance, may throw light on those already considered.

Summary

By far the greater number of persons living in Cincinnati during the decade of 1930 to 1940 were native white. The population comprising relatively large numbers of native white citizens over twenty-one years of age, both of whose parents are native white, tends to vote less favorably for the issues of public school finance than the entire city population. However, some of the valuations of the differences between the vote of this population and the vote of populations of Cincinnati at large are somewhat below acceptable standards of statistical significance.

The population consisting of relatively large numbers of native white persons, one or both of whose parents are foreign born, however, is inclined to oppose the issues of public school finance more than any of the populations of the city, classified with reference to nativity and race. All obtained differences between the means of the relative number of native white persons of foreign or mixed parentage in areas where the favorable vote is relatively high and in areas

where it is relatively low are real differences, and could not have happened by chance alone. Voting populations in Cincinnati consisting of relatively large numbers of native white persons, considered as a whole and without reference to parentage, are shown to vote less in favor of the issues than either of the populations representing large numbers of foreign born or Negro persons.

The foreign born population of Cincinnati consists principally of older persons well past middle age. The favorable vote of the population representing relatively large numbers of foreign born in Cincinnati tends to surpass that of the population of the city constituted chiefly of native white persons. The foreign born in Cincinnati live in areas whose populations vote highly in favor of levy and bond issues for public education. Conversely, relatively few foreign born live in those areas whose populations tend to oppose the issues. Differences between the mean per cent of foreign born persons in these two areas are found to be statistically significant, and could not have happened by chance.

Of all the populations of Cincinnati, classified on the basis of nativity and race, the population consisting principally of large numbers of Negroes tends to react most favorably toward issues concerned with public school finance. Areas in which are found relatively large numbers of Negroes are those tracts wherein the favorable vote is comparatively heavy. On the other hand, the vote for the issues of public school finance is relatively light in areas whose populations consist of relatively few Negroes.

Although the population in Cincinnati representing large numbers of Negroes tends to react most favorably toward issues of public school

finance, the effect of its favorable vote is probably offset in that the voters representing this population fail to sense fully their obligations to go to the polls to vote. The evidence lies in the fact that the larger the relative number of Negroes in the population of a given area of Cincinnati, the lower the per cent of eligible voters who actually vote on the issues. The apparent lack of interest on the part of the typical individual in areas whose population is made up largely of Negroes indicates that he possesses inadequate knowledge of the need of exercising his franchise on matters of civic importance.

The fact that those populations of Cincinnati representing relatively large numbers of native white persons tend to oppose the issues to a greater degree than other populations of the city, classified in terms of nativity and race, leads to the belief that native white populations of Cincinnati, in general, do not lend support to the issues equal to that of populations of the city at large. It is also highly possible that the foreign born population of Cincinnati is more inclined to support the issues than the native white population. Moreover, the results of the study suggest a marked tendency for Negroes of Cincinnati to favor the issues to a greater degree than all other populations classified in terms of nativity and race. However, inferences such as these may only be suggested as a result of the evidence that populations composed of relatively different numbers of persons, with reference to their nativity and race, show decided trends in the direction of their vote on the issues. They should not be considered as having been proved, since elections on issues of public school finance employ a secret ballot, thus making it impossible to ascertain exactly how individuals vote in any given population.

CHAPTER V

THE ECONOMIC STATUS OF POPULATIONS IN CINCINNATI AND THE VOTE ON THE ISSUES

Ability of Populations to Support School Finance Issues

Introduction.- Attitudes toward financial support of the public schools may depend largely upon the economic well-being of the people concerned. Because of the fact that schools are supported by revenue derived from taxes imposed upon the wealth of the various populations, differences in the voting behavior of the populations are inevitable. Some populations may be noticeably antagonistic toward an issue on public school finance chiefly because of its economic demands; other populations may be friendly toward the same issue because the economic demands may not be so keenly felt. This chapter is concerned with various populations whose economic status may differ, and the way these respective populations vote on the issues represented in the study. The main purpose will be to determine whether the various populations differ significantly in their vote on issues of public school finance, so as to display marked tendencies to subscribe to the issues or to oppose them.

Home Ownership and the Vote

Areas of relatively high and low home ownership.- The Regional Census of 1935 showed that, in some census tracts in Cincinnati, almost all families were tenant families who claimed no ownership of homes. In the first twenty tracts, all of which

are located in the Basin area, over 92 per cent of the families were renting homes in 1935, while outside the Basin approximately 56 per cent were tenant families.¹ Thirty-three per cent of all families living in Cincinnati in 1935 claimed home ownership, as presented in Appendix III-A, and 67 per cent of all families were renters.

The census tracts in Cincinnati whose families claimed the highest proportion of homes owned, as presented by Map XVI, are those that border the outer portions of the city. The map reveals that over 55 per cent of all families living in census tracts to the west and north of the city own their homes. Other tracts with equally heavy home ownership populations are located west and north of Norwood and in eastern Cincinnati. The tracts along the Ohio River to the extreme west, and those east of the Little Miami River, also have families with home ownership status in the upper one third of all tracts of the city.

Areas in which families own relatively few homes are found in the Basin area, in the tracts that extend northward along Mill Creek, and also in the direction of Norwood. It is interesting to note that census tracts in which family ownership of homes is lowest are found in the areas of high percentages of foreign born and Negro populations, as revealed by Maps XII and XIII respectively. Conversely, areas with low percentages of foreign born and Negro populations have families whose ownership of homes is relatively

¹ Studies in Economic Security: II, op. cit., Table 18, pp. 213-215.

MAP XVI - FAMILIES OWNING HOMES IN CINCINNATI, 1935

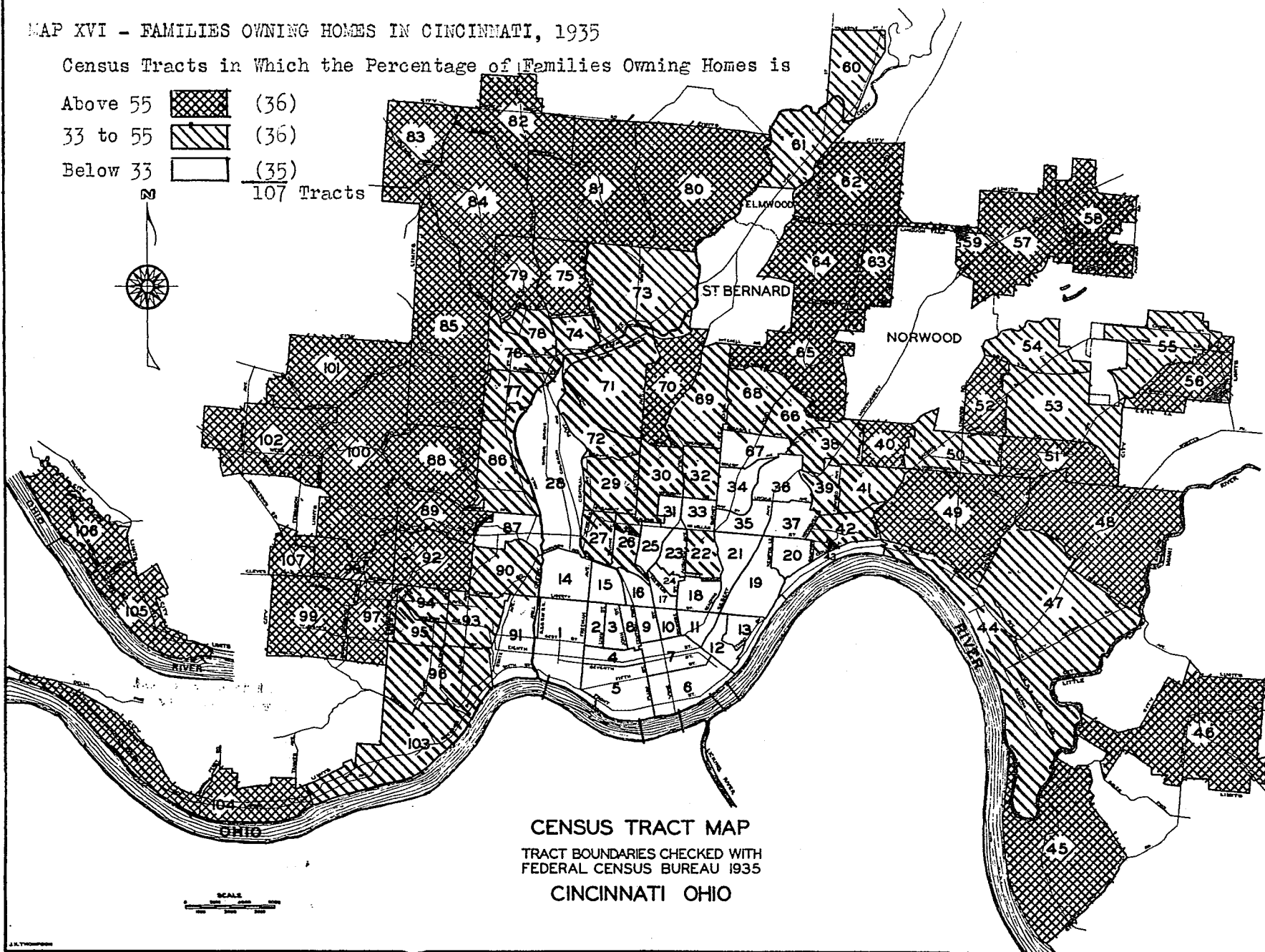
Census Tracts in Which the Percentage of Families Owning Homes is

Above 55 (36)

33 to 55 (36)

Below 33 (35)

107 Tracts



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

high.

The vote of families owning homes.- An attempt was made to determine whether true differences exist between the means of the relative number of families owning homes in two populations, one in which the favorable vote on the issues of school finance is relatively large and the other in which it is relatively small. Census tracts were divided into two groups on the basis of the per cent of favorable vote above and below the mean favorable vote. The mean per cent of home-owning families living in the census tracts in each of the two groups was computed. The difference between the two means was evaluated in terms of the probability of a true difference for each of the eleven issues of the study. Table XI presents the data of these evaluations.

From these evaluations it is obvious that the difference between the means of the per cent of families owning homes in the two populations is statistically significant. These differences, as presented in Table XI, are true differences, and could not have happened by chance. Voters in populations of Cincinnati whose family ownership of homes is relatively great tend to oppose the issues more than voters among the populations representing families that own relatively few homes. By inference, home-owning families of the city, taken as a whole, seem less inclined to support the issues than families that rent their homes.

Correlation coefficients between the per cent of families owning homes in 1935 and the per cent of favorable vote on the levy for operating expenses of 1935 and the bond issue for buildings of the same year were computed. The r 's from the two correlations are $-.63$ and $-.59$ respectively, both of which are statistically significant. The greater the extent of home ownership within a

TABLE XI

THE PER CENT OF FAMILIES OWNING HOMES, 1935, IN TWO AREAS
WHOSE POPULATIONS VOTE ON THE ISSUES ABOVE AND BELOW
THE MEAN FAVORABLE VOTE

Issue	Mean Per Cent of Families Owning Homes in Tracts Whose Populations Vote		Difference $M_2 - M_1$	Est'd $\sigma_{M_2 - M_1}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	26.91	50.05	23.14	3.145	7.354	99 +
1934 Levy	32.77	47.74	14.97	3.677	4.061	99 +
1935 Levy	29.35	49.18	19.83	3.669	5.405	99 +
1935 Bond	29.57	49.50	19.93	3.521	5.660	99 +
1936 Levy	24.70	51.95	27.25	3.090	8.819	99 +
1936 Levy ^o	28.31	52.46	23.65	3.300	7.167	99 +
1937 Levy	31.70	48.78	17.08	3.558	4.800	99 +
1937 Bond	29.27	50.09	20.82	3.600	5.783	99 +
1938 Bond August	28.32	50.50	21.73	3.540	6.132	99 +
1938 Bond November	25.43	51.90	26.42	3.039	8.350	99 +
1939 Levy	31.33	49.29	17.96	3.620	4.934	99 +

^oThe second levy of 1936, mentioned here, is for the financing of a school building program. All other levies in the table are for operating expenses. All bond issues are for building purposes.

population in Cincinnati, the less favorably the population tends to vote on issues of public school finance. That is to say, the greater the relative number of tenant families in populations in the city, the greater the tendency on the part of the voters in these populations to favor the issues.

The interest of home owners in the issues.- It was also decided to determine whether eligible voters in populations whose family ownership of homes is relatively high use the privilege of the franchise on the issues to a greater or lesser degree than the eligible voters in populations whose family ownership of homes is relatively low. Any significant difference in the relative extent of the vote on the part of these two populations would denote the relative interest of voters in Cincinnati who own homes and voters who do not.

The approximate number of voters in 1935 was carefully estimated, as described in Chapter IV. The mean per cent of eligible voters who actually voted on the 1935 levy for operating expenses and the 1935 bond issue for buildings was determined for the census tracts in which the per cent of families owning homes was higher than the average. In the census tracts in which the per cent of families who owned homes was lower than the average, the mean per cent of eligible voters on the issues was also determined. The difference between the means of these two populations, presented in Table XII, was then evaluated in terms of the probability of a true difference.

Both values of the probability of a true difference, as

presented in Table XII, are highly significant and could not have happened by mere chance. The typical voter of Cincinnati living in populations comprising relatively large numbers of families owning homes tends to vote less in favor of the issues of public school finance. In addition, he appears to sense more keenly his privilege and civic obligation of going to the polls when the issues are presented than does the voter located in populations representing families that own relatively few homes. Conversely, the typical citizen who resides among populations

TABLE XII

THE RELATIVE NUMBER OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935 IN TWO AREAS OF HIGH AND LOW FAMILY OWNERSHIP OF HOMES, 1935

Issue	Mean Per Cent of Voters Who Voted in		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	69 Tracts with Home Ownership Above 33%	38 Tracts with Home Ownership Below 33%				
1935 Levy	45.63	31.76	13.87	1.648	8.416	99+
1935 Bond	44.75	31.76	12.99	1.604	8.098	99+

whose families own relatively few homes tends to favor the issues but, at the same time, he shows a tendency to neglect to vote on the issues, probably because he has fewer economic exactions at stake.

Radio Ownership and the Vote

Home ownership is a possible criterion that may be used to determine the relative ability of populations to support issues of school finance. Home owners, in general, are considered as having more wealth than those who own no home, although in many individual cases this may not be true. Individuals who claim no ownership of homes may be in a financial position

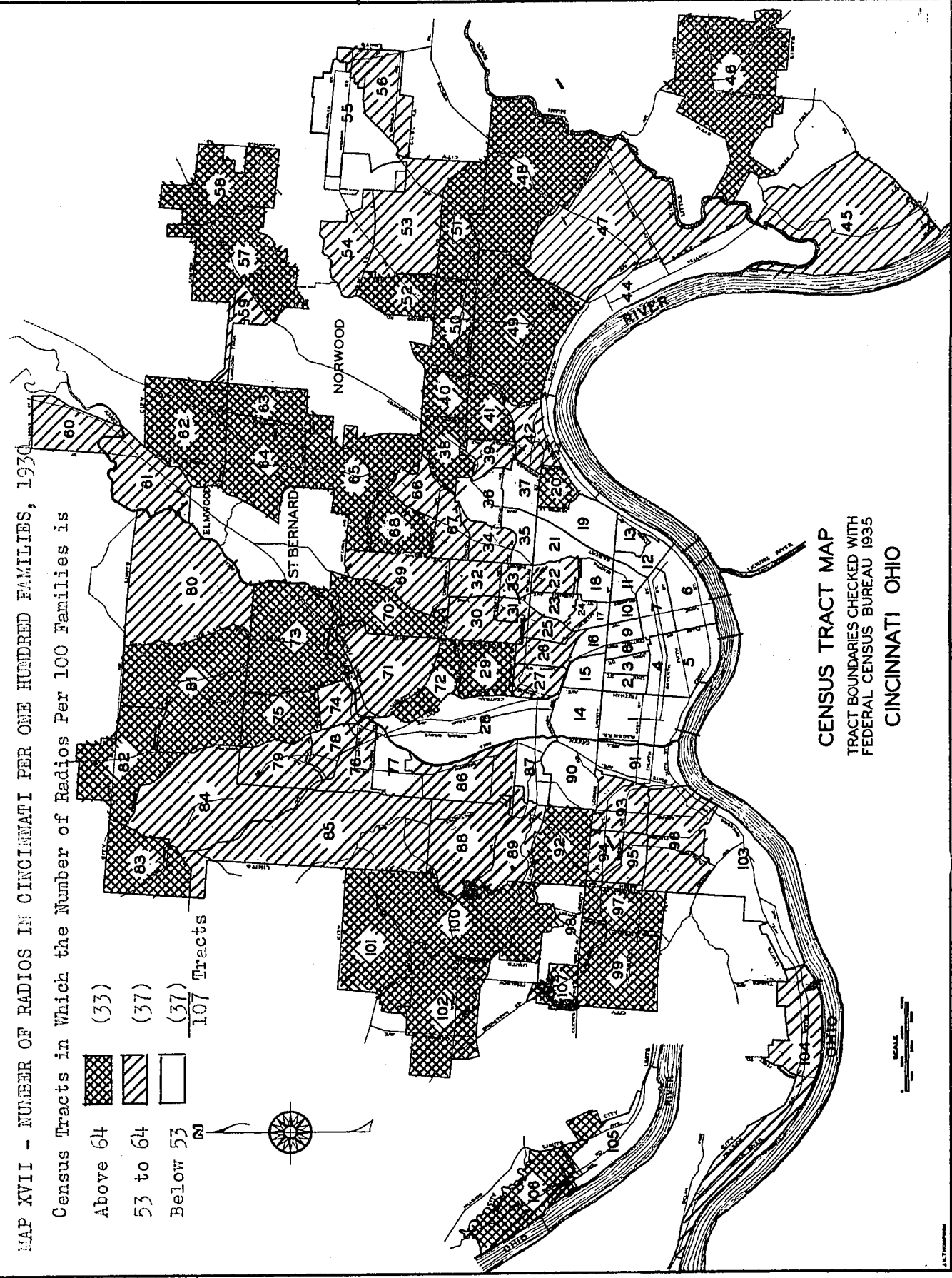
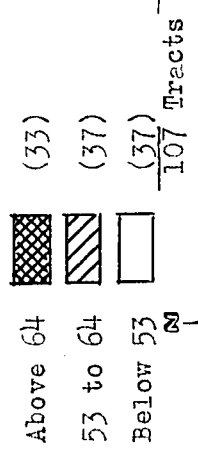
to support public enterprises even as well as some who own homes, or better. Other tangible property than that of the home may be a better criterion with which to determine the wealth of populations.

The number of radios in 1930.- Although the Regional Census of 1935 enumerated several data besides home ownership that may be used as a group to indicate the relative abilities of populations to support public education, no other single criterion of the 1935 census is considered by the writer to indicate this capacity as well as that of home ownership. The Federal Census of 1930, however, enumerated the number of radios per one hundred families, and this measure has been used as a means of determining the relative economic status of populations in various enterprises. Since the radio was less common in 1930 than it is today, it was probably a better criterion at that time for determining relative wealth than it is at present. The use of this criterion to determine the relative ability of populations to support issues of public school finance during the decade of 1930 to 1939, however, may prove valuable in the present study.

Distribution of radios in Cincinnati in 1930.- Appendix III-B presents the data on the number of radios per one hundred families in 1930, and Map XVII represents their distribution for the same year. Map XVII reveals that families with the largest number of radios are located in the extreme west of Cincinnati, in the tracts to the north and west of St. Bernard, between St. Bernard and Norwood, and in the tracts south and east of Norwood. Areas in which there are fewest radios per one hundred families are those located in the Basin area, along the Ohio River eastward and westward, and in those tracts

MAP XVII - NUMBER OF RADIOS IN CINCINNATI PER ONE HUNDRED FAMILIES, 1930

Census Tracts in Which the Number of Radios Per 100 Families is



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO



that extend northward along Mill Creek and immediately northeast of the Basin. Few families in areas of heavy negro populations, as shown by Map XIII, have relatively many radios. A comparison of Map XVI and Map XVII shows a direct relationship between the number of families owning radios in 1930 and the number of families owning homes.

The vote of families owning radios.- If the number of radios in a population is, to some degree, indicative of the ability of the population to support issues of school finance, evaluations of differences may be made to determine whether those who are more able to support such issues vote differently from those who are not equally as wealthy. In the application of the evaluations of differences to this part of the study, the census tracts whose populations voted above the mean per cent of favorable vote were listed against those tracts whose populations voted below the mean per cent. The mean number of radios per one hundred families for each of these groups was then determined. The difference in the means of these two populations, as revealed in Table XIII, shows that the population whose number of radios per one hundred families is relatively high vote less favorably on all eleven issues. The evaluations applied to these differences are statistically significant in all cases, as shown in Table XIII. It is possible that the more valid measures of the probability of a true difference are those of the issues presented to the public in the early years of the decade, since the number of radios is based on enumerations made at the beginning of the decade. It can be said with a high degree of confidence that such differences in the number of radios in the two populations, one of whose vote on the

TABLE XIII

THE NUMBER OF RADIOS PER ONE HUNDRED FAMILIES, 1930, IN TWO
AREAS WHOSE POPULATIONS VOTE MORE FAVORABLY AND LESS
FAVORABLY ON THE ISSUES

Issue	Mean Number of Radios Per 100 Families in Tracts Whose Popu- lations Vote		Differ- ence $M_2 - M_1$	Est'd $\sigma M_2 - M_1$	Value of $\frac{t}{s}$	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	44.33	60.75	16.42	3.225	5.091	99 +
1934 Levy	49.54	57.90	8.36	3.420	2.444	93 +
1935 Levy	47.74	58.98	11.24	3.420	3.287	99 +
1935 Bond	46.87	59.85	12.98	3.261	3.982	99 +
1936 Levy	43.32	61.71	18.39	3.031	6.068	99 +
1936 Levy*	46.28	61.87	15.59	3.145	4.957	99 +
1937 Levy	43.50	58.75	15.25	3.335	3.073	99 +
1937 Bond	45.56	61.14	15.58	3.148	4.948	99 +
1938 Bond August	45.85	60.65	14.80	3.180	4.654	99 +
1938 Bond November	42.83	61.46	18.63	3.085	6.039	99 +
1939 Levy	49.06	58.56	9.50	3.317	2.954	99 +

*The second levy of 1936 is for the financing of a school building program. All other levies in the table are for operating expenses. All bond issues are for building programs.

issues was relatively high and the other relatively low, could not have happened by chance. In other words, a real difference exists in the way people vote on the issues of public school finance in terms of their economic status. All measures of t , with respect to both the number of radios and the extent of home ownership in Cincinnati, show clearly that those who have the means with which to support issues of school finance tend to oppose such issues more than do those whose economic possessions are limited.

Correlation coefficients between the number of radios per one hundred families and the per cent of favorable vote on the two 1935 issues were also computed. r for the data on the 1935 levy is $-.67$, and for the 1935 bond is $-.57$, both of which are statistically significant. The greater the number of radios per one hundred families in Cincinnati, the less the tendency for populations to favor issues of public school finance.

Mention has already been made of the marked relationship between the distribution of the foreign born persons in Cincinnati and the distribution of the families owning their own homes. The same relationship between the distributions of home owners and the Negro populations has also been acknowledged. Where relatively large numbers of foreign born and Negro persons reside, as represented by Maps XII and XIII, the number of families who own their homes, as shown by Map XVI, is markedly low. Comparison of the distribution of foreign born and Negro persons with the distribution of the number of radios, as indicated by Map XVII, likewise, reveals that relatively few radios are found among these two populations.

On the other hand, the native white populations, as represented by Maps XIV and XV, are found generally in relatively large numbers where the per cent of families owning homes and the number of radios in the population of Cincinnati are relatively large. As revealed in Chapter IV, both the foreign born and Negro populations are in areas of Cincinnati whose populations tend to vote more favorably for the issues than the populations representing most of the native white persons. It is possible and rather probable that if the foreign born and Negro populations of Cincinnati tend to favor the issues to a greater extent than the native white populations, they may do so chiefly because of their economic position. Apparently these two populations have relatively less wealth and, therefore, may be more willing to subscribe favorably to the issues because they need not bear much of the burden of additional public school support. The more wealthy native white populations, however, recognized as such by their residence in areas where property ownership is high, represent populations that disclose a tendency to vote more in opposition for the issues, as shown in Chapter IV. Is it possible that native white populations, themselves, are less disposed to support issues calling for an increased tax rate primarily because they must shoulder the greater portion of the tax load for the support of such issues? While the above supposition has not been proved, it seems at the moment to be a plausible interpretation of the reason for the difference between the vote of populations representing those persons classified with reference to nativity and race.

Rentals of Tenant Families and the Vote

Monthly rental per dwelling unit, 1935.- Do tenants who pay

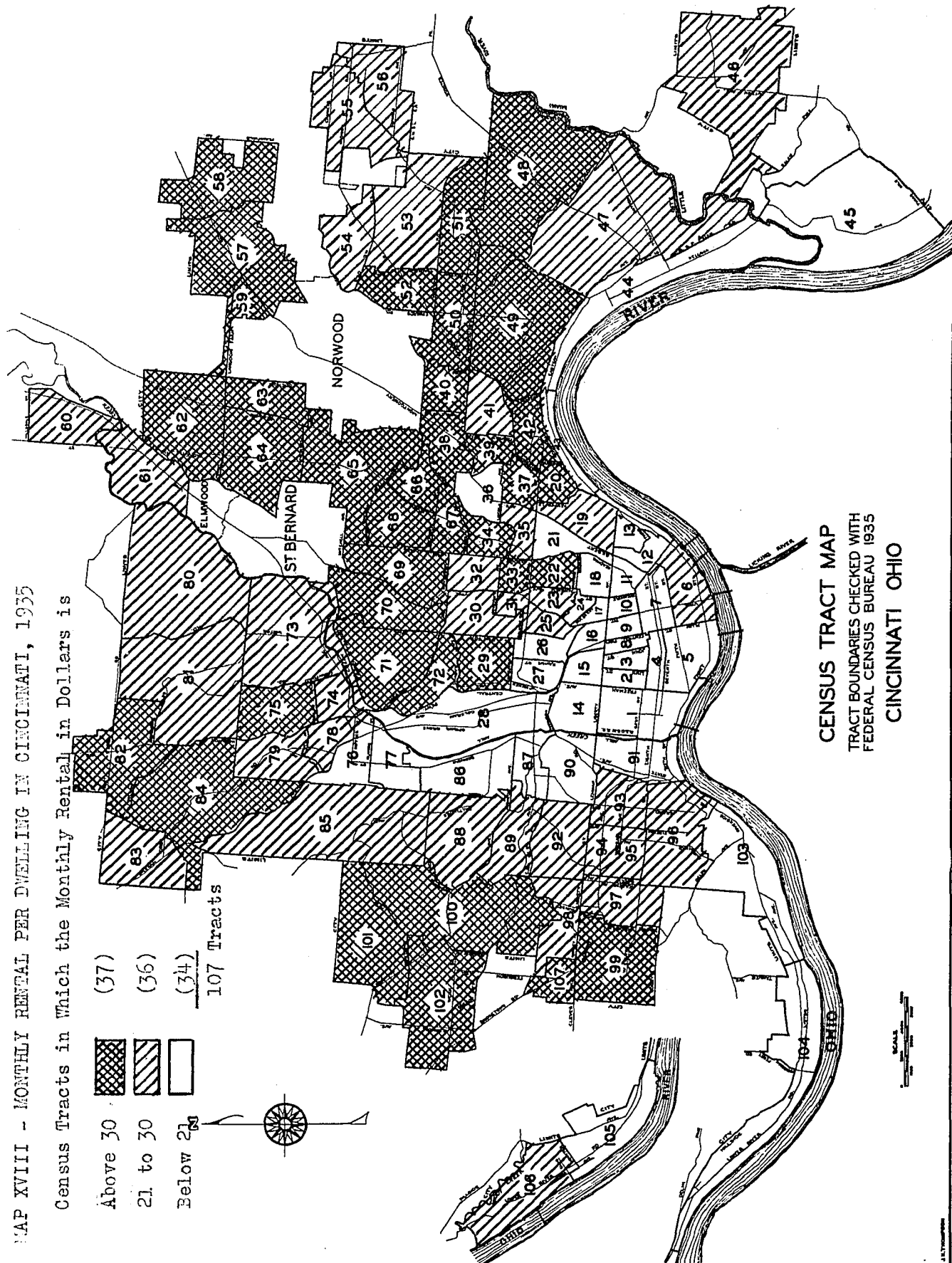
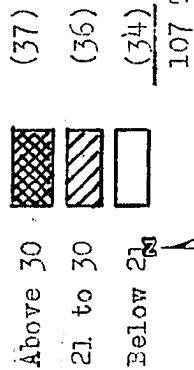
relatively high monthly rentals and relatively low rentals vote differently on the issues of the study to an extent that makes the difference statistically significant? Voters who claim ownership of their homes in Cincinnati might naturally be expected to vote differently on the issues of school finance from tenants who pay rent. If the difference between the vote of those tenants whose rental is relatively high and those whose rental is relatively low is found to be significant, this fact alone would tend to disprove what has already been established with regard to the difference between the vote of home owners and non-home owners. If, however, the difference between the vote of those who pay high rentals and those who pay low rentals is found not to be statistically significant, this fact would tend to strengthen the conclusion that there exists a predisposition on the part of home owners in Cincinnati to oppose issues of public school finance.

Areas of high and low rentals per dwelling.- The higher rentals per dwelling in 1935, as shown by Map XVIII, follow somewhat the general pattern of the per cent of families owning homes, as represented by Map XVI, although there are differences. Census tracts in the central part of the city and between the Basin area and St. Bernard and Norwood have high rental areas, while the per cent of families owning homes in the same area is low. While family ownership of homes in the tracts along the Ohio River is high, these same areas have monthly rentals of dwellings in the lower brackets. With these two general exceptions, the high rental areas per dwelling are located in areas where the per cent of families owning homes is relatively high. Census tracts in western Cincinnati and the eastern and northern sections of the city have relatively high rentals. The Basin area and the tracts extending up Mill

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MAP XVIII - MONTHLY RENTAL PER DWELLING IN CINCINNATI, 1935

Census Tracts in Which the Monthly Rental in Dollars is



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

Creek, as well as those that border the Ohio River, are regions where the rental per dwelling is lowest. Appendix III-C presents the data on the monthly rentals per dwelling. The average monthly rental per dwelling for the city was approximately \$21.57, with a range from slightly over \$10.00 in some tracts in the Basin to nearly \$70.00 in census tract 65.²

The vote of families paying high and low rentals per dwelling.-

The mean rental per dwelling was determined to the nearest one tenth of a dollar for those tracts whose populations cast favorable votes above the mean per cent of vote for each of the issues covered in the study. In the census tracts whose populations voted below the mean favorable vote the mean rental was also determined. The differences between the means, as presented in Table XIV, show that in some of the issues of the study the difference could be considered as negative and in others as positive. This means that for some issues the mean rental for those tracts whose populations voted above the mean favorable vote is lower than that for those tracts whose populations voted below the mean favorable vote, and for others the reverse is true. Such a result in the difference between the means of the two populations from issue to issue indicates that the monthly rental per dwelling paid by tenants has little to do with the outcome of the vote. Translation of the values of t into probabilities of a true difference for each of the issues, as presented by Table XIV, establishes this inference. None of the differences is statistically significant.

Correlation coefficients computed between the monthly rentals per

²Studies in Economic Security: II, op. cit., Table 18, pp. 213-215.

TABLE XIV

THE MEAN MONTHLY RENTAL PER DORMING UNIT IN 1935 IN TWO AREAS
WHOSE POPULATIONS VOTE RELATIVELY HIGH AND
RELATIVELY LOW FOR THE ISSUES

Issue	Mean Monthly Rental in Tracts with Popu- lations Voting		Differ- ence Between Means	Est'd. σ of Means	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	\$25.98	\$26.91	0.93	2.140	0.435	35
1934 Levy	23.58	24.86	3.72	2.183	1.703	91
1935 Levy	27.48	25.98	1.50	2.135	0.624	51
1935 Bond	27.15	25.57	1.58	2.083	0.759	55
1936 Levy	24.77	27.76	2.99	1.770	1.686	90
1936 Levy*	25.74	27.31	1.57	1.827	0.865	61
1937 Levy	23.27	25.14	3.13	2.111	1.478	85
1937 Levy	26.29	26.76	0.47	1.912	0.246	19
1938 Bond August	26.46	26.51	0.05	1.987	0.024	1
1938 Bond November	25.64	27.10	1.46	1.740	0.839	60
1939 Levy	27.92	25.26	2.66	2.160	1.231	78

*An issue presented to the public concerning a levy for school buildings. All other levies mentioned in the table are issues for operating expenses. All bond issues mentioned are for building programs.

dwelling and the per cent of favorable vote on the two issues of 1935 verify this conclusion. For the per cent of favorable vote on the 1935 levy and the average rental per dwelling the correlation coefficient, r , is .142, and for the 1935 bond issue for the same data it is .023, neither of which is statistically significant within conservative standards. The hypothesis that there is no real difference between the per cent of favorable vote in areas whose populations pay relatively high rentals and in areas whose populations pay rentals that are relatively low is tenable.

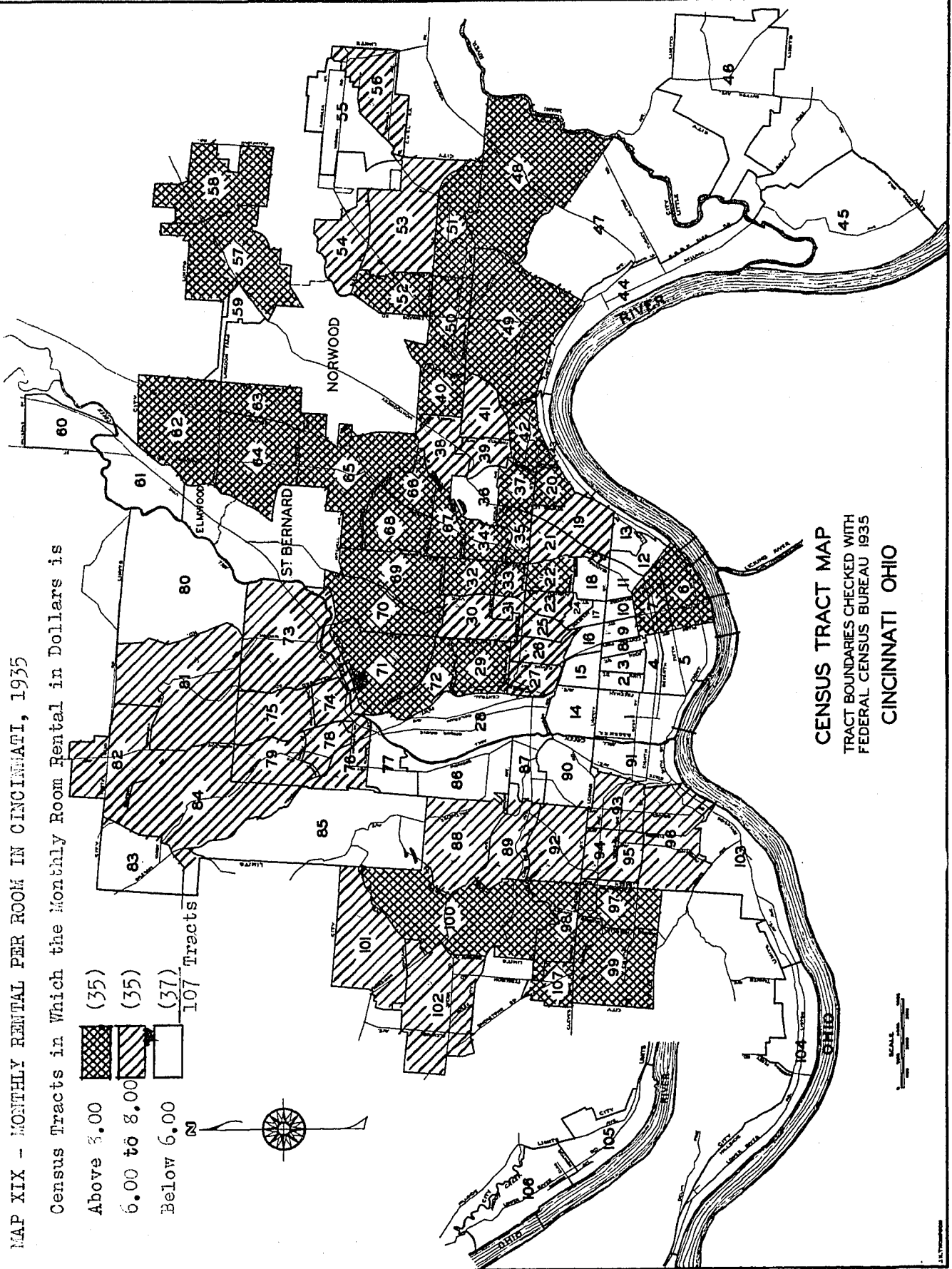
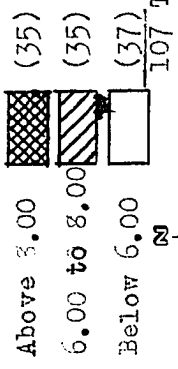
Monthly rentals per room in 1935.- Appendix III-C presents the data on the average monthly rental in dollars per room in Cincinnati in 1935.³ When the data are plotted on a map, as shown by Map XIX, the distribution of areas of high and low room rentals is rather similar to that of monthly rentals per dwelling for the same year. Those areas in which the monthly room rental is relatively high are located in the central part of the city immediately south of St. Bernard, in all areas immediately adjacent to Norwood, and in the tracts in eastern and western Cincinnati. In the Basin, tracts 6 and 7 also have relatively high room rentals. Areas of low room rental are in most tracts in the Basin, in the tracts to the east and west of the Basin and bordering the Ohio River, and in tracts extending north and west from the Basin area along Mill Creek. Tracts north of St. Bernard are also low room rental areas.

The vote of families paying high and low room rentals.- In testing

³
Ibid.

MAP XIX - MONTHLY RENTAL PER ROOM IN CINCINNATI, 1935

Census Tracts in Which the Monthly Room Rental in Dollars is



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

for the probability of a true difference between the monthly rental per room and the per cent of favorable vote, as shown in Table XV, the average monthly rental was computed for each census tract in which the favorable vote on the issues was higher than the mean favorable vote, and also for those tracts in which the favorable vote was lower. The difference $M_1 - M_2$ between the mean monthly rentals for these two populations varies greatly among the issues, as shown in Table XV, while the estimated standard error remains more nearly constant. The value for t , therefore, varies greatly among the issues.

These differences can hardly be considered as being statistically significant. As revealed in Table XV, populations in areas where the average monthly rental is relatively high seemingly vote more in favor of the issues of public school finance than populations in areas where the room rental is relatively low. But the probability of a real difference, according to the data, is sufficiently low to have easily happened by chance. There is hardly satisfactory reason to believe that tenants in Cincinnati who pay high monthly rentals per room vote differently on matters of public school finance from tenants whose monthly room rental is relatively low.

The interest of tenant families in the issues.- Is the relative number of eligible voters who actually vote on the issues of school finance significantly different between populations in Cincinnati that pay relatively high rentals and those that pay relatively low rentals? It has already been shown in the early part of the present chapter that populations of Cincinnati representing relatively large numbers of home owners make use of the franchise on the issues of school finance more than the eligible voters who own no homes, to the degree that

TABLE XV

THE MEAN MONTHLY RENTAL PER ROOM IN 1935 IN TWO AREAS WHOSE
POPULATIONS VOTE RELATIVELY HIGH AND RELATIVELY
LOW FOR THE ISSUES

Issue	Mean Monthly Rental in Tracts Whose Populations Vote		Differ- ence $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	\$7.34	\$6.87	0.47	0.371	1.240	78
1934 Levy	7.68	6.96	0.72	0.398	1.809	88
1935 Levy	7.53	6.92	0.61	0.388	1.572	86
1935 Bond	7.48	6.88	0.60	0.376	1.596	87
1936 Levy	7.13	7.01	0.12	0.321	0.374	30
1936 Levy*	7.20	6.94	0.26	0.341	0.762	55
1937 Levy	7.52	6.88	0.64	0.378	1.693	91
1937 Bond	7.32	6.84	0.48	0.381	1.232	81
1938 Bond August	7.35	6.70	0.65	0.385	1.671	90
1938 Bond November	7.41	6.83	0.58	0.376	1.542	87
1939 Levy	7.55	6.81	0.74	0.380	1.947	95

*An issue for the financing of a building program. All other
levy issues in the table are for operating expenses. All bond issues
are for building programs.

differences in the extent of the vote of the two populations are highly significant. Evaluations of the probability of a true difference between the per cent of eligible voters who actually voted on the issues in areas whose populations pay relatively high and relatively low rentals will reveal the relative interest these two voting populations take toward matters of public school support.

In evaluating the differences between the per cent of eligible voters who voted in tenant populations that pay relatively high and low rentals, only the 1935 levy for operating expenses and the 1935 bond issue for buildings were used. Although the number of eligible voters was a careful estimation, as mentioned in Chapter IV, such numbers of voting populations are more likely to change markedly from year to year than most populations used in the study.

The percentage of eligible voters, the determination of which was described in Chapter IV, who voted on the levy and bond issues of 1935 was listed for those census tracts in which the average monthly rental per dwelling was above the mean rental of \$22.00, as shown in Appendix III-C. Against this population of eligible voters was listed the per cent of voters voting in those tracts whose average monthly rental was below \$22.00. The difference between the means of the two populations was then evaluated in terms of the probability of a true difference, as presented in Table XVI. Both differences are highly significant.

It is evident, from the data of Table XVI, that the eligible voters in tracts in which rentals per dwelling are relatively high make use of the privilege of voting on issues of school finance far more than those voters who live in tracts in which the rentals are relatively low. This

fact substantiates the finding discussed in the earlier part of the present chapter, that citizens in Cincinnati who have more means of support and who live in more comfortable circumstances appear generally, for some reason, more interested in matters of public school finance. Such differences in the means of the two populations of eligible voters could not have happened by chance.

TABLE XVI

THE RELATIVE NUMBER OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935 IN TWO AREAS OF RELATIVELY HIGH AND RELATIVELY LOW MONTHLY RENTALS PER DWELLING, 1935

Issue	Mean Per Cent of Eligible Voters Who Voted in		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	66 Tracts with Mean Rental Above \$22	41 Tracts with Mean Rental Below \$22				
1935 Levy	45.3	32.8	12.5	2.283	5.475	99+
1935 Bond	44.6	32.9	11.7	2.280	5.131	99+

Tenant Families Having Heat Furnished

Distribution in 1935.— Another possible criterion that may be used to determine the ability of populations to support school finance issues, and which was a part of the data gathered in the Regional Census of 1935,⁴ is the extent to which tenant families rented homes that included heat furnished as a part of the rental. Dwelling units with heat furnished rent for higher monthly rentals than those with heat not

⁴ Studies in Economic Security: II, op. cit., Table 18, pp. 213-215.

furnished. It follows that, in general, tenant families who live in dwellings with heat furnished as a part of the rental have higher incomes than tenant families living in dwellings without this convenience. How populations living in homes with heat furnished in the rental vote on the issues of school finance, as compared with populations not so fortunate, is pertinent to the study.

Appendix III-D shows the data for the per cent of renting families having heat furnished, and Map XX represents the relative distribution of such dwelling units. As shown by Appendix III-D, 25.66 per cent of all families renting homes in Cincinnati in 1935 had heat furnished in the monthly rental. The greater percentage of rented homes with furnished heat, as revealed by Map XX, is found in the central part of Cincinnati in a large number of tracts south of St. Bernard, in a few tracts south and east of Norwood, in tracts 6 and 7 in the Basin, and in five tracts in the western part of the city. Tracts in which few dwelling units are furnished heat for tenant families are found in the Basin, in tracts bordering Mill Creek, and in the tracts that border the Ohio River east and west of the Basin area.

The vote of tenants having heat furnished in the rentals.- In the determination of the significance of the difference between the means of the per cent of tenant families having heat furnished, all eleven issues of the study were employed. One population of tenant families having heat furnished was made up in terms of those families living in tracts in which the mean favorable vote for each tract was above the mean of the total vote. The other population of tenant families having heat furnished consisted of those living in tracts in which the favorable

MAP XX - TENANT FAMILIES IN CINCINNATI HAVING HEAT FURNISHED, 1935

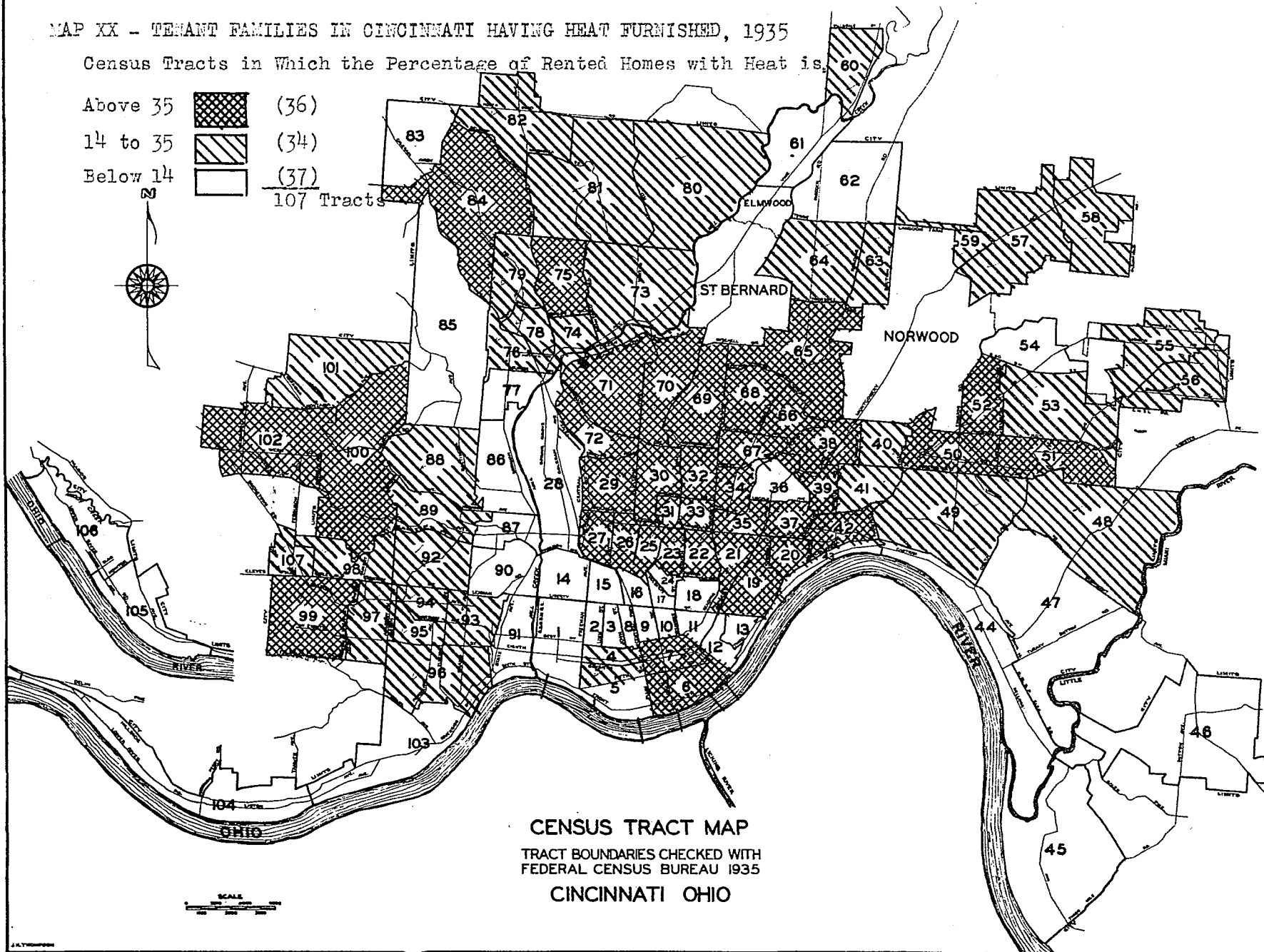
Census Tracts in Which the Percentage of Rented Homes with Heat is

Above 35 (36)

14 to 35 (34)

Below 14 (37)

107 Tracts



vote was below the mean favorable vote. Differences between the means of these two populations are not always in the same direction, as shown by Table XVII. With reference to approximately half of the evaluations of differences, the mean per cent of tenant families having heat furnished is located in tracts whose populations vote more favorably for the issues. Values of t for all the issues concerned reveal that no statistical significance can be attributed to tenant families having heat furnished, with respect to the way they vote on matters of public school finance. Populations with large numbers of tenant families renting homes with furnished heat tend to vote no differently on the issues of public school finance from those populations whose families live in rented homes with unfurnished heat.

The interest in the issues of families renting heated homes.-

Although no difference is evident between the vote of populations representing large numbers of families renting heated homes and of populations most of whose families rent homes with no heat furnished, it is not to be assumed that the interests of these two populations in the issues are the same. In order to determine the relative interest of the two populations, differences were evaluated between the means of the per cent of eligible voters who voted on the two issues of 1935 in areas where families rented relatively large numbers of homes having heat furnished and in areas where the number of dwellings with furnished heat was relatively small. Table XVIII presents the data for the determination of these valuations. As shown in Table XVIII, the probabilities of a true difference are both statistically significant. Populations representing families having heat furnished as a part of the rental appear to be more active, and thus more concerned about matters of

TABLE XVII

PER CENT OF TENANT FAMILIES HAVING HEAT FURNISHED IN 1935 IN
TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH
AND RELATIVELY LOW FOR THE ISSUES

Issue	Mean Per Cent of Rented Dwelling Units with Heat Furnished in Tracts with Populations Voting		Differ- ence Between Means	Est'd 6 of Differ- ence Between Means	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	25.12	26.08	0.96	0.958	1.302	69
1934 Levy	25.89	25.23	0.66	1.150	0.574	45
1935 Levy	25.18	26.58	1.40	0.982	1.436	35
1935 Bond	25.01	25.85	0.84	0.972	0.366	62
1936 Levy	24.98	26.12	1.14	1.415	0.306	56
1936 Levy ^o	25.20	25.81	0.61	1.205	0.506	48
1937 Levy	25.72	25.41	0.31	1.301	0.238	17
1937 Bond	25.93	25.20	0.73	1.010	0.723	55
1938 Bond August	25.12	26.00	0.88	1.403	0.625	45
1938 Bond November	25.89	25.19	0.70	0.990	0.697	52
1939 Levy	25.80	25.42	0.38	0.997	0.382	30

^o A levy issue presented to the public for the financing of a building program. All other levy issues in the table are for operating expenses. All bond issues are for building programs.

public school finance, as shown by their tendency to make more extensive use of the ballot.

Persons Engaged in Gainful Occupations

Distribution in 1935.— The possession of an occupation of some gainful nature may establish particular tendencies to vote on matters of public school support. The extent of employment, therefore, may serve as a criterion with which to determine whether populations whose earning power is relatively great vote differently on the issues from populations whose earning power is relatively small.

TABLE XVIII

THE PER CENT OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935 IN TWO AREAS WHERE THE NUMBER OF FAMILIES RENTING HEATED HOMES IS RELATIVELY LARGE AND RELATIVELY SMALL

Issue	Mean Per Cent of Voters Who Voted in		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of $\frac{t}{t}$	Chances in 100 that True Difference Exists
	51 Tracts in Which Over 26% of Families Rent Heat Furnished Homes	56 Tracts in Which Under 26% of Families Rent Heat Furnished Homes				
1935 Levy	44.6	37.7	6.9	1.863	3.704	99+
1935 Bond	43.0	37.0	6.0	1.780	3.371	99+

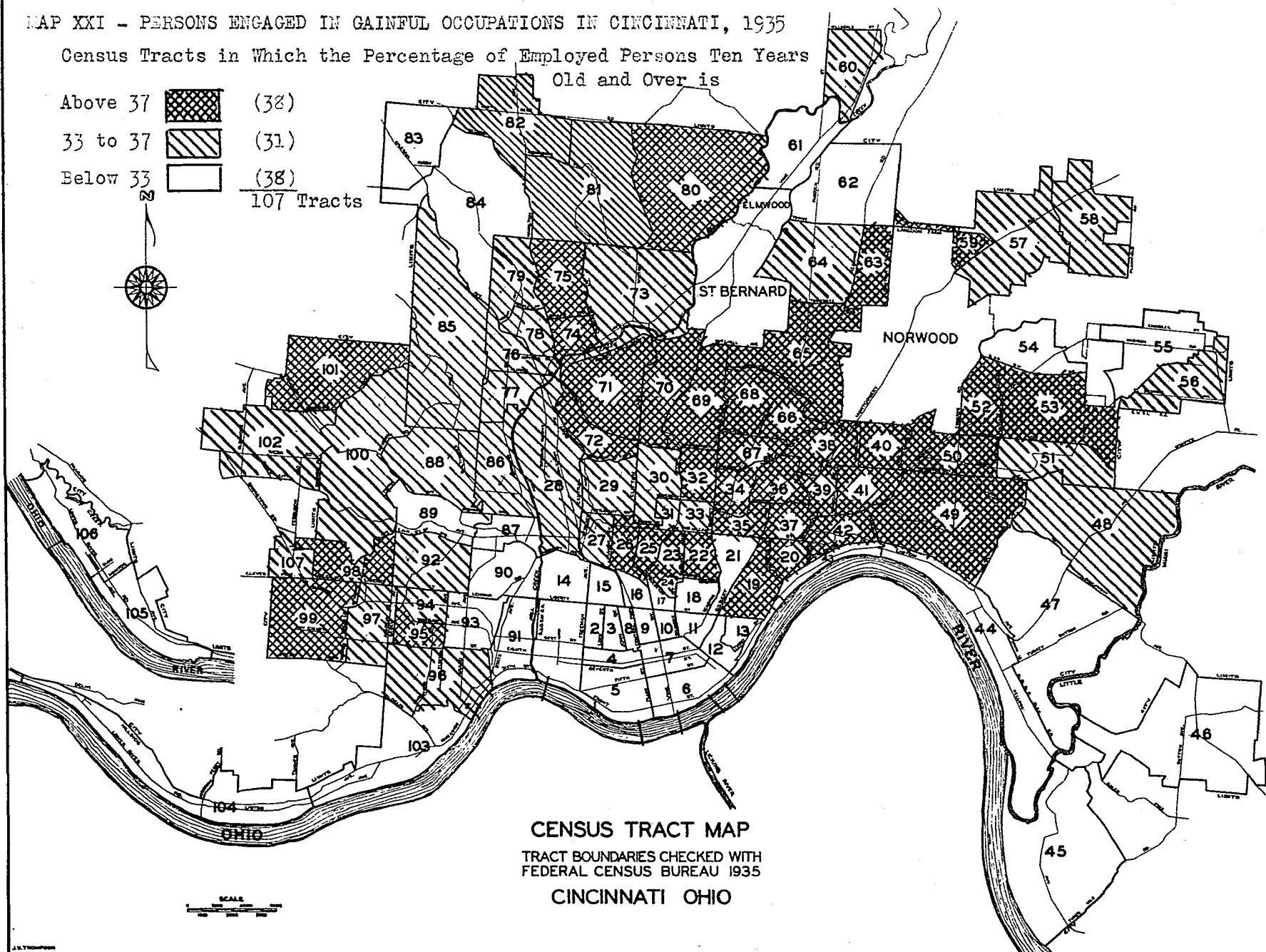
Appendix III-A reveals that 32.8 per cent of the total population in Cincinnati was engaged in gainful employment of some nature in 1935.⁵ As shown by Map XXI, the distribution of the relative number of persons in the total population engaged in gainful pursuits in 1935 is very

⁵ Ibid., Table 17, pp. 210-212.

MAP XXI - PERSONS ENGAGED IN GAINFUL OCCUPATIONS IN CINCINNATI, 1935

Census Tracts in Which the Percentage of Employed Persons Ten Years Old and Over is

Above 37		(38)
33 to 37		(31)
Below 33		(38)
107 Tracts		



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

similar to that of tenant families having heat furnished, as revealed by Map XX. With a few minor exceptions, the distribution is almost identical.

The vote of persons gainfully employed.- Evaluations of differences were computed between the means of the per cent of persons in Cincinnati who were gainfully employed in census tracts whose vote on the levy and bond issues of the study was above the mean favorable vote, and in tracts whose populations voted below the mean favorable vote. The evaluations of the differences give somewhat the same results as those already mentioned in the evaluation of the differences between the means of tenant families having heat furnished in the rentals of the two populations. As revealed by Table XIX, the differences between the means are not in the least statistically significant, and could have easily happened by chance. Populations in which there are relatively large numbers of persons gainfully employed tend to vote no differently from populations in which the relative number of employed persons is small.

Correlation coefficients computed between the per cent who are gainfully employed and the per cent of favorable vote on the 1935 levy for operating expenses and the 1935 bond issue for buildings gave coefficients of .050 and .083 respectively. These values of r verify the above conclusion that the relationship between populations in Cincinnati that are gainfully employed and the relative favorable vote is not statistically significant, inasmuch as neither of these values falls within significant levels.

TABLE XIX

PERSONS ENGAGED IN GAINFUL OCCUPATIONS IN CINCINNATI IN 1935
IN TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH
AND RELATIVELY LOW IN FAVOR OF THE ISSUES

Issue	Mean Per Cent of Popu- lations Employed in Tracts with Popu- lations Voting		Differ- ence Between Means	Est'd. 6 of Differ- ence Between Means	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	32.67	33.72	1.05	1.205	0.375	61
1934 Levy	33.69	32.97	0.72	1.218	0.591	45
1935 Levy	33.26	33.31	0.05	1.187	0.027	2
1935 Bond	33.06	33.47	0.41	1.180	0.222	15
1936 Levy	32.16	34.08	1.92	1.213	1.543	27
1936 Levy [*]	32.30	32.31	0.01	1.201	0.003	0
1937 Levy	33.35	33.24	0.11	1.196	0.092	9
1937 Bond	32.79	33.69	0.90	1.191	0.755	55
1938 Bond August	32.53	33.33	1.35	1.199	1.126	75
1938 Bond November	33.45	33.18	0.27	1.222	0.221	13
1939 Levy	33.35	33.23	0.12	1.200	0.100	5

^{*}An issue presented to the public for the purpose of financing a building program. All other levy issues are for operating expenses. All bond issues are for school building programs.

The interest in the issues of persons gainfully employed.- The interest in the issues on the part of persons in Cincinnati who are gainfully employed was also investigated. Census tracts were classified into two groups on the basis of the per cent of persons gainfully employed in those tracts above the mean per cent and below the mean per cent for the city. The per cent of eligible voters who voted on the two issues of 1935 was listed for each of the respective census

TABLE XX

THE RELATIVE NUMBER OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935 IN POPULATIONS WHERE THE NUMBER OF GAINFULLY EMPLOYED IS RELATIVELY HIGH AND RELATIVELY LOW

Issue	Mean Per Cent of Eligible Voters Who Voted in		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	65 Tracts with Per Cent of Persons Employed Above Mean of 33	41 Tracts with Per Cent of Persons Employed Below Mean of 33				
1935 Levy	45.5	33.8	11.7	1.744	6.709	99+
1935 Bond	44.0	33.4	10.6	1.649	6.428	99+

tracts, and the difference between the means of these two populations was then determined for both issues. Table XX, which presents the data for the determination of these evaluations, shows that the differences are both highly significant and that populations in which the per cent engaged in gainful occupations is relatively high tend to vote more extensively on the issues. The difference in the extent of

voting on the issues of public school finance, that is, the apparent difference between the interest of the two populations is real and is not due to chance.

The Density of Populations and the Vote

The number of persons per acre, 1935.- The density of populations in Cincinnati is another possible criterion that might be used to interpret the economic status of large populations and the attitudes toward public school support. An examination of Map XXII indicates a close negative relationship between the number of persons per acre in Cincinnati in 1935⁶ and the per cent of families owning homes in the same year, as shown by Map XVI. Those areas in which the per cent of home ownership is low are densely populated areas and, conversely, those areas in which ownership of homes is high have the least number of persons per acre. Similarly, a comparison of Maps XVIII and XXII shows that where densely populated areas in Cincinnati are found, low rental areas are located. There is evidence that, in general, the more densely populated areas in Cincinnati are areas in which the economic status of populations is relatively low.

The mean number of persons per acre in Cincinnati in 1935 was 9.93, as revealed in Appendix III-D. Areas of greatest density, represented by Map XXII, are found in most tracts in the Basin and in the tracts north of the Basin in the direction of Norwood. A few tracts in southern Cincinnati and west of the Basin area also have relatively dense populations, as well as census tracts 74, 76, and 78

⁶Ibid.

MAP XXII - DENSITY OF THE POPULATIONS OF CINCINNATI, 1935

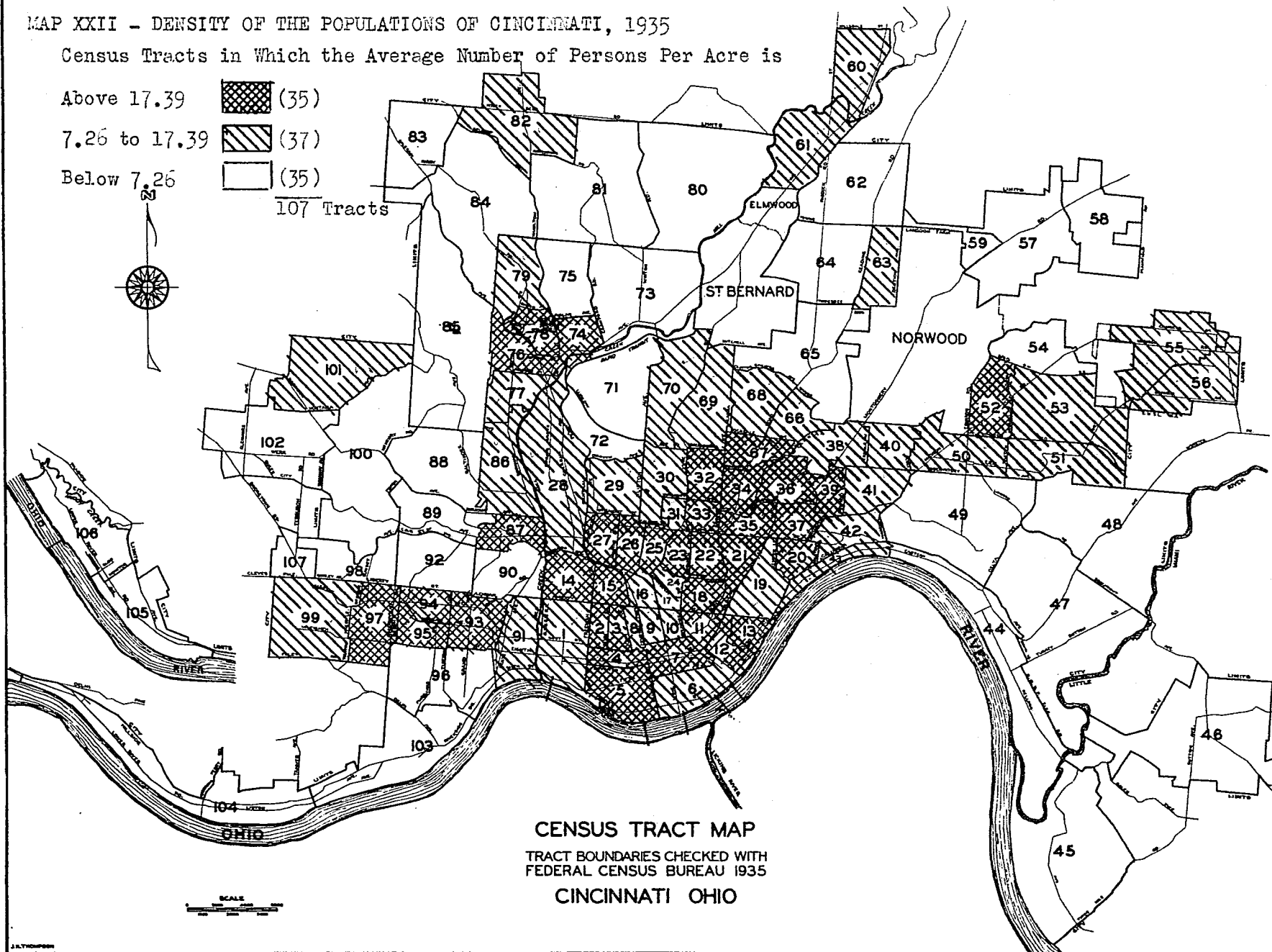
Census Tracts in Which the Average Number of Persons Per Acre is

Above 17.39 (35)

7.26 to 17.39 (37)

Below 7.26 (35)

107 Tracts



CENSUS TRACT MAP

TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935

CINCINNATI OHIO

in western and northern Cincinnati, and in tract 52 east of Norwood. Areas where the number of persons per acre is fewest occur in most tracts to the west, north, and east of the center of the city, and in the tracts that border the Ohio River outside the Basin.

The vote of dense populations in Cincinnati.- Census tracts of Cincinnati were divided into two groups on the basis of the per cent of favorable vote above and below the mean favorable vote for the issue under study. The average number of persons per acre in each of the census tracts for both groups was listed, and the mean of each of these two populations was then computed. The difference between the two means was then evaluated for each of the eleven issues covered by the study.

In general, the measures of the difference between the mean number of persons per acre in the two populations, as presented in Table XXI, are statistically significant. There is a tendency of populations living in the more densely populated areas in Cincinnati to favor issues of public school finance beyond that of persons who live in the less densely populated areas.

Correlation coefficients computed between the number of persons per acre and the per cent of favorable vote on the levy and bond issues of 1935 gave values of r at .227 and .323 respectively. Both values are statistically significant at conservative standards. From the analysis of the difference between the means of the number of persons per acre in Cincinnati, it appears that the denser the population the more likely are voters in that population to subscribe to issues of school finance. The fewer the number of persons per acre,

TABLE XXI

THE MEAN NUMBER OF PERSONS PER ACRE IN CINCINNATI, 1935, IN AREAS IN WHICH THE FAVORABLE VOTE ON THE ISSUES IS RELATIVELY HIGH AND RELATIVELY LOW

Issue	Mean Number of Persons Per Acre in Tracts with Populations Voting		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	24.21	13.35	10.86	3.845	2.845	99+
1934 Levy	22.44	13.85	8.59	3.815	2.252	97+
1935 Levy	22.59	14.02	8.57	3.920	2.183	96+
1935 Bond	25.21	13.38	9.83	3.865	2.543	99 -
1936 Levy	25.57	12.21	13.36	3.760	3.553	99+
1936 Levy*	23.04	12.46	10.58	3.742	2.827	99+
1937 Levy	22.58	13.73	8.85	3.810	2.323	98
1937 Bond	22.94	13.44	9.50	3.865	2.458	98+
1938 Bond August	23.94	12.82	11.12	4.010	2.773	99+
1938 Bond November	22.12	10.94	17.15	3.690	4.648	99+
1939 Levy	21.41	14.34	7.07	3.761	1.880	93+

*The second 1936 levy issue was one for the financing of a building program. All other levy issues mentioned are for operating expenses. All bond issues are for the financing of building programs.

the less likely is a favorable vote. If liberal standards for deciding the statistical significance of the valuations are used, the differences between the means of the two populations are real differences, and could hardly have happened by mere chance.

Comparison of the distribution of the foreign born and Negro populations, as shown by Maps XII and XIII, with the distribution of the number of persons per acre, as represented by Map XXII, reveals that the greater number of foreign born and Negro persons live in the more densely populated areas of Cincinnati. Meanwhile, it has been disclosed that the densely populated areas are those where the economic wealth of individuals is relatively low. Conversely, the less densely populated areas of the city have relatively few Negroes and foreign born persons among their populations, and relatively large numbers of native white persons, who are more fortunate as regards wealth. The above relationships agree with the inference already made that both the Negro and foreign born populations reveal tendencies of favoring issues of public school finance by being closely associated with those populations of Cincinnati that have been shown to manifest tendencies of favoring the issues. The suggestion has also been made that these populations lend more support to the issues primarily because they have relatively little wealth on which they may be taxed for their support. As already mentioned, this is only a supposition that is submitted for want of other plausible explanations.

The interest of dense populations in the issues.- Evaluations were made of the relative interest on matters of public school finance with respect to voters living in the more densely populated areas of Cincinnati and to voters living in the less densely populated areas.

Differences between the mean per cent of eligible voters who actually voted on the two issues of 1935 in the two areas, divided on the basis of the density of their populations, were computed. The probability that the differences are real differences was then determined, as revealed by the data in Table XXII.

The evaluations of the probability of a true difference, as shown by Table XXII, are statistically significant at conservative standards, and the differences can hardly be attributed to chance alone. Adult

TABLE XXII

THE MEAN PER CENT OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES
OF 1935 IN TWO AREAS WHOSE DENSITY OF POPULATIONS
IS RELATIVELY HIGH AND RELATIVELY LOW

Issue	Mean Per Cent of Voters Who Voted in		Differ- ence $M_2 - M_1$	Est'd $\sigma M_2 - M_1$	Value of t	Chances in 100 that True Difference Exists
	60 Tracts with No. of Persons Per Acre Above Mean of 10	47 Tracts with No. of Persons Per Acre Below Mean of 10				
1935 Levy	38.5	42.8	4.3	1.947	2.206	97+
1935 Bond	37.8	42.7	4.9	1.965	2.493	98+

citizens in Cincinnati over twenty-one years of age who live in the more densely populated areas tend to be more dilatory in their activity of voting on issues of public school finance. They thus reflect a lagging interest on matters of educational support, as compared with eligible voters in Cincinnati who reside in less densely populated areas. Citizens who live in areas where the population is less dense tend to oppose the issues to a greater degree and, at the same time, they appear to be more aware of their obligation in the exercise of the vote on such matters.

Summary

In the consideration of influences and factors that may affect the public vote on issues of school finance, this chapter has been concerned with the economic status of the populations of Cincinnati. Data for this part of the study include the following variables: home ownership, the number of radios in populations, tenant rentals for dwellings and for rooms, tenant rentals that include furnished heat, gainfully employed populations, and density of populations. With the exception of the data on the number of radios per one hundred families, which were taken from the 1930 Federal Census data, all other data used in the chapter came from the 1935 Regional Census.

The forces and influences that are instrumental in the formation of attitudes toward issues of public school finance appear to center chiefly around the relative wealth of the voting public. The results of the analysis reveal that, in general, the greater the economic wealth of a population in Cincinnati, the more the population is inclined to oppose the issues of school finance.

Evidence that populations whose wealth is relatively great oppose issues of public school finance is revealed in the evaluations of the differences in the means of populations whose relative economic status differs in areas wherein the favorable vote on the issues is relatively high and in areas in which the vote is relatively low.

Home ownership, used as a criterion of the relative wealth of families, reveals that the differences between the relative number of homes owned in the two areas, divided with respect to the relative favorable vote on the issues, are statistically significant. Voters in

populations in Cincinnati representing families that own relatively few homes tend to subscribe more favorably to issues of public school finance. Conversely, home ownership appears to be a factor that tends to stand in the way of favorable support of the issues. The same is true of populations that represent ownership of the larger number of radios. Populations whose relative ability to support the issues of public school finance is great, as measured by the greater number of radios per one hundred families in 1930, are more inclined to oppose the issues. Those populations of the city that own fewer radios tend to vote more in favor of the issues.

The fact that the denser populations of Cincinnati are located in those areas where the per cent of home ownership is small, where fewer radios are owned per one hundred families, and where the monthly rentals of tenant families are lowest indicates that areas of denser populations in the city are areas where the relative wealth of residing populations is low. The evaluation of differences between the relative number of persons per acre in areas where the favorable vote is relatively high and in areas where it is low reveals that these populations less fortunate in terms of wealth tend to favor the issues more than their wealthier neighbors. In general, the greater the density of the population in Cincinnati, the more favorable the vote of the respective population on issues of public school finance.

No real differences are found between the means of the average monthly rentals per dwelling or room, the per cent of tenant families having heat furnished in the rental, and the per cent of persons who are engaged in gainful occupations, each population of which was divided into two populations in terms of the relative extent of favorable vote.

Each of these variables, however, may not be as reliable a criterion of the relative wealth of populations as those of home and property ownership. While differences in the monthly rentals or in the per cent of tenant families having heat furnished may represent, to some degree, indices of economic well-being, they may also be due to the necessity of locating suitable residence near the place of occupation.

Not only does this part of the study reveal significant differences in the results of the vote of more wealthy and less wealthy populations, but there is even greater evidence that populations with the most means to support issues of public school finance are more interested and active in voting on the issues. Such an important revelation is disclosed by evaluating the difference between the means of the per cent of eligible voters who actually voted either for or against the issues in areas indicative of relatively more wealth and in areas in which the wealth of the population is less.

Populations in Cincinnati possessing more wealth with which to support the public schools tend to oppose the issues pertinent to their support. At the same time, these more wealthy populations appear more interested in matters of public school finance, as evidenced by their alertness in the exercise of the vote when school finance issues are presented to the public. This augmented vigilance of the relatively wealthy populations of Cincinnati contributes to a greater opposition toward the issues than would result if the less wealthy populations of the city were equally active in the exercise of the vote. The result of the vote of the less wealthy populations that tend to favor public school finance issues is partly held in check by

the relatively smaller number of eligible persons among these poorer populations who actually vote.

The fact that foreign born and Negro persons of Cincinnati live in areas whose populations possess less wealth gives credence to the belief that these populations, themselves, possess relatively little wealth. Furthermore, because these two populations are found in areas of the city whose populations tend to favor the issues of public school finance more than populations of the entire city, it is probable that they, too, tend to vote more favorably for the issues. These relationships of wealth of populations, classified on the basis of nativity and race, give rise to the belief that, if the foreign born and Negro populations of Cincinnati tend to subscribe more to the issues, they might do so primarily because they represent populations that have little to lose as a result of an increased tax burden.

Because the native white persons of Cincinnati are representative of populations that tend to oppose the issues to a greater degree than populations of the city at large, it is highly probable that they, too, tend to oppose the issues. If native white populations of the city show tendencies of opposing the issues, the primary motive is probably because, being more wealthy than either the Negro or the foreign born populations of Cincinnati, they would be compelled to stand most of the cost of a higher tax rate. At this point of the study no other credible reason can be submitted as to why each of the populations, classified with respect to nativity and race, tends to differ in their support of the issues.

CHAPTER VI

THE RELIGIOUS AFFILIATIONS OF CINCINNATI POPULATIONS AND THE VOTE

Introduction

Cincinnati is probably the only large city in the United States that has reasonably accurate data on the religious affiliations of its people.¹ The Regional Census of 1935 assembled rather complete data on the religious affiliations of all persons in Cincinnati by census tract. Table XXIII presents a summary of the total number of persons who reported their religious affiliations.² A total of 406,323 persons, as shown by Table XXIII, belonged to some religious group, while 67,098 persons, or 14 per cent of the total population, were classified in the census tracts as belonging to other religions not specified, or were unaffiliated with any religion, or were unknown in terms of their religious status.

It is possible, and rather probable, that some religious populations in Cincinnati may reveal predispositions to vote on school finance issues somewhat differently from the general trend. It is the purpose of this chapter to reveal whether any variances in the vote of

¹The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: I, The Population of Hamilton County, Ohio, in 1935, p. 34. Cincinnati: Cincinnati Employment Center, 1937.

²Ibid., Table 24, p. 119.

TABLE XXIII
RELIGIOUS AFFILIATIONS OF POPULATIONS OF
CINCINNATI, 1935

Religion	Total Number	Per Cent of All Affiliated	Per Cent of Total Population
Catholic	161895	39.3	34.2
Baptist	63140	16.3	14.4
Methodist	53413	13.2	11.3
Presbyterian	33298	8.2	7.0
Jewish	19195	4.7	4.1
Evangelical	18301	4.5	3.9
Lutheran	16526	4.1	3.5
Christian	11233	2.8	2.4
Episcopal	11079	2.7	2.3
Reformed	2532	0.6	0.6
Congregational	2350	0.6	0.5
Christian Science	2317	0.6	0.5
United Brethren	1943	0.5	0.4
Disciple of Christ	1786	0.4	0.4
New Thought	1292	0.3	0.3
Greek Catholic	786	0.2	0.2
Friends or Quakers	177	0.0	0.0
Total Professing Affiliation	406323	100.0	86.0
Others, Unaffiliated, Unknown	67098		14.0
Total	473421	100.0	100.0

religious populations are statistically significant. Table XXIII reveals that several large populations of Protestant faiths, and as many smaller Protestant groups, live in Cincinnati. The largest single religious population, however, is not Protestant, but Catholic, and comprises approximately 40 per cent of all persons who profess their religious affiliation. It is interesting and relevant to determine what real differences there are in the pattern of the vote of religious populations. The evaluation of such differences is, therefore, the essential problem of this chapter.

To attempt an analysis of the vote on the issues, with respect to each religious population listed in Table XXIII, would be rather confusing and would raise questions concerning the value of such procedure. Almost one half of the seventeen religious populations listed in the 1935 Regional Census are too small for separate treatment. By combining several religious populations whose religious beliefs and policies are not in opposition to the extent that matters of a social or educational nature are affected, the various religious groups may be reduced to a few. Fewer religious populations, made up of several religious subgroups whose educational policies and practices have some elements in common or whose religious beliefs are not in direct opposition, will result in larger numbers in each population, and will thereby make for more adequate treatment.

The Religious Populations Used in the Study

Protestant populations.- The plan of combining various religious groups of persons into fewer and more compact ones resulted in a final

selection of only four. The first of these comprises a combination of specified religious groups listed in Table XXIII, except the Catholics and the Jewish populations. These various religious groups depend, for the most part, upon the public schools for the education of their children. They look upon education in much the same way, in that church and school are regarded as separate institutions. This one common factor of looking to the public schools of Cincinnati for the training of youth is the basis for combining Protestant persons into one large population. This population will be known in the present study as the Protestant population.

The Catholic population.- The Catholic population, which is the second one for use in the study, is selected because a large percentage of children of Catholic parents receive much of their education in school separate from the public schools of Cincinnati. It is possible, therefore, that Catholic populations look upon the support of public schools somewhat differently from other religious groups that depend upon the public schools for educational training. The vote of the Catholic population may thus reflect attitudes on public school support.

The Jewish population.- The Jewish population comprises the third one employed in this part of the study. The selection of this population is one based only upon religious aspects, and is not because of any apparent differences in policies and practices concerning the educational training of Jewish youth. The Jewish children receive their educational training in the public schools of Cincinnati, and not in private educational institutions. Jewish populations may,

therefore, look upon school finance issues much the same as the Protestant populations. However, if any significant difference exists between the vote of the Jewish population and other religious populations on such issues, the population should not be combined with others, but should be treated separately.

Unspecified, unaffiliated, and unknown religious populations.-

The fourth and last population for use in this part of the study is, for the most part, not a religious population. It comprises the 14 per cent of the total population of Cincinnati whose religions were not specified, or who were unaffiliated, or whose religious status was unknown. Although little can be said regarding the religious activities of this population, it is probable that most of the persons who are thus classified have little interest in religious affairs.

The Protestant Populations

Distribution in 1935.- The Protestant population, made up of the various religious groups except the Catholic and the Jewish populations, as given in Table XXIII, numbered 225,233 persons and comprised 55.5 per cent of the total religious population of Cincinnati, and 47.7 per cent of the total population of both religious and non-religious groups. Appendix IV presents the data by census tract for the per cent of each of the four religious populations in 1935.³ Map XXIII represents the distribution of the Protestant population by census tract for the same

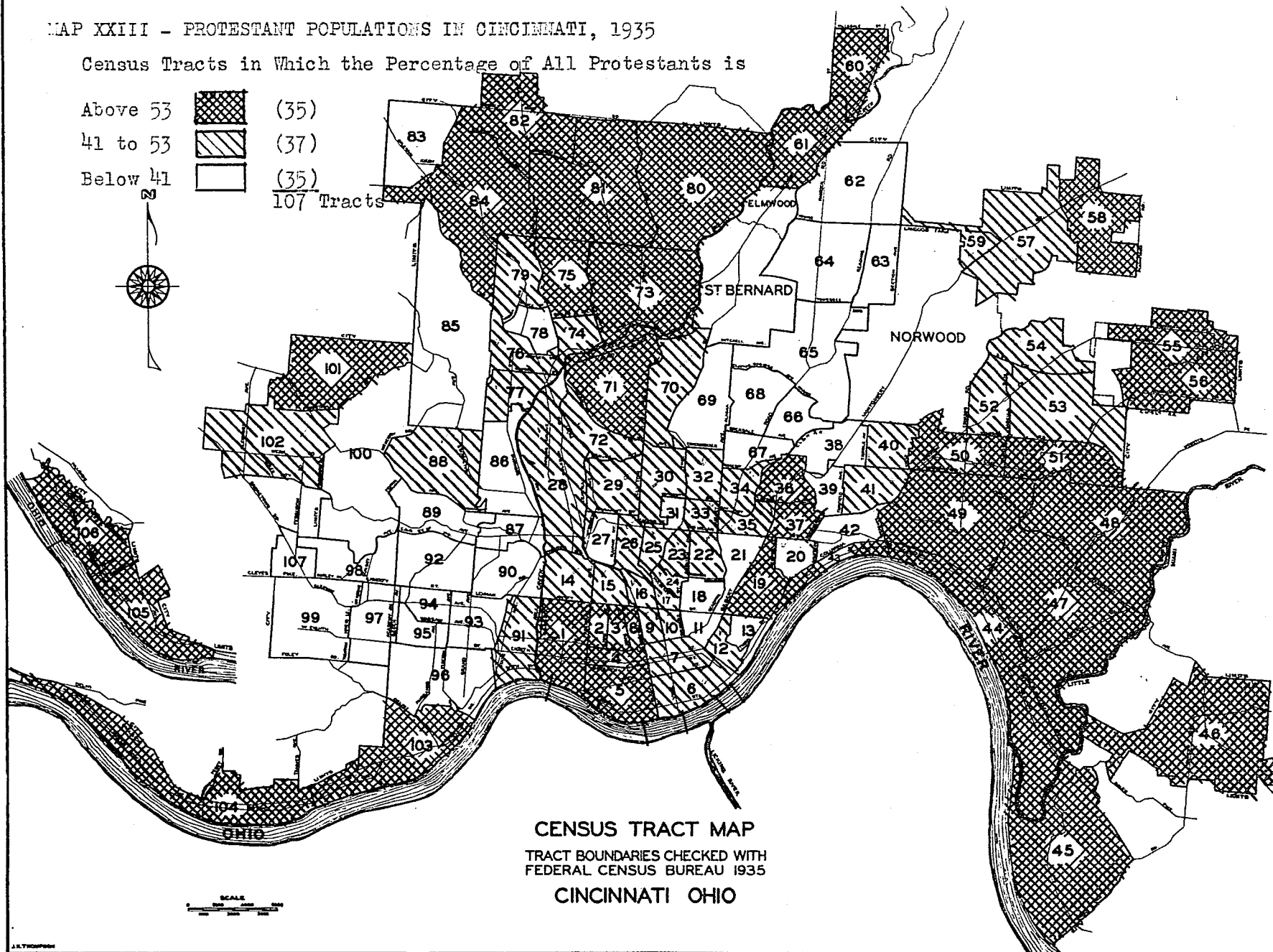
³The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, Table 17, pp. 210-212. Cincinnati: Cincinnati Employment Center, 1937.

MAP XXIII - PROTESTANT POPULATIONS IN CINCINNATI, 1935

Census Tracts in Which the Percentage of All Protestants is

Above 53		(35)
41 to 53		(37)
Below 41		(35)

107 Tracts



year.

According to the distribution, as shown by Map XXIII, the greater percentage of Protestant populations lives in the tracts in eastern Cincinnati, in tracts in northern Cincinnati west of St. Bernard, and in the census tracts that border the Ohio River. Heavy percentages of Protestant populations are also found in the Negro tracts in the Basin and in tracts of dense Negro population that extend northward to tract 36. Two definite areas where low percentages of Protestant populations are found are in the tracts in western Cincinnati and in those tracts to the north and east between St. Bernard and Norwood. A few tracts between the Basin and Norwood, of which 13 and 31 are examples, are also found to have low percentages of Protestants.

The Protestant vote on the issues.- Differences were evaluated between the means of the per cent of Protestants in areas whose populations voted relatively high on the issues and in areas whose populations voted relatively low. Tracts were divided into two groups on the basis of the per cent of favorable vote on the issue in question above and below the mean favorable vote for the whole city. The per cent of Protestants in the total population was then listed for the respective census tracts, and t was determined for the difference between the means of the per cent of these two populations.

The difference between the means of these populations, as given in Table XXIV, ranges from 2.29 in the November bond issue of 1938 to 6.60 in the 1934 levy issue. In seven of the eleven issues covered by the study the chances in one hundred that a true difference exists reach ninety-five and above, while the chances of a real difference for the

TABLE XXIV

MEAN PER CENT OF PROTESTANTS IN 1935 IN TWO AREAS WHERE THE
FAVORABLE VOTE ON THE ISSUES IS RELATIVELY HIGH
AND RELATIVELY LOW

Issue	Mean Per Cent of Protestant Popu- lation in Tracts Voting		Differ- ence $\mu_1 - \mu_2$	Est'd $\sigma_{\mu_1 - \mu_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	49.80	44.50	5.30	2.856	1.856	93
1934 Levy	50.21	43.61	6.60	2.778	2.377	98
1935 Levy	49.81	44.49	5.32	3.017	1.760	92
1935 Bond	47.91	44.23	3.68	2.830	1.300	81
1936 Levy	48.91	43.01	5.90	2.858	2.064	96
1936 Levy*	49.79	43.51	6.28	2.869	2.185	96
1937 Levy	49.81	43.92	5.89	2.704	2.178	96
1937 Bond	50.03	43.90	6.13	2.798	2.191	97
1938 Bond August	49.71	44.18	5.53	2.793	1.979	95
1938 Bond November	48.00	45.71	2.29	2.898	0.780	55
1939 Levy	49.73	43.75	5.98	2.750	2.174	96

*An issue for the financing of a building program. All other levy issues were for the purpose of financing issues for operating expenses. All bond issues mentioned in the table were for the financing of buildings.

1935 November bond issue fall to approximately fifty-five in one hundred.

The analysis of the data in Table XXIV reveals that, although some evaluations of the differences are low and cannot be considered as significant, most values of the difference approach levels that are statistically significant enough to be considered seriously. To conclude that the vote of the Protestant populations is no different from the vote of the general population of Cincinnati would be questionable in the light of the results as determined in Table XXIV. All differences between the means of the two populations under consideration show that where the per cent of Protestants is relatively high the favorable vote on the issues of the study is also relatively high. It is probable that, in general, populations consisting of relatively large numbers of Protestants tend to vote more highly in favor of the issues on public school finance than religious populations at large.

Correlation coefficients were computed between the per cent of Protestants in 1935 and the per cent of favorable vote on the two issues of 1935. With reference to the relative number of Protestants and the per cent of favorable vote on the 1935 levy, r is .268, and for the 1935 bond issue it is .310, both values of which are statistically significant. In general, the greater the relative number of Protestants in the total population of Cincinnati the higher the favorable vote on the issues of public school finance.

The Catholic Population

Distribution in 1935.- It has already been mentioned that the Catholic population is the largest single religious group in Cincinnati.

The 161,895 Catholic persons comprise 39.8 per cent of all persons who professed religious affiliations in 1935, and 34.2 per cent of the total population of Cincinnati in the same year, as presented in Table XXIII.

Most of the Catholic population of Cincinnati reside in the census tracts in the western part of the city west of Mill Creek, as shown by Appendix IV⁴ and by Map XXIV. Other areas where the percentage of Catholics is high are in tracts 63 and 64 between Norwood and St. Bernard, in the tracts to the south of Norwood, and in the tracts north of the Basin. Census tract 11 and also 13, which borders the Ohio River east of the Basin, are also markedly high in the percentage of Catholic populations.

Areas in which a low percentage of Catholic populations prevails, as shown by Map XXIV, are found in the Basin, in most tracts in eastern Cincinnati, and in most tracts in the northern portion of the city. Census tracts in which the Catholic population is markedly low, as shown by Map XXIV and by Appendix IV, are those exactly south of St. Bernard, of which tracts 67 and 68 are examples.

The Catholic vote on the issues.- Differences between the means of the per cent of Catholics in the census tracts whose favorable vote was above the mean favorable vote, and in the tracts whose favorable vote was below the mean, were evaluated to determine whether real differences exist. The differences between the means are relatively high, and do not vary greatly. As revealed in Table XXV, the census tracts in which the mean favorable vote on any issue is above the mean for the city have populations in which the percentage of Catholics is relatively low.

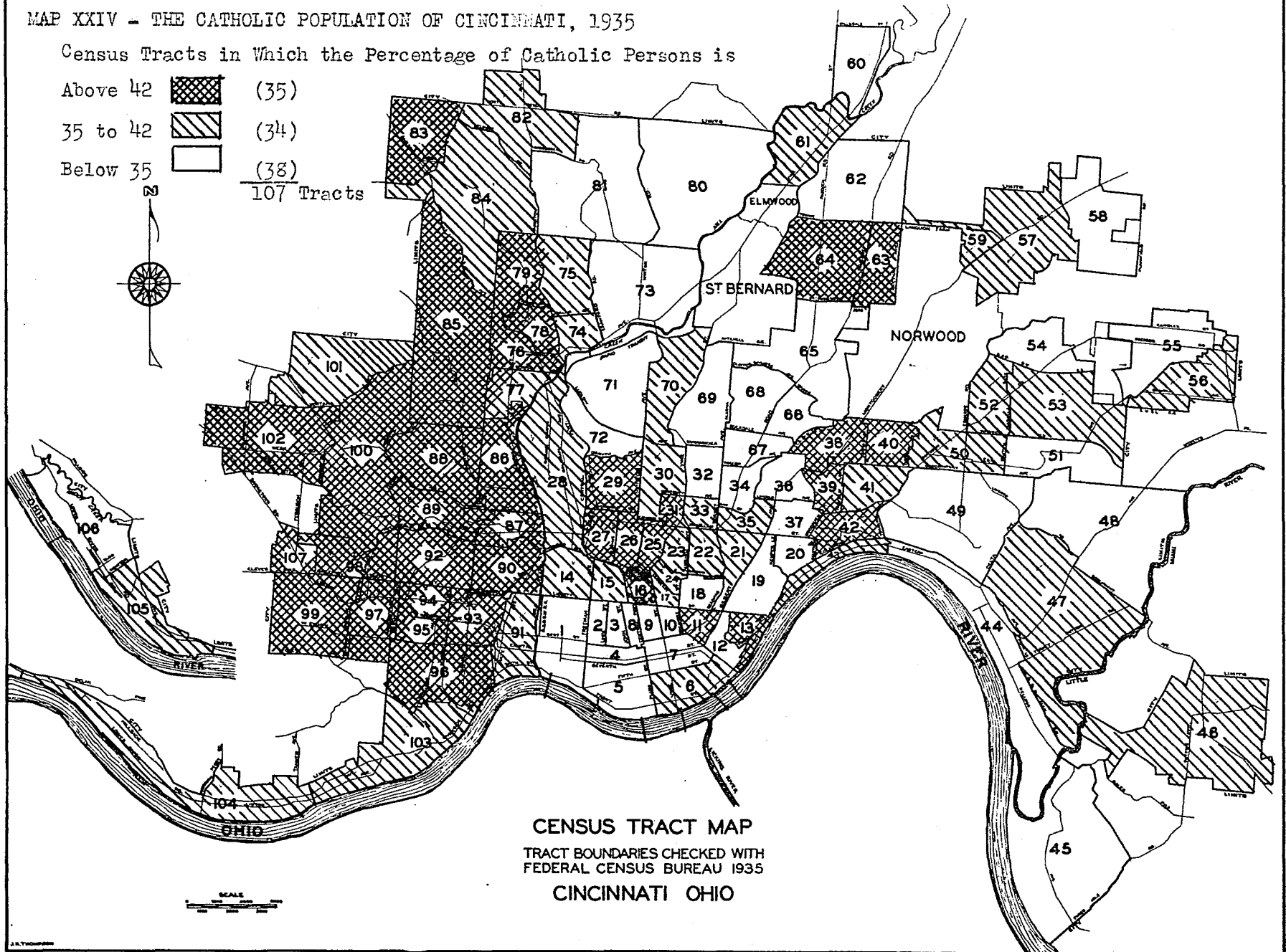
⁴

Studies in Economic Security: II, op. cit.

MAP XXIV - THE CATHOLIC POPULATION OF CINCINNATI, 1935

Census Tracts in Which the Percentage of Catholic Persons is

Above 42		(35)
35 to 42		(34)
Below 35		(38)
107 Tracts		



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

TABLE XXV

MEAN PER CENT OF CATHOLICS IN 1935 IN TWO AREAS WHERE THE
MEAN FAVORABLE VOTE ON THE ISSUES IS RELATIVELY
HIGH AND RELATIVELY LOW

Issue	Mean Per Cent of Catholic Populations in Tracts Voting		Differ- ence Between Means	Est'd. σ of Differ- ence Between Means	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	24.80	42.73	17.93	2.305	7.773	99 +
1934 Levy	25.91	43.28	17.37	2.448	7.132	99 +
1935 Levy	25.61	42.98	17.37	2.308	7.526	99 +
1935 Bond	25.42	43.43	18.01	2.253	7.968	99 +
1936 Levy	26.78	41.63	14.90	2.459	6.059	99 +
1936 Levy ^o	27.20	43.55	16.35	2.503	6.532	99 +
1937 Levy	25.58	43.52	17.94	2.251	7.964	99 +
1937 Bond	25.78	43.50	17.72	2.225	7.964	99 +
1938 Bond August	25.98	43.00	17.02	2.320	7.336	99 +
1938 Bond November	27.30	40.31	13.51	2.570	5.257	99 +
1939 Levy	26.19	44.10	17.91	2.229	8.035	99 +

^o A levy issue presented to the public of Cincinnati for the purpose of financing a building program. All other levy issues in the table are for operating expenses. All bond issues are for building programs.

Conversely, tracts in which the percentage of Catholics is high have populations whose favorable vote is relatively low. All the values of the probability of a true difference, as revealed in Table XXV, are far above ninety-nine chances in one hundred and are, without doubt, statistically significant. The analysis of the data, as shown by the table, makes it clear that populations of Cincinnati composed of relatively large numbers of Catholics tend to vote more against the issues of public school finance.

Correlation coefficients computed between the per cent of Catholics in Cincinnati and the per cent of favorable vote on the 1933 bond issue, the levy and bond issues of 1935, and the 1937 levy are $-.690$, $-.805$, $-.817$, and $-.840$ respectively. All these coefficients are highly significant. The greater the relative number of Catholics in a given population in Cincinnati the lower the relative favorable vote for the issues of public school finance.

From the evaluations of the vote of populations of Cincinnati representing large numbers of Catholic persons and from the computed correlation coefficients, considerable credence may be given to the possibility that Catholic voters of the city, taken as a whole, are generally opposed to the issues of public school support. Such an inference is not difficult to presume in light of the valuations. Catholic voters of Cincinnati might be expected to favor the issues less than other religious populations of the city. Mention has been made of the large proportion of children of Catholic families who receive much of their training in separate schools supported by Catholic funds. It follows that Catholic voters would be reluctant to subscribe to the support of public schools if their children receive their educational

training from church institutions that are supported by Catholic contributions. To support voluntarily two separate educational institutions, only one from which educational benefits are being derived, can hardly be expected from large populations confronted with such an option.

Most likely, Cincinnati is not the only city whose Catholic populations may tend to vote in opposition to issues of public school finance. Indeed, other cities of equally large proportions of Catholic persons may well be investigated with respect to the outcome of public school finance issues. Comparison of the favorable vote on matters of public school support in cities containing equally large proportions of Catholics and in cities where this religious population is negligible would be enlightening and would merit careful consideration. Such investigations would lead to conclusions as to whether parallel systems of educational training separate from publicly supported systems may operate as a menace to adequate public school support.

The Jewish Population

Distribution in 1935.- The Jewish population of 19,195 persons in Cincinnati in 1935 represents only 4.1 per cent of the total population.⁵ Appendix IV gives the data on the percentage of Jewish persons by census tract, and Map XXV shows the relative distribution within the city. By far the greater number of Jewish persons lives

⁵
Ibid.

MAP XXV - THE JEWISH POPULATION OF CINCINNATI, 1935

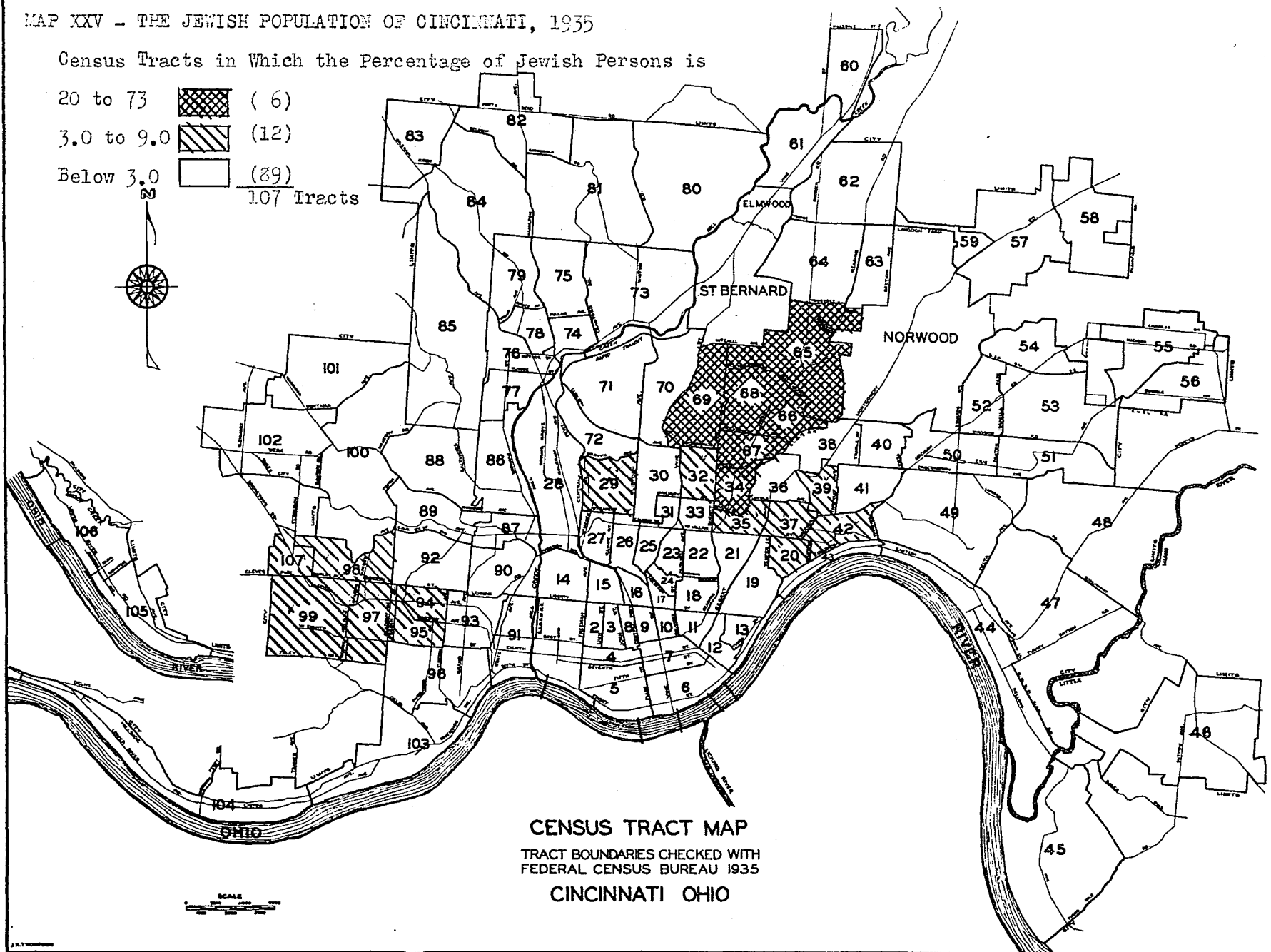
Census Tracts in Which the Percentage of Jewish Persons is

20 to 73 (6)

3.0 to 9.0 (12)

Below 3.0 (89)

107 Tracts



in only five or six census tracts, as revealed by Map XXV. A study of Appendix IV reveals that sixty-five tracts had fewer than 1 per cent of their populations who were Jewish, and only eighteen census tracts had more than 3 per cent who were Jewish. Of these eighteen census tracts in which the Jewish population was above 3 per cent, only six had populations above 20 per cent. Approximately 74 per cent of all Jewish persons lived within these six census tracts in 1935. This area of denser Jewish population, as shown by Map XXV, is located immediately south of St. Bernard and west of Norwood. Other areas in which the percentage of Jewish populations is above the mean are in tracts still farther south of the denser area, and in five tracts in the western and southern parts of the city.

The Jewish population and the vote.- The average per cent of Jewish persons in each census tract in which the per cent of favorable vote was above the mean per cent was listed against the per cent of Jewish persons in tracts in which the per cent of favorable vote was below the mean. The difference between the means of these two Jewish populations was evaluated in terms of the probability of a true difference. Table XXVI presents the data for the evaluations. It is evident from the table that Jewish populations of Cincinnati live in areas whose populations tend to vote more highly in favor of the issues of public school finance than the population of the city at large, as revealed by the differences between the means. Furthermore, the differences between the vote of these two populations, one of which contains a relatively high percentage of Jewish people and the other which is representative of relatively few Jewish persons, are statistically significant. The chances in one hundred that a true

TABLE XXVI

MEAN PER CENT OF JEWISH POPULATIONS IN 1935 IN TWO AREAS WHERE
THE MEAN FAVORABLE VOTE ON THE ISSUES IS RELATIVELY
HIGH AND RELATIVELY LOW

Issue	Mean Per Cent of Jewish Populations in Tracts Voting		Differ- ence $M_1 - M_2$	Est'd $\sigma M_1 - M_2$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	8.31	0.95	7.36	2.530	2.913	99 +
1934 Levy	7.57	0.93	6.64	2.354	2.821	99 +
1935 Levy	7.63	0.95	6.68	2.395	2.789	99 +
1935 Bond	7.67	0.95	6.72	2.408	2.786	99 +
1936 Levy	7.39	1.47	5.92	2.291	2.584	99 +
1936 Levy*	6.88	1.00	5.88	2.364	2.488	98 +
1937 Levy	6.75	0.89	6.75	2.356	2.865	99 +
1937 Bond	7.56	0.94	6.62	2.269	2.918	99 +
1938 Bond August	6.95	1.52	5.43	2.324	2.338	98 +
1938 Bond November	8.31	0.91	7.41	2.377	3.117	99 +
1939 Levy	7.19	0.91	6.28	2.390	2.628	99 +

*

A levy for the financing of a building program. All other levies mentioned in the table are for the financing of programs for operating expenses. All bond issues are for the financing of building programs.

difference exists are all above ninety-eight. Differences between the result of the vote of populations characterized by relatively large numbers of Jewish persons, as compared with the vote of the total population of Cincinnati, are real differences and are not because of chance.

Religiously Indifferent Populations of Cincinnati

Distribution in 1935.— The populations living in Cincinnati in 1935 whose religious affiliations were not specified, who were unaffiliated with any religion, or whose religion was unknown comprised 14.0 per cent of the total population.⁶ The reason for placing those persons whose religion was unspecified with the last population is that the number of persons included in such religious groups is small. The greater number of persons in this population of 14.0 per cent comprised those who professed no religious affiliation with any group, or whose religious affiliations were unknown. It might be said, therefore, that of the four populations with which this chapter is concerned, this last population consisting of persons whose religion is unspecified, unknown, or who profess no religious affiliation is the least active group with reference to religious coherence. Indeed, this last population is considered by the writer as a population of a more religiously indifferent character and, for this reason, it will be used to compare the trend of its vote on issues of public school finance with the direction of the vote of the other three more religious populations.

The areas wherein the highest percentages of these religiously

⁶ Ibid.

indifferent persons in Cincinnati reside are located in the eastern half of the Basin area and in census tracts that extend northward to tract 73 west of Norwood. Map XXVI represents the distribution of this population, and Appendix IV gives the per cent of persons whose religious affiliations are unspecified or are unknown. Only those tracts in the Basin in which few persons live have high percentages of such populations. Other scattered census tracts whose populations have high percentages of these religiously indifferent persons are found in the northern portions of the city and east of Norwood.

Areas consisting of few persons who profess no religious affiliation or whose religion is unknown are found in the census tracts in the western and the eastern parts of the city, and in a few scattered tracts to the north. Map XXVI reveals also that census tracts whose foreign born populations are large, as shown by Map XII, and where the per cent of Jewish populations is highest, as shown by Map XXV, also have relatively few persons who are unaffiliated with some religion, or whose religion is unknown.

The vote of religiously indifferent populations on the issues.-

Differences were evaluated between the mean percentages of the populations whose religion was of such a nature as to be unspecified, unaffiliated, or unknown in areas of relatively high favorable vote and in areas of relatively low favorable vote. According to Table XXVII, which presents the data for the determination of the valuations, this population that seemingly represents comparative religious indifference votes more highly in favor of the issues than against them. In the case of every issue covered by the study, the probability of a

MAP XXVI - UNSPECIFIED, UNKNOWN, AND UNAFFILIATED RELIGIOUS POPULATIONS OF CINCINNATI, 1935

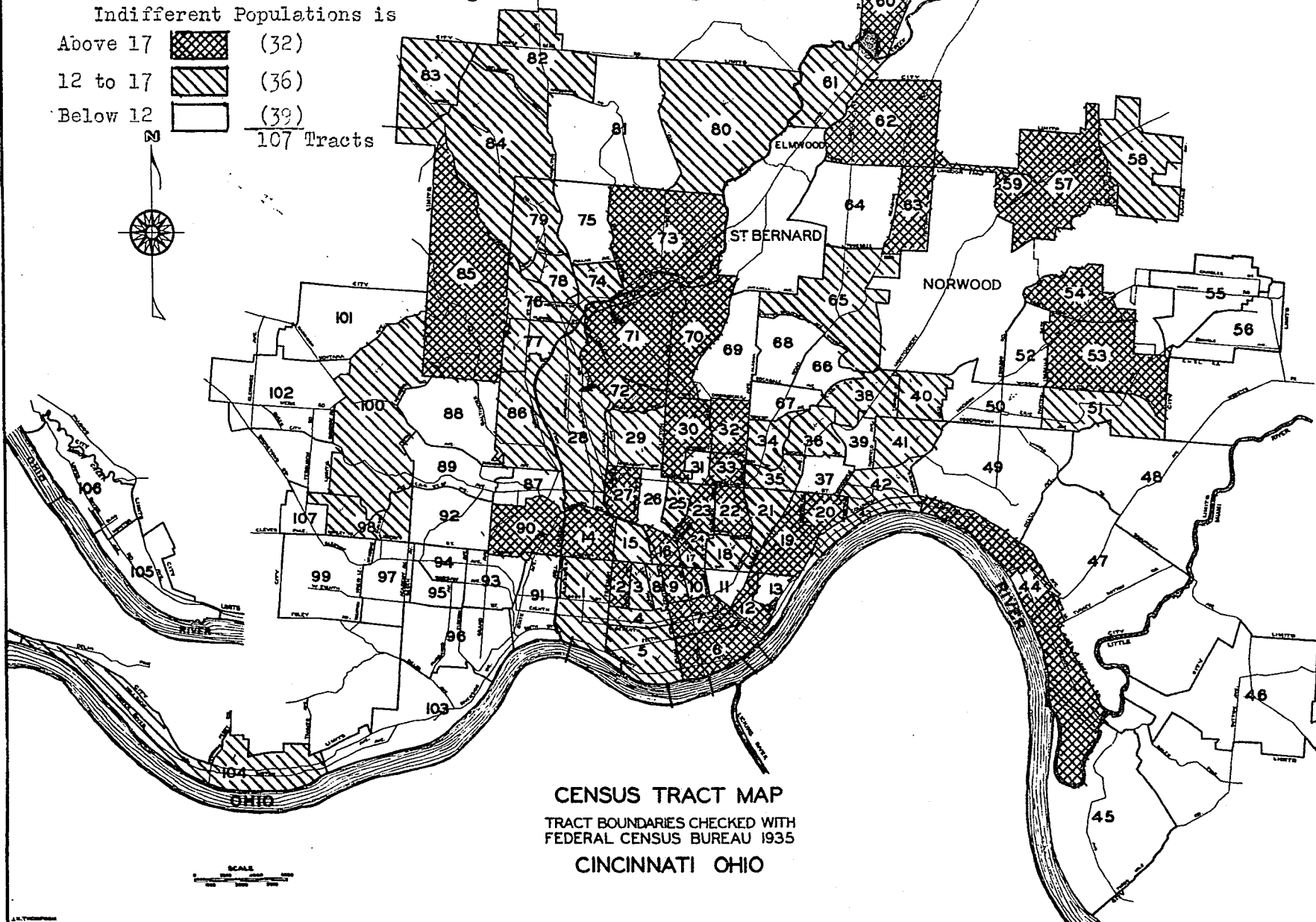
Census Tracts in Which the Percentage of the More Religiously Indifferent Populations is

Above 17 (32)

12 to 17 (36)

Below 12 (39)

107 Tracts



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

TABLE XXVII

MEAN PER CENT OF THE UNSPECIFIED, UNAFFILIATED, AND UNKNOWN RELIGIOUS POPULATIONS IN 1935 IN TWO AREAS WHERE THE VOTE ON THE ISSUES IS RELATIVELY HIGH AND RELATIVELY LOW

Issue	Mean Per Cent of Un-specified, Unaffiliated, and Unknown Religious Populations in Tracts Whose Populations Vote		Differ- ence $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	17.03	12.08	4.95	1.296	3.819	99 +
1934 Levy	16.26	12.12	4.14	1.292	3.204	99 +
1935 Levy	17.20	11.80	5.40	1.261	4.282	99 +
1935 Bond	17.31	11.52	5.79	1.249	4.635	99 +
1936 Levy	16.32	11.93	4.39	1.250	3.512	99 +
1936 Levy *	16.18	12.00	4.18	1.273	3.283	99 +
1937 Levy	17.00	11.63	5.32	1.263	4.212	99 +
1937 Bond	16.94	11.71	5.23	1.470	3.558	99 +
1938 Bond August	17.40	11.49	5.91	1.277	4.628	99 +
1938 Bond November	16.25	12.66	3.59	1.351	2.657	99 +
1939 Levy	16.68	11.72	4.96	1.273	3.897	99 +

* A levy presented to the public for the financing of a building program. All other levies mentioned in the table were for operating expenses. All bond issues were for building programs.

real difference is well above ninety-nine chances in one hundred. No such difference in the two populations between the relative number of persons whose religious affiliations seem more to be those of laxity could happen by mere chance.

Correlation coefficients were computed between the per cent of persons whose religious affiliations were unknown, unspecified, or who were unaffiliated and the per cent of favorable vote on the two issues of 1935. The coefficients for the levy and bond issues of that year are .232 and .307 respectively. Both of these values are statistically significant. It appears that the more indifferent persons in Cincinnati are to matters of affiliation with some religious body the greater the number of favorable votes for the issues of public school finance.

It may be that populations of Cincinnati representing the more religiously indifferent persons tend to subscribe more favorably to issues of public school finance than other populations of the city, classified in terms of religious affiliation, because of reasons other than of a religious character. Examination of the distribution of this population, as represented by Map XXVI, will show that most religiously indifferent persons live in areas where the relative wealth is not great. Few reside in areas where property ownership is relatively high, as shown by Maps XVI and XVII, which represent the respective distributions of families owning homes and radios. As a rule, individuals whose religion is unknown or is unspecified, or who are unaffiliated with any religion live mostly in densely populated census tracts in Cincinnati, as shown by comparing their distribution with that of the number of persons per acre, which is represented by Map XXII. Because of their

residence in areas where the relative wealth is not great, it is more conceivable to believe that religiously indifferent persons in Cincinnati tend to favor the issues more than other groups classified with reference to their religion, not necessarily because of religious aspects, but more so because of the general feeling of irresponsibility of paying taxes for their support. The above interpretation, however, has by no means been proved, and is only a supposition based upon interrelationships between religiously indifferent populations and populations that are less fortunate in terms of economic wealth.

Religious Interests in Public School Finance Issues

Introduction.- Religious populations in Cincinnati may show different degrees of interest in matters of school finance, just as various populations of the city, as revealed in Chapter V, indicate different degrees of interest in such matters, in keeping with their economic status. It may be recalled that the number and per cent of eligible voters in each census tract in 1935 were estimated, as described in Chapter IV, and as presented in Appendix II-B. By determining the per cent of citizens over twenty-one years of age who voted on a given issue in areas in which the religious population in question is relatively high, and also in areas in which the same religious population is low, probabilities of a true difference in the interest of eligible voters, according to affiliation with religion, can be evaluated.

The interest of Protestants in the issues.- The per cent of eligible voters who voted on the levy of 1935 was listed for those

census tracts whose per cent of Protestants was above the mean per cent of 48, and the same procedure was followed for the census tracts in which the per cent of Protestants was below the mean per cent. The difference between the mean per cent of eligible voters who actually voted in these two populations, one of which contained relatively large numbers of Protestants and in the other of which the Protestant population was relatively small, was then evaluated. The same procedure was used for the evaluation of the difference for the data of the 1935 bond issue.

As shown in Table XXVIII, which presents the data for the evaluations of the differences for both issues of 1935, both values of the

TABLE XXVIII

MEAN PER CENT OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935
IN TWO AREAS WHOSE PROTESTANT POPULATIONS ARE RELATIVELY
LARGE AND RELATIVELY SMALL

Issue	Mean Per Cent of Voters Who Voted in Tracts with Protestant Populations		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Per Cent of 48	Below Mean Per Cent of 48				
1935 Levy	41.0	39.5	1.5	2.015	0.749	56
1935 Bond	40.1	39.9	0.2	1.939	0.103	9

probability of a true difference are far too low to be statistically significant. Although populations of Cincinnati composed of relatively large numbers of Protestants show tendencies to subscribe more favorably to issues of school support, as shown by Table XXIV, so as to create differences in the results of the vote that border on significant levels, the interest of these populations in matters concerned with educational support seems to be no different from that of populations of the city at

large. Differences between eligible voters who actually voted on the issues of 1935 in areas where the percentage of Protestants is high and in areas in which the percentage is low could have happened easily by chance.

The interest of Catholics in the issues.— In the evaluation of the difference between the extent to which eligible voters went to the polls in areas of relatively large and relatively small Catholic populations, the same procedure as that described in the preceding section was used. The per cent of eligible voters who voted in each of the census tracts wherein the number of Catholic persons was above the mean

TABLE XXIX

MEAN PER CENT OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935
IN TWO AREAS WHERE THE NUMBER OF CATHOLIC PERSONS IS
RELATIVELY LARGE AND RELATIVELY SMALL

Issue	Mean Per Cent of Voters Who Voted in Tracts with No. of Catholic Persons		Differ- ence $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Per Cent of 34	Below Mean Per Cent of 34				
1935 Levy	43.1	38.9	4.2	1.945	2.159	97-
1935 Bond	42.0	38.2	4.0	1.936	2.066	96-

per cent was listed under one population. The per cent of eligible voters who voted on the same issue in the other tracts whose number of Catholic persons was below the mean per cent was then listed, and the probability of a true difference between the mean per cent of the two populations was determined.

The result of these evaluations of the difference, as revealed by Table XXIX, discloses that the populations in which there are relatively large numbers of Catholic persons appear to vote more actively, as

shown by the higher percentage of eligible voters who go to the polls in tracts containing relatively more Catholics. Moreover, the differences between the means of the two populations, one of which contains relatively more Catholics and the other of which is composed of relatively few Catholics, could hardly have happened by chance. This augmented activity in voting by the populations in Cincinnati representing relatively larger numbers of Catholic persons suggests the possibility that Catholic voters, themselves, may be decidedly active in the use of the franchise on issues of public school finance. Indeed, from the evidence of the valuations of the vote of populations representing the larger number of Catholic persons, much reliance can be placed on the probability that Catholic voters of Cincinnati are markedly opposed to issues concerned with public school support and, in addition, are more interested and concerned about the outcome of such issues than the voting populations of the entire city.

The interest of Jewish populations in the issues.- Jewish populations of Cincinnati reside in those populations that apparently take no greater and no less interest or concern in matters of public school finance, as revealed by the data of Table XXX. The same procedure was followed to evaluate the difference between the means of the per cent of eligible voters who actually voted and the per cent of Jewish populations as was followed in the treatment of the Protestant and Catholic populations. The mean per cent of voters who went to the polls in tracts in which relatively large numbers of Jewish persons lived was only slightly different from the mean per cent of voters who voted in tracts whose Jewish populations were relatively small. Values of t and their respective probabilities of a true difference, as shown by

Table XXX, reveal conclusively that any difference between the extent of the vote of these populations is insignificant, and that no real difference exists.

The interest of religiously indifferent populations in the issues.-

Less interest in the issues of public school finance is manifested by populations of Cincinnati representing persons whose religious affiliations are unspecified, unknown, or who claim no religious affiliation than by religiously affiliated groups. This diminished concern on the part of the more indifferent religious persons is disclosed by evaluating the difference between the means of the relative number of eligible

TABLE XXX

THE RELATIVE NUMBER OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES
OF 1935 IN AREAS WHERE THE JEWISH POPULATION IS
RELATIVELY LARGE AND RELATIVELY SMALL

Issue	Mean Per Cent of Voters Who Voted in Tracts with Jewish Populations		Differ- ence $M_2 - M_1$	Est'd $\sigma_{M_2 - M_1}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean of 4 Per Cent	Below Mean of 4 Per Cent				
1935 Levy	39.6	40.8	1.2	2.200	0.545	42
1935 Bond	39.3	40.1	0.8	2.615	0.306	24

voters who actually voted on the two issues of 1935 in areas comprising relatively large numbers whose religious affiliations were unspecified, unknown, or who were unaffiliated with any religion and in areas composed of relatively small numbers of these persons. Table XXXI shows the data for these evaluations.

It is evident from Table XXXI that populations that embrace relatively large numbers of persons whose religious ties appear to be weak

are not as active in going to the polls when school finance issues are presented to the public as are those persons representing populations affiliated with some specified religion. Furthermore, the difference between the extent of the vote of these two populations is statistically significant, and is not because of chance alone. Populations in Cincinnati identified by persons whose religious ties are

TABLE XXXI

THE MEAN NUMBER OF ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935
IN TWO AREAS WHERE THE NUMBER OF UNSPECIFIED, UNAFFILIATED,
AND UNKNOWN RELIGIOUS POPULATIONS ARE RELATIVELY
LARGE AND RELATIVELY SMALL

Issue	Mean Per Cent of Voters Who Voted in Tracts with No. of Religiously Indifferent Persons		Difference $M_2 - M_1$	Est'd $\sigma M_2 - M_1$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Per Cent of 14	Below Mean Per Cent of 14				
1935 Levy	37.9	43.0	5.1	1.913	2.656	99 +
1935 Bond	36.7	42.9	6.2	2.022	3.066	99 +

not as strong as those of their more religious neighbors tend to vote more favorably for the issues of public school finance, as revealed by the data from Table XXVII. This tendency to favor the issues by those who represent the more religiously indifferent populations, however, is offset somewhat by the tendency of such populations to ignore the voting privilege, as revealed by the data of Table XXXI.

Summary

In the analysis of the various religious populations of Cincinnati and of their effect upon the outcome of the vote on the issues of public

school finance, four religious populations were used, namely, the Protestant, the Catholic, and the Jewish populations, and the population consisting of persons whose religion was not specified, who were unaffiliated, or whose religious affiliation was unknown. All data on religious populations used for this part of the study came from the 1935 Regional Census.

All specified denominations of Protestant faith were combined into the first mentioned religious population, so as to eliminate various religious groups whose numbers were too small for separate treatment. The principal reason for combining these various Protestant populations, however, is based on the assumption that they possess educational policies and practices that have some elements in common. Most important of these common elements is that Protestants, as a rule, look to the public schools of Cincinnati for the education of youth.

In contrast, Catholic populations provide much of the educational training of Catholic youth in their own privately financed institutions. It is for this reason that Catholic populations are treated as a separate population in the study. The Jewish population comprises the third group, and the fourth population used in this part of the study consists of all other persons who are not affiliated with the other three religious groups. For the most part, this last population consists of persons who are not affiliated with any religion or whose religious affiliation is unknown. It is, for this reason, probably the most religiously indifferent population of the four.

An attempt was made to determine whether real differences exist between the trend of the vote of the four religious populations and

populations of the entire city. As in other parts of the study, evaluations of differences were computed between the relative number of persons in the four religious populations in those areas where the favorable vote on the issues was relatively high and in areas where it was relatively low. Differences in the relative extent of activity in voting on the part of the religious populations were also evaluated in order to ascertain which religious populations are particularly interested and concerned about public school finance.

The evidence from the study supports the conclusion that populations of Cincinnati representing relatively large numbers of Catholic and Jewish persons and those persons who reflect attitudes of indifference toward religious affiliation tend either to favor or to oppose issues of public school finance one way or the other. In the case of the populations in Cincinnati that represent larger numbers of Protestant persons, however, the evidence is not so conclusive, although the evaluations of the difference in seven of the eleven issues covered by the study show measures that border on statistical significance. Indeed, it is highly probable from the evidence of the analysis that populations in Cincinnati composed largely of Protestant persons tend to vote slightly more favorably for all issues of public school finance. By inference, the belief that the Protestant population of Cincinnati, taken as a whole, tends to subscribe more favorably to issues of public school support than does the voting population of the entire city is highly credible. Populations identified largely by Protestant adherents, however, disclose no greater interest or concern about matters of public school finance than do the populations of the city at large.

The attitude of populations comprising relatively large numbers of Catholic persons toward issues of public school finance is decidedly more evident than that of populations representing large numbers of Protestants, but in the opposite direction. The analysis applied to populations of Cincinnati composed largely of Catholic adherents reveals that they tend to vote markedly against the issues. Moreover, the populations of the city identified with relatively large numbers of Catholic voters manifest considerable concern about matters related to public school support. This increased interest is revealed by the fact that a larger percentage of eligible voters actually vote on the issues in those areas of the city whose populations consist of larger numbers of Catholic persons.

The marked tendency for the populations of Cincinnati associated with relatively large numbers of Catholic persons to subscribe less favorably for the issues lends credence to the belief that Catholic voters, themselves, are decidedly opposed to issues calling for increased levies for the public schools of the city. This inference, however, has not been proved, since the evaluations of the difference between the vote of the two populations can be made only from populations representing relatively different numbers of Catholic persons. However, from the evidence of the evaluations, much reliance is placed on the probability that Catholic voters of Cincinnati, taken as a whole, are generally opposed to issues dealing with public school finance. Their apparent opposition to the adequate financing of a public school program can be best explained in that Catholic families are already supporting educational institutions separate from the Cincinnati Public Schools for much of the training of their children.

Of all the populations of Cincinnati, classified with reference to their religious affiliation, the one identified with large numbers of Catholics tends to be most opposed to the issues. The relative magnitude of the vote of this population comprised largely of Catholic adherents carries considerable weight in the outcome of school finance issues presented to the Cincinnati public. The question consequently arises as to whether adequate financial support of public education in Cincinnati is thus threatened by a population representing the largest single religious body in the city.

Jewish people of Cincinnati are associated with populations that reflect attitudes more favorable to the support of public school finance issues. All valuations of differences with reference to the Jewish population are statistically significant. As in the case of populations identified with relatively large numbers of Protestant persons, however, the populations representing large numbers of Jewish persons show no greater interest or concern about matters of public school support than voting populations of the entire city.

Populations of Cincinnati associated with the more religiously indifferent persons of the city, consisting of unspecified religious groups, unaffiliated persons, and persons whose religion is unknown, tend to vote more favorably for the support of public schools. Other conditions being equal, there would be reason to expect the population representing the more religiously indifferent persons to carry weight in the direction of the vote on the issues. The tendency to subscribe more favorably to the issues, however, is counterbalanced partly by a diminished vigilance in the exercise of the privilege of voting. Apparently, the population representing the less active religious groups in Cincinnati is not really concerned much about matters of educational support.

CHAPTER VII

THE STATUS OF THE FAMILY IN CINCINNATI AND THE VOTE

Introduction

The family varies in size, in the number of children of public school age, in the marital status of its members, and in other characteristics. Each person composing the various populations already treated in the present study is a member of some family group. Is it possible that differences in the composition of families in Cincinnati exist with reference to the extent of favorable vote on matters of public school finance? Do large families tend to vote differently on the issues from small families? Does the number of children in the family of public school age contribute to differences in the relative number of favorable votes? Do married persons in Cincinnati tend to vote differently on school finance issues from single adults? These are some of the questions the present chapter will attempt to reveal.

The Family of Average Size

Distribution in 1935.- The average family in Cincinnati in 1935 comprised 3.077 persons,¹ as compared with 3.720 persons in 1930. Appendix V-A presents the data for the number of families in the city in 1935 and the mean number of persons in the family by census tract.

¹The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, Table 17, pp. 210-12. Cincinnati: Cincinnati Employment Center, 1937.

Map XXVII represents the distribution of the average number of persons per family for the same year.

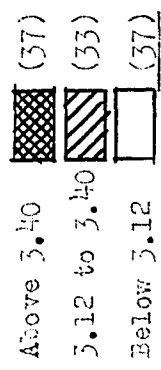
Families with memberships much above the average in 1935 are located to a large extent in the western part of Cincinnati west of Mill Creek, and in tracts in the eastern and northern parts of the city. Most of the census tracts outside the Basin and bordering the Ohio River are areas in which the average number of persons in the family is high. Areas in which the average number of persons in the family is relatively low are found in the census tracts included in the Basin and in those extending northward and eastward to St. Bernard and Norwood, with the exceptions of tracts 12, 13, and 43, which border the Ohio River. The average family membership in all tracts in the Basin, which includes the first seventeen and tracts 24 and 91, is 2.776 persons, while for all areas outside of the Basin the average family membership is 3.209.²

Comparison of Map XXVII with Map XVI shows that an interesting and marked relationship stands between the size of the family in Cincinnati and the distribution of families owning their own homes. Likewise, comparison of Map XXVII with Map XVII shows a similar relationship between the size of the family and the relative number of radios in the population. Apparently, large families in Cincinnati are located in areas where property ownership is relatively high. Conversely, small families are found in areas where the economic status of the population of Cincinnati is relatively low. Somewhat the same relationship exists

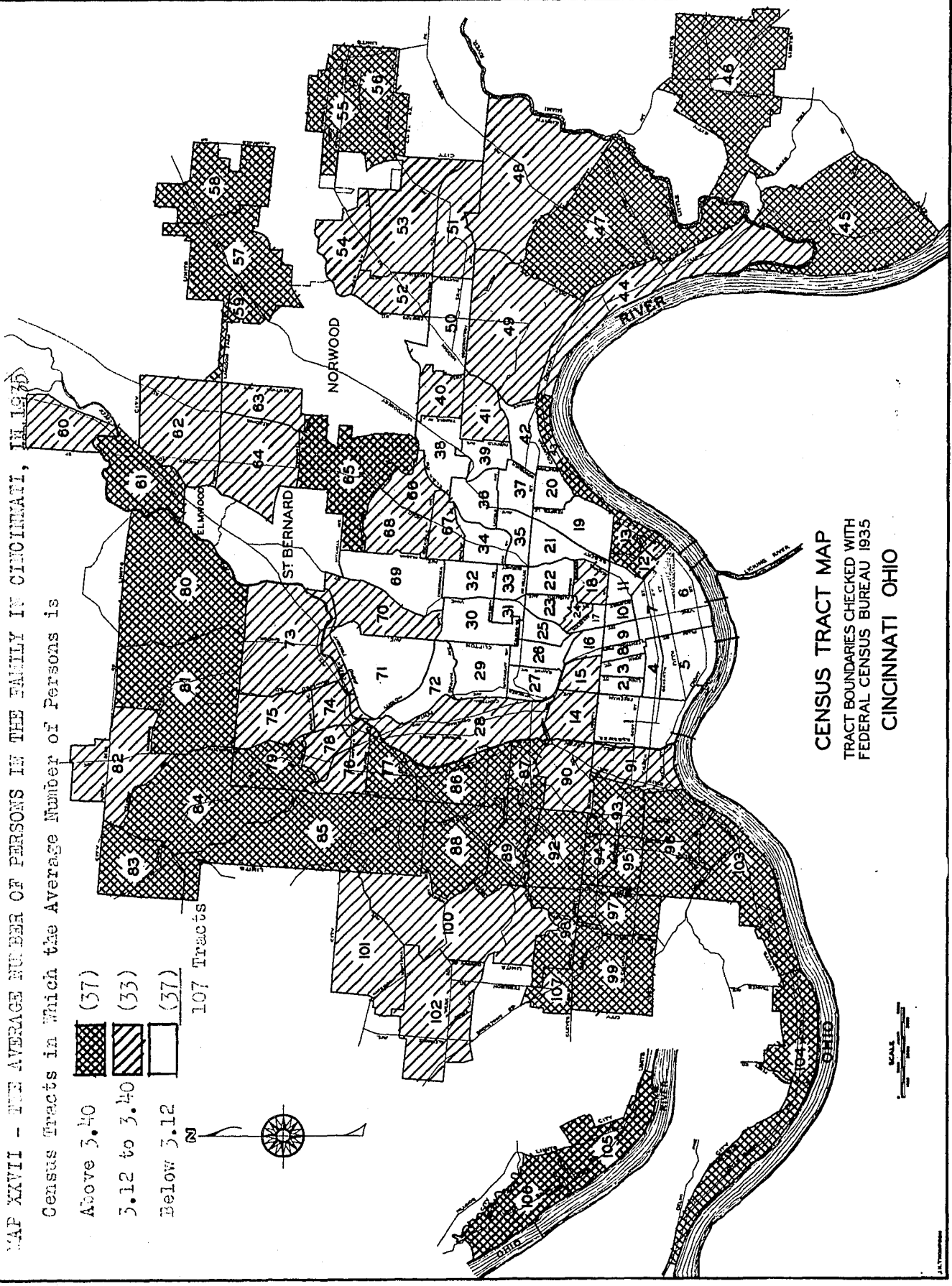
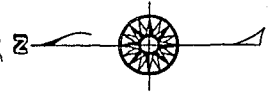
²
Ibid.

MAP XXVII - THE AVERAGE NUMBER OF PERSONS IN THE FAMILY IN CINCINNATI, IN 1975

Census Tracts in Which the Average Number of Persons is



107 Tracts



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO



between the size of the family in Cincinnati and the distribution of the Catholic population. In general, large families are located in areas where the Catholic population is relatively large, and areas where the family membership is small generally indicate tracts with relatively few Catholics. Mention of these relationships will be made later.

The vote of families of average size.- Differences were evaluated between the means of the average number of persons in the Cincinnati family in areas of relatively high and relatively low favorable vote in order to determine whether such differences are real. The difference between the means of the average number of persons in families whose populations voted relatively high on the issues and the means in families whose populations voted relatively low was computed, and the differences for each of the issues were evaluated. Table XXXII gives the data for the evaluations.

In every issue of the study, the populations whose favorable vote is relatively high include those families whose membership is relatively low. Conversely, populations whose favorable vote on the issues is relatively low have larger family memberships. The difference between the means of the average family membership of the two populations, moreover, is statistically significant. It is evident from Table XXXII that, in general, the tendency of voters in Cincinnati to oppose the issues is more marked in populations whose families have large memberships. It can be said with a high degree of confidence that the difference between the vote on issues of public school finance, with respect to families in Cincinnati having large memberships and those whose

TABLE XXXIII

THE AVERAGE NUMBER OF PERSONS PER FAMILY IN 1935 IN TWO AREAS
WHERE THE FAVORABLE VOTE ON THE ISSUES IS RELATIVELY
HIGH AND RELATIVELY LOW

Issue	Mean Number of Persons in Family in Tracts Whose Populations Vote		Differ- ence Between Means	Est'd. σ of Differ- ence Between Means	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	2.99	3.39	0.40	.0611	6.547	99 +
1934 Levy	3.03	3.32	0.29	.0532	5.451	99 +
1935 Levy	2.99	3.29	0.30	.0608	4.934	99 +
1935 Bond	3.00	3.36	0.36	.0573	6.283	99 +
1936 Levy	3.00	3.35	0.35	.0543	6.444	99 +
1936 Levy ^o	3.03	3.36	0.33	.0599	5.509	99 +
1937 Levy	3.01	3.36	0.35	.0581	6.024	99 +
1937 Bond	3.03	3.34	0.31	.0631	4.913	99 +
1938 Bond August	3.03	3.34	0.31	.0602	5.150	99 +
1938 Bond November	2.96	3.37	0.39	.0557	7.002	99 +
1939 Levy	3.03	3.35	0.32	.0551	5.808	99 +

^o A levy issue for the purpose of financing a building program.
All other levy issues mentioned above are for operating expenses.
All bond issues are for building purposes.

membership is smaller, are real differences.

In order to verify the relationship between the average number of persons per family and the per cent of favorable vote on the issues, correlation coefficients were computed. Because the data on the number of persons per family came from the 1935 Regional Census, the returns of the favorable vote from the levy and bond issues of 1935 were used for the determinations. For the data on the 1935 levy for operating expenses r is $-.474$, and for the bond issue for buildings r is $-.521$. Both values of r are statistically significant. In general, the greater the number of persons in the family, the greater the tendency of the voters of Cincinnati to vote more in opposition to the issues of public school finance.

Family Size and the Vote

Introduction.— Except for the data on the average number of persons in the family, the Regional Census of 1935 supplies no facts about the relative number of families of large or small memberships. However, the 1930 Federal Census provides complete data for Cincinnati concerning the number of families whose memberships consisted of one member, two members, and so on up to and including twelve and more members.³ The latter data were employed to evaluate differences between the means of the per cent of families of a specific number of members in areas whose populations vote relatively high on the issues and in areas where the vote is relatively low. In this way,

³ United States Federal Census of Cincinnati, Ohio, 1930, pp. 1-107. (Photostatic Copies).

populations of small, medium, or large family membership were investigated with reference to differences in the extent of favorable vote on the issues of public school finance.

The number of families with memberships of one and two persons was combined and the percentage of families with these memberships in the total population of families was computed for each census tract. The same treatment was used with families whose memberships consisted of three and four members, five and six members, and finally seven and eight members. Appendix V-B gives the data for all these family membership populations in terms of percentages and by census tract. According to the data given in Appendix V-B, 37.5 per cent of all families living in Cincinnati in 1930 consisted of one and two members; 40.0 per cent were composed of three and four persons; families of five and six members constituted 16.6 per cent; those with seven and eight members comprised 4.4 per cent; and 1.5 per cent of the families were composed of nine and more members.

The family of small size.— Small families in Cincinnati with memberships of only one or two persons, according to the data of the 1930 Federal Census and as represented by Map XXVIII, are concentrated in the Basin and in those tracts extending northward and eastward to St. Bernard and Norwood. Families with memberships as small are seldom found in all the western and northern parts of the city east of Mill Creek, in tracts between St. Bernard and Norwood and north of Norwood, and in the extreme southeast part of the city. By far a greater

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MAP XXVIII - FAMILIES IN CINCINNATI WITH MEMBERSHIPS OF ONE AND TWO PERSONS, 1930

Census Tracts in Which the Percentage of Families of One and Two Persons is

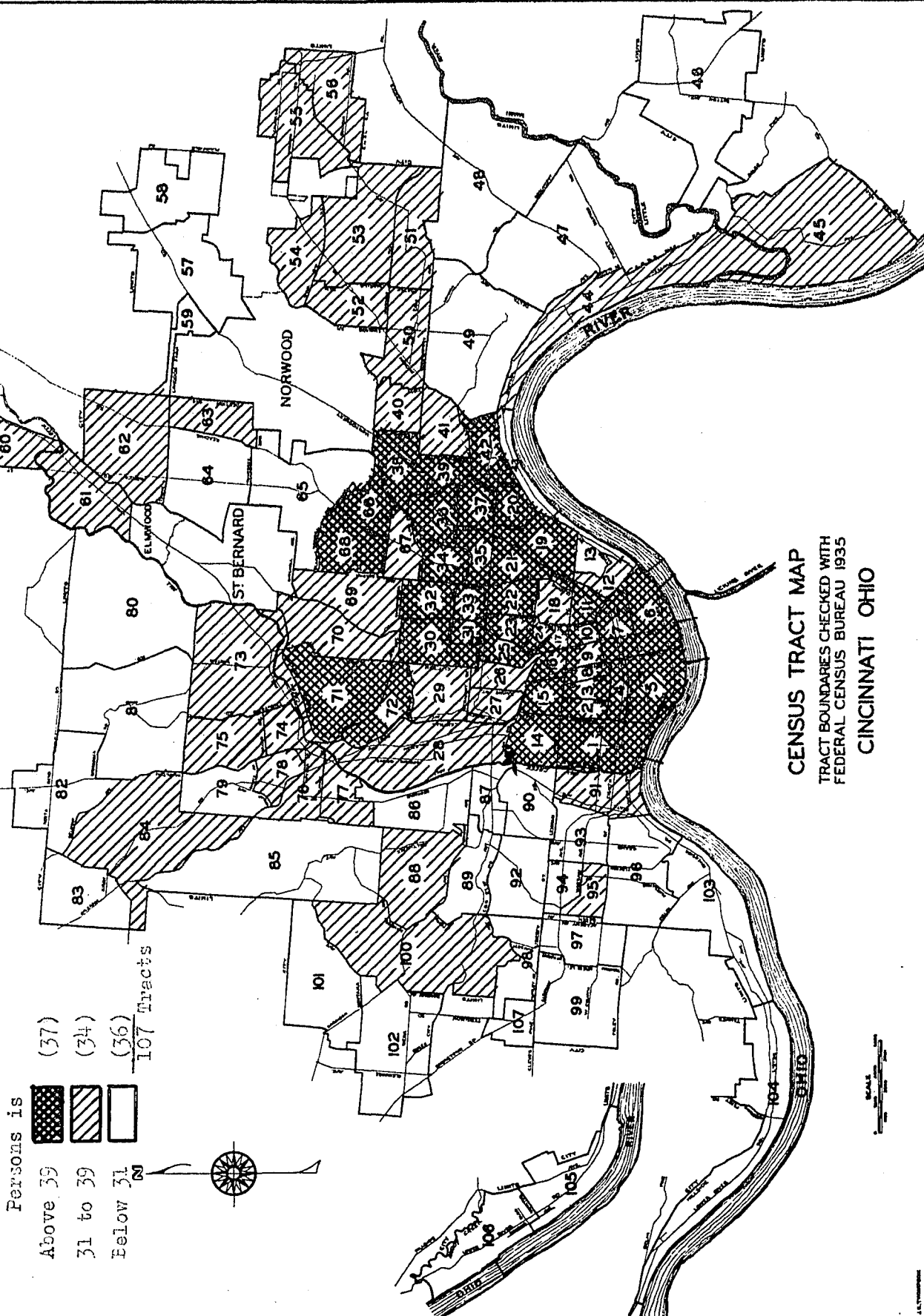
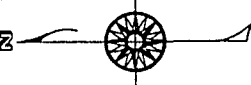
Persons is

Above 39 (37)

31 to 39 (34)

Below 31 (36)

107 Tracts



CENSUS TRACT MAP

TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935

CINCINNATI OHIO

SCALE

number of small families of one and two members are located where the ownership of homes and property is lowest, as represented by Map XVI and Map XVII, and where the Catholic population is relatively small, as shown by Map XXIV.

Differences were computed between the means of the per cent of families having memberships of one and two persons in areas wherein the favorable vote on the issue was relatively high and in areas wherein it was relatively low. Evaluations of the differences were made for each of the issues of the study in order to determine whether real differences exist. The valuations, as shown by Table XXXIII, are all statistically significant. From the data presented by Table XXXIII, it is certain that populations in Cincinnati consisting of small families of one or two persons tend to vote more in favor of the issues of public school finance than do populations comprising families with larger memberships.

Correlation coefficients computed between the number of families having memberships of one and two persons and the per cent of favorable vote on the 1935 levy and bond issues are .512 and .598 respectively. Both coefficients are found to be statistically significant. In general, the larger the number of small families in Cincinnati, the higher the per cent of favorable vote on issues of public school finance. On the other hand, the smaller the number of families consisting of one or two persons in the city, the lower the per cent of favorable vote.

Families composed of three and four persons.- Families in Cincinnati whose memberships consist of three and four persons are, in general,

TABLE XXVIII

FAMILIES WITH MEMBERSHIPS OF ONE AND TWO PERSONS, 1930, IN
TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH
AND RELATIVELY LOW ON THE ISSUES

Issue	Mean Per Cent of Families of One and Two Persons in Tracts with Populations Voting		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	42.2	31.0	11.2	1.619	6.918	99 +
1934 Levy	40.0	31.3	8.2	1.755	4.673	99 +
1935 Levy	41.9	30.8	11.1	1.625	6.831	99 +
1935 Bond	41.9	30.6	11.3	1.575	7.174	99 +
1936 Levy	42.4	33.9	8.5	1.679	5.063	99 +
1936 Levy*	41.0	30.7	10.3	1.513	6.785	99 +
1937 Levy	41.1	31.0	10.1	1.628	6.204	99 +
1937 Bond	41.2	30.9	10.3	1.552	6.637	99 +
1938 Bond August	41.2	30.6	10.6	1.574	6.734	99 +
1938 Bond November	43.5	30.4	13.1	1.423	8.804	99 +
1939 Levy	40.6	31.0	9.6	1.661	5.780	99 +

*A levy for the purpose of financing a program for buildings. All other levy issues were for operating expenses. All bond issues were for the financing of building programs.

those slightly larger than the average Cincinnati family in 1930. As shown by Map XXIX, the distribution of such families is somewhat scattered, but areas in which the highest percentage of families consists of three and four persons are found in the tracts outside the Basin extending northeastward toward Norwood. Tracts surrounding St. Bernard and Norwood and those in the eastern part of the city are areas having a relatively high percentage of families consisting of three and four persons. Census tracts along the Ohio River, as well as those in the Basin, are areas in which few families of three and four members reside.

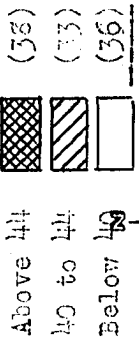
Map XXIX and Map XVII reveal a striking relationship between the distribution of families of three and four persons and the relative wealth of populations of Cincinnati, as shown by the number of radios per one hundred families. It appears that where average families of three and four members are found in greatest number the economic welfare of the populations is generally on a fairly substantial level.

Evaluations of differences between the means of the per cent of families having memberships of three and four persons in areas where the favorable vote on the issues is relatively high and in areas where it is relatively low show measures all of which are statistically significant. Populations composed of greater numbers of families with memberships of three and four persons, however, do not subscribe to the issues as do populations in Cincinnati with family memberships of one and two persons. The trend of the vote of families of slightly more than average size tends to be more unfriendly to the issues of public school finance than that of families with memberships of one and two persons. The difference

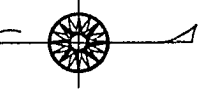
MAP XXIX - FAMILIES IN CINCINNATI WITH MEMBERSHIPS OF THREE AND FOUR PERSONS, 1970

Census Tracts in Which the Percentage of Families with Three and

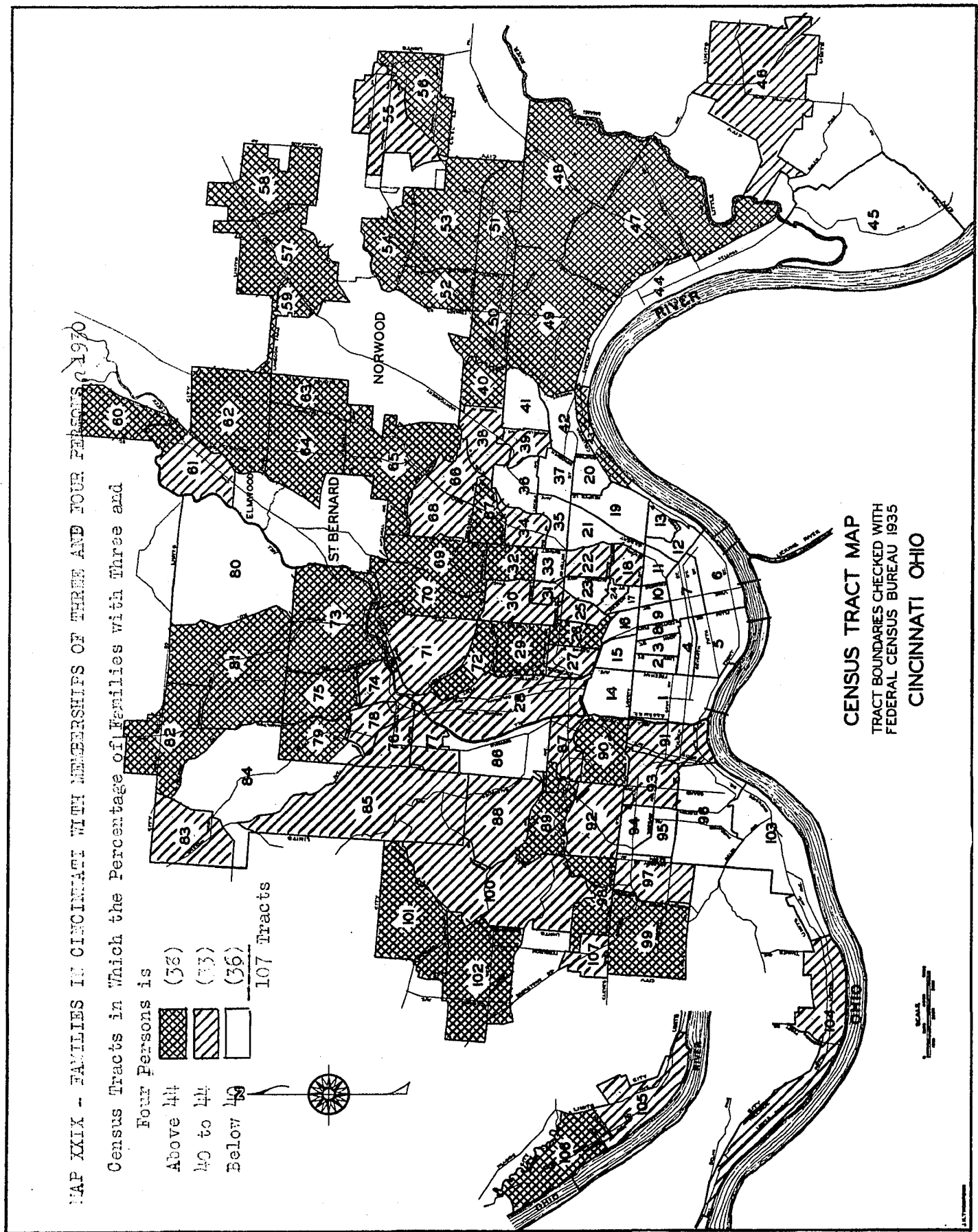
Four Persons is



107 Tracts



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO



between the means of the relative number of families composed of three and four persons in the two areas whose populations vote differently on the issues is a real difference, as revealed by Table XXXIV, and could not have happened by chance alone.

Coefficients of correlation computed between the per cent of families with memberships of three and four persons and the per cent of favorable vote on the 1935 levy and bond issues are found to be $-.248$ and $-.219$ respectively, both of which are statistically significant. On the whole, the larger the relative number of families in Cincinnati whose membership consists of three and four persons the smaller the favorable vote on the issues.

The family of large size.- Map XXX represents the distribution of families in Cincinnati in 1930 whose membership consisted of five and six persons. Map XXXI represents the distribution of families whose membership consisted of seven and eight members, and Map XXXII represents the distribution of families in which the number of persons was nine or above. An examination of the three maps shows that, in general, families of large size reside especially in the western part of Cincinnati, in tracts to the north, and in census tracts that border the Ohio River outside the Basin. A higher percentage of extremely large families, as shown by Maps XXXI and XXXII, is also found in those tracts in the western part of the Basin and in other tracts in the city in which large percentages of Negroes are located.

A marked relationship is noticeable particularly between the distribution of large families of five to eight persons, as shown

TABLE XXIV

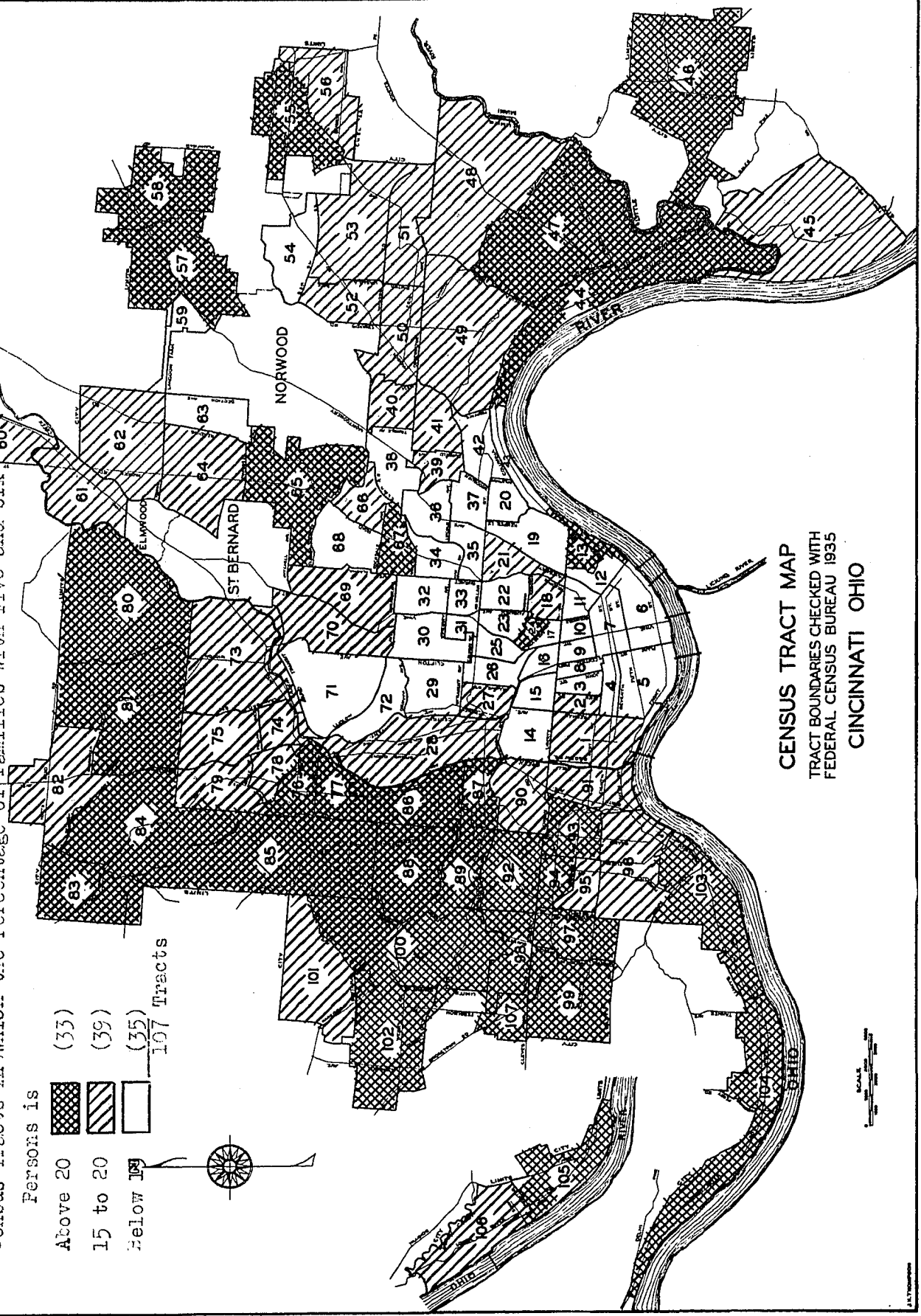
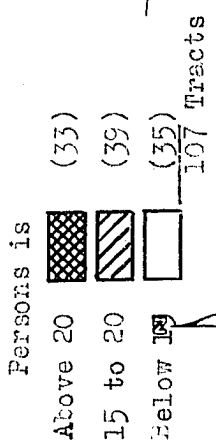
FAMILIES WITH MEMBERSHIPS OF THREE AND FOUR PERSONS, 1930, IN
TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH
AND RELATIVELY LOW ON THE ISSUES

Issue	Mean Per Cent of Families of Three and Four Persons in Tracts with Populations Voting		Difference $\bar{X}_2 - \bar{X}_1$	Est'd. $\sigma_{\bar{X}_2 - \bar{X}_1}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	35.5	47.1	3.2	1.117	2.865	99+
1934 Levy	39.0	44.0	5.0	1.177	4.243	99+
1935 Levy	38.3	42.3	4.0	1.152	3.445	99+
1935 Bond	38.6	43.0	4.4	1.082	4.067	99+
1936 Levy	37.5	43.6	6.1	1.032	5.911	99+
1936 Levy ^o	38.7	43.6	4.9	1.052	4.631	99+
1937 Levy	39.4	42.4	3.0	1.087	2.760	99+
1937 Bond	38.4	43.3	4.9	1.090	4.499	99+
1938 Bond August	38.4	42.6	4.2	1.101	3.815	99+
1938 Bond November	37.4	43.6	6.2	1.023	6.031	99+
1939 Levy	39.4	42.5	3.1	1.113	2.772	99+

^o A levy issue for the financing of a building program. All other levy issues mentioned are for operating expenses. All bond issues are for the financing of building programs.

MAP XXX - FAMILIES IN CINCINNATI WITH MEMBERSHIPS OF FIVE AND SIX PERSONS 1970

Census Tracts in Which the Percentage of Families with Five and Six Persons is

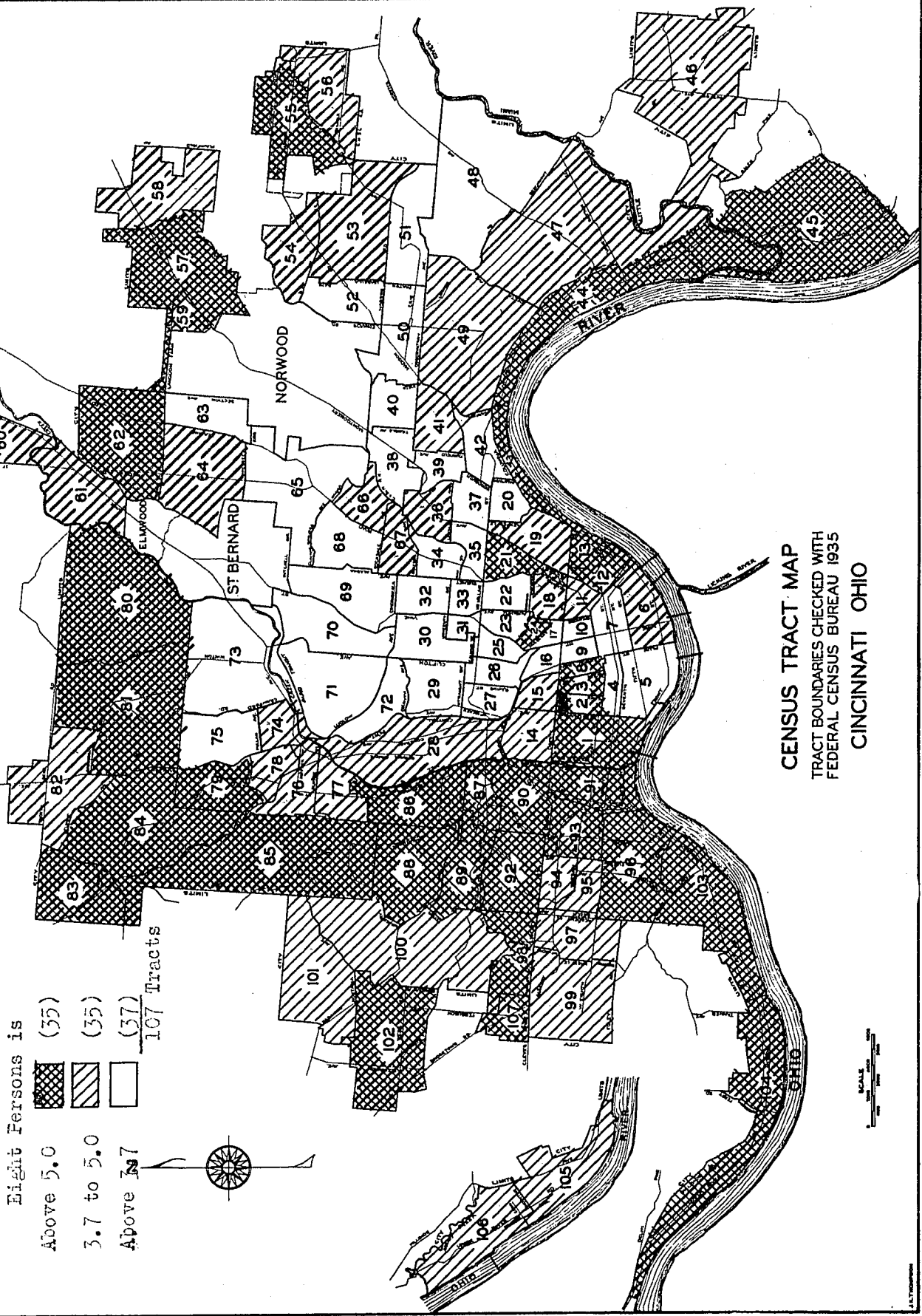


CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

-132-

MAP XXXI - FAMILIES IN CINCINNATI WITH MEMBERSHIPS OF SEVEN AND EIGHT PERSONS, 1930
Census Tracts in Which the Percentage of Families with Seven and Eight Persons is

- Eight Persons is
- Above 5.0 (35)
 - 3.7 to 5.0 (35)
 - Above 3.7 (37)
- 107 Tracts



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

MAP XXXII - FAMILIES IN CINCINNATI WITH MEMBERSHIPS OF NINE PERSONS AND ABOVE, 1930

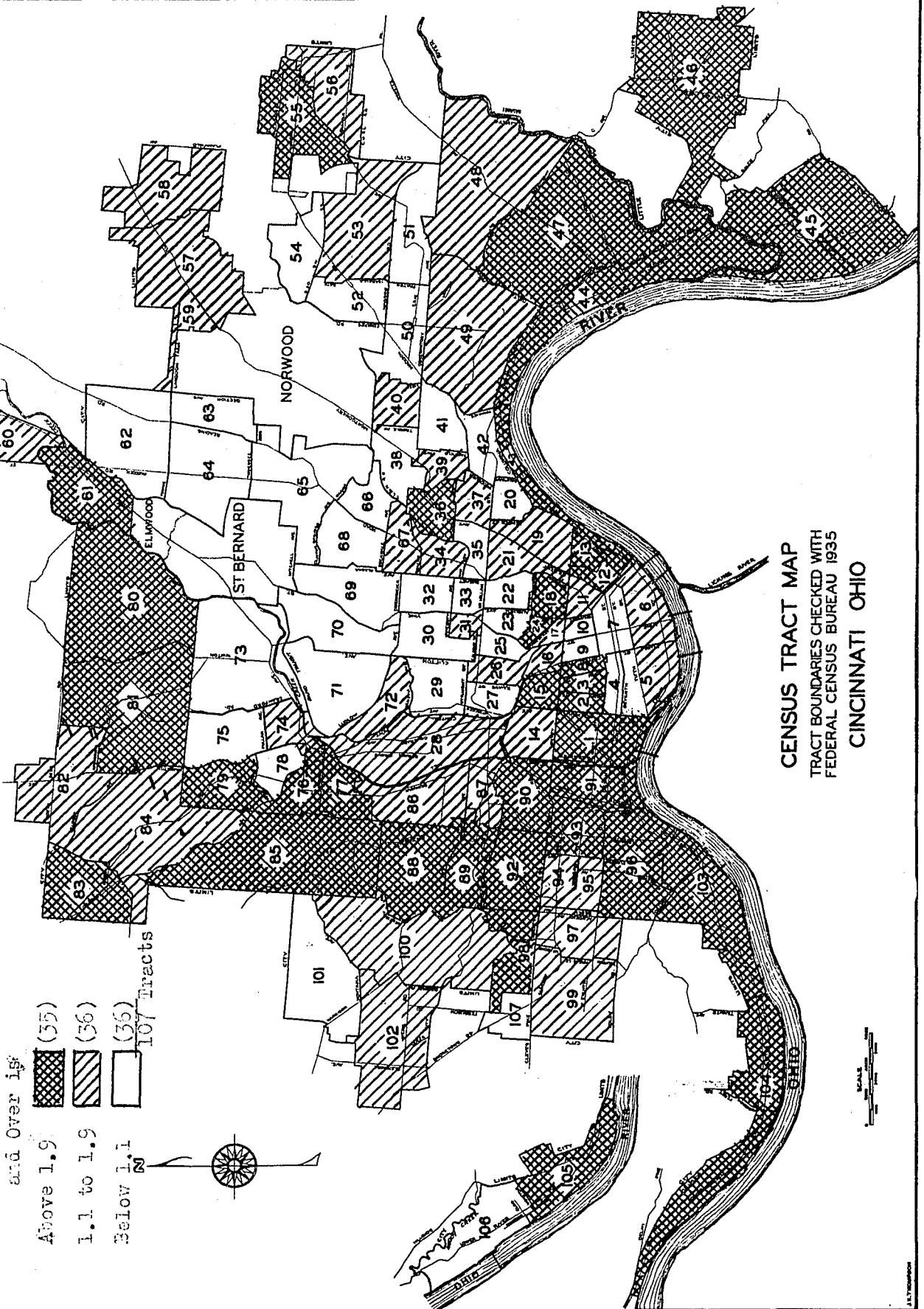
Census Tracts in Which the Percentage of Families with Nine Persons and Over is:

Above 1.9% (35)

1.1 to 1.9% (36)

Below 1.1% (36)

107 Tracts



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI, OHIO

by Maps XXX and XXXI, and the distribution of home and property ownership, as represented by Maps XVI and XVII. Large families in Cincinnati are found mostly in areas where home ownership is relatively high, while few large families are located in those areas of the city whose populations are less wealthy. The location of large families compared with the distribution of the Catholic population, as represented by Map XXIV, also shows that large families are found, for the most part, in those areas where the number of Catholics is relatively large.

In the evaluations of the difference between the means of the per cent of families in Cincinnati whose membership consisted of five or more persons in areas of relatively high and relatively low favorable vote, the same procedure was employed as that for the evaluations of the difference for smaller families. Census tracts in the city were divided on the basis of the per cent of favorable vote on the issues above and below the mean favorable vote. The per cent of families whose membership consisted of five and six persons was then listed by census tract, and the difference between the means of the two populations was computed. Evaluations were then made to determine whether the differences for each of the eleven issues were true differences. The same procedure was used in the treatment of families whose membership consisted of seven and eight persons. The data for the differences between the means and the values of t for families of five and six members are presented in Table XXXV, and the same data for families of seven and eight persons are included in Table XXXVI.

Populations in which the vote on the issues of public school finance

TABLE XXV

FAMILIES WITH A MEMBERSHIP OF FIVE AND SIX PERSONS, 1930, IN
TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH
AND RELATIVELY LOW ON THE ISSUES

Issue	Mean Per Cent of Families with Five and Six Persons in Tracts with Populations Voting		Difference $M_2 - M_1$	Est'd. $\sigma M_2 - M_1$	Value of $\frac{t}{s}$	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	14.0	18.3	4.3	0.796	5.403	99+
1934 Levy	14.7	18.0	3.2	0.835	3.952	99+
1935 Levy	14.1	18.4	4.3	0.827	5.199	99+
1935 Bond	14.1	18.5	4.4	0.791	5.563	99+
1936 Levy	14.2	17.9	3.7	0.835	4.431	99+
1936 Levy [*]	14.6	18.3	3.7	0.819	4.518	99+
1937 Levy	14.2	18.5	4.3	0.817	5.263	99+
1937 Bond	14.7	18.1	3.4	0.897	3.790	99+
1938 Bond August	14.6	18.1	3.5	0.919	3.809	99+
1938 Bond November	13.7	18.4	4.7	0.810	5.802	99+
1939 Levy	14.5	18.5	4.0	0.824	4.854	99+

^{*} A levy issue for the purpose of financing a building program. All other levy issues are for operating expenses. All bond issues are for building programs.

TABLE XXXVI

FAMILIES WITH A MEMBERSHIP OF SEVEN AND EIGHT PERSONS, 1930, IN TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH AND RELATIVELY LOW ON THE ISSUES

Issue	Mean Per Cent of Families of Seven and Eight Persons in Tracts with Populations Voting		Difference $M_2 - M_1$	Est'd. $\sigma_{M_2 - M_1}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	4.1	5.2	1.1	0.412	2.669	99+
1934 Levy	4.2	5.2	1.0	0.381	2.625	99+
1935 Levy	4.0	5.5	1.5	0.374	4.011	99+
1935 Bond	4.3	5.2	0.9	0.390	2.309	98+
1936 Levy	4.2	5.2	1.0	0.386	2.591	99+
1936 Levy ^o	4.2	5.3	1.1	0.390	2.821	99+
1937 Levy	4.1	5.3	1.2	0.395	3.033	99+
1937 Bond	4.3	5.1	0.8	0.403	1.965	95+
1938 Bond August	4.3	5.1	0.8	0.398	2.010	96+
1938 Bond November	4.1	5.3	1.2	0.391	3.069	99+
1939 Levy	4.2	5.4	1.2	0.388	3.093	99+

^oAn issue for the purpose of financing a building program. All other levy issues are for operating expenses. All bond issues are for the financing of building programs.

is relatively high have fewer families with a membership consisting of five and six persons, as given in Table XXXIV. Likewise, families whose membership consists of seven and eight persons are relatively few in populations whose vote for the issues is high. The differences between the percentages of families of large membership in populations whose vote on the issues is relatively high and in populations whose vote is relatively low, as shown by both tables, are large enough to be statistically significant. The differences between the size of families in populations that lend support to the issues and in populations that tend to oppose them could not have happened by mere chance. Populations in Cincinnati in which reside small families of one and two members are inclined to vote more favorably on the issues. Conversely, populations in Cincinnati whose family membership is larger than one or two persons tend to vote less in favor of the issues.

The conclusions concerning the significance of differences between the means of the per cent of families with large membership and the per cent of favorable vote on the issues are verified by the obtained coefficients computed between the per cent of large families and the per cent of favorable vote. Coefficients of correlation computed between the per cent of families with a membership of five and six persons and the per cent of favorable vote on the 1935 levy and bond issues are $-.392$ and $-.523$ respectively. For families with a membership of seven and eight persons, coefficients are $-.374$ and $-.330$ respectively. All obtained coefficients are statistically significant. It is quite conclusive that these are not just casual relationships. Populations in

Cincinnati whose family membership is above the average tend to contribute toward diminished support on matters of public school finance.

The fact that populations in Cincinnati composed of large families tend to oppose the issues of public school finance is not sufficient evidence for concluding that family size is a causal factor in the determination of the way people vote on the issues. In all probability, family size may have little to do directly with the way populations vote on school finance, but may stand a fair chance of attending something more underlying. Indeed, the relationship between family size in Cincinnati and the relative wealth of populations of the city might justifiably lead to the more reasonable deduction that economic factors may be the causal influences instead. It has been clearly shown that populations of Cincinnati whose economic well-being appears to be highest tend to oppose the issues more than populations whose relative wealth is small. At the same time, families of large membership are located, for the most part, in those very areas where the relative wealth is fairly great, and where the support for the issues of public school finance is relatively low.

In addition, the study has shown that large families reside particularly in areas where the Catholic membership in Cincinnati is high, and that the populations comprising relatively large numbers of Catholics lend little support to the issues. This characteristic of large families to reside mostly in areas of relatively great wealth and where the number of adherents to the Catholic faith is relatively large points to the possibility that family size may only attend the more causal economic and religious forces.

The School Census

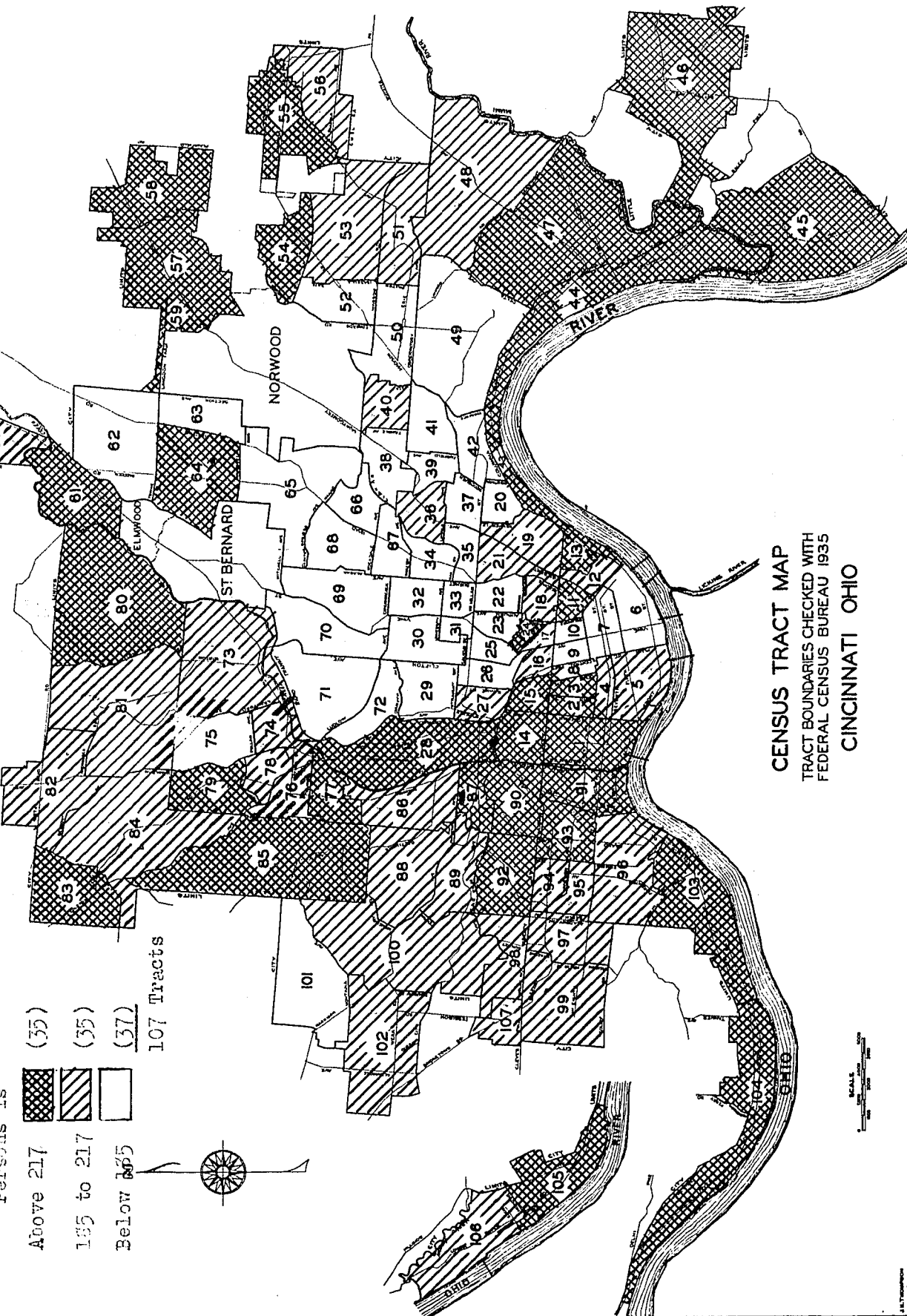
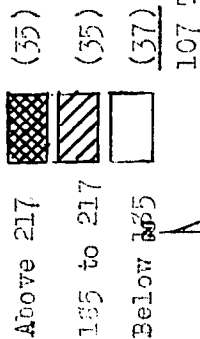
Where large numbers of school children are present in a population, one might reasonably expect that population to react more favorably toward an issue of public school finance than another population in which there are relatively few children. To determine whether such is the case, differences were evaluated between the means of the per cent of children of school age in populations whose favorable vote on the issues of public school finance was relatively high and in areas whose populations voted less favorably.

Distribution of school children in Cincinnati.- Data on the school census, which included all children in Cincinnati between the ages of five and seventeen inclusive, were available by census tract for each of the years covered in the study. The number of children of school age per one thousand persons was determined for each census tract, as presented in Appendix V-C. The distribution of these school children in 1935 per one thousand persons was plotted, as represented by Map XXXIII, and the distribution in 1933 per one thousand persons was determined, as shown by Map XXXIV. So similar was the distribution for both years that no other distributions for other years were plotted.

Both Maps XXXIII and XXXIV reveal that areas in which the largest numbers of children of school age per one thousand persons are located include census tracts in the western part of Cincinnati, in scattered tracts in the northern part of the city, in tracts in the extreme southeast, and in those tracts that border the Ohio River. Comparisons between both maps and Map XIII reveal that tracts in the Basin in which

MAP XXXIII - CHILDREN IN CINCINNATI FIVE TO SEVENTEEN YEARS OLD PER ONE THOUSAND PERSONS, 1935

Census Tracts in Which the Number of Children Per One Thousand Persons is



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO

SCALE
0 1 2 3 4 5 6 7 8 9 10
MILES

-191-

MAP XXXIV - CHILDREN 14 TO SEVENTEEN YEARS OLD PER ONE THOUSAND PERSONS, 1932

Census Tracts in Which the Number of Children Per One Thousand

Persons is

Above 219 (35)

135 to 219 (34)

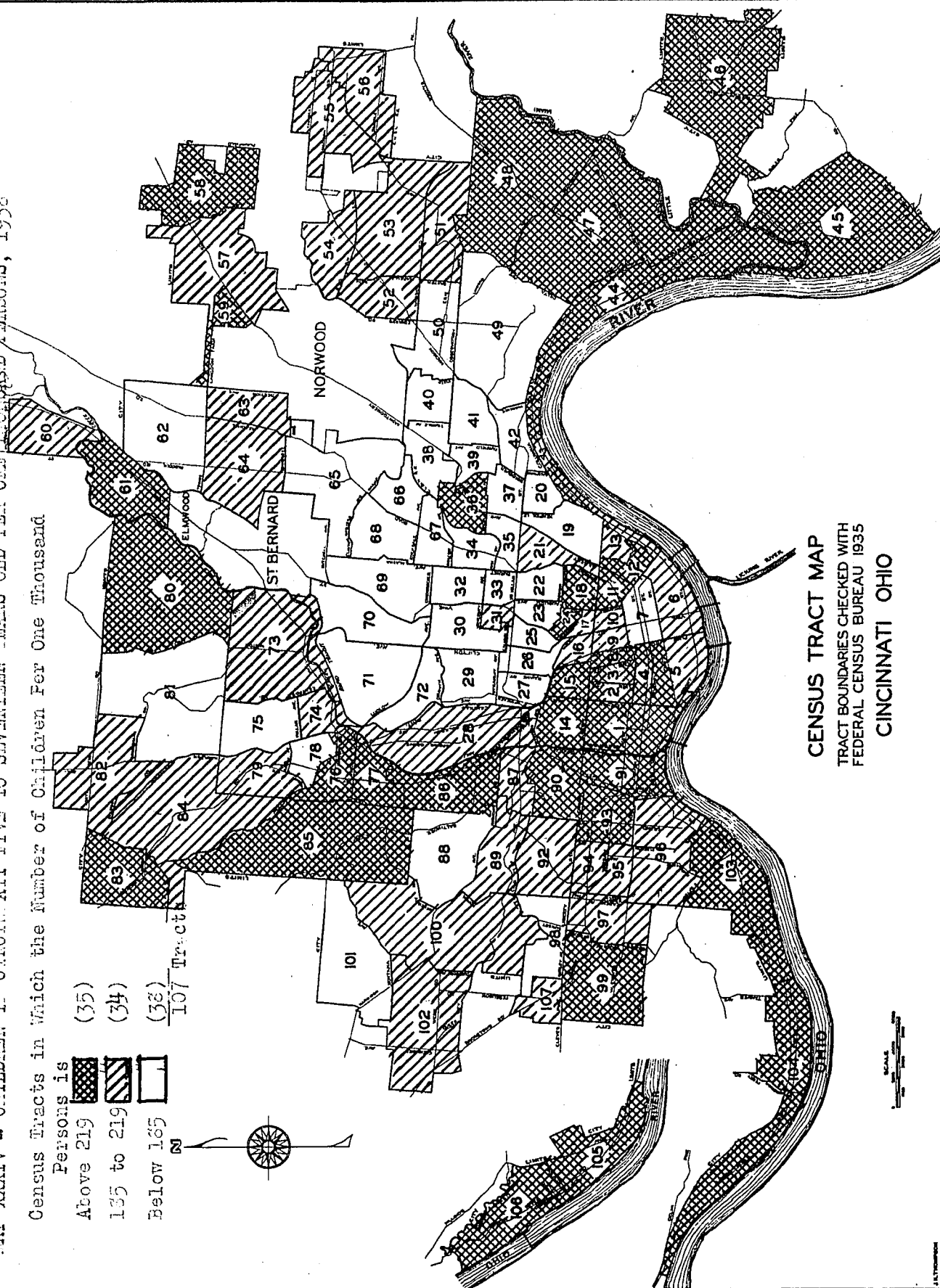
Below 135 (33)

107 Tracts

N



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO



there are heavy Negro populations also have large numbers of school children in the total population. Areas in which fewest children reside per one thousand persons are located in tracts that extend north of the Basin to St. Bernard and south of Norwood.

As a rule, areas whose populations are composed of large numbers of school children coincide fairly well with the areas of relatively great wealth and with areas whose populations contain relatively large numbers of Catholics. This characteristic of large numbers of school children in such populations naturally agrees with the comparisons made previously regarding the location of large families within the same areas.

The number of school children and the vote.- In the evaluation of differences to this part of the study, populations in Cincinnati were divided by census tract on the basis of the per cent of favorable vote above and below the mean per cent of favorable vote for each of the issues of the study. The number of children of school age per one thousand persons was then listed for each census tract, and the mean number of children for the two populations was then computed. The differences between the means, as presented by the data in Table XXXVII, show that for tracts whose populations vote less favorably on each of the issues the number of school children in the total population is higher than for tracts in which populations vote more favorably. The chances in one hundred that a true difference exists, as shown by the table, range from ninety for the levy for operating expenses of 1936 to ninety-nine, which is exemplary of most issues. Although two, or probably three, of the issues have valuations of a

TABLE XXXVII

CHILDREN FIVE TO SEVENTEEN YEARS OF AGE FOR EACH OF THE YEARS, 1933 TO 1939, IN TWO AREAS WHOSE POPULATIONS VOTE RELATIVELY HIGH AND RELATIVELY LOW ON THE ISSUES

Issue	Mean Number of School Children Per 1000 Persons in Tracts with Populations Voting		Difference $M_2 - M_1$	Est'd. $S_{M_2 - M_1}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	188	210	22	10.870	2.024	96 +
1934 Levy	185	213	28	9.105	3.075	99 +
1935 Levy	184	209	25	8.581	2.914	99 +
1935 Bond	187	209	22	8.245	2.668	99 +
1936 Levy	193	209	16	9.725	1.845	90
1936 Levy ^o	194	212	18	9.455	1.904	94 +
1937 Levy	188	210	22	8.552	2.572	99
1937 Bond	192	206	14	8.280	1.691	91
1938 Bond August	184	216	32	8.571	3.734	99 +
1938 Bond November	192	209	17	8.430	2.014	95 +
1939 Levy	185	208	23	8.515	2.700	99 +

^o An issue for the purpose of financing a building program. All other levies mentioned are for operating expenses. All bond issues are for building programs.

true differences that are not considered as statistically significant at conservative levels, it appears that most differences between the means of the number of school children per one thousand persons in the two voting populations are real differences. The difference between the vote of the two populations, with respect to the relative number of school children, is significant enough not to have happened by chance.

Correlation coefficients computed between the number of children in Cincinnati five to seventeen years of age per one thousand persons and the per cent of favorable vote on the 1935 levy and bond issues gave measures of $-.273$ and $-.313$ respectively, both of which are found to be statistically significant. Contrary to what one may reasonably expect, the greater the relative number of children of public school age in a Cincinnati population, the weaker the support of the respective population for issues of school finance having to do with public education of these children.

Similarity of the distribution of children of school age in Cincinnati, as represented by Maps XXXIII and XXXIV, with distributions of other populations already studied may lead to reasonable explanations of the differences between the vote of populations having relatively large numbers of children of school age and populations having relatively few school children. Comparison of the distribution of the number of these children with every population that has already manifested a real difference in the vote on the issues of public school finance shows that populations containing relatively large numbers of school children are associated with those that show

evidence of possessing economic advantages. Populations containing relatively large numbers of families owning homes, whose distribution is represented by Map XVI, and populations owning relatively large numbers of radios, whose distribution is shown by Map XVII, are of this class. Both populations tend to oppose the issues more than populations at large in Cincinnati. It has been disclosed in Chapter V that, in general, native white persons live in areas of the city whose populations represent relatively more wealth. These populations also tend to vote less in favor of the issues of public school finance.

On the other hand, populations within the city whose number of school children is relatively small, as shown by Maps XXXIII and XXXIV, appear to be located in the very areas whose populations indicate possession of relatively little wealth. Examples of the less wealthy populations in Cincinnati are found in areas where the number of foreign born and Negro persons is relatively large, as shown by Maps XII and XIII respectively, and in areas where the population is more dense, as represented by Map XXII. These three populations are located, for the most part, in areas where home ownership and property ownership appear to be lowest, as shown by Maps XVI and XVII respectively.

The evidence that populations containing large numbers of school children live in areas of greater wealth, and that they tend to vote less in favor of the issues stands in agreement with the suggestion already made with reference to family size. Indeed, the number of children of school age in the family is a fairly good indication of

the size of the family itself. It has been suggested that family size need not be a causal factor as to why populations vote differently on the issues. Populations having relatively few children of school age may vote more in favor of the issues of public school finance, not because of their small percentage of school children, but because they possess relatively less wealth and, therefore, are not under the necessity of bearing tax burdens for school support equal to those who own more wealth. Likewise, populations containing relatively large numbers of school children may fail to support the issues primarily because they have relatively more wealth and, consequently, are faced with the problem of a heavier tax for school support. Thus, the trend of the vote on issues of public school support in Cincinnati need not be attributable to the number of children of school age in a population. Indeed, the number of school children may only accompany the more basic and primary factor of economic interests.

Comparison of the distribution of the number of school children, as shown by Maps XXXIII and XXXIV, and the distribution of Catholics, as represented by Map XXIV, reveals that relatively large numbers of children of school age are generally located in areas where the number of Catholic persons is relatively high. Catholic families, therefore, appear to have more children of school age. With respect to the vote of Catholic populations on the issues, the number of school children, again, may not necessarily be a causal influence as to reasons for the difference between the vote on the issues. It is more conceivable to believe that Catholics, whose families appear to have more

children of school age in their populations, tend to vote less in favor of the issues, not because of the larger number of children, but primarily because they do not depend wholly upon the public school for much of the educational training of these children. Although the present study has not proved the fact, the number of children of school age may be thought of more credibly as an attendant factor, and the more causal force may be the economic and religious interests of Catholic populations of Cincinnati, as well as the economic interests of the more wealthy populations of the city.

The Marital Status of Populations and the Vote

Introduction.- Married persons of voting age may tend to vote on matters of public school finance somewhat differently from other populations classified in terms of their marital status. Likewise, single persons of voting age may be inclined to vote still differently. Other individuals whose position is other than single or married may have tendencies to vary from the mean vote on such issues. The marital status of adult persons composing the populations of Cincinnati may thus merit some consideration in the evaluation of differences among family groups.

With reference to marital status, the Regional Census of 1935 enumerated single persons, married persons, and those who were widowed, divorced, or whose marital status was unknown in five-year intervals. Enumerations of each population were made by census tract and began at fifteen years of age. Persons twenty years old in each population, classified with reference to their marital

condition, were thus included in the group whose ages were twenty to twenty-four years inclusive. Individuals twenty years old were, therefore, included in the number of potential voters in each population, arranged with respect to their marital status.

In the evaluation of differences for each of the populations, divided with reference to their marital status, the inclusion of persons one year younger than voting age will likely lead to somewhat erroneous valuations. The number of persons who are of voting age in each population, however, is considerably larger than the number one year younger. Indeed, while the individuals just twenty years old in each population can hardly be considered as a negligible number, the proportion of persons twenty-one years of age and older, as compared with those twenty years old, is rather overshadowing. It is probable that even if the number of persons one year younger than voting age is included in the data for arriving at valuations for this part of the study, the values of the differences will be substantial enough to be considered statistically sound.

As shown in Appendix V-D, which is a revised approximation of the data on the marital status of populations,⁴ as determined by the Regional Census of 1935, 23.5 per cent of all persons in Cincinnati twenty years old and over were single; 61.9 per cent were married; and 14.6 per cent were classified as widowed, divorced, or persons whose marital status was unknown.

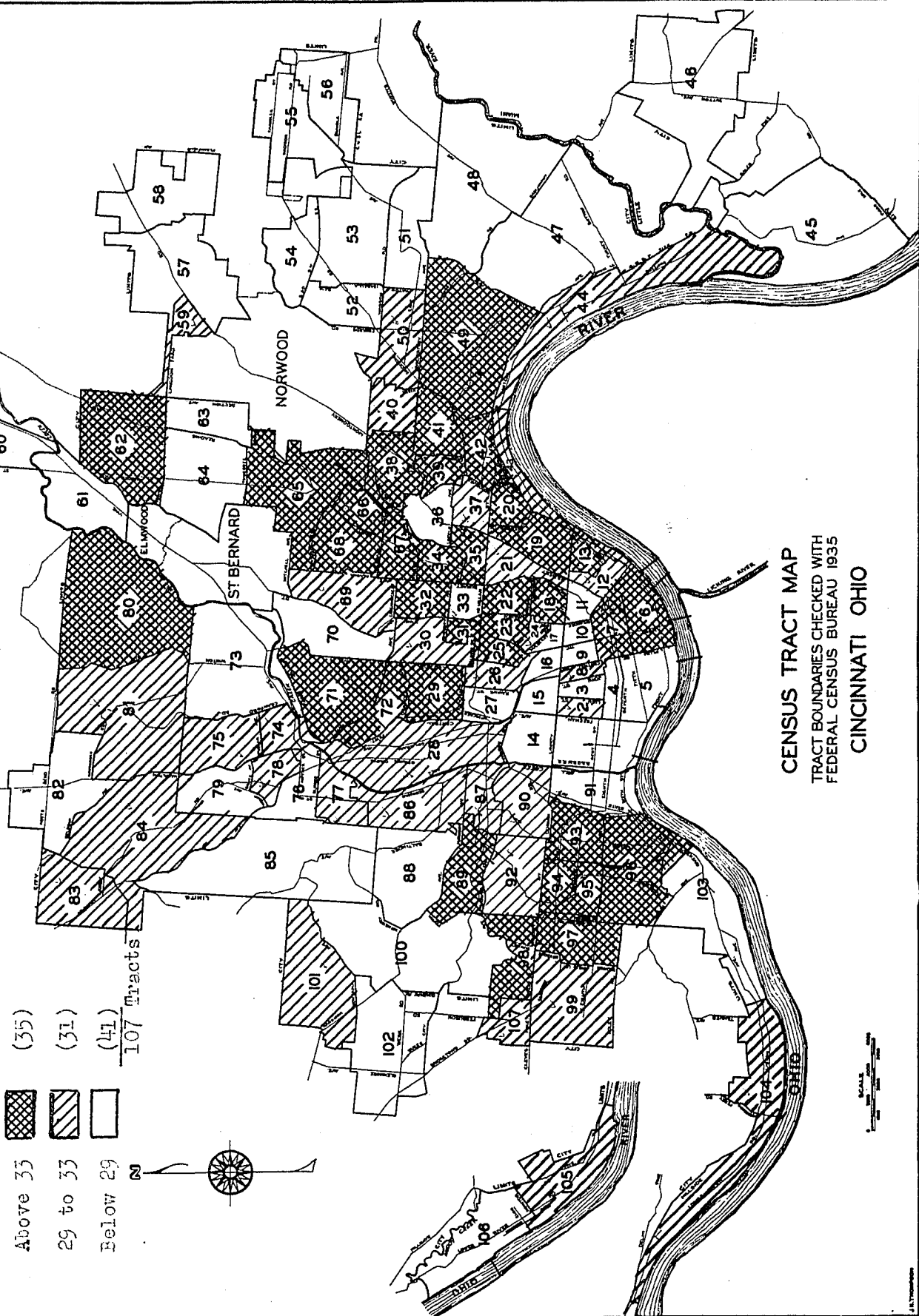
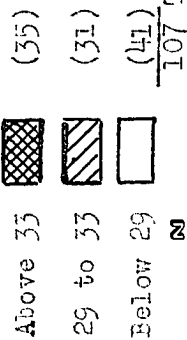
⁴The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, Table 6, pp. 57-110. Cincinnati: Cincinnati Employment Center, 1937.

Single adults.- Areas in which the higher percentages of single persons in Cincinnati over twenty years of age are located, as shown by Map XXXV, are in census tracts north and east of the Basin and extending to St. Bernard and Norwood. Other areas with relatively large proportions of single persons over twenty years of age are found in tracts west of the Basin and in tracts 30 and 32 north of St. Bernard. Tracts 6, 7, and 8 in the Basin also have relatively large numbers of single persons.

Areas in Cincinnati where relatively few single persons reside are found in most tracts that border the city to the east and the west. Census tracts adjacent to St. Bernard on the west and between St. Bernard and Norwood also have relatively few individuals who are single. Tracts in the Basin and elsewhere where large numbers of Negroes are located, as represented by Map XIII, also have small proportions of persons over twenty years old who are single.

The per cent of persons over twenty years old who are single in 1935 was tabulated for those census tracts wherein the per cent of favorable vote was above the mean favorable vote. Similarly, the per cent of single persons was tabulated in the census tracts in which the favorable vote was less than the mean favorable vote. The difference between the means of the per cent of these two populations of single persons over twenty years old was computed for each issue, and evaluations of the differences were then made in order to determine whether real differences exist.

MAP XXXV - SINGLE PERSONS IN CINCINNATI TWENTY YEARS OF AGE AND OVER, 1935
 Census Tracts in Which the Per Cent of Single Persons Fifteen and Over Is



CENSUS TRACT MAP
 TRACT BOUNDARIES CHECKED WITH
 FEDERAL CENSUS BUREAU 1935
 CINCINNATI OHIO



It is evident from Table XXXVIII, which gives the data for these determinations, that differences between the relative number of single persons of marriageable age in the two populations are not statistically significant. All valuations of the differences are far too low to be regarded as true differences. Any difference between the per cent of single persons among the marriageable populations of Cincinnati whose favorable vote on the issues was relatively high and in populations whose vote was relatively low could possibly have happened by chance.

Correlation coefficients between the per cent of individuals over twenty years of age who were single and the per cent of favorable vote on the issues of 1935 were computed. For the 1935 levy for operating expenses the coefficient for these data is .034, and for the 1935 bond issue for buildings it is -.027. Both values of r are much too low to be statistically significant.

Married populations.- Approximately 61.9 per cent of all persons in Cincinnati over twenty years of age were married in 1935, as shown by Appendix V-D. Relative numbers of married persons in the city are highest in census tracts in both the western and the eastern parts of the city, and in various tracts in the north around St. Bernard and Norwood, as represented by Map XXXVI. Areas in which the lowest percentages of married persons live are found in most tracts in the Basin and in tracts extending from the Basin to Norwood. Some census tracts in the northern part of the city also have low percentages of married persons in their populations.

TABLE XIXVIII

SINGLE PERSONS OVER TWENTY YEARS OLD IN 1935 IN TWO AREAS
WHOSE POPULATIONS VOTE RELATIVELY HIGH AND
RELATIVELY LOW ON THE ISSUES

Issue	Mean Per Cent of Single Persons in Tracts Whose Popu- lations Voted		Differ- ence $M_1 - M_2$	Est'd. $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	30.4	30.2	0.2	0.790	0.253	20
1934 Levy	30.6	29.8	0.8	0.803	0.996	66
1935 Levy	30.4	30.0	0.4	0.763	0.524	40
1935 Bond	30.3	30.1	0.2	0.707	0.283	23
1936 Levy	30.6	30.0	0.6	0.809	0.733	55
1936 Levy*	30.3	30.0	0.3	0.719	0.417	35
1937 Levy	30.8	29.7	1.1	0.811	1.358	52
1937 Bond	30.7	29.8	0.9	0.803	1.121	76
1938 Bond August	30.3	30.1	0.2	0.768	0.261	20
1938 Bond November	31.0	29.6	1.4	0.824	1.700	91
1939 Levy	30.6	29.8	0.8	0.798	1.003	70

* An issue presented for the financing of a building program. All other levy issues mentioned are for operating expenses. All bond issues are for building purposes.

MAP XXVVI - MARRIED PERSONS IN CINCINNATI TWENTY YEARS OF AGE AND OVER, 1935

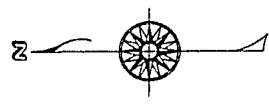
Census Tracts in Which the Per Cent of Married Persons is

- Above 61 (35)
- 56 to 61 (33)
- Below 56 (39)



107 Tracts

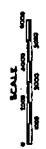
N



CENSUS TRACT MAP

TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935

CINCINNATI OHIO



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In the evaluation of differences between the means of the relative number of married persons residing in areas where the vote for the issues was relatively high and in areas where it was relatively low, the same procedure was used as that described in the treatment of single persons. Census tracts of Cincinnati were divided into two groups on the basis of the per cent of favorable vote above and below the mean favorable vote, and the per cent of married persons twenty years of age and above was tabulated for each tract. The differences between the means of the per cent married in the two populations were then computed for each issue concerned with the study, as shown by Table XXXIX. The value of t for each difference was then determined.

All differences between the means of the two populations of married persons reveal that populations whose favorable vote is relatively low have larger percentages of married persons among their number than populations of the city whose favorable vote is relatively high. Moreover, all differences between the means are statistically significant, as shown in Table XXXIX. The chances in one hundred that a true difference exists are all above ninety-nine. It can be said with confidence that populations of Cincinnati heavily populated with married persons tend to vote less favorably for issues of public school finance than other populations of the city, classified in terms of their marital status.

Correlation coefficients computed between the per cent of married persons in Cincinnati and the per cent of favorable vote on the levy and bond issues of 1935 are $-.381$ and $-.390$ respectively. Both values

TABLE XXXIX

MARRIED PERSONS TWENTY YEARS OF AGE AND OVER IN 1935 IN TWO
AREAS OF RELATIVELY HIGH AND RELATIVELY LOW
FAVORABLE VOTE ON THE ISSUES

Issue	Mean Per Cent of Married Persons in Tracts Whose Populations Voted		Difference $M_2 - M_1$	Est'd. $\sigma_{M_2 - M_1}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	54.81	59.00	4.19	1.157	3.613	99+
1934 Levy	55.06	59.17	4.11	1.139	3.608	99+
1935 Levy	54.59	59.39	4.80	1.139	4.215	99+
1935 Bond	54.74	59.33	4.59	1.125	4.081	99+
1936 Levy	54.27	59.60	5.33	1.085	5.097	99+
1936 Levy ^o	54.72	60.00	5.28	1.147	4.603	99+
1937 Levy	54.46	59.67	5.21	1.100	4.736	99+
1937 Bond	54.54	59.59	5.05	1.118	4.517	99+
1938 Bond August	54.32	59.63	5.36	1.098	4.882	99+
1938 Bond November	53.95	60.01	6.06	1.020	6.324	99+
1939 Levy	54.80	59.63	4.83	1.112	4.340	99+

^o A levy issue presented for the financing of a building program. All other levy issues are for operating expenses. All bond issues are for building programs.

of r are statistically significant, and could not have happened by mere chance. It is evident that the greater the relative number of married persons in a population in Cincinnati, the less favorably the population tends to vote on issues of public school finance.

By itself, marriage can hardly be thought of as being a causal force back of the vote on issues of public school finance. It is conceivable that married persons in a population vote differently on issues of school finance from those unmarried for some other reason than just because they are married. Marriage, in other words, is probably secondary to some other more basal reason for the development of tendencies to oppose such issues.

Comparisons of the distribution of the number of persons in Cincinnati that are married, as shown by Map XXXVI, with the distributions of other populations already mentioned in the study show that, in general, most of the married people live in areas where the wealth of populations is relatively great. Conversely, areas whose populations are composed of relatively few married persons are generally areas where the wealth of the populations is relatively small. Again, the populations, classified in other terms than marital but whose distribution is similar to that of the number of married persons, tend to vote less in favor of the issues. On the other hand, populations whose distribution is somewhat the same as that of the number of married persons, and whose economic wealth is relatively small, tend either to vote definitely in favor of the issues or to indicate no statistically significant difference as to how they vote.

Examples of populations whose distribution is similar to that of

the number of married persons and whose economic wealth is relatively great are those persons owning homes and property, as represented by Maps XVI and XVII; native white populations, as shown by Maps XIV and XV; and the more religious populations, especially the Catholics, as shown by Map XXIV. All populations closely associated with each of these groups tend to vote less favorably for the issues with statistically significant differences. Examples of populations of Cincinnati that are shown to reveal more friendly attitudes toward issues of public school finance are populations representing large numbers of Negroes, as shown by Map XIII; those heavily populated with Jewish people, as represented by Map XXV; and those whose number of foreign born is relatively large, as shown by Map XII. Populations residing in the more densely populated areas, represented by Map XXII, also show marked tendencies of favoring the issues. Each of these populations appears to be identified with groups that are not so fortunate in terms of economic wealth. Meanwhile, these same populations have distributions of their number somewhat similar to the distribution of persons whose status is other than married.

These comparisons lead to the suggestions about married persons that have already been made with reference to the size of the family and to the number of school children. Populations in Cincinnati containing relatively large numbers of married persons may vote more against the issues because of some other reason than that they are married. The most probable explanation is that economic interests of populations composed largely of married persons, whose relative wealth appears to be greater than that of unmarried adults, may be the causal forces back of the trend of the vote on issues of public school finance.

Populations whose marital status is widowed, divorced, or unknown.- Of the total number of individuals who were twenty years of age and over in Cincinnati in 1935, 14.6 per cent were classified as widowed, divorced, or persons whose marital status was unknown. Appendix V-D also includes the data by census tract for the population of persons twenty years old and over who, for the most part, were once married, but who are now single. Approximately 65 per cent of this population were widowed in 1935, 32 per cent were divorced, and 3 per cent were persons whose marital status was unknown. Of the total number of persons in Cincinnati who were over twenty years of age, approximately 9 per cent were widowed, 5 per cent were divorced, and 0.6 per cent were those whose marital status was unknown.

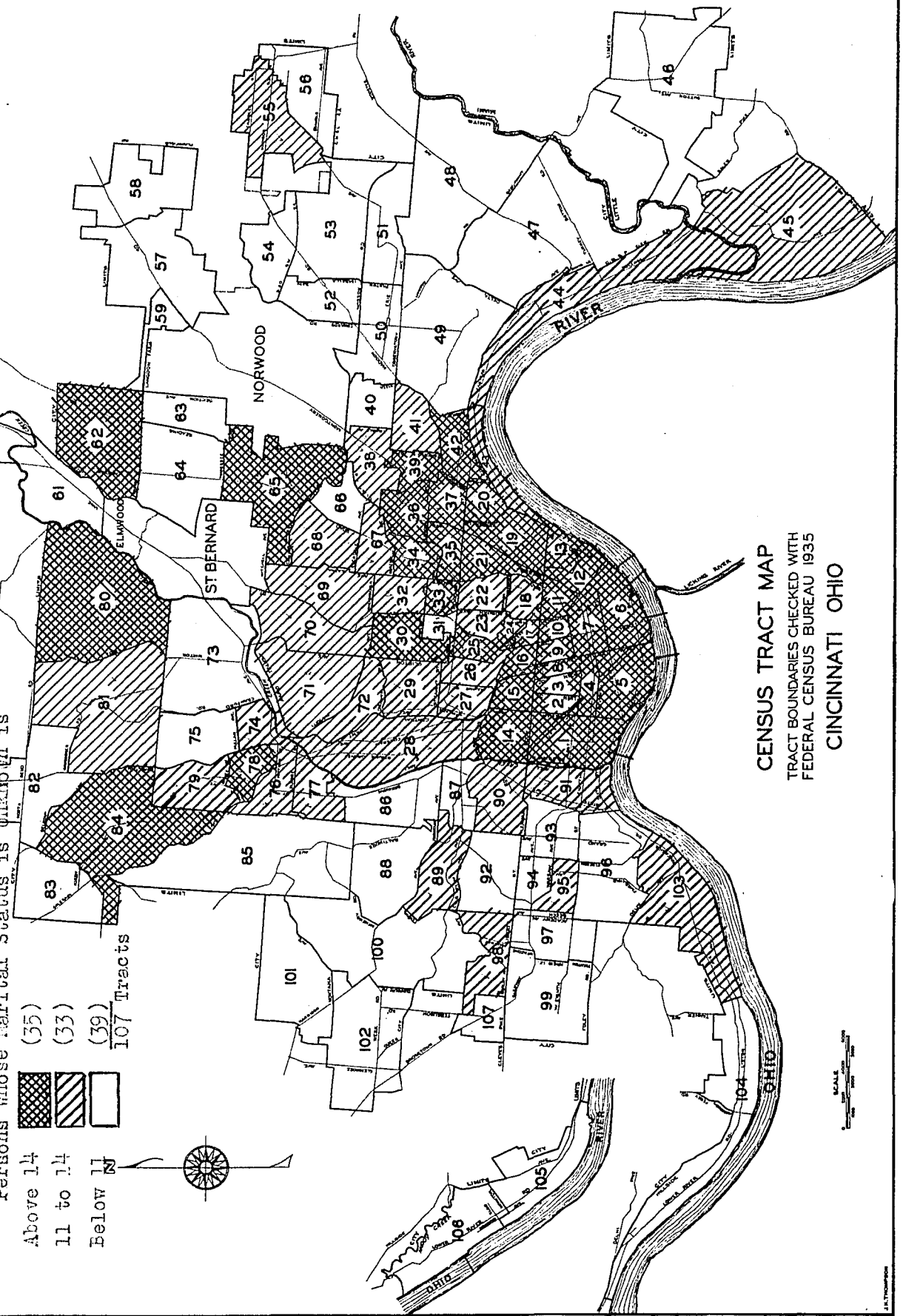
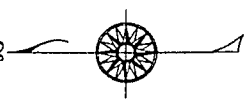
By far the greater number of widowed, divorced, and persons whose marital status is unknown in Cincinnati reside in all census tracts in the Basin and in tracts extending northward and eastward of the Basin toward Norwood, as shown by Map XXXVII. A few census tracts in the northern part of Cincinnati also have relatively large numbers of persons of these classifications. All tracts in the western and eastern sections of the city, and most tracts in the northern part, are areas in which the number of persons whose marital status is widowed, divorced, or undetermined is relatively small.

The per cent of individuals twenty years of age and above whose marital status was widowed, divorced, or unknown was listed for each

MAP XXVII - PERSONS IN CINCINNATI TWENTY YEARS OLD AND OVER WHOSE MARITAL STATUS IS WIDOWED, DIVORCED, OR UNKNOWN, 1935

Census Tracts in Which the Percentage of Widowed, Divorced, or Persons Whose Marital Status is Unknown is

- Above 14 (35)
- 11 to 14 (33)
- Below 11 (39)
- 107 Tracts



CENSUS TRACT MAP
TRACT BOUNDARIES CHECKED WITH
FEDERAL CENSUS BUREAU 1935
CINCINNATI OHIO



J. A. Thompson

census tract, and the census tracts were again divided into two groups on the basis of the per cent of favorable vote above and below the mean favorable vote. Differences between the means of the two populations were computed for each of the issues covered by the study, and evaluations of the differences were then determined, as presented in Table XI.

Populations in which relatively large numbers of persons live who are widowed, divorced, or whose marital status is unknown are found in areas in which the per cent of favorable vote is relatively high. Differences between the means of the per cent of such populations in tracts in which the per cent of favorable vote is high and the tracts wherein the per cent of vote for the issues is low are statistically significant, and are not because of chance.

The coefficients of correlation computed between the per cent of persons who were widowed, divorced, or whose marital status was unknown and the per cent of favorable vote on the levy and bond issues of 1935 are .560 and .545 respectively. Both values of r are statistically significant.

In agreement with other populations presented in this chapter, persons in Cincinnati who are either divorced, widowed, or whose marital status is unknown can hardly be thought of as tending to favor the issues of public school finance just because of their marital condition. Populations of Cincinnati studied in terms of other classifications than marital, and whose vote for the issues of public school finance is relatively high, have distributions much the same. The widowed, divorced, and persons in the city whose marital status

TABLE XL

PERSONS TWENTY YEARS OLD AND OVER, 1935, WHOSE MARITAL STATUS WAS
WIDOWED, DIVORCED, OR UNKNOWN IN TWO AREAS OF RELATIVELY
HIGH AND RELATIVELY LOW FAVORABLE VOTE

Issue	Mean Per Cent of Persons Twenty Years of Age and Over Other than Married or Single in Tracts Whose Populations Voted		Differ- $M_1 - M_2$	Std'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Favorable Vote	Below Mean Favorable Vote				
1933 Bond	15.00	10.75	4.25	0.727	5.844	99 +
1934 Levy	14.14	11.08	3.06	0.715	4.280	99 +
1935 Levy	14.37	10.62	4.25	0.767	5.542	99 +
1935 Bond	14.65	10.57	4.28	0.745	5.761	99 +
1936 Levy	15.77	10.22	5.55	0.792	7.003	99 +
1936 Levy*	14.70	10.24	4.46	0.766	5.822	99 +
1937 Levy	14.53	10.61	3.97	0.713	5.529	99 +
1937 Bond	14.92	10.44	4.48	0.720	5.743	99 +
1938 Bond August	15.04	10.42	4.62	0.735	5.753	99 +
1938 Bond November	15.71	10.34	5.37	0.802	6.696	99 +
1939 Levy	14.50	10.36	3.84	0.726	5.248	99 +

* A levy for the purpose of financing a building program. All other levy issues are for operating expenses. All bond issues are for building programs.

is unknown are found mostly in areas of dense populations, as shown by Map XXII; in areas where family ownership of homes and property is relatively low, as represented by Maps XVI and XVII; and where the more religiously indifferent populations of Cincinnati are found in greatest number, as shown by Map XXVI. All the populations residing within these areas appear to possess relatively little wealth. The divorced, widowed, and persons of unknown marital status, therefore, indicate that they, too, own relatively less wealth. It is credible to believe, therefore, that they tend to vote somewhat similar to other less wealthy populations of the city because of economic motives, and not because of their marital status.

The Active Interest of Family Groups in the Issues

Just as some populations already mentioned in other chapters of the present study are shown to have indicated a more active interest about matters of public school finance than other populations, it is possible that some of the populations concerned with the status of the family may also make greater use of the franchise on issues of public school finance. The present study has disclosed that, in general, populations of Cincinnati composed of relatively large families tend to subscribe less favorably to the issues than smaller families containing one and two members. By evaluating the difference between the relative number of citizens over twenty-one years of age who actually voted in populations of the city consisting of families of large and small membership, it is possible to determine whether either type of family votes more extensively on issues of public school support and, thus, to determine which population manifests greater

concern about matters of public school support. Likewise, evaluations of the differences between the relative number of eligible voters voting in populations containing large and small percentages of married persons or single persons will disclose which population makes greater use of the privilege of voting on public school issues.

The interest of small and large families in the issues.- Census tracts in Cincinnati containing families having an average number of persons greater than the mean number of 3.08 for the entire city in 1935 were listed as one group, and the per cent of eligible voters who voted on the levy of 1935, as estimated from the data of the Regional Census of 1935 and as described in Chapter IV, was listed for each tract. The remaining census tracts containing families with an average membership below the mean for the city comprised the second group, and the percentage of eligible voters who actually voted on the levy was listed for each of these tracts. The difference between the means of the two populations of eligible voters who voted, one of which came from relatively large families and the other of which came from families whose membership was below the mean, was then computed, and the difference was evaluated in terms of the probability of a true difference. The same procedure was followed for the evaluation of the difference between the per cent of eligible voters who voted in the two populations on the bond issue of 1935. Table XLI presents the data for the evaluations of these differences.

As shown by Table XLI, in populations where the family membership in Cincinnati is higher than the mean membership of 3.08 persons the per cent of citizens over twenty-one years of age are inclined to make

greater use of the franchise on issues of public school finance than eligible voters in populations where the family membership is lower than the mean. The difference between the relative number of eligible voters who vote either for or against the issues in the two populations is statistically significant. The chances that a real difference exists are above ninety-nine in one hundred.

In general, populations in Cincinnati composed of families with relatively large memberships tend to oppose the issues of public school

TABLE XLI

ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935 IN TWO AREAS
WHERE THE AVERAGE FAMILY MEMBERSHIP WAS RELATIVELY
LARGE AND RELATIVELY SMALL

Issue	Mean Per Cent of Voters Voting in Tracts Whose Average Number of Persons in the Family is		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Per Cent of 3.08	Below Mean Per Cent of 3.08				
1935 Levy	42.63	35.62	7.01	2.243	3.218	99 +
1935 Bond	42.01	35.62	6.39	2.227	2.869	99 +

finance more strongly than populations composed of small families. Where families of three or more persons reside, the respective populations tend to vote less in favor of the issues than populations of the city at large. In addition, populations whose family membership is relatively large appear to show more active interest in matters of public school finance. On the other hand, populations whose family membership consists of only one or two members tend to vote markedly in favor of the issues. Populations composed of relatively small

Families, however, fail to go to the polls when the issues are presented in sufficient number to indicate interest in the issues equal to that of populations comprising families of larger membership.

The interest of single adults in the issues.— The same procedure as that just described was used for the evaluation of differences between the relative number of eligible voters who voted in areas where the number of single persons twenty years of age and over was relatively large and where it was relatively small. Table XLII includes the data for the determination of valuations for the levy and bond issues of

TABLE XLII

ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935 IN TWO AREAS
WHERE THE NUMBER OF SINGLE PERSONS OVER TWENTY YEARS
OLD WAS RELATIVELY HIGH AND RELATIVELY LOW

Issue	Mean Per Cent of Voters Voting in Tracts Whose No. of Single Adults is		Difference $M_1 - M_2$	Est'd $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Per Cent of 23.0	Below Mean Per Cent of 23.0				
1935 Levy	40.19	40.02	0.17	2.120	0.085	5
1935 Bond	40.75	39.53	1.22	2.211	0.552	37

1935. The differences between the means of the two populations of eligible voters who went to the polls are both small, and the chances in one hundred of a true difference are both far too low to be statistically significant, as shown by Table XLII. Differences between the per cent of eligible voters who actually voted in tracts composed of relatively large numbers of single adults and in tracts in which the per cent of single adults is low are not real differences and could easily have happened by chance.

The interest of married populations in the issues.— Married populations over twenty years of age were divided by census tract into two groups, the division being based upon the mean per cent of married individuals in the entire city population. The per cent of eligible voters who really voted in the respective census tracts was listed, and the difference between the means of these two populations of voters was computed. As shown in Table XLIII, which includes the data for the evaluation of these differences, the eligible voters who actually voted on the 1935 levy and bond issues tend to exercise the ballot on the issues of public school finance to a greater degree in

TABLE XLIII

ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935 IN TWO AREAS
WHERE THE PER CENT OF MARRIED PERSONS TWENTY YEARS OLD
AND OVER WAS RELATIVELY HIGH AND RELATIVELY LOW

Issue	Mean Per Cent of Voters Voting in Tracts Whose Average Number of Married Persons is		Difference $M_1 - M_2$	Est'd. $\sigma_{M_1 - M_2}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Per Cent of 62.0	Below Mean Per Cent of 62.0				
1935 Levy	42.70	38.13	4.52	2.050	2.225	97+
1935 Bond	42.08	37.83	4.25	2.012	2.112	95+

tracts whose populations contain relatively large numbers of married persons. On the other hand, eligible voters in tracts whose populations have relatively few persons who are married appear less interested about matters of public school finance, inasmuch as relatively few citizens of voting age in these populations exercise the right to vote on the issues. The chances in one hundred that the differences

are true differences, as presented in Table XIII, are sufficiently high enough to be considered statistically significant. In general populations representative of large numbers of married persons show tendencies of being more interested and concerned about matters concerning the financing of public education than populations identified by larger percentages of single adults of voting age.

The interest of persons whose marital status is widowed, divorced, or unknown.- Evaluations of differences were computed between the relative number of eligible citizens who actually voted on the bond and levy issues of 1935 in areas where the per cent of persons twenty years old and over whose marital status was other than single or married was relatively high and in areas where the per cent was low. The evaluations were made in order to determine whether populations who, for the most part, were once married but who are now single indicate any difference in active interest in matters of public school finance from other populations of the city, classified in terms of their marital status.

The valuations, as shown in Table XIV, are statistically significant, and the differences between the means of the per cent of citizens who really voted could not have been because of chance alone. The differences between the means show that populations of Cincinnati representing the larger percentages of persons over twenty years of age who are widowed, divorced, or whose marital status is unknown neglect to make use of the privilege to vote on the issues to the same degree as populations of the city at large.

A review of the concern about the issues of public school finance, expressed by each of the populations employed in the present study,

discloses some interesting facts. Those populations of Cincinnati that tend to oppose the issues, and that have been analyzed in terms of their relative interest, are decidedly more concerned about the issues than other related populations, similarly classified. This fact is manifested by the larger percentages of voters representing populations opposed to the issues who go to the polls when the issues are presented to the public. Populations representing families whose ownership of homes or other taxable property is relatively high,

TABLE XLIV

ELIGIBLE VOTERS WHO VOTED ON THE ISSUES OF 1935 IN TWO AREAS WHERE THE PER CENT OF PERSONS WHOSE MARITAL STATUS WAS WIDOWED, DIVORCED, OR UNKNOWN WAS RELATIVELY HIGH AND RELATIVELY LOW

Issue	Mean Per Cent of Voters Voting in Tracts Whose Per Cent of Persons Over 20 Years Old, Other than Married or Single, are		Differ- ence $M_2 - M_1$	Est'd $\sigma_{M_2 - M_1}$	Value of t	Chances in 100 that True Difference Exists
	Above Mean Per Cent of 15.0	Below Mean Per Cent of 15.0				
1935 Levy	33.42	44.78	11.36	1.929	5.389	99+
1935 Bond	33.20	44.29	11.09	2.014	5.506	99+

the result of whose vote tends to defeat the issues, are more alert to the importance of the ballot on the issues. Likewise, populations containing relatively large numbers of married persons and families whose membership is relatively large, both of which live in areas of the city whose populations have relatively more wealth, are found to be more interested about the exercise of the vote on the issues.

Populations of Cincinnati whose memberships consist principally of Catholics also indicate considerable interest about the outcome of the vote on questions concerning issues of public school finance. No

single population in Cincinnati that appears to oppose the issues of public school finance manifests diminished interest equal to that expressed by the entire voting population of the city.

On the other hand, no single Cincinnati population treated in the present study that tends to favor the issues indicates interest or concern about them that reaches beyond that expressed by populations at large in the city. In fact, several populations in Cincinnati have been shown to express tendencies of favoring the issues of public school finance and, at the same time, of indicating a decided lack of interest or concern as to their outcome, as measured by their relatively small number of eligible citizens who go to the polls when the issues are presented to the public. Indeed, they disclose concern about the outcome of the issues on public school matters that is decidedly below par.

Of the populations of Cincinnati that reveal tendencies of favoring the issues and that show no difference in their interest about them from the entire voting population of the city, those recognized by large numbers of Protestants, foreign born, and Jewish persons are examples. However, voters of the city characterized by large numbers of Negro persons, those who appear more religiously indifferent, and those who are widowed, divorced, or whose marital status is unknown reveal marked deficiencies of interest or concern about matters of public school support. Voters residing in the more densely populated areas of the city also show a decided lack of interest. All voting populations that manifest tendencies of favoring the issues, but that fail to be as active in exercising their vote on such matters, reside in the less wealthy areas of the city.

As a result of the analysis of the relative interest in matters of public school finance of the several populations covered by the study, one or two general conclusions may be drawn. It is rather evident that interest or concern about the issues of public school finance in Cincinnati is closely associated with economic wealth and Catholic forces. In general, where the wealth of populations of the city is relatively great, issues of public school finance are of grave concern, and the voting activity on such matters tends to increase. Similarly, populations in Cincinnati that depend somewhat upon agencies other than the public schools for their children's educational training are, likewise, more concerned about the outcome of issues of public school finance, and they, too, make greater use of the ballot. Moreover, the economic interests of the more wealthy populations of Cincinnati and the interests of those populations active in the financing of private institutions for the education of their children appear to be factors that induce the respective populations to oppose the issues to a greater degree than Cincinnati populations at large.

When such forces as those mentioned above are absent, or when such incentives are relatively not as apparent, the interest in matters of public school finance tends to lag, and the respective populations of Cincinnati are not as alert to the responsibility of exercising the ballot. These populations, moreover, that possess little wealth or that depend wholly upon the public schools for the educational training of their children, would be inclined to support the issues of public school finance to a greater degree than populations at

Large M. Cincinnati. However, they fail to go to the polls in sufficiently large numbers equal to those who have the more compelling and proximate incentives associated with wealth and religion.

Summary

Evaluations of differences were made with reference to various family populations in Cincinnati and their favorable vote on issues of public school finance, in order to determine whether the vote of the respective family populations is characteristically different from the mean pattern. Differences were also evaluated between the relative number of eligible voters who used the voting franchise on the issues in areas of the city in which the size of the respective family populations varied. These latter evaluations were made for the purpose of determining whether the several family populations show differences in their concern about the issues of public school finance.

The evidence is quite conclusive that, in general, populations in Cincinnati composed of families with relatively large memberships are inclined not to support the issues as readily as populations composed of small families. Where there are relatively large numbers of families whose memberships range from three persons and over, the respective populations tend to vote less favorably on the issues than populations of the city at large. On the other hand, populations whose membership of families consists of one and two persons tend to vote markedly in favor of the issues of public school finance. In addition, those populations whose family membership is large appear to manifest more active interest in matters concerning public school

support, as revealed by the extent to which eligible voters in areas of large family membership make use of the privilege of voting on such matters. In areas of the city where the membership of the family is relatively small, however, relatively greater numbers of eligible voters neglect to make use of the franchise when the issues are presented to the public.

Populations that include families comprised of relatively large numbers of school children also show marked differences between the extent of favorable vote and the mean favorable vote of the entire city population of Cincinnati. The greater the relative number of school children in an area of the city, the less the tendency of the population included in the area to support the issues. Populations in which the percentage of children of school age is relatively small vote more favorably for the issues than populations in which the percentage of school children is large.

Populations in which relatively large numbers of married persons reside tend to vote decidedly less favorably for the issues of public school finance. Voters in populations of Cincinnati marked by large percentages of married persons, moreover, make use of the voting franchise on the issues decidedly more than other populations of the city, divided in terms of their marital status. More concern about matters of public school support is thus indicated by married citizens of Cincinnati. The populations of the city composed largely of single persons of marriageable ages, however, show no significant differences between their vote on the issues concerning public school finance and that of the voting population of the entire city. Furthermore, no differences are found between the interest or concern single adults

display about the issues and that of populations of the city at large.

Populations of Cincinnati in which are found most of the widowed, divorced, and persons whose marital status is not known appear to vote pointedly in favor of the issues. However, these populations representative of persons who, for the most part, were once married but who are now single seemingly take little interest as to the outcome of the issues. Their reduced activity in the use of the ballot makes negligible any tendency they may indicate to increase the number of favorable votes for the issues.

Because of the close relationship of populations in Cincinnati whose classification is based upon family standing with other populations of the city whose relative wealth is great and whose voting tendencies are somewhat the same, it is possible, and highly probable, that family status is intrinsically not a causal factor in the voting trends on the issues. Of course, the study fails to prove this supposition, however. Likewise, the close relationships between some of the populations treated in this chapter and the Catholic population lead also to the suggestion that family status, itself, may be merely incidental, or may only attend the more causal factor of religious forces.

The locations of populations treated in the present chapter whose tendency is to vote less favorably for the issues coincide markedly with the locations of populations of the city whose wealth and taxable property appear to be relatively great. Similarly, these same populations that tend to oppose the issues, and whose

classifications are based upon family status, are found mostly in areas whose number of Catholic adherents is relatively large. The populations founded on family status that tend to support the issues of public school finance, however, reside in areas of Cincinnati where the relative wealth of the inhabitants appears to be small, and where the relative number of Catholics, moreover, is small.

Relationships similar to these strengthen the conclusion, already made in Chapter V, that economic forces in Cincinnati may play an important role in determining the direction of the vote on issues of public school finance. Furthermore, the practice of the Catholic families of depending upon schools unassociated with the public schools of Cincinnati for much of the educational training of their children, together with the assurance that Catholics generally tend to oppose the issues, leads to the belief that the Catholic religion may be a relevant force in directing the trend of the vote on the issues. The size of the family in Cincinnati, the number of children of school age, or the number of married persons, which with respect to the Catholic populations are all relatively large, may be only secondary to this religious force.

All populations investigated in the present study that tend to oppose the issues are shown to be more concerned about the outcome of the issues than populations indicating stronger tendencies to subscribe to them. Populations that indicate ownership of taxable wealth and the native white populations of Cincinnati are more interested in going to the polls when the issues are presented to the public. Populations containing relatively large numbers of married

persons, and those containing the higher percentages of families whose membership is large and whose numbers of school children are relatively large, likewise, show more vigilance in the use of the ballot on such issues.

No population investigated in the study that tends to subscribe to the issues to a greater degree than populations at large in Cincinnati is equally as interested in the outcome of the vote. In fact, those populations that tend to be most friendly to the issues and that are the potential supporters of them appear to be decidedly more unconcerned about the outcome of the vote. Consequently, relatively few of them actually go to the polls to vote on matters of public school finance when they are presented to the public. Unless the issue of public school finance arouses the typical voter to the realization that he has some economic or religious interest at stake, voting lethargy sets in, and a feeling of indifference about the outcome keeps him from sensing fully his obligation to make use of the voting franchise.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

Introduction

The problem.- This study is an attempt to discover and to identify the voting characteristics peculiar to the various populations of Cincinnati with reference to their vote on issues of public school finance. The issues of school finance under consideration are those presented to the public of Cincinnati during the decade from 1930 to 1939 inclusive. During the decade eleven issues of public school finance were presented, five of which were special levies for operating expenses, and six of which were for the purpose of financing building programs. Identification of those populations that differ in their vote on matters of public school support may aid in recognizing causal factors and forces that play their roles in the final disposition of such issues.

Of the eleven issues presented to the Cincinnati public for approval, none for the financing of building programs carried by public vote, and one of the five special levies for operating expenses failed to carry. Failure of all the issues for buildings to carry, however, was partly because of added legislative limitations that raised the percentage of favorable vote necessary to pass a levy for buildings from 50 per cent to 65 per cent.

Treatment employed in the study.- The technique employed in the study is of a statistical nature. The principal statistical treatment

involves the evaluation of the difference between the means of two separate divisions of a particular population, divided in terms of residence in areas where the favorable vote on an issue of public school finance is relatively high and where it is relatively low. These evaluations of each difference in the populations covered by the study were made by the application of the t-test of the significance of a difference between the means of independent populations, as developed by R. A. Fisher.¹ The mean favorable vote on each issue of public school finance was, as a rule, used as the basis on which to divide each of the populations considered in the study. With respect to the division, any population in the areas covered by the study becomes two populations, one of which resides in areas where the favorable vote for the issue is relatively high and the other whose residence is in areas where the favorable vote is relatively low. The difference between the means of the two populations was computed, and the evaluation of the difference was made in terms of the probability of a true difference. In this way, each of the populations considered in the study was investigated to determine whether they are really different populations or whether they are one and the same population, as regards their vote on issues of public school finance.

In many cases where it was deemed advisable, correlation coefficients between the relative number in a population under

¹
E. F. Lindquist, Statistical Analysis in Educational Research, pp. 43-58. Boston: Houghton Mifflin Co., 1940.

investigation and the per cent of favorable vote on the issues were also computed. Maps of Cincinnati were used to represent relative distributions of most of the respective populations.

Sources of data.- All data on the returns of the vote for each of the issues of the study came from the Bureau of School Research of the Cincinnati Public Schools and from the Board of Elections of Hamilton County, Ohio. The number of school children in the school census for each of the years covered in the study also came from the Bureau of School Research. The proceedings of the Board of Education of the Cincinnati Public Schools were also used.

Most data of a census nature about the various populations of Cincinnati came from the 1935 Regional Census of Hamilton County, Ohio.² A few data concerning these populations, data that were not included in the 1935 Regional Census, were taken from the 1930 Federal Census of Cincinnati. All the data from these two sources were made available through the cooperation of the Department of Sociology, University of Cincinnati.

Areas included in the study.- Not all the populations of the Cincinnati School District were included in the study, because most of the data about populations in the district outside the city limits

² The Regional Department of Economic Security, the Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: I, The Population of Hamilton County, Ohio, in 1935. Cincinnati: Cincinnati Employment Center, 1937. Pp. x + 113.

The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935. Cincinnati: Cincinnati Employment Center, 1937. Pp. ix + 253.

were lacking. Only the populations living within the limits of the city of Cincinnati were included. The populations employed in the study, however, embrace over 95 per cent of the total population of the Cincinnati School District. After careful examination of the population units that might have been used, the census tract was selected as the most feasible one. All data used in the study from the 1930 Federal Census and from the 1935 Regional Census were already tabulated in census tract form. All data from the returns of the public vote on the issues, however, were originally tabulated in precinct form. Before they could be used, it was necessary to build these up into census tract form. Precincts usually followed the boundaries of the census tracts, but occasionally a precinct overlapped two or more census tracts. In such cases an apportionment, already worked out by the Bureau of Research of the Cincinnati Public Schools, was used in the build-up of the vote on issues into census tract form.

Summary

The general pattern of the vote on the issues.- A series of maps, one for each issue of public school finance, was employed to reveal areas whose populations voted relatively high and relatively low for the issues. A high degree of consistency in the pattern of favorable vote from issue to issue is found to exist. Specific areas in Cincinnati embrace populations that always vote relatively high in favor of the issues of public school finance, while other areas are found to comprise populations whose favorable vote is consistently low.

An almost unbroken area of census tracts whose populations vote more favorably for the issues studied extends from the main business

section of Cincinnati next to the Ohio River northward and slightly eastward to the city limits beyond St. Bernard and Elmwood. The largest single area whose populations vote less favorably for the issues is in the western half of the city, west of Mill Creek. The eastern portions of the city also have populations whose favorable vote is generally low, although most populations in tracts in the eastern part of the city are not as strongly against the issues as those in the western half of the city. One area in the eastern portion of the city whose populations are markedly against the issues is composed of the census tracts immediately south of Norwood. Census tracts 63 and 64 between Norwood and St. Bernard also have populations that vote conspicuously against the issues.

Intercorrelations among the issues.- Correlation coefficients were determined between the per cent of favorable vote on one issue and the per cent of favorable vote on another, until the vote for each issue had been correlated with the vote for every other issue. Each of the 107 census tracts of the city was used as the number of cases. Thus, fifty-five different correlations were calculated. All obtained coefficients are consistently high, with a range from .73 to .96. Both the obtained coefficients of correlation and the maps, plotted in terms of areas of relatively high and low favorable vote, reveal a high degree of consistency in the voting behavior of various populations of Cincinnati. Such consistency is indicative of the existence of certain forces or factors that are intrinsically characteristic of particular populations of Cincinnati.

Populations opposing the issues.- The study discloses several particular populations of Cincinnati that show tendencies to oppose the

issues of public school finance. Populations used as criteria of the relative wealth of the city, represented by families owning homes and radios, show well defined tendencies to vote against the issues. According to every reasonable expectation, the low favorable vote of those who own relatively more wealth may be attributed to economic motives. Because the relatively wealthy populations are under the necessity of paying the greater portion of the costs of school support, they consequently may show reluctance to subscribe to issues calling for increased taxes.

Of the populations of Cincinnati, classified with reference to religious affiliation, only those identified with relatively large numbers of Catholics show pointed tendencies to oppose the issues. The favorable vote of populations composed largely of Catholic persons is decidedly smaller than that of other religious populations of the city. From the results of the study, the writer believes that voting populations of Cincinnati consisting largely of Catholic persons are disposed to vote more strongly against the issues than for them because many Catholic school children receive much of their educational training in schools separate from the Cincinnati Public Schools. To support two separate school systems, only one of which contributes to the education of the child, is unlikely and contrary to reasonable expectation. Evidence that Catholic populations of Cincinnati are relatively wealthy is indicated by the fact that they reside, for the most part, in areas where wealth in the city is relatively great. Therefore, the economic motive of protection from higher taxes may also be an instrumental inducement for them to vote against the issues.

Populations of Cincinnati consisting largely of native white

persons, which comprise approximately 82 per cent of the total population of the city, also tend to vote less favorably for the issues. Populations of the city consisting chiefly of native white persons whose parents are native white, however, show less opposition to the issues than those composed of native white individuals, one or both of whose parents are foreign born. Nevertheless, all native white persons of the city, regardless of the nativity of their parents, reside in areas whose populations show marked tendencies of voting less favorably for the issues with statistically significant differences.

It is possible, and rather likely, that none of the differences between the relative number of persons in Cincinnati, classified with respect to nativity or to race, means anything of itself. Why native white persons appear to vote less favorably for the issues of public school finance can hardly be explained by arguing that it is because they are native white. Certain reasons more nearly basal and to the point are needed; the statistical treatments used to determine whether real differences exist do not explain why they are present.

An examination of the distribution of the native white persons of Cincinnati offers a possible explanation of the low favorable vote of the populations they represent. The distribution of native white persons whose parents are foreign born reveals that the great majority reside in areas of the city where ownership of taxable property is relatively great. This is, as a rule, true also of the native white-native parentage populations, but not nearly to the same degree. Native white persons in Cincinnati of foreign born or mixed parentage are probably, for the most part, sons and daughters of foreign born parents who already live or who once lived in Cincinnati. Since nearly all foreign born persons

in Cincinnati are well past middle age,³ the sons and daughters are probably nearing middle age and may, therefore, likely exceed the average age of persons who are native white, but whose parents are also native white.

This similarity regarding the distribution of native white persons in populations of relatively great wealth offers a plausible explanation of the low favorable vote of the populations they represent. It is credible that, in general, native white persons of foreign or mixed parentage are sufficiently old to be rather conservative as to taxes, and to have acquired property in the form of homes. Mention has already been made of the low favorable vote of populations of the city whose families are owners of homes and taxable property. Therefore, populations of the city identified by large numbers of native white persons, particularly those whose parents are foreign born, may be inclined to oppose the issues because of economic motives. This is a reasonable interpretation of the relatively low favorable vote of populations of Cincinnati consisting largely of native white individuals, although it has not been proved and should not be regarded as conclusive without further study.

Another explanation as to why populations representing native white persons of foreign parentage are inclined to vote markedly against the issues may be associated with religious motives. The distribution of native white persons of foreign or mixed parentage is strikingly similar to that of Catholic persons. By inference, a large portion of the native white population of foreign or mixed parentage is probably Catholic. Opposition to the issues by the voting population composed largely

³ Studies in Economic Security: I, op. cit., p. 2.

of Catholics may thus account in part for the tendency of populations consisting largely of native white persons of foreign or mixed parentage to oppose the issues more strongly than voting populations representing most of the native white persons of native parentage.

The study reveals that voting populations of Cincinnati representing families whose memberships are as small as three and four persons, together with those whose families are of larger size, tend to vote less favorably for the issues. Furthermore, the tendency to oppose the issues is not only confined to populations with large families, but also to those containing large numbers of children of public school age.

It is doubtful whether the size of the family or the relative number of children of public school age in the family has much to do directly with the formation of attitudes toward the vote on the issues. Indeed, it would be more reasonable to suppose that the larger families, especially those with relatively more school children, would vote more favorably for the issues in order to provide sufficient funds for the education of these children. Other more fundamental motives for opposing the issues presumably exist.

In agreement with the evidence of the study, a credible interpretation as to why populations of Cincinnati representing large families, including those with relatively large numbers of school children, tend to oppose the issues is again associated with economic motives, and possibly with religion. Large families of the city are mostly located in areas where home and property ownership is frequent. Likewise, populations including relatively large numbers of school children are generally located within the same areas. Therefore, large families, including those that comprise greater numbers of school children, are

probably the same families whose economic ability to support the issues of public school finance is above par. It is, therefore, more conceivable to think of family size and of the number of school children in the family as incidental to the more causal economic motives. In all probability, these populations consisting of relatively large families and relatively more children of school age tend to vote more strongly against the issues of public school finance because, being relatively more wealthy, they do not wish to support a higher tax burden.

Populations containing large families or families having relatively large numbers of children of public school age may tend to oppose the issues because of religious motives as well as those of an economic character. An examination of the distribution of the large family in Cincinnati and of the family having more children of school age discloses that these two populations are found, for the most part, in areas where the Catholic population is relatively large. Consequently, Catholic families may be somewhat larger than other families in the city, and the chances are considerable that the number of school children in the Catholic family is, likewise, relatively large. As a matter of fact, a former study has revealed that more children are born to Catholic women in Cincinnati than to women of other religious denominations within the city.⁴ It is again probable that populations in Cincinnati containing large families and relatively more school children are inclined to oppose the issues, not because of the size of the family itself, but more so because Catholic populations, whose

⁴Ibid., p. 34.

family membership appears to be larger, tend to oppose the issues. The suggestion has already been made that the typical Catholic citizen may tend to vote more against the issues because his children may be receiving their educational training from privately supported schools separate from the public schools of Cincinnati.

All populations of Cincinnati manifesting tendencies of opposing the issues of public school finance lend credence to the belief that married populations of the city, taken as a whole, also may be less inclined to favor the issues. This study reveals that such an assumption is possible. Populations comprising relatively large numbers of married persons tend to vote decidedly less in favor of the issues. The distribution of married persons in the city, as shown by the study, follows the general pattern of every opposing population already mentioned. Where relatively large numbers of persons who are married are located in Cincinnati, relatively large numbers of persons opposing the issues are, likewise, found. It is conceivable that married persons generally tend to subscribe less favorably for the issues for the same reasons suggested in the treatment of the former populations, and not because of any inherent reason characteristic of married persons, themselves. They show evidence of owning more wealth in the form of taxable property, and the economic motive of avoidance of higher taxes most likely plays an important role in the way married persons of Cincinnati vote.

Populations favoring the issues.- This study reveals that the populations of Cincinnati showing tendencies to vote more favorably for the issues of public school finance are populations that are, in some respects, the antithesis of those that tend to oppose them. Populations of the city that are more inclined to subscribe to the issues

are those representing relatively less wealth, and those that depend primarily upon the public schools of Cincinnati for the educational training of their children.

Populations in Cincinnati that own relatively little taxable property, those identified by large numbers of Negro and foreign born persons, and those living in the more densely populated areas of the city all show decided tendencies of favoring the issues. Populations consisting of families whose membership is not more than one or two persons, and those comprising large numbers of widowed, divorced, and persons whose marital status is not known, likewise, lend greater support to the issues. Other populations manifesting the same tendencies are those representative of large numbers of Protestant and Jewish persons, and those consisting of most persons who are unaffiliated with any religion, or whose religion is unspecified or unknown.

With the exception of populations of Cincinnati identified by large numbers of Protestant and Jewish persons, all others disclosing tendencies of voting more favorably for the issues are found principally in areas where the wealth of the people is below par. Densely populated areas of the city are located where home ownership and other taxable property are shown to be lowest. The foreign born and Negro populations live in these densely populated areas, although they do not occupy identical areas in the city. Persons whose religious ties appear to be rather weak, as indicated by the fact that the great majority of them profess no religious affiliations, reside in the denser populated areas where home and property ownership is not great. The widowed, divorced, and persons whose marital status is unknown are, likewise, found in these crowded areas.

Such relationships lend support to the conviction that these

populations tend to vote more favorably for the issues because they own relatively less taxable wealth. They have little to lose because of any resulting increase in taxes for public school support. It is incredible that Negro or foreign born populations would subscribe more to the issues merely because of their race or nativity. As mentioned before, the populations representative of married persons of the city show tendencies of opposing the issues. Consequently, those populations characterized by larger numbers of widowed or divorced persons would hardly support the issues just because most of them are not now married. Rather, if they tend to favor the issues, they do so probably because they are less wealthy than the married populations of the city and, therefore, have little or nothing at stake if the issues should carry the public vote.

Both Protestant and Jewish populations of Cincinnati differ from the other populations that show tendencies of favoring the issues of public school finance in that they do not, as a rule, live in areas where the wealth of the people is relatively small. The Protestants, especially, are located throughout most parts of the city so that the great majority of them reside in areas representing relatively more taxable wealth. The Jewish populations, likewise, are shown to have residence in parts of the city that can hardly be considered as economic indigent areas. Because of residence in the more wealthy areas of the city, both religious groups are indicative of those with relatively great wealth, and are not to be regarded in the same economic aspect of other populations that have disclosed tendencies of favoring the issues.

Both the Protestant and Jewish populations in Cincinnati imply tendencies of favoring the issues of public school finance, regardless of their relative economic affluence. No other motive for the predisposition

to favor the issues by populations representative of Protestant and Jewish voters can be proposed by the writer than that which is antithetical of the reason why populations composed largely of Catholics tend to oppose them. The study shows that populations characterized by large percentages of Catholic persons manifest marked tendencies of opposing the issues, and the suggestion has been proposed that they probably do so partly because they depend less upon the public schools of Cincinnati for the educational training of their children. Conversely, voting populations closely associated with Protestant and Jewish groups may lend greater support to the issues primarily because the public schools of the city are the sole educational institutions upon which they depend.

Populations neither favoring nor opposing the issues.- A few populations of Cincinnati reveal no differences in the character of the vote on issues of public school finance from populations at large in the city. They disclose tendencies neither to favor the issues nor to oppose them. Populations in Cincinnati consisting of families whose rentals per dwelling or per room are relatively high show no differences in their vote from those whose rentals are relatively low. No real difference is indicated between the vote of populations with large numbers of tenant families having heat furnished as a part of the rental and the vote of populations of tenant families having no heat furnished. Voters among populations engaged in gainful employment, likewise, are shown to reveal no true difference between their vote on the issues and the vote of populations characterized by large numbers of unemployed. Populations in Cincinnati largely identified by single persons of voting age also indicate no particular preference one way or the other in their vote on the issues.

The chances are great, however, that these variables are not as valid criteria of the relative wealth of populations as those of home

and property ownership. Although such differences as those of monthly rentals or the per cent of tenant families having heat furnished in their rentals may indicate, to some degree, the extent of economic well-being, they may also be attributable to the necessity of locating a suitable residence near the place of occupation.

The active interest of populations in the issues.- It is interesting to note that, without a single exception, every population in the city revealing tendencies of opposing the issues of public school finance manifests more interest in the issues when they are presented to the public. This is evident by the fact that relatively more eligible voters among the opposing populations go to the polls to vote on the issues than eligible voters among other populations of the city. The relative number of eligible voters who actually vote in populations showing tendencies to vote against the issues is considerably greater than the relative number among the populations disclosing tendencies to support them.

This pointed concern in the issues by the populations in Cincinnati that tend to oppose them is not surprising, especially if the interpretation is sound that the opposing populations all represent those owning relatively great wealth or those whose children do not always attend the public schools of the city. Those who are relatively more wealthy are shown to have tendencies to oppose the issues. They show an added concern in voting probably because, owning more taxable wealth, they wish to protect themselves from the obligation of supporting a higher tax rate for public schools. The suggestion has been made that populations recognized by large percentages of Catholic persons are more concerned about using the ballot because they, too, are not converted to the point of view of paying additional taxes for the support of schools to which

they do not send their children. The greater active interest displayed by populations, every one of which shows inclinations to oppose the issues, lends support to the belief that both the economic motives and those of a religious nature are causal influences in the determination of the vote.

Every population of Cincinnati that tends to favor the issues of public school finance exhibits either marked indifference about them or manifests no greater concern than that of the entire city population. Almost all populations that have been shown to represent relatively little wealth tend to indicate a decided lag in their interest in the outcome of the issues, as measured by the relatively small number of eligible citizens among these populations who actually vote. The only exception is the population consisting of large percentages of foreign born, whose concern appears to be no different from populations in the city at large. Relatively less wealthy populations of Cincinnati that are particularly inactive in voting on the issues are those representative of families owning few homes or other taxable property; populations identified by high percentages of Negroes; those composed of small families of one and two persons; populations living in the denser areas of the city; those that comprise many persons whose religious ties are rather weak; and the populations of the city containing relatively large numbers of widowed, divorced, and persons whose marital status is unknown. They show tendencies of favoring the issues but, meanwhile, they fail to make effective use of the privilege of voting.

Such diminished concern about matters of public school support is not surprising, and may be expected from populations that have few economic considerations at stake. The cost of a higher tax to them is

negligible; therefore, interest in such matters is almost certain to wane.

Protestant and Jewish persons of Cincinnati are associated with voting populations of the city whose concern about the issues appears to be more marked than that of other populations manifesting tendencies of favoring the issues. Even the interest of voters identified by these two religious groups, however, seems to be no greater than the interest expressed by the voting population of the entire city. This heightened concern about matters of public school support is probably accounted for in that considerable numbers of Protestant and Jewish individuals are located in areas of the city representative of relatively great wealth. Consequently, although populations characterized by high percentages of Protestant and Jewish persons are generally inclined to favor the issues, it could be that eligible voters among their number who are opposed to the issues may vote in larger percentages than eligible voters who have been shown to favor them. Inasmuch as this suggestion has not been proved, but is only a possibility in the light of the evidence of the study, it should not be regarded as final.

Conclusions

All forces under consideration in this study appear to revert to only two primary sources, both of which may, themselves, be closely related. The relative wealth of populations of Cincinnati appears to be the source from which all other factors originate. Even the other force, that of Catholicism, which, to all appearances, contributes to the determination of the way people of the city vote on the issues of public school finance, may be secondary to relative wealth. In general, the greater the ability of populations of Cincinnati to support issues

of public school finance, the less favorably they vote for them. Conversely, the populations of the city that really support the issues are those with relatively few resources with which to pay the costs.

If religious affiliation may be considered as a second force that contributes to the direction or manner in which populations vote, then Catholicism also plays a role. The evidence is conclusive that populations of Cincinnati represented principally by Catholic persons show pointed tendencies of voting less favorably for issues of public school finance. By inference, Catholic voters of the city, themselves, are believed to oppose the issues, presumably because they are already burdened with the task of supporting an educational system that parallels the public school system of the city. Such being the case, the economic factor of relative wealth and ability again becomes the force on which even religious differences in the vote depend.

Not only do populations of Cincinnati whose wealth is relatively great and those representing the Catholic faith show tendencies of voting less favorably for the issues, but they also appear to be particularly interested in the issues, and thus more active in the employment of the vote. This alertness to vote on the issues evidently results in greater opposition to additional support of public schools because of the increased use of the ballot by the opposing populations. Meanwhile, the populations of the city that reveal tendencies of favoring the issues of public school finance are, without doubt, less interested about their disposition. The diminished concern of populations showing tendencies to favor the issues allows for the vote of the populations opposing them to carry added weight.

Recognition of the dangers of generalization similar to those made

in this study should be pointed out. During the progress of the study various factors analyzed were consequently combined, and are now regarded only as appurtenant to the two forces considered, as a result of the analysis, as more basal. There is a remote possibility that these separate factors may be major influences in themselves, and that they are not so much associated incidentally with the economic status of populations or with religion as is suggested in this study. As a result of the investigation, it is the writer's conviction that all factors and forces that characterize the populations of Cincinnati, with respect to the public vote on the issues, are related to either wealth or religion. However, further study and use of different techniques, together with additional information beyond that furnished by the Regional Census of 1935 and the Federal Census of 1930, might throw a different light on some of the forces analyzed and conclusions reached.

The future of the Cincinnati problem.- From the evidence of the study, the problem of providing sufficient funds for the maintenance of a modern public educational program in the Cincinnati School District promises to be rather difficult. Since the enactment of legislative measures reducing the tax rate that may be levied on property in Ohio without a special vote of the people from fifteen mills to ten mills, some of the special levies for operating expenses have barely passed the public vote, and during the period covered by the study one of them failed to carry. Moreover, the legislative restriction passed by the people of Ohio in 1933, which raised the per cent of favorable vote necessary to carry an issue for the financing of a building program from 50 per cent to 65 per cent, brought about the defeat of all six bond issues presented during the same period. Indeed, three of the six bond

issues for building purposes would have failed to carry even if the new amendment raising the per cent of favorable vote had not been enacted. The special issues of public school finance, therefore, especially those concerned with finance for the erection of buildings, are liable to face defeat each time they are presented unless some new aid, legislative or otherwise, comes to the rescue.

What other large cities of Ohio are doing in the support of levies for operation and issues for building purposes has not been a part of the investigation. However, it is probable that the larger cities of the state, whose populations represent various groups with divergent interests that make for extreme unsolidarity of opinion about the financing of public education, are faced with similar difficulties, especially with those concerned with the financing of building programs. Even with more favorable sentiment about the financing of funds for buildings than that expressed by the Cincinnati public, the problems encountered by other large Ohio cities would prove challenging.

Because of the severity of the problem of providing adequate school buildings for the maintenance of an educational program, even when the required vote necessary to pass an issue for such purposes was only 50 per cent, this study leads to the suggestion that Cincinnati ask that further consideration be given the amendment passed by the people of Ohio which raised the required favorable vote from 50 per cent to 65 per cent. Unless the public of Cincinnati changes its attitude about providing finances for the erection of school buildings, few buildings will be financed by public vote, even if and when such an amendment is revised. The other amendment providing a tax limit of ten mills on all property

without special consent of the people is not quite so threatening. Unless other funds from other sources can be substituted for the extra amount necessary to operate the schools of the city, however, the reduction of the tax rate to ten mills leaves the Cincinnati Board of Education no other alternative but to present levies for operating expenses for almost every year.

When an issue of public school finance is presented to the public of Cincinnati, campaign materials concerning the issue are formulated and campaign programs are undoubtedly carried into effect. The study has shown that much attention was given to campaign operations whenever levy and bond issues were presented to the public. Of course, interpretation of the issues to the public is most essential, and certainly does much to enlighten the citizens as to what is proposed.

In light of the results of this study, certain populations of Cincinnati might be thought of as key groups to which should be directed much emphasis about the educational interpretation of the issues. The particular populations of the city that manifest definite tendencies of favoring the issues are the same ones that show considerable negligence in the exercise of the vote when the issues are presented to the public. It is highly probable, although the present study does not attempt to test the assumption, that the same populations in Cincinnati that fail to make use of the franchise on issues of public school finance also neglect to vote on other issues not related to public school finance. If it is assumed that good citizenship recognizes the privilege of voting as a civic duty, a study of the extent to which various populations, similar to those employed in this investigation, vote on other

public issues would be worth thoughtful consideration.

Is it possible that particular populations in Cincinnati endanger public education by insisting on the maintenance of schools of their own in which the child may receive training that parallels the instruction received in the public schools? When over one third of the people of a school district are affiliated with such a population, as is evidently the situation in Cincinnati, the maintenance of a parallel school system separate from the public schools may become a serious threat to adequate support of public education.

With the assumption that to vote is not only a right and privilege, but also a civic duty of every citizen of voting age, attention to this important obligation should be directed to those who do not sense fully their voting responsibilities. Over a period of a few years much attention can be directed in the public schools toward this one aspect of good citizenship. This is not meant as suggesting that duty to vote is not given effective treatment in the public schools of the city, but even greater emphasis might produce results that may prove promising.

The investigation has revealed two particular classes of people in Cincinnati who make insufficient use of the right to vote and, at the same time, who show definite tendencies of being more friendly toward issues of public school finance. The first class consists of those various populations of the city that are not so fortunate in terms of economic well-being. Negro populations of Cincinnati, especially, are representative of this class. Others indicative of little wealth and that tend to support the issues to a greater degree than the entire voting population of the city are populations representative of the foreign born and those identified by persons, taken collectively, whose

religious and family ties are not strong. All these populations that are representative of less wealth reside in definite areas of the city, well recognized as those of the denser populated areas. Although these groups, taken as a whole, are representative of populations that reflect only a small amount of civic solidarity, continual educational interpretation of matters of public school support directed their way may awaken their interest about their civic responsibilities with respect to the exercise of the ballot. If emphasis could be especially directed to these less wealthy populations with the objective of getting them to sense more fully the importance of the exercise of the voting franchise, the weight of their vote would give the issues of public school finance a fair chance of surviving the opposition of those who manifest a clearer sense of their civic obligations.

The second population that should be especially stimulated to exercise the franchise to vote consists of the religiously affiliated populations of Cincinnati other than Catholic. The Jewish population and all Protestant groups, considered as a whole, imply strong tendencies of neglecting to go to the polls in sufficiently large numbers to compare with the number of voters characterized by Catholic persons. Although the Jewish population in Cincinnati is found mostly in one or two specific areas, Protestants are scattered throughout the whole city, and are not confined to only a few areas. Further interpretation of civic matters concerned with school support directed to the Protestants of the city, therefore, may be extremely difficult, and may not be carried further than has been the practice during the decade of the study. However, the study lends credence to the belief that Protestant voters of Cincinnati tend to favor the issues of public school finance to a

greater extent than the population of the entire city. If they could be stimulated to recognize a keener feeling of responsibility in the exercise of the vote equal to that manifested by the Catholics of Cincinnati, their vote for any issue of a civic nature would consequently carry considerable weight.

The public schools of the nation undoubtedly play a most important role of teaching citizenship in an American democracy, together with any responsibilities that must be shouldered in order to enjoy American rights and privileges. One of the responsibilities of the American citizen is to make intelligent use of the ballot when the opportunity presents itself. The public schools of Cincinnati are, without doubt, doing considerable to enlighten the public about pertinent aspects of American education. The personnel of the public schools of the city should be particularly conscious of the need for continued emphasis of the benefits derived from free public education, which exists only with the consent of those who possess the right to vote.

Problems for further investigation.- One or two problems worth considering arise from this study. To what extent do particular populations of cities of the United States support public education when they have divergent interests resulting from their support of a school system that supposedly parallels that of the public school? With reference to this study, the Catholic population of Cincinnati is representative of such a group. From the results of the study, voting populations of Cincinnati designated particularly by large percentages of Catholic persons appear to carry considerable weight in their opposition against all issues of public school support. Is this opposition

typical of similar populations of other cities of the nation, to the extent that the support of the public school is weakened materially and that educational advancement of the people, taken in a broad sense, is thus retarded? Would it be undemocratic to contend that all the children of all the people should attend the public schools in order that education may receive what support the public may decide without conflicting opinions concerning what schools to support?

This study has made no attempt to determine the extent to which the respective populations of Cincinnati make use of the public vote on other matters of a civic or public nature. Only the public vote of the various populations of the city on the issues of public school support has been investigated. It is quite possible that those who manifest indifference about the outcome of the issues of public school finance make little use of the vote on other civic matters decided upon by the public ballot. On the other hand, it is rather possible that those who make more extensive use of the vote on matters of public school support also make effective use of the public vote concerning other public issues. An investigation concerned with this problem would disclose the true facts about these assumptions, and should merit thoughtful consideration.

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APPENDIX I

THE VOTING RETURNS OF THE SCHOOL LEVY AND BOND ISSUES PRESENTED TO THE PUBLIC OF THE CINCINNATI SCHOOL DISTRICT DURING 1930-1939 BY CENSUS TRACTS

All official voting returns from the five hundred or more precincts were built up into census tract form. The precincts usually followed the boundaries of the census tracts, but they overlapped occasionally. Where precincts were found to belong to more than one census tract an apportionment, as worked out by the Bureau of Research of the Cincinnati Public Schools, was used in the build-up of the returns of the vote into census tract form.

A. SCHOOL BOND ISSUE FOR BUILDINGS, NOVEMBER 7, 1933

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	560	445	1005	55.7	31	480	799	1279	37.5
2	1078	883	1961	56.0	32	778	790	1568	49.6
3	836	759	1595	52.4	33	610	624	1234	49.4
4	1385	563	1948	71.1	34	730	467	1197	61.0
5	1283	457	1740	73.7	35	612	535	1147	53.4
6	882	585	1467	60.1	36	876	435	1311	66.8
7	1130	937	2067	54.7	37	821	802	1623	50.6
8	494	264	758	65.2	38	955	1423	2378	40.2
9	876	756	1632	53.7	39	581	863	1444	40.2
10	754	622	1376	54.8	40	617	866	1483	41.6
11	618	696	1314	47.0	41	682	1080	1762	38.7
12	412	330	742	55.5	42	516	716	1232	41.9
13	475	622	1097	43.3	43	320	272	592	54.1
14	672	776	1448	46.4	44	699	787	1486	47.0
15	999	1002	2001	49.9	45	56	230	286	19.6
16	805	766	1571	51.2	46	358	581	939	38.1
17	783	738	1521	51.5	47	804	983	1787	45.0
18	804	901	1705	47.2	48	809	966	1775	45.6
19	542	498	1040	52.1	49	1133	1636	2769	40.9
20	540	557	1097	49.2	50	1254	1479	2733	45.9
21	796	663	1459	54.6	51	709	772	1481	47.9
22	811	777	1588	51.1	52	1116	1387	2503	44.6
23	601	543	1144	52.5	53	956	1283	2239	42.7
24	429	443	872	49.2	54	172	161	333	51.7
25	690	831	1521	45.4	55	1082	987	2069	52.3
26	1162	1533	2695	43.1	56	1138	872	2010	56.6
27	837	1014	1851	45.2	57	1021	1413	2434	41.9
28	1292	1432	2724	47.4	58	585	663	1248	46.7
29	676	874	1550	43.6	59	163	232	395	41.8
30	623	791	1414	44.1	60	910	503	1413	64.4

APPENDIX I-A (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
61	950	542	1492	63.7	85	152	229	381	39.9
62	219	206	425	51.5	86	762	886	1648	46.2
63	425	607	1032	41.2	87	434	536	970	44.7
64	620	750	1370	45.3	88	331	509	840	39.4
65	1139	808	1947	48.5	89	533	761	1294	41.2
66	769	423	1192	64.5	90	311	351	662	47.0
67	1093	593	1686	64.8	91	554	699	1253	44.2
68	1288	598	1886	68.3	92	213	481	694	30.7
69	1020	909	1929	52.9	93	708	1035	1743	40.6
70	611	763	1374	44.5	94	472	795	1267	37.3
71	718	658	1376	52.2	95	557	1043	1600	34.8
72	474	472	946	50.1	96	1087	1398	2485	43.7
73	578	569	1147	50.4	97	833	1656	2489	33.5
74	700	905	1605	43.6	98	270	519	789	34.2
75	345	486	831	41.5	99	903	1588	2491	36.3
76	468	516	984	47.6	100	558	830	1388	40.2
77	411	530	941	43.7	101	557	615	1172	47.5
78	728	1106	1834	39.7	102	770	1009	1779	43.3
79	475	724	1199	39.6	103	711	772	1483	47.9
80	41	83	124	33.1	104	182	233	415	25.1
81	128	162	290	44.1	105	212	437	649	32.7
82	918	1281	2199	41.7	106	180	286	466	38.6
83	68	120	188	36.2	107	315	429	744	42.3
84	199	213	412	48.3		71378	77786	149164	47.9

District Outside City of Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Chevoit	1	415	541	956	43.4
	2	374	399	773	48.4
	3	339	444	783	43.3
	4	389	614	1003	38.8
Norwood	1-G	132	144	276	47.8
	3-D	20	34	54	37.0
Anderson Township		14	15	29	48.3
Columbia Township		584	736	1320	44.2
Delhi Township		27	42	69	39.1
Green Township		223	279	502	44.4
Springfield Township		461	371	832	55.4
Sycamore Township		87	96	183	47.5
Disputed Ballots		135	95	230	58.8
Total Outside City		3200	3810	7010	45.6
Total for Cincinnati		71378	77786	149164	47.9
Grand Total		74578	81596	156174	47.7

B. SCHOOL LEVY FOR OPERATING EXPENSES, NOVEMBER 6, 1934

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	667	319	986	67.6	45	168	109	277	60.6
2	1209	629	1838	65.8	46	528	351	879	60.1
3	1234	445	1679	73.5	47	1070	625	1695	63.1
4	1600	500	2100	76.2	48	1084	615	1699	63.8
5	1538	469	2007	76.6	49	1563	1039	2602	60.1
6	932	516	1448	64.4	50	1789	889	2678	66.8
7	1259	633	1892	66.5	51	870	514	1384	62.9
8	477	216	693	68.8	52	1355	1082	2437	55.6
9	950	525	1475	64.4	53	1202	1008	2210	54.4
10	747	445	1192	62.7	54	199	124	323	61.6
11	688	555	1243	55.3	55	1199	735	1934	62.0
12	476	273	749	63.6	56	1111	791	1902	58.4
13	522	482	1004	52.0	57	1642	953	2595	63.3
14	833	507	1340	62.2	58	827	378	1205	68.6
15	1111	729	1840	60.4	59	155	97	252	61.5
16	880	561	1441	61.1	60	808	470	1278	63.2
17	826	551	1377	60.0	61	927	559	1486	62.4
18	1084	628	1712	63.3	62	289	173	462	62.6
19	695	300	995	69.8	63	566	481	1047	54.1
20	718	338	1056	68.0	64	745	586	1331	56.0
21	870	542	1412	61.6	65	1349	506	1855	72.7
22	1099	487	1586	69.3	66	959	291	1250	76.7
23	742	387	1129	65.7	67	1317	345	1662	79.2
24	549	266	815	67.4	68	1500	349	1849	81.1
25	876	544	1420	61.7	69	1211	588	1799	67.3
26	1413	1001	2414	58.5	70	842	450	1292	65.2
27	1036	670	1706	60.7	71	933	412	1345	69.4
28	1649	965	2614	63.1	72	637	267	904	70.5
29	1130	681	1811	62.4	73	689	412	1101	62.6
30	608	416	1024	59.4	74	908	614	1522	59.7
31	675	513	1188	56.8	75	450	330	780	57.7
32	1037	477	1514	68.5	76	644	428	1072	60.1
33	772	383	1155	66.8	77	592	384	976	60.7
34	868	318	1186	73.2	78	1039	737	1776	59.0
35	737	350	1087	67.8	79	604	536	1140	52.6
36	1022	339	1361	75.1	80	71	56	127	55.9
37	1129	423	1552	72.7	81	167	135	302	55.3
38	1369	904	2273	60.2	82	1268	981	2249	56.4
39	752	570	1322	56.9	83	96	72	168	57.1
40	817	582	1399	58.4	84	275	117	392	70.2
41	894	728	1622	55.1	85	163	188	351	46.4
42	673	474	1147	58.7	86	891	643	1534	58.1
43	321	208	529	60.7	87	665	442	1107	60.1
44	885	561	1446	61.2	88	485	304	789	61.5

APPENDIX I-B (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
89	756	544	1300	58.2	99	1051	1253	2304	45.6
90	188	154	342	55.0	100	763	563	1326	57.5
91	624	519	1143	54.6	101	724	445	1169	61.9
92	285	317	606	47.3	102	996	761	1757	56.7
93	850	775	1625	52.3	103	839	528	1367	61.4
94	551	601	1152	47.8	104	155	227	382	40.6
95	711	858	1569	45.3	105	323	350	673	48.0
96	1238	1022	2260	64.3	106	259	215	474	54.6
97	1042	1226	2268	45.9	107	328	396	724	45.3
98	357	420	777	46.0					
Total for Cincinnati					88261	54750	143011		61.7

District Outside City of Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	543	394	937	58.0
	2	414	353	767	54.0
	3	432	390	822	52.6
	4	482	499	981	49.1
Norwood	1-G	140	97	237	59.1
	3-D	19	38	57	33.3
Anderson Township		11	12	23	47.6
Columbia Township		796	584	1380	57.7
Delhi Township		22	53	75	29.3
Green Township		304	197	501	60.7
Springfield Township		533	321	854	62.4
Sycamore Township		192	122	314	61.1
Disputed Ballots		12	8	20	60.0
Total Outside City		3900	3068	6968	55.8
Total for Cincinnati		88261	54750	143011	61.7
Grand Total		92161	57818	149979	61.5

C. SCHOOL LEVY FOR OPERATING EXPENSES, NOVEMBER 5, 1935

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	440	294	734	59.9	43	180	226	406	44.3
2	813	637	1450	56.1	44	501	624	1125	44.5
3	645	444	1089	59.2	45	136	107	243	56.0
4	1254	512	1766	71.0	46	402	429	831	48.4
5	1129	524	1653	68.3	47	732	744	1476	49.6
6	680	481	1161	58.6	48	702	694	1396	50.3
7	959	734	1693	56.6	49	1098	1263	2361	46.5
8	324	246	570	56.8	50	1334	1084	2418	55.2
9	691	568	1259	54.9	51	672	593	1265	53.1
10	593	425	1018	58.3	52	1001	1083	2084	48.0
11	478	613	1091	43.8	53	792	1107	1899	41.7
12	328	267	595	55.1	54	156	144	300	52.0
13	372	544	916	40.6	55	829	848	1677	49.4
14	569	579	1148	49.6	56	769	828	1597	48.2
15	744	767	1511	49.2	57	1082	1160	2242	48.3
16	704	655	1359	51.8	58	688	555	1243	55.3
17	610	590	1200	50.8	59	100	117	217	46.1
18	779	673	1452	53.7	60	652	512	1164	56.0
19	548	425	973	56.3	61	721	532	1253	57.5
20	471	363	834	56.5	62	231	196	427	56.4
21	525	506	1031	50.9	63	421	627	1048	40.2
22	806	600	1406	57.3	64	495	646	1141	43.4
23	580	431	1011	57.4	65	1150	657	1807	63.6
24	366	321	687	53.3	66	605	170	775	78.1
25	671	620	1291	52.0	67	1196	514	1710	69.9
26	985	1169	2154	45.7	68	1275	413	1688	75.5
27	732	754	1486	49.3	69	934	720	1654	56.5
28	1043	1118	2161	48.3	70	626	543	1169	53.6
29	634	646	1280	49.5	71	808	489	1297	62.3
30	619	616	1235	50.1	72	438	306	744	58.9
31	478	649	1127	42.4	73	588	422	1010	58.2
32	794	632	1426	55.7	74	654	684	1338	48.9
33	580	484	1064	54.5	75	312	371	683	45.7
34	654	322	976	67.0	76	483	565	1048	46.1
35	524	399	923	56.8	77	364	376	740	49.2
36	695	362	1057	65.8	78	739	849	1588	46.5
37	908	489	1397	65.0	79	399	571	970	41.1
38	900	1069	1969	45.7	80	53	55	108	49.1
39	606	605	1211	50.0	81	117	128	245	47.8
40	550	633	1183	46.5	82	914	1117	2031	45.0
41	713	785	1498	47.6	83	73	84	157	46.5
42	524	513	1037	50.0	84	213	134	347	61.4

APPENDIX I-C (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
85	114	196	310	36.8	97	690	1489	2179	31.7
86	627	754	1381	45.4	98	198	377	575	34.4
87	371	445	816	45.5	99	729	1318	2047	35.6
88	330	423	753	43.8	100	569	701	1270	44.8
89	497	576	1073	46.3	101	568	599	1167	48.7
90	251	296	547	45.9	102	688	870	1558	44.2
91	422	556	978	43.1	103	578	548	1126	51.3
92	182	376	558	32.6	104	157	182	339	46.3
93	554	924	1478	37.5	105	195	284	479	40.7
94	348	638	986	35.3	106	181	208	389	46.5
95	476	907	1383	34.4	107	249	409	658	37.8
96	883	1205	2088	42.3					
Total for Cincinnati						63510	61632	125142	50.7

District Outside City of Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	424	555	979	43.3
	2	299	394	693	43.1
	3	243	470	713	34.1
	4	296	543	839	35.3
Norwood	1-G	81	136	217	37.4
	3-D	16	48	64	25.0
Anderson Township		4	13	17	23.5
Columbia Township		476	718	1194	39.9
Delhi Township		23	49	72	31.9
Green Township		148	201	349	42.4
Springfield Township		363	396	759	47.8
Sycamore Township		147	215	362	40.6
Disputed Ballots		22	23	45	49.0
Total Outside City		2542	3761	6303	40.3
Total for Cincinnati		63510	61632	125142	50.8
Grand Total		66052	65393	131445	50.3

D. THE \$3,300,000 SCHOOL BOND ISSUE FOR BUILDINGS,
NOVEMBER 5, 1935

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	467	265	732	63.8	44	552	544	1096	50.4
2	895	518	1413	63.3	45	129	98	227	56.8
3	784	305	1089	72.0	46	399	389	788	50.6
4	1382	366	1748	77.2	47	758	696	1454	52.0
5	1249	349	1598	78.2	48	753	640	1393	54.1
6	728	366	1094	66.5	49	1189	1085	2274	53.0
7	1054	574	1628	64.8	50	1368	978	2346	58.3
8	387	169	556	69.6	51	694	540	1234	56.2
9	765	507	1272	60.1	52	1080	974	2054	52.6
10	644	385	1029	62.6	53	856	1022	1878	45.6
11	575	511	1086	52.9	54	162	127	289	56.1
12	382	256	638	59.9	55	940	710	1650	57.0
13	432	489	921	46.9	56	877	701	1578	55.6
14	601	523	1124	53.5	57	1127	1070	2197	51.3
15	837	646	1483	56.4	58	709	498	1207	58.7
16	753	573	1326	56.8	59	110	94	204	53.9
17	739	494	1233	59.9	60	725	418	1143	63.4
18	847	605	1452	58.3	61	839	443	1282	65.4
19	583	411	994	58.7	62	242	164	412	60.2
20	495	326	821	60.3	63	434	574	1008	43.1
21	608	424	1032	58.9	64	553	588	1141	48.5
22	863	539	1402	61.6	65	1193	576	1769	67.4
23	618	394	1012	60.6	66	650	183	833	78.0
24	409	274	683	59.9	67	1362	411	1773	76.8
25	708	579	1287	55.0	68	1297	359	1656	78.3
26	1109	1063	2172	51.1	69	1019	636	1655	61.6
27	816	675	1491	54.7	70	676	486	1162	58.2
28	1143	982	2125	53.8	71	827	440	1267	65.3
29	686	598	1284	53.4	72	477	263	740	64.5
30	699	503	1202	58.2	73	583	395	978	59.6
31	534	604	1138	46.9	74	735	609	1344	54.7
32	872	544	1416	61.6	75	345	325	670	51.5
33	602	455	1057	57.0	76	516	495	1011	51.0
34	688	291	979	70.3	77	395	340	735	53.6
35	542	358	900	60.2	78	819	771	1590	51.5
36	718	278	996	72.1	79	452	510	962	47.0
37	943	418	1361	69.3	80	53	55	108	49.1
38	921	1021	1942	47.4	81	132	115	247	53.4
39	608	558	1166	52.1	82	939	1021	1960	47.9
40	575	577	1152	49.9	83	72	77	149	48.3
41	705	728	1433	49.2	84	225	131	356	63.2
42	551	471	1022	53.9	85	134	181	315	42.5
43	207	195	402	51.5	86	655	665	1320	49.6

APPENDIX I-D (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
87	428	398	826	51.8	98	233	344	577	40.4
88	360	368	728	49.5	99	808	1234	2042	39.6
89	523	516	1039	50.3	100	608	631	1239	49.1
90	282	252	534	52.8	101	599	516	1115	53.7
91	489	505	994	49.2	102	760	788	1548	49.1
92	206	346	552	37.3	103	608	528	1136	53.5
93	615	829	1444	42.6	104	167	177	344	48.5
94	383	590	973	39.4	105	221	232	453	48.8
95	544	827	1371	39.7	106	193	184	377	51.2
96	996	1092	2088	47.7	107	271	369	640	42.3
97	771	1394	2165	35.6					
Total for Cincinnati						68842	54689	123531	55.7

Returns from District Outside City of Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	508	475	983	51.7
	2	339	353	692	48.9
	3	291	427	718	40.5
	4	338	472	810	41.7
Norwood	1-G	82	135	217	37.8
	3-D	17	41	58	29.3
Anderson Township		4	10	14	28.6
Columbia Township		525	638	1163	45.1
Delhi Township		27	54	81	33.3
Green Township		172	172	344	50.0
Springfield Township		409	342	751	54.5
Sycamore Township		148	195	343	43.1
Disputed Ballots		29	12	31	81.8
Total Outside City		2889	3326	6215	46.5
Total for Cincinnati		68842	54689	123531	55.7
Grand Total		71731	58015	129746	55.3

E. SPECIAL SCHOOL LEVY OF TWO MILLS FOR OPERATING EXPENSES,
NOVEMBER 3, 1936

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	733	441	1174	62.4	43	372	287	659	56.4
2	1285	906	2191	58.6	44	796	810	1606	49.6
3	660	335	995	66.3	45	167	168	335	49.9
4	1435	547	1982	72.4	46	461	649	1110	41.5
5	1698	581	2279	74.5	47	1073	1057	2130	50.4
6	1131	699	1830	61.8	48	938	1042	1980	47.4
7	1640	947	2587	63.4	49	1449	1646	3095	46.8
8	544	284	828	65.7	50	1649	1546	3195	51.8
9	1112	818	1930	57.6	51	798	892	1690	47.2
10	961	686	1647	58.3	52	1120	1683	2803	40.0
11	648	627	1275	50.8	53	1065	1600	2665	40.0
12	482	367	849	56.8	54	205	226	431	47.6
13	514	669	1183	43.4	55	1119	1276	2395	46.7
14	853	847	1700	50.2	56	1064	1260	2324	45.8
15	1269	1045	2314	54.8	57	1312	1710	3022	43.4
16	1023	854	1877	54.5	58	811	879	1690	48.0
17	1002	766	1768	56.7	59	146	182	328	44.5
18	1137	922	2059	55.2	60	989	798	1787	55.3
19	871	644	1515	57.4	61	1031	804	1835	56.2
20	657	577	1234	53.2	62	317	312	629	50.4
21	816	654	1470	55.5	63	550	1038	1588	34.6
22	1142	828	1970	58.0	64	719	933	1652	43.5
23	867	621	1488	58.3	65	1274	962	2236	57.0
24	580	417	997	58.1	66	824	384	1208	68.2
25	787	890	1677	46.9	67	1581	744	2325	68.0
26	1386	1675	3061	45.3	68	1426	728	2154	66.2
27	964	1034	1998	48.2	69	1139	1156	2295	49.6
28	1684	1562	3246	51.9	70	779	808	1587	49.1
29	868	934	1802	48.2	71	973	720	1693	57.5
30	738	933	1671	44.2	72	582	505	1087	53.5
31	642	983	1625	39.5	73	704	694	1398	50.4
32	979	1021	2000	49.0	74	914	963	1877	48.7
33	800	764	1564	51.2	75	372	592	964	38.6
34	996	542	1538	64.8	76	658	745	1403	46.9
35	794	648	1442	55.1	77	476	540	1016	46.9
36	1132	544	1676	67.5	78	954	1235	2189	43.6
37	1255	808	2063	60.8	79	499	828	1327	37.6
38	1167	1493	2660	43.9	80	64	82	146	43.8
39	769	896	1665	46.2	81	153	175	328	46.6
40	716	906	1622	44.1	82	1067	1550	2617	40.8
41	800	1137	1937	41.3	83	83	134	217	38.2
42	698	737	1435	48.6	84	246	217	463	53.1

APPENDIX I-E (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
85	165	260	425	38.8	97	1005	2002	3007	33.4
86	838	1117	1955	42.9	98	303	521	824	36.8
87	527	599	1126	46.8	99	954	1783	2737	34.9
88	357	593	950	37.6	100	649	967	1616	40.2
89	609	828	1437	42.4	101	660	860	1520	43.4
90	344	401	745	46.2	102	825	1282	2107	39.2
91	707	744	1451	48.7	103	833	717	1550	53.7
92	258	548	806	32.0	104	183	264	447	40.9
93	845	1197	2042	41.4	105	244	426	670	36.1
94	608	753	1361	44.7	106	191	300	491	38.9
95	569	1268	1837	31.0	107	348	616	964	36.1
96	1152	1629	2781	41.4					
Total for Cincinnati						86328	87824	174152	49.6

Returns from District Outside City of Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	515	800	1315	39.2
	2	388	525	913	42.5
	3	363	598	961	37.8
	4	405	768	1173	39.2
Norwood	1-G	133	171	304	43.8
	3-D	23	51	74	31.1
Anderson Township		18	26	44	40.9
Columbia Township		884	1091	1975	44.8
Delhi Township		42	84	126	33.3
Green Township		308	437	745	41.3
Springfield Township		622	592	1214	51.2
Sycamore Township		185	288	473	39.1
Disputed Ballots		50	57	107	46.7
Total Outside City		3936	5488	9424	41.8
Total for Cincinnati		86328	87824	174152	49.6
Grand Total		90264	93312	183576	49.2

F. THE SPECIAL ONE MILL-THREE YEAR LEVY FOR SCHOOL BUILDINGS
NOVEMBER 3, 1936

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	593	425	1018	58.3	44	664	739	1403	47.3
2	1030	879	1909	54.0	45	155	148	303	51.2
3	484	270	754	64.2	46	417	614	1031	40.4
4	1093	431	1524	71.7	47	939	999	1938	48.5
5	1224	430	1654	74.0	48	849	995	1844	46.1
6	966	596	1562	61.8	49	1311	1575	2886	45.4
7	1489	851	2340	63.6	50	1418	1488	2906	48.8
8	424	247	671	63.2	51	749	833	1582	47.3
9	947	742	1689	56.1	52	1123	1657	2780	40.4
10	824	588	1412	58.4	53	934	1489	2423	38.5
11	576	558	1134	50.8	54	188	220	408	46.1
12	407	321	728	55.9	55	1017	1239	2256	45.1
13	463	610	1073	43.2	56	993	1095	2088	47.6
14	763	808	1571	48.6	57	1186	1657	2843	41.7
15	1082	934	2016	53.7	58	776	829	1605	48.3
16	868	771	1639	52.9	59	127	177	304	41.8
17	857	704	1561	54.9	60	918	714	1632	56.3
18	1017	840	1857	54.8	61	953	701	1654	57.6
19	762	583	1345	56.7	62	291	283	574	50.7
20	600	547	1147	52.3	63	499	989	1488	33.5
21	684	581	1265	54.1	64	647	908	1555	41.6
22	1018	788	1806	56.4	65	1224	984	2208	55.4
23	787	594	1381	57.0	66	753	371	1124	67.0
24	531	387	918	57.8	67	1362	700	2062	66.1
25	722	805	1527	47.3	68	1341	653	1994	67.3
26	1241	1601	2842	43.7	69	1016	1056	2072	49.0
27	873	974	1847	47.3	70	707	765	1472	48.0
28	1473	1464	2937	50.2	71	881	708	1589	55.4
29	783	890	1673	46.8	72	543	493	1036	52.4
30	585	856	1441	40.6	73	653	638	1291	50.6
31	603	905	1508	40.0	74	798	938	1736	46.0
32	888	957	1845	48.1	75	337	583	920	36.6
33	710	741	1451	48.9	76	570	708	1278	44.6
34	891	519	1410	63.2	77	410	509	919	44.6
35	713	587	1300	54.8	78	855	1166	2021	42.3
36	918	463	1381	66.5	79	450	792	1242	36.2
37	1059	740	1799	58.8	80	50	79	129	38.8
38	1047	1416	2463	42.5	81	134	165	299	44.8
39	695	869	1564	44.4	82	983	1460	2443	40.2
40	623	875	1498	41.6	83	72	128	200	36.0
41	739	1120	1859	39.8	84	225	205	430	52.3
42	626	691	1317	47.5	85	156	233	389	40.1
43	321	266	587	54.7	86	754	1026	1780	42.4

APPENDIX I-F (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
87	454	547	1001	45.4	98	305	501	806	37.8
88	298	544	842	35.4	99	892	1647	2539	35.1
89	546	769	1315	41.5	100	580	928	1508	38.5
90	310	379	689	45.0	101	632	810	1442	43.8
91	600	659	1259	47.7	102	757	1234	1991	38.0
92	223	515	738	30.2	103	682	656	1338	51.0
93	718	1155	1873	38.4	104	157	246	403	39.0
94	441	826	1267	34.8	105	216	399	615	35.1
95	549	1207	1756	31.2	106	166	289	455	36.5
96	1038	1513	2551	40.7	107	331	558	889	37.2
97	903	1881	2784	32.4					
Total for Cincinnati						76225	82196	158421	48.1

District Outside City of Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	485	726	1211	40.0
	2	353	485	838	42.1
	3	350	536	886	39.5
	4	372	697	1069	34.8
Norwood	1-G	115	167	282	40.8
	3-D	21	46	67	31.3
Anderson Township		16	24	40	40.0
Columbia Township		776	1005	1781	43.6
Delhi Township		35	78	113	31.0
Green Township		272	400	672	40.5
Springfield Township		526	530	1056	49.8
Sycamore Township		159	261	420	37.9
Disputed Ballots		47	41	88	43.4
Total Outside City		3527	4996	8523	41.4
Total for Cincinnati		76225	82196	158421	48.1
Grand Total		79752	87192	166944	47.8

G. SPECIAL SCHOOL LEVY OF 2.3 MILLS FOR OPERATING EXPENSES,
NOVEMBER 2, 1937

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	575	328	903	63.7	44	558	577	1135	49.2
2	972	609	1581	61.5	45	161	121	282	57.1
3	657	226	883	74.4	46	398	473	871	45.7
4	1593	396	1989	80.1	47	805	826	1631	49.4
5	1860	330	2190	84.9	48	850	665	1515	56.1
6	801	562	1363	58.8	49	1267	1168	2435	52.0
7	941	682	1623	58.0	50	1455	1061	2516	57.8
8	510	169	679	75.1	51	755	608	1365	55.5
9	799	634	1433	55.8	52	1051	1156	2207	47.6
10	697	483	1180	59.1	53	863	1133	1996	43.2
11	537	610	1147	46.8	54	167	144	311	53.7
12	434	321	755	57.5	55	919	913	1832	50.2
13	410	620	1030	39.8	56	792	894	1686	47.0
14	541	655	1196	45.2	57	1119	1337	2456	45.6
15	931	820	1751	53.2	58	727	625	1352	53.8
16	767	693	1460	52.5	59	153	148	301	50.8
17	636	586	1222	52.0	60	645	498	1143	56.4
18	776	737	1513	51.3	61	556	549	1105	50.3
19	540	347	887	60.9	62	254	209	463	54.9
20	524	388	912	57.5	63	506	722	1228	41.2
21	515	556	1071	48.1	64	576	686	1262	45.6
22	894	596	1490	60.0	65	1293	655	1948	66.4
23	636	421	1057	56.6	66	711	223	934	76.1
24	422	324	746	56.6	67	1266	435	1701	74.4
25	649	684	1333	48.7	68	1351	421	1772	76.2
26	1032	1239	2271	45.4	69	968	620	1588	61.0
27	763	828	1591	48.0	70	698	652	1350	51.7
28	1053	1211	2264	46.5	71	899	443	1342	67.0
29	720	653	1373	52.4	72	483	349	832	58.1
30	644	702	1346	47.8	73	547	497	1044	52.4
31	517	735	1252	41.3	74	593	776	1369	43.3
32	828	661	1489	55.6	75	292	408	700	41.7
33	611	539	1150	53.1	76	442	569	1011	43.7
34	775	378	1153	67.2	77	314	402	716	43.9
35	597	457	1054	56.6	78	692	953	1645	42.1
36	1040	363	1403	74.1	79	413	612	1025	40.3
37	964	516	1480	65.1	80	164	178	342	48.0
38	883	1112	1995	44.3	81	113	149	262	43.1
39	595	723	1318	45.1	82	974	1194	2168	44.9
40	562	638	1200	46.8	83	67	106	173	38.7
41	700	895	1595	45.1	84	232	155	387	59.9
42	548	518	1066	51.4	85	129	233	362	35.6
43	221	215	436	50.7	86	637	886	1523	41.8

APPENDIX I-G (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
87	430	563	993	43.3	98	193	487	680	28.4
88	323	464	787	41.0	99	677	1581	2258	30.0
89	486	642	1128	43.1	100	593	761	1354	43.8
90	197	233	430	45.8	101	583	671	1256	46.6
91	468	563	1031	45.4	102	777	992	1769	43.9
92	192	432	628	30.6	103	521	596	1117	46.6
93	550	963	1513	36.4	104	129	204	333	38.7
94	329	743	1072	30.7	105	203	298	501	40.5
95	423	1039	1462	28.9	106	184	234	418	44.0
96	864	1365	2229	38.8	107	260	506	766	33.9
97	729	1684	2413	30.2					
Total for Cincinnati						68640	65614	134254	51.1

District Outside City of Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	418	601	1019	41.0
	2	303	451	754	40.2
	3	264	431	695	38.0
	4	282	545	827	34.1
Norwood	1-G	115	107	222	51.8
	3-D	9	49	62	14.5
Anderson Township		19	17	36	52.8
Columbia Township		622	765	1387	44.8
Delhi Township		32	65	97	33.0
Green Township		213	281	494	43.1
Springfield Township		430	339	769	55.9
Sycamore Township		155	228	383	40.6
Disputed Ballots		46	30	76	60.5
Total Outside City		2908	3909	6817	42.7
Total for Cincinnati		68640	65614	134254	51.1
Grand Total		71548	69523	141071	50.7

H. SPECIAL \$6,000,000 SCHOOL BOND ISSUE FOR BUILDINGS,
NOVEMBER 2, 1937

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	644	265	909	70.8	44	568	566	1134	50.1
2	1046	563	1609	65.0	45	151	129	280	53.9
3	681	204	885	77.0	46	372	490	862	43.2
4	1708	301	2009	85.0	47	755	854	1609	46.9
5	2042	228	2270	90.0	48	816	749	1565	52.1
6	836	536	1372	60.9	49	1150	1310	2451	46.9
7	1000	668	1668	60.0	50	1229	1245	2473	49.7
8	521	169	690	75.5	51	654	707	1361	40.1
9	817	618	1435	56.9	52	968	1242	2210	43.8
10	727	474	1201	60.5	53	805	1198	2003	40.1
11	562	604	1166	48.2	54	158	155	313	50.5
12	461	305	766	60.2	55	876	927	1803	48.6
13	398	626	1024	38.9	56	770	893	1663	46.3
14	558	657	1215	45.9	57	964	1483	2447	39.4
15	971	808	1779	54.6	58	633	696	1329	47.6
16	769	707	1476	52.1	59	138	156	294	46.9
17	646	595	1341	52.0	60	609	530	1139	53.5
18	760	758	1518	50.1	61	602	519	1121	53.7
19	449	363	812	55.3	62	361	205	466	56.0
20	478	394	872	54.8	63	505	674	1179	42.8
21	591	541	1132	52.2	64	549	726	1275	43.1
22	835	675	1510	55.3	65	1223	738	1961	62.4
23	604	437	1041	58.0	66	665	268	933	71.3
24	423	337	760	55.7	67	1211	495	1706	71.0
25	619	700	1319	46.9	68	1269	508	1777	71.4
26	1004	1306	2310	43.5	69	901	795	1696	53.1
27	741	850	1591	46.6	70	650	611	1261	51.5
28	1029	1234	2263	45.5	71	787	561	1348	58.4
29	675	680	1355	49.8	72	477	376	853	55.9
30	602	727	1329	45.3	73	504	541	1045	48.2
31	515	757	1272	40.5	74	590	743	1333	44.3
32	786	699	1485	52.9	75	288	423	711	40.5
33	564	575	1139	49.5	76	446	586	1032	43.2
34	728	397	1125	63.9	77	315	400	715	44.1
35	571	475	1046	54.6	78	672	987	1659	40.5
36	993	345	1338	74.2	79	394	643	1037	38.0
37	1007	554	1561	64.5	80	169	175	344	49.1
38	799	1221	2020	39.6	81	107	152	259	41.3
39	509	760	1269	40.1	82	874	1294	2168	40.3
40	501	704	1205	41.6	83	58	118	176	33.0
41	646	915	1561	41.4	84	203	172	375	54.1
42	501	656	1066	47.0	85	129	230	359	35.9
43	225	233	458	49.1	86	579	888	1467	39.5

APPENDIX I-H (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
87	401	574	975	41.1	98	211	483	694	30.4
88	281	494	775	36.3	99	666	1602	2268	29.4
89	442	683	1125	39.3	100	568	796	1364	41.6
90	199	240	439	45.3	101	557	704	1261	44.2
91	499	541	1040	48.0	102	740	1032	1772	41.8
92	196	442	638	30.7	103	524	614	1138	46.0
93	551	979	1530	36.0	104	124	208	332	37.3
94	332	752	1084	30.6	105	189	323	512	36.9
95	436	1042	1478	29.5	106	171	236	407	42.0
96	842	1387	2229	37.8	107	249	521	770	32.3
97	700	1746	2446	28.6					
Total for Cincinnati						66463	68078	134541	49.4

Returns from District Outside Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	409	616	1025	39.9
	2	296	451	747	39.6
	3	250	445	695	36.0
	4	263	556	819	32.1
Norwood	1-G	108	114	222	48.6
	3-D	15	47	62	24.2
Anderson Township		19	16	35	54.3
Columbia Township		608	774	1382	44.0
Delhi Township		31	70	101	30.7
Green Township		216	272	488	44.3
Springfield Township		422	324	746	56.3
Sycamore Township		124	252	376	33.0
Disputed Ballots		48	28	76	63.2
Total Outside Cincinnati		2809	3965	6774	41.5
Total for Cincinnati		66463	68078	134541	49.4
Grand Total		69272	72043	141315	49.0

I. SPECIAL \$5,400,000 SCHOOL BOND ISSUE FOR BUILDINGS,
AUGUST 9, 1938

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	390	167	557	70.0	44	390	301	691	56.4
2	703	282	985	71.4	45	72	109	181	39.8
3	501	104	605	82.8	46	259	302	561	46.2
4	1259	243	1502	83.8	47	571	481	1052	54.3
5	1556	168	1724	90.3	48	425	470	922	49.0
6	615	280	895	68.7	49	786	768	1554	50.6
7	845	310	1155	73.5	50	901	711	1612	55.9
8	385	102	487	79.1	51	464	389	853	54.4
9	639	337	976	65.5	52	565	801	1366	41.4
10	551	283	834	66.1	53	503	797	1300	38.7
11	477	390	867	55.0	54	109	75	184	59.2
12	322	167	489	65.8	55	624	585	1209	51.7
13	270	338	608	44.4	56	584	527	1111	52.6
14	328	291	619	53.0	57	616	882	1498	41.1
15	540	324	864	62.5	58	438	378	816	53.7
16	604	325	929	65.0	59	65	101	166	39.2
17	485	285	770	63.0	60	466	324	790	59.0
18	493	415	908	54.3	61	404	264	668	60.5
19	306	208	514	59.3	62	253	173	426	59.4
20	374	237	611	61.2	63	205	474	679	30.2
21	551	375	926	59.5	64	383	431	814	47.1
22	572	366	938	61.0	65	609	316	925	65.8
23	381	210	591	64.5	66	328	107	435	75.4
24	276	132	408	67.6	67	713	242	955	74.7
25	395	401	796	49.6	68	673	204	877	76.7
26	632	649	1281	49.3	69	386	543	929	41.6
27	426	399	825	51.6	70	401	312	713	56.2
28	610	626	1236	49.4	71	522	293	815	64.0
29	396	377	773	51.2	72	316	148	464	68.1
30	406	435	841	48.1	73	297	290	587	50.6
31	331	452	783	42.3	74	343	449	792	43.3
32	527	360	887	59.4	75	150	259	409	36.7
33	376	298	674	55.8	76	211	270	481	43.9
34	426	180	606	70.3	77	153	224	377	40.6
35	414	228	642	64.5	78	378	436	814	46.4
36	729	169	898	81.2	79	214	320	534	40.1
37	705	310	1015	69.5	80	105	80	185	56.8
38	586	677	1263	46.4	81	77	81	158	48.7
39	403	398	801	50.3	82	493	851	1344	36.7
40	362	420	782	46.3	83	40	46	86	46.5
41	460	554	1014	45.4	84	117	82	199	58.8
42	328	334	662	49.5	85	62	112	174	35.6
43	133	111	244	54.5	86	323	382	705	45.8

APPENDIX I-I (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
87	220	217	437	50.3	98	112	213	325	34.5
88	175	192	367	47.7	99	366	958	1324	27.6
89	227	311	538	42.2	100	321	366	687	46.7
90	142	164	306	46.4	101	345	366	711	48.5
91	335	311	646	51.9	102	397	578	975	40.7
92	114	212	326	35.0	103	268	233	501	53.5
93	315	465	780	40.4	104	66	89	155	42.6
94	216	385	601	35.9	105	134	180	314	42.7
95	297	525	822	38.8	106	110	137	247	44.5
96	519	644	1163	43.4	107	151	319	470	32.1
97	387	1075	1462	36.0					
Total for Cincinnati						43306	37047	80353	53.9

Returns from District Outside Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	242	278	520	46.5
	2	169	264	433	39.0
	3	169	239	408	41.4
	4	150	286	436	34.4
Norwood	1-G	53	67	120	44.2
	3-D	7	40	47	14.9
Anderson Township		29	15	44	65.9
Columbia Township		427	469	896	47.7
Delhi Township		10	36	46	21.7
Green Township		120	204	324	37.0
Springfield Township		336	209	545	61.7
Sycamore Township		92	100	192	47.9
Disputed Ballots		3	2	5	60.0
Total Outside Cincinnati		1807	2209	4016	44.9
Total for Cincinnati		43306	37047	80353	53.9
Grand Total		45113	39256	84369	51.0

J. SPECIAL \$250,000 SCHOOL BOND ISSUE FOR BUILDINGS,
NOVEMBER 8, 1938

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	979	219	1198	81.7	44	725	519	1244	58.3
2	1482	488	1970	75.2	45	150	167	317	47.3
3	1275	214	1489	85.6	46	506	467	973	52.0
4	2480	278	2758	89.9	47	1015	787	1802	56.3
5	2816	264	3080	91.4	48	1001	728	1729	57.9
6	1056	480	1536	68.8	49	1603	1132	2735	58.6
7	1453	501	1954	74.3	50	1664	1055	2719	61.2
8	722	160	882	81.9	51	863	619	1482	58.2
9	1133	513	1646	68.8	52	1221	1262	2483	49.2
10	1088	371	1459	74.6	53	1134	1222	2356	48.1
11	945	452	1397	67.6	54	200	159	359	55.7
12	621	263	884	70.2	55	1089	949	2038	53.4
13	674	394	1068	63.1	56	965	968	1933	49.9
14	838	568	1406	59.6	57	1372	1374	2746	50.0
15	1353	732	1985	68.2	58	819	656	1475	55.5
16	1091	566	1657	65.8	59	132	181	313	42.2
17	1137	537	1674	67.9	60	727	556	1283	56.7
18	1132	593	1725	64.6	61	601	602	1203	50.0
19	545	368	913	59.7	62	348	334	682	51.0
20	661	334	995	66.4	63	623	742	1365	45.6
21	867	434	1301	66.6	64	714	675	1389	51.4
22	1043	516	1559	66.9	65	1375	649	2024	67.9
23	710	398	1108	64.1	66	674	251	925	72.9
24	427	193	620	68.9	67	1373	459	1832	74.9
25	801	619	1420	56.4	68	1410	398	1808	78.0
26	1316	1108	2424	54.3	69	1110	772	1882	59.0
27	911	763	1674	54.4	70	824	547	1371	60.1
28	1323	1123	2446	54.1	71	998	506	1504	66.4
29	798	612	1410	56.6	72	531	360	891	60.0
30	761	668	1429	53.2	73	582	478	1060	54.9
31	682	685	1367	49.9	74	720	798	1518	47.4
32	1025	635	1660	61.7	75	306	403	709	43.2
33	772	513	1285	60.1	76	499	577	1076	46.4
34	829	406	1235	67.1	77	402	480	882	45.6
35	719	406	1125	63.9	78	859	905	1764	48.7
36	1310	318	1628	80.5	79	485	618	1103	44.0
37	1375	453	1828	75.2	80	148	196	344	43.0
38	1181	1036	2217	53.3	81	161	154	315	51.1
39	803	580	1383	58.1	82	1170	1275	2445	47.9
40	745	605	1350	55.2	83	80	111	191	41.9
41	924	740	1664	55.5	84	238	174	412	57.8
42	653	462	1115	58.6	85	140	208	348	40.2
43	323	169	492	65.7	86	727	837	1564	46.5

APPENDIX I-J (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
87	472	471	943	50.1	98	324	359	683	47.4
88	357	438	795	44.9	99	975	1396	2371	41.4
89	615	630	1245	49.4	100	710	744	1454	48.8
90	300	323	623	48.2	101	660	652	1312	50.2
91	655	516	1171	55.9	102	924	1080	2004	46.1
92	308	360	668	46.1	103	653	548	1201	54.4
93	693	847	1540	45.0	104	147	214	361	40.7
94	518	614	1132	45.8	105	242	318	560	43.2
95	640	859	1499	42.7	106	195	224	419	43.5
96	1124	1148	2272	49.5	107	359	471	830	43.3
97	946	1368	2314	40.9					
Total For Cincinnati						87880	61527	149407	58.8

Returns from District Outside Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	464	650	1114	41.7
	2	339	500	839	40.4
	3	383	480	863	44.4
	4	349	546	895	39.0
Norwood	1-G	129	136	282	44.9
	3-D	18	45	63	28.6
Anderson Township		42	20	62	67.7
Columbia Township		880	975	1855	47.4
Delhi Township		43	63	106	40.6
Green Township		341	386	727	46.9
Springfield Township		585	529	1114	52.5
Sycamore Township		183	216	399	45.9
Disputed Ballots		4	5	9	44.4
Total Outside Cincinnati		3760	4551	8311	45.2
Total for Cincinnati		87880	61527	149407	58.8
Grand Total		91640	66078	157718	58.1

K. SPECIAL SCHOOL LEVY OF 2.2 MILLS FOR OPERATING EXPENSES,
NOVEMBER 7, 1939

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
1	728	360	1088	66.9	44	670	569	1239	54.1
2	1123	612	1735	64.7	45	164	152	316	51.9
3	1269	537	1806	70.3	46	537	493	1030	52.1
4	1696	650	2346	72.3	47	944	862	1806	52.3
5	1967	656	2623	75.0	48	1018	707	1725	59.0
6	932	686	1618	57.6	49	1516	1172	2688	56.4
7	1026	826	1852	55.4	50	1496	1080	2576	58.1
8	601	262	863	69.6	51	826	600	1426	57.9
9	780	638	1418	55.0	52	1129	1232	2361	47.8
10	754	540	1294	58.3	53	1081	1285	2366	45.7
11	597	650	1247	47.9	54	190	153	352	56.5
12	410	398	808	50.7	55	945	1010	1955	48.3
13	405	624	1029	39.4	56	905	946	1851	48.9
14	672	631	1303	51.6	57	1338	1337	2675	50.0
15	1005	820	1825	55.1	58	897	627	1524	58.9
16	850	745	1595	53.3	59	157	159	316	49.7
17	738	656	1394	52.9	60	736	487	1223	60.2
18	863	703	1566	55.1	61	591	517	1108	53.3
19	543	332	875	62.1	62	452	401	853	53.0
20	560	420	980	57.1	63	615	827	1442	42.6
21	714	549	1263	56.5	64	652	693	1345	48.5
22	852	608	1460	58.4	65	1480	610	2090	70.8
23	611	401	1012	60.4	66	679	244	923	73.6
24	493	318	811	60.8	67	1375	505	1880	73.1
25	657	671	1328	49.5	68	1325	411	1736	76.3
26	1168	1225	2393	48.8	69	1018	766	1784	57.1
27	763	832	1595	47.8	70	761	553	1314	57.9
28	1186	1170	2356	50.3	71	955	477	1432	66.7
29	743	638	1381	53.8	72	544	316	860	63.2
30	719	683	1402	51.3	73	697	440	1137	61.3
31	564	718	1282	44.0	74	559	710	1269	44.1
32	956	665	1621	59.0	75	187	211	398	47.0
33	697	521	1218	57.2	76	508	567	1075	47.3
34	770	401	1171	65.8	77	464	450	914	50.8
35	634	438	1072	59.1	78	740	936	1676	44.2
36	1178	438	1616	72.9	79	637	772	1409	45.2
37	1165	509	1674	69.6	80	160	172	332	48.2
38	1029	1126	2155	47.7	81	160	140	300	53.3
39	636	707	1343	47.4	82	1317	1276	2593	50.8
40	624	686	1310	47.6	83	95	113	208	45.7
41	805	866	1671	48.2	84	293	157	450	65.1
42	567	496	1063	53.4	85	158	200	358	44.1
43	258	225	483	53.4	86	693	784	1477	46.9

APPENDIX I-K (Continued)

Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
87	414	440	854	48.5	98	236	455	691	34.2
88	368	447	815	45.2	99	800	1604	2404	33.3
89	540	646	1186	45.5	100	692	745	1437	48.2
90	286	309	595	48.1	101	649	634	1283	50.6
91	494	579	1073	46.0	102	896	1055	1951	45.9
92	228	390	618	36.9	103	638	539	1177	54.2
93	577	1000	1577	36.6	104	143	202	345	41.4
94	411	663	1074	38.3	105	275	340	615	44.7
95	474	962	1436	33.0	106	213	238	451	47.2
96	925	1253	2178	42.5	107	313	541	854	36.7
97	725	1634	2359	30.7					
Total for Cincinnati						77278	67432	144710	53.5

Returns from District Outside Cincinnati

City or Township	Tract	Vote For	Vote Against	Total Vote	Per Cent Favorable Vote is of Total Vote
Cheviot	1	443	612	1055	42.0
	2	334	518	852	39.2
	3	267	507	774	34.5
	4	326	572	898	36.3
Norwood	1-G	146	135	281	52.0
	3-D	15	57	72	20.8
Anderson Township		17	24	43	39.5
Columbia Township		807	1064	1871	43.1
Delhi Township		40	85	125	32.0
Green Township		294	385	679	43.3
Springfield Township		576	447	1023	56.3
Sycamore Township		179	229	408	43.9
Disputed Ballots		55	27	82	67.1
Total Outside Cincinnati		3499	4662	8161	42.9
Total for Cincinnati		77278	67432	144710	53.5
Grand Total		80777	72094	152871	52.8

APPENDIX II

POPULATIONS OF CINCINNATI, 1935

A. POPULATIONS OF CINCINNATI BY NATIVITY AND COLOR, 1935
BY CENSUS TRACTS¹

Census Tract	No. of Persons	Total Per Cent	Native White	Per Cent Native White	Foreign Born	Per Cent Foreign Born	Negro	Per Cent Negro
1	6640	100	2810	42.3	145	2.2	3685	55.5
2	8207	100	4882	59.4	309	3.8	3016	36.8
3	10862	100	3404	31.3	510	4.7	6948	64.0
4	9540	100	1386	14.6	128	1.3	8026	84.1
5	14027	100	953	7.1	88	0.3	12986	92.6
6	4847	100	4432	91.4	305	6.3	110	2.3
7	6068	100	5211	85.9	390	6.4	467	7.7
8	5038	100	2453	48.7	185	3.7	2400	47.6
9	6597	100	5894	89.3	521	7.9	182	2.8
10	5548	100	5160	93.0	388	7.0	---	---
11	5622	100	5263	93.6	321	5.7	38	0.7
12	4817	100	3710	80.2	152	3.1	955	19.7
13	5156	100	4769	92.5	158	3.1	229	4.4
14	6664	100	6203	93.1	283	4.2	178	2.7
15	9550	100	7532	78.9	691	7.2	1327	13.9
16	7318	100	6321	86.4	929	12.7	68	0.9
17	6778	100	6161	90.9	541	8.0	76	1.1
18	5352	100	4829	90.2	455	8.5	68	1.3
19	3938	100	3632	92.3	266	6.7	40	1.0
20	2331	100	2175	93.3	125	5.4	31	1.3
21	5424	100	4377	80.7	658	12.1	389	7.2
22	3977	100	3561	89.6	248	6.2	168	4.2
23	3920	100	3598	91.9	316	8.0	6	0.1
24	3295	100	2830	85.9	189	5.7	276	8.4
25	4365	100	3947	90.4	415	9.5	3	0.1
26	7661	100	6842	89.3	813	10.6	6	0.1
27	4817	100	4334	89.9	475	9.9	8	0.2
28	9370	100	8713	93.0	477	5.1	180	1.9
29	4268	100	3832	89.8	430	10.1	6	0.1
30	3586	100	3229	90.1	356	9.9	1	---
31	3860	100	3523	91.3	324	8.4	13	0.3
32	4134	100	3732	90.2	396	9.6	6	0.2

¹ The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, pp. 14-49. Cincinnati: Cincinnati Employment Center, 1937.

APPENDIX II-A (Continued)

Census Tract	No. of Persons	Total Per Cent	Native White	Per Cent Native White	Foreign Born	Per Cent Foreign Born	Negro	Per Cent Negro
33	3069	100	2771	90.2	284	9.3	14	0.5
34	4840	100	3533	73.0	567	11.7	740	15.3
35	3470	100	3071	88.4	262	7.6	137	4.0
36	5338	100	349	6.6	54	1.0	4935	92.4
37	5498	100	2946	53.6	195	3.5	2357	42.9
38	4966	100	4631	93.2	262	5.3	73	1.5
39	3658	100	3429	93.7	198	5.4	31	0.9
40	3382	100	3219	95.7	156	4.1	7	0.2
41	4207	100	3587	85.3	270	6.4	350	8.3
42	3300	100	3004	91.1	278	8.4	18	0.5
43	2026	100	1966	97.0	37	1.9	23	1.1
44	6373	100	5368	84.2	132	2.1	873	13.7
45	998	100	986	98.7	12	1.3	---	---
46	2326	100	2164	97.4	57	2.4	5	0.2
47	5178	100	4964	95.9	162	3.1	52	1.0
48	4215	100	4075	96.7	116	2.7	24	0.6
49	6253	100	5895	94.2	273	4.4	85	1.4
50	6445	100	6151	95.4	249	3.9	45	0.7
51	3232	100	3124	96.6	99	3.1	9	0.3
52	5933	100	5671	95.5	259	4.4	3	0.1
53	6265	100	5919	94.4	343	5.5	3	0.1
54	1377	100	1217	88.4	81	5.9	79	5.7
55	5895	100	4549	77.2	241	4.1	1105	18.7
56	6137	100	5710	93.1	185	3.0	242	3.9
57	5930	100	5699	96.1	217	3.7	14	0.2
58	3543	100	3233	91.2	141	4.0	169	4.8
59	796	100	763	95.8	33	4.2	---	---
60	4276	100	3935	92.1	138	3.2	203	4.7
61	5163	100	4972	96.3	164	3.2	27	0.5
62	3419	100	2874	84.0	331	9.7	214	6.3
63	3194	100	3056	95.7	138	4.3	---	---
64	3918	100	3743	95.6	174	4.4	1	---
65	4524	100	4037	89.2	402	8.9	85	1.9
66	2685	100	2042	76.1	494	18.4	149	5.5
67	5911	100	3965	67.1	1874	31.7	72	1.2
68	5154	100	4064	78.8	988	19.2	102	2.0
69	4874	100	3678	75.5	835	17.1	361	7.4
70	3110	100	2891	93.0	202	6.5	17	0.5
71	3285	100	3066	93.3	193	5.9	26	0.8
72	1803	100	1678	93.0	122	6.8	3	0.2
73	3209	100	3043	94.9	166	5.1	---	---
74	4667	100	4460	95.6	200	4.3	7	0.1
75	2070	100	1957	94.5	113	5.5	---	---
76	4463	100	4245	95.2	207	4.6	11	0.2
77	2599	100	2109	81.2	123	4.7	367	14.1
78	5074	100	4809	94.7	263	5.2	3	0.1

APPENDIX II-A (Continued)

Census Tract	No. of Persons	Total Per Cent	Native White	Per Cent Native White	Foreign Born	Per Cent Foreign Born	Negro	Per Cent Negro
79	2786	100	2455	88.1	167	6.0	164	5.9
80	358	100	332	92.6	26	7.4	---	---
81	759	100	700	92.3	59	7.7	---	---
82	5256	100	4772	90.8	280	5.3	204	3.9
83	525	100	507	96.7	18	3.3	---	---
84	1199	100	1159	96.6	40	3.4	---	---
85	1083	100	995	91.8	69	6.4	19	1.8
86	4853	100	4474	92.2	341	7.0	38	0.8
87	4143	100	3917	94.5	210	5.1	16	0.4
88	2146	100	1923	89.7	220	10.2	3	0.1
89	4019	100	3529	87.7	442	11.1	48	1.2
90	1744	100	1672	95.9	72	4.1	---	---
91	5612	100	5444	97.0	155	2.8	13	0.2
92	1918	100	1818	94.8	95	4.9	5	0.3
93	5371	100	5079	94.5	273	5.1	19	0.4
94	3122	100	2984	95.6	138	4.4	---	---
95	4331	100	4093	94.5	238	5.5	---	---
96	6572	100	6263	95.3	287	4.4	22	0.3
97	6724	100	6279	93.4	436	6.5	9	0.1
98	2488	100	2190	88.1	165	6.6	133	5.3
99	5934	100	5612	94.5	318	5.4	4	0.1
100	2878	100	2723	94.7	151	5.2	4	0.1
101	3040	100	2893	95.2	147	4.8	---	---
102	4393	100	4199	95.6	192	4.4	2	---
103	4225	100	4046	95.7	177	4.2	5	0.1
104	1592	100	1543	96.9	49	3.1	---	---
105	1614	100	1471	91.1	27	1.7	116	7.2
106	1004	100	967	96.3	31	3.1	6	0.6
107	2107	100	2007	95.2	98	4.7	2	0.1
Total	473421		388458		29198		55765	
Per Cent		100		82.0		6.2		11.8

II-B. CITIZENS OF CINCINNATI TWENTY-ONE YEARS OF AGE AND OVER
BY NATIVITY AND COLOR, 1935,
BY CENSUS TRACT

The number of citizens of voting age is only a careful approximation. The exact number twenty-one years of age and over in Cincinnati cannot be determined from the data of the Regional Census of 1935. The Regional Census enumerated the number of persons for each tract in five-year intervals, so that those twenty years old were included in the group whose ages were twenty to twenty-four inclusive.¹ In order to procure as close an approximation as possible of those persons twenty-one years old and over, one fifth of the number twenty to twenty-four years old inclusive in each census tract were subtracted from the total number of persons over twenty years of age. The number of foreign born who were not citizens in 1935² were then subtracted from the number twenty-one years old and over. This procedure gave what is considered to be as close an approximation as could be obtained of the exact number of eligible voters for each census tract.

Census Tract	Citizens 21 Years Old and Over	Total Per Cent	Native White	Per Cent Native White	Foreign Born	Per Cent Foreign Born	Negro	Per Cent Negro
1	3894	100	1620	41.5	97	2.5	2177	56.0
2	5063	100	3132	60.8	244	4.8	1687	34.4
3	6698	100	2139	31.9	368	5.5	4191	62.6
4	6431	100	1023	15.9	114	1.8	5294	82.3
5	9798	100	707	7.2	59	0.6	9032	92.2
6	3505	100	3182	90.8	232	6.6	91	2.6
7	4620	100	4276	92.5	336	7.3	8	0.2
8	3794	100	1818	48.7	124	3.3	1807	48.0
9	4642	100	4051	87.2	437	9.4	154	3.4
10	4564	100	4278	93.7	286	6.3	---	---
11	3492	100	3227	92.4	256	7.3	9	0.3
12	2783	100	2100	75.5	114	4.1	569	20.4
13	3178	100	2880	90.6	121	3.8	177	5.6
14	4121	100	3774	91.5	233	5.7	114	2.8
15	5720	100	4481	78.4	500	8.7	739	12.9
16	4526	100	3931	87.1	559	12.1	36	0.8
17	4413	100	3952	89.6	410	9.3	51	1.1
18	3561	100	3133	88.8	390	10.1	38	1.1
19	2752	100	2489	90.4	211	7.7	52	1.9
20	1894	100	1774	93.6	98	5.2	22	1.2
21	3455	100	2691	78.1	535	15.5	229	6.4
22	3094	100	2777	89.6	223	7.2	94	3.2
23	2739	100	2472	89.6	262	9.6	5	0.8
24	1990	100	1711	86.0	136	6.8	143	7.2
25	3215	100	2918	90.8	294	9.1	3	0.1

¹ Studies in Economic Security: II, op. cit., pp. 14-49.

² Ibid., pp. 111-113.

APPENDIX II-B (Continued)

Census Tracts	Citizens 21 Years Old and Over	Total Per Cent	Native White	Per Cent Native White	Foreign Born	Per Cent Foreign Born	Negro	Per Cent Negro
26	5471	100	4804	87.6	662	12.3	5	0.1
27	3255	100	2849	87.5	399	12.3	7	0.2
28	5982	100	5338	89.2	506	8.5	138	2.3
29	3115	100	2781	89.3	328	10.5	6	0.2
30	2738	100	2444	89.3	293	10.7	1	--
31	2747	100	2468	89.8	270	9.9	9	0.3
32	3190	100	2782	87.1	403	12.7	5	0.2
33	2366	100	2140	90.5	212	8.9	14	0.6
34	3454	100	2531	73.4	479	13.8	444	12.8
35	2618	100	2322	88.7	184	7.0	112	4.3
36	3660	100	264	7.2	45	1.2	3351	91.6
37	4194	100	2391	56.9	173	4.1	1630	39.0
38	3750	100	3467	91.9	231	6.6	52	1.5
39	2749	100	2562	92.4	161	6.2	26	1.4
40	2375	100	2241	94.6	128	5.4	6	0.9
41	3131	100	2614	83.5	240	7.7	277	8.8
42	2491	100	2273	91.2	203	8.2	15	0.6
43	1223	100	1175	96.1	28	2.3	20	1.6
44	3991	100	3392	85.0	109	2.7	490	12.3
45	592	100	579	97.8	13	2.2	---	--
46	1444	100	1400	96.9	40	2.8	4	0.3
47	3396	100	3231	94.9	131	4.1	34	1.0
48	2844	100	2719	95.6	103	3.6	22	0.8
49	4517	100	4214	93.3	228	5.0	75	1.7
50	4802	100	4586	96.5	176	3.7	40	0.8
51	2275	100	2179	95.8	87	3.8	9	0.4
52	4339	100	4115	94.9	222	5.1	2	--
53	4322	100	4009	92.3	311	7.7	2	--
54	1756	100	1638	93.2	71	4.1	47	2.7
55	3767	100	2915	77.3	206	5.5	646	17.2
56	4113	100	3831	93.2	158	3.8	124	3.0
57	3983	100	3811	95.7	164	4.1	8	0.2
58	2378	100	2151	90.4	120	5.1	107	4.5
59	539	100	506	93.9	33	6.1	---	--
60	2847	100	2604	91.4	116	4.1	127	4.5
61	3244	100	3078	93.9	145	4.5	21	0.6
62	3124	100	2609	83.5	311	10.0	204	6.5
63	2228	100	2112	94.8	116	5.2	---	--
64	2584	100	2425	93.8	159	6.2	---	--
65	3269	100	2851	87.2	353	10.8	65	2.0
66	1984	100	1439	72.6	435	21.9	110	5.5
67	4110	100	2442	59.5	1605	39.0	63	1.5
68	3780	100	2820	74.6	876	23.2	84	2.2
69	3656	100	2673	73.1	744	20.4	239	6.5

APPENDIX II-B (Continued)

Census Tract	Citizens 21 Years Old and Over	Total Per Cent	Native White	Per Cent Native White	Foreign Born	Per Cent Foreign Born	Negro	Per Cent Negro
70	2293	100	2102	91.7	174	7.6	17	0.7
71	2487	100	2308	92.8	154	6.2	25	1.0
72	1413	100	1299	92.0	111	7.8	3	0.2
73	2169	100	2032	93.7	137	6.3	---	---
74	3253	100	3069	94.4	180	5.5	4	0.1
75	1550	100	1452	93.7	98	6.3	---	---
76	2958	100	2752	93.0	198	6.7	8	0.3
77	1654	100	1322	79.9	113	6.8	219	13.3
78	3514	100	3255	92.6	256	7.3	3	0.1
79	1874	100	1625	86.7	150	8.0	99	5.3
80	216	100	183	84.7	33	15.3	---	---
81	532	100	472	88.7	60	11.3	---	---
82	3727	100	3356	90.0	263	7.1	108	2.9
83	304	100	287	94.4	17	5.6	---	---
84	826	100	788	95.4	38	4.6	---	---
85	710	100	637	89.7	62	8.7	11	1.6
86	3161	100	2851	90.1	283	9.0	27	0.9
87	2637	100	2454	93.1	174	6.6	9	0.3
88	1407	100	1227	87.3	178	12.6	2	0.1
89	2699	100	2317	85.3	350	13.5	32	1.2
90	1113	100	1057	95.0	56	5.0	---	---
91	3314	100	3181	96.0	126	3.8	7	0.2
92	1216	100	1130	92.9	83	6.9	3	0.2
93	3379	100	3130	92.6	236	7.0	13	0.4
94	2102	100	1986	94.5	116	5.5	---	---
95	3027	100	2818	93.1	209	6.9	---	---
96	4505	100	4229	94.0	261	5.7	15	0.3
97	4585	100	4207	91.8	372	8.1	6	0.1
98	1793	100	1476	82.3	148	8.3	169	9.4
99	4054	100	3766	92.9	284	7.0	4	0.1
100	2026	100	1882	92.9	141	7.0	3	0.1
101	2194	100	2049	93.4	145	6.6	---	---
102	3053	100	2873	94.1	179	5.9	1	---
103	2611	100	2446	93.6	161	6.2	4	0.2
104	984	100	973	95.2	47	4.8	---	---
105	1028	100	922	89.7	22	2.1	84	8.2
106	677	100	654	96.6	18	2.7	5	0.7
107	1439	100	1341	93.2	96	6.7	2	0.1
Total	324774	100	264183	81.4	24345	7.5	36246	11.1
Per Cent								

II-C. PERSONS IN CINCINNATI TWENTY-ONE YEARS OF AGE AND OVER OF
NATIVE WHITE-NATIVE PARENTAGE AND NATIVE WHITE-FOREIGN OR
MIXED PARENTAGE IN 1930,³ BY CENSUS TRACTS

Census Tract	Native White Persons of Native White Parentage	Per Cent of Total Population 21 Years Old and Over with Native White Parents	Native White Persons of Foreign or Mixed Parentage	Per Cent of Total Population 21 Years and Over with Foreign Born or Mixed Parents
1	1308	30.2	546	12.6
2	2418	45.0	1241	24.0
3	1833	29.5	705	11.4
4	1626	24.7	300	4.8
5	663	7.2	181	2.0
6	2668	66.6	764	19.1
7	3697	63.2	1103	18.9
8	1123	38.4	278	9.6
9	3700	68.4	1050	19.4
10	2424	63.5	908	23.8
11	1933	58.6	969	29.4
12	1638	59.0	464	16.7
13	1582	57.9	838	30.7
14	2421	58.9	1160	28.2
15	2528	46.8	1392	25.8
16	2241	47.7	1315	28.0
17	2183	55.0	1133	28.5
18	1868	54.8	1120	32.2
19	1855	69.7	564	20.9
20	1081	64.0	439	26.0
21	1541	45.3	832	24.5
22	1644	57.2	901	31.3
23	1634	61.3	731	27.6
24	921	52.4	561	31.9
25	1472	48.0	1131	36.9
26	2251	43.9	2006	39.1
27	1416	43.9	1261	39.1
28	3534	53.3	2012	30.3
29	1428	48.8	1007	34.4
30	1310	45.3	1171	40.5
31	1196	44.1	1139	42.0
32	1465	45.4	1184	36.7
33	1205	54.6	695	31.5
34	1384	42.7	321	9.9
35	1393	59.1	645	27.3
36	225	7.2	86	2.7
37	1603	42.4	690	18.3
38	2264	58.9	1260	32.8

³United States Federal Census of Cincinnati, Ohio, 1930, pp. 1-107. (Photostatic copies).

APPENDIX II-C (Continued)

Census Tract	Native White Persons of Native White Parentage	Per Cent of Total Population 21 Years Old and Over with Native White Parents	Native White Persons of Foreign or Mixed Parentage	Per Cent of Total Population 21 Years and Over with Foreign Born or Mixed Parents
39	1610	56.4	961	33.7
40	1272	60.4	661	31.4
41	1560	49.9	992	31.7
42	1327	55.0	766	31.8
43	875	76.0	206	11.9
44	2606	67.7	716	18.6
45	422	81.5	77	14.9
46	908	68.1	339	25.4
47	2178	69.3	736	23.4
48	1787	71.1	560	22.3
49	2733	63.1	1118	25.8
50	2761	63.4	1269	29.2
51	1289	65.3	541	27.4
52	2564	59.6	1374	31.9
53	2551	61.8	1132	27.4
54	363	54.6	140	21.0
55	1682	56.1	672	22.4
56	2219	68.4	780	24.0
57	2155	60.4	1126	31.5
58	1184	61.5	545	28.3
59	408	89.1	27	5.9
60	1854	67.4	582	21.1
61	2224	71.5	721	23.2
62	2294	76.9	390	13.1
63	744	63.1	350	29.7
64	1206	60.1	643	32.1
65	1347	40.7	1300	39.3
66	513	28.6	709	39.5
67	899	21.9	1359	33.0
68	1003	28.3	1474	41.7
69	1191	32.6	1300	35.6
70	1248	53.6	797	34.2
71	1416	58.0	730	29.9
72	645	51.1	477	37.8
73	1379	61.0	676	29.9
74	1825	57.9	1046	32.2
75	767	54.9	496	35.5
76	1529	53.7	1030	36.2
77	691	42.2	527	32.2
78	1935	55.3	1280	36.6
79	799	45.7	641	36.7
80	173	51.6	88	26.3

APPENDIX II-C (Continued)

Census Tract	Native White Persons of Native White Parentage	Per Cent of Total Population 21 Years Old and Over with Native White Parents	Native White Persons of Foreign or Mixed Parentage	Per Cent of Total Population 21 Years and Over with Foreign Born or Mixed Parents
81	412	63.1	142	21.7
82	1706	52.7	1152	35.6
83	173	62.5	74	26.7
84	492	62.0	226	28.5
85	262	50.2	190	36.4
86	1451	47.6	1130	37.0
87	1366	53.8	881	34.7
88	538	46.7	425	36.9
89	1060	38.8	1124	41.1
90	578	46.2	484	38.7
91	2171	64.3	923	27.4
92	501	51.0	348	35.4
93	1723	53.8	1122	35.0
94	897	47.1	806	42.3
95	1449	50.5	1140	39.7
96	2339	54.5	1534	35.7
97	2047	48.7	1657	39.4
98	704	53.9	418	32.0
99	1803	51.6	1349	38.6
100	838	50.8	642	38.9
101	1028	52.5	769	39.3
102	1400	54.2	976	37.8
103	1735	67.0	638	24.6
104	630	62.4	307	30.4
105	552	60.5	225	24.6
106	429	68.6	167	26.7
107	651	58.6	268	33.2
Total	157747		84674	
Per Cent		51.1		27.4

APPENDIX III

THE ECONOMIC STATUS OF VARIOUS POPULATIONS IN CINCINNATI

A. HOME OWNERSHIP AND EMPLOYMENT IN CINCINNATI IN 1935

Tract	Tenure of Home*		Per Cent of Persons Over 10 Yrs. of Age Gainfully Employed**	Tract	Tenure of Home		Per Cent of Persons Over 10 Yrs. of Age Gainfully Employed
	Per Cent of Families Owning	Per Cent of Families Renting			Per Cent of Families Owning	Per Cent of Families Renting	
1	5.67	94.33	15.9	29	44.00	56.00	36.2
2	9.91	90.33	21.2	30	35.70	64.30	35.9
3	6.46	93.54	20.8	31	29.83	70.17	36.4
4	4.29	95.71	26.5	32	38.94	61.06	42.9
5	1.39	98.61	19.2	33	29.89	70.11	41.4
6	3.85	96.15	31.9	34	25.49	74.51	41.4
7	1.20	98.80	43.2	35	21.45	78.55	42.6
8	2.80	97.20	18.8	36	16.15	83.85	36.8
9	6.66	93.34	29.5	37	15.65	84.35	40.1
10	4.17	95.83	27.9	38	44.34	55.66	38.9
11	6.55	93.45	27.1	39	36.46	63.54	38.8
12	15.01	84.99	22.1	40	58.15	41.85	36.2
13	26.43	73.57	26.8	41	53.96	46.04	37.8
14	11.53	88.47	28.1	42	32.83	47.17	41.9
15	14.91	85.09	25.0	43	23.67	76.33	24.7
16	6.37	93.63	28.4	44	33.33	66.67	25.4
17	8.53	91.47	29.2	45	59.85	40.15	28.9
18	27.98	72.02	32.2	46	66.13	33.87	31.0
19	18.61	81.39	36.9	47	48.04	51.96	32.1
20	26.48	73.52	44.1	48	58.79	41.21	34.5
21	21.65	78.35	30.6	49	63.72	36.28	37.8
22	35.80	64.20	42.9	50	49.36	50.64	36.8
23	17.76	82.24	38.2	51	63.16	36.84	34.3
24	21.11	78.89	29.0	52	55.40	44.60	37.9
25	32.27	67.73	40.2	53	47.78	52.22	37.2
26	37.34	62.66	37.2	54	36.06	63.94	28.9
27	35.23	64.77	33.7	55	51.56	48.44	30.9
28	19.85	80.15	35.5	56	59.05	40.95	33.2

* The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, pp. 213-15. Cincinnati: Cincinnati Employment Center, 1937.

** Ibid., pp. 210-12.

APPENDIX III-A (Continued)

Tract	Tenure of Home		Per Cent of Persons Over 10 Yrs. of Age Gainfully Employed	Tract	Tenure of Home		Per Cent of Persons Over 10 Yrs. of Age Gainfully Employed
	Per Cent of Families Owning	Per Cent of Families Renting			Per Cent of Families Owning	Per Cent of Families Renting	
57	65.35	34.65	34.5	83	72.90	27.10	32.0
58	68.37	31.63	33.8	84	59.51	40.49	28.9
59	60.00	40.00	36.9	85	61.13	38.87	32.9
60	47.27	52.73	33.1	86	51.33	48.67	34.3
61	42.70	57.30	32.1	87	31.65	68.35	32.3
62	56.22	43.78	13.3	88	60.45	39.55	32.5
63	68.53	31.47	37.3	89	57.26	42.74	31.6
64	56.43	43.57	32.9	90	32.70	67.30	30.3
65	73.13	26.87	42.9	91	15.94	84.06	25.8
66	33.24	66.76	42.1	92	61.05	38.95	35.6
67	26.40	73.60	38.1	93	40.60	59.40	32.1
68	29.33	70.67	40.5	94	41.24	58.76	34.5
69	45.13	54.87	40.6	95	44.35	55.65	36.9
70	55.70	44.30	39.1	96	48.38	51.62	34.6
71	53.62	46.38	38.7	97	53.85	46.15	35.4
72	47.29	52.71	40.0	98	57.46	42.54	36.6
73	49.36	50.64	35.8	99	61.14	38.86	36.7
74	40.05	59.95	36.8	100	70.41	29.59	35.5
75	67.40	32.60	39.2	101	67.80	32.20	35.6
76	41.89	58.11	33.7	102	72.68	27.32	34.8
77	43.87	56.13	32.5	103	40.84	59.16	27.7
78	44.60	55.40	35.4	104	58.22	41.78	27.1
79	64.97	35.03	34.2	105	54.46	45.54	29.0
80	71.00	29.00	38.5	106	69.14	30.86	30.2
81	72.63	27.37	36.2	107	64.49	35.51	36.4
82	62.42	36.58	36.4				
Mean Per Cent					33.00	67.00	32.8

III-B. NUMBER OF RADIOS PER ONE HUNDRED FAMILIES IN CINCINNATI, 1930,*
BY CENSUS TRACTS

Census Tract	Number of Families	Radios		Census Tract	Number of Families	Radios	
		Number	Number Per 100 Families			Number	Number Per 100 Families
1	1889	246	13	39	1053	653	62
2	2383	602	25	40	837	585	70
3	2803	441	16	41	1162	746	64
4	2407	406	17	42	943	529	56
5	3623	237	7	43	469	212	45
6	1200	162	14	44	1606	631	39
7	1595	227	14	45	224	126	56
8	1265	171	14	46	521	334	64
9	2304	633	27	47	1305	751	58
10	1758	415	24	48	1014	717	71
11	1565	484	31	49	1537	1132	74
12	1240	316	25	50	1641	1251	77
13	1149	492	45	51	767	673	88
14	1867	595	32	52	1742	1208	69
15	2470	647	26	53	1682	1052	63
16	2345	615	26	54	297	165	56
17	2004	615	31	55	1221	596	30
18	1358	622	46	56	1356	746	55
19	1071	481	45	57	1441	1050	73
20	641	427	66	58	779	598	77
21	1413	532	38	59	183	115	63
22	1078	612	57	60	1147	724	63
23	1111	541	49	61	1309	705	54
24	785	290	37	62	121	91	75
25	1272	736	60	63	497	381	77
26	2147	1168	54	64	804	543	67
27	1428	761	53	65	1070	931	87
28	2621	1259	48	66	643	364	57
29	1025	679	66	67	1513	912	60
30	1227	758	62	68	1352	969	72
31	1119	577	52	69	1399	889	63
32	1084	608	60	70	883	621	70
33	857	473	55	71	920	578	63
34	1184	622	53	72	484	350	72
35	878	426	49	73	871	576	66
36	1276	247	19	74	1308	724	55
37	1371	575	42	75	544	373	68
38	1493	952	64	76	1206	679	56

* United States Federal Census of Cincinnati, Ohio, 1930, pp. 1-107.
(Photostatic copies)

APPENDIX III-B (Continued)

Census Tract	Number of Families	Radios		Census Tract	Number of Families	Radios	
		Number	Number Per 100 Families			Number	Number Per 100 Families
77	687	333	48	93	1213	706	58
78	1453	891	61	94	765	477	62
79	701	443	63	95	1154	712	62
80	73	41	56	96	1688	1022	61
81	181	127	70	97	1650	1075	65
82	1305	902	69	98	366	182	50
83	109	86	79	99	1337	1038	75
84	257	155	60	100	657	474	72
85	207	125	60	101	783	526	67
86	1279	693	54	102	980	760	78
87	1059	552	52	103	1106	566	51
88	473	284	60	104	421	245	48
89	971	554	57	105	384	169	44
90	496	256	52	106	254	181	71
91	1495	542	36	107	462	325	78
92	388	262	68				
Totals					122511	59634	48.6

III-C. MONTHLY RENTALS PER DWELLING AND PER ROOM IN CINCINNATI, 1935,*
BY CENSUS TRACT

Census Tract	Average Monthly Rental in Dollars		Census Tract	Average Monthly Rental in Dollars	
	Per Dwelling	Per Room		Per Dwelling	Per Room
1	10.37	3.99	14	12.79	4.72
2	12.51	4.50	15	12.74	4.64
3	11.92	4.51	16	12.09	5.08
4	14.92	5.57	17	12.41	5.21
5	10.63	4.59	18	17.47	5.66
6	20.52	10.75	19	23.72	7.57
7	17.21	9.17	20	42.80	11.74
8	12.65	4.86	21	19.07	6.22
9	14.31	6.20	22	31.10	8.86
10	12.76	5.46	23	23.74	7.85
11	12.28	4.97	24	13.60	4.86
12	11.00	4.13	25	21.76	7.01
13	15.00	4.54	26	19.59	6.68

* The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, pp. 213-15. Cincinnati: Cincinnati Employment Center, 1937.

APPENDIX III-C (Continued)

Census Tract	Average Monthly Rental in Dollars		Census Tract	Average Monthly Rental in Dollars	
	Per Dwelling	Per Room		Per Dwelling	Per Room
27	17.57	6.08	68	51.10	11.61
28	16.31	5.70	69	33.20	8.50
29	32.83	9.17	70	38.45	9.00
30	25.29	7.49	71	52.27	12.07
31	21.23	6.85	72	45.07	10.67
32	28.66	8.38	73	23.81	6.04
33	30.41	8.67	74	21.09	6.25
34	32.30	9.23	75	30.27	7.57
35	25.99	8.33	76	19.31	6.08
36	18.74	5.67	77	18.40	5.74
37	30.03	8.92	78	24.65	7.00
38	31.32	7.65	79	26.08	7.28
39	32.45	7.83	80	24.09	5.87
40	35.50	8.09	81	29.98	6.34
41	29.56	7.78	82	33.13	7.78
42	32.94	8.81	83	27.46	5.69
43	15.06	4.15	84	33.86	7.47
44	15.76	4.42	85	22.13	5.84
45	16.53	4.37	86	18.45	5.25
46	26.15	5.41	87	17.10	5.58
47	22.88	5.69	88	25.66	6.89
48	37.17	8.03	89	20.94	6.25
49	42.67	8.68	90	16.00	5.14
50	48.70	10.10	91	13.13	4.83
51	50.57	10.31	92	22.85	6.26
52	34.41	8.28	93	23.43	6.19
53	29.18	7.60	94	24.93	6.83
54	26.07	6.40	95	26.50	6.71
55	24.03	5.76	96	24.46	6.23
56	27.91	6.31	97	29.61	7.49
57	38.44	8.31	98	28.37	8.61
58	39.53	8.09	99	35.94	8.30
59	30.68	7.39	100	36.10	8.43
60	24.73	5.86	101	35.00	7.90
61	20.85	5.73	102	35.73	7.86
62	43.65	8.95	103	17.48	5.11
63	42.98	9.66	104	16.61	4.88
64	35.96	8.45	105	19.78	4.79
65	68.50	11.99	106	28.65	5.72
66	47.26	11.29	107	38.72	8.43
67	37.13	9.19			
Mean for City				21.57	6.79

III-D. DENSITY OF POPULATIONS IN CINCINNATI AND THE PER CENT OF
FAMILIES RENTING DWELLINGS HAVING HEAT FURNISHED, 1935,
BY CENSUS TRACT

Census Tract	Mean Number of Persons Per Acre*	Per Cent of Renting Families Having Heat Furnished [#]	Census Tract	Mean Number of Persons Per Acre	Per Cent of Renting Families Having Heat Furnished
1	15.60	2.24	36	24.74	9.96
2	95.43	2.71	37	31.69	45.72
3	129.31	3.14	38	17.33	51.82
4	93.50	18.18	39	24.75	45.08
5	44.25	5.16	40	16.55	32.97
6	16.83	53.95	41	16.54	33.27
7	32.45	58.71	42	13.72	55.60
8	8.45	9.26	43	15.12	4.82
9	8.99	18.77	44	6.19	5.32
10	8.69	6.94	45	0.75	3.70
11	53.95	4.34	46	1.65	7.94
12	40.38	3.65	47	3.23	13.82
13	46.03	6.64	48	3.07	15.59
14	25.29	2.87	49	5.23	25.91
15	70.27	6.34	50	15.14	53.93
16	7.89	7.60	51	7.26	44.96
17	11.18	4.66	52	19.36	45.75
18	42.07	14.75	53	8.07	30.35
19	13.74	49.59	54	3.86	6.61
20	17.39	75.20	55	10.88	17.90
21	28.95	71.33	56	14.44	15.99
22	25.11	66.59	57	6.64	23.28
23	37.95	49.63	58	5.85	24.01
24	6.96	5.29	59	7.20	26.75
25	35.34	42.49	60	11.33	18.53
26	53.84	34.84	61	10.39	15.02
27	33.73	23.42	62	3.38	5.69
28	12.46	11.60	63	13.75	18.84
29	14.22	49.75	64	6.99	25.86
30	11.98	50.14	65	5.69	45.90
31	5.26	37.59	66	13.55	75.60
32	20.32	51.73	67	27.80	70.21
33	28.57	60.26	68	15.57	79.13
34	26.09	52.83	69	12.06	51.00
35	23.62	60.94	70	7.68	51.22

* The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, pp. 210-12. Cincinnati: Cincinnati Employment Center, 1937.

[#] Ibid., pp. 213-15.

APPENDIX III-D (Continued)

Census Tract	Mean Number of Persons Per Acre	Per Cent of Renting Families Having Heat Furnished	Census Tract	Mean Number of Persons Per Acre	Per Cent of Renting Families Having Heat Furnished
71	5.50	73.78	90	5.21	9.35
72	7.06	65.23	91	15.94	3.68
73	2.93	17.60	92	4.91	31.38
74	23.12	25.45	93	18.02	21.92
75	4.95	43.75	94	19.71	18.86
76	18.91	17.09	95	29.20	29.76
77	10.52	8.97	96	4.11	20.57
78	30.04	32.78	97	20.57	31.12
79	7.58	28.63	98	7.25	23.52
80	0.27	27.58	99	10.25	39.05
81	0.61	23.07	100	2.79	45.85
82	7.73	33.34	101	8.15	32.71
83	1.03	6.90	102	5.12	37.66
84	0.99	37.00	103	5.66	5.30
85	0.53	13.68	104	1.73	2.50
86	9.45	12.92	105	3.70	2.17
87	22.56	15.21	106	1.76	3.61
88	3.37	24.06	107	7.08	23.88
89	10.45	26.99			
Means for Cincinnati				9.93	25.66

APPENDIX IV

RELIGIOUS AFFILIATIONS OF POPULATIONS IN CINCINNATI, 1935,*
BY CENSUS TRACT

Census Tract	R e l i g i o u s P r e f e r e n c e			
	Per Cent Protestant	Per Cent Catholic	Per Cent Jewish	Per Cent Other**
1	65.4	19.7	0.6	14.3
2	54.2	26.6	1.0	18.2
3	66.5	15.6	5.7	12.2
4	78.0	9.4	0.7	11.9
5	77.0	8.2	0.2	14.6
6	44.2	30.9	1.0	23.9
7	49.5	25.2	1.3	24.0
8	68.0	14.5	3.1	14.4
9	46.9	26.7	1.0	25.4
10	40.5	33.5	0.5	25.5
11	36.4	46.7	0.1	16.8
12	47.3	26.9	0.1	25.7
13	33.4	54.2	0.1	12.3
14	47.4	35.5	0.2	16.9
15	51.4	34.1	0.3	14.2
16	40.8	42.4	0.5	16.3
17	47.0	37.8	0.3	14.9
18	30.8	40.6	0.7	27.9
19	53.9	25.4	1.8	18.9
20	50.5	26.2	2.5	20.8
21	38.1	48.8	0.6	12.5
22	50.8	30.7	0.6	17.9
23	46.0	30.7	2.4	20.9
24	40.0	36.1	0.4	23.5
25	42.4	42.4	0.8	14.4
26	45.1	44.0	0.4	10.5
27	39.0	42.4	0.3	18.3
28	48.7	36.1	0.3	14.9
29	41.5	42.3	3.0	13.2
30	42.4	38.5	0.7	18.4

* The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, pp. 210-12. Cincinnati: Cincinnati Employment Center, 1937.

** Those who profess no religious affiliation, whose religion was unspecified in the Regional Census of 1935, and whose religious affiliation was unknown are included in this classification.

APPENDIX IV (Continued)

Census Tract	R e l i g i o u s P r e f e r e n c e			
	Per Cent Protestant	Per Cent Catholic	Per Cent Jewish	Per Cent Other
31	28.3	55.2	0.3	16.2
32	47.2	27.4	9.1	16.3
33	47.4	33.0	0.8	18.8
34	47.1	18.2	20.0	14.7
35	48.7	32.7	3.8	14.8
36	80.9	4.2	1.1	13.8
37	67.4	19.4	3.2	10.0
38	36.8	47.1	1.2	14.9
39	37.2	49.1	3.2	10.5
40	42.8	44.6	1.0	11.6
41	46.4	38.3	1.8	13.5
42	35.6	46.2	3.1	15.1
43	57.3	28.0	0.6	14.1
44	56.5	23.6	0.3	19.6
45	69.7	23.5	0.0	6.8
46	62.6	28.5	0.6	8.3
47	60.3	29.2	0.1	10.4
48	66.9	26.7	0.3	6.1
49	63.7	24.9	0.4	11.0
50	54.7	34.8	0.7	9.8
51	60.7	26.6	0.3	12.4
52	50.6	37.6	0.5	11.3
53	47.1	32.1	1.6	19.2
54	46.2	20.1	0.6	33.1
55	66.7	23.0	0.2	10.1
56	61.5	28.7	0.3	9.5
57	49.8	32.8	0.2	17.2
58	64.1	20.4	0.4	15.1
59	49.8	31.7	0.0	18.5
60	63.5	18.0	0.3	18.2
61	52.9	33.5	0.1	13.5
62	14.0	26.3	2.3	57.4
63	37.9	42.5	2.4	17.2
64	40.1	47.1	1.6	11.2
65	19.9	20.0	46.8	13.3
66	15.8	11.6	63.9	8.7
67	14.4	7.8	72.8	5.0
68	15.1	10.4	68.9	5.6
69	30.7	22.1	34.0	13.2
70	50.0	32.8	1.6	15.6
71	62.4	19.8	0.9	16.9
72	51.9	25.4	2.4	20.3
73	56.7	21.9	0.3	21.1
74	47.8	39.3	0.3	12.6

APPENDIX IV (Continued)

Census Tract	R e l i g i o u s P r e f e r e n c e			
	Per Cent Protestant	Per Cent Catholic	Per Cent Jewish	Per Cent Other
75	62.0	33.8	0.1	4.1
76	42.1	42.5	0.1	15.3
77	50.5	36.8	0.2	12.5
78	36.1	54.2	0.6	9.1
79	40.3	46.5	0.4	12.8
80	60.2	27.1	0.0	12.7
81	70.7	20.4	0.0	8.9
82	53.2	33.9	0.4	12.5
83	34.3	52.9	0.0	12.8
84	56.7	31.1	0.1	12.1
85	39.4	44.4	0.0	16.2
86	40.4	47.6	0.2	11.8
87	37.3	52.9	0.1	9.7
88	43.5	49.8	0.0	6.7
89	35.5	56.5	0.4	7.6
90	27.6	53.4	0.0	19.0
91	49.5	40.8	0.0	9.7
92	19.5	73.1	1.3	6.1
93	27.5	64.8	1.8	5.9
94	21.0	70.5	3.4	5.1
95	21.2	68.1	3.8	6.9
96	34.5	56.2	0.8	8.5
97	19.6	68.3	5.9	6.2
98	25.0	56.1	6.3	12.6
99	24.9	66.7	3.3	5.1
100	39.8	45.1	0.6	14.5
101	57.9	34.7	0.3	7.1
102	50.9	42.0	0.6	6.5
103	53.9	37.5	0.1	8.5
104	52.9	35.4	0.0	11.7
105	58.5	32.3	0.0	9.2
106	66.6	22.4	0.0	11.0
107	35.2	57.6	1.5	5.7
Means	47.7	34.2	4.1	14.0

APPENDIX V

THE FAMILY IN CINCINNATI

A. THE SIZE OF THE FAMILY IN CINCINNATI, 1935,*
BY CENSUS TRACT

Census Tract	F a m i l i e s		Census Tract	F a m i l i e s	
	Number	Mean Number of Persons		Number	Mean Number of Persons
1	1693	3.096	33	890	2.778
2	2199	3.119	34	1326	2.917
3	3129	2.969	35	1105	2.547
4	3097	2.552	36	1461	2.979
5	5533	2.343	37	1649	2.722
6	2028	2.395	38	1432	3.030
7	2324	1.921	39	1023	3.046
8	1178	2.702	40	877	3.318
9	2192	2.479	41	1136	3.174
10	1894	2.586	42	798	3.011
11	1650	3.057	43	490	3.531
12	1159	3.464	44	1635	3.389
13	1105	3.595	45	269	3.416
14	1890	3.197	46	558	3.546
15	2521	3.161	47	1351	3.411
16	2262	2.709	48	1121	3.399
17	2228	2.736	49	1607	3.363
18	1487	3.246	50	1732	3.119
19	1252	2.841	51	942	3.207
20	691	2.687	52	1769	3.125
21	1469	3.215	53	1798	3.236
22	1310	2.696	54	355	3.318
23	1154	2.802	55	1476	3.410
24	791	3.355	56	1680	3.417
25	1289	2.887	57	1550	3.464
26	2295	2.942	58	882	3.433
27	1391	3.035	59	215	3.516
28	2559	3.141	60	1136	3.337
29	1066	2.979	61	1267	3.522
30	1154	2.788	62	201	3.163
31	1160	3.007	63	928	3.179
32	1184	2.804	64	1003	3.304

*The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, the Population of Hamilton County, Ohio, in 1935, pp. 213-15. Cincinnati: Cincinnati Employment Center, 1937.

APPENDIX V-A (Continued)

Census Tract	F a m i l i e s		Census Tract	F a m i l i e s	
	Number	Mean Number of Persons		Number	Mean Number of Persons
65	454	3.610	87	1049	3.424
66	743	3.219	88	537	3.409
67	1646	3.174	89	992	3.405
68	1275	3.307	90	477	3.374
69	1458	3.051	91	1487	3.376
70	833	3.133	92	457	3.725
71	856	3.084	93	1298	3.565
72	573	2.801	94	839	3.407
73	853	3.329	95	1123	3.393
74	1291	3.163	96	1761	3.424
75	589	3.193	97	1727	3.459
76	1208	3.289	98	449	3.641
77	677	3.523	99	1575	3.468
78	1426	3.156	100	774	3.315
79	688	3.458	101	826	3.245
80	100	4.067	102	1186	3.367
81	190	3.677	103	1021	3.476
82	1509	3.184	104	383	3.724
83	107	4.159	105	404	3.473
84	247	3.455	106	269	3.388
85	301	3.484	107	566	3.450
86	1282	3.441			
Totals				131501	3.077

V-B. THE MEMBERSHIP OF FAMILIES IN CINCINNATI BY SIZE, 1930,*
BY CENSUS TRACT

Census Tract	Average No. of Persons Per Family	Per Cent of Total Families Having Memberships of				
		1 and 2 Persons	3 and 4 Persons	5 and 6 Persons	7 and 8 Persons	9 and Above Persons
1	3.93	40.3	29.2	18.5	7.9	4.2
2	3.53	43.3	24.5	14.8	5.6	11.8
3	3.50	44.5	33.6	13.8	6.0	2.1
4	3.76	52.5	32.3	10.8	3.5	0.9
5	3.67	57.7	31.0	9.1	1.7	0.5
6	4.48	55.9	27.1	11.0	3.8	2.2
7	4.41	69.0	21.8	6.8	2.0	0.4
8	3.53	47.6	33.1	10.9	6.1	2.3
9	3.18	58.5	29.6	8.9	2.4	0.6
10	3.04	56.9	30.0	9.1	3.0	1.0

*United States Federal Census of Cincinnati, Ohio, 1930, pp. 1-107.
(Photostatic copies)

APPENDIX V-B (Continued)

Census Tract	Average No. of Persons Per Family	Per Cent of Total Families Having Memberships of				
		1 and 2 Persons	3 and 4 Persons	5 and 6 Persons	7 and 8 Persons	9 and Above Persons
11	3.31	40.8	35.4	12.1	4.5	7.2
12	3.81	36.9	34.2	18.1	7.3	3.5
13	3.94	30.4	37.9	20.1	8.4	3.2
14	3.41	41.2	30.2	14.5	5.4	8.7
15	3.49	42.0	36.3	14.5	5.0	2.2
16	2.99	52.2	32.2	11.0	3.3	1.3
17	2.97	49.2	33.1	12.3	3.0	2.4
18	3.82	34.7	39.6	18.4	4.9	2.4
19	3.12	48.5	34.6	11.4	4.0	1.5
20	3.20	52.4	35.1	8.8	3.0	0.7
21	2.63	42.5	34.8	15.1	6.0	1.6
22	3.35	44.6	41.1	11.6	2.0	0.7
23	3.36	46.9	38.0	11.4	2.7	1.0
24	3.78	32.9	37.4	20.3	6.4	3.0
25	3.21	43.6	42.8	10.9	2.3	0.4
26	3.27	38.3	43.7	12.9	3.6	1.5
27	3.25	38.4	43.2	15.5	2.3	0.6
28	3.72	38.4	40.7	15.2	4.4	1.3
29	3.87	37.2	45.0	14.0	3.2	0.6
30	3.06	46.2	40.3	11.4	1.8	0.3
31	3.36	40.9	41.4	10.4	2.9	4.4
32	3.96	40.4	44.0	11.6	2.7	1.3
33	3.32	48.9	38.8	9.9	2.1	0.3
34	3.73	42.7	39.6	12.8	3.6	1.3
35	3.56	47.9	38.1	11.0	2.4	0.6
36	3.62	45.2	34.7	14.1	4.8	1.2
37	3.58	52.3	31.9	11.5	2.9	1.4
38	3.40	39.4	42.7	14.0	3.0	0.9
39	3.53	37.8	42.9	14.7	3.1	1.5
40	3.57	32.6	47.3	15.5	3.5	1.1
41	3.70	34.2	44.0	16.4	4.4	1.0
42	3.36	47.9	36.2	12.7	2.8	0.4
43	3.99	25.5	45.5	18.3	7.5	3.2
44	3.83	32.1	37.4	20.2	6.8	3.5
45	3.88	36.2	35.7	16.5	7.1	4.5
46	4.47	27.2	42.3	22.8	4.6	3.1
47	3.80	30.1	41.6	21.1	4.9	2.3
48	3.77	25.8	52.3	16.9	3.6	1.4
49	4.05	27.5	50.0	16.8	4.6	1.1
50	3.58	34.6	44.4	17.2	2.9	0.9
51	3.68	27.9	52.1	16.0	3.5	0.5
52	3.42	35.3	46.0	15.3	2.6	0.8
53	3.69	30.6	48.0	16.3	3.9	1.2
54	3.42	35.4	48.1	12.2	3.7	0.6
55	4.02	30.9	40.5	19.2	6.9	2.5

APPENDIX V-B (Continued)

Census Tract	Average No. of Persons Per Family	Per Cent of Total Families Having Memberships of				
		1 and 2 Persons	3 and 4 Persons	5 and 6 Persons	7 and 8 Persons	9 and Above Persons
56	3.59	30.2	45.3	18.9	3.8	1.8
57	3.80	24.8	48.9	20.8	4.2	1.3
58	3.85	21.1	53.0	20.2	4.1	1.6
59	4.00	21.6	49.8	18.8	8.7	1.1
60	3.65	32.1	44.3	18.1	4.1	1.4
61	3.76	30.8	42.1	18.2	4.7	3.2
62	2.65	32.8	46.2	12.4	6.6	2.0
63	3.52	29.6	53.5	13.5	2.8	0.6
64	4.95	27.2	48.7	18.8	4.2	1.1
65	4.38	25.4	51.2	19.9	2.6	0.9
66	3.87	37.3	42.5	14.8	4.2	1.2
67	3.83	32.3	42.3	19.2	5.1	1.1
68	3.56	39.5	42.3	13.9	2.4	0.9
69	3.54	34.3	42.9	18.6	2.6	0.6
70	3.59	36.2	45.0	14.9	3.4	0.5
71	3.45	44.7	41.6	11.1	2.3	0.3
72	3.42	40.5	45.4	10.7	2.1	1.3
73	3.80	31.2	46.1	18.6	3.4	0.7
74	3.54	35.0	43.5	15.4	4.6	1.5
75	3.52	31.9	47.3	17.3	2.8	0.7
76	3.71	32.3	40.6	20.2	5.1	1.8
77	3.86	30.9	40.6	21.1	4.7	3.7
78	3.56	37.2	43.4	14.8	3.6	1.0
79	3.84	28.5	45.4	17.5	5.8	2.2
80	5.45	13.6	31.6	38.4	10.9	5.5
81	5.23	30.3	48.9	15.5	4.2	1.1
82	3.61	23.2	44.2	21.0	8.8	1.8
83	4.30	22.0	40.3	26.6	8.3	2.8
84	4.37	32.3	38.9	21.8	5.5	1.5
85	4.29	18.8	42.4	22.7	13.1	3.0
86	3.86	28.8	39.3	22.4	7.3	2.2
87	3.81	30.3	41.2	21.0	5.3	2.2
88	3.74	31.9	43.2	15.9	7.4	1.6
89	4.30	28.5	43.7	19.0	5.7	3.1
90	3.92	30.2	44.6	15.5	6.3	3.4
91	3.79	32.0	41.0	17.9	6.5	2.6
92	4.21	22.3	39.6	25.0	8.2	4.9
93	4.25	28.8	39.9	20.0	6.3	5.0
94	3.73	30.2	38.2	20.8	5.1	5.7
95	3.60	32.7	38.3	18.7	5.0	4.3
96	3.78	30.4	39.1	18.4	6.0	6.1
97	3.74	28.0	41.3	21.2	4.5	5.0
98	5.56	18.3	44.2	26.5	6.3	4.7
99	3.92	23.8	43.6	20.6	5.4	6.6
100	3.65	31.2	39.6	19.1	4.0	6.1

APPENDIX V-B (Continued)

Census Tract	Average No. of Persons Per Family	Per Cent of Total Families Having Memberships of				
		1 and 2 Persons	3 and 4 Persons	5 and 6 Persons	7 and 8 Persons	9 and Above Persons
101	3.67	28.0	47.2	17.3	4.9	2.6
102	3.98	23.2	47.2	20.4	5.7	3.5
103	3.96	29.1	37.9	20.3	7.2	5.5
104	3.97	26.4	40.4	21.2	8.3	3.7
105	3.71	27.5	39.6	19.5	4.4	9.0
106	3.64	29.6	50.2	15.8	4.6	0.8
107	3.91	25.2	41.2	20.4	6.7	6.5
Total Mean	3.72	37.5	40.0	16.6	4.4	1.5

APPENDIX V-C

1. SCHOOL CHILDREN IN CINCINNATI FIVE TO SEVENTEEN YEARS OF AGE FOR YEARS 1933 TO 1935 INCLUSIVE, BY CENSUS TRACTS*

Census Tract	1933		1934		1935	
	Number	Number Per 1000 Population**	Number	Number Per 1000 Population**	Number	Number Per 1000 Population**
1	1873	282	1765	266	1785	269
2	2168	263	2194	265	2099	246
3	2714	249	2802	259	2630	242
4	2055	216	2288	240	2040	214
5	2813	200	2671	190	2681	188
6	891	184	929	192	788	163
7	650	107	635	104	571	94
8	1025	204	989	196	803	159
9	1249	189	1169	177	1195	183
10	1011	183	1040	188	1000	181
11	1160	207	1215	216	1298	231
12	1300	270	1228	254	1247	259
13	1121	216	1172	228	1308	253
14	1616	242	1406	211	1603	240
15	2425	254	2279	238	2411	252
16	1538	210	1499	202	1552	212
17	1558	230	1404	207	1416	209
18	1188	222	1174	219	1108	206

*The School Census for the City of Cincinnati, 1933 to 1935, pp. 18. Board of Education of the Cincinnati School District, 1939.

**The number per one thousand population is based upon the population per census tract of 1935, as given in Appendix II-A.

APPENDIX V-C (Continued)

Census Tract	1 9 3 3		1 9 3 4		1 9 3 5	
	Number	Number Per 1000 Population	Number	Number Per 1000 Population	Number	Number Per 1000 Population
19	668	170	730	186	743	189
20	195	84	231	99	245	105
21	1093	200	1208	222	1151	213
22	418	105	427	108	525	132
23	586	150	641	164	672	172
24	817	248	783	238	834	254
25	597	136	634	145	624	143
26	1324	173	1318	172	1289	168
27	882	183	859	178	940	195
28	1934	207	1807	193	2274	243
29	563	132	545	128	586	137
30	473	131	504	140	483	135
31	697	180	678	175	706	183
32	511	124	559	135	572	139
33	476	155	421	137	410	133
34	727	150	730	151	770	159
35	461	133	464	133	466	135
36	1175	220	1138	214	1071	201
37	822	150	883	161	813	148
38	783	158	797	161	753	152
39	553	151	571	157	565	154
40	548	162	585	173	625	184
41	642	169	734	174	703	167
42	445	135	437	131	448	136
43	489	246	472	232	512	252
44	1316	248	1614	254	1538	241
45	307	311	268	269	242	242
46	606	260	632	271	578	248
47	1161	225	1162	224	1177	227
48	967	230	983	233	905	214
49	1221	196	1224	196	1126	180
50	965	151	993	154	1087	169
51	600	186	575	178	636	197
52	1086	183	1036	175	1035	175
53	1363	202	1362	218	1258	200
54	282	205	281	204	462	326
55	1442	245	1358	230	1381	235
56	1086	177	1317	215	1278	205
57	1628	275	1399	236	1303	220
58	737	208	758	214	767	216
59	51	64	193	242	176	221
60	941	220	987	231	921	215
61	1239	240	1284	249	1216	235
62	216	63	145	42	134	39

APPENDIX V-C (Continued)

Census Tract	1 9 3 3		1 9 3 4		1 9 3 5	
	Number	Number Per 1000 Population	Number	Number Per 1000 Population	Number	Number Per 1000 Population
63	443	139	554	174	562	176
64	707	180	750	192	952	243
65	865	191	864	191	811	179
66	392	146	372	138	412	153
67	1083	184	1089	184	1021	173
68	794	153	795	153	794	154
69	814	167	732	150	669	137
70	515	165	529	170	513	165
71	472	143	443	135	496	151
72	231	128	251	139	223	123
73	626	195	640	199	658	208
74	914	195	947	203	870	186
75	359	173	341	165	314	152
76	1007	225	1010	226	945	211
77	644	249	669	257	628	241
78	886	175	969	190	1074	214
79	607	218	590	212	601	216
80	125	350	146	408	103	288
81	224	296	213	281	144	190
82	997	190	992	188	981	186
83	160	305	161	307	156	297
84	255	222	259	216	238	199
85	446	412	233	214	231	221
86	1289	266	1199	247	1048	215
87	984	238	966	233	963	232
88	386	185	414	193	464	215
89	727	181	818	204	807	201
90	450	258	420	241	412	236
91	1538	274	1466	261	1361	243
92	445	232	422	220	436	228
93	1182	220	1177	219	1243	232
94	616	197	638	206	637	204
95	809	187	844	195	805	186
96	1349	205	1301	198	1310	199
97	1324	198	1392	208	1339	199
98	719	288	461	185	531	213
99	1064	180	1237	208	1202	213
100	468	163	545	190	549	191
101	538	177	571	190	531	175
102	835	201	875	199	858	195
103	1106	262	1072	254	1024	243
104	466	293	402	252	383	240
105	380	235	424	262	391	242
106	221	220	211	210	214	214
107	422	200	452	214	432	205
Totals	94665	200	94422	199	93881	198

APPENDIX V-C

2. SCHOOL CHILDREN IN CINCINNATI FIVE TO SEVENTEEN YEARS OF AGE
FOR YEARS 1936 TO 1938 INCLUSIVE, BY CENSUS TRACT*

Census Tract	1 9 3 6		1 9 3 7		1 9 3 8	
	Number	Number Per 1000 Population **	Number	Number Per 1000 Population **	Number	Number Per 1000 Population **
1	1964	292	2035	306	2103	317
2	2314	282	2334	284	2257	278
3	1621	148	1598	147	1516	140
4	2161	227	2125	224	2084	219
5	2970	212	3170	222	2903	204
6	788	163	826	170	897	185
7	602	99	647	106	580	96
8	1109	220	1180	234	1133	225
9	1162	177	1404	214	1309	198
10	1108	200	1192	216	1055	191
11	1309	232	1436	256	1239	221
12	1361	282	1278	265	1196	248
13	1205	234	1093	212	1076	204
14	1731	260	1654	248	1626	244
15	2382	250	2644	267	2436	255
16	1453	199	1614	221	1484	203
17	1494	221	1563	231	1456	215
18	1165	217	1258	235	1231	230
19	766	195	793	201	651	166
20	218	94	252	108	199	85
21	1160	214	1207	222	1142	211
22	455	115	483	121	454	114
23	650	161	695	177	635	162
24	825	251	904	274	831	252
25	658	151	697	160	707	162
26	1343	176	1339	175	1281	167
27	902	187	893	186	834	173
28	2130	217	1973	211	1894	202
29	561	131	555	130	523	122
30	523	148	518	144	471	131
31	727	189	701	182	716	186
32	523	126	507	123	448	108
33	435	142	438	143	434	141
34	736	152	799	165	705	146

*The School Census for the City of Cincinnati, 1936 to 1938, pp. 9.
Cincinnati: Board of Education of the Cincinnati School District, 1939.

**The number per one thousand population is based upon the population per census tract of 1935, as given in Appendix II-A.

APPENDIX V-C (Continued)

Census Tract	1 9 3 6		1 9 3 7		1 9 3 8	
	Number	Number Per 1000 Population	Number	Number Per 1000 Population	Number	Number Per 1000 Population
35	469	135	498	143	520	150
36	1185	222	1171	220	1291	242
37	870	158	983	171	923	168
38	789	158	772	145	752	151
39	576	158	631	173	552	151
40	584	172	611	180	583	172
41	722	172	719	168	642	152
42	435	132	460	140	428	130
43	517	252	525	258	594	292
44	1716	269	1497	235	1489	234
45	291	292	174	174	291	292
46	656	272	626	269	660	283
47	1201	232	1205	233	1178	228
48	970	230	958	228	1025	243
49	1123	180	1166	186	1089	174
50	1028	159	976	154	923	143
51	630	195	640	198	617	191
52	1084	177	1077	183	1005	170
53	1258	200	1250	199	1215	194
54	301	219	300	218	291	218
55	1467	249	1427	242	1257	214
56	1216	198	1344	219	1247	203
57	1346	227	1201	220	1251	212
58	825	232	773	218	801	226
59	193	242	209	262	199	250
60	913	214	891	209	842	197
61	1223	237	1191	231	1124	218
62	144	41	168	49	240	70
63	599	187	656	206	647	203
64	806	206	806	205	817	208
65	793	175	746	165	768	170
66	438	163	461	171	485	180
67	1126	190	1034	175	1016	172
68	789	153	720	139	821	159
69	730	150	701	143	714	146
70	511	164	478	154	473	152
71	484	147	478	145	444	135
72	214	118	230	127	208	115
73	696	217	676	211	631	197
74	870	186	830	178	885	189
75	322	155	328	158	285	137
76	1095	245	912	204	1034	232
77	654	252	571	220	615	237

APPENDIX V-C (Continued)

Census Tract	1 9 3 6		1 9 3 7		1 9 3 8	
	Number	Number Per 1000 Population	Number	Number Per 1000 Population	Number	Number Per 1000 Population
78	912	180	900	177	814	160
79	564	202	592	212	561	201
80	124	346	187	522	130	364
81	159	210	173	228	165	172
82	1054	200	1081	206	1082	206
83	188	359	98	187	190	362
84	252	210	254	212	253	212
85	233	212	242	228	292	269
86	1142	235	1159	238	1113	230
87	962	232	935	226	925	224
88	406	189	408	190	392	182
89	858	214	894	242	861	214
90	450	258	430	246	390	223
91	1502	268	1550	266	1508	268
92	424	220	414	216	418	218
93	1239	230	1255	234	1219	227
94	640	205	641	205	602	193
95	785	181	778	179	776	179
96	1387	211	1366	208	1306	199
97	1386	206	1430	223	1428	212
98	450	181	425	171	427	171
99	1264	214	1256	212	1311	222
100	538	187	625	217	569	198
101	565	182	496	163	543	178
102	909	207	927	221	886	202
103	1130	268	1030	244	1175	278
104	435	262	411	251	428	269
105	354	219	364	231	359	222
106	260	258	238	220	233	222
107	519	246	408	202	440	209
Totals	95361	201	95903	209	93164	197

V-D. MARITAL STATUS OF PERSONS IN CINCINNATI TWENTY YEARS OF AGE AND OVER IN 1935, BY CENSUS TRACT

The Regional Census of 1935 listed the number of persons fifteen years of age and over, classified in terms of their marital status, in five year intervals.¹ Those persons twenty years old, therefore, were included with those twenty to twenty-four years of age. In order to determine the number of persons more nearly of voting age in each classification, the number between the ages of fifteen to nineteen inclusive was subtracted from the number twenty years old and above. The number of persons in the tabulations of Appendix V-D, therefore, include those one year younger than voting age. The resulting figures for each classification and for each census tract were then readjusted for "under-enumeration".² This gave as close an estimation as could be obtained from the data of the census of the number of eligible voters by census tract for each population classified in terms of their marital status.

Census Tract	T o t a l		S i n g l e		M a r r i e d		Widowed, Divorced, Unknown*	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
1	3362	100	621	28	2143	64	598	18
2	5202	100	1076	21	3197	61	929	18
3	6761	100	1201	18	4203	62	1357	20
4	6788	100	1175	18	3920	57	1693	25
5	10929	100	1633	15	6170	55	3126	30
6	3691	100	1165	32	1694	46	832	22
7	5590	100	1831	33	2361	42	1398	25
8	3549	100	1069	30	1546	43	934	27
9	5036	100	1140	23	2821	56	1075	21
10	3892	100	776	20	2220	57	896	23
11	3558	100	741	21	2161	61	656	18
12	2712	100	562	21	1725	64	425	15
13	2772	100	747	27	1575	57	450	16
14	4370	100	922	21	2728	62	720	17
15	5647	100	1020	18	3668	65	959	17
16	4665	100	999	21	2774	59	892	20
17	4741	100	1010	21	2787	59	944	20
18	3809	100	1006	28	2244	59	559	13

¹The Regional Department of Economic Security, the Cincinnati Employment Center of the Ohio State Employment Service, and the United States Employment Service, Studies in Economic Security: II, The Population of Hamilton County, Ohio, in 1935, pp. 57-110. Cincinnati: Cincinnati Employment Center, 1937.

²Ibid., pp. 239-40.

* Included with the number of those who were widowed or divorced are the number of those whose marital status was undetermined in 1935.

APPENDIX V-D (Continued)

Census Tract	T o t a l		S i n g l e		M a r r i e d		Widowed, Divorced, Unknown	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
19	2832	100	809	28	1552	55	471	17
20	1676	100	501	30	879	52	296	18
21	3701	100	843	23	2276	61	582	16
22	3372	100	1115	33	1781	53	476	14
23	3404	100	1082	32	1882	55	440	13
24	1871	100	427	23	1165	62	279	15
25	3253	100	904	28	1826	56	523	16
26	5734	100	1386	24	3588	63	760	13
27	3576	100	741	21	2352	66	483	13
28	7785	100	1753	23	5078	65	954	12
29	3269	100	1044	32	1820	56	405	12
30	2922	100	736	25	1740	59	446	16
31	2782	100	816	29	1681	60	285	11
32	3984	100	1258	31	2216	56	510	13
33	2280	100	618	27	1125	49	537	24
34	3836	100	1281	34	1967	51	588	15
35	2585	100	779	30	1404	54	402	16
36	3657	100	601	16	2279	62	777	22
37	4280	100	1110	26	2208	52	962	22
38	4050	100	1134	28	2342	57	574	15
39	2671	100	851	32	1406	53	414	15
40	2344	100	530	23	1595	68	219	9
41	3227	100	934	29	1870	58	423	13
42	2160	100	730	34	1109	51	321	15
43	1114	100	243	22	741	67	130	11
44	4202	100	856	20	2751	65	595	15
45	627	100	106	17	433	69	88	14
46	1496	100	253	17	1091	73	152	10
47	3513	100	724	21	2391	68	398	11
48	3045	100	586	19	2185	72	274	9
49	4619	100	1229	27	2861	62	529	11
50	4444	100	1169	26	2780	63	495	11
51	2419	100	439	18	1777	74	203	8
52	4807	100	1041	22	3247	70	519	8
53	4819	100	954	19	3489	73	376	8
54	923	100	137	15	712	77	74	8
55	3897	100	757	19	2655	70	485	11
56	4490	100	843	19	3212	71	435	10
57	4055	100	815	20	2890	71	350	9
58	2474	100	473	19	1762	71	239	10
59	579	100	120	21	396	68	63	11
60	2918	100	468	16	2130	73	320	11
61	3204	100	555	17	2345	73	304	10
62	3260	100	1365	42	1389	43	506	15

APPENDIX V-D (Continued)

Census Tract	Total		Single		Married		Widowed, Divorced, Unknown	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
63	2117	100	284	13	1692	80	141	7
64	2722	100	505	19	1977	73	240	8
65	3292	100	859	26	1930	59	503	15
66	2002	100	569	28	1213	60	220	12
67	1441	100	1241	28	2620	59	580	13
68	3806	100	1040	27	2281	60	485	13
69	3821	100	953	25	2434	64	434	11
70	2282	100	618	27	1386	61	278	12
71	2377	100	711	30	1366	58	300	12
72	1474	100	411	28	889	60	174	12
73	2242	100	420	19	1625	72	197	9
74	3361	100	762	23	2153	64	446	13
75	1576	100	382	24	1029	65	165	11
76	3012	100	611	20	2026	68	375	12
77	1739	100	353	20	1173	68	213	12
78	3730	100	914	25	2278	61	538	14
79	1925	100	404	21	1274	66	247	13
80	278	100	63	24	163	59	47	17
81	571	100	139	24	363	64	69	12
82	4009	100	783	19	2824	71	402	10
83	304	100	60	20	213	70	31	10
84	789	100	197	25	450	57	142	18
85	786	100	156	20	559	71	71	9
86	3413	100	800	24	2224	65	389	11
87	2685	100	559	21	1817	68	309	11
88	1372	100	276	20	980	72	116	8
89	2963	100	786	26	1772	60	405	14
90	1150	100	275	24	740	64	135	12
91	3467	100	675	19	2279	66	513	15
92	1226	100	296	24	835	68	95	8
93	3520	100	960	27	2201	63	359	10
94	2216	100	614	28	1367	61	235	11
95	3149	100	889	28	1876	60	384	12
96	4540	100	1188	26	3004	66	348	8
97	4682	100	1254	27	2904	62	524	11
98	1887	100	534	28	1115	59	238	13
99	4326	100	985	23	2919	68	422	9
100	2105	100	435	21	1472	70	198	9
101	2242	100	509	23	1523	68	210	9
102	3249	100	689	21	2212	68	348	11
103	2568	100	519	20	1740	68	309	12
104	1031	100	220	21	691	67	120	12
105	1033	100	227	22	693	67	113	11
106	677	100	123	18	481	71	73	11
107	1549	100	341	22	1071	69	137	9
Totals	336936	100	79404	23.5	208149	61.9	49383	14.6