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**PEOPLE OF
OAKLAND COUNTY**

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OAKLAND COUNTY PLANNING COMMISSION

VOLUME I Part 1 - B

Number of Persons in Oakland County 1840 - 1965

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Number of Persons, Numerical and Percent Increase

By Decades Oakland County, 1840 - 1965

Year	Number of Persons	Numerical Increase	Percent Increase
1840	23,646	-----	-----
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THE POPULATION GROWTH AND EVOLVING
URBANIZATION OF OAKLAND COUNTY

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Albert J. Mayer

Volume I
Population History
1840-1960

Oakland County Planning Commission

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FOREWORD

Population data is in constant demand and the users are many and varied. Some need overall gross figures while others are searching for detailed statistics. Some users require projections and others find historical data to be satisfactory.

This study contains population information concerning Oakland County, Michigan, in both historical form covering the time period from 1840 to 1960 and also projections from 1960 to 1990. In addition to the statistical data, this study provides an interpretation of the raw figures and includes a description of the methodology used in making the projections. The reader, therefore, can compare his methodology and interpretations with those contained in this study.

Needless to say, the future is known to no man. Most everyone has premonitions and the ability to conjecture. Some individuals, fortunately, have devoted their entire lives to the study of the art and science of predicting population trends. These specialists have the advantage over the rest of us in that their research and study of the past behavior of human beings have yielded insights and methods which have proven to be surprisingly accurate.

The present study provides one attempt to look into the future. It also provides an evaluation of the past and present. Both aspects of the study have been carried out as objectively as possible by a person experienced in population research. However, the reader is still reminded to use discretion in his application of the findings in this report.

We are all well aware of the fact that our communities and neighborhoods are far from ideal. The county and its constituent communities are faced with a monumental

task of planning, building anew and rebuilding the old to meet modern standards. No disparaging finger is being pointed here at individual communities, groups or societies. We all have a job to do in making this future environment of Oakland County a better one.

The study presented here was prepared for the Oakland County Planning Commission to serve as one of many background reports to enable the Commission to construct its comprehensive county development plan. These population figures will play an important if not a key role in the new plan.

George N. Skrubbs, Director
Oakland County Planning Commission

INTRODUCTION

This study will examine the population of Oakland County from the point of view not only of its present status, but also of Oakland County as a prototype of the city of the future. By the standards of the past it wouldn't be considered a city at all, but would be regarded as a collection of suburbs dependent on the central city of Detroit for its very existence. While Oakland County is still very much tied to Detroit, this dependency is rapidly decreasing. The County is becoming strong enough to take on a fully urban life of its own, and eventually compete with Detroit for dominance in the metropolitan complex.

The principal thesis of this study is that the future of urban development greatly favors the growth and development of Oakland County (and its counterparts throughout the United States); that during the next thirty years the suburbanization process will advance to a point of qualitative change so that suburban areas will fulfill many of the functions formerly performed by the central city. In turn, the central city will be reduced to certain very specialized functions which it best can sustain. However, the bulk of urban activities will take place in areas similar to Oakland County.

In truth, we are far along this path. In 1960, 56 percent of the population of the Detroit Standard Metropolitan Statistical Area¹ lived outside of the central city of Detroit. This compares to only 32 percent living outside

1. Hereafter the Detroit Standard Metropolitan Area (Wayne, Oakland and Macomb Counties) will be referred to by its initials SMSA.

the central city in 1940. In numerical terms, the suburbs are predominant already. Numbers, however, are not the only criteria of urbanization. Each separate urban function must be examined and evaluated. Let us take shopping. What is the future of suburban shopping centers versus that of the central business district of the central city? The explosive growth of Northland Center in Oakland County is an indication of the future in this respect. Other urban functions such as recreation and industry are all undergoing change. The focus of this study is the composition of the Oakland County population and anticipated changes in that population during the next twenty-five years.

The characteristics of the population which generate the social structure provide the basic variable in planning for the future. The 30 year old of 1965 will be the 55 year old of 1990. If his life in 1990 is going to be more pleasant, safer, more fruitful, his environment must be suited to his needs and wants. This study will attempt to predict the number of persons, their geographic distribution and their principal socio-economic characteristics. Since it has been suggested previously that the future population of Oakland County will be urban not suburban, the task of the planners will be to seek methods for guiding this future urbanization down a constructive path leading to improvement in the external conditions of the environment for all residents of the county.

Organization of The Population Study

This population study is divided into two principal parts. The first part describes and analyzes the existing population of Oakland County with

respect to its salient social and economic characteristics. Wherever possible the analysis is located historically so that the trend over time can be observed. This enables a picture of the developmental process to unfold and provides guideposts to the course of future development. Oakland County is compared with other areas whenever relevant, so that its position with respect to the other parts of the SMSA may be understood.

The aim of the first part of the study is to present a comprehensive and detailed characterization of the present population of Oakland County so that persons and agencies concerned with the welfare and administration of the County will have the basic facts at their disposal to aid in making day to day as well as long range decisions necessary to administer the County.

The second part of the study consists of a projection into the future of the County to the year 1990. First the number of persons is projected, then the social and economic characteristics of this future population are projected by communities within the County. The resulting description of the County twenty five years hence, assumes certain continuing trends as well as certain anticipated changes.

The study has been organized to meet two kinds of use. First the analytical text and brief summary tables are combined into a narrative account describing the present and future population. Readers can, if they wish, confine themselves to this narrative account without inquiring into how various estimates and projections were made or examining any of the detached tabulations. The detailed appendix tables and technical appendixes which describe the many methods used to arrive at the predictions may be of interest to the

technical person. The detailed tabular material may also serve as a reference or compendium for persons interested in doing further research in Oakland County.

VOLUME I Part 1 - B

Number of Persons in Oakland County 1840 - 1965

The most basic fact concerning a population is the count of the number of persons residing in an area. Ever since human communities developed, man has had a fascination for counting his numbers. A good starting point in this study is an analysis of the number of persons in Oakland County from early times to the present (Table 1).

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Table 1 (continued)

Year	Number of Persons	Numerical Increase	Percent Increase
1960	690,603	294,582	74.4
1965	817,000 ¹	126,397	18.3

The record of population growth in Oakland County in the past 125 years has certainly not been one of steady progress, but rather has been characterized by obviously changing situations. While the county showed a little growth between 1840 and 1860, probably there was little migration from other places. The excess of births over deaths, could account for the population increase observed. After 1860 and continuing through 1910 it is obvious from the very small population increases (between 1880 and 1890 there was an actual loss), that Oakland County was "going no place" in the sense of acquiring additional people. Apparently the entire 1840-1910 period was characterized by a relatively stable farming population slowly filtering out of the county in response to the nationwide movement from farm to city.

Between 1910 and 1920 the entire character of growth changed dramatically. Whereas the 1910-1920 increase was 82 percent, succeeding decades were characterized by widely fluctuating growth, but always the growth after 1910 was markedly greater than anything that occurred before 1910. The Detroit area became the center of the burgeoning automobile industry and the entire area, particularly the central city of Detroit, exploded in terms

¹ 1965 population is estimated. The method of estimation is discussed in Appendix C of this study.

of population growth. Oakland County was drawn into the orbit of the Detroit growth because the automobile and the interurban line linked Southern Oakland County with the other parts of the metropolitan area. Without adequate transportation Oakland County would have remained a relatively stable low density area. This didn't happen, and Oakland County is now an integral part of the social and economic unit that comprises the Detroit Standard Metropolitan Statistical Area.¹

The widely fluctuating growth pattern since 1920 has been due to changing economic conditions which have influenced both natural population increase (excess of births over deaths) and migration to Oakland County. The peak growth, in terms of percent increase occurred between 1920 and 1930, but by far the largest numerical increase took place between 1950 and 1960 when almost 300,000 persons, enough to make a large city, were added to the population. Growth during the 1960's, at least through 1965, seems somewhat less than that of a decade ago, but the numerical increase is still very great. If the county grows at the same rate between 1965 and 1970 the increase for the 1960-1970 decade will be about 36 percent, considerably less than that of past years. This is to be expected, for the county is already so large that even the smaller proportions of increase will result in vast numbers of persons being added to the population. The implications of this will be discussed fully in Volume II after the population forecast to 1990 is presented.

¹ The term Standard Metropolitan Statistical Area (SMSA) is used by almost all governmental publications to refer to permanent units for data collection. The Detroit Standard Metropolitan Statistical area is comprised of Wayne, Oakland and Macomb Counties. Throughout the remainder of this study the initials SMSA will be used to refer to this entity.

Taken as it is, today Oakland County is a very large city. It may seem almost beyond belief but Oakland County could rank as the ninth largest city in the United States. It is larger than San Francisco, Milwaukee, St. Louis, and Washington D. C. , and it very well may be larger than Cleveland, since that city has lost population since 1960. It should be pointed out that in one sense this is a comparison of oranges with pears, for we are comparing Oakland County here with central cities whose total SMSA's make them considerably larger than Oakland County. Actually Oakland County is the 32nd largest county in the United States. However, the point here is that considering Oakland County as an urban place, it ranks as a very large city in its own right, and the recent development of large commercial, recreational, industrial and apartment centers only intensified its urban character. Presumably the future, with its certain population growth, will see the proliferation of urbanization in this county.

While the record of Oakland County's growth is interesting by itself, it is meaningful also to compare it with related areas both larger and smaller. Therefore a comparative analysis of growth is the subject of the next section.

VOLUME I Part 1 - C

Comparison of Population Growth of Oakland County with That of Selected Areas.

The accompanying table and figure (Table 2 Figure 1) enable us to compare the growth pattern of Oakland County with that of a number of other significant areas.

Another way of looking at the relative position of Oakland County is to look at what proportion of larger geographic areas it has comprised over a period of time (Table 3). Looking at Oakland County as a proportion of the Detroit SMSA, it is seen that starting from 1840, when it was about 40 percent of the three county area, it diminished every decade until in 1920 it comprised less than 7 percent of the total area. This was due to the growth of the City of Detroit. However, since 1920 Oakland has started to grow much faster than the total three county area, because it is increasing in population while the City of Detroit decreases. Comparing Oakland County with the State of Michigan we see that much the same pattern obtains. Oakland County which contained 11 percent of Michigan population in 1840 decreased relatively until it contained less than 3 percent in 1920. Today it is back to almost 9 percent. When we compare Oakland with the East North Central States we observe the same situation.

It can readily be seen that Oakland County's growth has consisted of phases, with the first phase - the rural Oakland County - coming to an end after 1920. The second phase, characterized by Oakland's rapid growth compared with that of the City of Detroit, the total SMSA, the State of Michigan,

and of the East North Central states, is still in progress.

TABLE 2

Number of Persons By Decade, Oakland County and Selected Areas; 1840 - 1960

Year	Oakland County	Detroit SMSA	Macomb County	Wayne County Less Detroit	City of Detroit	State of Michigan	East North Central States ¹	United States
1840	23,646	57,535	9,716	15,071	9,012	212,267	2,924,728	17,069,453
1850	31,270	89,556	15,530	21,737	21,019	397,654	4,523,260	23,191,876
1860	38,261	136,651	22,843	29,928	45,619	749,113	6,926,884	31,443,321
1870	40,867	187,521	27,616	39,461	79,577	1,184,059	9,124,517	38,558,371
1880	41,537	239,608	31,627	45,104	116,340	1,636,937	11,206,668	50,189,209
1890	41,245	330,172	31,813	51,238	205,876	2,093,889	13,478,305	62,979,766
1900	44,792	426,829	33,244	63,089	285,704	2,420,982	15,985,581	76,212,168
1910	49,576	613,772	32,606	65,824	465,766	2,810,172	18,250,621	92,228,496
1920	90,050	1,305,798	38,103	183,967	993,678	3,668,412	21,475,543	106,021,537
1930	211,251	2,177,343	77,146	320,824	1,568,662	4,842,325	25,297,185	123,202,624
1940	254,068	2,377,329	107,638	392,171	1,623,452	5,256,106	26,626,342	132,164,569
1950	396,001	3,016,197	184,961	585,667	1,849,568	6,371,766	30,399,368	151,325,798
1960	690,603	3,763,146	405,804	996,595	1,670,144	7,823,194	36,225,024	179,323,175

¹ Michigan, Illinois, Indiana, Wisconsin and Ohio

TABLE 3

Oakland County as a Percentage of the SMSA, State of Michigan
and East North Central States By Decade 1840 - 1960

Year	Detroit SMSA	State of Michigan	East North Central States
1840	41.1	11.1	0.8
1850	34.9	7.9	0.7
1860	28.0	5.1	0.6
1870	21.8	3.5	0.4
1880	17.3	2.5	0.4
1890	12.5	2.0	0.3
1900	10.5	1.9	0.3
1910	8.1	1.8	0.3
1920	6.9	2.5	0.4
1930	9.7	4.4	.8
1940	10.7	4.8	1.0
1950	13.1	6.2	1.3
1960	18.4	8.8	1.9

VOLUME I Part 1-D AND E

Births, Deaths and Natural Increase

The vital processes of birth and death are a source of much interest at all times because they operate to change the composition of the population. Consequently an exploration of these vital forces is useful for understanding the future of an area.

If the yearly number of deaths is subtracted from the yearly number of births the result is called net natural increase, assuming that the number of births is greater than the number of deaths. In Oakland County, because it is a young community, the yearly net natural increase is very substantial. Some idea of the magnitude of this natural increase can be gained if we realize that in every year since 1950 Oakland County has been acquiring additional population through an excess of births over deaths enough to populate a city at least the size of Huntington Woods.

The record of Oakland County's population 1940 - 1964 growth is compared with other geographic areas in Tables A-1 through A-6.

Looking first at births; with the exception of a period during World War II births in Oakland County increased every year until 1958, with the peak being the 18,635 births occurring in 1957. Since this time births in Oakland County have declined slowly but steadily. However, the data in the same table make it clear that this is a nationwide trend, for births in the total United States as well as the East North Central Region and the total Detroit SMSA have followed precisely the same pattern. Macomb County has not shown this decrease, probably because the great influx of young persons into this county in the past seven years has raised the birth rate. On the other hand, the City of Detroit which reached a peak of 47,475 births in 1954 has shown a precipitous drop in the succeeding years, falling to 31,039 in 1964. This undoubtedly represents not only a decline in births, but a very sharp population loss, particularly concentrated among young persons in the child bearing years.

The number of deaths for each of the geographic areas shown in Tables A-2 and A-5 fluctuate because they are dependent on contradictory trends. The fact that medical science is constantly prolonging life tends to decrease the number of deaths in any given period and is reflected in an increase in the number of older persons in the population at any given time. This tends to increase mortality rates. Oakland County has obviously been subject to extensive migrations because the number of deaths has increased rather steadily since 1940.

In Table A-4 births over a 24 year period are compared for different areas, with births in each area shown as the proportion of the United States total. For instance in 1940, 1.67 percent of all children born in the United States were born to residents of the Detroit SMSA, and .20 percent were born to residents of Oakland County. Examining each year enables us to see the trend in births in each area. It can be seen that Oakland County contained a constantly increasing proportion of the nation's births from 1940 to 1956 going from .20 in 1940 to .43 in 1956. However, since 1956 Oakland County has been slipping downward with each succeeding year, reaching .38 in 1964. This may be attributed to several factors. For one thing the actual birth rates of Oakland County women may be dropping faster than they are in the United States. For another, the women who live in the County may be aging relative to the age of all U. S. women, and thus passing out of the child-bearing years. A third and most likely reason, is that women move to Oakland County after they have had a child or two. Thus Oakland County does not have the births, but it does get the children after they get to school age. This is why predictions of future school enrollments based on births in a community may not prove to be very accurate.

The relationship of Detroit SMSA births to United States births is worthy of note. The Detroit SMSA has followed exactly the same pattern as has Oakland County, reaching a high in 1956 and declining afterwards. This also means that births in Oakland County, at least for the last decade, have comprised a relatively constant proportion of the SMSA births. Each year since 1955 about 18 percent of the babies born in the Detroit SMSA have been born in Oakland County. During this

same period Macomb County's share has risen from 11 percent to 15 percent, and the City of Detroit's share has dropped from 46 percent to 38 percent.

Deaths

Deaths in Oakland County as a proportion of the U. S. total have been climbing steadily since 1940 (Table A-5). This is simply an index of an increasing population, as well as a population which is getting older. Deaths in the Detroit SMSA have been increasing proportionate to those in the U. S. as well, but the rate of increase is not as steep as Oakland County's indicating that Oakland County is growing faster than the Detroit SMSA, and probably growing older relative to the total SMSA as well.

Net Natural Increase

The most important index is the annual births less the annual deaths (net natural increase) which tells us how the natural growth of Oakland County relates to growth in other areas (Table A-6). Oakland County, Wayne County, and the Detroit SMSA reached their peak relative growth in 1956 and have been declining since that time. The City of Detroit reached its peak in 1950. On the other hand Macomb County is still climbing relative to total U. S. natural increase, as well as to the other constituent parts of the Detroit SMSA. Why is this so? It can be caused by three principal factors. One would be that the rate of population influx is so fast that there are simply more people to have babies. Second, the birth rates can be higher than other areas, and third, more of the population can be youthful and in the child bearing years. Also there may be older persons and hence fewer deaths.

The major political subdivisions comprising the Detroit SMSA, sort themselves into three categories. First there is the central City of Detroit, which has passed

its peak of population increase from natural sources. Second, Oakland and Wayne Counties are beginning to slide back some, and third, Macomb County is still continuing to increase from the central city of Detroit.

It has already been stated that in terms of actual excess of births over deaths all of these areas are increasing. Their relative increase is important also, for it indicates that the rate of increase, at least from excess of births over deaths, is declining. This is an index of the relative maturity of Oakland and Wayne Counties, with the consequence that a steadier rate of growth from natural increase is the most likely prospect.

Net Migration

Knowing the total population for 1940, 1950 and 1960, as well as the net natural increase for these periods, enables us to calculate the net migration. If we count the population of an area at two successive censuses and the second census total is larger, the area obviously has gained population. The additional population could stem from two sources. One is excess of births over deaths (net natural increase) the other is migration of persons into the area. The migration figure is a net figure. That is, many more persons could have moved in, and many more persons could have moved out during the decades, but we know only the number of persons who were present at the census. Nevertheless this still represents the migration component of the total population increase.

Table 3A shows the components of population increase in Oakland County for the past two decades, subdivided into the natural and migratory components. Migration accounted for the greatest proportion of increase in both 1940 - 1950 and 1950 - 1960. However, the proportion was slightly smaller in 1950 - 1960

(57.8 percent versus 61.9 percent) due to the great increase in births between 1950 and 1960. Starting with the 1940 population of 254,068 persons we find that it increased 34.6 percent due to migration and 21.3 percent due to natural increase between 1940 and 1950 for a total increase of 54.9 percent. Similarly if we use the 1950 population of 396,001 persons we see that it increased 42.9 percent due to migration and 31.4 percent due to natural increase, for a total increase 74.3 percent. The essential meaning of these figures is that the two sources of population growth - excess of births over deaths and new people moving in, both contributed heavily and increasingly to the County's high growth rate in the past twenty years.

TABLE 3 A

TOTAL POPULATION INCREASE, NET NATURAL INCREASE AND NET
MIGRATION, OAKLAND COUNTY 1940 - 1950, 1950 - 1960

	<u>1940 - 1950</u>	<u>1950 - 1960</u>
Total Increase	141,933	294,258
Net Natural Increase	54,044	124,238
Net Migration	87,889	170,020

VOLUME I - Part 2 - A

Age, Sex and Race:Age

An overview of the important aspects of age distribution in Oakland County is seen in the evaluation of Figures 2, 3 and 4. These Figures are called population pyramids. In the absence of migration, and if birth and death rates remained constant, the population pyramid would assume a perfect triangular shape. Any deviations from this model of a triangle are revealing of past events which affected the area's population significantly.

In Oakland County the 1940 population pyramid shows the effect of the low birth rates of the 1930's. The usual number of children are simply not there. They were never born. In fact the shape of the pyramid is almost rectangular up to age 50, which means that almost thirty years of extensive migration had preceded 1940. By 1950 the shape of the pyramid assumed a more triangular form, with the birth of many children between 1940 and 1950. The permanent effects of the low depression birth rates are now seen in the 15 to 24 year old age groups. It is evident that this particular effect will remain for sixty or seventy years, for the 1960 population pyramid shows the "dimple" in the 15 to 29 year age groups. However, a partial replacement has occurred, for the 30 to 34 year old age group has been augmented by new migrants to the County. In fact the pyramid for 1960 shows the consequences of very substantial migration to the County within the past twenty years, for there is an over-abundance of persons 35 to 44 years of age. Also of interest is the excess of older females over males, a reflection of the longer life expectancy among

females.

Turning away from the diagrammatic population pyramids to Table 4, the major age groupings can be analyzed. First, the almost fourfold growth of the number of children (under 15 years of age) from 1940 to 1960 is of great consequence. Accompanying this has been a percentage increase wherein persons under 15 years of age have increased from 28 percent of the population in 1940 to 36 percent in 1960. This great increase in the number of children has been the most important change in the County's population. It should be emphasized that this increase represents change of a most crucial and basic character. This can be best illustrated by looking at Table 4 again and realizing that the number of children in Oakland County in 1960 was just about the same as the total population of the County in 1940! This great increase in the number of children has changed the character of the social structure of the County, making it into a place of youth - of growth - a climate of vigor. It also brings practical problems such as the continuing need to expand the schools, recreational facilities, and other communal services necessary to serve the needs of a youthful growing population.

While youth has grown in numbers, older persons have increased as well. Persons over 65 years of age have tripled in number since 1940. Services for the aged, including housing, are and will continue to be needed, since not only will the number of older persons continue to increase, but in general older persons will live longer.

If the percentage of young are increasing, and the percentage of the old are increasing, obviously the percentage of persons in their economically productive years are decreasing proportionately. If we take the persons in the working years

(25 to 64 years of age) as a proportion of the total population of Oakland County we find that while in 1940 this group comprised 53 percent of the total population, and in 1950, 51 percent of the population, by 1960 they were only 47 percent of the total population. This dependency ratio as it is sometimes called, can serve as a warning of social problems if the ratio of persons in the productive ages to the total population becomes too low. Taxation becomes a burden, social services per taxpayer increase, and in general the community is threatened with a lower standard of living. However, Oakland County, because it has one of the highest average incomes in the United States, probably will be able to withstand the increase in dependents and still maintain its economic health and standards.

Race

Negroes have been present in Oakland County since 1820, when the first census was recorded. Their number was not very great, reaching a peak of 465 (see Table 5) in 1870, and declining to 222 in 1900. It is probable that the decline was part of the farm to city movement, and a few Negro families moved into Detroit. After 1910 the number of Negroes increased slowly, reaching a high of 23,026 in 1960.

Looking at percentages over the years it is interesting to note that the nine Negroes in the total population of 330 persons living in Oakland County in 1820 represented a greater percentage of the population than in any succeeding decennial year until 1950. The peak percentage was 4.6 in 1950, with a decline to 3.3 in 1960, caused by the fact that Negroes failed to migrate to Oakland County at the same pace as whites. In fact, migration of Negroes to Oakland County between 1950 and 1960 was negligible because almost all of the Negro population increase (4,902 persons)

probably was due to net natural increase.

Comparing Oakland County with the other major political subdivisions of the Detroit SMSA (Table 6) reveals that in 1840 the "spread" of Negroes over the Tri-County area was greater than at any subsequent time. Beginning in 1890 the concentration of the total SMSA's Negro population in the City of Detroit rose to 82 percent, climbed to a high of 90.5 percent in 1920 and has been at the 80 percent level ever since. Oakland County, itself, has contained about 3 or 4 percent Negro population since 1900. The high point of Negro concentration for Oakland County was in 1950 where Negroes reached 5.1 percent of the total population but it dropped back to 4.1 in 1960. In general, the decreases in proportions of Negroes in the county between 1950 and 1960 were not due to any losses of Negro population, but due to failure to gain any new Negro migrants while at the same time whites were flocking in.

TABLE 4

AGE DISTRIBUTION: OAKLAND COUNTY - 1940, 1950 and 1960

Age Group	1940		1950		1960	
	Number	Percent	Number	Percent	Number	Percent
Under 15	71,045	28.0	120,675	30.5	248,612	36.0
15 - 24	42,942	16.9	53,849	13.6	80,785	11.7
25 - 44	82,900	32.6	126,499	31.9	199,604	28.9
45 - 64	45,233	17.8	74,157	18.7	123,616	17.9
65 and Over	11,968	4.7	20,821	5.3	37,642	5.5
Total	254,088	100.0	396,001	100.0	690,259	100.0

TABLE 5 POPULATION BY RACE - OAKLAND COUNTY 1820 - 1960

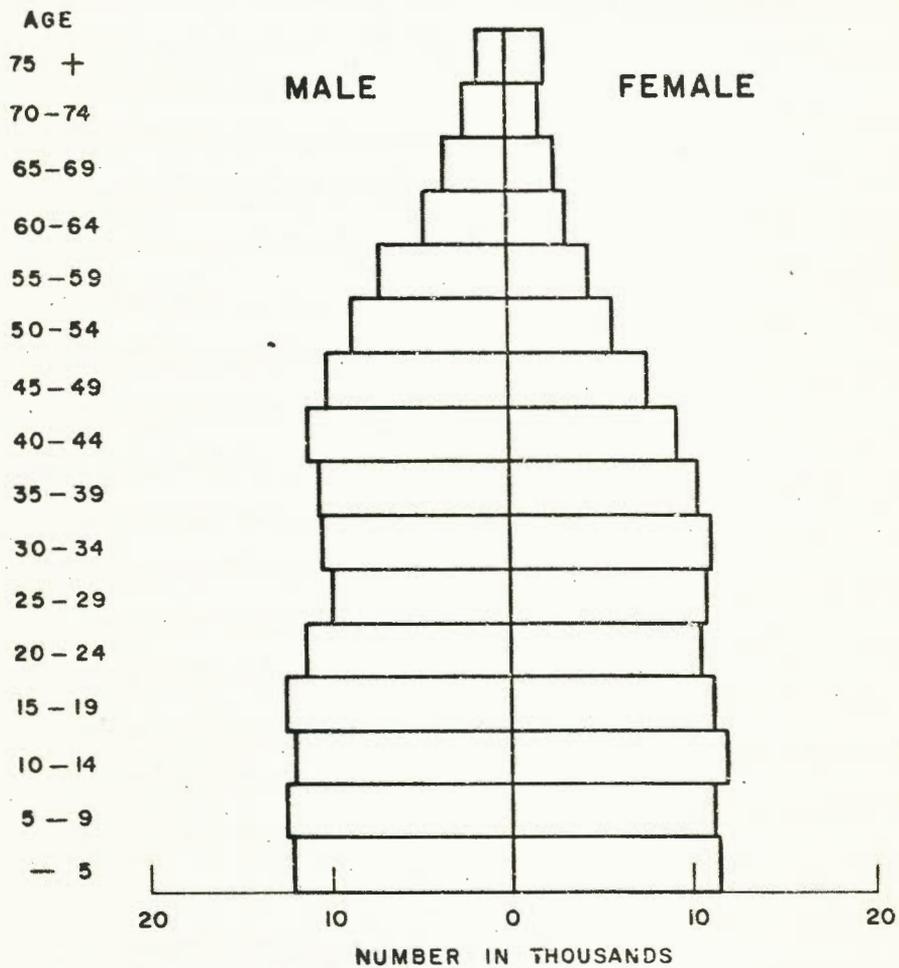
	TOTAL	WHITE	NEGRO	% NEGRO
1820	330	321	9	2.7
1830	4,910	4,892	18	0.4
1840	23,646	23,590	56	0.2
1850	31,270	31,206	64	0.2
1860	38,261	37,952	309	0.8
1870	40,867	40,402	465	1.1
1880	41,536	41,136	400	1.0
1890	41,235	40,920	315	0.8
1900	44,790	44,568	222	0.5
1910	49,570	49,319	251	0.5
1920	90,035	88,887	1,148	1.3
1930	210,164	205,904	4,260	2.0
1940	253,968	248,661	5,307	2.1
1950	395,737	377,613	18,124	4.6
1960	689,207	666,181	23,026	3.3

TABLE 6 TOTAL NEGRO POPULATION: DETROIT SMSA, COUNTY AND CITY OF DETROIT 1840 - 1960

		Detroit SMSA	Oakland County		Wayne County		Macomb County		City of Detroit	
1840	100.0	336	16.7	19.0	64	6.8	23	57.5	193	
1850	100.0	815	7.9	16.8	137	3.3	27	72.0	587	
1860	100.0	2,045	15.1	13.2	270	3.1	63	68.6	1,403	
1870	100.0	3,266	14.2	13.7	448	3.6	118	68.5	2,235	
1880	100.0	3,857	10.4	14.5	558	2.0	78	73.1	2,821	
1890	100.0	4,178	7.5	9.2	384	1.1	48	82.0	3,431	
1900	100.0	4,848	4.6	8.7	424	1.9	91	84.8	4,111	
1910	100.0	6,438	3.9	5.3	344	1.6	102	89.2	5,741	
1920	100.0	45,108	2.5	6.4	2,882	0.5	240	90.5	40,838	
1930	100.0	137,520	3.1	8.5	11,681	1.1	1,513	87.3	120,066	
1940	100.0	170,766	3.1	8.3	14,173	1.3	2,167	87.3	149,119	
1950	100.0	357,800	5.1	9.7	34,908	1.2	4,262	84.0	300,506	
1960	100.0	558,870	4.1	8.5	47,359	1.1	6,262	86.3	482,223	

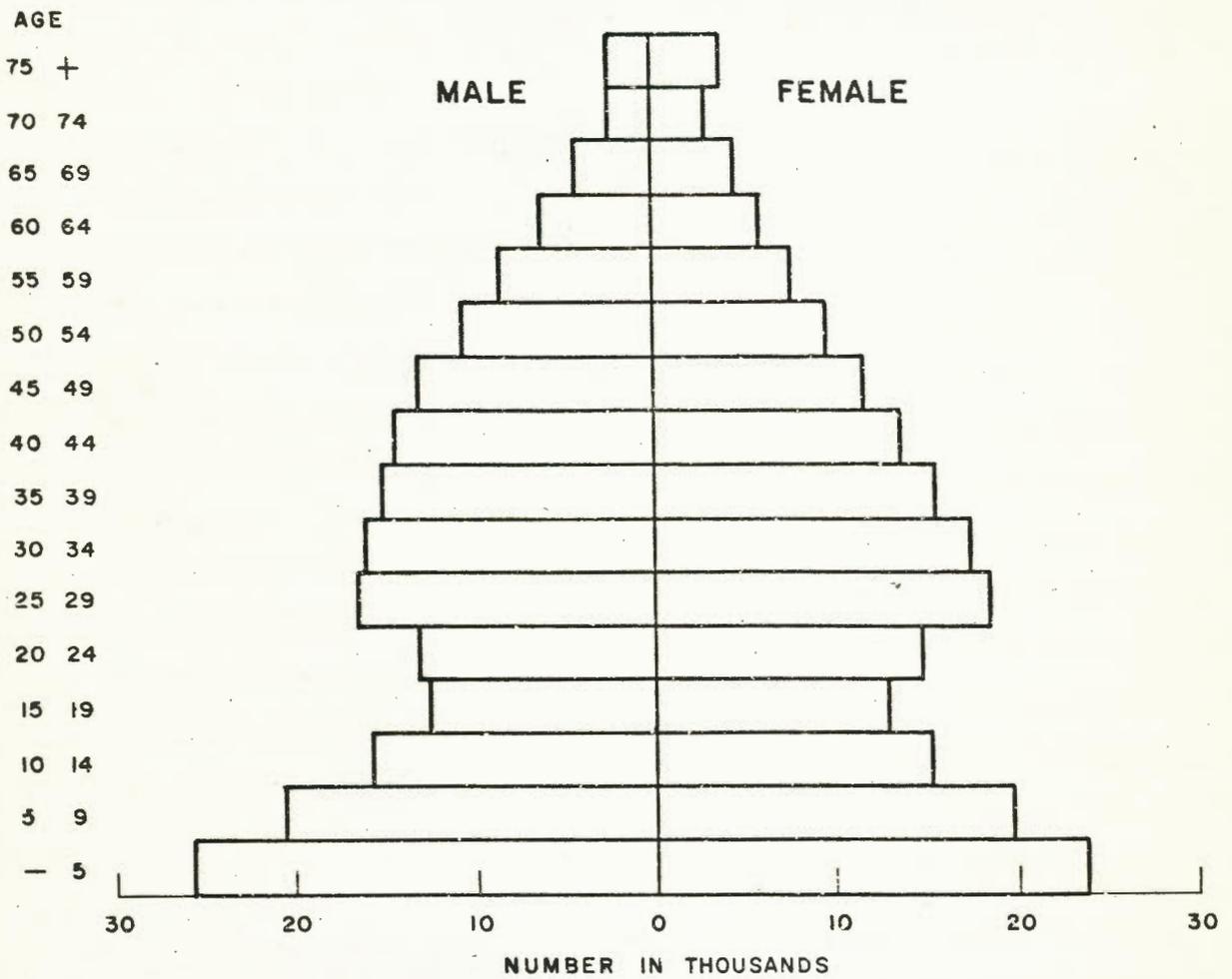
Age & Sex Composition; Oakland County, 1940

Figure 2



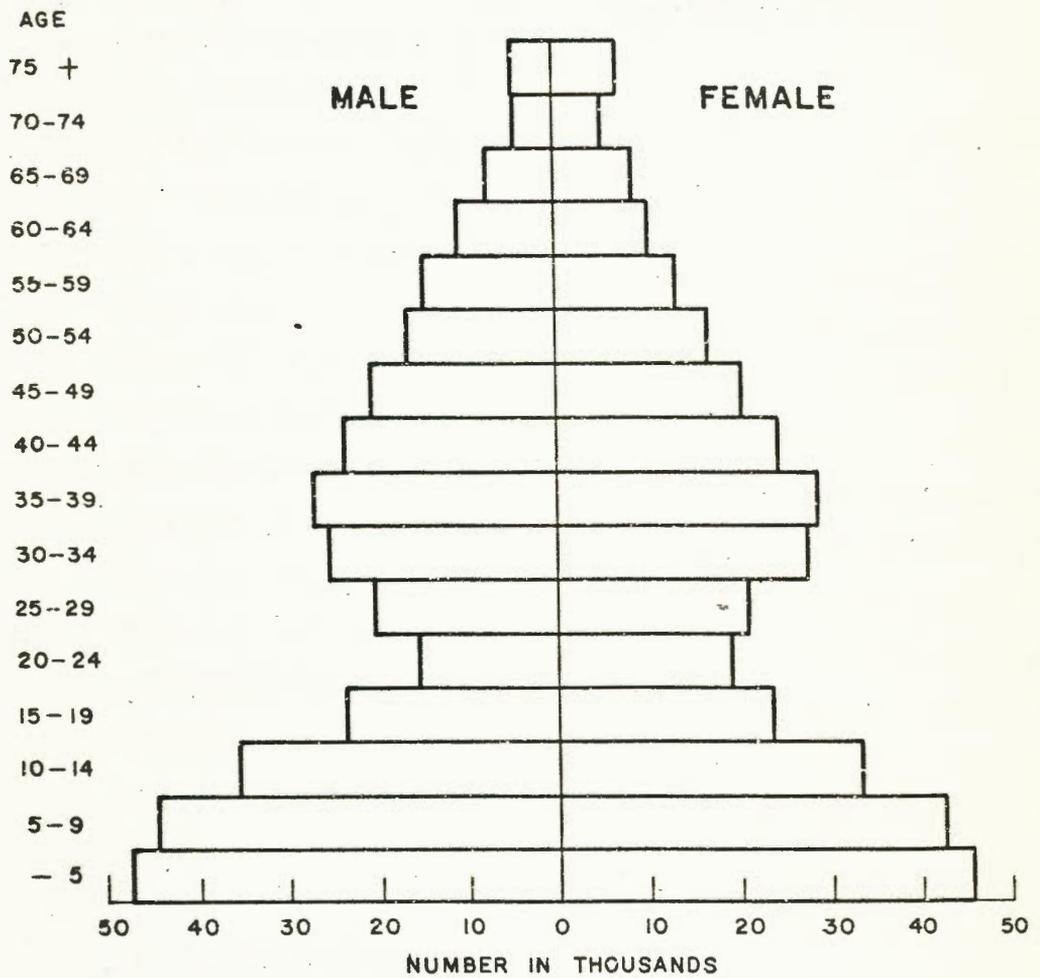
Age & Sex Composition; Oakland County, 1950

Figure 3



Age & Sex Composition; Oakland County, 1960

Figure 4



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Marital Status and Household Relationship

Marital status is a basic characteristic of population but it can be treated rather briefly because of its relatively regular and slowly changing pattern (Table 7). There is little difference in marital status between the constituent counties of the SMSA. About three quarters of the persons over 14 years of age are married, two percent are widowed, two percent divorced, and twenty percent single. The City of Detroit is somewhat different, containing fewer married, and correspondingly more single, widowed and divorced. Part of this difference is due to the fact that in 1960, none of the suburban areas contained any large number of small apartments which would have a market among the unmarried. Hence, they would tend to congregate in the central city.

At this writing (1966) many apartments have been built in the suburbs since 1960. It remains to be seen if these apartments will attract the unmarried. If they do, one more of the central city's functions-housing the unmarried-will begin to wither away. Correspondingly, institutions and commercial establishments catering to the unmarried, such as restaurants, places of entertainment, laundries, etc., also will be attracted increasingly to the suburbs.

Household relationship is largely a reflection of the same factors that influence marital status (Table 8). Of all the counties, Macomb is the most "family centered". It has the largest number of children under 18 years of age per household, the largest total household size, and the smallest proportion of single person households. Oakland is the second most family central county, followed by Wayne County outside Detroit, and finally the City of Detroit is the least "family centered" area.

TABLE 7

MARITAL STATUS: DETROIT SMSA, COUNTY, AND CITY OF DETROIT 1960

	Detroit SMSA		Macomb County		Oakland County		Wayne County - City of Detroit		City of Detroit	
MARITAL STATUS	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TOTAL										
Male, 14 years and over	1,256,115	100.0	126,422	100.0	220,910	100.0	322,073	100.0	586,710	100.0
Single	288,061	22.9	24,748	19.6	44,774	20.4	68,312	21.2	150,326	25.6
Married	894,406	71.2	96,984	76.7	167,077	75.6	238,606	74.1	391,739	66.8
Separated	21,578	1.7	882	0.7	1,643	0.7	3,344	1.0	15,709	2.6
Widowed	41,599	3.3	2,804	2.2	5,020	2.2	8,529	2.6	25,246	4.3
Divorced	32,049	2.6	1,886	1.5	4,039	1.8	6,725	2.1	19,399	3.3
Female, 14 years and over	1,323,999	100.0	128,600	100.0	231,219	100.0	332,396	100.0	631,684	100.0
Single	237,824	18.0	20,026	15.6	37,539	16.2	55,933	16.8	124,326	19.7
Married	904,575	68.3	97,486	75.8	168,632	72.9	239,516	72.1	398,941	63.2
Separated	31,236	2.4	1,204	0.9	2,504	1.1	4,397	1.3	23,131	3.7
Widowed	136,337	10.3	8,550	6.6	18,37	8.1	27,944	8.4	81,106	12.8
Divorced	45,263	3.4	2,538	2.0	6,411	2.8	9,003	2.7	27,311	4.3

TABLE 8

HOUSEHOLD RELATIONSHIP: DETROIT SMSA, COUNTY, AND CITY OF DETROIT, 1960

	Detroit SMSA	Macomb County	Oakland County	Wayne County Less City of Detroit	City of Detroit
HOUSEHOLDS					
TOTAL					
Total Population	3,762,360	405,804	690,259	996,153	1,670,144
In Households	3,712,388	403,186	682,528	979,514	1,647,160
Head of Household	1,080,220	106,644	188,908	269,851	514,837
Head of Primary Family	937,906	99,473	172,191	245,224	421,018
Primary Individual	142,314	7,171	16,717	24,607	93,819
Wife Of Head	832,051	93,125	160,006	225,453	353,467
Child Under 18 of Head	1,328,728	168,515	271,684	344,580	503,949
Other Relative Of Head	401,900	31,294	53,846	86,674	230,086
Nonrelative Of Head	69,489	3,608	8,084	12,976	44,821
In Group Quarters	49,972	2,618	7,731	16,639	22,984
Inmate of Institution	25,392	739	5,387	12,659	6,607
Other	24,580	1,879	2,344	3,980	16,377
Population Per Household	3.44	3.78	3.61	3.63	3.20
Percent of Pop. In Group Quarters	1.3	0.6	1.1	1.7	1.4
Primary Individual Households	13.2	6.7	8.8	9.1	18.2
Number of Children Under 18					
Per Household	1.23	1.58	1.44	1.28	.98
Number of Other Relatives					
Per Household	.37	.29	.29	.32	.45
Number of Nonrelatives					
Per Household	.07	.03	.04	.05	.09

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Years of School Completed

The educational level of any community is an important clue to the mode of life that comprises the atmosphere of any living place. Although education and income are highly associated with one another, the educational level is possibly the more sensitive index to the type of community needs and resources that should be available. For example, could Oakland County support a comprehensive bookstore or a symphony orchestra? We see that Oakland County has 40,300 college graduates or 28 percent of all college graduates in the SMSA, considerably more than its share. Further, we see that in 1950 it contained only 16 percent of all college graduates in the SMSA, so that it appears to be growing relatively faster than the SMSA with regard to more educated persons.

Examination of the measure of education, years of school completed, in Table 9 shows the very substantial rise in educational level as measured by median school year completed. Whereas in 1940 Oakland County males had completed only 9.1 years of school on the average, by 1960 the average had risen to 12.0 years. A similar rise in educational level was observed among females. College graduates among males increased from 6.4 in 1940 to 14.7 percent in 1960. Correspondingly, males with an elementary education decreased from 50 percent in 1940 to 28 percent in 1960. There is no question that educational levels are rising rapidly in Oakland County. This certainly indicates that community facilities need to be reviewed. Schools and school systems come to mind as the community facility most affected by the increas-

ing educational level of the county's inhabitants. Better educated parents desire and eventually demand more elaborate schools for their children. Future school planning must take into account at least three factors. First, the sheer increase in numbers of children; second, the quality of education necessary to keep pace with the nationwide thrust towards more and better education; third, the fact that Oakland County's population already has a high level of education and will demand better and better education for its children.

While the absolute increase in educational level of Oakland County is important in itself, it is equally important to examine its position relative to the other parts of the SMSA. In general this study has shown that Oakland County is rapidly attracting the people who are better off economically. Does this hold true with regard to education? Table 10 contains data on the median year of school completed for each of the counties comprising the SMSA and for the City of Detroit for 1950 and 1960. In addition each median is expressed as an index of the SMSA total. That is, if the SMSA median is 100, the medians of the individual counties are expressed as proportions or percentages of 100. It can be seen that in 1950 in Oakland County the median school year completed was 10.9 or nine percent higher than the SMSA average. By 1960 Oakland County had thirteen percent higher than the SMSA average. Thus Oakland County, along with Macomb County which showed the same tendency, is attracting the better educated persons in the SMSA and clearly this is at the expense of the City of Detroit, which showed correspondingly lower relative average educational levels.

Did this increase in relative educational level of Oakland County take

place because persons with the most education moved there or did it take place because people with the least education moved out or at least didn't move in.⁷ Table 10 answers this question. The first possibility has already been explored, and it was seen that Oakland County which should have had only about eighteen percent of all college graduates in the entire SMSA in 1960, actually had 28 percent, a considerable over-representation. In 1950 it had 17 percent compared with the 13 percent it would have had if the population of college graduate would have been equally distributed in the county area. This means that Oakland County which by 1950 had already attracted more than its share of the better educated, had increased its share even more by 1960. Clearly, the increasing educational level in Oakland County is due to the fact that it is attracting extraordinary numbers of college graduates.

The other question, namely whether persons of lesser education moved out of Oakland County can also be answered by Table 10. Whereas in 1950 62,825 persons who had less than four years of high school lived in Oakland County, by 1960 their number had increased to 89,043 persons. This indicates that Oakland County is also attracting persons with less education as well as persons with more education. The percent increase of the more highly educated is considerably higher (70 percent increase in college graduates versus 42 percent increase in persons with less than a high school diploma). Thus a differential attraction exists which tends to concentrate the more highly educated in Oakland County.

TABLE 9

YEARS OF SCHOOL COMPLETED: OAKLAND COUNTY, 1940, 1950, 1960

	1940		1950		1960	
		Percent of Total		Percent of Total		Percent of Total
Males 25 years Old and Over	72,032		108,505		177,114	
No School Years Completed	740	1.1	800	.7	1,140	.7
Grade School:						
1 to 4 years	3,462	4.9	4,250	3.9	5,210	2.9
5 or 6 years	5,405	7.6	5,735	5.3	7,649	4.3
7 or 8 years	25,922	36.1	27,170	25.1	36,282	20.5
High School:						
1 to 3 years	15,162	20.3	24,365	22.5	38,762	21.9
4 years	12,166	17.0	24,870	22.9	42,540	24.0
College:						
1 to 3 years	4,291	6.1	8,835	8.1	19,524	11.0
4 years or more	4,545	6.4	9,640	8.9	26,007	14.7
Not Reported	339	.5	2,840	2.6		
Total		100.0		100.0		100.0
Median School Years Completed	9.1		10.8		12.0	
Females 25 years Old and Over	68,049		110,255		183,534	
No School Years Completed	533	.8	605	.5	1,412	.8
Grade School:						
1 to 4 years	2,429	3.6	3,356	3.1	3,844	2.1
5 or 6 years	4,475	6.6	5,330	4.8	6,519	3.6
7 or 8 years	21,960	32.2	23,910	21.7	32,843	17.9
High School:						
1 to 3 years	15,915	23.4	26,050	23.6	40,804	22.1
4 years	14,688	21.6	32,490	29.4	64,236	35.0
College:						
1 to 3 years	5,080	7.5	9,420	8.6	19,583	10.7
4 years or more	2,787	4.0	6,190	5.7	14,293	7.8
Not Reported	182	.3	2,895	2.6		
Total		100.0		100.0		100.0
Median School Years Completed	9.9		11.4		12.1	

TABLE 10

MALES 25 YEARS OF AGE AND OVER -- MEDIAN SCHOOL YEAR COMPLETED

BY COUNTY AND AS A PROPORTION OF TOTAL SMSA

		Macomb County	Oakland County	Wayne County	City of Detroit	Total SMSA
Median School Years Completed						
1950		9.4	10.8	9.7	9.6	9.9
Median School Year Completed as Proportion of SMSA		9.5	10.9	9.8	9.7	10.0
1960		10.9	12.0	10.2	9.7	10.6
Median School Years Completed As proportion of SMSA		10.3	11.3	9.6	9.2	10.0
1950	No.	34,550	62,825	104,495	370,050	571,920
No High School Diploma	%	6.0	11.0	18.0	64.7	100.0
College Graduates	No.	985	9,640	12,330	34,745	57,700
	%	1.7	16.7	21.4	60.2	100.0
1960	No.	61,047	89,043	147,048	321,887	619,025
No High School Diploma	%	9.9	14.4	23.7	52.0	100.0
College Graduates	No.	7,052	26,007	26,345	31,870	91,274
	%	7.7	28.5	28.9	34.9	100.0

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School Enrollment

School enrollment is of interest largely because the percentage enrolled by age is given, and we are able to examine the changing patterns of educational usage. The number of persons enrolled in school is available in more detail and is more up to date in the analysis of local school census data.

Table 11 shows the school enrollment as of 1960 as well as the percentage enrolled in school. Little comment is necessary concerning the number enrolled because of the foregoing reason. However, the section of the table concerned with percent enrolled contains very useful information. First, the children between 7 and 15 years of age are almost all enrolled in school. This is as expected. Dropping out of school begins to occur in the sixteenth and seventeenth years, when the proportion enrolled dropped to 86 percent in 1960. This represents an increase in proportion enrolled over 1940 and 1950. However, there is obviously such room for improvement left, since these persons are clearly not high school graduates. Among the 18 and 19 year olds only 37 percent were in school in 1960. This is, however, a marked improvement over 1950 when only 28 percent were still in school. It should be pointed out that this percentage does not represent the total of persons still in school since the young people who go away to college are not in this count but are enumerated where they attend school. In 1970, this percentage undoubtedly will show a remarkable upward surge because the establishment of M. S. U. -Oakland and of community colleges will make Oakland County a residential center for college students.

The prolongation of education is shown very clearly by the great increase in

percentage enrolled in the 20-24 year age group, which went from 5 percent in 1940 to 8 percent in 1950, to 22 percent in 1960. While this undoubtedly represents many part time students it does indicate a vastly increased utilization of schools and colleges. Without doubt the trend in this direction will be enhanced as time goes by and continued education becomes more of a necessity. Some people continue their education into their thirties as evidenced by the 1960 figure showing 4 percent of persons 25-34 years of age enrolled in school. Truly the "market" for continuing education is still vast and barely tapped. The proliferation of school facilities of all sorts can be expected to be a major aspect of future growth in Oakland County.

Table 12 contains data for 1960 unavailable in earlier censuses. School enrollment is divided into public and non-public school enrollment. Presumably the latter is composed largely of parochial schools sponsored by various religious bodies. Most students are enrolled in public schools, ranging from a high of 97 percent in kindergarten, to 86 percent in elementary school, with high school being in the middle with 89 percent enrolled in public schools. Thus it is seen that in a large measure schooling is still the responsibility of the entire community, and the American concept of public supported schools still greatly predominates.

TABLE 11
NUMBER AND PERCENT ENROLLED IN SCHOOL
OAKLAND COUNTY, 1940, 1950, 1960

Number Enrolled in School, by Age	1940	1950	1960
5 and 6 years Old	6,787	12,410	29,966
7 to 13 years Old	32,968	48,490	107,810
14 and 15 years Old	9,125	11,340	21,043
16 and 17 years Old	7,005	8,665	19,097
18 and 19 years Old	3,163	2,610	5,323
20 to 24 years Old	776	2,295 ²	3,413 ³
25 years and Over ¹		1,610 ²	3,775 ³

Percent Enrolled in School, By Age	1940	1950	1960
5 and 6 years Old	74.5	75.5	83.1
7 to 13 years Old	97.9	97.4	98.9
14 and 15 years Old	96.6	97.5	97.1
16 and 17 years Old	79.1	83.5	86.4
18 and 19 years Old	24.6	27.7	37.6
20 to 24 years Old	4.7	8.2	21.5
25 years and Over		4.7	3.9

¹ Not available for 1940

² 25 - 29 years Old

³ 25 - 34 years Old

TABLE 12

SCHOOL ENROLLMENT, PUBLIC OR NON PUBLIC, OAKLAND: 1960

<u>School Enrollment</u>		Percent Public
Total Enrolled, 5 to 34 years Old	190,427	
Kindergarten	17,954	-
Public	17,466	97.2
Elementary (1 to 8 years)	125,916	-
Public	108,511	86.2
High School (1 to 4 years)	39,171	-
Public	34,898	89.1
College	7,386	

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Income

The importance to government planning and administration of information about levels of family income in an area cannot be emphasized enough. Yet often there is a certain reticence in treating income differentials and their consequences to population distribution. We have some difficulty in acknowledging the obvious fact that persons with higher incomes prefer to live with persons of similar income, and do not want to live with, or near, persons of lower income, particularly persons of very low income. However, this is the social reality, even if it does not correspond with American ideals of equalitarianism. In concrete terms, this fact of life is responsible for the type of urban growth which is occurring in Oakland County today. Furthermore, once a pattern of this nature is established it tends to reinforce and perpetuate itself. Speaking in even more blunt language, the fact is that Oakland County is attracting the higher income families in the Detroit SMSA, and because this pattern is now well established it will reinforce itself and even snowball in the years to come. Oakland County has only two competitors in attracting persons of above average income. These are the Dearborn area and the Grosse Pointe area. However, they are limited in geographic extent and almost filled already, while Oakland county has almost limitless land for the expansion of high income residential areas.

Similar observations can be made concerning concentrations of low income families and areas. Once an area becomes established as a low income area it tends to remain low income and the surrounding areas also tend to attract

lower income families. In a later section of this study, particular high and low income areas within Oakland County will be discussed. However, at this point the more general relationship between the major political divisions of the Detroit SMSA will be reviewed (Tables 13 and 14).

Table 13 reveals some rather interesting patterns. Looking at the median family income in 1950 it is seen that there was little difference between the major political subdivisions in the Detroit SMSA. Only Macomb County which had a family income six percent lower than the average for the SMSA differed conspicuously from the SMSA average. In other words, in 1950 median family income was much the same in every part of the SMSA.

By 1960 a marked spread in income differences had begun to appear. Oakland County had a median family income eleven percent higher than the SMSA average. Macomb County had risen from below average to higher than average. Wayne County outside the City of Detroit had declined slightly in relation to the whole.

Table 15 treats the extreme high and low income groupings. Looking at 1950 it is seen that both high and low extremes of family income (under \$2,000 and over \$10,000) did not differ greatly between major political subdivisions. For example, the City of Detroit which contained 62.2 percent of all families had 62.2 percent of all families in the high income group and 65.6 percent of all families in the low income group. Oakland County which had 12.9 percent of all families in the SMSA had 12.4 percent of families in the low income group and 15.5 percent of all families in the high income group. While Oakland County was showing some tendency towards a concentration of higher income families

the over-concentration was not very great. In general in 1950 the extremes groupings (high and low) with regard to income, like the median income, showed relatively small difference between major political subdivisions. Thus, at this time families of both high and low incomes were spread quite evenly among the major political subdivisions.

Although 1950 and 1960 cannot be compared directly because the same dollar income had a different meaning in terms of buying power and income distribution, by 1960, as with the median income, the distribution of both high and low income families became decidedly different in each major political subdivision. Looking first at the distribution of low income families it is seen that the City of Detroit with about 45 percent of the SMSA's population has 65.1 percent of the families under \$2,000 per year and 60.5 percent of the families between \$2,000 and \$2,999 per year. Correspondingly, each other area had a considerable smaller proportion of families in the lowest income groupings. The City of Detroit was definitely assuming the role as the area which housed the less well to do families.

On the other end of the income scale, the higher the income grouping the more likely Oakland County was to contain an overproportion of families. In the very highest income group (\$25,000 per year and over) Oakland County contained 36.5 percent of these families, whereas it contained only 18.3 percent of all families. In other words, it contained exactly double the number it would have had if income were evenly distributed by major area of residence. Macomb, which contained an underproportion of poor families, also contained an underproportion of well to do families. Truly Macomb was the great middle ground. Wayne outside

of Detroit had a slight overproportion of well to do families, and a substantial underproportion of poor families. The City of Detroit was greatly over-represented in poor families and greatly under-represented in the well to do and very well to do categories.

At the risk of appearing defensive it should be pointed out that the previous discussion is not aimed at "see how good Oakland County is." The meaning is far greater than mere boosterism for the County on which this study is focused. Given the fact that Oakland County has hundreds of square miles of undeveloped land particularly suitable for future high income residential areas, and the further sociological tendency for high income areas once established to reinforce and perpetuate themselves, it is highly likely that Oakland County shows the greatest attracting power of any of the major political subdivisions. Consequently, it is highly likely that in the future Oakland County will contain the residences of larger and larger proportions of the most economically sufficient families in the Detroit SMSA.

TABLE 13

Median Family Income by County - 1950 and 1960

	Macomb County	Oakland County	Wayne County	City of Detroit	Total SMSA
1960					
Median Income	7,091	7,576	6,597	6,069	6,825
Index of Total SMSA	104	111	97	89	100
1950					
Median Income	3,722	4,031	3,989	3,955	3,976
Index of Total SMSA	94	101	100	99	100

TABLE 14

Income Distribution: S. M. S. A. City and County; 1960

Family Income	Macomb County	Oakland County	Wayne less Detroit	City of Detroit	Detroit SMSA
All Families	100,432	173,063	246,100	423,991	943,586
Under \$1,000	2,241	3,986	5,263	21,678	33,168
\$1,000 - \$1,999	3,131	5,483	6,994	28,797	44,405
\$2,000 - \$2,999	4,080	6,421	9,267	30,240	50,008
\$3,000 - \$3,999	4,947	7,702	10,607	30,929	54,185
\$4,000 - \$4,999	7,833	12,203	17,624	42,686	80,346
\$5,000 - \$5,999	13,136	19,859	29,903	54,498	117,396
\$6,000 - \$6,999	13,726	20,177	31,982	45,964	111,849
\$7,000 - \$7,999	12,309	18,572	28,859	37,997	97,737
\$8,000 - \$8,999	10,466	15,676	24,699	30,863	81,704
\$9,000 - \$9,999	8,236	13,079	19,816	24,731	65,862
\$10,000 - \$14,999	16,477	32,643	44,320	55,352	148,792
\$15,000 - \$24,999	3,269	11,889	12,385	15,848	43,391
\$25,000 and over	581	5,373	4,381	4,408	14,743
Median Income Families	7,091	7,576		6,069	6,825
Unrelated Individuals	2,205	2,272		1,929	2,062
Families and Unrelated Individ.	6,755	7,042		5,184	6,078

TABLE 15

Number and Percent of Families By Highest and Lowest

Income Groups By County 1950 and 1960

	Macomb County	Oakland County	Wayne less City of Det.	City of Detroit	Total SMSA
<u>1950</u>					
<u>Number</u>					
All Families	46,365	101,305	149,095	486,185	782,910
Over \$10,000	1,010	5,375	7,920	20,450	34,755
Under \$2,000	5,850	11,630	14,775	61,550	93,805
<u>Percent</u>					
All Families	5.9	12.9	19.0	62.2	100.0
Over \$10,000	2.9	15.5	22.8	58.8	100.0
Under \$2,000	6.2	12.4	15.8	65.6	100.0
<u>1960</u>					
<u>Number</u>					
\$10,000-\$14,999	16,477	32,643	44,320	55,352	148,792
\$15,000-\$24,999	3,269	11,889	12,385	15,848	43,391
\$25,000 and over	581	5,373	4,381	4,408	14,743
Under \$2,000	5,372	9,469	12,257	50,475	77,573
\$2,000-\$2,999	4,080	6,421	9,267	30,240	50,008
All Families					
<u>Percent</u>					
\$10,000-\$14,999	11.1	21.9	29.8	37.2	100.0
\$15,000-\$24,999	7.5	27.4	28.6	36.5	100.0
\$25,000 and over	3.9	36.5	29.7	29.9	100.0
Under \$2,000	6.9	12.2	15.8	65.1	100.0
\$2,000-\$2,999	8.2	12.8	18.5	60.5	100.0
All Families	10.6	18.3	26.2	44.9	100.0

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Occupation

Occupation of the head of the household is probably the most important single fact concerning a family. It determines to a large extent the family's level of living, kind of place lived in, and even the attitudes and opinions held by persons and families. In fact, occupation is so important that if we are confined to knowing just one fact about a person, occupation is the fact we need to know. It places a person in society, and tells much about him. This is borne out even in ordinary discourse, for it is not long after we meet a new person that we are asking, "what do you do?"

The question here is, what do the people in Oakland County do? Table 16 shows what they have been doing over the past few decades. The major trends are quite clear. Oakland County is rapidly turning into a professional, managerial, high status occupational area. Whereas in 1940 about 7 percent of the male labor force was engaged in professional occupations, by 1960, 16 percent of the males were engaged in professional occupations. Among females the percentages were about the same as males in 1960, but of course the occupation of the female is of less significance than that of the male. Nevertheless the same trend towards a higher proportion of professionally employed is observed among females in Oakland County as well as among males.

This growth of the professional group has important implications for the entire physical and social structure of the county. For not only are professional workers usually well paid, but they are invariably well educated, and consequently have recreational tastes and consumptive patterns which are dis-

tinctive in character. Also in terms of community leadership they may figure more importantly than any other group. They have certain demands in the area of education and of schools for their children. Their presence in a community will be a source of attraction of more persons like themselves. This is why the increasing number and proportion of persons in professional occupations living in Oakland County becomes one of the most significant facts in forecasting its future.

Another aspect of the increasing proportion of professional persons is their increasing proportion in Oakland County, within the entire Detroit Standard Metropolitan Area. Whereas in 1940, only 11 percent of all persons in professional occupations in the three county area lived in Oakland, by 1960 this proportion increased to 23 percent. This can be explained by the fact that Oakland County had drawn professional persons from the City of Detroit. In 1940 the City of Detroit contained 70 percent of all professional persons in the SMSA, but by 1960 this proportion had dropped to 36 percent. If these trends continue, Oakland County will soon surpass the City of Detroit as the residential focus of professional persons.

The discussion so far has been confined to the professional category because the greatest changes have occurred in this group. However, other occupations in Oakland County have undergone changes as well. Operatives, largely persons who perform routine factory operations, and laborers, have shown the greatest percentage decreases in the Oakland County labor force between 1940 and 1960. This is in accord with the increases in professional and other white collar occupations. At the same time the persons in the mid-

dle of the occupational range, the craftsmen, clerical, and sales workers, have maintained relatively stable proportions or have increased slightly.

Turning to the relationship between Oakland County and the total SMSA and the total United States in 1960 (Table 17) it is seen that Oakland County has higher proportions of persons in the higher status occupations than either the U. S. A. or the SMSA. On the other end of the occupational scale (service workers and laborers), Oakland County has about 12 percent in these occupations, the SMSA has 16 percent, and the United States 19 percent. Thus looking from either up or down the occupational ladder Oakland County is ahead of both the SMSA and the United States in those occupations which pay more and in which the people concerned are better educated and the general level of living is higher.

This is borne out by Table 18 which shows the different median incomes for selected occupations in Oakland County in 1960. The median income of almost \$9,000 per year of professional and managerial workers is an indication of the high economic level of this group compared with any of the other occupational categories shown. This was markedly higher than the figure for the other two counties in the SMSA. It indicates that Oakland County has not only a higher proportion of professional and managerial workers, but that they are the higher paid members of these groups as well. Rather curiously, Oakland County has the highest incomes of all these counties in the professional and managerial group only. Among the craftsmen and operatives groups, and even among the laborers, Macomb County has slightly higher median incomes. While the differences are slight they are of importance for they lead to a

rather interesting hypothesis. From these data, and certainly further investigation would be necessary to prove or disprove the point, it appears that Oakland County is the "home" of the white collar group. Further it attracts the higher income members of this group. Macomb County, on the other hand is the "home" of the blue collar worker, and attracts the higher paid blue collar workers. Wayne County is intermediate. It seems evident from this that values and tastes, at least as far as community and place of residence is concerned, make Oakland County the place to live for the white collar worker, while the blue collar worker has differing goals with regard to his place of residence - namely Macomb County. Instead of one county attracting the most economically affluent regardless of occupation apparently there is a differing image depending on whether one is white or blue collar. The place to live for the more affluent members of each group differs - Oakland County for white collar; Macomb County for blue collar. If this supposition is actually correct, it means that as the population increases in each county it will increasingly become the residential goal of different occupational groups with different tastes and life styles.

Should the above discussion seem a bit abstract, let us illustrate it with a practical example. Should a builder and developer attempt to build very expensive houses for upper income white collar workers in Macomb County, he would probably have difficulty selling the houses. However, it is probably equally true that any attempt to attract large members of highly paid blue collar workers to residential projects in Oakland County would also run into serious problems, because they would regard Macomb County as a more desirable

place to live.

In addition to being one of the most revealing items of information about a family, the occupation of the head of the household also reveals much about the nature of a geographic area. Table 17 compares Oakland County with the Detroit SMSA and the total U.S. A.

Looking at Oakland County in relation to the United States it is seen that Oakland County has a larger proportion of professionals, clerical workers, and craftsmen, and a smaller proportion of service workers. Proprietors and laborers are proportionately fewer, largely because the U.S. proportions in these two categories are enhanced by existence of many farm owners and farm laborers. While Oakland County does have farms, the bulk of the population is urban. Thus Oakland County differs from the U. S. in that it has a larger proportion of persons in the more urbanized, better paying occupations.

Comparing Oakland County with the Detroit SMSA it can be seen that Oakland County contains larger proportions of the higher income, higher status groups. Professionals and managers, proprietors and officials constitute 27 percent of the Oakland County labor force and only 19 percent of the total SMSA labor force. The clerical and craftsmen groups are about the same in each area, but while operative service workers and laborers comprise 32 percent of Oakland County's labor force they comprise 39 percent of the remaining SMSA labor force. These are relatively larger differences which indicate that Oakland County has a much larger white collar population, particularly upper income white collar families, than does the remainder of the Detroit SMSA.

This is probably the most crucial factor in determining the general social and economic structure of the county, and the major determinant of its present and future physical setting.

The preceding discussion has been in terms of broad occupational categories and these conceal interesting and important differences. In Table A-11 the broad occupational groupings are subdivided into a number of categories which clarify the picture. Table A-11 also expresses the number of persons in each detailed occupational group as a proportion of the total in the SMSA. These tables enable us to spot the occupations of which Oakland County attracts more than its share and those occupations of which Oakland County attracts less than its share.

What is meant by Oakland County's "share?" Looking at the total labor force it is seen that Oakland County contains 18.8 of all persons in the labor force. If the proportion in a given occupation is more than 18.8 percent it means that Oakland County has more than the average proportion. Conversely a percent of less than 18.8 percent means Oakland County has less than its share.

Let us look at those occupations of which Oakland County has unusually high proportions. These occupations (considering males only) are:

Architects	(35.9%)
Mechanical Engineers	(31.4%)
Metallurgists	(37.5%)
Sales Engineers	(43.8%)
Biological Scientists	(37.3%)

Geologists	(72.7%)
Physicists	(42.3%)
Statisticians	(33.2%)
Managers (Manufacturing)	(33.0%)
" (Communication & Utilities)	(31.6%)
" (Retail Trade & Furniture)	(34.9%)
" (Retail Trade Hardware Etc.)	(34.9%)
" (Business Services)	(41.0%)
Owners (Self Employed)	
Construction	(31.1%)
Manufacturing	(31.8%)
Insurance & Real Estate	(34.4%)

On the other end of the scale occupations of males in which Oakland County is particularly deficient are:

Elevator Operators	(3.8%)
Porters	(3.9%)
Sailors	(3.8%)
Laborers (Bakery Products)	(1.9%)
" (Office Machinery)	(3.6%)
" (Fabricated Metal)	(3.8%)
" (Blast Furnaces)	(2.1%)
Operatives (Drugs & Medicine)	(2.2%)
" (Textile Mill Products)	(2.0%)
" (Bakery Products)	(3.3%)
" (Miscellaneous Foods)	(2.7%)

It's no great surprise that the male occupations in which Oakland County has the greatest over-proportion prove to be high paying - high status professional and managerial occupations. Conversely, the occupations which contain particularly small proportions are in the operative and laborer categories. It is more interesting, however, to note that those occupations which are more often represented in Oakland County are the newer high status occupations such as physicists and managers of various enterprises. The more traditional high status occupations such as lawyers, bankers, etc. are not strikingly apparent though. Ofcourse, Oakland County does contain an over-proportion of these occupations also, but not an outstandingly high over-proportion.

Among females, occupations which are particularly well represented are:

Architects	(44.9%)	(4 women)
Chiropracter	(42.9%)	(3 women)
Aeronautical Engineers	(100.0%)	(5 women)
Mechanical Engineers	(58.6%)	(17 women)
Agricultural Scientist	(50.0%)	(4 women)
Physicists	(75.0%)	(8 women)
Postmistresses	(100.0%)	(8 women)
Blacksmiths	(50.0%)	(4 women)
Stonemasons	(55.6%)	(4 women)
Glaziers	(100.0%)	(4 women)
Carpenters (apprentice)	(100.0%)	(5 women)
Dyers	(100.0%)	(5 women)

It is quite apparent that should one desire the services of a feminine aeronautical engineer, postmistress, glazier, apprentice carpenter or dyer, they can be found in Oakland County and Oakland County only. The four feminine blacksmiths represent a particularly intriguing group, not to mention the four women stonemasons. However, they are neatly balanced by four male housekeepers and four male baby sitters. The census, despite its great detail does not reveal whether these four males and four females are married to one another.

TABLE 16

Number and Percent Distribution of Employed Persons
By Major Occupation Group and Sex, Oakland County: 1940, 1950, and 1960

Major Occupation Group	1940		1950		1960	
	Male	Female	Male	Female	Male	Female
1-Professional Technical and Kindred Workers	4,771	2,520	10,883	4,611	28,187	10,857
2-Managers, Officials and Proprietors (inc. Farm)	8,489	720	13,443	1,476	23,708	2,389
3-Clerical Sales and Kindred Workers	9,918	5,864	15,559	14,397	28,708	30,519
4-Craftsmen, Foremen and Kindred Workers	15,580	187	28,040	544	39,623	830
5-Operatives and Kindred Workers	21,180	1,520	33,530	4,828	39,613	6,552
6-Service Workers (inc. Private Household)	3,417	5,826	4,935	7,524	7,535	14,574
7-Laborers (inc. Farm & Mine)	6,341	141	6,797	415	7,329	410
TOTAL	69,696	16,778	113,187	33,793	174,703	66,131
Percent						
1-Profess. Tech. & Kind. Wrkrs	6.9	15.0	9.6	13.6	16.3	16.4
2-Mgrs, Offic. & Prop. (inc. Farm)	12.2	4.3	11.8	4.4	13.5	3.6
3-Cler. Sales & Kind. Wrkrs	14.2	34.9	13.7	42.6	16.4	46.2
4-Crftsm, Frmn & Kind. Wrkrs	22.3	1.1	24.7	1.6	22.6	1.2
5-Oper. & Kindred Workers	30.3	9.1	29.7	14.2	22.6	9.9
6-Servive Wrkrs (inc. Pri. Hshld)	4.9	34.7	4.4	22.3	4.4	22.0
7-Laborers (inc. Farm & Mine)	9.2	0.9	6.1	1.3	4.2	.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 17

Number and Percent Distribution of Employed Persons By Major Occupation Group

Oakland County, Detroit S. M. S. A. and United States 1960

Major Occupation Group	Oakland County		Detroit SMSA Less Oakland County		United States	
	Number	Percent	Number	Percent	Number	Percent
1-Professional Technical and Kindred Workers	39,044	16.2	129,838	11.9	7,607,081	11.8
2-Managers, Officials and Proprietors	26,097	10.8	77,411	7.1	8,325,271	12.9
3-Clerical Sales & Kindred Workers	59,227	24.6	273,124	25.1	14,668,340	22.7
4-Craftsmen, Foremen & Kindred Workers	40,453	16.8	180,031	15.6	9,194,130	14.2
5-Operatives and Kindred Workers	46,165	19.2	252,069	23.2	12,513,987	19.3
6-Service Workers (Inc. Private Household)	22,109	9.2	126,986	11.7	7,542,263	11.7
7-Laborers (Inc. Farm and Mine)	7,739	3.2	48,272	4.4	4,788,174	7.4
TOTAL	240,834	100.0	1,087,731	100.0	64,639,246	100.0

TABLE 18

Income By Type of Occupation, For Total SMSA and Each County Separately: 1960

	Total SMSA	Oakland County	Macomb County	Wayne County
Median Earnings of Selected Occupation Groups				
Male, Total With Earnings ¹	\$5,604	\$6,180	\$5,904	\$5,436
Professional, Managerial, & Kindred Workers	7,986	8,966	7,530	7,697
Farmers and Farm Managers	-----	2,719	2,664	2,206
Craftsmen, Foremen, and Kindred Workers	6,379	6,566	6,640	6,273
Operatives and Kindred Workers	5,089	5,282	5,356	5,006
Farm Laborers, Exc. Unpaid and Farm Children	-----	1,418	1,341	1,185
Laborers, Except Farm and Mine	3,708	3,198	3,789	3,768
Female, Total With Earnings ¹	2,692	2,595	2,625	2,720
Clerical and Kindred Workers	3,414	3,281	3,268	3,460
Operatives and Kindred Workers	3,099	3,168	3,856	3,122

¹ Includes persons in other occupation groups, not shown separately.

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Resident Employment by Industry

The data on employment by industry refers to the place of residence of the employed person. It does not mean that the place of work is located in the county. Thus the material is of limited value insofar as having any great meaning for planning at the county level. Nevertheless it does have some descriptive value in adding to our picture of the occupational patterns of Oakland County residents. Table 19 and Table 20 show the changes in distribution by industrial classifications of persons in the labor force living in Oakland County.

The changes which have taken place over the past twenty years have not only been in accord with changes on a nationwide basis, but they indicate changes within the Detroit SMSA as well. The decline of Agriculture etc. from five percent in 1940 to less than one percent in 1960 highlights the increasing urbanization of the county. The decrease in persons employed in manufacturing of durables reflects not only the nationwide decrease in such employment but the increasingly higher economic level of Oakland County as it becomes more and more a place of middle class residence. The corresponding increase in professionals (from seven percent in 1940 to twelve percent in 1960) represents the same situation. An increase of from three to eight percent in the Financial Insurance and Real Estate Category is still another aspect of the same situation.

Table A-12 describes the Oakland County share of SMSA with regard to the total number of workers in each industry category in 1960. Since Oakland

County has 18.8 percent of the male and 16.5 percent of the female labor force, any percentage over these represents an over-proportion of workers in the particular category.

Since some part of Oakland County is still largely rural, the over-proportions in the Agriculture, Forestry, and Mining groups are not surprising. These seem to be the only groups in the entire labor force heavily over-represented. There seems to be a strong tendency for persons employed in every industry grouping to live relatively evenly spread in the Oakland County portion of the Detroit SMSA.

TABLE 19

Percent Distribution of Employment by Major Industry Group,

Oakland County - 1940, 1950 and 1960

	<u>1940</u>		<u>1950</u>		<u>1960</u>	
	Number	Percent	Number	Percent	Number	Percent
Agriculture, Forestry and Fisheries	4,496	5.2	3,189	2.2	2,376	.9
Mining	202	.2	271	.2	329	.1
Construction	4,035	4.7	9,301	6.3	12,335	4.9
Manufacturing (Durable Goods)	37,890	43.8	62,384	42.4	87,575	34.9
Manufacturing (Non-Durable Goods)	2,790	3.2	6,671	4.5	14,400	5.8
Transportation, Communications and Other Public Utilities	4,124	4.8	8,389	5.7	12,170	4.9
Retail and Wholesale Trade	14,066	16.3	25,537	17.4	45,981	18.3
Finance, Insurance, Real Estate	2,651	3.1	4,380	3.0	19,244	7.7
Business and Repair Services	843	1.0	3,986	2.7	6,977	2.8
Personal Services	6,457	7.5	6,556	4.5	10,331	4.1
Entertainment and Recreation Services	854	1.0	1,626	1.1	2,361	.9
Professional Services	6,186	7.1	11,235	7.7	30,210	12.1
Public Administration	1,891	2.1	3,453	2.3	6,617	2.6
Total	86,485	100.0	146,978	100.0	250,906	100.0

TABLE 20

Employment by Industry Group: Oakland County - 1940, 1950, and 1960

Employed Workers by Industry Group	1940			1950			1960		
	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes
Agriculture, Forestry and Fisheries	4,388	108	4,496	2,934	255	3,189	2,061	315	2,376
Mining	201	1	202	261	10	271	296	33	329
Construction	3,972	63	4,035	9,072	229	9,301	11,710	625	12,335
Durable Manufacturing	35,509	2,381	37,890	55,294	7,090	62,384	76,633	10,942	87,575
Nondurable Manufacturing	2,414	376	2,790	5,470	1,201	6,671	11,529	2,871	14,400
Transportation, Communication and Other Public Util.	3,563	561	4,124	6,755	1,634	8,389	9,876	2,294	12,170
Wholesale and Retail Trade	10,181	3,885	14,066	16,416	9,121	25,537	29,600	16,381	45,981
Finance, Insurance and Real Estate	1,994	657	2,651	2,867	1,513	4,380	5,772	13,472	19,244
Business and Repair Services	735	108	843	3,525	461	3,986	5,598	1,379	6,977
Personal Services	1,740	4,717	6,457	2,102	4,454	6,556	2,630	7,701	10,331
Entertainment and Recreation Services	699	155	854	1,236	390	1,626	1,573	788	2,361
Professional Services	2,848	3,338	6,186	4,741	6,494	11,235	12,800	17,410	30,210
Public Administration	1,459	432	1,891	2,511	942	3,453	4,696	1,921	6,617
Total	69,703	16,782	86,485	113,184	33,794	146,978	174,774	76,132	250,906

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Migration and State of Birth

State of birth is an index of past migrations, as well as somewhat of an index of the roots and attachment persons have for a particular place. That is, if in an area a large part of the population was born elsewhere in the United States, that area is bound to have certain problems that arise as people adjust to their new areas of residence. Of course, Table 21 comprises a rather crude index for it does not distinguish which state persons come from, nor does it attempt to separate place of birth by urban and rural. We see that the major political subdivisions of the SMSA exhibit fairly wide differences with respect to state of birth. Macomb County is the most "home grown" with almost 78 percent of the population born in Michigan. Oakland and Wayne each contain 71 percent Michigan born and the City of Detroit is sharply different with only 62 percent of its population having been born in Michigan. With such a high proportion of its population being indigenous to Michigan, Oakland County is in a favorable position with regard to the "problem" of adjustment of migrants to suburban and urban life. The more immediate migration picture is also shown in Table 21. Here it is seen that only half of Oakland County's population lived in the same house in 1960 as in 1955. However, of the half of the population who moved either within the County or into the County in those five years 25 percent (one-half of the movers) moved within the County. Only 6 percent of all households came into the County from a different state, and 17 percent of all households came into the County from other counties within the state. Thus recent migrations to Oakland County have

been largely persons from elsewhere in the Detroit SMSA, and not from out of state. It is apparent from Table 21 that between 1955 and 1960 Oakland County and Macomb County have been the objective of large numbers of migrants from Wayne County, particularly the City of Detroit. Only about 5 percent of all households were migrants from states outside Michigan. The great migratory movement was with the Detroit SMSA, and this was a movement from the City of Detroit to the outlying counties.

TABLE 21

Migration and State of Birth: S. M. S. A. City and County; 1960

State of Birth	Macomb County		Oakland County		Wayne County Less Detroit		City of Detroit		Detroit S.M.S.A.	
	Number	%	Number	%	Number	%	Number	%	Number	%
Total native population	374,892	100.0	643,418	100.0	912,815	100.0	1,468,431	100.0	3,399,556	100.0
Born in state of residence	286,776	77.6	447,207	71.0	628,168	70.5	873,967	62.2	2,236,118	67.8
Born in different state	81,765	22.1	181,175	28.8	260,428	29.2	527,842	37.5	1,051,210	31.9
Born in U. S. outlying area, at sea, etc.	1,121	0.3	1,767	0.2	2,154	0.3	4,348	0.3	9,390	0.3
State of birth not reported	5,230	----	13,269	----	22,065	----	62,274	----	102,838	----
Residence in 1955										
Population 5 years old and over, 1960	342,228	100.0	597,533	100.0	876,762	100.0	1,497,744	100.0	3,296,267	100.0
Same house as in 1960	162,280	47.8	299,178	50.7	450,379	52.1	830,022	56.5	1,741,859	53.7
Different house in U. S.	172,637	50.9	286,095	48.5	387,067	44.8	624,332	42.5	1,470,131	45.3
Same county	63,243	18.6	148,764	25.2	313,343	36.3	546,134	37.2	1,071,484	33.0
Different county	109,394	32.2	137,331	23.3	73,724	8.5	78,198	5.3	398,647	12.3
Same state	93,044	27.4	102,672	17.4	31,507	3.6	28,363	1.9	255,586	7.9
Different state	16,350	4.8	34,659	5.9	42,217	4.9	49,835	3.4	143,061	4.1
Abroad	4,513	1.3	5,093	0.9	8,215	1.0	14,354	1.0	32,175	1.0
Moved residence in 1955 not reported	2,798		7,167		13,101		29,036		52,102	

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Rural Urban Residence

Throughout the United States rapidly increasing urbanization has been swallowing up rural areas more and more as time continues. Oakland County is a prime example of this widespread phenomena. As farms make way for new housing subdivisions, and farmers shift into other occupations, the rural component of the population is melting rapidly. By 1960 the number of persons living on farms in Oakland County had declined from 19,300 persons in 1940 (Table 22) to 4,833 persons in 1960. In fact the remaining rural population of Oakland in 1960 could be contained in one or two good sized new real estate subdivisions. During the 1960 - 70 decade the rural farm population doubtless will decline even further, and by 1980, with the exception of a few "gentleman" and special purpose farms, farm residence in Oakland County will have disappeared forever.

Before rural nonfarm residence is discussed it should be defined since its meaning is not as obvious as rural-farm residence. Rural nonfarm residence refers to places which have less than 2,500 population and are not incorporated. In other words, all of the hamlets, villages and unincorporated settlements are included in this category. This type of settlement pattern can come about in two ways. First, even in the most rural areas there are always village trading centers. Located at railroad stops and road junctions, they have been an essential part of the pattern of rural America. Oakland County contains a number of settlements of this nature and many of them have been declining in size as they have lost their former function and as an auto-

mobile owning people have turned to larger centers for shopping and recreation.

At the same time other rural settlements are growing as they are pulled into the orbit of urbanization. People spill out of the cities to live on the fringe. Some of them are wealthy or highly paid professional people with visions of a country estate in their minds. Some are blue collar workers often of rural origin, who are looking for a little piece of land for a small farm, but their primary occupation is urban in nature.

Thus two opposed trends are operating; one to reduce, one to increase the rural nonfarm population. This is readily apparent in Table 22 when the data for the rural nonfarm population is analyzed. Between 1940 and 1950 the rural nonfarm population actually increased from 91,642 in 1940 to 95,795 in 1950. However, between 1950 and 1960 the direction changed and the rural nonfarm population declined to 76,336 persons. This decline in size of the rural nonfarm population must now be considered permanent. As more people flock to these rural non-farm areas, they will tend one by one to become more dense, to incorporate, and to become urban in character. It is inevitable that urbanization will envelope all of Oakland County within the not too distant future.

When soberly considered this is a fact of first importance in planning for the future. The entire County must be considered as a city. Not one city, of course, but as a collection of cities which have more in common than they suspect. Incorporations and annexations will tend to produce larger governmental units. Higher population densities will create urban problems. This is the obvious future of Oakland County.

Social and Economic Characteristics by Rural Urban Residence 1960

Rural urban residence would be only a geographic classification without social meaning if the social and economic characteristics of people residing in these different areas were the same. Looking at these characteristics (Tables 23 through 27) we see first that less than one percent of Oakland County's population lived on farms in 1960. Thus it is established that from a purely numerical point of view the farm population is an insignificant proportion of the total county. This isn't at all true for the rural non-farm population for it is almost 12 percent of the total county population. The important aspect to examine then is whether the rural non-farm population differs from the urban portion of the population.

It can be seen that there are some differences between the rural and urban population with regard to percentage of persons born in the United States. That is, the percent of foreign born is slightly higher in the urban population. There is little difference between the rural farm and the rural non-farm. This difference is just about what would be expected, but it isn't of any great significance because the percentage of foreign born is small anywhere in the county.

Educational level does show large and important differences. Both measures of education, percent college graduates, and median school year completed, show the same thing: namely, that the rural farm population is not nearly as well educated as the urban population. This is to be expected, but the important point is that the rural non-farm is just about the same as the urban population with respect to education.

Looking at the labor force characteristics it is seen that much the same situation is to be found. That is, the rural farm population is sharply different from the rural non-farm and the urban population, with respect to percent of the labor force engaged in professional occupations and percent of women working. Of course the major difference is found in the percent of farm owners and farm laborers in the labor force. However, the important implication is the same as with education. The pattern of family income distribution re-confirms and supports the contention that the rural population is different, and the rural farm and urban population are much alike.

A common note has been struck in the review of the various indices of rural urban differences. Put simply, the rural non-farm population and the urban population seem to be very much the same, and the farm population has widely different characteristics. This fact has a tremendously important meaning for understanding Oakland County, present and future. We have seen the rural farm population already comprises less than one percent of the County's population. Thus over 99 percent of the population of Oakland County is homogenous with respect to its salient social and economic characteristics. This means that the population is overwhelmingly urban already. It means that the demand for urban concepts and standards of community service will intensify, particularly if even more urban people migrate to the County. Oakland County is not going to become urban, it is urban at least as far as the characteristics of its people are concerned. At the same time the great bulk of the land area is still low density rural or partly rural. The environment is bound to shape itself to conform to the population that inhabits it. The proc-

ess of creating this environment will be a challenge to planners and governmental officials. This section on rural-urban residence constitutes an important clue as to the general course of future action.

TABLE 22

Rural Farm and Non-Farm Residence, Oakland County: 1940, 1950, 1960

<u>Farm-NonFarm Residence</u>	<u>1940</u>	<u>1950</u>	<u>1960</u>
Total Rural Population	110,942	109,073	81,169
Rural Non-Farm: Male	46,813	48,492	38,414
Female	44,829	47,303	37,922
Rural Farm: Male	10,565	7,108	2,456
Female	8,735	6,170	2,377

TABLE 23

Family Income: Rural and Urban Population; Oakland County - 1960

	RURAL			URBAN	TOTAL
	<u>Farm</u>	<u>Non-Farm</u>	<u>Total Rural</u>	<u>Urban</u>	<u>County</u>
Family Income in 1959					
All Families	1,266	18,595	19,861	153,202	173,063
Under \$1,000	86	418	504	3,482	3,986
\$1,000 to \$1,999	99	601	700	4,783	5,483
\$2,000 to \$2,999	158	738	896	5,525	6,421
\$3,000 to \$3,999	103	980	1,083	6,619	7,702
\$4,000 to \$4,999	106	1,376	1,482	10,721	12,203
\$5,000 to \$5,999	140	2,446	2,586	17,273	19,859
\$6,000 to \$6,999	122	2,245	2,367	17,810	20,177
\$7,000 to \$7,999	63	1,785	1,848	16,724	18,572
\$8,000 to \$8,999	96	1,473	1,569	14,107	15,676
\$9,000 to \$9,999	75	1,192	1,267	11,812	13,079
\$10,000 and over	218	5,341	5,559	44,346	49,905
Median Income Families	\$5,579	\$7,279	\$7,169	\$7,620	\$7,576

TABLE 24: Major Occupation Group: Rural and Urban Population; Oakland County - 1960

Major Occupation Group	RURAL			URBAN	TOTAL
	<u>Farm</u>	<u>Non-Farm</u>	<u>Total Rural</u>	<u>Urban</u>	<u>County</u>
Male, Employed	1,439	18,822	20,261	154,465	174,226
Professional, technical, and kindred workers	73	2,510	2,583	24,675	27,258
Farmers and farm managers	452	133	585	182	767
Managers, officials and proprietors except farm	88	2,375	2,463	19,699	22,162
Clerical and kindred workers	53	953	1,006	10,138	11,144
Sales workers	40	1,478	1,518	15,100	16,618
Craftsmen, foremen and kindred workers	206	4,313	4,519	33,800	38,319
Operatives and kindred workers	248	4,522	4,770	33,539	38,309
Private household workers	5	63	68	143	211
Service workers except private household	41	733	774	6,301	7,075
Farm laborers and foremen	183	216	399	209	608
Laborers, except farm and mine	22	758	780	5,704	6,484
Occupation not reported	28	768	796	4,975	5,771
Female, employed	404	6,462	6,866	59,269	66,135
Professional, technical and kindred workers	53	1,029	1,082	9,316	10,398
Farmers and farm managers	4	4	8	40	48
Managers, officials and proprietors except farm	9	232	241	1,999	2,240
Clerical and kindred workers	99	1,867	1,966	20,475	22,441
Sales workers	64	598	662	6,126	6,788
Craftsmen, foremen and kindred workers	5	85	90	706	796
Operatives and kindred workers	37	780	817	5,458	6,275
Private household workers	34	594	628	4,167	4,795
Service workers, except private household	56	865	921	8,242	9,163
Farm laborers and foremen	31	12	43	59	102
Laborers, except farm and mine	8	37	45	246	291
Occupation not reported	4	359	363	2,435	2,798

TABLE 25

Social Characteristics: Rural and Urban Population; Oakland County 1960

	RURAL			URBAN	TOTAL
	Farm	Non-Farm	Total Rural	Urban	County
Total Population	4,833	76,336	81,169	609,090	690,259
Male	2,456	38,414	40,870	301,510	342,380
Female	2,377	37,922	40,299	307,580	347,879
Non-White Population	7	662	669	23,409	24,078
Male	4	346	350	11,223	11,573
Female	3	316	319	12,186	12,505
Nativity and Parentage					
Native	4,598	72,947	77,545	565,873	643,418
Native Parentage	3,917	61,780	65,697	448,310	514,007
Foreign or Mixed Parentage	681	11,167	11,848	117,563	129,411
Foreign Born	235	3,389	3,624	43,614	47,238
Years of School Completed					
Persons 25 years and over	2,804	38,598	41,393	319,255	360,648
Number School Years Completed	20	202	222	2,330	2,552
Elementary: 1 - 4 years	80	920	1,000	8,054	9,054
5 - 6 years	121	1,316	1,437	12,731	14,168
7	130	2,065	2,195	14,614	16,809
8	720	6,096	6,816	45,500	52,316
High School: 1 - years	601	8,477	9,078	70,488	79,566
4	723	11,338	12,061	94,705	106,776
College: 1 - 3 years	282	4,075	4,357	34,750	39,107
4 or more	127	4,100	4,227	36,073	40,300
Median School Years Completed	10.7	12.0	12.0		12.1

TABLE 26

Social Characteristics: Rural and Urban Population; Oakland County 1960

	RURAL			URBAN	TOTAL
	<u>Farm</u>	<u>Non-Farm</u>	<u>Total Rural</u>	<u>Urban</u>	<u>County</u>
Employment Status					
Male 14 years old and over	1,807	24,705	26,512	194,037	220,549
Labor force	1,470	19,954	21,424	162,658	184,082
Civilian labor force	1,470	19,857	21,327	162,336	183,663
Employed	1,439	18,822	20,261	154,465	174,726
Unemployed	31	1,035	1,066	7,871	8,937
Not in labor force	337	4,751	5,088	31,429	36,517
Female, 14 years old and over	1,753	24,774	26,527	205,348	231,875
Labor force	421	6,854	7,257	63,106	70,363
Employed	404	6,462	6,866	59,269	66,135
Unemployed	17	392	409	3,819	4,228
Not in labor force	1,332	17,920	19,252	142,260	161,512

TABLE 27

Summary of Social and Economic Characteristics by Rural Urban Residence:
Oakland County - 1960

	RURAL			URBAN	TOTAL
	<u>Farm</u>	<u>Non-Farm</u>	<u>Total Rural</u>	<u>Urban</u>	<u>County</u>
Percent of Total Population					
Residing in	0.7	11.1	11.8	88.2	100.0
Percent of Foreign Born	4.9	4.4	4.5	7.2	6.8
Percent College Graduates	4.5	10.6	10.2	11.3	11.2
Median School Year Completed	10.7	12.1	12.0	12.1	12.1
Percent Females 14 years old and over in Labor Force	24.1	27.7	27.4	30.7	30.3
Percent of Males 14 years old and over, Professional	5.1	13.3	12.7	16.0	15.6
Percent of Males 14 years old and over, Farmer, Farm Manager and Farm Laborer	44.1	1.9	4.9	0.3	0.8
Median Family Income	\$5,579	\$7,279	\$7,169	\$7,620	\$7,576
Percent Families with Income Over \$10,000	17.2	28.7	28.0	28.9	28.8
Percent Families with Income Under \$3,000	27.1	9.4	10.6	9.0	9.2

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Place of Work by Place of Residence and Means of Transportation to WorkPlace of Work by Place of Residence

The relationship of place of work to place of residence has been the subject of much comment on the part of students of city life. In the early days of suburbanization, about the time of World War I, the central city was thought of as the work place, and the suburbs were supposed to be mere dormitories. For many years commerce and industry have been decentralizing, and jobs as well as residences have been developed outside the central city. However, little concrete data existed on the nature of the work-residence relationship until the 1960 census asked a question on place of work. Table 28 summarizes our existing knowledge on this question.

TABLE 28

Place of Work by Place of Residence, by County 1960

Residing In:	Working In:					Total
	Outside SMSA	Macomb County	Oakland County	Wayne Outside Detroit	City of Detroit	
Outside SMSA	-----	2,810	4,039	7,875	8,748	23,472
Macomb	1,491	66,368	5,445	8,343	48,547	130,194
Oakland	4,830	13,574	133,480	16,625	58,382	226,891
Wayne Outside Detroit	11,262	4,716	6,050	368,971	123,845	514,844
City of Detroit	5,706	17,782	13,115	65,809	461,613	564,025
Total	23,289	105,250	162,129	467,623	701,135	1,459,426

Looking first at Oakland County it is seen that 162,129 persons work in this county. Of this number 133,480 or 82 percent live in Oakland County as well as work there. Of the 28,649 persons who work in the county but do not live there, most (13,115) live in

Detroit. About 5,000 persons come into Oakland County from outside the SMSA, Macomb County and Wayne County outside of Detroit.

About a quarter of a million persons (226,891) who live in Oakland County are in the labor force. Of the aforementioned, 133,480 persons or 59 percent work in the County in which they live, but 41 percent or 93,411 persons go outside Oakland County to work. The most frequent work destination is the City of Detroit which employs 58,382 or 63 percent. Macomb County is the destination for 13,574 workers and Wayne County employs 16,625 persons. Almost five thousand Oakland County workers leave the SMSA to work.

It should be noticed that in the net exchange Oakland County gains 28,649 workers from outside the County, but loses 93,411 for a new outflow of 64,762 jobs. In a sense Oakland County is more a place of residence than a place of work. However, this is relative, for the County does provide 162,290 jobs.

Looking at the other major political subdivisions in the SMSA we see that Macomb County has a net outflow of 24,944 jobs, Wayne County outside Detroit has a net outflow of 47,221 jobs, and the City of Detroit has a net influx of 137,221 jobs. Thus Detroit is still the major workplace, but in every instance the number of persons working inside a county's boundaries is far greater than the number of persons who find it necessary to go outside the county boundaries to work.

If we divide the total number of jobs available in each major political subdivision by the total number of persons who live there we get a work-residence ratio which is an index of the area's self sufficiency and we find the following:

TABLE 29

Work/Residence Ratio, By Major Political Division 1960

	Number of Jobs In Area	Number of Workers Live in Area	Jobs Per Worker
Macomb	105, 250	130, 194	.81
Oakland	162, 129	226, 891	.71
Wayne outside of Detroit	467, 623	514, 844	.91
City of Detroit	701, 135	564, 025	1.24

It is seen that Oakland County is the most residential because it has the lowest proportion of jobs per working person. Yet it is a very long way from a purely residential place. It is too bad that data previous to 1960 do not exist, for the trend is important here. The chances are very great that time will see even more opportunities migrating to the counties along with the persons who work at those jobs.

Means of Transportation to Work

The material on means of transportation to work provides a vivid picture of dependence on the automobile in the Detroit SMSA (Table 30). In the outlying counties public transportation was only a very minor factor in transporting people to work. In fact in Oakland and Macomb Counties feet were more often used than public transportation, for more people walked to work than rode on buses and trains. Only in the City of Detroit did public transportation have any real impact, and, at that, less than one-quarter of the workers employed this means of travel to work. In both Oakland and Macomb Counties over 87 percent of the persons travelled to work by automobile.

It is obvious there is a total commitment to automobile usage in the Detroit area.

Whether this is a consequence of inadequate public transportation or whether public transportation is inadequate because people do not support it, is impossible to say. Oakland County does have one commuter line which only 1750 persons took to work in 1960. Since that time the patronage has dwindled further, although the population has grown greatly. Whether the standard of service on this line has been responsible for this downfall, or whether it was caused by other factors also cannot be told. We only know that workers in Oakland County, at least these making the work trip from Pontiac and points South to the CBD of Detroit had the opportunity to take a train to work. They did not take this opportunity.

Automobile Availability

Prior to 1960 the census did not ask about automobile availability. The question now is asked in terms of availability rather than ownership, because today many persons drive company owned cars or rent their automobiles. The pattern of automobile availability is much like the pattern of usage of the automobile for transportation to work. That is, automobile availability was almost universal in Oakland and Macomb Counties, while Wayne County had a smaller proportion of households with automobiles available and in the City of Detroit more than one in four households had no car available (Table 30A). It should be recognized that Oakland and Macomb Counties, with only about 6 percent of the households without automobiles available, represent a rather extreme situation. After all, there are some people who are physically handicapped, extremely old, or bedridden. Clearly everyone else in Oakland and Macomb Counties is rolling on wheels!

Multiple car availability was extensive, particularly in Oakland County where one-third of the households had two cars and almost 4 percent had three or more cars. The time is coming - and soon - when Oakland County is going to average two cars per household.

TABLE 30

Means of Transportation to Work by County 1960

	Detroit SMSA	Macomb County	Oakland County	Wayne Co. Less Detroit	City of Detroit
<u>Means of Transportation</u>					
Total	1,245,851	130,162	227,945	325,071	562,673
Private Auto or Car Pool	965,945	113,919	98,760	273,385	379,881
Railroad	2,139	22	1,752	126	239
Subway or Elevated	-----	-----	-----	-----	-----
Bus or Streetcar	161,469	4,354	6,332	22,117	128,666
Walked to Work	73,390	6,087	10,809	18,203	38,291
Other Means	21,037	2,767	5,339	5,739	7,192
Worked at Home	21,871	3,013	4,953	5,501	8,404
Percent					
Total	100.0	100.0	100.0	100.0	100.0
Private Auto or Car Pool	77.4	87.5	87.2	84.1	67.5
Railroad	0.2	-----	0.8	-----	-----
Subway or Elevated	-----	-----	-----	-----	-----
Bus or Streetcar	13.0	3.3	2.8	6.8	22.9
Walked to Work	5.9	4.7	4.7	5.6	6.8
Other Means	1.7	2.1	2.3	1.8	1.3
Worked at Home	1.8	2.3	2.2	1.7	1.5

TABLE 30 A

Aubomobiles Available by County: 1960

	Detroit SMSA	Macomb County	Oakland County	Wayne Co. Less Detroit	City of Detroit
Automobiles Available					
1	622,940	68,676	106,036	167,434	280,794
2	242,316	29,170	63,479	69,753	79,914
3 or more	29,228	3,552	7,078	7,486	11,112
None	186,137	5,613	12,405	25,102	143,017
Total	1,080,621	107,011	188,998	269,595	514,837

Percent

Automobiles Available

1	57.7	64.2	56.1	62.1	54.5
2	22.4	27.3	33.6	25.8	15.5
3 or more	2.7	3.3	3.7	2.8	2.2
None	17.2	5.2	6.6	9.3	27.7
Total	100.0	100.0	100.0	100.0	100.0

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Country of Origin

In the recent past a very important aspect of urban life was the ethnic background of the foreign born population. One of the most colorful features of central cities was, and to a limited extent still is, the distinctive ethnic communities of Italians, Polish, Jewish, and others.

Oakland County has no such distinguishing feature. Although there were 47,238 persons of foreign origin living in the County in 1960, over half or 24,014 reported English as their mother tongue which means they came from cultures not too different from the United States. Thus, Oakland County has just a sprinkling of "ethnic flavor", not concentrated sufficiently in any one spot to denote any ethnic community.

One of the processes of urban life has been the exodus to the suburbs of the children of the foreign born. Oakland County is no exception for if we look at Table 31 we see that in 1960, 176,649 persons were of foreign stock (47,238 foreign born and the remainder children with at least one foreign born parent). However, again we must discount at least the 57,126 persons of Canadian origin for although they are technically of foreign origin they really should not be considered "ethnic" in the sense that they have roots in a greatly different culture background.

The most common foreign cultural background in Oakland County is German, followed by Polish, with U.S.S.R. third. This later group is a mixture of Jewish persons born in Russia, as well as Russians of the Christian faith.

This is in contrast to Macomb County where Polish, German and Italian groups, in that order, are the largest in size, and Wayne County, where the Polish group is predominant followed by the Germans and Italians. Thus, Oakland is different chiefly in that Germans outnumber the Polish, and Russian stock exceeds Italian stock. However, the largest group, the Germans, comprise only 2% of the County's population, so that we are talking about minorities of persons.

Perhaps it is more proper to characterize Oakland County as a place where the ethnic group has disappeared, or is fast disappearing. Thus, Oakland County differs from the traditional conception of a city in this respect. However, in thinking of the future, cities will all be almost devoid of foreign born persons. Thus in this respect Oakland County, if it might not have fulfilled past urban conceptions, will certainly be in accord with future urban trends.

TABLE 31: Country of Origin of the Foreign Stock: Metropolitan, County, City of Detroit; 1960

COUNTRY OF ORIGIN	Detroit S. M. S. A.	Macomb County	Oakland County	Wayne County	City of Detroit
Total Foreign Stock	1,133,986	124,529	176,649	832,808	537,446
United Kingdom	114,466	9,682	25,813	78,971	46,493
Ireland (Eire)	21,589	1,395	3,174	17,020	11,604
Norway	6,337	495	1,711	4,131	2,349
Sweden	13,289	1,059	3,654	8,576	5,338
Denmark	5,360	482	1,627	3,251	1,839
Netherlands	7,676	1,330	1,858	4,488	2,876
Switzerland	3,520	459	788	2,273	1,449
France	7,445	949	1,153	5,343	3,412
Germany	115,059	17,088	17,013	80,958	54,256
Poland	190,997	18,119	14,741	158,137	106,739
Czechoslovakia	19,141	2,275	2,366	14,500	8,888
Austria	28,123	3,351	3,765	21,007	13,251
Hungary	32,582	2,451	2,879	27,252	14,202
Yugoslavia	20,435	2,852	2,394	15,189	9,873
U. S. S. R.	55,480	2,797	10,254	42,429	33,142
Lithuania	13,581	779	1,548	11,254	8,116
Finland	13,118	915	2,987	9,216	5,741
Rumania	12,054	1,145	1,918	8,991	5,788
Greece	13,262	789	1,510	10,963	7,489
Italy	95,077	16,302	7,734	71,041	47,689
Portugal	416	20	63	333	177
Other Europe	32,552	6,461	2,652	23,439	16,720
Asia	27,644	1,824	3,169	22,651	15,498
Canada	256,707	29,331	57,126	170,250	98,803
Mexico	11,731	443	1,773	9,515	7,276
Other America	5,650	460	650	4,540	3,526
All Other	2,296	242	546	1,508	873
Not Reported	8,399	1,034	1,783	5,582	4,039

VOLUME I PART 2 M

Housing

Up to this point this study has been concerned with people, their social and economic characteristics, their comings and goings, their way of life. Closely associated with their way of life are the homes in which they live. This part of the study will examine their housing. Several things should be kept in mind. First, although individuals and families may move in a relatively short span of time, their housing is much less mobile. It is literally rooted to the ground, and once it is built it stays in place at least 40 years, and perhaps much longer. Thus we discuss 1960 census data concerning people with the full realization that the lapse of even a few years has brought many changes in population characteristics. However, when we discuss the 1960 housing characteristics of Oakland County we know that while some changes have taken place, the housing stock has largely the same characteristics that it had a few years ago. Further, that it will continue to have the same basic characteristics for many years in the future. Once an area is committed to a particular type of housing, its basic character will remain the same or change very slowly over a period of time.

A careful inventory of the housing supply in the County can provide much knowledge of predictive utility in planning the County's future. Therefore, as each aspect of housing is analyzed here it should be borne in mind that this is the vital heart of Oakland County, and that a description of the residential housing is a map of the County's present and future.

Tenure

Looking at the historical trend (Table 32) we see that home ownership is increasing very rapidly in Oakland County. In 1960 the percentage of home ownership (83 percent) was extremely high and is an index of the high economic level of the county as well as an important index to the basic character of the County. The high level of home ownership implies a great deal of stability which is particularly important as Oakland County heads towards further urbanization and in general adopts city-like characteristics. It will become even more crucial as Oakland County heads towards further urbanization.

If Oakland County becomes a "City of the Future", one of the important ways it will differ from past or existing cities is that it will be a city where almost everyone owns his home. This alone is sufficient to insure its being markedly different from cities in the past.

Table 33 compares the tenure characteristics with the other major political subdivisions of the SMSA. We see that all areas increased with respect to home ownership. Each area increased about the same proportion between 1950 and 1960, about 5 or 6 percent. In fact by 1960 the proportion of home ownership was extremely high everywhere in the Detroit SMSA, including the unusually high proportion in the central city. It is no wonder that the five years since 1960 have seen the construction of large numbers of apartments all over the SMSA. Since there are always some people who prefer to rent, it is obvious that by 1960 rental units were relatively scarce anywhere in the Detroit SMSA. Hence the current wave of apartment building. It is probable that even more apartment building will occur in the future, and

that 1960 saw close to the peak in proportion of home ownership anywhere in the Detroit area.

TABLE 32

TENURE: OAKLAND COUNTY, 1940, 1950, 1960

Total Occupied Dwelling Units	1940	1950	1960
Owner Occupied	61.0	77.8	83.3
Renter Occupied	39.0	22.2	16.7

TABLE 33

Housing Characteristics: Detroit Standard Metropolitan Area; 1950 and 1960

	TENURE				
	Detroit SMSA	Macomb County	Oakland County	Wayne Less Detroit	City of Detroit
<u>1950</u>					
Occupied Dwelling Units	828, 832	49, 465	109, 239	157, 714	512, 414
Owner Occupied	512, 510	40, 044	84, 981	111, 172	276, 313
Renter Occupied	316, 322	9, 421	24, 258	46, 542	236, 101
Percent Owner Occupied	61.8	81.0	77.8	70.5	53.9
<u>1960</u>					
Occupied Dwelling Units	1, 080, 220	196, 644	188, 908	269, 381	514, 837
Owner Occupied	767, 365	91, 941	157, 377	218, 540	299, 507
Renter Occupied	312, 855	14, 703	31, 531	51, 291	215, 330
Percent Owner Occupied	71.0	86.2	83.3	76.5	58.2

Age of Structure

One of the really crucial housing questions is the age of the structure. Given the prevailing social attitude of discarding the old for the new, older dwelling units, with rare exceptions, can be expected to decrease in value with the passage of time. Also the great technological improvements in housing create a certain obsolescence, and will doubtless continue to do so in the future. If a house is older than thirty years, unless extensive modernizing and renovation has taken place, it is subject to a questionable future. As of 1960 about 24 percent or 48,000 dwelling units (Table 34) were over thirty years old. At the same time almost half (47 percent) of Wayne County's dwelling units were this old. Housing in Macomb County was considerably newer with only 16 percent of its dwelling units in this category.

Looking even farther into the past (Table 34) the 1950 census showed that about 20,000 dwelling units, at least as of 1950 were built before 1919, and were at least 40 years old. It should be noted that the 1960 census showed 48,133 dwelling units in Oakland County built before 1929, while in 1950 51,610 dwelling units were recorded as being this old. Evidently about 3,000 were demolished or otherwise eliminated between 1950 and 1960.

Up to now the discussion has concerned itself with the older dwelling units, the implication being that contemplation of conservation and renewal of existing structures are not out of place in Oakland County. While the problem is not of the magnitude that it is in Wayne County, it certainly is the legitimate object of scrutiny and thought.

However, Oakland County is not primarily a place where ancient housing

is a critical problem. Almost half (45 percent) of the housing in Oakland County has been built since 1950. This compares with almost 60 percent in Macomb County and only 21 percent in Wayne County. Surely then the general environment of Oakland County is one of almost new housing. The extensive building after 1960 has served to further enhance the newness of the County's housing supply. Thus it can be seen that while on one hand the county has the feature of newness it also has some old housing that should be examined carefully and watched for signs of deterioration.

Condition and Plumbing

The physical condition of its housing stock is an important factor in the assessment of any county's environment. Deteriorating or dilapidated structures can be compared to the proverbial bad apples that ruin the rest of the apples. Proverbs aren't usually as apt as this one. Decaying houses do drag down a neighborhood. Oakland County, despite its general high level of income and high housing standards, is not without its bad apples. In 1960, Oakland County contained 21,220 dwelling units, or about 10 percent of all dwelling units, which were classified as deteriorating or dilapidated. This was about the same proportion as the other counties in the SMSA. In addition, of the dwelling units classified as sound, 3,822 lacked plumbing and another 1,055 lacked hot water. Taken altogether then, there were 26,097 dwelling units in the county which were substandard for one reason or another. The locations of these substandard dwelling units will be examined in a later section (), but the very fact that they exist should be a matter of concern.

TABLE 34

Housing Characteristics Detroit Standard Metropolitan Area; 1950

YEAR STRUCTURE BUILT

	Detroit SMA	Macomb County	Oakland County	Wayne County
*Year Built 1950				
Number Reporting	827,690	50,670	113,200	663,820
1945 or later	111,165	12,495	25,985	72,685
1940 to 1944	103,000	9,530	16,350	77,120
1930 to 1939	112,810	10,265	19,255	83,290
1920 to 1929	264,365	9,215	31,765	223,285
1919 or earlier	236,350	9,165	19,845	207,340
*Year Built 1950				
Number Reporting	100.0	100.0	100.0	100.0
1949 or later	13.4	24.7	23.0	10.9
1940 to 1944	12.4	18.8	14.4	11.6
1930 to 1939	13.6	20.3	17.0	12.5
1920 to 1929	31.9	18.2	28.1	33.7
1919 or earlier	28.6	18.1	17.5	31.2
*Year Structure Built				
All Units	1,153,001	113,337	204,634	835,030
1959 to March 1960	32,702	8,607	8,749	15,346
1955 to 1958	134,960	29,830	39,047	66,083
1950 to 1954	173,311	26,469	45,113	101,729
1940 to 1949	203,660	20,411	40,949	142,300
1930 to 1939	149,296	9,961	22,643	116,692
1919 or earlier	459,072	18,059	48,133	392,880
*Year Structure Built				
All Units	100.0	100.0	100.0	100.0
1959 to March 1960	2.8	7.6	4.3	1.8
1955 to 1958	11.7	26.3	19.1	7.9
1950 to 1954	15.0	23.4	22.0	12.2
1940 to 1949	17.7	18.0	20.0	17.0
1930 to 1939	12.9	8.8	11.1	14.0
1929 or earlier	29.8	15.9	23.5	47.0

TABLE 35

Housing Characteristics Detroit SMSA - 1960

Condition, Plumbing

	Detroit S. M. S. A.	Macomb County	Oakland County	Wayne County
CONDITION AND PLUMBING				
All Units	1,153,001	113,337	204,634	835,030
Sound	1,028,117	104,509	183,414	740,194
With All Plumbing Facilities	1,002,896	102,614	178,537	721,745
Lacking Only Hot Water	2,840	423	1,055	1,362
Lacking Other Plumbing Facilities	22,381	1,472	3,822	17,087
Deteriorating	99,299	6,558	16,195	76,546
With All Plumbing Facilities	85,840	5,242	13,357	67,241
Lacking Only Hot Water	1,691	259	567	865
Lacking Other Plumbing Facilities	11,768	1,057	2,271	8,440
Dilapidated	25,585	2,270	5,025	18,290
CONDITION AND PLUMBING PERCENTAGE				
All Units				
Sound	89.2	92.2	89.6	88.6
With All Plumbing Facilities	97.5	98.2	97.3	97.5
Lacking Only Hot Water	0.3	0.4	0.6	0.2
Lacking Other Plumbing Facilities	2.2	1.4	2.1	2.3
Deteriorating	8.6	5.8	7.9	9.2
With All Plumbing Facilities	86.4	79.9	82.5	87.8
Lacking Only Hot Water	1.7	3.9	3.5	1.1
Lacking Other Plumbing Facilities	11.9	16.1	14.0	11.0
Delapidated	2.2	2.0	2.5	2.2

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Type of Structure

What is the most general thing that can be said about Oakland County? In 1960 about 90 percent of the County's households lived in single family homes (Table 36). This fact is extremely important in understanding the social fabric of the County. Cities of great size have always been composed largely of apartments, with single family homes comprising some small part of the total housing stock of the City. However it has been the multiple structure which has characterized the city, and provided its essential flavor. It is the very lack of multiple structures which has retarded our thinking of Oakland County (and all the counties like it) as an area which is really urban. This is the future city, single family ownership, low density (by past standards), extensive use of automobile transportation, and a pattern of commercial and industrial land uses that comprise the low density community. Once an outlying area becomes sufficiently "city-like" it will begin to attract more multiple dwelling units. This is taking place in Oakland County now. However, the fact that Oakland County had initially and primarily a single family residential pattern will for a very long time be the predominant factor in determining its growth, just as the opposite factor, existence of primarily multiple dwelling unit structures, has largely determined the pattern of central city growth.

Another factor related to type of structure is the number of rooms per dwelling unit (Table 37). Oakland County has the largest dwelling units with a median room number of 5.3 compared with 5.1 for Macomb County and 5.1

for Wayne County. Although this does not appear to be much of a difference, if it is expressed in percentages of dwelling units over six rooms in size we see that Oakland County has 19 per cent over six rooms, Macomb County 12 per cent and Wayne County 15 per cent. Larger home sizes mean an attraction of larger sized families to Oakland County providing they can afford the additional cost.

TABLE 36

HOUSING CHARACTERISTICS DETROIT S.M.S.A. 1960

TYPE STRUCTURE

TYPE STRUCTURE	Detroit SMSA	Macomb County	Oakland County	Wayne County
ALL UNITS	1, 152, 941	113, 331	204, 629	834, 981
1 Detached	808, 308	101, 889	179, 417	527, 002
1 Attached	55, 654	2, 956	6, 154	46, 544
2	125, 742	2, 796	5, 819	117, 127
3 and 4	41, 286	1, 801	3, 990	35, 495
5 or More	115, 300	2, 303	7, 041	105, 956
Trailer				
On Perm. Foundation	168	26	71	71
Mobile	6, 483	1, 560	2, 137	2, 786

TYPE STRUCTURE - PERCENT

ALL UNITS	Detroit SMSA	Macomb County	Oakland County	Wayne County
1 Detached	70.1	89.9	87.7	63.1
1 Attached	4.8	2.6	3.0	5.6
2	10.9	2.5	2.8	14.0
3 and 4	3.7	1.6	1.9	4.3
5 or more	10.0	2.0	3.4	12.7
On Perm. Foundation	---	---	---	---
Mobile	0.6	1.4	1.1	0.3

TABLE 37

Housing Characteristics Detroit S. M. S. A. 1960

NUMBER OF ROOMS

	Detroit SMSA	Macomb County	Oakland County	Wayne County
ALL UNITS	1, 153, 001	113, 337	204, 634	835, 030
1 Room	24, 197	695	1, 530	21, 972
2 Rooms	33, 344	1, 484	3, 371	28, 489
3 Rooms	83, 800	4, 824	10, 558	68, 418
4 Rooms	172, 477	19, 310	33, 678	119, 489
5 Rooms	399, 650	51, 025	66, 316	282, 309
6 Rooms	264, 810	22, 826	49, 004	192, 980
7 Rooms	101, 650	8, 426	23, 420	69, 804
8 Rooms or More	73, 073	4, 747	16, 757	51, 569
MEDIAN	5. 2	5. 1	5. 3	5. 1
ALL UNITS				
1 Room	2. 1	0. 6	0. 7	2. 6
2 Rooms	2. 9	1. 3	1. 6	3. 4
3 Rooms	7. 3	4. 3	5. 2	8. 2
4 Rooms	15. 0	17. 0	16. 5	14. 3
5 Rooms	34. 7	45. 0	32. 4	33. 8
6 Rooms	23. 0	20. 1	23. 9	23. 1
7 Rooms	8. 8	7. 4	11. 4	8. 4
8 Rooms or More	6. 3	4. 2	8. 2	6. 2
MEDIAN	5. 2	5. 1	5. 3	5. 1

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Year Moved Into Dwelling Unit

It has been said that a family moves once in seven years on the average. Or put another way, one-seventh of the families in the U. S. move every year. The Detroit SMSA fits this generalization very nicely. Just about one-seventh of the families did move during 1960. Thus the SMSA was experiencing just about the expected rate of movement. Apparently ceaseless mobility is a feature of the American social landscape which must be accepted.

There was little difference between Oakland and Macomb Counties with respect to either owner or renter movements. (Table 38). Wayne County was different in that both owners and renters moved less often. Of course this table shows the result of movement. Since most of the residential movement is a drift to Oakland and Macomb Counties from Wayne County, it follows that the distribution of households in Wayne County by year moved into present dwelling unit would show less movement simply because the movers are shown as having moved into the other two counties.

Further realization as to the extent of movement can be gained from looking at the proportions of persons who had lived for more than 20 years in their present dwelling unit. For Oakland and Macomb Counties the figure is less than 10 percent and for Wayne County it is less than 15 percent. Among renters, of course, it was less than 3 percent. In view of this it is not surprising that planners and civic administrators are faced with the constant problem of seeking community maintenance in the wake of highly mobile

populations. The family that moves into a home with the expectation of living there all of its life is uncommon, and the reality of living in one place during the whole family cycle is even more uncommon. Our residential neighborhoods are built with the implicit assumption that the family who moves in will stay a while -- a long while. In reality the in and out movers out number by far the permanent or reasonably permanent stayers. Perhaps if we frankly acknowledge that the American family is on the go and will remain on the go, our thinking can be reoriented towards planning communities that are less vulnerable to the consequences of constant residential movement.

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Rental and Value of Home

Rent paid for rented dwelling units and value of owner occupied dwelling units are highly correlated with income and other economic indices. Analysis of these economic indices usually does not add anything new. However, in this particular case a comparison between the counties of both value of home and rental yields an additional insight into the composition of the population.

It will be noticed (Table 39) that the median value of homes is higher in Macomb County than it is in Oakland or Wayne. Yet when the percent distribution is examined it is seen that in Macomb County only 5 percent of the owner occupied dwelling units have a value over \$25,000 whereas in Oakland County 15 percent, are in the higher value group. The answer lies in the fact that the housing in Macomb County is far more homogeneous than it is in Oakland County. That is, houses in Macomb County tend to be more alike in terms of their cash value. Correspondingly housing in Oakland County encompasses more of a range. There are cheaper and poorer homes, and there are far more expensive homes in Oakland County than in Macomb County. Thus a potential new resident of Oakland County has much more of a range of selection than he does in Macomb County.

Although it not need necessarily follow, the same thing is true with regard to rental dwelling units. The median rent is slightly higher in Macomb County compared with Oakland County, but Oakland has over four times as many

dwelling units renting for over \$150 per month. Thus selection of a place to rent involves a wider choice in Oakland County. This has the effect of strengthening the urban nature of Oakland County since it will attract a more heterogeneous population because of the larger range of choices available.

TABLE 39: RENT AND VALUE, OAKLAND COUNTY: 1960

Value	Detroit	-----COUNTIES-----			Detroit	-----COUNTIES-----			
	SMSA	Macomb	Oakland	Wayne	SMSA	Macomb	Oakland	Wayne	
OWNER OCCUPIED	704,083	86,630	149,516	467,937	704,083	86,630	149,516	467,937	
Less than \$5,000	14,239	1,417	3,338	9,484	2.0	1.6	2.2	2.0	
\$5,000 to \$7,400	50,691	4,511	10,158	36,022	7.1	5.2	6.7	7.6	
\$7,500 to \$9,900	99,228	9,998	19,887	69,343	14.0	11.6	13.4	14.9	
\$10,000 to \$12,400	145,148	16,343	27,848	100,957	20.8	18.9	18.7	21.7	
\$12,500 to \$14,900	131,772	16,049	23,543	92,180	18.9	18.6	15.8	19.7	
\$15,000 to \$17,400	102,984	16,423	17,079	69,482	14.7	19.0	11.5	14.9	
\$17,500 to \$19,900	60,241	10,292	11,729	38,220	8.5	11.8	7.8	8.2	
\$20,000 to \$24,900	48,386	7,570	13,328	27,388	6.8	8.7	8.9	5.8	
\$25,000 to \$34,900	32,275	3,169	13,295	15,811	4.5	3.6	8.8	3.3	
\$35,000 or More	19,219	858	9,311	9,050	2.7	1.0	6.2	1.9	
MEDIAN DOLLARS	13,300	14,200	13,900	13,000	100.0	100.0	100.0	100.0	
Gross Rent									
RENTER OCCUPIED	312,621	14,578	31,406	266,637	312,621	14,578	31,406	266,637	
Less than \$20	379	7	8	364	.7	-----	-----	-----	
\$20 to \$29	3,257	36	109	3,112	1.0	-----	-----	1.1	
\$30 to \$39	9,201	162	417	8,622	2.9	1.1	1.0	3.2	
\$40 to \$49	15,898	359	929	14,610	5.0	2.4	2.9	5.4	
\$50 to \$59	27,102	684	1,887	24,531	8.6	4.6	6.0	9.2	
\$60 to \$69	46,567	1,209	3,556	41,802	14.8	8.2	11.5	15.7	
\$70 to \$79	50,066	2,019	3,721	44,326	16.1	14.0	12.0	16.8	
\$80 to \$99	76,700	3,996	7,100	65,604	24.5	27.6	22.8	24.8	
\$100 to \$119	41,767	2,903	5,502	33,362	13.3	21.1	17.7	12.5	
\$120 to \$149	20,157	1,631	3,834	14,692	6.4	11.1	12.4	5.5	
\$150 to \$199	6,254	464	1,747	4,043	2.0	3.1	5.5	1.5	
\$200 or More	2,144	40	458	1,646	.6	.5	1.4	.6	
NO CASH RENT	13,129	1,068	2,138	9,923	4.1	7.3	6.8	3.7	
MEDIAN DOLLARS	79	92	90	78	100.0	100.0	100.0	100.0	

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Density

Density or persons per unit of land is one of the most important indices used in understanding the nature of the society we are examining. Rural areas are characterized by low densities of 100 persons per square mile or less, while completely urbanized areas usually run from 1000 persons per square mile to densities of ten or twenty or even forty or fifty thousand persons per square mile. Areas with a density of between 100 to 1000 persons per square mile can be considered transitional or in various stages of the urbanizing process.

While density is an important index of urbanization, it is not a very sensitive index. For the density is dependent on topography as well as other geographic and man made features. For example, the residential density of an area devoted largely to manufacturing is very low yet this is thoroughly urbanized land. Net residential density, or the number of persons per square mile of land which is available for residential purposes is a much more critical and sensitive measure, but unfortunately it is rarely available. However, the rough index of persons per square mile of total area is satisfactory for making broad comparisons.

Looking at the density of Oakland County over the years, in Table 40 it is seen that even by 1960 the average density was not high enough to be considered urban. Clearly there must be vast tracts of uninhabited or largely rural land and much population capacity is still unused. This is one of the key points in the entire study. Oakland County is nowhere near its capacity to absorb

population. Growth still can turn in almost any direction. Potential future growth and settlement patterns still can be altered and modified.

Density 1960

The accompanying figure and Table 41 indicate the wide range of densities existing in Oakland County in 1960. The range extends from Groveland Township, with the least density (36 persons per square mile) to about 12,000 persons per square mile in downtown Pontiac. If the entire county had a density as small as Groveland Township it would contain only 324,000 persons (about the same as its population in 1950) and if it had as great a density as the city of Detroit it would have a population of 10,600,000 persons, or more people than live in any SMSA save New York. This great range of densities is an index to the heterogeneous nature of Oakland County and to the wide range of living conditions to be found within its borders.

Comparing Oakland with the other major geographic areas in the Detroit SMSA it is seen that it has the lowest density. (Table 41) The city of Detroit is 15 times as densely settled as Oakland County, yet its population is only slightly over twice as large. The density of the total Detroit SMSA is two and one half times as great as Oakland County; again illustrating the growth potential of Oakland County.

Density By Minor Civil Divisions

The highest level of density is to be found in the South East portion of the county lying near Woodward Avenue from Maple Road to Eight Mile Road. A second area of density radiates out from the center of Pontiac. These two centers of density would lie in an unbroken line, if the very high income

Bloomfield Hills area, with its estates and very large building lots did not intervene between Quarton Road and Pontiac.

By and large the density even in the densest portion is not very high by urban standards. Yet the density which presently exists in this Woodward corridor is undoubtedly higher than the density which will develop in the future as new communities grow. This is because the building standards (in terms of lot size, amount of land devoted to ancillary uses, such as streets, recreational space, shopping centers etc.), tend to be greater as the level of living continues to rise.

While lower densities have been an ideal of urban planners they can become a two edged sword. Consequently services such as sewers, water, public transportation, utilities, as well as recreational and shopping facilities, become expensive and relatively inefficient where the residential pattern is too diffuse.

The still open spaces of Oakland County provide a stimulating challenge in terms of the possibility of bettering the physical environment. And the challenge is great. A glance at Figure 5 reveals that the greater portion of the county is still undeveloped. How this development is handled will be an important factor in determining the future environment of this county.

Density is so important for understanding both the present and the future that a detailed analysis is in order. Density classifications have been grouped and examined for generalized characteristics.

The groups are as follows:

Group I (densities from 10,000 - 12,000 per square mile.)

Berkley (tract 18)

Hazel Park (tracts 5, 6, 7)

Pontiac (tracts 93, 98)

Royal Oak City (tract 26)

Royal Oak Township (tract 11)

Group II (densities from 8,000 to 9,999 per square mile)

Berkley (tract 17)

Birmingham (tract 29)

Ferndale (tracts 8, 9, 10)

Madison Heights (tract 3)

Oak Park (tract 14)

Pontiac (tracts 90, 94)

Royal Oak City (tract 25)

Group III (densities from 6,000 - 7,999 per square mile)

Birmingham (tract 31)

Clawson (tract 27)

Ferndale (tract 8)

Hazel Park (tract 4)

Madison Heights (tracts 2, 3)

Oak Park (tract 13)

Pleasant Ridge (tract 15)

Pontiac (tracts 89, 95, 96, 100)

Group IV (densities from 4,000 - 5,999 per square mile)

Beverly Hills (tract 32)

Birmingham (tract 28)

Huntington Woods (tract 16)

Ke ego Harbor (tract 64)

Oak Park (tract 12)

Pontiac (tracts 88, 99, 101)

Royal Oak City (tracts 22, 23)

Group V (densities from 2, 000 - 3, 999 per square mile)

Birmingham (tract 30)

Bloomfield Township (tract 69)

Farmington City (tract 49)

Farmington Township (tract 48)

Lake Orion Village (tract 117)

Lathrup Village City (tract 34)

Madison Heights (tract 1)

Pontiac (tracts 86, 91, 92)

Rochester Village (tract 78)

Sylvan Lake City (tract 65)

Southfield City (tract 38)

Waterford Township (tract 102)

Group VI (densities of 1, 000 to 1, 999 per square mile)

Beverly Hills City (tract 33)

Southfield City (tract 35, 36, 37, 39)

Northville City (tract 51)

South Lyon City (tract 53)

Milford Village (tract 55)

Wolverine Lake Village (tract 59)

Walled Lake City (tract 60)

Troy City (tract 76)

Pontiac Township (tract 83)

Pontiac City (tract 87)

Waterford Township (tracts 103, 104, 105, 106, 107, 108, 109, 111)

Oxford Village (tract 121)

Holly Village (tract 125)

Group VII (densities of 100 to 999 per square mile)

Southfield City (tracts 40, 41, 42)

Birmingham Farms and Franklin Village (tract 43)

Farmington Township (tract 44, 45, 46, 47)

Novi Village (tract 50)

Wixom City (tract 52)

Commerce Township (tracts 57, 58)

West Bloomfield Township (tracts 61, 62, 63)

Bloomfield Township (tracts 66, 67, 68, 70)

Bloomfield Hills City (tract 71)

Troy City (tracts 73, 74, 75, 77)

Avon Township (tracts 79, 80, 81, 82)

Pontiac Township (tract 84)

Lake Angelus Village (tract 85)

Pontiac City (tract 97)

White Lake Township (tract 112)

Highland Township (tract 113)

Independence Township (tract 116)

Orion Township (tract 118)

Group VIII (densities of 0 to 99 per square mile)

Lyon Township (tract 54)

Milford Township (tract 56)

Rose Township (tract 114)

Southfield Township (tract 115)

Oakland Township (tract 119)

Addison Township (tract 120)

Leonard Village

Oxford Township (tract 122)

Brandon Township

Ortonville Village (tract 123)

Groveland Township (tract 124)

Holly Township (tract 126)

It is not easy to discern any generalized pattern with regard to density. If we look at the high density areas (Group I) we see that they tend to be in those communities that are somewhat older and somewhat lower economically. Much the same situation applies to Group II, except that the Birmingham tract can scarcely be considered low income, and the Oak Park tract isn't very old. In Group III the discrepancies become more numerous. Birmingham and Pleasant Ridge are relatively high income areas, and Oak Park and Clawson

are fairly new. Beginning in Group IV and through all the remaining groups no general condition can be discerned, except the lowest density group (Group VII) is clearly undeveloped rural farmland. It is noteworthy to observe that this is a huge area of about 350 square miles, more than two and one half times the city of Detroit, which is at present untouched by any urban development. Its future, linked to tomorrow's urbanizations, holds great promise. That is to say, this raw land close to a great urban complex, can at this time be shaped into anything man wants it to be.

TABLE 40

Population Density in Oakland County - 1900 - 1960

<u>Year</u>	<u>Persons per Square Mile</u>
1900	50.6
1910	56.0
1920	101.8
1930	238.7
1940	287.0
1950	447.4
1960	780.3

TABLE 41

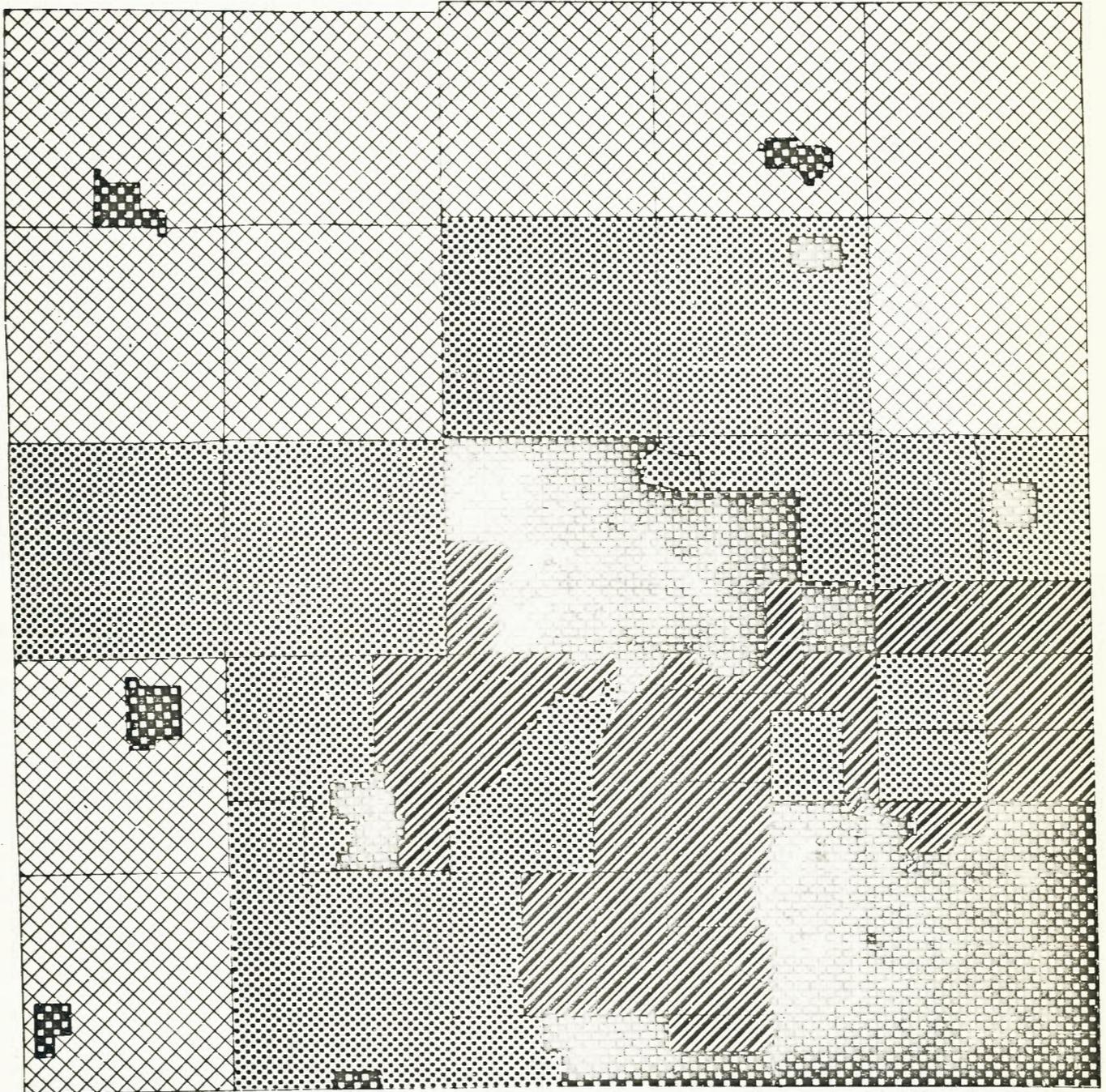
Area and Population Density by County Detroit SMSA:

1950 - 1960

<u>County</u>	<u>Area in Square Miles</u>	<u>Population Per Square Mile</u>	
		<u>1960</u>	<u>1950</u>
Total SMSA	1975	1906	1527
Macomb	475	850	386
Oakland	885	780	448
Wayne	611	4364	3986
City of Detroit	140	11930	13211
Balance of County	471	2115	1243

OAKLAND COUNTY, MICHIGAN

DENSITY OF POPULATION
BY CENSUS TRACT - 1960



LEGEND

- LESS THAN 100
- 100 TO 499
- 500 TO 999
- 1,000 & OVER

Figure 5

SUMMARY VOLUME I PART 1 AND 2

The very detailed material concerning the people of Oakland County presented in the preceding pages has served the purpose of bringing together vast quantities of information. There is the great danger of losing sight of the forest for the trees, and becoming so concerned with the thousands of small facts that the major findings are not even remembered. Hence this summary is needed to draw together many threads into a piece of whole cloth. We will try to tell the story with a minimum of figures.

The thesis is that Oakland County is rapidly - rushing headlong is probably a more apt phrase - towards full urbanization. For one thing the rate of population increase, sheer numbers of persons, bears this out. However, the number of persons, or even the increasing density of the county do not tell the whole story. These numbers and that density could occur in an area that was totally suburban in character, a mere adjunct to the central city.

Urbanization in Oakland County is characterized by more than the continuing formation of dormitory suburbs. The population is becoming more heterogeneous as white collar workers, blue collar workers, executives, and professionals, flock into Oakland County, primarily from the central city of Detroit but from elsewhere in the country as well. This element of heterogeneity of population is one of the most distinctive features of urbanization and is a vital element in distinguishing the city from the suburb or rural area.

The city that Oakland County is rapidly becoming is quite different from cities of the past. It is characterized by almost total single family home ownership, and by equally widespread automobile ownership. All land usages

are geared to these two dominant factors. While theoreticians of city life and urban planners of various sizes shapes and descriptions battle about the merits or demerits of various modes of living, the public demonstrates what it wants by the continuing and increasing acceptance of a way of life built upon home and automobile ownership. Thus Oakland County, first a forest, then farm country, then a collection of suburbs, is now in the process of metamorphosing into a city.

The traditional city grew by the outward spread of population from a large center, and the eventual annexation of surrounding towns and farmland. Oakland County is growing quite differently. At present 63 minor civil divisions, each growing in its own way are cooperating in various ways. What form future cooperation and future governmental structure will take is not our problem here, but it is clear that more people, higher densities, increasing heterogeneity, will demand that solutions be found.

Why are we so sure that Oakland County will become more urban? The main answer lies in the origin and characteristics of the mobile people who are making up the population of the country. Put simply, the most economically able persons and families are migrating to Oakland County from the city of Detroit. They are the best educated, younger, highest income, upper white collar families with children. We have shown, by comparison with the other counties in the Detroit SMSA, that Oakland is continuing to attract more than its share of the economically well off portion of the total SMSA's population. The additional point has been made that having attracted these many higher income families the probabilities of attracting more of the same become even

greater. However it is a gross over-generalization to view Oakland County as a high income area exclusively. There is a complete range of economic levels from poor rural to country estates, and from expensive urban apartments to urban single family slums.

Oakland County's growth is due both to a large preponderance of births over deaths, and to migration from the city of Detroit and from other places in the United States as well. The major source of population increase is from births, and this of course means a large number of children to fill the schools. At the same time the number of persons over 65 years of age has increased greatly indicating that facilities for older persons must be considered in future planning.

Most of the people who live in Oakland County live in places classified as urban. Rural population, with the exception of a tiny minority still living on farms, is hard to distinguish in terms of its social and economic characteristics, from the population living in places classified as urban. This means that while an aerial photograph of Oakland County would show its geographic contour largely as undeveloped land, the population is actually urban in character.

Any illusions concerning Oakland County as a collection of dormitory suburbs was dispelled by the facts which were that most residents of Oakland County work within the county. In addition thousands of persons from neighboring counties come into the county to work. The net out flow of workers even to the central city of Detroit is not very great.

Looking at the characteristics of housing in the county revealed that most

of the housing is of recent construction, although there are some older areas as well. The latter was re-emphasized by the small but significant portion of the housing stock that was classified as dilapidated. However, the most distinguishing feature of Oakland County's housing was the pervasiveness of the single family dwelling.

VOLUME I PART 3 Comparison of Minor Civil Divisions

A. Age and Race By Minor Civil Division¹

In the various Civil Divisions of the country, population has clustered at an uneven pace, and the results are quite revealing. The differential social and economic characteristics of a population are revealed by looking at its resources; how it achieves them (occupations and incomes), how it uses them (type and value of housing), where it uses them (residential locations), family size, age distribution, and style of life. Clues to all of the factors which so vitally influence living patterns may be seen in comparing the differences between the places of residence of Oakland County inhabitants and contrasting their characteristics.

Population size, age, and sex distribution constitute a good place to begin. Of the Civil divisions in Oakland County in 1960, villages and cities numbered 31 while townships numbered 24. Among the 55 Civil Divisions, only three had a population distribution showing 10% or more of their inhabitants over the age of 65. These were Bloomfield Hills City with 10.8%, Oxford Village with 14.6%, and Pleasant Ridge City with 12.8% of their populations over sixty-five years of age.

On the other hand, eight residential areas had a population distribution with less than 4% of the total over the age of 65. These were Clawson with 3.6%; Independence Township with 3.6%; Madison Heights with 2.1%; Northville with 3.2%; Oak Park with 3.1%; the Pontiac Negro community with 3.5%; Royal Oak Township with 3.2%. It will be noted that all these communities

¹ Data on which the subsequent discussion is based on information found in Appendix A Tables A-14 through A-19.

except Northville and Oak Park also have over 40% of their populations under the age of fifteen. The residential areas with more than ten percent of their populations over 65 are also the residential areas with the largest percentage of population over the age of 45.

It might be expected that the communities with the largest percentage of population over 45 should have the largest proportion of children under fifteen since such a high proportion of persons are mature married individuals. This, however, is not the case. The reasons are complex but in general it can be said that the communities with a third or more of their populations over 45 are also the more economically prosperous communities. The more prosperous the community, the fewer the children, other things being equal.

The communities with 35% or more of their populations over 45 can be considered as a group because, in general, their population changes occur by death or replacement by new families. These communities, Bloomfield Hills City with 47.2% of its population over 45, Lathrup Village with 35%, Oxford Village with 36.1% and Pleasant Ridge with 41.7% over 45 are also communities with high proportions in the older age range in 1950. At that time however, three of the townships - Holly, Milford, and Oxford, also had more than ten percent of their population over 65. The 1950 data represents a transitional phase prior to the dramatic population growth of the County. It is seen more clearly by contrasting 1940 data with 1960 data where this is possible. Of the four older communities in 1960 only two have data available for 1940, Bloomfield Hills City and Pleasant Ridge. For both of these in 1940 the percentage of population over 65 was low, 5.1% in the former and 3.7% in the latter. Deconcentration of the SMSA was just beginning.

The high cost residential areas of Bloomfield Hills City and Pleasant Ridge require high income families and high incomes are not likely to occur among well educated professional and business people until quite late in life. In addition, being outside the central city in 1940 and commuting to it meant the ability to arrange time schedules according to personal choice. Once again, such a possibility is open to senior not junior executives and to senior not junior professional men. Thus in 1940 we see only small numbers of high income families with heads over 65 in these cities, reflecting the small numbers that had moved there during the late twenties and thirties.

In 1940 Addison Township, Milford Township, Oxford Township, Rose Township, and South Lyon all had more than 10% of their populations past the age of 65 while Brandon Township with 9.9%, Groveland Township with 8.0%, Highland Township with 8.1%, Independence Township with 8.0%, Springfield Township with 9.1%, and White Lake with 8.3%, all were close behind. Thus in 1940 the rural areas of Oakland County were the aging areas and the SMSA was just ready to begin its explosive growth. These age figures also represent the legacy of the great depression of the 1930's when populations were less mobile and the rural to urban drift had been reversed.

By 1950, with World War II over, the urbanization of America was picking up speed and the first signs of it in Oakland County are the changing patterns of age distribution. These reflect the post World War II baby boom and the accelerating move to the fringe areas of the SMSA. Now the older population, as we have seen, are in the urban centers. For example, while Ferndale's population jumped nearly one third in total numbers, its population over 65

more than doubled; while the total population of Bloomfield Hills City increased by a little more than 5%, its population over 65 doubled; while the population of Pleasant Ridge city increased about 6% in total, the proportion over 65 increased by over 75%; while the total population of Pontiac increased about ten percent, the Pontiac population over 65 years increased by over 50%.

Thus in 1960 the Oakland County residents who had pioneered the urban communities in the decades of the twenties and thirties were now the senior citizens. Their numbers were small in the two decades after World War I so that while they represent a large relative increase in the older population by 1950, they are still only a small proportion of the rapidly growing urbanized areas of the county.

Movement was clearly on its way both to the incorporated and the unincorporated areas of the county, but the greatest movement was to the unincorporated areas and the not completely built up incorporated areas. We shall see further signs of this as we look at housing later on.

By 1960 the trend was marked. The built up communities were aging, the new communities of the post war years were maturing, and the once rural areas urbanizing rapidly. The built up communities were aging only in the relative sense for the most part. They too had experienced the immigration of young adults and the baby boom but to a smaller degree than had the less built up areas. For example, between 1940 and 1960 as we see in Table A15 & A19 the percentage of total residents over 65 decreased in 17 townships and increased in six. But in only one of those six increases, in Southfield Township, was the percentage over 65 more than one percent higher than what

it had been in 1940. In the incorporated areas it was a different picture. Of eleven areas for which we have data for both 1940 and 1960, nine incorporated areas had a higher percentage of their population over 65 in 1960 than in 1940. In only two incorporated areas, both small and far from other urbanized areas, did the percentage of total population over 65 decline between 1940 and 1960.

We see then that while the post World War II baby boom accounted for an enormous and highly visible change, it obscured other changes of great significance. The baby boom and its impact is most marked when only the young portion of a community increases. But in the various residential areas of Oakland County growth and ageing were occurring simultaneously in various proportions.

If we look at Tables A 15 and A 19 which show the percentage of the population under the age of fifteen in 1940 and again in 1960 we see a pattern here too. The communities with the highest percentage of population over 65, as in the case of Bloomfield Hills City, Pleasant Ridge, and Ferndale, had relatively low percentages under 15 in 1940 and the percentage under 15 in 1960 increased very little over the percentage in 1940. When the age group under 15 remains almost the same proportion of the population in twenty years it has not too greatly strained the resources of the community in providing facilities for it.

Four cities, Huntington Woods, Farmington, Royal Oak, and Birmingham show a growth pattern in which the age group under 15 grew disproportionately compared to the growth of the total population. In the period from 1940 to

1960 the under 15 age group grew 40% faster than the total population grew in Birmingham, 53% faster in Huntington Woods, 70% faster in Farmington, 39% faster in Royal Oak and 38% faster in South Lyon.

In these communities the strain on facilities caused by disproportionate growth between 1940 and 1960 is clearly evident. While we do not have full data for all the Civil Divisions of the County for both 1940 and 1960, we do have it for eleven urban places and for 23 townships. As has been seen in Tables A 15 and A 19, five of the urban places have a very high and disproportionate increase in the under 15 age group as compared to total population growth between 1940 and 1960; three urban places have very little disproportionate growth of the under fifteen age group; and three urban places show a moderately disproportionate increase during these twenty years. On the other hand, in the townships ten of the twenty three had a population increase in the under 15 age group that was more than 40% greater than the percentage increase in the total population of the township from 1940 to 1960. The other thirteen townships had a moderately disproportionate growth in the under 15 age group ranging between fifteen and thirty percent in excess of the rate of growth of the whole township population. Consequently the townships found the costs and problems of growth much more difficult to deal with than did the urban places. The townships have fewer local resources, incomes are generally lower than in the urban places, and population was more dispersed. Additional significant differences in the minor civil divisions of the county will show up when we look at the data on fertility, housing, and income, as these relate to both numbers and age distribution.

Communities with a high proportion of the population over 65 had, as has been noted, a low proportion of their population under fifteen years of age. Bloomfield Hills City had 21.5% of its total population under 15, Oxford Village 28.5% and Pleasant Ridge 26.1%. These three communities also have the lowest population per household of the Oakland County Communities. In a number of ways, the communities of Bloomfield Hills City, and Pleasant Ridge represent a very highly urbanized, educated and prosperous sector of the county toward which other communities are moving. Oxford Village which has a similar age distribution is not the same sort of community in type of housing, occupation, or other characteristics. It represents a type of community quite common to an earlier historical period.

The city of Ferndale in 1960 also had an age distribution showing a relatively low percentage (29.1%) under the age of fifteen and is, as previously noted, an aging community.

At the other extreme of age several areas had 40% or more of their populations under the age of 15 years. These were Clawson with 42.3%; Independence Township with 42.3%; Madison Heights with 42.5%; the non-white population of Pontiac with 41.5%; Royal Oak Township with 43.0%, and Walled Lake City with 40.2% of their population under the age of fifteen. Quite clearly these six communities have entirely different educational problems, with such rapidly growing populations, than do the other communities of the county. The four Civil Divisions with less than 30% of their populations under fifteen comprise (roughly) one-eleventh of the total population of Oakland County. The six Civil Divisions with 40% or more of their populations under

fifteen comprise approximately one eighth of the county's total population. Practically speaking the fact that 26 of Oakland County's Civil Divisions have between 35% and 39.9% of their population under the age of fifteen means that provision for youth services, increasing rates of juvenile brushes with the law, and higher accident rates, just to mention a few associated factors, appear to be major problems needing attention now and for some years to come.

Race

The population of Oakland County in 1960 was 690,259 which included only 24,078 non-whites or barely 3.5% of the population. Of these non-whites, the overwhelming majority are Negroes, approximately 95%. As a population cluster, non-whites are found very unevenly distributed in Oakland County, with 58% living in the city of Pontiac and 33% in Royal Oak Township. The remaining nine percent are scattered throughout the County, in no case with more than one percent of the non-white population found in any minor Civil Division other than those previously mentioned.

B. Economic Characteristics¹

The age distribution of a community is a clue to problems of education as well as problems of delinquency and what kinds of behavior young people will exhibit is related very clearly to the social backgrounds from which the youths being considered have come. The most useful single indicator available to us

¹ Data on which the subsequent discussion is based is found in Appendix A Tables A-20 through A-29.

is the occupation of the family head. Clearly of importance also is the income level of families.

A close look at the various residential areas of the County reveals a clustering of population by occupational level. In Table A22 we see that of the males in the labor force in Oakland County 46.2% are in white collar occupations in 1960, and 22.6% are in skilled craft occupations. The communities of Oakland County range widely in occupational composition from Royal Oak Township where only 12.0% of the males have white collar occupations to Beverly Hills where 85.4% of the males have white collar occupations. If we cluster the 63 minor civil divisions into four groups, we find that there are eight residential areas where the percentage of males in white collar occupations is greater than 75%. These communities include 24.2% of all the white collar males in the County, although they are only 14% of the communities and have only 10.8% of the total population. Another seven communities, roughly one eighth of the communities, with 10.3% of the population of the County, have 14% of the male white collar workers in the County. Thus, in residential communities containing 21.3% of the county's total population we find 38.2% of the male white collar workers.

The middle group of communities having a range of 35% to 54.9% of the male labor force being white collar includes 18 communities. This group are roughly one third of the minor civil divisions in Oakland County, containing 36.2% of the County population and 38% of the male white collar workers in the County. These are the middle range communities which include communities as urbanized as Royal Oak and as rural as Lake Orion. The fourth

group of communities are definitely blue collar. They number 22 of the 63 Oakland County communities and the percentage of their male labor force that is white collar ranges from 12.1% in Royal Oak Township to 33.4% in Waterford.

A look at the location of the occupations of Oakland County residents as shown in Table A 24 reveals that the communities with the highest percentage of white collar males employed show wide variations in the degree to which these males are found in the manufacturing sector of the SMSA's economy, ranging from 41% in Beverly Hills to 23% in Bloomfield Hills. The communities with the lowest percentage of males in white collar occupations also vary widely as to the degree in which their occupations are concentrated in manufacturing, with 35.9% of the jobs in Brandon Twp in manufacturing to 52.1% of the jobs in Hazel Park in manufacturing. In addition to the communities already mentioned, Huntington Woods has only 27% of its jobs in manufacturing and Oak Park only 25.5% of its jobs in this sector. These are the communities with a low concentration in manufacturing, while Groveland with 50%, Madison Heights with 51.0%, Orion Twp with 50.2%, South Lyon with 51.1% of their occupations found in manufacturing represent the communities most clearly dominated by this sector of the economy along with Hazel Park as previously mentioned. These five latter communities also are found in the group of minor civil divisions with the lowest percentage of white collar male workers and show very high concentrations of Craftsmen and Foremen.

For the sector of wholesale and retail trade we find eight areas that have

the highest representation of total employees in trade - Berkley with 21.2%, Farmington Twp with 21.6%, Holly Twp with 23.1%, Huntington Woods with 24.4%, Oak Park with 33.5%, Quakertown with 20.7%, Southfield City with 21.5%, and Wolverine Lake with 22.0%. No other areas have as much as 20% of their jobs in trade. Among these eight communities only Huntington Woods has over 75% of its males in white collar occupations. Two communities have very few of their occupations in trade, Lyon Twp with 9.6% and Milford Twp with 10%. No other communities have 10% or less of their occupations in trade.

Persons who work may be private wage and salary workers, government workers, self employed or unpaid family workers. In Oakland County, seven areas have 14% or more of their workers employed by government. These are Milford Twp with 14.1%, Milford City with 14.9%, Northville with 14.8%, Springfield Twp with 15.1%, Sylvan Lake with 18.1%, and Walled Lake with 16.4%. All of these communities it will be noted are fairly far from the centers of urban growth in the County. As the population continues to move outward these percentages of government workers will undoubtedly decline. Unpaid family workers are a negligible fraction of the labor force of the County.

Self employed workers in Oakland County are found with frequency in two types of areas, areas with very high proportions of white collar workers and those with very low proportions. The latter areas tend to have rural characteristics and fewer than 1,000 workers. Areas with large proportions of white collar workers and large proportions of self employed are also the higher

income of the more urbanized areas. The areas with small proportions of white collar workers and large proportions of self employed are Groveland Twp with 21.3% self employed, Lyon Twp with 15.3%, Milford Twp with 16.3%, Oakland Twp with 15.4%, and Rose Twp with 20.1%. The areas with a high proportion of white collar workers and a high proportion of self employed are Beverly Hills with 14.9% self employed, Bloomfield Hills with 17.8%, Farmington Township with 17.2%, Franklin with 21.0%, Huntington Woods with 24.5%, Bloomfield Township with 18.1%, Lake Angelus with 18.3%, Lathrup with 23.8%, Oak Park with 20.9% and Pleasant Ridge with 16.4% self-employed.

Residential areas where less than five percent of the employed are self-employed are Hazel Park with 3.9% self-employed, Madison Heights with 3.6%, Pontiac with 4.6% and Royal Oak Township with 2.3% self-employed. These four areas also fall in the group of areas that have the lowest percentage of males in white collar occupations.

But occupation alone, while it tells us a great deal, is even more significant when coupled with income. The 1960 median family income in Oakland County was \$7,588. This figure which indicates that one half the families receives less income and one-half more income is useful to us when we compare it with median income by community.

We can divide the communities of Oakland County shown in Table A26 into four groups. The highest income group includes eight communities whose median income is more than 35% above the median income for the county as a whole. These communities are Beverly Hills Village, Birmingham City,

Bloomfield Hills City, Bloomfield Township, Franklin Village, Huntington Woods City, Lathrup Village, and Pleasant Ridge City. These eight communities are, with the exception of Pleasant Ridge, the communities with the highest percentage of the male labor force in white collar occupations. Lake Angelus is in the top group in occupations but just barely below it in income, while Pleasant Ridge is just below the top group occupationally but in the top group in income. It is also pertinent to note that in the 22 communities with the lowest percentages of white collar male workers, thirteen of the 22 also have the low median income position as well. Of the remaining nine communities, 6 seem to have higher median incomes because of the higher than average percentage of craftsmen among their residents.

C. Social Characteristics¹

The occupational level and the income of a population is often closely related to the educational level that population has reached as this level is measured in number of school years completed. The relationship is often misleading, especially when the occupations involved include large proportions of skilled craftsmen and lower level white collar workers. Yet looking at the 15 residential areas with the highest percentage of males in white collar employment, the median education level is higher in these communities than in any of the remaining 41 minor civil divisions of the county. In these fifteen residential communities at least 15% of those over 25 years of age have had four or more years of college.

¹Data on which the subsequent discussion is based are found in Appendix A, Tables A-30 through A-32.

The eight residential areas with the highest percentage of male white collar workers also have the highest frequency of college graduates, ranging from 26.5% of all persons 25 years of age and older being college graduates in Franklin, to 36.6% being college graduates in Lake Angelus. The clear cut differences among residential areas that have been noted with respect to the percentage of males in white collar occupations and the percentage of college graduates also hold for income. The communities with the highest percentage in white collar occupations and in education are also the communities with the highest median income. What we are seeing then is the geographic and physical separation of families by social characteristics in the county. Historically the trend is accentuating as well.

The Oakland County population in 1960 is a native born population. For all minor civil divisions as we see in Table A30 at least seven out of every eight persons are native born except in Oak Park and even here more than six out of every seven persons is native born. Overwhelmingly in 1960 the foreign born in the county are from England and Canada, secondarily from Germany, Poland and with lesser frequency from the USSR and Italy.

The population of the county is also increasingly urban as will be noted in the discussion of fertility. Suffice it here to say also that the Oakland County population has its economic base in the metropolitan area but increasingly the place of work of residents is within the county itself. As we see from Table A32 only the outlying civil divisions of Holly Township and Holly Village and Rose Township have as many as 20% of their residents employed outside the SMSA. In 25 of the civil divisions 2/3 or more of the places of work are within

Oakland County. Only five of these 25 civil divisions are urban places. Most of them are the outlying townships. Ten civil divisions had from one-half to two-thirds of their population employed within the county. Six of these ten are urban places. Thirteen of the civil divisions have from one-third to one-half of their work locations in Oakland County. Of these thirteen places only two are townships, both of which are densely settled and basically urbanized. Of the six civil divisions with less than 1/3 of their work locations inside Oakland County only one is a township. Basically the communities with the highest percentages of college graduates and with the highest median incomes have less than half of their work places in the County. The only communities where this does not apply are Lake Angelus with 78% of the places of work within the county and Sylvan Lake with 82.6% of work places within the County. West Bloomfield Township, also a high income, high education, high white collar community, has 57% of its work places within the county.

With the exception of Royal Oak Township, it is the highest income, status, and educational level communities that still have the highest proportion of work locations inside Detroit, the central city. Only five of the lowest level communities have 29% or more of their work places in the central city.

The journey to work is characteristically by private car in all communities. In only 6 areas do as many as 10% or more of workers walk to work. These are all small areas, only one of high status - Bloomfield Hills City, where 15.2% walk to work. Aside from these communities, plus Rose Township and

Royal Oak Township, over 80% of all workers use a private car to get to work. Obviously, in 1960 the existence of Oakland County as it has developed depends on the private automobile. Since the mass of workers now work within the county, the improvement of the local road network is crucial for maintenance, growth and expansion of population. No longer will the two lane highway or the freeway out of the county suffice. Even for the children this is true, for we shall see that the great increase in the number of children is to be found in the outlying parts of the county which have the least facilities for meeting their needs. Either children are transported to facilities, as is the case with schools, or they will not have the facilities.

Aside from Royal Oak Township with a population per household of 4.35 and Independence Township with a population per household of 4.01, household size in the county is under 4 persons. Fifteen of the civil divisions have an average population of 3.5 per household or less. The remainder, or 30 communities, have from 3.5 to 3.99 persons per household. The County is also a place where families live alone. No civil division has as many as 5% of its families living in the same household with other families. The single family unit is the overwhelmingly premoninant type of living pattern. As we have seen, the families are predominantly young and middle aged families in that stage of life cycle in which their children are at home, with the possible exception of those few communities already noted with a very high proportion of population over 65.

D. Vital Statistics By Minor Civil Divisions¹

While the population of Oakland County has grown greatly in the period from 1940 to 1960 the proportion of that growth which is due to natural increase, the excess of births over deaths has not been examined. As we see in Table A33 the natural increase in the County was 53,332 during the period from 1940-1949; the increase from 1950-1959 was at least 111,940. (We cannot be sure of the total since births and deaths in 1951 and 1952 were classified by place of occurrence rather than by place of residence, and hence these two years natural increase is markedly understated.) For the period from 1960-1964 the natural increase was 60,208. Even with the birth rate falling in the past eight years, the natural increase in first half of the 1960 decade is larger than in the whole of 1940 decade and larger than in the first half of the 1950 decade. We have natural increase data only for the cities of Birmingham, Ferndale, Pontiac, and Royal Oak for the period 1940-1964. All other data for communities covers a shorter span of years. Yet these four cities include the wide range of social characteristics in Oakland County. Birmingham represents the high income level, educational level, and percentage of white collar workers; Royal Oak and Ferndale represent the middle and lower levels.

We find that in the decade from 1940-1949, these four communities had from 46.3 to 53.4% of all of the natural increase in the county. From 1950-1959 they accounted for a decreasing share of the natural increase which reflects the growth of other urbanized areas.

¹ Data on which the subsequent discussion is based are found in Appendix A Tables A-33 through A-39.

The percentage natural increase of these four communities of the total county natural increase in 1950 - the high point, to 34.5% of all county natural increase in 1959. From 1960-1964 the trend continues and the four communities range from 26.2% in 1960 of all county natural increase to 34.6% in 1964 of all county natural increase. Thus the older urbanized areas of the county show a decreasing share of the natural increase in the county in the past 25 years.

A careful look at the proportion of births in these four communities to all births in the county, when compared to the proportion of deaths in these four communities to all deaths in the County will give us an index number which will reflect the degree to which the births and deaths vary in the same way or in different ways in these communities. Table 42 shows these index numbers. In effect such an index number reflects the influence of in and out migration to the county and its minor civil divisions, changes in age distribution, and changes in age specific birth and death rates. Compiling such an index for the four communities we see that proportionately to the rest of the County, in the period from 1940-1949 their deaths were increasing more rapidly than their births in seven to ten years. In the decade of the fifties the same was true in four out of eight years. In the period from 1960-1964 deaths in these four aging communities were a relatively higher proportion of all County deaths than their births were of all County births. Hence, our composite picture of the four communities suggests the following possibilities: they are aging faster than the rest of the county, young people have been moving into them less often, old people are moving in more often or moving out less often, young people are moving out more often. The previous analysis of

age distribution suggests that these are indeed aging communities. We see that in Table 42 the percentage of population over 65 increased substantially in these four areas from 1940-1960 and of 35 civil divisions for which we have age distributions in both 1940 and 1960, the percentage of population over 65 decreased in this 20 year period in 19 of 35 civil divisions and in seven more civil divisions increased less than the smallest increase in the four communities. In only two communities did the population over 65 increase more rapidly during these 20 years than it did in Ferndale and Pontiac. Again, of the 35 civil divisions for which we have data for both 1940 and 1960, eleven had a larger increase in the percentage of population under fifteen than did the most rapidly increasing of our four communities. No other community had as small an increase in the under 15 age group in this 20 year period as did Ferndale with the exception of Bloomfield Hills city and only three communities had a smaller increase in the under fifteen group than did Pontiac. Quite clearly then the inferences from our index seem supported.

Looking once again at births by minor civil divisions for the 1950 decade, as shown in Table A 34 we see that the county births outside of the four communities plus Hazel Park and Berkley are an increasing proportion of the total births, rising continuously from 39.5% of the county births in 1950 to 56.6% of the county births in 1959. This proportion keeps increasing even when total births decrease as they do after 1957. In the period 1960-1964 the trend is stabilized and the balance of the county as defined in the 1950's has about 42% of the births from 1960-1964. However, the unincorporated parts of the county and the smallest parts of the county, i. e., Lathrup,

Pleasant Ridge, etc. which have been lumped together, begin to decline as five more urban communities are removed from the "balance of county" total. In the 1960-1964 period Oakland County's eleven listed cities in Table A 34 account for a slowly increasing proportion of total births. The eleven communities have passed their peak in births and total county births have declined as well. The meaning of these declines cannot be known unless we look at age distributions, sex distributions, and calculate fertility ratios. The fertility ratio is a useful device since it gives us an estimate of the rate at which a population is reproducing itself. About 90% of all females under five years of age grow up and marry and about 85% of all married women have at least one child. In order to have one thousand females in the next generation available to marry and have children, we need about 380 children under five per thousand women aged 15-44. Table A 36 shows the communities for which we have data in Oakland County, in 1940. Berkley, Clawson, Keego Harbor, Oak Park, Southfield and Troy had a fertility ratio of 380 or higher. In the same year Birmingham, Farmington, Ferndale, Holly Village, Huntington Woods, Milford Village, Novi Twp. Pleasant Ridge, Pontiac, Rochester, and Royal Oak City, did not have a fertility ratio sufficient to reproduce their populations. It should be noted that the higher the socioeconomic level and educational level of the community in 1940, the lower was its fertility ratio. However, in 1950 none of these communities had a fertility ratio below reproduction rate. Indeed, the rate in Oak Park was double the number necessary for reproduction. In 1960 the same was true, but in this year Clawson, Madison Heights, Milford Village, and Walled Lake, had

fertility ratios double that necessary for reproduction.

A more useful measure is number of children ever born. Looking at the eleven communities in the county for which we have data in 1960 in Table A 27 we note that the number of children ever born per 1,000 married women ages 35-44 is in no case more than fifteen percent larger than the number of children ever born per thousand married women age 25-34. Hence it appears reasonable to assume that the maximum number of children ever born per thousand married women as they pass through the childbearing period will not exceed 3,000 or an average of three per female. As a matter of fact this figure is only barely approached in Ferndale. The communities with the highest socio-economic level, the highest proportion of college graduates, and the highest proportion of white collar workers produce fewer children as we see from Table A 37. This is true not only in Oakland County but nationally. The four high score communities by these social and economic measures are Birmingham, Oak Park, Royal Oak and Southfield. Their frequency of number of children ever born per thousand ever married women age 35-44 range from 2309 in Oak Park to 2587 in Royal Oak. Even the highest figure, that for Royal Oak, is more than ten percent lower than the figures for Clawson and Ferndale, the two high childproducing cities in Oakland County in 1960.

As we note in Table A 34 the peak year for births in Oakland County was 1957. Royal Oak and Ferndale had their greatest number of births in 1955 and 1954 respectively. By 1964 births were down by 40% in Royal Oak from the peak year and by 38.3% from the peak year in Ferndale. Birmingham, Clawson, and Oak Park births by 1964 were all down approximately 31%

from their peak years. Berkley and Troy were down approximately one fourth. Thus births as a source of further growth in the county is not the factor it had been during the years prior to 1960. Moreover the aging of the population means that it is likely that the natural increase as a factor in growth has reached its peak in the existing cities as least. The peak year for total natural increase in the county was 1957. By 1964 the county's natural increase was lower than it had been although the population was substantially greater.

The natural increase in the county was only a part of the growth of the county however. Out data since 1960 is not what we would wish but they are useful. They are based on the school census taken every May. Figures are available from 1958 through 1965. When tabulated they show in Table 43 that while in 1958 children under five were 32.3% of the under 20 age group in Oakland County, each year since then their proportion of the total has dropped. The peak number of children under five was reached in 1960 but the number of children from five through 19 years of age was increasing even more rapidly so that by 1965 the children under five were only 24.3% of the total number of persons under 20 in the county. Thus, from 1958-1965 the number of children under five decreased by 8.5%, the number of children from five years of age through nineteen years of age had increased 27% and the total number under 20 by 18.5%.

Where then does the increase come from? Part of it comes from the fact that each year the county has added almost 15,000 births to the group at the young end, while losing between 6300 and 9300 at the older age end. Hence

there has been a net gain in total of between 48 and 70 thousand in these age groups. The actual net gain has been approximately 62,000. Looking at the actual ages, year by year we can see that net in-migration has occurred. For example, in 1959 there were 16,663 children in the county under one year of age. In 1964 those children should have been between 5 and 6. If no net in migration had occurred their numbers would have been about 16,300. In fact, the school census shows 18,846 children between five and six in the county in 1964 for a net in-migration of at least 2,500 children in these five years. For each age we can perform the same operation and summing the figures we get net in-migrants in the 0-4 age group from 1959-1964 amounting to 5314 children. Again, in 1959 there were 84,688 children in the county ages 5-9. Thus by 1964 there should have been somewhat fewer than this number aged 10-14 with net in-migration. But, in fact, the 10-14 year age group in 1964 totaled 85,867. Thus this five year age group shows a net in-migration of at least 1179. The net in-migration seems to be slowing down in this age group. The 10-14 year olds in 1959 totalled 66,298 in Oakland County. There should have been somewhat fewer than this number of 15-19 year olds in the county in 1964. There were in fact 63,423 for a net loss of 2875. We now have some idea of what is happening in terms of net mobility in the county. Families with children under five were moving into the county in greater numbers than those who moved out in the years 1959-1964. Families with children aged five through nine years of age moved into the county in smaller numbers during this period. And families with all children over nine moved out of the county more frequently than they moved in. Thus

one would find it characteristic that in-migrants to the county during this period, if they had any children at all, would be families with young children and the characteristic out-migrants would be families with teen age children. Such a pattern in the county seems quite in line with the fact that this is increasingly a county of white collar, well educated, higher income families where the head works in the auto industry. The transfers of white collar personnel as they are promoted fits this pattern quite well. Looking at fifteen year olds in 1959 who number 10,940 in the county, we find that by 1963 when they are 19 their numbers have shrunk to 8,654 for a loss of 2,286. The sixteen year olds of 1959 were 19 in 1962. Their numbers went from 11,737 to 8,312 for a net loss of 2,425 in three years. The seventeen year olds in 1959 numbered 9,699 but as nineteen year olds in 1961 numbered only 8,134 for a loss of 1,561 in two years. The loss of fifteen year olds as they age to 19 was greatest in the 1959-1963 period. From 1960-1964 the fifteen year olds number 10,561 and shrank to 8,466 nineteen year olds in 1964 while the fifteen year olds of 1961 number 10,492 and shrank only to 9,127 nineteen year olds in 1965. Such a pattern from 1959-1961 suggests that the net loss of families with children in the late teens may be beginning to slow down. It is much too early to tell on the basis of data for only three years.

While the school census data represents a valuable tool for analysis of trends, the materials are not useful in examining the growth patterns of minor civil divisions since school districts do not coincide with such boundaries very often. Nevertheless in the thirty school districts we do find valuable

information. In every instance except in the South Lyon School district, the evidence is clear that the peak birth rates are past. The under one year age group is smaller in numbers than the four year old age group in 1964. In the Avondale, Bloomfield Hills, Clarenceville, Farmington, Holly, Huron Valley, Lake Orion, Lamphere, South Lyon, Rochester, Southfield, and Walled Lake districts the 0-4 population is higher in 1965 than it was in 1958. These then are the growing areas. Brandon, Dublin, Madison, Oxford, West Bloomfield, and North Oxford districts are quite stable with about 5 percent increase or decrease in the 0-4 age groups in this period. The remaining districts show drops of sizeable proportions from 1958-1965 in the 0-4 age group. In Berkley, Ferndale, and Hazel Park the drop in the age group approximates 25% in the seven years, while in the Oak Park district the drop is over 50%.

In the comparison of the 5-19 age group between 1958 and 1965 we see that every one of the thirty school districts increased their numbers substantially except Ferndale where the increase was about 3%, Oak Park where the increase was about 5%, Hazel Park where the increase was about 10%. Many of the districts almost doubled the number of 5-19 year olds in their boundaries from 1958-1965. Bloomfield Hills and Lamphere more than doubled their numbers in this age group in the seven years. It is clear from the preceding discussions that the great increase in the population under 20 years of age in Oakland County is only partially accounted for by the increase in births. From 1958-1964 in fact, births had dropped in the county by 2,300 and the 0-4 age group by over 6,000. The increase then must have been due to net

in-migration. And it was the in-migration of established families, those with children over five who have increased the population in the school districts. But many of the districts with high rates of increase are now almost built up. Increases in Clawson and similar districts can only take place in future years if the present population as it ages and dies is replaced by a lower income population. For it is the lower income groups that have the highest birth rates and the largest family sizes. The pattern of growth of the county, which is attracting an increasing share of the more highly educated, white collar, upper income, segments of the metropolitan area, suggests that a massive influx into aging communities of low income, blue collar, high fertility, groups is not the most likely prospect for the future.

Such groups may well migrate into the established and aging low income areas. Their numbers cannot be too great. Only if the open land of the County becomes built up as blue collar area, will the population explosion of the young which occurred since 1950 be repeated.

The census data for 1960 reveal some additional materials which are of interest. In Table A-39 we have the percentage of all school enrollment, both public and private. Private school enrollment reflects both the high quality private secular school often used by high income areas, and parochial schools found where religious groups supporting such schools are numerous. Of the minor civil divisions, the range of percentage of children of elementary school age in private schools is from none to almost half in Bloomfield Hills city. The same range is found at the high school level. Here we see in addition the low density of Roman Catholics (who build and support most of

the full-time religious schools) in the townships. National studies have indicated that of the three major faiths, the native white Protestant is the most rural and the most suburbanized, the Roman Catholic population being the latest migrants to suburbia. We can thus expect that as time passes, Addison Township, Brandon Township, Groveland Township, Lake Angelus Township, Lyon Township, Milford Township, Milford Village, Northville City, Oxford Village, Pontiac Township, Highland Township, Holly Village, Independence Township, Keego Harbor, Rose Township, Royal Oak Township, South Lyon, Springfield Township, and Walled Lake, will all sharply increase the proportion of elementary school children in private schools. In the communities previously listed, less than 5% of the children in elementary schools (grades 1-8) were in private schools. From a consideration of the other minor civil divisions, it seems clear that a frequency of ten to fifteen percent of elementary school pupils in private schools is the probable future for these low areas.

At the high school level the frequency of low enrollment in private high schools is a much more frequent phenomenon. Table A³⁹ indicates that only thirty of the fifty five civil divisions have 5% or more of their high school students in private schools, and only fifteen of these have more than 10% in private schools. The lower population density of suburbia, the higher cost of high school education, the greater distances to be traveled for attendance at private high schools, all suggest that in the future, the minor civil divisions will not have more than 10% of their high school kids in private schools unless they are very high income areas such as Huntington Woods, Quakertown, Pleasant Ridge, Lathrup Village, Farmington, Beverly Hills, Birmingham, or Bloomfield Hills city.

TABLE 42

NATURAL INCREASE IN BIRTHS AND DEATHS

Oakland County

Old System Cities

Percent Age 65 and Over			Percent Under Age 15	
1940	1960		1940	1960
5.0	7.1	Birmingham	24.0	34.0
3.0	8.1	Ferndale	28.8	29.1
4.8	8.1	Pontiac	25.8	31.6
4.2	5.5	Royal Oak	25.6	35.6

Old System Cities

Year	Natural Increase	Births	Year	Deaths	Increase In Births/Deaths
1940	52.8	50.9	1940	47.9	106.3
1941	48.0	49.3	1941	51.7	95.4
1942	46.4	48.0	1942	51.4	93.4
1943	49.2	49.9	1943	51.5	96.9
1944	48.0	49.4	1944	51.9	95.2
1945	53.4	53.0	1945	52.2	101.5
1946	52.0	52.5	1946	53.5	98.1
1947	48.2	49.3	1947	52.5	94.1
1948	46.9	48.0	1948	51.1	93.9
1949	46.3	46.2	1949	45.9	100.7
1950	48.1	50.4	1950	46.0	109.6
1951	N.A.	N.A.	1951	N.A.	N.A.
1952	N.A.	N.A.	1952	N.A.	N.A.
1953	45.9	N.A.	1953	45.6	100.7
1954	46.1	45.8	1954	44.7	102.5
1955	44.2	43.8	1955	42.5	103.1
1956	41.1	41.5	1956	42.8	97.0
1957	39.9	40.3	1957	41.7	96.6
1958	38.4	39.1	1958	41.6	94.0
1959	34.5	36.0	1959	41.5	86.7
1960	33.8	35.2	1960	39.5	89.1
1961	26.2	35.0	1961	38.5	90.9
1962	34.1	35.1	1962	37.6	93.4
1963	34.6	35.8	1963	38.4	93.2
1964	34.3	35.3	1964	37.3	94.6

TABLE 43

SCHOOL CENSUS TOTALS FOR OAKLAND COUNTY

<u>May</u>	<u>AGE</u>		0 - 19 TOTAL
	0 - 4	5 - 19	
1958	88,939	186,749	275,688
%	32.3	67.7	100.0
1959	90,524	197,319	287,843
%	31.4	68.6	100.0
1960	91,124	207,622	298,746
%	30.5	69.5	100.0
1961	89,743	216,593	306,336
%	29.3	70.7	100.0
1962	86,466	225,034	311,500
%	27.8	72.2	100.0
1963	84,767	233,905	318,685
%	26.6	73.4	100.0
1964	83,179	245,128	328,307
%	25.3	74.7	100.0
1965	82,087	256,107	338,194
%	24.3	75.7	100.0
% inc. 1958 to 1965 - 8.5%		27.0	18.5

VOLUME I Part 3 - E

E. Housing by Minor Civil Division¹

Having looked at the location of residents in Oakland County and the social and economic characteristics of the communities of residence we can now turn to the housing itself. As Table A-40 shows, only 9 of the minor civil divisions have less than 90 percent of their dwelling units as single family structures. Of these only Pontiac with 58.6 percent, Royal Oak with 86.2 percent, and Royal Oak Township with 40.0 percent of their housing in single family units, can be considered densely settled urban areas. The remaining six areas are both small and far away from the densely settled areas. These are Holly Village with 81.1 percent, Lake Orion with 84.5 percent, Lyon Township with 88.5 percent, Milford with 78 percent, Oxford Village with 79.5 percent, and South Lyon with 88 percent of the housing in single family units. Actually 88.7 percent of all dwelling units in the county are one family structures and only 1.6 percent of the dwelling units are found in structures of ten or more units. In fact, although 6.1 percent of the dwelling units are in two family structures, Pontiac alone has 70 percent of all the two family structures in the county in 1960. Similarly Pontiac has 38 percent of the three and four family structures, Royal Oak has 16.3 percent, and Royal Oak Township 12.6 percent. The remaining 33.1 percent of three and four family dwelling units, some 1,330 dwelling units, are scattered in 53 minor divisions.

Similarly, Royal Oak in 1960 had 38.9 percent of the dwelling units in

¹ Data on which the subsequent discussion is based is found in Appendix A Tables A-40 and A-51.

structures of ten units and more, Royal Oak has 25.1 percent, and of the remaining 36 percent, some 1,244 units are scattered over the balance of the county. We have then, with the exception of three areas, a county characterized by one family dwelling units. The quality of the housing may be measured by the percentage of units characterized as dilapidated. On the surface, residentially the county looks in good shape, since, except for Royal Oak Township no minor civil division has as much as ten percent of its structures characterized as dilapidated. In fact, of 55 civil divisions 24 have less than two percent dilapidated structures, 23 have 2 - 5.9 percent of their structures characterized in this way, and only 8 have more than 6 percent dilapidation. But the percentage of housing that is deteriorating is important as a signal of possible future trouble.

Of the 55 civil divisions, 28 have less than ten percent of the housing in deteriorating condition, 21 have from 10 - 19.9 percent of housing in deteriorating condition; 5 have from 20-29.0% of housing in deteriorating condition, and one, Royal Oak Township, had 37.1 percent of its units in deteriorating condition. Groveland Township with 24.2 percent, Holly Township with 29.9 percent, Keego Harbor with 29.6 percent, Oakland Township with 23.8 percent and Lake Orion with 26.2 percent of housing in deteriorating condition are the danger spots. These are the rural areas and the outlying areas. They rank low on other social indices as well. Yet all these areas have 95 percent or more of their housing in single family units. Apparently it is age of structure that is significant here. 82.5 percent of the dwelling units in Keego Harbor were built prior to 1939. Yet looking at age of structure we note that of the

13 M. C. D. with more than 50 percent of their housing built prior to 1939, only three are M. C. D. 's with 20 percent or more showing deteriorating plumbing. These thirteen areas, each having more than half of their housing over 20 years old, by 1960 only show three areas with deteriorating or dilapidated plumbing and condition. The remaining ten areas show from 76.4 percent of the housing to 96.7 percent of the housing as sound. The thirteen areas with the oldest housing have 21.7 percent of the dilapidated housing. In the entire county only 2.5 percent of all the housing is classified as dilapidated however. Royal Oak Township in 1960 with only 1.2 percent of the total housing has 20.6 percent of all the dilapidated housing in the county. It thus remains true that as in other measures, the outlying townships and civil divisions have the older housing and the highest percentage of dilapidated housing.

As is true of Michigan generally, in 1960 Oakland County was a homeowning county. The percentage of all dwelling units that are single family suggests this. A careful look at the minor civil divisions confirms it. Royal Oak Township and Rose Township are the only civil divisions in 1960 with less than 50 percent of the dwelling units owner occupied. In fact, in 7 civil divisions over 90 percent of the units are owner occupied; 12 areas have from 80.0 to 89.9 percent owner occupancy; 13 areas have from 70.0 to 79.9 percent owner occupancy; 13 areas have from 60 to 69.9 percent owner occupancy; and 8 areas have from 50 to 59.9 percent owner occupancy. Of the ten areas with less than 60 percent owner occupancy, eight have low socio-economic status and low percentages of white collar workers. Of the ten, only Lake Angelus, is the smallest civil division in the county with only 104 dwelling units and is

an exceptional case. Of the seven areas with the highest percentage of home ownership, all are in the top 15 communities in educational level, income, and percentage of white collar workers. As a matter of fact, in these top fifteen communities only four have less than 80 percent home ownership. They are West Bloomfield Township, Lake Angelus, Birmingham and Bloomfield Hills city.

The usual reaction to the fact that the population of Oakland County is a home-owning county is the notion that it is, therefore, composed of stable communities. Nothing of the kind is indicated by such figures. When we look at the year families moved into their dwelling units and group these as a percentage of all dwelling units, some surprising materials emerge. Of the 55 minor civil divisions in the county only in five civil divisions have more than 80 percent of the families lived in their present housing for over two years at the time of the 1960 census. In the entire county 54.6 percent of the housing was built prior to 1950, yet in 19 civil divisions over 30 percent of the population in these divisions had lived in their present house two years or less. Four of the highly mobile areas are in the top group of areas in social characteristics, the others are not. Of the remaining fifteen minor civil divisions, seven are in the group showing the smallest percentage of white collar workers. Hence mobility here cuts across educational and socio-economic lines. Both very high and very low socio-economic communities are highly mobile. But the consequences of mobility are different in areas with a high proportion of college graduates and white collar workers and in areas with low proportions of these characteristics. In the former, formal organizations flourish and community organization is usually well advanced; in the latter, such is much

less likely to be the case. When the highly mobile residential areas are small and not densely settled, the problems are different than when the areas are large and urbanized. Hence increasingly from these data we can anticipate a high degree of differentiation among the Oakland County civil divisions.

Of the fifteen high socio-economic and educational level communities, three have more than half their population who have lived in the same house since 1953. They are Huntington Woods with 56.4 percent, Lathrup with 51.3 percent and Pleasant Ridge with 64.6 percent having lived in the same house since 1953. Three more areas have more than 40 percent who have been resident in the same house for eight years or more. They are Birmingham with 42.7 percent, Sylvan Lake with 47.9 percent and Lake Angelus with 49.3 percent. Five of the fifteen communities have had less than one third of their residents living in the same house since 1953. They are Bloomfield Township with 22.2 percent, Farmington City with 24.6 percent, Farmington Township with 28.8 percent, Northville with 25.8 percent, and Oak Park with 30.3 percent.

Of the 22 areas with the lowest percentage of white collar occupations, on the other hand, only two have less than a third of families who have lived in their present homes since 1953. They are Independence Township with 25.3 percent and Madison Heights with 22.3 percent. Seven of these 22 areas have 50 percent or more of their residents who have lived in the same house since 1953. They are Addison Township, Brandon Township, Groveland Township, Hazel Park, Royal Oak Township, Keego Harbor, and Wixom.

A somewhat different measure of physical mobility, the residence in 1955 of all persons five years old and older in 1960 has some additional information

to provide. In the fifteen high socio-economic and educational areas, the percentage of residents over 5 in 1960 who had lived outside the metropolitan area in 1955 ranged from 0 percent to 21.1 percent. Three areas seemed very high, Beverly Hills with 21.1 percent, Birmingham with 17.8 percent and Bloomfield Township with 15.3 percent. Six areas were very stable, Lake Angelus, with no persons over five years of age who came from outside the metropolitan area since 1955, Lathrup Village with 3.1 percent, Oak Park with 5.4 percent, Huntington Woods with 6.3 percent, Pleasant Ridge with 6.4 percent, and Farmington Township with 6.6 percent.

On the other hand, of the 22 areas of low white collar and educational rank in only three was the percentage of residents over five years of age from outside the S. M. S. A. very high. These areas were Holly with 18.7 percent, Lyon Township with 19.5 percent, and South Lyon with 16.0 percent. Seven of the areas had 6.6 percent or less of their residents over five who came from outside the S. M. S. A. since 1955. These were Addison Township with 6.0 percent, Hazel Park with 5.9 percent, Keego Harbor with 5.5 percent, Pontiac Township with 5.2 percent, Royal Oak Township with 4.4 percent, White Lake with 5.6 percent, and Wixom with 3.2 percent.

In Oakland County only in Ferndale, Huntington Woods, Oak Park and Southfield do we have as many as 10 percent of the population foreign born. Hence when we look at the area of residence of the native born in cities of over 10,000 in the county, for all practical purposes this is the entire population. In the eleven cities of over 10,000 in 1960 in the county we find that, of the population 5 years old and over, in only three cities, Madison Heights,

Oak Park, and Southfield, does a substantial part of the population come from a different county since 1955. In the other eight cities, over 70 percent of the native born population over five has lived in Oakland County for at least five years. Even in the three lowest cities, at least 57.8 percent of the native population over five has lived in the county for over five years. From this data it is clear that although the population of the county may be mobile, it is mobile within the county, by and large. The moving, sorting and selecting process that is going on has had the result, as has already been noted, of beginning to create quite noticeably homogeneous communities of quite different social types.

Summary Volume I-Part 3

Examination of the 55 political subdivisions comprising Oakland County reveals the existence of great diversity in almost every respect. The county already contains so many people and encompasses such a vast geographic area, that the differences between its constituent parts seem to have been effected as natural consequences.

One of the principal features of urban life is diversity of population types and style of life. In the traditional view, the city was characterized as a mosaic; a cluster of small islands each with its distinct population. The major differentiating feature was ethnic origin. Oakland County has only small numbers of persons of distinct ethnic origin, but difference has more than been replaced by the diversity among and within communities of occupation, income, and age levels. If anything, differentials between communities in Oakland County are greater than those existing in any central city, for differences between subcommunities within the county are enhanced by the varying kind of political structures as well as by the degree of rural land usage, two factors that don't even exist in the central city.

The discussion of the characteristics of the minor civil divisions of Oakland County has been confined to four important population characteristics. First, the age differentials, second, the economic differentials, third, the differences in vital rates, and fourth, differences in housing. The analysis has been oriented to pointing out the sources of potential or incipient problems that will need consideration.

Problems arising from the age structure include a general increase in older persons in all parts of the county; but also particular communities have disproportionate numbers of older persons. On the other end of the age spectrum certain communities are literally swamped with children of school age. Still other communities have quite small proportions of persons in the working or productive years. The section on vital statistics uses different data to support the same conclusions.

The section on income, occupation and education emphasizes the great range of differences in economic character between the 55 major civil divisions. There are wide differences in style of life inherent in these economic differentials, as well as differences in ability to pay for community services and to maintain viable communities. Areas of low income, and Oakland County has a number both urban and rural in nature, are potential trouble spots where social problems of many types already exist.

The section on housing tends to repeat and reinforce the economic data on population characteristics. That is, problem housing is highly correlated with low income. The only thing is that the housing data is not an index but is an actual description of the weak spots in the county housing picture. In addition, the type of housing is discussed and the areas of high residential mobility pinpointed. The relative stability or instability of each minor civil division and its effect on the communities' future is pointed out, and the conclusion is reached that Oakland County is tending to turn into a series of internally homogeneous communities of widely different social types.

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OAKLAND COUNTY - A LOOK AT THE FUTURE

Introduction to Volume II

Up to this point this study has been devoted to describing and analyzing existing social and economic aspects of the population of Oakland County. While this is useful for understanding Oakland County, it yields no really new information, for the perceptive observer already aware of this surroundings. If this study is going to serve as a basis of action it has to probe into the future and to attempt to visualize Oakland County as it will exist in 1970 and 1980 and 1990.

Given the present pace of social change this is an audacious undertaking. If this were a stable society we could expect that tomorrow would be much like today. However, the one thing we know for certain is that social change is tending to occur at faster and faster rates, and tomorrow will not be like today. Yet we cannot arrive at a projection for 25 years hence by guessing that just anything or everything will happen. We have to make certain logical assumptions based on past behavior when necessary, and on modifications of past behavior if this seems reasonable. As each element of population composition is projected forward the underlying assumptions will be stated so that the reader can see just how the ultimate result was obtained and what it depends on.

The procedure will be to project the total population of the County to provide a master total on which to base projections of social and economic characteristics for the total county in 1970, 1980, and 1990. The population of

the 55 minor civil divisions now comprising the county will be projected, and finally the most important social and economic characteristic of the 55 constituent minor civil divisions will be projected.

It should be pointed out that the larger the area the less the error in forecasting the future. That is, if we are working with the total county we can expect less error proportionately than ~~with~~ ^{BY} attempting to predict the future for one of its parts. Therefore, the total county population will be to proceed progressively smaller geographic units projected first. Second the county will be divided into three belts based on present population density. The first density belt is composed of minor civil divisions of from 0 to 999 persons per square mile and is characterized as rural even though there are some small towns enclosed in the rural townships. The second density belt consist of minor civil divisions with density greater than 1,000 per square mile and less than 4,000 persons per square mile and is considered to be only partly filled with people. The third density belt is composed of minor civil divisions of densities greater than 4,000 persons per square mile. Although there may be scattered vacant lots still to be filled, the area is considered to be totally occupied. This knowledge is essential in projecting future numbers of persons and their characteristics. The master totals for population numbers for 1970, 1980, and 1990 can then be distributed among the three density belts.

The final step will be to predict the numbers and characteristics of geographic units within the three density belts. In accord with the rule that the larger the geographic area the less the percentage error in prediction it would be theoretically desirable to group the 55 minor civil divisions into relatively

homogenous clusters which will be referred to as Population Analysis Zones (PAZ's). This will increase the geographic size of each unit to be projected and reduce the error. However, first a procedure for logically grouping the minor civil divisions with PAZ's must be worked out. This is done in Appendix B. It may be that each minor civil division is so distinct from each other minor civil divisions that no method of grouping will produce a logical clustering of the minor civil divisions. On the other hand it may be quite feasible to combine many similar minor civil divisions.

The PAZ's have the further property of serving as relatively permanent units of population analysis (hence the name Population Analysis Zone). They are supposed to be "natural areas" in that they contain relatively homogenous population which presumably will retain their basic social and economic trends in the future. They may also be used as a basic unit for tabulating other kinds of data such as births, deaths, other vital statistics, market information, etc.

VOLUME II - Part 1 -

Projection of the Total Population of Oakland County to 1990.

Starting from a 1960 census actual count of 690,000 persons, and a 1965 estimate of 817,000 persons the population of Oakland County will rise to between 1,183,000 and 1,569,000 persons by 1990.¹ In order for the population to be as low as 1,183,000, all further migration from the city of Detroit must cease, and the higher figure (1,569,000) is based on a moderate amount of out-migration from Detroit to Oakland County in the next twenty-five years. The latter possibility, suggesting the higher figure, seems far more likely at present, and should be regarded as the most probable estimate unless future events indicate contrary trends. In view of this, and for clarity, all further discussion will be based on the assumption that the high estimate will come to pass.

By 1990 the population of Oakland County will be 129 percent greater than it was in 1960. Looking at it from a broad perspective means there must be an increase of 129 percent in every county facility just to keep the level of environment up to its present standards. Translating this into roads, schools, sewers, water lines, police and fire protection, and the many other governmental and administrative services and facilities means there is a tremendous task ahead. However, just keeping up with the population increase represents the minimal consideration. Keeping up with increases in the standard of living demanded by the population will add to the size of the job. Another aspect

¹ The actual projection method is explained step by step in Appendix C and the detailed projections are shown in Table C-10.

of future needs is the replacement of existing environmental features as they age and deteriorate. In 1990, the presently existing facilities will be twenty five years older. A very significant portion of the present physical equipment will need replacement before 1990. The task of just keeping pace with the urgent needs will be demanding. The beforehand knowledge that a task of this size will surely be necessary should help to inspire the immediate action that is necessary if the needs and demands of the future are to be met.

A panoramic picture of the growth characteristics of Oakland County is shown in Table 1 and Figure 1. It shows that the growth has not been steady but has varied from decade to decade. This, incidentally, is why past performances were discarded as a basis of projection. The greatest percentage of growth occurred between 1920 and 1930. The greatest numerical growth will occur between 1980 and 1990.

Most impressive is the fact that by 1990 Oakland County will contain enough people, living at a sufficient level of density to be considered a very large city in the sociological sense. This is the principal fact which should be borne in mind in reading the projective analysis which follows. This (Oakland County) will be no collection of bedroom suburbs of mere housing subdivisions, but instead by 1990 it will be powerfully competing with the City of Detroit itself for dominance of the metropolitan area.

TABLE 1

Growth of Oakland County 1900 - 1990

Year	Population	Numerical Increase	Percent Increase
1900	44,792	-----	-----
1910	49,576	4,784	11.1
1920	90,050	40,474	81.6
1930	211,251	121,201	134.6
1940	254,068	42,817	20.3
1950	396,001	141,933	55.9
1960	690,259	294,258	74.3
1970	942,000	251,741	36.5
1980	1,230,000	288,000	30.6
1990	1,569,000	339,000	27.6

Figure 1

Growth of the Total Population: Oakland County 1900 - 1990

2 Million

0 1900

1990

(Semi-Log)

VOLUME II PART I

Projection of age distribution

Division of the population into meaningful age categories as is done in Table 2 provides a basis for useful and important analysis of the future population. Each age group as specified in Table 2 has certain needs which the environment needs to supply, and each age group in turn makes certain contributions to the total environment. Let us look at the age groups one by one.

The youngest group, those under 15 years of age, will increase from about a quarter of a million children in 1960 to half a million children in 1990. Thus all child centered facilities - particularly the elementary schools must double in capacity in the next twenty five years. This alone is a major undertaking.

However, the dimensions of this increase are not nearly as great as the potential increase in young persons in the 15-24 year old age group. In this group we have a doubling of numbers between 1960 and 1970 and a near doubling again between 1970 and 1990. Present observation indicates this is in progress right now. These are crucial years for young people. If we supply schools and a little local neighborhood recreation we have taken care of most of the needs of children under fifteen years of age. Its a different story for those in the 15-24 age group. They need high school and college facilities, jobs, homes when they marry, complex, and widespread recreational facilities and many other services which our society has dragged its heels in supplying. Unless we realize that the necessity of really doing something is upon us already, we're going to witness the spectacle of a three or fourfold increase in delinquency, illegitimacy, auto accidents and many other social ills that

uncared for youth are prone to have.

This study would be remiss unless it strongly emphasized the above point. We will be beset with the problems of youth and we had better come up with some adequate answers, and we had better do it soon. The alternative is to invite a Woodward with four times as many teenagers wandering aimlessly between four times as many drive-ins for the next thirty years. If this study has been descended to preaching its because of the gravity of the issue. Oakland County will be a county for the young. Can we provide adequately for them?

Looking at the younger adults (25-44 years of age) we see a doubling of numbers between now and 1990. This means a doubling of homes, a doubling of jobs, and a doubling of potential customers for all businesses and services. We see also that this age group which now constitutes 29 percent of the total population will decrease relatively 24 percent in 1970 but will begin to rise proportionately to 26 percent in 1980 and to 28 percent in 1990. This means that persons in the prime working ages will constitute a smaller portion of the population than in prior years. However, its not very consequential in Oakland County for its high economic level insures that the slight increase in the proportion of dependents per worker will cause little disturbance in the economic picture.

Much the same thing can be said for the 45-64 year age group. In fact these two age groups (25-44 and 45-64) can be thought of as a single age group of adults in the prime of life, with common concerns and needs.

In recent years much concern has been voiced over the increase in persons

over 65 years of age. Oakland County will share in this great increase, with the number of persons over 65 years of age rising from 37,642 in 1960 to 113,370 in 1990, an almost threefold increase. These figures on older persons should be viewed with some reservation, however, on one hand we know that the high income levels in Oakland County mean that many persons have or will have the economic means to move to a warmer climate in their retirement years. So there is at least the potential of fairly substantial out migration among the older persons. This would leave fewer persons actually residing in the county than indicated by the projection. On the other hand it is prudent to remember that these projections are predicted upon no major medical advances directed at prolonging life. If our past progress in medical technology continues, and there is no reason why it won't, the chances are that many residents of Oakland County will be saved from death, and when the census taker knocks on the door in April 1990, they are going to be very much alive.

Even though we will experience large increases in older persons, proportionately they will represent only a small part of the total population. Whereas in 1960 they were 5 percent, they will be only 7 percent by 1990. Thus Oakland County even twenty five years in the future, will still be characteristically youthful.

TABLE 2

Number and Percent Distribution by Major Age Groupings:

Oakland County 1940 - 1990

Age Group	1940		1950		1960	
	Number	%	Number	%	Number	%
Under 15	71,045	28.0	120,675	30.5	248,612	36.0
15 - 24	42,942	16.9	53,849	13.6	80,785	11.7
25 - 44	82,900	32.6	126,499	31.9	199,604	28.9
45 - 64	45,233	17.8	74,157	18.7	123,616	17.9
65 and over	11,968	4.7	20,821	5.3	37,642	5.5
TOTAL	254,088	100.0	396,001	100.0	690,259	100.0

Age Group	1970		1980		1990	
	Number	%	Number	%	Number	%
Under 15	304,462	32.3	401,223	32.6	511,331	32.6
15 - 24	172,578	18.3	207,896	16.9	269,853	17.2
25 - 44	220,678	23.5	314,826	25.6	436,816	27.8
45 - 64	185,277	19.7	224,806	18.3	237,340	15.1
65 and Over	58,030	6.2	80,927	6.6	113,370	7.2
TOTAL	941,025	100.0	1,229,678	100.0	1,568,710	100.0

Race

This study except for a few minor references has not examined the subject of racial composition. While the subject of race and color has become more important throughout the nation, it has affected Oakland County very little. This is why it has had little impact in this study. The areas of Oakland County where Negroes comprise an appreciable proportion of the population, have undergone little basic change and there has been little movement of Negroes into new areas of Oakland County in the past forty years.

With the changes in legislation and public attitudes which are now sweeping the nation we can expect many changes in Negro population movements and residential patterns before 1990. The central City of Detroit has a current Negro population of about 600,000 many of whom undoubtedly would follow the suburbanization patterns of the white population if it were not for housing discrimination. We can certainly expect that housing discrimination and segregation will diminish if not vanish before 1990. In effect this means that before 1990 many Negro families will have moved to Oakland County. But when and how many? There is simply no experience on which to base a projection. There is no case of mass suburbanization of Negroes anywhere in this county. Nothing in the way of a numerical projection can even be attempted.

One thing can be mentioned. Any projective figure we employ here applies to the total population, regardless of race. It can be observed that as Negroes do move to Oakland County, as they surely will before 1990, the fact that they are Negro will become of lesser importance. Doubtless Negroes of all economic

levels will be moving to Oakland County in the years to come and their economic position will be much more important than their race. Thus the fact that this study does not include a racial breakdown in its forecasts for the future loses some of its importance as the social significance of race decreases as it's bound to do in the years to come.

Occupational Distribution 1940-1990

Changes in the occupational distribution in the future in Oakland County will be mainly centered in increases in the professional occupational category with corresponding small reductions in the number of clerical and craftsmen and foremen (Table 3). The greatest percentage loss will be among the operatives or factory workers which will decline from 19 percent in 1960 to 9 percent in 1990. By 1990 more than one person in four will be employed in some professional occupation compared with only one person in six similarly employed in 1960. In terms of numbers professional will more than quadruple from 39,000 in 1960 to 161,000 in 1990. All major occupational groups, with the exception of laborers show an absolute numerical increase between 1960 and 1990.

These sizable shifts in the kinds of occupations will have profound consequences on the nature of the social environment in Oakland County in the future. Detroit was once notorious for being a "blue collar town". The suburbs of Detroit largely shared this image. Indeed if we glance at Table 3 again we will see that in 1940 even Oakland County, presumably containing the "dormitory suburbs" of Detroit, had a relatively low proportion of its residents in professional, managerial, and clerical occupational categories.

TABLE 3

Major Occupation Groups, Number and Percent Distribution 1940-1990

	1940		1950		1960	
	Number	Percent	Number	Percent	Number	Percent
Professional and Technical	7,291	8.4	15,494	10.5	39,044	16.2
Managers and Officials	9,209	10.6	14,919	10.2	26,097	10.8
Clerical	15,782	18.3	29,956	20.4	59,227	24.6
Craft	15,767	18.2	28,584	19.4	40,453	16.8
Operatives	22,700	26.3	38,358	26.1	46,165	19.2
Services	9,243	10.7	12,459	8.5	22,109	9.2
Labor	6,482	7.5	7,212	4.9	7,739	3.2
TOTAL	86,474	100.0	146,980	100.0	240,834	100.0
	1970		1980		1990	
	Number	Percent	Number	Percent	Number	Percent
Professional and Technical	70,170	20.1	108,517	24.0	161,000	27.9
Managers and Officials	38,053	10.9	49,736	11.0	64,631	11.2
Clerical	86,927	24.9	113,943	25.2	146,574	25.4
Craft	56,206	16.1	69,632	15.4	84,828	14.7
Operatives	54,809	15.7	54,711	12.1	49,052	8.5
Services	34,561	9.9	47,927	10.6	65,208	11.3
Labor	8,379	2.4	7,687	1.7	5,770	1.0
TOTAL	349,105	100.0	452,153	100.0	577,063	100.0

By 1960 a great shift had occurred, and the proportion of white collar persons in the labor force in Oakland County had increased from one third of all employed to one half of all employed. By 1990 over six out of ten employed persons will be in the white collar category.

This is bound to be accompanied by corresponding shifts in the recreational, commercial, educational, and other institutional activities of the County.

While Oakland County will encompass a complete range of occupational types the emphasis will be on white collar oriented activities and on facilities aimed at a white collar "market". While it can be expected that the natural forces of supply and demand will by themselves shape the nature of the future environment of the county, the almost certain knowledge that Oakland County will increasingly contain a professional and white collar population, should serve to point to the direction that future planning should take.

Education 1970 - 1980 - 1990

Table 4 provides a complete picture of the educational patterns in Oakland County from 1940 to 1990. It complements the data on occupational changes but at the same time has its own story to tell. Before embarking on an analysis of what the data say, a few words concerning their accuracy is necessary. In general any projection of future behavior is fraught with risks. Some things are less subject to change and therefore more easily projected. The data on educational attainment as shown in Table 4 are offered as being especially likely to come about. That is, particular confidence can be placed in the forecasts of educational attainment for 1970, 1980 and 1990. This is due to the relative inflexibility of the social trends underlying the assumptions on which the forecasts was made. A complete explanation is given in the appendix, but the outline can be expressed in a few words here.

For one thing, most of the people who will comprise the population over 25 years of age in Oakland County in 1990 are living here today, and the bulk of these have completed their education. Thus it's just a matter of carrying them forward in time. Second, the structure of our educational pattern is sufficiently rigid so that major variation is unlikely. For example, there will be few persons with less than eight years of education. Even dropouts from high school will fade to a minority in the next thirty years. This leaves only errors in the number going to college as the only major source of error. However, we also know that it is almost certain that college attendance will increase sharply. Thus our only source of real error lies in a wrong estimation of the degree of the future rate expansion of the college and university establishment. But even if we are greatly wrong in our estimate of this, it will not affect the total results very greatly because our error will be in only a part of a part. Therefore the educational distribution as shown in Table 4 should be a relatively accurate picture of the future.

The results as given in Table 4 have some very interesting implications. It will be noticed immediately that the sharp upward trend between 1940 and 1960 in median school year completed slows down greatly, and it takes 30 years for the average to creep up from 12.1 to 13.0 years. This seems very modest in view of the fact that the median school year completed increased by 2.5 years between 1940 and 1960. The explanation lies in understanding that the 1940 - 1960 period represents the end point in a social process wherein universal high school education became the norm in American life. However, at this time college education has become the universal educational

goal. At this time (1965) only about thirty percent of high school graduates go on to further education. Even by 1990 there will be many people still alive who have not finished high school. Since that, even with the most heroic efforts, we will not have built up the college and university establishment to where it has capacity to provide four years of college to everyone, the slow upward progress of number of school years completed is quite understandable. However, to make even this rate of progress the rate of college attendance will have to increase from its present 30 percent to 72 percent by 1990.

While there is no direct necessity for the colleges to be located in Oakland County itself, it is apparent that greatly enhanced college facilities should be nearby. Of course the present day movement towards junior colleges is already underway, but the major contribution of Table 4 is to emphasize that the task is very great, and we need to step up the pace of our efforts to even begin to keep up with the demand.

Let us consisely summarize what has been said here: In order for even a modest increase in average education to transpire we must build our educational establishment from its present capacity at the college and university to provide for about 30 percent of our present number of young people, to where it can account about 70 percent of the more than twice as many young people who will be in the population at that time. Otherwise we will have a static situation where little or no educational advancement on the part of the average person is possible. This is a formidable task facing our generation.

TABLE 4

Number and Percent of Persons 25 years of Age and Over By Highest School Year
Completed 1940 - 1990

	1940		1950		1960	
	Number	Percent	Number	Percent	Number	Percent
Less Than Five Years	7,164	5.1	9,020	4.3	13,604	3.2
5 - 8 Years	57,762	41.4	62,145	29.2	83,293	23.1
9 - 11 Years	31,077	22.3	50,415	23.6	79,566	22.1
12 Years	26,854	19.2	57,360	26.9	106,776	29.6
13 - 15 Years	9,371	6.7	18,255	8.6	39,107	10.8
16 Years or More	7,332	5.3	15,830	7.4	40,300	11.2
Total Persons 25 Years of Age and over	139,560	100.0	213,025	100.0	360,648	100.0
Median School Year Completed		9.6		11.2		12.1
	1970		1980		1990	
	Number	Percent	Number	Percent	Number	Percent
Less Than Five Years	9,394	2.2	7,405	1.2	6,635	0.8
5 - 8 Years	81,639	17.6	72,437	11.7	59,748	7.6
9 - 11 Years	97,167	20.8	108,239	17.4	103,504	13.1
12 Years	149,180	32.0	197,375	31.8	225,050	28.6
13 - 15 Years	59,338	12.8	103,661	16.7	165,619	21.0
16 Years or More	67,921	14.6	131,444	21.2	226,970	28.9
Total Persons 25 Years of Age and over	464,639	100.0	620,559	100.0	787,526	100.0
Median School Year Completed		12.3		12.6		13.0

Urban Rural Residence 1970, 1980, 1990.

No quantified results are necessary to project future urban rural residence. Our study (see Volume I) has shown that by 1960 rural farm residence was reduced to less than one percent of the total population of the county. Thus rural farm residence was in 1960 diminishing to the point where it was a negligible fraction of the total population of the County. Clearly, by 1970 it will have diminished to the point where it is a minority so small that the entire category can be dismissed as meaningful in population analysis. There will simply be a few hundred (or less) persons living on farms.

The category of rural nonfarm which contained 76,000 persons in 1960, was not statistically negligible in 1960, nor will it be in the future years. However, the analysis of the social and economic characteristics of these persons, indicates that they are virtually indistinguishable from the population classified as urban, and that to treat them as two separate entries would be a mistake. That is, whether the place of residence was technically classified as urban or rural nonfarm had importance only in describing the size of community in which people lived, and was of no importance in describing or understanding their social and economic characteristics. Thus the two categories could be lumped together, without loss to the analysis and understanding of Oakland County. Therefore no projection in the trends of the number of persons was necessary.

The Number Of Occupied Dwelling Units In 1970, 1980, 1990.

The forecast of population needs to be supplemented by a forecast of occupied dwelling units in 1970, 1980 and 1990. If dwelling units and population were directly related i. e., if they were in absolute ratio the task would be easy. Table 5 indicates that it is not so simple.

If we look at the number of dwelling units per person we see the general trend is downward it is irregular. However, this figure is affected by changing birth rates. The relationship can be clarified by the removal of children and young persons. Accordingly the ratio of persons over 20 years of age per dwelling unit was used.¹ This measure while not constant showed a consistent downward trend. It should be noted that the 1965 is an estimate, and should not be given the same credence as the ex-post facto census figures.

By calculating the line of regression we are able to extrapolate to 1990. The line of regression was calculated by the method of least squares and found to be described by the equation.

$$Y = 31,500 + 1.91X$$

If this equation is used with the persons over 20 years, as taken from the population projections for 1970, 1980, and 1990, the following number of dwelling units are predicted:

¹ The measure of persons over 20 years of age was not selected arbitrarily. Many other age groupings were tried, such as persons over thirty, persons 25-44, persons 25-64, and several others. They all correlated highly with the presently used index (persons 20 and over).

Year	Number of Occupied Dwelling Units
1970	267,000
1980	368,000
1990	463,000

It should be observed that this prediction is based on the extrapolation of current trends towards a smaller number of adults per dwelling units. This is a dangerous procedure in that we have no idea of the underlying causes of this relationship. It is quite possible that factors beyond our present knowledge may in the future greatly change the slight downward trend in average number of adults per dwelling unit observed over the last 40 years. Yet we have nothing but past trends to support the projection. Nevertheless we must depend on this superficial relationship until a better base of making dwelling unit projections is found. Just as the projection of education was considered particularly accurate it should be pointed out that this projection of future dwelling units is probably the least accurate of the many projections made here.

The practical consequences of the forecasts shown here are many. At the present time (1965) there are about 232,000 dwelling units existing in Oakland County, and almost all of these are occupied. It is an unusually crowded time, and doubtless many substandard dwelling units are filled which were vacant in 1960, and may be vacant again in 1970. The forecast for 1970 of some 267,000 dwelling units, is only 35,000 more than presently exist. This does

not mean that only the 35,000 will be built. At present the rate of new construction in Oakland County is some 15,000 per year, or 75,000 more before the end of the decade. Perhaps as many as 40,000 will be vacant or torn down by then if the present pace of building continues, or perhaps the pace of building will slow down. Urban renewal and freeway plans will actually take some dwelling units.

Between 1970 and 1980, 101,000 additional dwelling units will be necessary, or an average of about 10,000 new dwelling units each year. Again aging of older structure will mean the total number to be built must exceed 10,000 per year.

Between 1980 and 1990, 95,000 more dwelling units must be built to keep up with new needs, but again this will not account for the total quantity of dwelling units to be constructed. By this decade many structures will be very old and the question of their future will have to be considered. We can summarize by saying that between 1965 and 1990 the absolute minimum number of new dwelling units must average 10,000 per year, with additional construction being dependent on the rate of removal of obsolescent and aging structures.

TABLE 5

	Total Population	Population 20 Years of Age And Over	Number of Occu- pied Dwelling Units	Total Persons Per Dwelling Unit	Number of Persons 20 Years of Age and Over Per Dwelling Unit
1920	90,050	57,800	20,063 (15)	4.49	2.88
1930	211,251	129,046	47,974 (51)	4.40	2.69
1940	254,068	160,587	66,587 (67)	3.82	2.41
1950	396,001	249,648	109,239 (113)	3.63	2.29
1960	690,603	394,631	188,908 (186)	3.66	2.09
1965	817,000	467,379	232,000 (223)	3.52	2.01

Age Of Dwelling Units

Of all possible characteristics for which further predictions can be made, age of structure, is perhaps one of the easiest to predict. In the first place, most of the dwelling units which will be standing twenty or thirty years hence are already standing, and their future age is determined by adding their present age and the number of years for which the future prediction is made. That is, a dwelling unit that is 40 years old today obviously must be 70 years old thirty years from now. Second, the total number of new dwelling units is a function of the number of additional persons, so that at any time we are able to add the new dwelling units that are needed to house the additional population. This is the basis on which Table 6 has been constructed.

The total number of dwelling units has already been discussed and need not be analyzed again. However, the age distribution is new information. Looking at the percent distribution it can be seen that in 1960 almost half (45 percent) of the dwelling units in the county were built between 1950 and 1959, and thus were less than ten years old. In 1970, although the percentage less than 10 years old will have dropped, still almost one out of four dwelling units will be less than twenty years old, which means that housing in the county is still largely new housing. At the same time over a quarter of the dwelling units will be over thirty years old, very many of them will be, of course,

1
 much older. Since Oakland County will be constantly expanding and growing it follows that the older dwelling units will represent a constantly declining proportion of the total. By 1990 these will be 15 percent of all dwelling units and over 50 years old and undoubtedly ripe for replacement or at least extensive renewal. Because Oakland County is so young the replacement of older structures might seem to be far down on the agenda of things to do. Perhaps failure to cope with the problem of over-age structures in other places has stemmed from failing to commence renewal and repair until the rivulet became a flood. Perhaps Oakland County can profit from this lesson.

1 A more detailed breakdown of the pre-1940 dwelling units can be obtained from earlier censuses. The 71,249 dwelling units reporting year built in the census of 1940 (these are presumably the same dwelling units as reporting in 1960) were distributed as follows

1935-1940	10,201	1900-1909	3,370
1930-1934	6,508	1890-1899	2,454
1925-1929	22,932	1880-1889	1,458
1920-1924	12,141	1860-1879	2,080
1910-1919	8,735	1859 or ear.	1,370

TABLE 6

Dwelling Units, By Year Built: 1960, 1965, 1970, 1980, and 1990

	1960	1965	1970	1980	1990
1930-1989	----	----	----	----	95,000
1970-1979	----	----	----	101,000	101,000
1965-1969	----	----	35,000	35,000	35,000
1960-1965	----	27,000	27,000	27,000	27,000
1950-1960	92,909	92,909	93,000	93,000	93,000
1940-1950	40,949	40,949	41,000	41,000	41,000
Before 1940	70,776	70,776	71,000	71,000	71,000
TOTAL	204,634	232,000	267,000	368,000	463,000

Percent Distribution By Decades

	1960	1970	1980	1990
1980-1989	----	----	----	20.5
1970-1979	----	----	27.4	21.8
1960-1969	----	23.2	16.9	13.4
1950-1959	45.4	34.9	25.3	20.1
1940-1949	20.0	15.3	11.1	8.9
Before 1940	34.6	26.6	19.3	15.3
TOTAL	100.0	100.0	100.0	100.0

VOLUME II PART 2

Introduction

Having projected the numbers of persons, as well as some important social and economic characteristics of those persons, for the total County for 1970, 1980 and 1990 the next task is to make projections for the constituent parts of the county. It should be recognized that any attempt to peer into the future is at best difficult and subject to potential error. Trends that have been steady or at least regular for many decades suddenly change course and create totally new and unexpected situations. For example the previously discussed sudden switch from almost total single family home construction to apartment construction in Oakland County in the past five years was completely unexpected and without precedent. Without doubt the future holds many more such "surprises".

However, no matter how difficult it is to project for the total county, the perils of projecting the future population of the many small minor civil divisions comprising the county, are even greater. Each small area is subject to greater chance variation as well as percentage error. For example, one good size housing subdivision could double the population of one of the rural townships. Thus in evaluation the projections which will be made, it should be remembered that the potential error is very great.

To minimize this error we must take advantage of a simple fact. Oakland County in 1990 will not be a place that grows from scratch. A very considerable portion of what Oakland County will be in the future exists already in the

form of fully built up communities as well as communities whose development is so far along that their fundamental character is set and patterned. Thus our potential error can be partially controlled by projecting only the still to be built parts. Even if we miscalculate badly, the miscalculation will be confined to only a part of the whole. Let us illustrate: Today, Royal Oak is largely built-up. In projecting the future of Royal Oak we may error somewhat as to whether renewal and conservation will take place in some of the older structures, or we may fail to calculate the precise amount of new construction, but essentially in 1990 Royal Oak will be Royal Oak. True it will be twenty five years older, but we can take that into account. Thus the potential error has limits. However, if we take Avon Township, or even a totally undeveloped area the Rose Township, how can we foretell? Perhaps some large developer will decide in 1970 that this is the place to erect 30,000 homes or even 10,000 homes. We have no way to know this at this time. Presently a method of dealing with this problem will be discussed, but at best projections of the future for totally undeveloped areas are subject to wide variation.

The first step towards a solution of the problem of prediction for small areas within the county is to make the above discussed division into undeveloped minor civil divisions, partially developed minor civil divisions where essential social and economic character is formed, and finally almost fully developed minor civil divisions which will gain little or no further population. These three categories are defined as: (1) Minor civil divisions with densities of less than 1,000 persons per square mile (Low Density), (2)

minor civil divisions with densities of to between 1,000 and 3,999 persons per square mile (Moderate Density), and (3) minor civil divisions with over 4,000 per square mile (High Densities).

VOLUME II PART 2 A and B

Data for the three density classifications in Table 7 reveals the numbers of persons in 1960 and their age composition. It can be seen that in 1960 better than half (364,000 persons) lived in minor civil divisions that were largely built up. Another 150,000 persons lived in partly developed areas and 170,000 persons lived in low density areas. It can be readily seen that each density category embraced populations of substantial size. This however, is not a particularly important nor useful fact. What does count however, is the age distribution shown in the table. Here we see that differences in age distribution between the three density groupings are almost nonexistent. This is surprising. It does indicate that persons in all age categories live in each density group. Apparently each density category is attractive to persons of various ages, and the result is a very even distribution of ages between the three density groupings. Many possible explanations can be given for this, but it does remain an obvious fact. Furthermore its a very handy fact in making projections, because we can assume that this broad based attraction will continue, and that we can disregard age of differentials in projecting.

Table 8 gives the occupational distribution by density grouping for 1960. Here we are using occupation as an index to socio-economic status. Income

itself is too difficult to project since we cannot foretell what a 1960 dollar will mean in 1990. Looking at the occupational distribution we see that differences between the three density groupings are not very great. The low density grouping contains a slightly smaller percentage of professional males, but considering the fact that it technically is a rural area, it is clear that the low density area of Oakland County is not truly rural (this agrees with similar observation in another part of this study). Looking at the other occupational categories we see a rather close correspondence between density groupings. As with age we can see that we will be able to project occupational groupings with some degree of assurance that each density grouping will continue to attract persons at all occupational levels and hence at all socio economic levels.

Although we cannot readily project income we can look at the distribution of income by density for 1960. (Table 9). This serves to confirm the use of occupation as an index of income in making the projection. The relationship between the three density levels is the same for income as it is for occupation. That is, the low density area and the moderate density area have just about the same median income, and both are higher than the high density area.

TABLE 7

Age By Density Group: 1960

	Low		Moderate		High	
	Number	Percent	Number	Percent	Number	Percent
Under 15	63,034	36.9	56,625	36.3	128,953	35.5
15 - 24	20,056	11.8	17,831	11.4	42,899	11.8
25 - 44	48,443	28.4	45,146	28.9	106,015	29.1
45 - 64	30,134	17.7	28,014	17.9	65,477	18.0
65 and over	8,821	5.2	8,557	5.5	20,264	5.6
TOTAL	170,488	100.0	156,173	100.0	363,608	100.0

TABLE 8

Major Occupation Group By Density Group

	Low		Moderate		High	
	Number	Percent	Number	Percent	Number	Percent
Professional	6,259	15.0	5,831	16.4	15,168	16.6
Managers, Official Proprietors	6,996	16.7	4,985	14.0	10,948	12.0
Clerical & Kind.	2,340	5.6	2,046	5.7	6,758	7.4
Sales Workers	3,910	9.4	3,177	8.9	9,531	10.4
Craftsmen & Foremen	9,519	22.7	8,598	24.3	20,202	22.1
Operatives	9,006	21.6	8,296	23.3	21,007	22.8
Service & Private Household	1,652	4.0	1,294	3.6	4,340	4.7
Laborers	2,094	5.0	1,365	3.8	3,633	4.0
TOTAL	41,776	100.0	35,592	100.0	91,587	100.0

TABLE 9

Family Income By Density Group: 1960

	Low		Moderate		High	
	Number	Percent	Number	Percent	Number	Percent
Under 1,000	1,005	2.4	780	2.2	2,201	2.3
1,000-1,999	1,335	3.1	936	2.6	3,212	3.4
2,000-2,999	1,644	3.9	1,218	3.4	3,559	3.8
3,000-3,999	1,861	4.4	1,518	4.2	4,323	4.6
4,000-4,999	2,899	6.8	2,382	6.6	6,922	7.3
5,000-5,999	4,702	11.0	3,945	11.0	11,212	11.9
6,000-6,999	4,752	11.2	4,113	11.4	11,312	12.0
7,000-7,999	4,065	9.6	3,932	10.9	10,575	11.2
8,000-8,999	3,442	8.1	3,308	9.2	8,926	9.4
9,000-9,999	2,792	6.6	2,816	7.8	7,471	7.9
10,000-14,999	8,289	19.4	7,034	19.5	17,320	18.2
15,000-24,999	3,685	8.7	2,665	7.4	5,539	5.9
25,000-over	2,037	4.8	1,353	3.8	1,983	2.1
TOTAL	42,508	100.0	36,000	100.0	94,555	100.0
MEDIAN INCOME	\$7,750		\$7,789		\$7,420	

VOLUME II PART 2

Projection to 1970, 1980 and 1990

To project the number of persons by the three density groupings the 1970 population (Table 1) is split proportionately to the number of dwelling units in 1970 in each of the three areas (Table 6). Nineteen-eighty and 1990 are obtained similarly. We have seen that in 1960 there were only small differences between the three density belts with regard to either age distribution or economic level as measured by occupation. Using this knowledge and the assumption that this situation (no major age or economic differentials between density groupings will continue) we can project the 1970, 1980 and 1990 population characteristics for the three density belts directly from Tables 7 and 8. Results are shown in Tables 10 and 11. Since these are interim figures and the final result we are after is a division of each of the three density groupings into PAZ's, no analytical commentary on the meaning of the characteristics will be made. Instead we will proceed directly to Part 3, projections by PAZ's.

TABLE 40

AGE DISTRIBUTION BY DENSITY GROUPING 1970, 1980, 1990

AGE GROUP	1970			1980			1990		
	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High
Under 15	49,100	97,900	157,300	40,424	140,832	219,724	41,076	147,678	322,740
15 - 24	27,800	55,500	89,200	20,956	73,008	113,906	21,672	77,916	170,280
25 - 44	35,800	71,100	114,400	31,744	110,592	172,544	35,028	125,934	275,220
45 - 64	29,900	59,700	95,900	22,692	79,056	123,342	19,152	68,856	150,480
65 and over	9,400	18,800	30,200	8,184	28,512	44,484	9,072	32,616	71,280
TOTAL	152,000	303,000	487,000	124,000	432,000	674,000	126,000	453,000	990,000

TABLE 11

OCCUPATIONAL DISTRIBUTION BY DENSITY GROUPING: 1970, 1980, 1990

OCCUPATIONAL GROUP	1970			1980			1990		
	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High
Professional and Technical	11,296.2	22,592.4	36,260.4	10,956.5	38,076.5	59,447.1	12,878.6	46,524.1	101,580.3
Managers and Officials	6,125.8	12,251.6	19,663.6	5,021.7	17,451.7	27,246.6	5,169.9	18,676.3	40,777.7
Clerical and Sales	13,993.8	27,987.6	44,919.6	11,504.3	39,980.3	62,419.4	11,724.6	42,355.3	92,478.1
Craftsmen	9,048.2	18,096.4	29,044.4	7,030.4	24,432.4	38,145.1	6,785.5	24,512.7	53,520.8
Operatives	8,823.4	17,646.8	28,322.8	5,523.9	19,196.9	29,971.2	3,923.6	14,174.0	30,947.4
Services	5,563.8	11,127.6	17,859.6	4,839.1	16,817.1	26,255.8	5,216.2	18,843.1	41,141.8
Labor	1,348.8	2,697.6	4,329.6	776.1	2,697.1	4,210.8	461.6	1,667.5	3,640.9
TOTAL	56,200	112,500	180,400	45,652	158,652	247,696	46,169	166,753	364,087

VOLUME II PART 3

Introduction

The remaining part of this study will be devoted to further sub-dividing the three density belts or zones into areas which have the same characteristics, and thus be logically grouped together into Population Analysis Zones (PAZ's). These PAZ's will then serve as the basic geographic units for projecting the 1970, 1980 and 1990 population by component areas of the County. The explanation as to the nature of PAZ's, and how they were constructed and designated can be found in Appendix B. The purpose of the PAZ's is to provide a unit which can serve as the geographic basis for distributing the future population. Homogeneous geographic units can be expected to be subject to the same social and economic forces in attracting particular population types in the future.

The findings of Appendix B. are disturbing on one hand and reassuring on the other. It was hoped to reduce the 55 minor civil divisions to perhaps 10 or 15 PAZ's to ease the labor of projection. Unfortunately this was not the fact. Working on a logical design on three largely independent factors, income (economic level), age of community, and degree of attachment to Detroit as measured by the proportion of employed persons working in Detroit, a typology of communities was developed. We were able to group only relatively few minor civil divisions, and ended up with 29 different PAZ's, a disappointingly large number. In a sense it was hardly worth doing for it surely is not much practical help. On the other hand it does show that

even after much manipulation and attempts almost by brute force to shove the 55 minor civil divisions into pigeon holes, they simply cannot be forced. In fact the constituent parts of Oakland County are markedly heterogeneous, and that's the way it is. Further, it is evident that the traditional urban ecological patterns of ring and sector are not present in Oakland County. Instead the county shows the marks of a number of differing phases of development, of differing population types living in widely scattered places in the county. This heterogeneity is further shown by the actual existence of 20 of the 27 theoretically possible PAZ types (Appendix B, Table A-8). It can be seen that even if we ignore density differences and geographic contiguity as well, and just count the existence of each type, we are able to reduce the 55 minor civil divisions only to 20 types. While 9 civil divisions can be grouped as High Income High Housing and High Detroit Attachment, and 8 civil divisions group under the other extreme, Low Income, Low Housing, and Low Detroit Attachment, the remaining 38 minor civil divisions are split among 18 types only about 2 civil divisions per type.

Just as an experiment table A-8 was re-examined and the assumption was made that one factor would be dropped, and only two would be used to type communities. With two factors, only nine types are possible (3X3). If we use income and age of housing we find that all nine possible types are present. If we use income and Detroit Attachment we find that eight of the nine are present (high income and low Detroit Attachment does not exist. If we use age of housing and Detroit Attachment we find that all nine combinations exist. Thus even if we used only two factors we still would have a wide range

of types.

It was stated earlier that there was a bright side to this picture. While admittedly the existence of a wide range of community types complicated the task of prediction, the practical consequence of the existence of this broad spectrum of community types means that the original thesis of this study that Oakland County is a growing city and not just a collection of bedroom suburbs is strongly upheld. Put another way, when we get around to typing the communities of Oakland County we find that a great range of types exist. This is a characteristic of a large city - and that is what Oakland County is becoming. There is also a very practical and real consequence which cannot be emphasized too strongly: It is clear that the existing communities of Oakland County embrace such a wide range of types that there is "something for everyone" in terms of appeal to future migrants. This is the key to present and future migratory pattern into the county. If a person wants a low income - new home - close to Detroit - it can be found. If a person wants a high income - new home - close to Detroit it can be found. If a person wants a low income - new home - far from Detroit - it can be found. So many combinations are possible that Oakland County is now and will become attractive to almost any person or family at any income and in any age of the life cycle.

VOLUME II PART 3

A. Number of Persons By PAZ 1970, 1980 and 1990

There will be gross differences in the growth rate between the constituent parts of Oakland County. The Southeastern portion of the County is largely filled with people already and cannot grow much more. The Northern and Western fringes of the County won't grow much until after 1990 because the total amount of undeveloped land is so great that it cannot possibly be filled by 1990. Figures A, B and C show the numerical growth by PAZ for the various time periods.

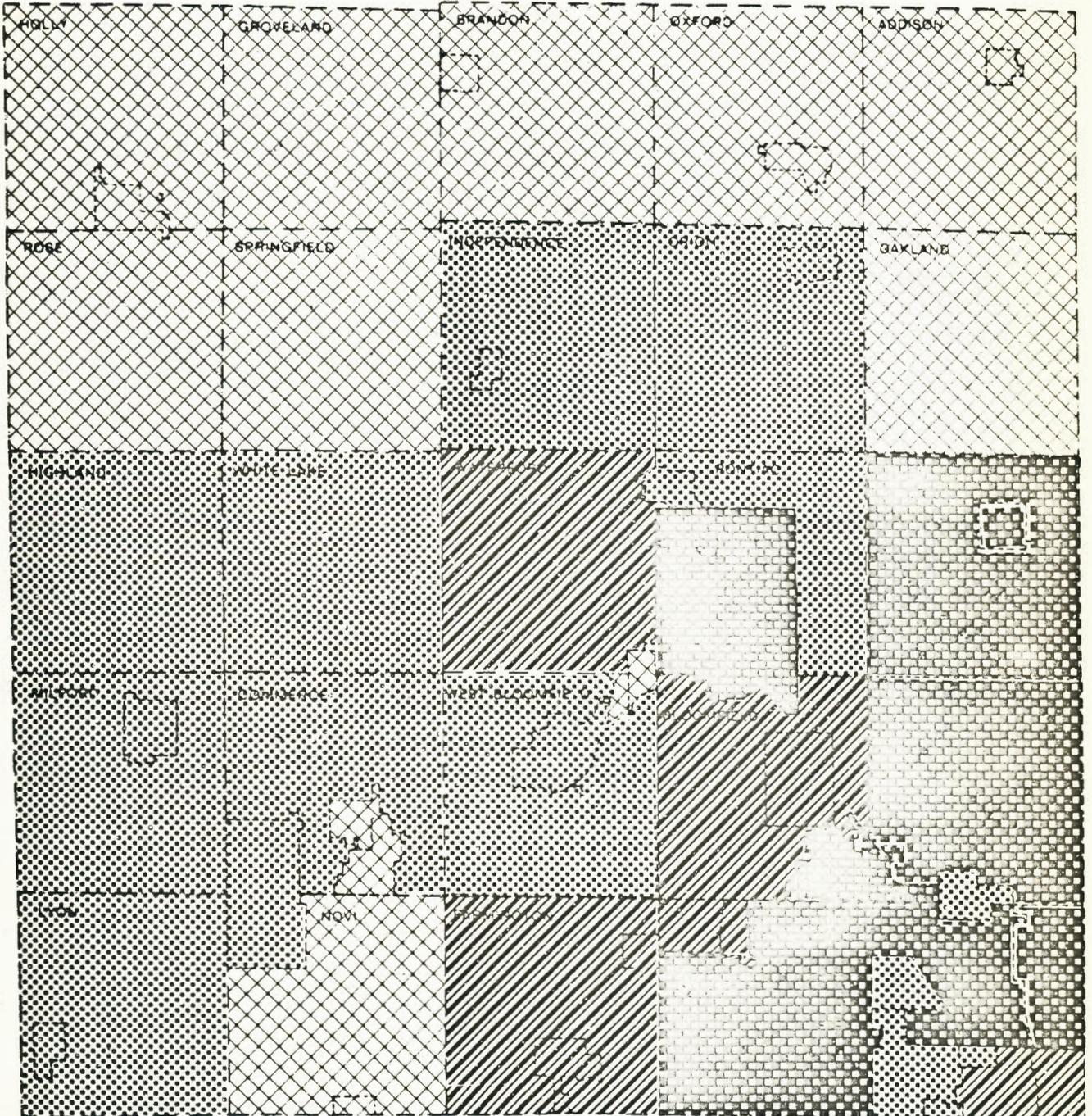
As examination of Table 12 indicates phenomenal changes are in the offering. PAZ 11 will gain 60,000 persons before 1990. Similarly PAZ 12 will gain 57,000 persons, PAZ 13, 75,000 persons, PAZ 14, 198,000 persons, PAZ 15, 80,000 persons, PAZ 17, 87,000 persons, all before 1990.

Will this surely happen? No projection of the future is certain. Yet if we are to plan intelligently we must make some best estimate of the most likely possibility. The above projections are not a guess. Nor are they based on any extrapolation of past growth patterns, because it is obvious that the past cannot repeat itself. Instead the PAZ projections are based on a set of concepts which are carefully, lengthily and tediously explained in Appendix C. This method is new and untested. Oakland County is the first test. Time will be the judge of the value of the method. It is suggested that the PAZ projections be reviewed frequently to see if they are still on the track.

While it is difficult to visualize the entire County gaining almost three

quarter of a million persons, it is even more difficult to imagine the impact of these boxcar figures on individual townships. The largest increase, almost 200,000 persons which will occur in PAZ 14 (mainly Farmington and Bloomfield Townships), represents by itself a very good sized city. Just to cite one aspect of this massive population increase: the additional auto trips generated by this one PAZ will more than fill the freeways as now planned for this part of Oakland County. Obviously other environmental needs will be proportionate. No amount of thoughtful consideration of the very real and important problems stemming from this vast growth would be too much.

OAKLAND COUNTY, MICHIGAN POPULATION INCREASE 1965-1970



OAKLAND COUNTY PLANNING COMMISSION

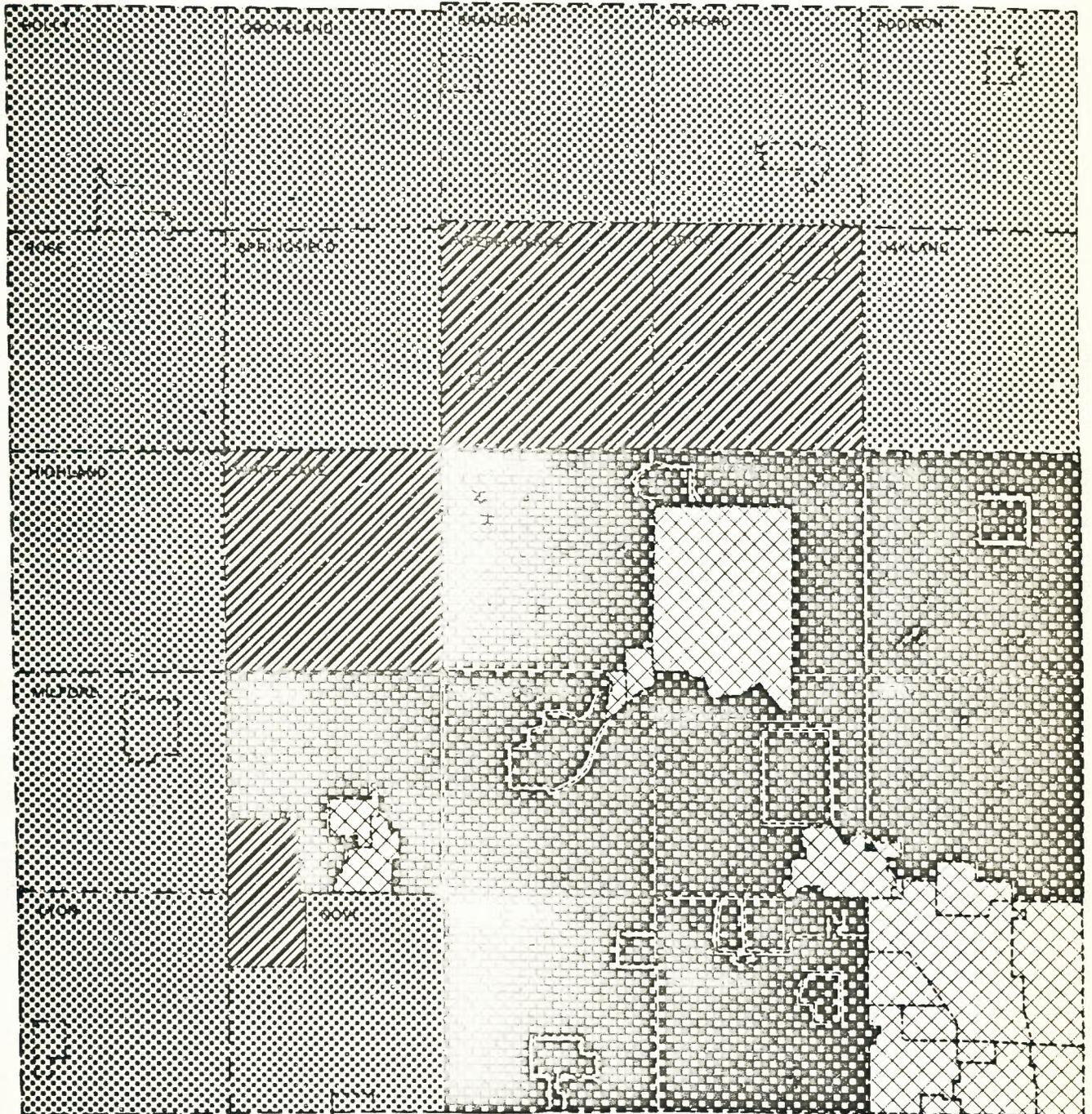
ROYAL OAK
SCALE IN MILES
0 1 2 3 4

LEGEND

-  1 to 999
-  1,000 to 4,999
-  5,000 to 9,999
-  10,000 & over

Figure A

OAKLAND COUNTY, MICHIGAN POPULATION INCREASE 1970-1980



OAKLAND COUNTY PLANNING COMMISSION

ROYAL OAK
SCALE IN MILES
0 1 2 3 4

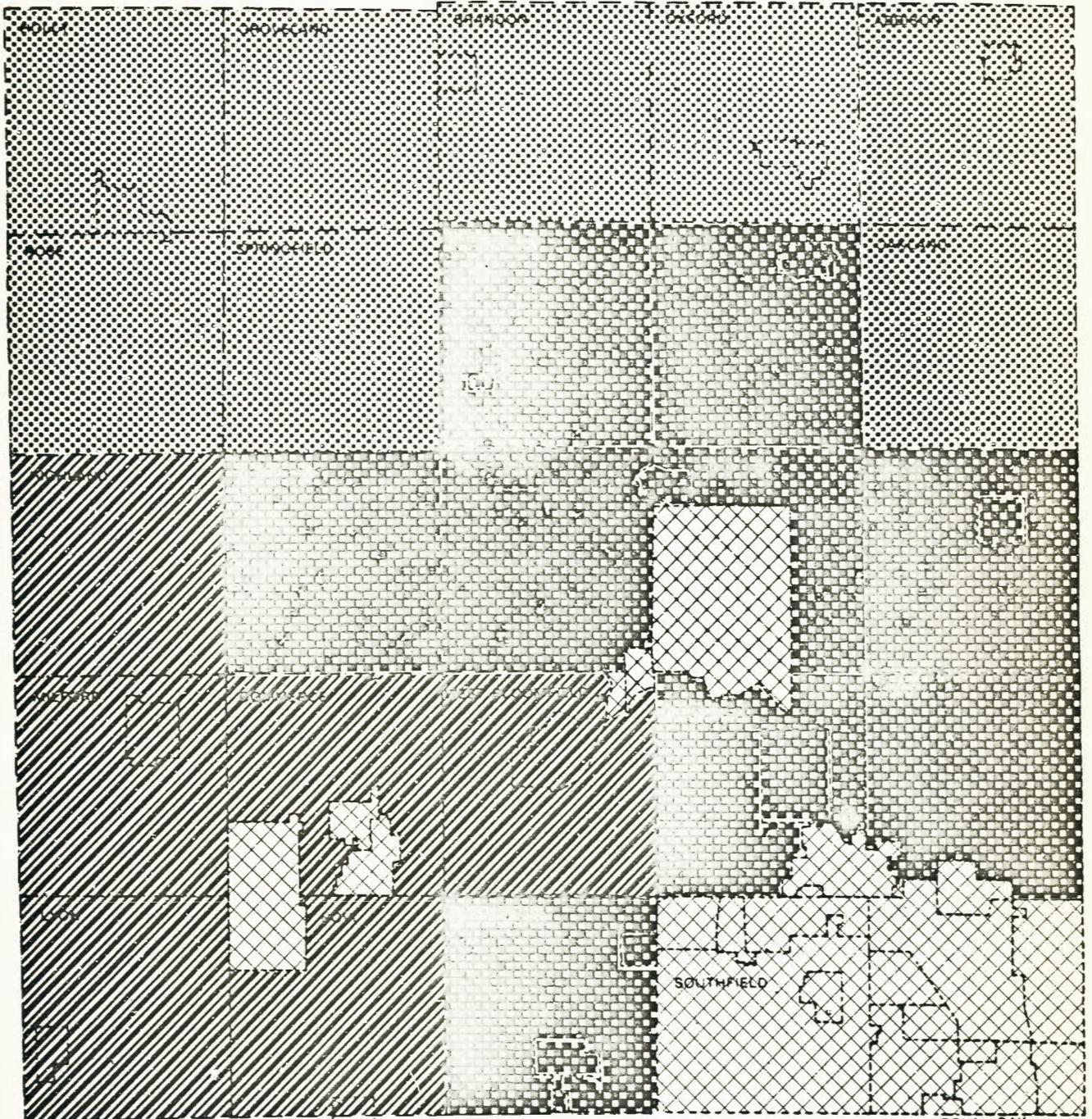
LEGEND

-  No Increase
-  1 to 3,999
-  4,000 to 9,999
-  10,000 & over

Figure B

OAKLAND COUNTY, MICHIGAN.

POPULATION INCREASE 1980-1990



OAKLAND COUNTY PLANNING COMMISSION

ROYAL OAK
SCALE IN MILES
0 1 2 3 4

LEGEND

-  No Increase
-  1 to 3,999
-  4,000 to 9,999
-  10,000 & over

Figure C

VOLUME II PART 3

Age Distribution By PAZ's 1970, 1980, 1990

The age distribution of the future population of Oakland County, by PAZ will be discussed rather briefly. While the subject is of great importance, it should be realized that the degree of possible error becomes very great when predicting a given population characteristic, by small areas (PAZ's) for a distant date. In other words, we are really straining the limits of our ability to forecast the future. Nevertheless it seems feasible to make some analysis of the future age distribution.

The age distributions for the individual PAZ's were calculated by taking the growth of the total County for each decade by age group, and distributing it among the PAZ's by the percentage of the total growth of the County that each PAZ represented. That is, if the total County gained 28,000 persons between 1970 and 1980 in the 15-24 year old age group, and Troy gained 2 percent of the total County growth, then 560 persons were added to the 15-24 year old age group in Troy between 1970 and 1980.

The data are shown in Tables 13 through 16. Maps for 1990 were constructed by ranking the PAZ's first by percentage of persons under 15 years of age (the child population) and then by percentage of persons 25-44 years of age (the young adults). After rank ordering the 28 PAZ's were placed in four groups of seven characterized by High, Moderately High, Moderately Low and Low. The maps and tables largely tell the story.

Looking at the persons under 15 years of age (Figure.4) (children) for 1990 we see that in general the outlying portions of the county will contain the highest

proportions of children. Since these are now the areas with the smallest school systems it can be seen that quite a change must be forthcoming if needs are to be met. Correspondingly the smallest proportions of children will be found in the oldest parts of the County where schools are most adequate today.

Persons 25-44 years of age (Figure 5) represent the young adults and hence presumably the most productive persons. In the case of young adults the areas containing the highest proportions will be located in the middle parts of the County. This will be the fastest growing portion as well, and will represent the prime market area in every respect.

Occupational Distribution by PAZ 1970, 1980, 1990

Occupation is used here as an index of economic level of the various PAZ's. While the full occupational distribution is shown in Tables 17, 18 and 19 analysis is confined to analyzing the proportion of professionals and managers, owners and officials - the higher economic and status occupations, as a proportion of persons in the total labor force. High proportions of persons in these occupations represents higher socio economic levels.

The projections for the individuals PAZ's have been made by distributing the projected growth of the various occupational groups for the total county among the PAZ's proportionate to their percentage of the total County's growth. For example, if between 1970 and 1980 the total increase in professionals in Oakland County was 31,000 and Southfield gained 10 percent of the total growth, then Southfield was increased by 3100 professionals.

A map of the relative economic standing (as measured by proportion of professionals and managers, proprietors and officials of the total labor

force) for 1990 is shown (Figure 6). It shows the highest ranking economic areas to be located in places that are beginning to grow today, and the lowest ranking economic areas, located at opposite ends of the County - the far Northwest, and the Southeast corner. With the exception of Pontiac, which has the lowest economic ranking, the highest economic areas extend in a solid belt slicing the County into two parts.

It should be cautioned that this projection is based on a long string of "ifs" and is to be viewed as only a very broad indication of the future. As it stands many questions can be raised concerning the individual PAZ's. For example PAZ 21 is shown as being in the high economic group, and on the surface this seems debatable. Undoubtedly more accurate specific results can be obtained by local planning commissions studying the precise prospects of the individual area.

New Dwelling Units 1970, 1980, 1990

Growth of the new dwelling units in Oakland County for 1970, 1980, and 1990 is shown in Table 20 . No additional analysis is needed because the growth pattern is identical to the pattern of population growth (Table 12), because the new dwelling unit predictions were derived directly from the population growth predictions, and are not an independent estimate.

TABLE 13

AGE DISTRIBUTION BY PAZ'S 1960

	Paz 1	2	3	4	5	&	6	7	8	9	10
AGE											
Total	24,632	10,504	1,691	2,469	231	9,091	7,439	4,855	1,531	8,381	
Under 15	11,814	3,947	560	910	62	3,343	2,785	1,752	516	3,091	
15 - 24	2,919	1,395	223	285	28	1,248	870	644	198	1,028	
25 - 44	6,354	2,834	421	701	51	2,511	2,148	1,238	399	2,407	
45 - 64	5,091	1,594	368	436	80	1,614	1,180	822	272	1,370	
65 and over	1,723	734	119	137	10	375	270	399	146	485	
	11	12	13	14	15	16	17	18	19	20	
AGE											
Total	45,866	22,734	27,006	61,147	23,266	2,004	47,107	2,404	3,550	106,137	
Under 15	16,716	9,090	10,143	22,489	7,989	633	17,818	980	1,428	37,378	
15 - 24	5,542	2,835	3,181	6,189	2,143	186	5,344	289	472	11,336	
25 - 44	12,994	6,554	7,745	17,765	6,530	546	14,305	724	1,054	31,985	
45 - 64	7,933	3,221	4,634	11,771	5,314	483	7,699	340	434	19,191	
65 and over	2,681	1,034	1,303	2,897	1,290	156	1,944	71	162	6,247	
	21	22	23	24	25	26	27	28	29		
AGE											
Total	40,439	23,275	82,233	2,761	8,147	31,347	25,631	33,343	14,795		
Under 15	15,327	8,615	25,987	844	3,474	9,130	8,976	14,185	6,252		
15 - 24	3,559	2,867	10,996	428	1,214	4,233	3,392	3,891	1,371		
25 - 44	13,243	6,679	21,472	684	2,017	7,874	7,512	11,383	4,831		
45 - 64	6,675	4,110	17,087	623	1,182	7,579	4,578	3,189	1,817		
65 and over	1,631	1,004	6,691	182	260	2,531	1,173	695	526		

TABLE 14

AGE DISTRIBUTION BY PAZ'S - 1970

	Paz 1	2	3	4	5&6	7	8	9	10	
AGE										
Total	25,669	12,800	2,200	3,600	15,131	8,314	6,800	3,000	11,600	
Under 15	11,539	5,232	674	1,162	4,738	3,022	2,186	844	3,809	
15 - 24	2,468	1,207	409	699	3,436	1,258	1,356	736	2,206	
25 - 44	6,251	3,940	464	796	3,013	2,237	1,401	522	2,677	
45 - 64	4,788	1,586	493	714	3,085	1,441	1,300	633	2,162	
65 and over	1,623	835	160	229	859	356	557	265	746	
	11	12	13	14	15	16	17	18	19	20
AGE										
Total	70,100	36,515	35,001	88,663	73,899	2,399	61,003	3,099	4,201	151,999
Under 15	22,120	10,577	11,926	28,633	19,280	271	20,916	1,135	1,573	47,605
15 - 24	14,412	5,275	6,107	16,273	20,675	331	10,429	544	710	28,122
25 - 44	15,030	7,114	8,416	20,079	10,783	579	15,472	782	1,109	35,837
45 - 64	13,895	11,975	6,601	18,549	17,770	580	11,117	511	594	30,473
65 and over	4,643	1,574	1,951	5,129	5,391	188	3,069	127	215	9,962
	21	22	23	24	25	26	27	28	29	
AGE										
Total	45,995	27,000	96,000	2,999	18,000	38,061	32,000	59,000	21,002	
Under 15	16,567	9,446	29,057	897	5,671	10,614	10,396	19,907	7,636	
15 - 24	5,594	4,230	16,035	515	4,820	6,668	5,723	13,281	3,642	
25 - 44	13,710	6,992	22,628	704	2,845	8,433	8,047	13,538	5,352	
45 - 64	8,043	5,026	20,474	682	3,606	9,216	6,145	9,501	3,343	
65 and over	2,081	1,306	7,806	201	1,058	3,070	1,689	2,773	1,029	

TABLE 15

AGE DISTRIBUTION BY PAZ'S - 1980

AGE	Paz 1	2	3	4	5&6	7	8	9	10	
Total	28,068	14,798	2,899	4,700	44,801	11,412	8,997	9,193	16,195	
Under 15	12,008	5,902	909	1,531	14,688	4,061	2,923	2,921	5,350	
15 - 24	2,639	1,451	494	833	7,059	1,636	1,624	1,492	2,767	
25 - 44	6,707	4,592	692	1,155	12,695	3,248	2,118	2,543	4,177	
45 - 64	4,980	1,860	589	865	7,154	1,866	1,601	1,482	2,792	
65 and over	1,734	993	215	316	3,205	601	731	755	1,109	
AGE	11	12	13	14	15	16	17	18	19	20
Total	96,973	42,209	89,946	122,629	142,921	2,399	105,958	3,099	4,201	151,999
Under 15	31,132	12,487	30,351	40,023	42,429	721	35,991	1,135	1,573	47,605
15 - 24	17,694	5,970	12,817	20,421	29,105	331	15,919	544	710	28,122
25 - 44	23,799	8,972	26,346	31,163	33,310	579	30,142	782	1,109	35,837
45 - 64	17,580	12,756	14,136	23,207	27,237	580	17,282	511	594	30,473
65 and over	6,768	2,024	6,296	7,815	10,850	188	6,625	127	215	9,962
AGE	21	22	23	24	25	26	27	28	29	
Total	45,995	27,000	96,000	2,999	22,995	37,911	32,000	59,000	21,002	
Under 15	16,567	9,446	29,057	897	7,346	10,614	10,396	19,907	7,636	
15 - 24	5,594	4,230	16,035	515	5,430	6,668	5,723	13,281	3,642	
25 - 44	13,710	6,992	22,628	704	4,475	8,433	8,047	13,538	5,352	
45 - 64	8,043	5,026	20,474	682	4,291	9,216	6,145	9,501	3,343	
65 and over	2,081	1,306	7,806	201	1,453	3,070	1,689	2,773	1,029	

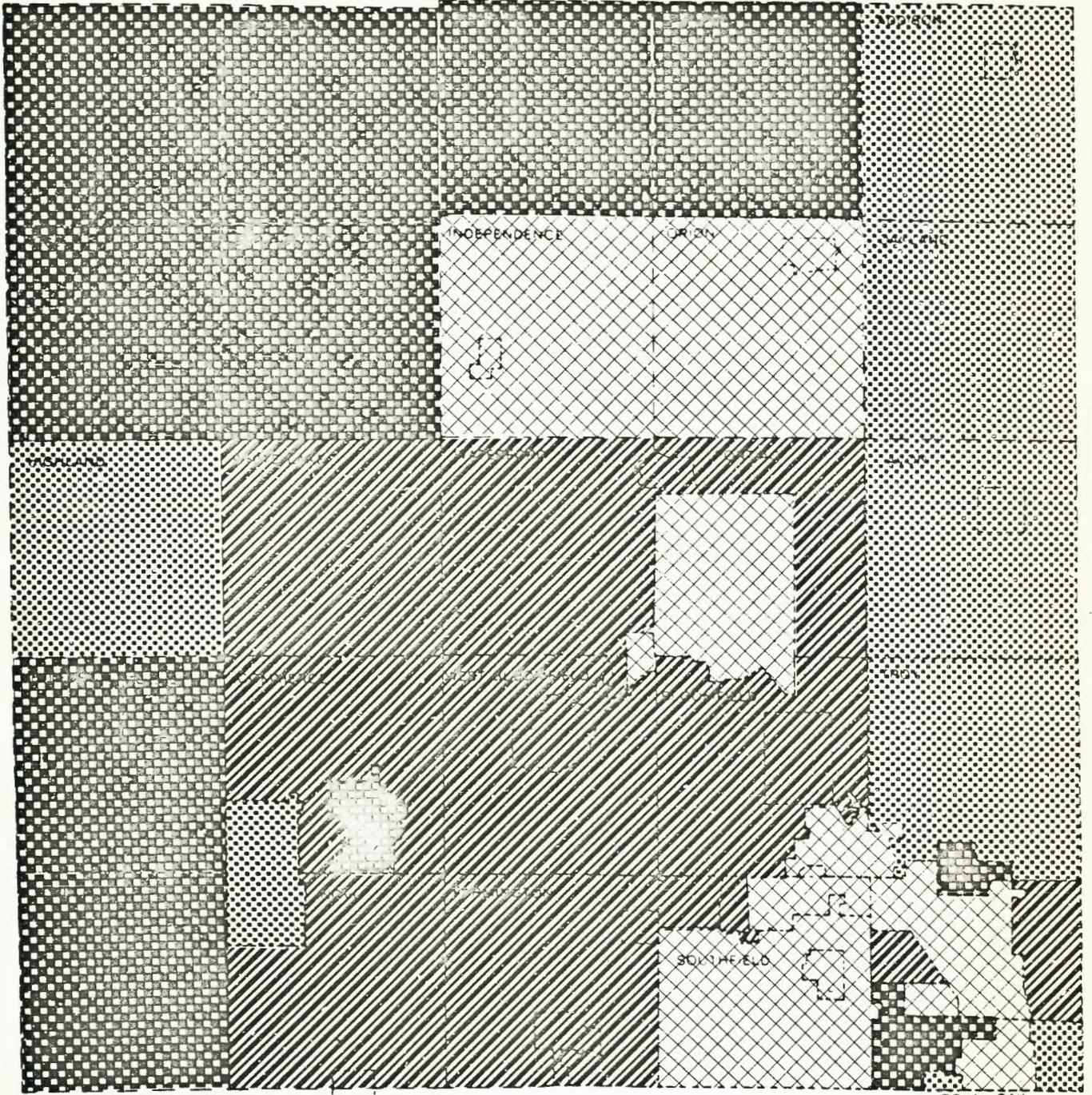
TABLE 16

AGE DISTRIBUTION BY PAZ'S - 1990

	Paz 1	2	3	4	5&6	7	8	9	10	
AGE										
Total	31,172	20,804	5,101	8,205	74,831	21,222	16,004	9,193	26,707	
Under 15	13,016	7,852	1,624	2,669	24,438	7,246	5,198	2,921	8,763	
15 - 24	3,206	2,549	897	1,474	12,549	3,429	2,905	1,492	4,689	
25 - 44	7,823	6,752	1,484	2,415	23,495	6,776	4,638	2,543	7,957	
45 - 64	5,095	2,082	670	995	8,264	2,229	1,860	1,482	3,181	
65 and over	2,032	1,569	426	652	6,085	1,542	1,403	755	2,117	
	11	12	13	14	15	16	17	18	19	20
AGE										
Total	109,986	91,157	104,961	279,786	142,931	2,399	139,992	3,099	4,201	151,999
Under 15	35,357	28,379	35,226	91,048	42,429	721	47,041	1,135	1,573	47,605
15 - 24	20,073	14,919	15,562	49,152	29,105	331	22,141	544	710	28,122
25 - 44	28,479	26,576	31,746	87,683	33,310	579	42,382	782	1,109	35,837
45 - 64	18,061	14,565	14,691	29,016	37,237	580	18,540	511	594	30,473
65 and over	8,016	6,718	7,736	22,887	10,850	188	9,888	127	215	9,962
	21	22	23	24	25	26	27	28	29	
AGE										
Total	45,995	27,000	96,000	2,999	22,995	38,001	32,000	59,000	21,002	
Under 15	16,567	9,446	29,057	897	7,346	10,614	10,396	19,907	7,636	
15 - 24	5,594	4,230	16,035	515	5,430	6,668	5,723	13,281	3,642	
25 - 44	13,710	6,992	22,628	704	4,475	8,433	8,047	13,538	5,352	
25 - 64	8,043	5,026	20,474	682	4,291	9,216	6,145	9,501	3,343	
65 and over	2,081	1,306	7,806	201	1,453	3,070	1,689	2,773	1,029	

OAKLAND COUNTY, MICHIGAN

PERCENT OF PERSONS UNDER 15 YEARS OF AGE - 1990



OAKLAND COUNTY PLANNING COMMISSION

ROYAL OAK
SCALE IN MILES
0 1 2 3 4

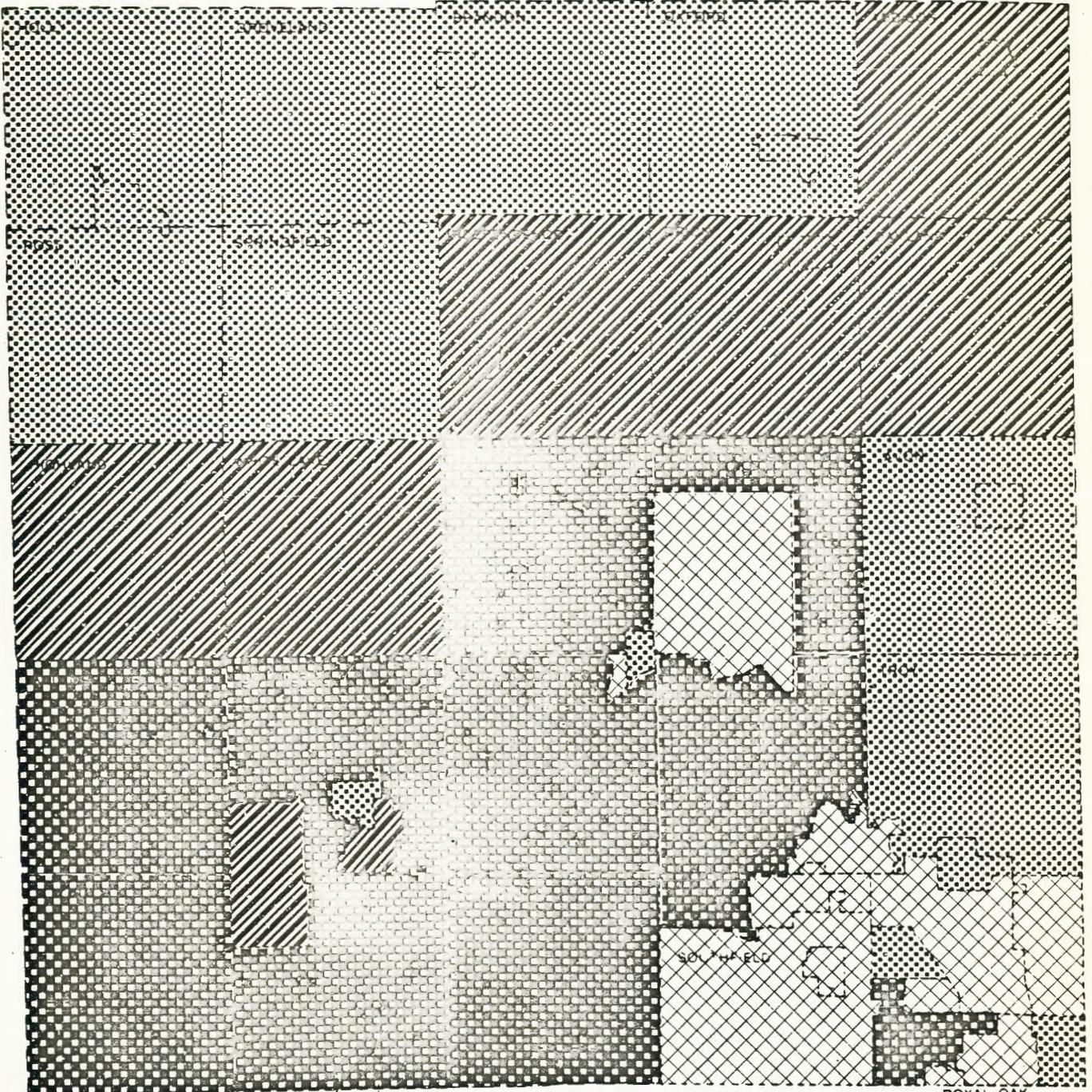
LEGEND

-  ...LOW
-  ...MODERATELY LOW
-  ...MODERATELY HIGH
-  ...HIGH

Figure 4

OAKLAND COUNTY, MICHIGAN

PERCENT OF PERSONS 25-44 YEARS OF AGE -1990



OAKLAND COUNTY PLANNING COMMISSION

ROYAL OAK
SCALE IN MILES
0 1 2 3 4

LEGEND

-  LOW
-  MODERATELY LOW
-  MODERATELY HIGH
-  HIGH

Figure 5

TABLE 17.
OCCUPATIONAL DISTRIBUTION BY PAZ'S - 1970

	Paz 1	2	3	4	5&6	7	8	9	10	
Male & Female Employed	6,519	3,560	618	876	3,174	2,436	1,520	534	2,677	
Professional, Tech. & Kindred Workers	564	430	54	116	305	334	128	54	288	
Managers, Officials, Propr's Inc. & Farm	646	387	87	135	163	270	122	23	159	
Clerical, Sales & Kindred Workers	1,234	612	82	174	557	474	326	113	457	
Craftsmen, Foremen & Kindred Workers	1,173	653	68	167	562	486	285	112	587	
Operatives & Kindred Workers	1,676	829	183	121	907	463	379	135	757	
Private Household Workers	162	62	13	28	44	51	25	9	24	
Service Workers, Exc. Private Hshold	439	281	336	44	260	166	130	37	188	
Laborers, except mine	389	211	54	64	175	124	66	29	115	
Total Employed	6,520	3,560	618	876	3,174	2,436	1,520	534	2,677	
	11	12	13	14	15	16	17	18	19	20
Male & Female Employed	14,072	7,498	8,146	20,266	15,440	763	16,983	794	1,097	41,787
Professional, Tech. & Kindred Workers	1,895	736	1,483	4,431	3,240	182	2,146	99	191	9,495
Managers, Officials, Propr's Inc. & Farm	1,230	482	885	4,124	2,726	127	1,226	47	75	5,554
Clerical, Sales & Kindred Workers	2,918	1,295	2,007	4,657	3,911	218	3,597	123	213	11,964
Craftsmen, Foremen and Kindred Workers	2,674	1,621	1,391	2,519	2,334	90	3,277	175	193	5,624
Operatives & Kindred Workers	2,953	1,950	1,092	1,809	1,645	64	3,762	199	263	4,205
Private Household Workers	276	163	127	601	238	---	283	14	23	745
Service Workers, Exc. Private Hshold	1,051	599	462	904	725	23	1,418	86	80	2,044
Laborers, except mine	617	221	227	477	229	16	563	34	31	777
Total Employed	14,072	7,498	8,146	20,266	15,440	763	16,983	794	1,097	41,787
	21	22	23	24	25	26	27	28	29	
Male & Female Employed	12,693	8,124	29,878	1,069	1,702	12,253	9,126	10,885	4,964	
Professional, Tech. & Kindred Workers	2,616	1,219	2,702	59	30	1,553	551	1,489	850	
Managers, Officials, Propr's Inc. & Farm	2,212	658	1,370	61	57	807	349	530	362	
Clerical, Sales & Kindred Workers	4,253	2,245	5,904	206	130	3,264	1,886	2,491	1,222	
Craftsmen, Foremen, & Kindred Workers	1,543	1,616	4,033	201	170	2,266	1,876	2,178	994	
Operatives & Kindred Workers	1,056	1,344	8,725	116	522	2,553	2,924	2,789	866	
Private Household Workers	193	106	1,077	27	211	134	116	107	111	
Service Workers, Exc. Private Hshld	382	482	3,373	109	258	846	806	627	335	
Laborers, except mine	122	207	1,357	42	184	363	278	351	141	
Total Employed	12,693	8,124	29,878	1,069	1,702	12,253	9,126	10,885	4,964	

TABLE 18

OCCUPATIONAL DISTRIBUTION BY PAZ'S 1980

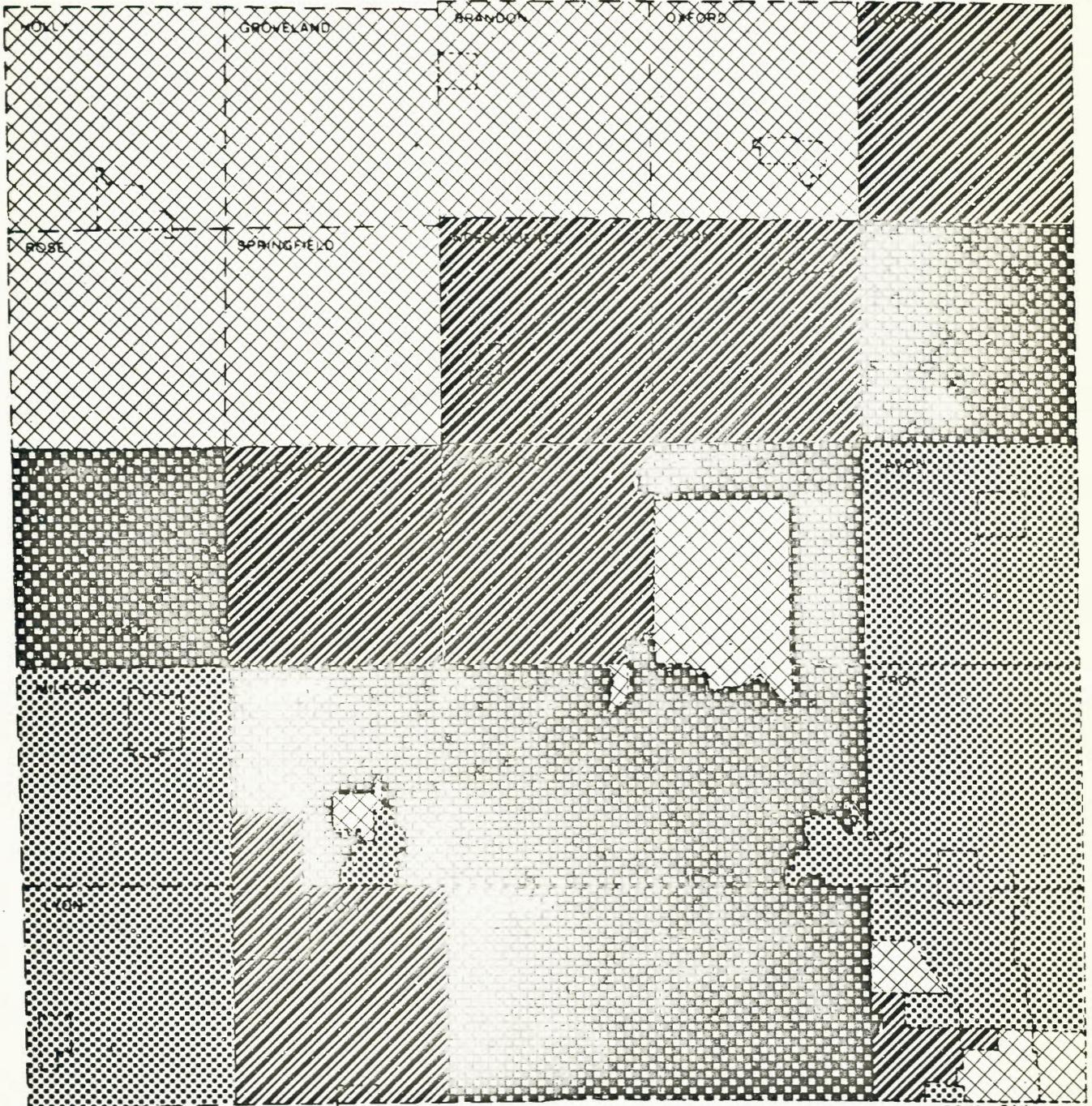
	Paz 1	2	3	4	5&6	7	8	9	10	
Professional, Tech. & Kindred Workers	990	943	191	493	4,762	841	647	1,001	1,232	
Managers, Officials, Propr's Inc. & Farm	787	565	134	230	1,594	435	299	328	478	
Clerical, Sales & Kindred Workers	1,560	1,022	191	393	3,858	853	735	816	1,193	
Craftsmen, Foremen & Kindred Workers	1,343	873	127	234	2,249	681	502	473	975	
Operatives & Kindred Workers	1,711	898	200	156	1,089	489	440	178	852	
Service Workers, Exc. Private Hshld	758	537	101	175	1,915	401	349	389	563	
Laborers exc. mine	392	216	55	67	188	126	70	32	122	
Total Employed	7,541	5,054	999	1,697	15,655	3,826	3,042	3,217	5,415	
	11	12	13	14	15	16	17	18	19	20
Professional, Tech. & Kindred Workers	8,036	2,976	9,434	11,849	17,730	213	9,470	161	253	14,538
Managers, Officials, Propr's Inc. & Farm	3,333	1,290	3,416	6,651	7,622	139	3,611	71	99	7,503
Clerical, Sales & Kindred Workers	7,776	3,163	7,844	10,494	15,224	246	9,099	175	268	16,479
Craftsmen, Foremen & Kindred Workers	5,264	2,648	4,356	5,620	8,320	106	6,117	207	225	8,192
Operatives & Kindred Workers	3,696	2,374	1,334	2,656	3,190	73	4,186	216	280	5,614
Service Workers, Exc. Private Hshld	3,628	1,626	3,451	4,275	6,347	35	4,369	125	128	4,819
Laborers exc. mine	672	252	245	540	346	17	594	35	32	881
Total Employed	32,405	14,329	30,080	42,085	58,779	829	37,446	993	1,285	58,026
	21	22	23	24	25	26	27	28	29	
Professional, Tech. & Kindred Workers	3,239	1,624	4,227	90	1,759	2,300	1,267	4,321	1,535	
Managers, Officials, Propr's Inc. & Farm	2,451	813	1,956	73	674	1,094	624	1,618	625	
Clerical, Sales & Kindred Workers	4,807	2,605	7,261	234	1,557	3,929	2,523	5,012	1,831	
Craftsmen, Foremen & Kindred Workers	1,858	1,821	4,805	217	949	2,644	2,238	3,612	1,341	
Operatives & Kindred Workers	1,229	1,456	9,149	125	825	2,760	3,123	3,576	1,056	
Service Workers, Exc. Private Hshld	824	750	5,060	148	1,132	1,279	1,208	1,867	720	
Laborers exc. mine	135	215	1,388	43	206	378	293	409	155	
Total Employed	14,543	9,284	33,846	930	7,102	14,384	11,276	20,415	7,263	

TABLE 19

OCCUPATIONAL DISTRIBUTION BY PAZ'S 1990

	Paz 1	2	3	4	5&6	7	8	9	10	
Professional, Tech. & Kindred Workers	11,462	1,888	506	917	9,381	2,363	1,749	1,001	2,859	
Managers, Officials, Propr's Inc. & Farm	921	933	223	379	2,905	867	612	328	940	
Clerical, Sales & Kindred Workers	1,854	1,609	387	719	6,730	1,799	1,420	816	2,204	
Craftsmen, Foremen & Kindred Workers	1,480	1,147	281	436	3,586	1,122	821	473	1,446	
Operatives and Kindred Workers	1,711	898	200	156	1,089	489	440	178	852	
Service Workers, Exc. Private Hshld	914	848	205	348	3,436	901	712	389	1,099	
Laborers exc. mine	392	216	55	67	188	126	70	32	122	
Total Employed	8,734	7,439	1,794	3,022	27,315	7,667	5,284	3,217	9,522	
	11	12	13	14	15	16	17	18	19	20
Professional, Tech. & Kindred Workers	10,030	10,534	11,743	36,096	17,730	213	14,718	161	253	14,538
Managers, Officials, Propr's Inc. & Farm	3,899	3,425	4,071	13,532	7,622	139	5,101	71	99	7,503
Clerical, Sales & Kindred Workers	9,016	7,862	9,280	25,570	15,224	246	12,362	178	268	16,479
Craftsmen, Foremen & Kindred Workers	5,841	4,836	5,025	12,640	8,320	106	7,637	207	225	8,192
Operatives & Kindred Workers	3,696	2,374	1,334	2,656	3,190	73	4,186	216	280	5,614
Service Workers, Exc. Private Hshld	4,285	4,114	4,211	12,259	6,347	35	6,097	125	128	4,819
Laborers exc. mine	672	252	245	540	346	17	594	35	32	881
Total Employed	37,439	33,407	35,909	103,293	58,779	829	50,695	993	1,285	58,026
	21	22	23	24	25	26	27	28	29	
Professional, Tech. & Kindred Workers	3,239	1,624	4,227	90	1,759	2,300	1,267	4,321	1,535	
Managers, Officials, Propr's Inc. & Farm	2,451	813	1,956	73	674	1,094	624	1,618	625	
Clerical, Sales & Kindred Workers	4,807	2,605	7,261	234	1,557	3,929	2,523	5,012	1,831	
Craftsmen, Foremen & Kindred Workers	1,858	1,821	4,805	217	949	2,644	2,238	3,612	1,341	
Operatives & Kindred Workers	1,229	1,456	9,149	125	825	2,760	3,123	3,576	1,056	
Service Workers, Exc. Private Hshld	824	750	5,060	148	1,132	1,279	1,208	1,867	720	
Laborers exc. mine	135	215	1,388	43	206	378	293	409	155	
Total Employed	14,543	9,284	33,846	930	7,102	14,384	11,276	20,415	7,263	

OAKLAND COUNTY, MICHIGAN POPULATION ANALYSIS ZONES BY ECONOMIC GROUPINGS - 1990



OAKLAND COUNTY PLANNING COMMISSION

ROYAL OAK
SCALE IN MILES
0 1 2 3 4

LEGEND

- LOW
- MODERATELY LOW
- MODERATELY HIGH
- HIGH

Figure 6

TABLE 20

NEW DWELLING UNITS BY DECADE BY PAZ

	Paz 1	2	3	4	5&6	7	8	9	10	
1960 - 1970	6,629	3,626	623	1,120	4,334	2,408	1,926	850	3,286	1
1970 - 1980	7,425	4,431	868	1,331	13,473	3,473	2,695	2,754	4,850	
1980 - 1990	8,230	6,136	1,504	2,419	22,124	6,313	4,720	1,239	7,876	
	11	12	13	14	15	16	17	18	19	20
1960 - 1970	19,858	8,329	9,915	25,127	20,935	680	17,280	878	1,190	43,059
1970 - 1980	29,042	10,509	26,946	36,826	42,814	719	31,737	928	1,257	45,509
1980 - 1990	32,448	24,779	30,973	82,596	42,183	708	41,298	914	1,239	44,838
	21	22	23	24	25	26	27	28	29	
1960 - 1970	13,031	7,649	27,195	9,348	5,099	10,764	9,065	16,714	5,949	
1970 - 1980	13,772	8,084	28,743	898	3,892	11,377	9,581	17,665	6,287	
1980 - 1990	13,569	7,965	28,319	885	3,835	11,209	9,440	17,404	6,195	

TABLE 21

AGE OF STRUCTURE BY PAZ

	Paz 1	2	3	4	5	6	7	8	9	10
YEAR										
1950 to March 1960	2,000	1,366	231	362	38	977	1,112	705	163	1,165
1940 - 1949	1,051	332	106	111	28	632	346	489	150	877
1939 or Earlier	3,622	1,491	358	328	38	972	782	802	359	1,260
Total	6,673	3,189	695	801	104	2,581	2,240	1,996	672	3,302
	11	12	13	14	15	16	17	18	19	20
YEAR										
1950 to March 1960	5,216	3,191	3,941	11,834	7,964	279	7,016	380	521	15,303
1940 - 1949	2,365	1,332	1,541	2,376	2,868	74	3,098	205	188	8,263
1939 or Earlier	3,940	2,705	2,550	2,865	1,767	299	3,823	166	332	10,280
Total	11,521	7,228	8,032	17,075	12,599	13,652	13,937	1,751	31,041	33,846
	21	22	23	24	25	26	27	28	29	
YEAR										
1950 to March 1960	8,467	1,676	5,545	68	230	1,582	2,667	6,423	2,487	
1940 - 1949	1,527	3,096	2,505	104	1,709	2,636	1,292	1,268	380	
1939 or Earlier	1,102	1,519	16,704	809	508	5,668	3,509	1,132	1,036	
Total	11,096	6,291	24,754	981	2,447	9,886	7,468	8,873	3,903	

VOLUME II PART 3

Population By Minor Civil Divisions - 1970, 1980, 1990

Table 21 subdivides each PAZ into its constituent minor civil divisions and shows the projected population for 1970, 1980 and 1990. Readers are cautioned not to place too much confidence in the results for the individual minor civil division, particularly if it displays a vast growth between 1970 and 1990. Also these minor civil divisions that exhibit this great growth potential will probably also change in governmental character as the population increases markedly. This is why the PAZ's were developed as the analytical units upon which this study is based. However, in the interest of practicality in planning the tabulation by minor civil division is shown in Table 21.

TABLE 22
 POPULATION OF OAKLAND COUNTY FOR
 1965, 1970, 1980 AND 1990 BY MINOR CIVIL DIVISION

	1965	1970	1980	1990
PAZ # 1	22,760	23,400	24,800	27,900
Brandon Township	3,680	3,780	3,980	4,580
Groveland Township	1,430	1,530	1,730	2,230
Rose Township	1,800	1,900	2,100	2,600
Oxford Township	6,559	6,690	6,990	7,490
Holly Township	6,300	6,400	6,700	7,200
Springfield Township	3,000	3,100	3,300	3,800
PAZ #2	11,670	12,800	14,800	20,800
Milford Twp. & Milford Vil.	6,330	6,930	7,930	11,000
Lyon Twp. & South Lyon City	5,340	5,870	6,870	9,800
PAZ # 3	1,870	2,200	2,900	5,100
Addison Twp & Leonard Vil.				
PAZ # 4	3,100	3,600	4,700	8,200
Oakland Township				
PAZ # 5 & 6	11,370	15,300	46,000	75,000
Lake Angelus	270	300	300	300
Pontiac Township	11,100	15,000	45,700	74,700
PAZ # 7	8,250	8,500	11,600	21,400
Novi Twp. & Northville				
PAZ # 8	5,740	6,800	9,000	16,400
Highland Township				
PAZ # 9	1,710	3,000	9,200	9,200
Wixom				
PAZ # 10	9,900	11,600	16,200	26,700
White Lake Township				
PAZ # 11	49,500	70,100	97,000	110,000
Troy	24,000	34,000	49,000	57,000
Avon Township	19,600	29,600	40,500	45,000
Rochester	5,900	6,500	7,500	8,000

	1965	1970	1980	1990
PAZ # 12	26,980	29,400	35,100	84,000
Independence Township	13,260	14,500	17,300	41,800
Orion Twp. & Lake Orion Vil	13,720	14,900	17,800	42,200
PAZ # 13	31,380	35,000	99,000	105,000
West Bloomfield Township	19,780	21,600	53,600	56,600
Commerce Township	11,600	13,400	45,400	48,400
PAZ # 14	82,200	88,700	123,000	280,000
Quakertown - Woodcreek Farms	1,400	2,000	3,000	4,000
Franklin - Bingham Farms	3,210	4,000	6,000	10,000
Bloomfield Twp. - Bloomfield Hills	36,150	39,750	53,000	124,000
Farmington Twp. - City of Farmington	41,400	42,950	61,000	142,000
PAZ # 15	63,400	73,900	143,000	143,000
Southfield	48,000	57,400	126,500	126,500
Beverly Hills	11,500	12,000	12,000	12,000
Lathrup Village	3,900	4,500	4,500	4,500
PAZ # 16	2,200	2,400	2,400	2,400
Sylvan Lake				
PAZ # 17	52,700	61,000	105,000	140,000
Waterford Township				
PAZ # 18	2,830	3,100	3,100	3,100
Wolverine Lake				
PAZ # 19	3,800	4,200	4,200	4,200
Walled Lake				
PAZ # 20	126,350	152,000	152,000	152,000
Birmingham	27,300	32,900	32,900	32,900
Huntington Woods	9,050	9,100	9,100	9,100
Royal Oak	90,000	110,000	110,000	110,000
PAZ # 21	42,340	46,000	46,000	46,000
Oak Park	38,500	42,200	42,200	42,200
Pleasant Ridge	3,840	3,800	3,800	3,800
PAZ # 22	23,600	27,000	27,000	27,000
Berkley				

	1965	1970	1980	1990
PAZ # 23 Pontiac	84,000	96,000	96,000	96,000
PAZ # 24 Keego Harbor	2,650	3,000	3,000	3,000
PAZ # 25 Royal Oak Township	11,900	13,000	13,000	13,000
PAZ # 26 Ferndale	31,900	38,000	38,000	38,000
PAZ # 27 Hazel Park	26,000	32,000	32,000	32,000
PAZ # 28 Madison Heights	35,000	59,000	59,000	59,000
PAZ # 29 Clawson	16,900	21,000	21,000	21,000

Final Summary

The entire study can be summed up in a few brief but extremely vital points. They are as follows:

(1) Oakland County will increase from its present 817,000 to 1,569,000 persons by 1990. (2) The increase will be more than quantitative, it will be qualitative. Oakland County will become increasing urban. That is it will be less a collection of bedroom suburbs, and more self sufficient, more city like, more dominating in the total metropolitan complex. There is an excellent chance that multiple dwelling units will play a more important role in the Countys housing picture. If so the County will become even more urban. (3) Oakland County will contain most of the higher income, better educated persons in the Metropolitan Ara. Thus the needs for particular environmental features which a highly educated population desires will become greater. (4) The greatest areas of growth will be the present day Farmington, Bloomfield, Southfield, Avon, West Bloomfield, Commerce and Waterford Townships. Growth will occur in both Northwest and Southeast of these areas but it will be comparatively minor. (5) The consequences of this vast growth will be enormous. The water, sewers, schools, roads, and other community facilities, necessary to serve this additional population must be planned now. In addition certain parts of the County, in the Southeast corner, and near some of the lakes, will be old and far below the undoubtedly higher standards of tomorrow. They will need to be renewed and replaced if the entire county is to remain visable. Inner cities have allowed blight and decay to almost overwhelm them. There is no reason for a county

such as Oakland which has a young and prosperous population, and will have an even younger and more prosperous population, to repeat the mistakes of the past. At the present time deteriorated areas are but minor spots in the County. Now is the time to do something about them. T

The above expressed points are few in number, yet understanding of each is crucially important if needs are to be met. This study has attempted to identify the future population and to comment on its probable needs. It attempts to measure, in terms of people, the gross demand for community facilities. What to do and how to do it is the job for planners, public officials administrative and elective, and for the public at large. The challenge is great, particularly in view of the fact that all of the elements for success are present.

APPENDIX B

Designation Of Population Analysis Zones

Introduction

Let us consider the following question: What is the smallest number of geographically contiguous areas that the 55 minor civil divisions comprising Oakland County can be grouped, and still maintain some degree of social and economic homogeneity? First, we must answer the question as to why we wish or need to group minor civil divisions at all. In making the projections of population characteristics to some future date it is desirable to project for as large an area as possible to reduce the percentage of error; also grouping of areas into smaller types is based on the assumption that areas that tend to be similar now will continue to be homogeneous in the future. Thus we wish to group the 55 minor civil divisions of Oakland County into a minimum number of areas to be called Population Analysis Zones (PAZ's) which will be internally homogeneous with regard to the social and economic characteristics of their resident populations. This appendix describes the method of making these groupings and designates the resultant PAZ's.

Method

Perhaps the most important factor in designating the grouping of minor civil divisions is the density of each. Density has two separate and independent meanings for our purposes. First knowing the present density gives us a very good idea of how much more an area can grow in numbers of persons, if we assume some standard of ultimate or eventual density. In other words we can calculate the ultimate residential capacity of an area. The second reason for knowing

density in designating PAZ's is that present density is an index to the style of life of an area; whether it is rural, urban, suburban, in character is largely dependent on its density.

In Volume I of this study the 55 minor civil divisions were classified by density (Table Figure) Figure shows Oakland County divided into density belts. The rationale for these particular density classifications are stated in the introduction to Volume II.

With the division into the three density belts attention can be turned to subdividing these density belts into logical groupings of minor civil divisions. What is meant by logical grouping? The desired result of this logical grouping is to combine the minor civil divisions into types of PAZ's which will represent distinctly different subcommunities which will be internally homogeneous. On what criteria should these PAZ's be based?

The first factor is fairly obvious. The civil divisions should be divided by economic level. The reason for this is that knowledge about economic level is of vast importance in understanding the community-present and future, so without question one of the factors on which PAZ's will be based will be economic level.

After the selection of economic level as one criteria, additional criteria is not so easily selected. In the first place it is not easy to find other factors which are important and yet independent of income. In other words we might suggest such things as education and occupation but past research has shown that these factors and many more are simply indexes of income. Later we shall verify this for Oakland County specifically.

Another factor often used in the past for distinguishing potential PAZ's is ethnic affiliation. However, our study has shown this is of little importance in Oakland County.

Another factor which would seem to have some consequence, if it is sufficiently independent of income, is the age of community. This factor would, in theory and in the practical sense as well, seem to be of importance to planners and public administrators.

Closely related to age of community is the age of persons comprising the community. Again, to be useful, it must be independent of both income and age of community.

An intriguing possibility for an additional factor lies in a measure of the degree to which each community (minor civil divisions) is oriented to the central city of Detroit. This factor can be measured for the first time with census data, since we have information on place of work.

Now there may be other factors which would be useful for constructing a typology of minor civil divisions, and combining the similar types into PAZ's, but the census does not have the necessary information. Separate studies should be encouraged. However, they can be of no use to us here.

The factors which will be analyzed here are as follows.

I. Economic Factor

Measures

- A. Median family income.
- B. Percent Craftsmen, foremen, etc., of all workers.
- C. Number school years completed.

- D. Percent professional, technical, managers, etc., of all workers.
- E. Fertility Ratio.
- F. Percent dwelling units in structure of all dwelling units .
- G. Percent females 14 years of age and over in labor force.

II. Age of persons

Measures

- A. Persons 25-44 percent of all persons 25 and over .
- B. Persons 45-64 percent of all persons 25 and over .
- C. Persons 65 and over percent of all persons 25 and over .

III. Age of Community

- A. Year moved in 1939 or earlier .
- B. Year built percent built 1950-1960 .
- C. Year built 1939 or earlier .

IV. Attachment to Detroit

- A. Percent of all workers, working in Detroit.
- B. Percent of all workers, working in Oakland County.

V. Density

- A. Persons per square mile.

The process of selecting the final factors involved the construction of a correlation matrix involving the inter-correlation of each variable with the other. This matrix is shown in Table B -1.

This matrix was analyzed with the following in mind: (1) If two or more variables were highly correlated with each other the one variable which correlated most highly with the other variables was considered the best index

of that particular characteristic. Let us use an example to illustrate. Persons 25-44 years of age, persons 45-64 years of age and persons 65 years of age and over were all indexes of age. Which one should we continue to use, since their inter-correlations were all very high, indicating that each was a good index of the other. Examining Table B -1 it will be seen that persons 25-44 correlated more highly than the other two age indicators with the other variables in the matrix. Thus persons 25-44 years of age was selected as the index of age of persons in the community. Similar decisions were made for the other multi-index variables: e.g. economic, and age of community. The reduced matrix which is much smaller but which has not sacrificed information is shown in Table B -2.

It will be noticed that density, which was included in the matrix, although it has been previously decided that density would be a basic variable, behaved independently thus justifying its selection. That is, it was almost totally uncorrelated with any other variable (Table B -1). This means that density must be considered in typing the communities (minor civil divisions).

There are just four factors left in the reduced matrix. These are: Economic level (measure-median family income), age of community (measure-percent of dwelling units built between 1950 and 1960), age of persons (measure-percent persons 25-44 years of age) and degree of attachment to Detroit (measure-percent of labor force who work in Detroit). A fifth variable-density (measure-persons per square mile) has already been selected for use.

Noticing that then four variables are moderately correlated with one

TABLE B-1

CORRELATION MATRIX FOR SIXTEEN VARIABLES, BY CENSUS TRACT OAKLAND COUNTY

	Density	Age 65+	Age 45-64	Age 25-44	Yr Mvd in-'39- Earlier	Year Built 50-60	Yr Blt 1939- Earlier	Crafts- men or Labor's	8 Yrs. Educ.	Fert- ility	1 Unit in Strctr.	Fem. 14 Labor	Md. Income	Work Oak.	Work Det.	Prof'l, Tech., Mgr.
Density	---	.0661	.0195	-.0444	.2844	-.2897	.2667	-.0275	.1096	-.0792	-.1619	.3168	.1621	-.1169	.2203	-.1056
Age 65 +	---	---	.4714	-.7911	.5909	-.5785	.7084	-.1014	.2166	-.5652	.0429	.0170	-.0132	.2850	-.2649	.0808
Age 45-64	---	---	---	-.9124	.4600	-.4643	.4295	-.2178	.0290	-.7248	.1963	.0931	.1886	.0446	.0235	.2499
Age 25-44	---	---	---	---	-.5839	.5835	-.6269	.1995	-.1214	.7997	-.1560	-.0727	-.1243	-.1631	.1056	-.2109
Yr. Mvd In '39-earl'r	---	---	---	---	---	-.8369	.8561	.1535	.4318	-.2514	-.0942	.4989	-.4483	.4079	-.4143	-.3731
Yr. Built 50-60	---	---	---	---	---	---	-.8871	-.2643	-.5346	.2555	.0857	-.5525	.5489	-.4597	.4754	.4642
Yr. Built '39-earl'r	---	---	---	---	---	---	---	.1798	.5320	-.2711	-.0683	.5026	-.4819	.5518	-.5548	-.3501
Craftsmen Completed 8 yrs. ed.	---	---	---	---	---	---	---	---	.5362	.3886	-.1405	.3032	-.5611	.3760	-.4489	-.5965
Fertility 1 Unit in Structure Females 14 Labor	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Median Fam. Inc.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Work in Oak, Co.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Work in Detroit	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE B.-2

CORRELATION MATRIX REDUCED TO FOUR VARIABLES

	Age of Persons	Year Housing Built	Income	Work in Detroit
Age of Persons	-----	.58	-.12	.11
Year Housing Built		-----	.55	.47
Income			-----	.61
Work in Detroit				-----

TABLE B.-3

Correlations Between Two Variables, Holding Third Variable Constant

Two Variables Examined	Variable Held Constant	Original Correlation	Correlation With Variable Constant
Age 25-44 & Yr. Blt. 50-60	Md. Income	.58	.77
Age 25-44 & Yr. Blt 50-60	Work in Detroit	.58	.62
Yr. Blt. 50-60 & Md. Income	Age 25-44	.54	.79
Yr. Blt. 50-60 & Md. Income	Work in Detroit	.54	.37
Md. Income & Age 25-44	Yr. Blt. 50-60	-.12	-.63
Md. Income & Age 25-44	Work in Detroit	-.12	-.22
Md. Income & Work in Detroit	Age 25-44	.60	.61
Md. Income & Work in Detroit	Yr. Blt. 50-60	.60	.47
Age 25-44 & Work in Detroit	Yr. Blt. 50-60	.10	-.23
Age 25-44 & Work in Detroit	Md. Income	.10	.21
Yr. Blt. 50-60 & Work in Detroit	Age 25-44	.47	.47
Yr. Blt. 50-60 & Work in Detroit	Md. Income	.47	.22

TABLE B-4

Correlations Between Two Variables, With Other Two Variables Held Constant

Two Variables Examined	Two Variables Constant	Original Correlation	Correlation Two Variables Constant
Persons Age & Structure Age	Income & Work in Detroit	.58	.75
Persons Age & Income	Work in Detroit & Structure Age	-.12	-.85
Persons Age & Work in Detroit	Structure Age & Income	.10	.78
Structure Age & Income	Persons Age & Work Detroit	.54	.71
Structure Age & Work Detroit	Persons Age & Income	.47	0
Income & Work in Detroit	Persons Age & Structure Age	.60	.44

another the next step is to calculate partial correlation coefficients (2nd order), holding one variable constant and then employing third order partial correlation coefficients holding two variables constant. Results are shown in Table B -3.

The principal contribution in the analysis of the partial correlations is that if we hold income and place of work constant we find that age of community and age of persons are highly correlated (.75). Also age of persons is highly correlated with income (.85) and with work in Detroit (.78). This means that one can be eliminated from further consideration.

If we eliminate age of persons and are reduced to three variables, we are left with the following.

TABLE B -5

Correlations Between Three Variables

	Year Built	Income	Work
Year Built	_____	.55	.47
Income		_____	.61
Work			_____

If we hold one of the three constant and examine the other two we find:

Two Variables Examined	Variable Held Constant	Partial Correlation	R ²
Year Built-Income	Work	.37	.14
Year Built-Income	Income	.22	.05
Income -Work	Year Built	.47	.22

We find that if the partial correlation is squared with work held constant

only 14 percent of the variance is accounted for by the association between Year Built and Income, and with Income held constant, only 5 percent of the variance is accounted for by the association between Work and Year Built, and if Year Built is held constant only 22 percent of the variance is accounted for by the association between Income and Work.

The three remaining variables (economic level, age of community, and degree of attachment to Detroit), need to be formed into a typology of minor civil divisions. How many types can be postulated? This depends on the number of categories into which we divide each variable. Suppose that each variable is broken into five divisions ranging from high to low. Then there would be 5 "Income" groupings, 5 "Age of Community" groupings and 5 "Attachment to Detroit" groupings or a total of 125 different types possible ($5 \times 5 \times 5 = 125$). In view of the fact that there were only 55 minor civil divisions, this seemed an excessive number of possible type categories. A division into three groups, high moderate and low for each variable, seemed more feasible, this was done and the 55 minor civil divisions were arranged in rank order, and divided into three equal groups. Each minor civil division then could be classified as high moderate or low with respect to the three variables.

As a final step the 55 minor civil divisions were classified into a typology of PAZ's within the three density belts. The result is shown in the following table:

Table B.-6

Low Density (0-999 persons per square mile)

PAZ # 1

Low Income - Low Housing - Low Detroit Attachment

Rose Township

Groveland Township

Brandon Township

Low Income - Moderate Housing - Low Detroit Attachment

Oxford Township and Oxford Village

Holly Township and Holly Village

Springfield Township

PAZ # 2

Moderate Income - Low Housing - Moderate Detroit Attachment

Milford Township and Milford Village

Low Income - Moderate Housing - Low Detroit Attachment

Lyon Township and South Lyon Village

PAZ # 3

Moderate Income - Low Housing - Moderate Detroit Attachment

Addison Township and Leonard Village

PAZ # 4

High Income - Moderate Housing - Moderate Detroit Attachment

Oakland Township

PAZ # 5

Lake Angelus

High Income - Moderate Housing - Moderate Detroit Attachment

PAZ # 6

Low Income - Moderate Housing - Low Detroit Attachment

Pontiac Township

PAZ # 7

Moderate Income - Moderate Housing - Moderate Detroit Attachment

Novi Township and Northville

PAZ # 8

Low Income - Moderate Housing - Moderate Detroit Attachment

Highland Township

PAZ # 9

Low Income - Low Housing - Moderate Detroit Attachment

Wixom

PAZ # 10

Moderate Income - Moderate Housing - Moderate Detroit Attachment

White Lake Township

PAZ # 11

Moderate Income - High Housing - Moderate Detroit Attachment

Troy

PAZ # 12

Moderate Income - High Housing - Low Detroit Attachment

Independence Township

Moderate Income - Moderate Housing - Low Detroit Attachment

Orion Township and Lake Orion Village

PAZ # 13

High Income - High Housing - Moderate Detroit Attachment

West Bloomfield Township**High Income - Moderate Housing - Moderate Detroit Attachment****Commerce Township****PAZ #14****High Income - High Housing - High Detroit Attachment****Quakertown - Woodcreek Farms****Franklin - Bingham Farms****Bloomfield Township - Bloomfield Hills****Farmington Township - City of Farmington****Moderate Density (1000 - 3999 persons per square mile)****PAZ # 15****High Income - High Housing - High Detroit Attachment****Southfield****Beverly Hills****Lathrup Village****PAZ #16****High Income - Moderate Housing - Moderate Detroit Attachment****Sylvan Lake****PAZ # 17****Moderate Income - High Housing - Low Detroit Attachment****Waterford Township****PAZ # 18****Moderate Income - High Housing - Moderate Detroit Attachment****Wolverine Lake**

PAZ # 19

Low Income - High Housing - Moderate Detroit Attachment

Walled Lake

High Density (4000 persons per square mile and over)

PAZ # 20

High Income - Moderate Age - High Detroit Attachment

Birmingham

Royal Oak

Huntington Woods

PAZ # 21

High Income - Low Housing - High Detroit Attachment

Oak Park

Pleasant Ridge

PAZ #22

Moderate Income - Low Housing - High Detroit Attachment

Berkley

PAZ #23

Low Income - Low Housing - Low Detroit Attachment

Pontiac

PAZ # 24

Low Income - Low Housing - Low Detroit Attachment

Keego Harbor

PAZ # 25

Low Income - Low Housing - High Detroit Attachment

Royal Oak Township

PAZ # 26

Moderate Income - Low Housing - High Detroit Attachment

Ferndale

PAZ # 27

Moderate Income - Moderate Housing - High Detroit Attachment

Hazel Park

PAZ # 28

Moderate Income - High Housing - High Detroit Attachment

Madison Heights

PAZ # 29

Moderate Income - High Housing - Moderate Detroit Attachment

Clawson

Table B-8 summarizes the numbers of civil divisions in each of the combinations. Of the 27 theoretically possible combinations 20 actually appeared. It is evident that great heterogeneity was characteristic of the minor civil divisions in Oakland County. Otherwise the groupings would have been confined to a few types.

TABLE B-8

Income	Housing	Place of Work	Number of Communities
1	1	1	9
1	1	2	2
1	2	1	3
1	2	2	4
1	3	1	2
2	1	2	4
2	1	3	2
2	2	2	3
2	2	3	1
2	3	1	1
2	3	2	2
2	3	3	2
2	1	1	1
2	2	1	1
3	1	2	1
3	2	2	1
3	2	3	5
3	3	1	1
3	3	2	1
3	3	3	8

APPENDIX C

Population Projection: Oakland County 1965-1990

The problem of projecting Oakland County's population to the year 1990 involves unique aspects not usually encountered in making population projections. Its uniqueness stems from the fact that Oakland County is not an autonomous economic and social entity, but is a particular portion abstracted from the totality of the three counties comprising the Detroit Standard Metropolitan Statistical Area. In many ways Oakland County's present and future existence is tied to the SMSA, but it is also true that Oakland County's future, particularly its prospects for future population growth are relatively independent of any other area. Evaluation of this selective dependence and independence is essential to a reliable population projection. This means that common and simple methods of projection cannot be applied to Oakland County with any validity. In fact they yield absurd results.

A rather simple illustration of the projection problem generated by the situation of Oakland County is shown in Figure 1. Examining the long time

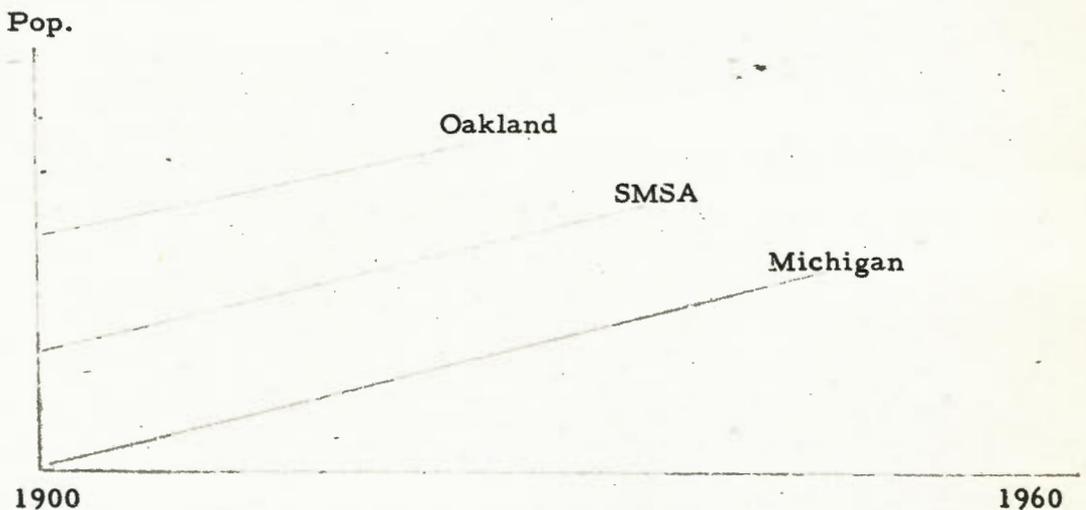


FIGURE 1

growth of Oakland County, the SMSA, and Michigan, it can be seen that while the two larger units have slowed down considerably in their rate of growth, Oakland County has an significantly different growth pattern. It is not only growing at a faster rate than either the state or the Metropolitan Area but its rate of growth seems to be speeding up. Consequently, while we may examine past trends as a matter of interest, looking at the past will yield few clues to the future.

To project the population of Oakland County properly, the factors contributing to population growth must be identified and evaluated. Then these factors must be combined, taking into account the interactive effect of one upon the other. This method is called the component method. What are the components of population change? That is, by what means do people enter or leave a particular population. The basic relationship is demonstrated on the following equation:

$$P_1 = B - D + M_1 - M_0 + P_0$$

P_1 = population in some future year B = births M_1 = in-migration

P_0 = present population D = deaths M_0 = out-migration

If we can evaluate each of these factors, and combine them properly we will have projected the population of an area. The remainder of this discussion will consist of the evaluation of each of the components, and their combination into the final projection of Oakland County's population to the year 1990.

The Death Component

The incidence of future mortality is perhaps the easiest component to

estimate. This is because present mortality rates are relatively stable and likely to remain so in the immediate future. Let us examine mortality rates in Oakland County to see if the above statement is unjustified. Table C - 1 shows the course of the crude death rate in Oakland County in the past 25 years. The course of the trend is clearly downward, but the rate of decline has decreased. The crude death rate has limited utility as a measure of mortality because of its seriously affected by changes in the age composition of the population. For this reason life tables, which provide a true mortality measure, have been especially prepared for this study. Table C - 1 summarizes the mortality pattern in Oakland County, and compares it to other areas. The measure, length of life at birth or life expectancy, used here is a summary measure of the true force of mortality. It is defined as the number of years that an infant born on the indicated dates may be expected to live on the average.

TABLE C-1

Years of Life Expected at Birth By Sex, Oakland County
and Selected Areas, For Various Years

Sex and Year	AREA				
	Oakland County	United States ¹ (white pop.)	Detroit Standard Metropolitan	State of Michigan ²	City of Detroit ³ (white pop.)
Males					
1939-1941	64.93	62.81	64.27	N. A.	N. A.
1949-1951	68.59	66.31	66.38	66.16	65.96
1959-1961	69.47	66.80	66.86	N. A.	65.82
Females					
1939-1941	68.36	67.29	66.81	N. A.	N. A.
1949-1951	72.59	72.03	71.17	71.21	71.60
1959-1961	75.34	74.19	72.06	N. A.	73.31

¹ United States Life Tables 1959-1961. Volume 1, No. 1. United States Department of Health, Education and Welfare, Public Health Service Publication No. 1252.

² Michigan School and College Enrollment

³ Special Research Done by Author

Mortality in Oakland County is lower than any of the relevant areas with which it is compared. It is particularly interesting to observe that the average length of life in Oakland County is as high as any place in the world.¹ It should be further noted that the Oakland County life tables were calculated on the basis of the total population, and consequently include some incidence of Negro mortality. Since the majority of Negroes do not have a strong economic position, and this is certainly true in Oakland County, their life expectancy is substantially lower than white persons living in the same area. Thus if Oakland County life tables were confined to the white population, the life expectancy would be even higher, easily qualifying as one of the highest, if not the highest extent today. The reason for this is clear enough. Oakland County happens to be one of the wealthiest counties in the United States, and one of the things that can be purchased with this wealth is life itself.

While the above discussion makes splendid fuel for local chambers of commerce, its purpose was to make an explicit point. Mortality rates in Oakland County are already so low, and life expectancy so high, that only trivial improvement can be expected until a major breakthrough occurs in the prevention, treatment and cure of heart diseases and cancer. While the chances are very good that just this will happen before the end of the century it is not on the immediate horizon.

This contention is borne out by examining changes in life expectancy in

¹ The total United States does not have the highest life expectancies. For example, life expectancy at birth for females in Norway in 1960 was 75.6 years; Netherlands 74.8 years; Sweden 75.4 years.

the past few years in those areas where life expectancy is already high. For example, in the total United States white females: 1955-59, 73.7 years; 1960, 74.1 years; 1961, 74.5 years; 1962, 74.4 years. Or Norway; 1955-59, 75.4 years; 1960, 75.6 years.

In view of this evidence the obvious assumption for predicted mortality is already so low that only trivial improvements can be expected during most of the next twenty-five years. Hence, the current mortality rates as expressed in the 1959-61 Oakland County life tables will serve as the basis of calculating future mortality rates in Oakland County.

The Birth Component

Birth rates are far more difficult to predict than mortality rates. Given the present state of our society there is much more instability in birth rates. This is confirmed by Table B-6. Most important there is no long time trend in the birth rate. It rose from 1940 to 1943, fell until 1945 (understandable), rose sharply from 1946 to 1948, rose somewhat during the 1950's and then declined again in the late 1950's, with rather sharp declines in the early 1960's. Now where will it go? This is an engrossing question and the only thing we know for certain is not comforting the "experts" invariably have been wrong. However, recent predictions have solved the problem of possible error in birth forecasting in a manner of speaking. They are based on a range of assumptions so varied that they include almost every logical possibility, and as a consequence are almost useless.

For example, the latest projections of the Census Bureau ¹ gives fertility rate projections to 1985. Four series of projections are shown. The high fertility series is at the 125 level, ² and the lowest series is at the 90 level. In addition there are two more series, intermediate to these extremes. Looking at actual Oakland County data we see that in 1940 the general fertility rate in this county was 90, in 1940, in 1950 it was 124, and 1960 it was 122.

TABLE C-3

General Fertility Rate (Births per 1,000 women age 15-44). For Oakland County Detroit SMSA and the United States, 1939, 1941, 1949-1951, and 1959-1961.

Year	Oakland County	Detroit SMSA	United States
1939-1941	90.1	74.0	79.9
1949-1951	124.5	110.1	106.2
1959-1961	121.9	118.1	120.1

The range of possibilities covered by the United States projections is so broad that it coincides (quite accidentally) with the complete range of fertility actually exhibited by Oakland County in the past twenty years. In other words, according to the Census Bureau, future fertility behavior will have a range so

1 United States Bureau of Census: Projections of the Population of the United States by Age and Sex to 1985, Current Population Reports. Series p. 25, No. 279 February 4, 1964.

2 The measure of fertility used here is the general fertility rate which is defined as: The total number of live births (per year) per 1,000 women age 15-44 years. Thus the 125 given above means 125 births per 1,000 women 15-44 years.

wide that it will include any and all of the actual fertility behavior exhibited in the past twenty years. This still leaves the basic question unanswered. One way to solve this problem would be to prepare four separate fertility forecasts for Oakland County, but when it is realized that the other population components must also have contingencies, the number of possibilities soon becomes wieldy. That is, the final results of the projection being made here could be presented in terms of eight or sixteen possibilities, and surely at least one of these many contingencies would become fact. However, we don't know which one, and for this reason inclusion of too many possible situations not only makes comprehension difficult, but is downright useless in terms of practical usage in planning. A choice must be made at this time as to the most likely fertility contingency.

Fortunately the choice is quite easy in this case. If we assume that during the twenty-five years between 1965 and 1990 no major shifts in family size considerations will take place, then the fertility pattern of the past twenty years will provide a suitable model. That is, since 1940 the family size of two, three or four children has governed fertility behavior. Persons, upon entering the married state generally look to families of between two and four children. Granted that some have five, six or seven children, but this is compensated by those who have none or one child. It is difficult to see how this fundamental pattern can change drastically in the next twenty-five years. The yearly, or even a five year birth rate is another story. It may fluctuate with economic conditions or other factors not yet clearly known. We can assume that over these next twenty-five years many fluctuations in the birth

rate will occur; it will rise, it will fall, and just when these oscillations will occur cannot be told. However, it will approach an average based on a family which is not greatly different than at present. By averaging the fertility behavior of the past twenty years we can approximate the average fertility behavior of the next twenty years. This frees us from dependence on short range up swings and downswings in fertility. Thus with any five year period there may be a certain amount of error, but over the entire twenty-five year period these errors will naturally be compensated. As an example let us suppose that during 1970-1974 economic conditions are not good, and that as a consequence people have fewer births. This does not necessarily mean permanently smaller families, for with a rise in economic conditions after 1975, married couples may decide to have the child which they originally postponed.

The simplest, and seemingly most logical assumption concerning future births can be derived by taking the average general fertility rate of the past twenty years (90.1 + 124.5 births) per 1,000 women age 15-44 years as the average fertility level in this county over the next twenty-five years. Let us examine this rate and see where it fits into the broader picture. As stated before, the Census Bureau's projections range between 125 and 90 births, so the rate 112 is medium high, in fact coinciding with the Bureau's second highest fertility assumption. This means that over the next twenty-five years, births should average somewhat below the very high birth rate levels characteristic of the early 1950's, but still quite high in terms of population growth and increase. In the past, Oakland County has had a high birth rate

relative to the total United States, and the Detroit SMSA, (see Table C 3), and this projected level is continued in the projected rates.

Migration In and Out of the Detroit Standard Metropolitan Area

As stated previously, Oakland County is only a portion of a social and economic whole. That is, people who come to live in Oakland County in response to job opportunities, customarily evaluate these job opportunities in terms of the whole metropolitan area rather than just Oakland County. This is not to say that in certain cases persons do not come to the Detroit Metropolitan Area in response to a particular job opportunity in Oakland County, but in most instances it is impossible to separate the distinct job opportunities in Oakland County from the general economic opportunities provided by the total Detroit Metropolitan Area. Also, the factor of work-residence separation cannot be disentangled. That is, a person may come to the area in response to a job opportunity in the City of Detroit and at the same time live in Oakland County. Of course the opposite job-residence situation prevails as well.

This then is the factor which makes population projection of this one county (Oakland) especially complex. In providing a solution to this the first step is to further break down the in and out migration factors (M_1 and M_0) into two further components. M_1 can be divided into M_{1a} and M_{1b} where M_{1a} represents migration into Oakland County from elsewhere in the Detroit Standard Metropolitan Area (Wayne and Macomb Counties), and M_{1b} represents migration into the Standard Metropolitan Area (including Oakland County) from elsewhere in the United States. Similarly M_0 is broken in

M_{0A} and M_{0B} which represents out-migration from Oakland County into the remainder of the Detroit area and out-migration from the remainder of the Detroit area into Oakland County.

External Migration (M_{0A} and M_{0B})

For reasons mentioned earlier there is no way to determine the migration to Oakland County from outside the three county Detroit SMSA. Yet there is little doubt that the future population of Oakland will be affected by the external migration component. However, this component must be determined on a metropolitan area-wide basis, with Oakland County's share of this migration calculated as a final step.

The Detroit Metropolitan Area has in the past been one of the places in the United States where tens of thousands of migrants from the rural United States and Europe have located. The growth of the Detroit area, until recently, has been very rapid. This growth has been due to the rapid expansion of the great automobile industry. This industrial expansion was the source of job opportunity that attracted the migrants to the Detroit area. There are at least two reasons why this growth must slow down. First, the basic productive facilities are already established, and while future expansion can be expected and indeed will occur, the increase in jobs can be only incremental. That is, if it takes one hundred thousand workers to produce one million cars, it takes far less than two hundred thousand workers to produce two million cars. Second, and closely related, is the continuing automation, which has to a large extent done away with the mass of unskilled jobs. Whether it be fast or slow automation will eventually decrease the

number of persons needed to produce a given value of automobile product. While the automobile industry is predominant in Detroit and it is a symbol of its economy, the automobile industry actually employs a small portion of the total labor force. Thus the attempts to characterize Detroit's economy in terms of the automobile industry yield a spurious generalization. Other industries and activities also are factors in the Detroit economy, and contribute to its growth. However the factors applicable to the automobile industry, as described above, are equally applicable to any other industrial or manufacturing process that might locate in Detroit in the future. The chances are great that jobs, and plenty of jobs will be located in the next twenty-five years, but the chances that these will be mass jobs by the tens of thousands are practically nil. Since 1940 many new jobs have been created by our unceasing technological progress. Space technology, electronics, chemicals, electrical equipment, to name just a few, have all expanded but none have been characterized by the mass migrations characteristics of Detroit's growth in automobile jobs, or Pittsburgh's growth in steel jobs.

The above argument is somewhat subjective in nature, and probably can be rebutted by anyone who wished to take another view of the subject. However, we have at our command data which further make argument unnecessary, and point out, with great clarity, the probabilities with respect to future migration to the Detroit SMSA.

Table C-4 presents a picture of the relationship between projected job opportunities and projected size of the labor force. Column 1 gives the projected size of the labor force in the Detroit SMSA by five year intervals.

This projection was based on the following assumptions¹: (a) A set of future birth and death rates similar to those described here. (b) No in or out migration from or to Detroit SMSA. (c) A set of labor force participation rates based on the 1960 labor force participation rates as given by the census. In essence this says: Given the present population in the absence of migration, and further assuming the same proportions of persons in each age and sex grouping are employed as in 1960, the figures shown for each five year period represents the number of jobs necessary to maintain level of employment similar to 1960. Thus column 1 states the number of jobs necessary to assure employment of the existing population. The remaining columns of Table C-4 show various projected employment levels under different assumptions. Column 2 represents a growth rate of 1% and most closely approximates the actual growth in Detroit in the recent years. This growth rate means that as the years go by the number of persons needing jobs (Col. 1) will seriously outstep the job opportunities. The Detroit economy will have to better than this or it will face unemployment and/or possible out-migration. Column 3 is a calculated growth rate of 1 1/2% and represents a projection of the growth rate of the United States as a whole. Even at this rate the number of persons needing jobs is greater than the projected number of jobs. Column 4 represents growth rate of 1 3/4%, a rate far greater than that for the United States as a whole. Even this rate fails

¹ For a full exploration of these assumptions see the Future Population of the Detroit Metropolitan Area, Mayer, A. J. and Hoult, Thomas F. United Community Services, Detroit, November 1963.

TABLE C-4

Projected Number of Persons in the Labor Force and Projected
Employment Levels Detroit Standard Metropolitan
Area ²

Year	Col. 1	Col. 2	Col. 3	Col. 4	Actual Employment
	Annual Growth Rate				
		1%	1½%	1 3/4%	
1959	----	1,273.9	1,280.2	1,284.0	1,370.3
1960	1440	1,286.5	1,299.1	1,305.4	1,321.6
1961	----	1,299.1	1,319.3	1,328.1	1,247.8
1962	----	1,313.0	1,338.2	1,352.1	1,281.6
1963	----	1,325.6	1,358.4	1,376.1	1,323.1
1964	----	1,339.5	1,378.6	1,400.0	1,372.4
1970	1621	1,421.5	1,508.5	1,552.7	-----
1975	1755	1,493.8	1,624.6	1,693.9	1,700.0 ¹
1980	1870	1,570.3	1,750.7	1,847.8	1,850.0 ¹
1985	----	1,649.8	1,885.6	2,014.3	-----
1990	----	1,734.3	2,030.7	2,197.2	-----

¹Thompson, W. R., The Size of the Detroit Economy 1960-1980. (Unpublished monograph prepared for City of Detroit. A summary of this report is contained in Michigan in the 1970's: An Economic Forecast, Bureau of Business Research, University of Michigan, 1965, Chapter VI.)

²All data in this table with the exception of Col. 1 came from the forthcoming economic study of Oakland County under the direction of C. J. Austermler.

to provide as many jobs as will be necessary according to the population projections. Column 5 is an independent projection made by a somewhat different method, but its results confirm our other findings.

In summary it can be seen that in the next fifteen to twenty years the chances of job opportunities in Detroit becoming greater than the population available to fill those jobs, is extremely remote, thus making the chances for further in-migration very slight. More likely persons wanting work will undoubtedly be more numerous than available job opportunities. This leads to the possibility of out-migration from Detroit in search of job opportunities elsewhere. There is no question that such a situation is a realistic possibility. However, there is one reason why it is not being considered as a contingent situation here. Granting that it is possible that the number of jobs necessary to employ the future population will be created in Detroit, it is no more likely that other metropolitan areas will create sufficient job opportunities to employ their populations. It must be remembered, that the larger number of persons reach the age of entrance into the labor force during the 1960's, 1970's and 1980's are a consequence of the high birth rates which occurred after World War II. This was a nationwide phenomenon. Thus every city and metropolitan area throughout the entire United States is experiencing the same spurt of growth, and the same necessity of creating local job opportunities. Certainly, the economy will be concentrated in particular urban centers who will cry for migrants. These migrants will come not just from Detroit, but they will come from Cleveland and Baltimore and Pittsburgh and Chicago and New York, for each of these centers

will be in the same situation. Put another way, if Detroit cannot provide all the jobs necessary, people will still tend to stay here because almost every metropolitan area will be in the same position. Because of this the contingency of out-migration from Detroit is not being considered in the projection made here. How will this future employment problem be solved? The answer lies in the potential change in labor force participation rates, and the very structure of the labor force itself. Persons can stay in school later thus delaying their entrance into the labor force. Persons can retire earlier. Women can be forced out of the labor force if men are available for the positions. Above all, by shortening the work week or the work day, the work can be spread. All of these contingencies seem to be very realistic, as outlets for what presently appears to be a "surplus" of future job seekers. Taken together they seem much more likely solutions than out-migration.

In summary then, the external migration component assumption used here will be considered zero, with neither a net in or out migration accuracy between the present and 1990.

The Internal Migration Component (M_{1A} and M_{1B})

Internal migration in this means inter-area migration between the various parts of the Detroit SMSA. The particular focus of interest is, of course, the relationship between Oakland County and the other parts of the SMSA, particularly the city of Detroit. While assumptions concerning the other components in the equation could be based on past trends and assumptions of continuing regularity (i. e., death rates are at a low point and will stay that

way, two, three and four child families will prevail, migration is related to the number of jobs) no such easy answer can be found for the internal migration component. This is shown in Table C-5.

TABLE C-5

Number of Persons, and Percent of Total SMSA,
By Major Subdivisions 1940, 1950, 1960

	1940		1950		1960	
	Number	Percent	Number	Percent	Number	Percent
Total Detroit SMSA	2,377,329	100.0	3,016,197	100.0	3,762,360	100.0
Macomb County	107,638	4.5	184,961	6.1	405,804	10.8
Oakland County	254,068	10.7	396,001	13.1	690,259	18.3
City of Detroit	1,623,452	68.3	1,849,568	61.3	1,670,144	44.4
Remainder Wayne County	392,171	16.5	585,667	19.5	996,153	26.5

Inspection of Table B-5 reveals that with each succeeding decade the city of Detroit comprises a smaller portion of the total SMSA. This is the long-time and now familiar process of suburbanization or decentralization as it is sometime called. The past trend, as shown here, cannot be projected over the next twenty-five years to 1990. That is whatever forces contributed to these past suburbanization trends must be changed or at least modified before 1990. Let us see why, by testing a number of assumptions based on past trends. First we must assume, as has been shown already, that it is highly unlikely that the Detroit SMSA will receive any appreciable net migration from outside the area in the next twenty years. The total population in this case will be about 5,100,000 persons.¹ How will this

¹ See Mayer and Hoult

population be distributed? Assumption # 1: That suburbanization will continue at the same rate as it did in the 1950-1960 decade. If this occurs, the central cities share of the 5.1 million persons will decline as follows; in 1950 the City of Detroit contained 61 percent of the total, and by 1960 this had dropped to 44 percent, a loss of 17 percent in ten years. At this same rate by 1970 the City of Detroit will have declined to 27 percent of the total, and by 1980 to 10 percent or about 500,000 persons. This is not reasonable.

Assumption #2 that the suburbanization trend in Assumption #1 represents a unique period, and a more valid measure can be obtained by extending the base period to 20 years, i. e., 1940-1960. In this period the central cities share declined from 68 percent in 1940 to 44 percent in 1960, a loss of 24 percent. Extrapolating this trend yields 44 percent less 24 percent, or a net of 20 percent (about one million persons) by 1980. While this is a very small population allocated to the city of Detroit, its at least within reason. However, the target date for our predictions here is 1990, not 1980, and this assumption cannot hold up the extra ten years, for another 12 percent will reduce Detroit to 8 percent by 1990. This is not reasonable. It should be noted that extending assumption #1 to 1990 was not even ventured because it would have yielded a negative population for Detroit.

Two assumptions have been tried, and they do not produce answers that stand the test of reason. Perhaps another approach is needed. One way would be to invent modifications of these trends based mainly on a need for a reasonable answer. This could be done, but it would be of little scientific worth for it would be pure expediency. Another way is to use entirely

different data and see what kind of answers it produces. The 1960 census included a considerable amount of data on migration between 1955 and 1960. Perhaps this trend can be extrapolated.

The 1960 census gave the actual inter-metropolitan area migration figures. They were as follows: Between 1955 and 1960 the city of Detroit lost 267,830 persons, of whom 68,021 moved to Macomb County; 63,436 moved to Oakland County; and 136,373 moved to Wayne County outside of Detroit. During the same period 49,023 persons moved to the City of Detroit from these places. Thus the net migration was a loss of 218,807 persons from the central city to the outlying areas during the five year period. If this figure is extrapolated it amounts to 437,614 persons per decade, or 1,312,842 persons over the 1960-1990 period. However, a natural increase would be supplementing the central city population at the same time. If the 1950-1960 rate of natural increase is applied, the population figures for Detroit in 1990 would be 833,280 persons. While this is not beyond reason, as were some of the figures derived from other assumptions, it is a devastatingly low figure. Why is it low? Because it means that over one-half of the present day existing dwelling units in Detroit would either be vacant or torn down. This would not appear to be in accord with economic reality.

Another approach would hinge on the question of whether the 1955-1960 period represented a short term phenomenon, and that migration from the central city was for less than this if a longer period is considered. While the same type of migration figures are not available for years before 1955, certain indexes of migration can be ascertained. For example, in 1950 the

City of Detroit's population was 1,849,568. The natural increase obtained by subtracting deaths from births was 276,047. The 1960 population was 1,670,144. If we add the natural increase to the 1950 population we get 2,125,515 persons, and subtracting this from the 1960 population of 1,670,144 we get a net migration loss of 455,471 persons. Since about 219,000 persons were lost to the suburbs in the 1955-1960 five year period it is quite apparent that the same rate of migration was operating between 1950 and 1955. How about the period prior to 1950? Between 1940 and 1950 the City of Detroit gained 15,255 persons by migration, presumably from outside the Standard Metropolitan Area. During the same 1940-1950 period the suburban areas gained 263,220 persons through net migration. While we do not know that most of these migrants came from Detroit rather from out of the area, known patterns of migration indicate that this was the case. The 1940-1950 rate of migration from the central city to the suburbs does not approach the rate of the 1950-1960 period, but it must also be remembered that between 1940 and 1945, building almost ceased due to the war, and that most of the actual suburban influx must have occurred between 1945 and 1950. If this assumption is true then the 1945-1950 migration from city to suburbs would then begin to approach the 1950-1960 rate.

In summary then, the rate of migration from the City of Detroit to the remainder of the three county area has been very high for many years. In fact the rate is so high that it cannot continue at this pace without depleting the central city long before 1990. Analysis and projections of past trends in central city—suburban migration leads to some very dubious results that

range from the virtually impossible to the highly questionable. Most desirable would be a model of migration behavior that depended on future rather than past trends. What would be the characteristics of this model?

(1) It would be based on deeply and widely held desires and values. Just as the two, three or four child family ideal governs fertility this value would govern moving behavior.

(2) It would be in accord with economic reality. That is, this behavior model must not result in producing an economic situation that would be incompatible with our economic laws. For example, in one of our prior assumptions Detroit was reduced to less than half of its present size by 1990. This is not realistic, for long before half of the present dwelling units in Detroit became empty, their price would fall to the point where many people would buy.¹

(3) The basis of the model should be some phenomenon which is certain to transpire. This is a tall order, for future certainties are indeed rare.

Fortunately there is a basic assumption that can be translated into a model of future migration behavior. This basic assumption is: The older a house or dwelling unit the less desirable it becomes for residence. This is so obvious and simple that it seems absurd. It seems simple because it's what everyone does without much thinking about why they are doing it. A basic value in our society is that newness is good. Thus the above assumption is

¹ This is no long-hair theory. It's in operation at this writing. Because of the mass exodus from Detroit, many houses are so attractively priced that they are eagerly sought.

an expression of a deeply held value in American life. We hope to obtain the new home, the new car, the new furniture. If an individual's economic position is fairly low the new item (house or car) may be several times used already, but it's certainly to be newer than their present house or car. In housing, as with all material objects the desire for newness is enhanced by technological progress which has rendered older homes obsolescent. Old homes, like old people and old cars must surely die.¹

The concept of the age and obsolescence meet second requirement, namely that it be compatible with our economic structure, for the economic worth is highly correlated with the sociological worth. After an all too brief period lasting only a few years after its erection, a dwelling unit sells for less and less and less. There are exceptions to this in terms of housing shortage or of highly localized demand, but the general economic rule is the older the cheaper, and the very old is very cheap. Racial segregation also prevents this economic rule, and this is why some slum properties in central cities would not last a year without racial segregation to artificially keep them up. As racial segregation disappears from the American scene, as it must surely will before 1990, the over-age, under-cared for housing in the central cities will vanish, because it cannot hold its own in a full housing market.

¹ There are some exceptions to this but they are rare. Also whether they are true exceptions is debatable. For instance, Georgetown in Washington D. C. is composed of houses built largely in pre-revolutionary times. But is it proper to consider a house that while technically dating from 1750 has been subjected to \$60,000 worth of remodeling within the past few years an old house? There are a few old farmhouses in the Detroit area that have been accorded the same treatment, but this is rare in this metropolitan area.

The third quality demanded of the model is that it be based on some quality which is almost certain to transpire. The quality, in this case, is our knowledge of the present age of housing in the Detroit SMSA, and how old it will be in ten, twenty and thirty years. To illustrate: Suppose that 10 percent of the present housing stock in the metropolitan area was built between 1930 and 1940. This means that today it is between 25 and 35 years old, and it also means that by 1990 it will be between 55 and 65 years old. This knowledge provides the framework upon which future housing activities, and future inter-area migration patterns can be traced.

Data on age of housing are summarized in the following table:

TABLE C-6

Age of Dwelling Units, City of Detroit
and Remainder of the Detroit SMSA: 1960

Age of Dwelling Unit	Detroit		Remaining SMSA		Total SMSA	
	Number	Percent	Number	Percent	Number	Percent
Under 10 years	56,049	10.1	284,734	47.4	340,783	29.5
10-19 years	84,267	15.2	119,393	19.9	203,660	17.7
20-29 years	86,600	15.7	62,696	10.5	149,296	13.0
30-39 years	188,891	34.2	88,227	14.7	277,118	24.0
40-49 years	102,915	18.6	33,360	5.6	136,275	11.8
50 years and over	34,387	6.2	11,295	1.9	45,682	4.0
	553,109	100.0	599,705	100.00	1,152,814	100.0

The picture drawn by the above table is clear. The housing in the City of Detroit was much older than the suburban (remainder of the SMSA) areas in 1960. It's also true that neither city nor suburb was very old. The very

rapid growth of the suburbs is shown by the fact that almost half of the dwelling units were less than ten years old in 1960.

However, when we are making a projection to 1990 we must consider that these dwelling units will be thirty years older. Thus the age distribution in 1990 would look like this:

	Detroit	Remaining SMSA	Total SMSA
	(to be built)	(to be built)	(to be built)
Under 30 years			
30-39 years	56,049	284,924	340,973
40-49 years	84,267	119,393	203,660
50-59 years	86,600	62,696	149,296
60-69 years	188,891	88,227	277,118
70-79 years	102,915	33,360	136,275
80 years and older	34,384	11,295	45,679
	326,190	132,882	461,072

By 1990 almost half a million dwelling units (461,072) in the SMSA will be over 60 years old. Of these 326,190 or 71 percent are located within the City of Detroit. Why was 60 years chosen as a cut off point? A study made by the Detroit City Plan Commission¹ indicates the useful life of residential structures in Detroit as 60 years. After this economic necessity demands their replacement. Guided by this Detroit Plan Commission study findings the following assumptions will be made:

- (1) All dwelling units over 60 years of age will no longer be useful as

¹ Renewal and Revenue Detroit City Plan Commission, Detroit 1962

residences. They will either be vacant, demolished or converted to some other than residential usage. In this instance Detroit will loose 326,190 dwelling units, and the suburban areas will loose 132,882 dwelling units. Detroit will gain 35,000 dwelling units, the remainder will be built in the suburbs. The 55,000 dwelling unit gain for Detroit was estimated as follows: In the five years since 1960 about 10,000 dwelling units have been built in Detroit. Extrapolating this to 1990 yields about 60,000 dwelling units in the thirty year period. This extrapolating is dangerous unless backed up by corroborative data. The Detroit Housing Commission was consulted concerning future plans. It was stated that 9,250 dwelling units will be built from the present projects within the next five years. There is no information available beyond what is presently being done. This figure of 9,250 in the five years between 1965 and 1970, if extrapolated yields a net of some 50 to 60 thousand dwelling units for 1990. Thus this assumption was pinpointed at about 55,000 dwelling units to be built in Detroit between 1960 and 1990. Under this assumption the City of Detroit will lose 326,000 and gain 55,000 dwelling units between 1960 and 1990, a net loss of 271,000 dwelling units.

(2) The second assumption is based on a greatly differing set of conditions. It assumes that the loss of dwelling units at the pace assumed in #1 is too great, and that forces of conservation will reduce the loss and demolition of dwelling units to the point where dwelling units as old as 70 years will still be useful. In this case Detroit will only lose 137,000 dwelling units. Gaining the same 55,000 new dwelling units as in assumption #1, the net loss to Detroit will be 82,000 dwelling units between 1960 and 1990.

(3) The third assumption poses somewhat different set of factors. It is like assumption #1 in that all dwelling units over 60 years of age will disappear, instead of 55,000 new dwelling units, the forces of private real estate and the government come alive, at a pace not now on the horizon, and produce 155,000 dwelling units. It is possible, although not likely to happen. It means that about 6,000 dwelling units a year would have to be built for the next twenty-five years. This amounts to about one-third of the metropolitan areas current building rate.

(4) The fourth assumption is based not on any logical set of conditions as in the first three but simply on hope, faith and piety. It says that somehow after 1965 the City of Detroit will not average any population loss. It will stay at just about its current level of size. After examining the relationship expressed in the proceeding text it is difficult to see how, short of divine intervention, this could be achieved, but it will still be presented as a conceivable condition. This assumption says that Detroit will literally hold its own and this will be no further migration from Detroit to the suburbs.

Four assumptions have been presented. On one end of the scale assumption #1 says that Detroit will lose 271,000 dwelling units, and house their occupants to the suburbs between 1960 and 1990. The other end of the scale says, no more households will be lost to the suburbs between 1965 and 1990. Between these two extremes two more logical situations (assumptions 2 and 3) are analyzed. It would be good to be able to make four alternative forecasts based on the four assumptions. However, this would mean obscuring the results in a welter of figures. Therefore only the extremes will be presented.

They do have the virtue of covering a very wide range of future possibilities.

It should be mentioned that this method does not decimate Detroit as would be the case if current trends are blindly projected. If the situation where Detroit does not lose any more persons to the suburbs comes true, Detroit, thanks to its future natural increase, would become very full. If the opposite extreme, the net loss of 271,000 dwelling units becomes the fact by 1990, natural increase would serve to keep the Detroit population around the million mark at the very least.

Two further steps must be taken before the final projection can be made. The persons lost to Detroit with the loss of 271,000 dwelling units must be calculated, and Oakland County's share also must be calculated. At the current level of family size in Detroit (3.4 persons), Detroit would lose 921,000 persons to the suburbs between 1960 and 1990. Of this number 190,000 have already moved to the suburbs between 1960 and 1965. Thus 731,000 persons can be expected to move between 1965 and 1990. This amounts to 146,200 persons every five years. It should be noted that this represents a decreasing function for the 1955-1959 movement was 218 thousand persons, and the 1960-1964 movement was 190,000 persons. To calculate Oakland's share, assuming the county will not run out of available land ¹ we have to go back to historical trends. While, as indicated throughout this study, historical trends can be very misleading when anticipating the

¹At an assumed capacity of 4,000 persons per square mile (a very low figure given current residential land usage standards) Oakland County's total residential capacity would be 3,600,000 persons. Oakland County will not run out of residential land in this century.

future, it's hard to find any other peg on which to hang this particular factor. Looking at the historic trend (Table B-7) it is seen that Oakland

TABLE C-7

Percent Distribution of Population for Macomb, Oakland and Wayne County Less Detroit, 1940, 1950, 1960, 1964

	1940	1950	1960	1964
Macomb	14.3	15.9	19.4	21.3
Oakland	33.7	33.9	33.0	32.6
Wayne Less Detroit	52.0	50.2	47.6	46.1

County has constituted about one-third of the total suburban area for the past twenty-four years. While it shows a slight decrease, the decrease is so little that a rather sure assumption is that it will continue at about that level for the next twenty-five years. Even if it were to decline a few percent it would make only a trivial difference in the population of Oakland County.

If the total migration from Detroit to the suburbs is predicted to be 146,200 persons every five years, and Oakland County receives one-third, the number of migrants to be added to the Oakland County total every five years is 48,700 persons. This total must be broken into age and sex categories. The best assumption here, is to use the same age and sex proportions as observed in the city-suburban migration pattern of 1955-1960.¹ The age distribution of migrants includes persons over five years of age only. Children under five must be added. However, this is easily accomplished by

¹ U.S. Census Special Reports Migration 1960, page

applying the fertility rate of 1, 121. 1, used throughout our other calculations, to the migrant woman age 15-44. This adds 15, 807 children under 5 years of age to the migrants, giving a total of 64, 500 persons to add to Oakland County's population every five years.

Summary of Assumptions for Each Component

All necessary assumptions have been made and supportive data examined.

Results can be summarized as follows:

(1) Death Component

Mortality Rates taken from the 1959-1961 Oakland County male and female life tables constitute the continuing basis for mortality rates to 1990. It was shown that mortality rates in Oakland County are among the lowest in the world. Little improvement is possible until a really major breakthrough in cancer and heart disease mortality occurs. While the current increase in medical knowledge make for optimism in this respect, it is still too early to include reduction in mortality rates are assumed to continue.

(2) Birth Component

After examination of fertility rates in Oakland County over time, and in comparison with the other portions of the SMSA and the total United States, it was concluded that the average general fertility rate (1, 121. 1 births per 1, 000 women age 15-44) would be the most suitable general expression of probable birth rates between 1965 and 1990. Not only did this average cover a wide range of times and economic conditions, but it agreed with the forecasts of U. S. birth rates for the same period as made by the U. S. Census Bureau. Use of the single prediction of birth rates (1, 121 per 1, 000 women

15-44 years of age) enables us to calculate the number of births occurring in each five year period. Granted that deviations will occur as birth rates fluctuate over time, still the average over the entire twenty-five year period should approach our predictions.

(3) External Migration Component

After examination of a number of predictions of future employment levels in the Detroit SMSA between 1965 and 1990, and comparing these with the predictions of number of persons in the labor force during this same period, it was assumed that on the average there would be no net migration and from the Detroit SMSA between 1965 and 1980. The reason for this was that the growth of the labor force from natural increase, came close to balancing the number of employment opportunities. As with births, fluctuation in migration both in and out of the Detroit SMSA will occur, but it appears that over the twenty-five year period the two will balance quite well.¹ Thus the assumption of no net migration was made.

(4) Internal Migration Component

The internal migration component was the most difficult to assess of any of the components. Any extrapolation of historical or current trends produced results which did not seem reasonable in either economic or sociological terms. Because recent and past migrations from the central city of Detroit to the suburban areas has been so extensive, continuation at the same pace would virtually decimate the city of Detroit by 1990. An entirely new

¹ This fluctuation was evident during the 1960-1964 period. During the first years there appeared to be some out-migration, and during the latter years, in-migration appeared to be occurring.

logic was suggested and applied to further inter-area migration. The basic of this logic was the proposition that the older the house or dwelling unit the less desirable it becomes for residence. Applying this proposition enabled us to make a series of assumptions concerning the number of dwelling units that are likely to be built, or be destroyed in Detroit between 1965 and 1990. The extremes of the series of assumptions proved to be on one end, a migration of about an average of 48,700 persons every five years from Detroit to the suburbs. The other extreme was that the average inter-area migration between 1965 and 1990 would be zero. That is, Detroit would not lose any more persons to the suburbs, considering the entire twenty-five year period.

The above paragraphs constitute a resume of the basic assumptions. One more step remains before the actual calculation can be carried out. The 1965 base population must be estimated.

Estimating the 1965 Population of Oakland County

Before a projection of population can be made the current (1965) population must be estimated. It has been five years since the 1960 census and numerous changes have occurred. The problem of estimating population is greatly different from the problem of projecting population. In the latter case we are dealing with events that have not yet occurred and we attempt to assess the probability of their happening. In estimating population we are trying to measure events as accurately as possible events that have already occurred, in this case the 1965 population of Oakland County.

The direct measure, a Federal census is taken only every ten years. No other complete count of the population is made. Counts of part of the

population, drivers licenses, censuses of school children, new building permits, electric meters installed, etc., all fail to produce a precise result. Yet if careful analysis is made, employing a variety of these measures and indexes, the final result will be not far from the actual population. Also the further away from the last full census count (in this case 1960) the greater the potential error in the estimate. The estimating method employed here will follow the electric approach; that is, all available measures will be examined and tried. Two major avenues will be explored. One based on the population of Oakland County itself, standing apart from the remainder of the Metropolitan Area. The second major avenue will be to try and estimate the total of the Total Detroit SMSA, and then attempt to ascertain Oakland County's share. The two major approaches will then be compared.

Estimating the Population of Oakland County Directly

In April 1960 the U. S. census counted 690,257 persons in Oakland County. Since that date 82,530 babies have been born in Oakland County and 22,512 persons have died leaving an excess of births over deaths of 60,018. Now, unless extensive out-migration has occurred (and our other data indicated it hasn't), the population of Oakland County must be at least 690 + 60 or 750,000 in 1965. This birth and death information is complete and accurate, and the only error that can occur must be in the migration data. The accuracy of the final estimate depends on our ability to estimate the migration component.

First let us look at the number of additional dwelling units that were constructed in Oakland County between 1960 and 1965. In 1960 the census showed 188,908 occupied dwelling units in Oakland County. As of July 1, 1965, DMRPC

estimates of occupied dwelling units in Oakland County (based on building permits) was 217,400 an increase of 28,500 occupied dwelling units or 15 percent. How many persons does this represent? Several measures (all indirect may be employed). In 1960 the average household size in Oakland County was 3.65 (690,257 persons divided by 188,908 occupied dwelling units). If this figure is used the migration to Oakland County then would amount to 104,000 persons. However, migrants may have somewhat different family sizes from the resident population. Let us look at the family sizes of past (1955-1960) migrants. No data for Oakland County specifically exists, but we do know the average household size of migrants to all of the Detroit suburbs combined. In this case the average family size of migrants was 3.78. This would give a migrant population of 108,000. Adding the migration populations to the natural increase gives a 1965 estimate of 854,000 to 858,000 persons for Oakland County. However, we are probably counting the natural increase of the migrants twice. Hence since natural increase comprises 9 percent of the increase since 1960, 9 percent must be deducted from the migrant group, leaving a estimate of about 846,000 for Oakland County in 1965. On the other hand if we assume that some how the natural increase is absorbed in increasing family size we come out with a minimal estimate for the county (217.4 dwelling units X 3.65 average family size) or a total of 794,000 for a minimum. If we assume that the size of migrant families will prevail (3.78) we arrive at 3.65 (217,400) or 821,000 persons as the 1965 estimate for Oakland County. This is a broad range of estimates and before a final decision is made it will be better to examine a second approach, and

compare the results.

Estimating 1965 Population of Oakland County by Determining its share of the Total SMSA

The second general pathway to estimating the Oakland County population is to determine the population of the total SMSA, and then allocate the proper share to Oakland County. The logic behind this two step process is that presumably more and better data are available for the total SMSA than for the county. In practice this is somewhat questionable, because the area-wide data may not necessarily be better than the county data. However, one index - the number of jobs - is available on the SMSA basis only, and because it is so vital it makes the first component is to determine the natural increase by adding the births and subtracting the deaths. For the Detroit SMSA the natural increase between 1960 and 1965 was 271,055. When this is added to the 3,762,000 persons recorded by the U. S. Census in 1960 you get a population for 1965 of 4,033,000 persons for the SMSA in 1965. The question of migration then remains.

Migration is dependent on economic opportunity. That is if there are jobs to fill migrants will filter into the area to take those jobs. In 1960 there were 1,329,000 employed in the Detroit SMSA, and 99,000 unemployed, according to the Michigan Employment Security Commission. In 1965 there were about 1,445,000 employed and 29,000 unemployed. Thus the number of jobs increased by 127,000. Presumably 59,000 of the unemployed were absorbed,

leaving 68,000 jobs still to be filled. However, new entrants to the labor force were on hand to fill some of these jobs. The labor force increased in size by some 54,000 leaving an excess of 14,000 jobs to be filled by people from out of the area. If the figure of average family size of migrants between 1955 and 1960 still holds it would mean a net migration of about 54,000 persons to the area.

Adding the 54,000 to the 4,033,000 as stated above gives at 1965 population of 4,087,000 for the Detroit SMSA.

Having established the total population of the SMSA at 4,087,000 in 1965 it remains to determine Oakland Counties share. A number of indices are available for purposes of comparison.

First, and perhaps most impressive, is the index that can be contrived from sales tax receipts on food. The State of Michigan publishes each year the amount of sales tax collected on the sale of good. Now the amount of food consumed should be in direct ratio to the size of the population. While it is true that a more prosperous population would consume more expensive food there is certain a natural limitation on how far this can be carried. The important relationship is not the dollar amount, but the increasing or decreasing share over a period of time. Table G-8 gives the necessary data.

TABLE C-8

Food Sales Tax Receipts By County and City of Detroit - 1956-57 1964-65

Dollars (in thousands)

	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65
Oakland	6,767	7,963	8,351	8,634	9,087	10,448	13,470	14,003	15,107
Macomb	3,272	4,099	4,362	4,407	4,883	5,800	7,429	8,073	8,868
Wayne Less Det.	9,777	11,009	11,346	11,703	13,543	16,930	17,661	18,407	19,156
City of Detroit	27,703	27,252	26,585	25,164	24,007	24,820	29,780	30,319	32,004
SMSA Total	47,519	50,323	50,644	49,908	51,519	57,998	68,340	70,802	75,135

Percent

Oakland	14.8	15.8	16.5	17.3	17.6	18.0	19.7	19.8	20.1
Macomb	7.2	8.1	8.6	8.8	9.5	10.0	10.9	11.4	11.8
Wayne Less Det.	21.4	22.1	22.4	23.4	26.3	29.2	25.8	26.0	25.5
City of Detroit	60.6	54.2	52.5	50.5	46.6	42.8	43.6	42.8	42.6
SMSA Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The steady increase of Oakland County's share of the SMSA total leads to the conclusion that it has an increasing population relative to the other counties and the City of Detroit. If there were irregularities one could suspect that the data were not sufficiently precise to lead to any conclusions. However, in 1960 the sales tax receipts indicated that Oakland County had 17.3 percent of the SMSA's total sales tax receipts. The census showed that in 1960 Oakland County had 690,259 of the 3,762,360 persons in the SMSA, or 18.3 percent of the total. Thus the 1965 figure of 20.1 percent of the SMSA's population as derived from Table C-8, is probably a bit conservative.

A second and independent index of Oakland County's share of the total SMSA population lies in an estimation of the proportion of the SMSA's total dwelling units which are found in Oakland County. In 1960 17.487 percent of all occupied dwelling units were located in Oakland County. At the same time Oakland County contained 18.346 percent of the SMSA's total population, thus families in Oakland County were slightly larger than the three county average. According to the estimates of the Detroit Metropolitan Area Regional Planning Commission, which does a notable job of recording dwelling units ferment and demolition charges, 18.8 percent of all occupied dwelling units were located in Oakland County. If we assume that the ratio of family size between Oakland County and the total SMSA has held constant over five years, we find that Oakland County contains 19.7 percent of the SMSA's population.

A third index of Oakland County's share of the population can be found in

school census data. Rather than a simple comparison of totals of children 5-19 years of age, which would be affected by changing birth rates, a method of cohort analysis is used to analyze the school census data. The following procedure was employed: Children who were 6 through 10 years of age in 1960 were also the same children who were 7 through 11 years of age in 1962, 9 through 13, in 1963, 10-14 in 1964, and 11-15 in 1965. Thus we are tracing the same group or cohort in the following table.

TABLE C-9

Cohort Analysis of School Census Population by County and
the City of Detroit 1960 - 1965

	Number					
	1960	1961	1962	1963	1964	1965
Oakland	84,578	84,281	84,154	84,635	85,867	86,775
Macomb	50,726	51,438	52,199	53,194	54,460	54,832
Wayne Less Det.	117,929	117,484	117,158	116,618	116,681	111,276
City of Detroit	160,350	156,843	153,801	150,864	148,471	146,270
Total SMSA	413,592	410,037	407,312	405,311	405,479	399,153
	Percent					
Oakland	20.4	20.6	20.7	20.9	21.2	21.7
Macomb	12.3	12.5	12.8	13.1	13.4	13.7
Wayne Less Det.	28.5	28.4	28.8	28.8	28.8	27.9
City of Detroit	38.8	38.3	37.8	37.2	36.6	36.7
Total SMSA	100.0	100.0	100.0	100.0	100.0	100.0

As we look across the table from 1960 to 1965 we are presumably looking

at the same children counted in six successive years. Then the six successive distributions are shown in percentages. The results show that Oakland County has an increasingly greater share with each successive year, with 21.7 percent in 1965. The distribution among the other areas is very similar to the other indices used.

In summary we see that three indices have been employed, food sales tax, occupied dwelling units, and the school census. Each, no doubt has its own small error. Yet their essential agreement is impressive. The first says Oakland County's share of the SMSA population is 20.1 percent, the second says 19.7 percent, and the third 21.4 percent. In the interest of being conservative, 20 percent has been chosen as the rock bottom estimate of Oakland County's share in 1965. Multiplying 4,087,000 our estimate of the SMSA by 20 percent we find an estimate of 817,000 for Oakland County for 1965. Comparing this with the direct estimate of 846 to 821 thousand we find it is closer to the lower end of the range. Again being conservative we chose the lower estimate as the most likely, and finally settle on the 817,000 as our best, but admittedly conservative estimate of the population of Oakland County in 1965.

Making the Projection to 1990

Having evaluated the components, and estimated the 1965 Oakland County population to provide a base line, the steps leading to the actual projection become simple and few in number. The procedure is as follows:

- (1) Using the 1965 Oakland County population of 817,000 persons subdivide by age and sex as a base, apply the 1959-1961 mortality rates to each age

group has been made five years older and these who died during the interval have been deducted. This is called "aging" the population.

(2) At this point the two major assumptions take different paths. To make the necessary calculations for the assumption of no migration, the births occurring during the 1965-1970 period, according to our fertility assumption (112, 10 births per 1,000 women 15-44), are added, and the population of 1970 is again "aged" to 1975 as in step one. This process is repeated at five year periods up to 1990. Results are shown in Table C-10.

(3) The second assumption in "migration from the central city", is computed by adding to the approximate age and sex categories the 48,000 persons who will migrate to Oakland County from the central city every five years under average migration conditions. The age and sex composition of the migrants is derived from the patterns of past migration from Detroit to the suburbs during the 1955-1959 period. The number of new births during the five year period are also added as in step two. This gives first the 1970 population, and then by repeating the operation the successive five year intervals up to 1990.

TABLE C-10

Population Projection - Oakland County
(Low Estimate)

MALE	1965	1970	1975	1980	1985	1990
Age	Total Pop.	Total Pop.	Total Pop.	Total Pop.	Total Pop.	Total Pop.
Under 5	41,982	48,445	52,340	58,010	61,770	68,195
5 - 9	52,204	41,898	48,348	52,236	57,894	61,647
10-14	47,156	52,100	41,814	48,251	52,132	57,778
15-19	37,373	46,897	51,814	41,585	47,986	51,846
20-24	25,338	37,001	46,430	51,298	41,171	47,508
25-29	18,614	25,199	36,798	46,175	51,017	40,945
30-34	24,008	18,484	25,023	36,541	45,853	50,661
35-39	28,242	23,769	18,300	24,774	36,177	45,397
40-44	24,845	27,724	23,245	17,964	24,320	35,513
45-49	25,016	29,020	26,958	22,602	17,467	23,648
50-54	21,187	23,853	27,671	25,705	21,552	16,655
55-59	17,436	19,632	22,102	25,640	23,818	19,970
60-64	14,464	15,455	17,402	19,591	22,728	21,113
65-69	10,054	11,865	12,678	14,275	16,071	18,645
70-74	6,535	7,548	8,907	9,518	10,717	12,065
75-79	3,864	4,215	4,869	5,745	6,140	6,913
80-84	1,776	1,910	2,083	2,406	2,839	3,034
85 +	598	634	682	743	859	1,013
TOTAL	405,692	435,559	467,464	503,059	540,511	582,546

FEMALE	1965	1970	1975	1980	1985	1990
Age	Total Pop.	Total Pop.	Total Pop.	Total Pop.	Total Pop.	Total Pop.
Under 5	40,053	46,395	50,125	55,560	59,155	65,310
5 - 9	50,370	40,033	46,372	50,100	55,532	59,125
10-14	45,337	50,320	39,993	46,326	50,050	55,477
15-19	35,973	45,248	50,221	39,914	46,235	49,951
20-24	27,159	35,902	45,159	50,122	39,835	46,144
25-29	22,940	27,091	35,812	45,046	49,997	39,736
30-34	26,259	22,883	27,023	35,723	44,934	49,892
35-39	29,677	26,115	22,757	26,875	35,527	44,687
40-44	30,640	29,352	25,829	22,508	26,581	35,138
45-49	25,126	30,127	28,814	25,355	22,095	26,043
50-54	20,966	24,481	29,353	28,074	24,704	21,527
55-59	17,003	20,133	23,508	28,186	26,958	23,722
60-64	13,500	15,882	18,806	21,959	26,328	25,181
65-69	10,179	12,180	14,329	16,967	19,811	23,753
70-74	7,837	8,530	10,207	12,008	14,218	16,602
75-79	4,987	5,809	6,322	7,565	8,900	10,538
80-84	2,876	2,916	3,397	3,697	4,424	5,204
85 +	1,203	1,128	1,144	1,333	1,450	1,736
TOTAL	412,135	444,525	479,171	517,318	556,734	599,796

Population Projection - Oakland County
(High Estimate)

MALE

<u>Age</u>	<u>1970a</u>	<u>1975a</u>	<u>1980a</u>	<u>1985a</u>	<u>1990a</u>
Under 5	56,541	64,396	74,111	82,426	94,826
5 - 9	42,774	60,304	68,143	77,839	86,137
10-14	54,595	45,184	62,678	70,502	80,179
15-19	48,351	55,749	46,390	63,789	71,569
20-24	38,721	49,540	56,914	47,648	64,874
25-29	28,228	41,538	52,297	59,631	50,416
30-34	21,537	31,084	44,301	54,985	62,268
35-39	25,728	23,265	33,209	46,294	56,749
40-44	30,005	27,554	24,644	34,406	47,374
45-49	30,244	30,297	27,864	25,020	34,757
50-54	24,858	29,946	30,046	21,741	24,784
55-59	20,351	23,753	28,474	28,514	26,352
60-64	16,020	18,603	21,608	25,855	25,912
65-69	12,250	13,511	15,632	18,100	21,593
70-74	7,792	9,454	10,340	11,983	13,833
75-79	4,352	5,167	6,246	6,844	7,869
80-84	1,972	2,211	2,616	3,152	3,443
85 +	654	724	809	953	1,145
TOTAL	464,973	532,280	606,378	685,682	774,080

FEMALE

<u>Age</u>	<u>1970a</u>	<u>1975a</u>	<u>1980a</u>	<u>1985a</u>	<u>1990a</u>
Under 5	54,106	61,626	70,936	78,891	90,771
5 - 9	43,679	57,725	65,241	74,547	82,498
10-14	52,767	46,082	60,114	67,623	76,920
15-19	46,937	54,352	47,680	61,685	69,179
20-24	38,569	49,512	56,912	50,253	64,231
25-29	30,223	41,605	52,520	59,802	53,260
30-34	25,623	32,888	44,241	55,129	62,393
35-39	27,936	27,338	34,823	46,167	56,938
40-44	31,398	29,641	28,791	36,140	47,418
45-49	31,221	31,819	30,056	29,236	36,577
50-54	25,369	31,404	32,025	30,293	29,367
55-59	20,803	25,028	30,831	31,371	29,686
60-64	16,411	19,964	23,902	29,379	29,905
65-69	12,619	15,251	18,410	22,011	26,950
70-74	8,837	10,893	13,098	15,790	18,765
75-79	6,018	6,747	8,276	9,909	11,906
80-84	3,021	3,625	4,043	4,940	5,894
85 +	1,169	1,220	1,457	1,619	1,972
TOTAL	476,706	546,720	623,406	704,785	794,630

APPENDIX D

The Geographic Distribution Of The Population of Oakland County in 1970, 1980 and 1990.

The population of Oakland County in 1965 has been estimated at 817,000 persons. The population in 1990, if the high range projection holds, will be 1,530,000. The 713,000 additional persons must be allocated on a geographic basis, and it is to this problem that we address ourself here.

The problem of projection of the number of persons which was discussed in Appendix C, was solved by the analysis of relatively few variables -- births, deaths, and migration. The problem of future geographic distribution of population is inherently more complex because of the number of variables that affect this distribution. Before discussing the particular variables affecting future population distribution it would be best to review the general scope of the problem.

At the present time the 817,000 persons who live in this county are scattered quite unevenly throughout the entire county. In some places, largely in the South East corner, residential development is complete, and it is highly doubtful if any significant population increase can occur. In fact in several spots, the residential density is far above contemporary standards. It is possible that these areas may even lose population in the years to come.

Other parts of the county are partially filled but still have the capacity to absorb much additional population. The greatest part of the 900 square miles that comprise the county are, however, raw undeveloped rural land. As has already been observed it would

take about 3,600,000 persons to fill all of the county at a density of about 4,000 persons per square mile. Obviously this population will not be attained until well into the 21st century. Therefore the prediction for 1990 will necessarily involve some method of selecting which areas, cities and townships will be filled, which will be partially filled and which, if any, will still remain largely undeveloped.

It would be extremely convenient if each separate area would fill up evenly and regularly like water jugs being filled to the brim from a water tap. Fill a jug, put it aside, fill another jug, put it aside, and so forth. Unfortunately this doesn't happen - except that it sometimes does. Oak Park is a case in point. In just ten years it went from virtually all undeveloped land to a fully built up community. On the other hand the City of Royal Oak isn't filled after fifty years of development. So when we attempt to predict we are faced with many possibilities. Will Southfield fill in ten years or in fifty years? Will new subdivisions and new towns grow along the Northern reaches of I-75, or will the existing subdivisions and towns be expanded? Clearly if the past is any guide, all of these things will happen. This then is the dimension of the problem; future development in Oakland County can occur anywhere over a very wide geographic area. Further the precise timing is even more difficult to predict. Yet we are faced with solving this problem, and we shall have to do our best.

It would seem desirable to list variables which seem relevant to future population location, and then attempt to select the most promising to use in future analysis and prediction:

(1) Proximity to water and sewers.

While it is possible to have a certain amount of low density development without water and sewer systems, no large population can be served in this manner.

(2) Proximity to transportation

Unless it is wilderness, every area has some transportation possibilities. Thus, transportation must be viewed as relative. Also, the aspect of transportation to various destinations enters the picture. To assume an orientation to downtown Detroit is a gross oversimplification of the problem. A more logical expression of transportation adequacy would be nearness, as measured by time, to the total urban mass.

(3) Development covering the total range of economic possibilities.

If future development is limited to a particular economic stratum, then households within that stratum will be the only ones attracted. That is, if homes costing over \$100,000 are erected then the only potential development will be among wealthy families. The same applies to development at the other end of the economic scale.

(4) Existing density.

Obviously each area has a limit to its capacity to hold population. This total population potential means the present population is the total number of new population that the area can hold. This also could be true for the total county, but as has already been mentioned the total population capacity of Oakland County exceeds any population possibilities for 1990. It is not relevant to the problem as posed here.

(5) Speculation in land.

As in similar counties throughout the country the bulk of the undeveloped land is held by persons interested in reaping the large profits that accrue as the land is turned to some urban use. Some of this land is held by the original farm family, some by people who have bought the farm and rented it to tenant farmers, some by large corporations and trusts, and some by land developers who have rather immediate intentions towards the land. Individual decisions and plans of these persons and groups will help shape the future course of development of Oakland County.

(6) The role of government and financial institutions.

Part of the course of future development in Oakland County will be influenced by still unknowable economic pushes and pulls. These economic forces are sometimes the product of local market conditions and sometimes the product of nationwide economic forces and pressures. When we attempt to forecast the future of housing development in Oakland County we are faced with trying to ascertain the effects of these imponderables.

Let us illustrate a case in point. When this study was originally designed it was expected that one of the future predictions would involve the number of single and multiple dwelling units. However, when the data were analyzed it was found that up until 1960 Oakland County had been characterized by an almost complete absence of building of multiple dwelling units. That is, the county was composed almost completely of single family housing. After 1960 the trend changed with tremendous rapidity to where in 1965, 45 percent of the new dwelling units were in multiple structures in the form of large

apartment complexes. Today multi-story high rises are under construction. Oakland County will soon have two sixteen story apartment buildings.

A critical change in essential character of construction, with wide ranging effects on the nature of land use, commenting stricture, and potential land values is now in progress. Will this continue and even accelerate? Is it perhaps a temporary and abortive trend? What will the next 200,000 dwelling units to be built in this county be like? Much depends on the success of the present endeavors. Also much depends on whether current land use, taxing, depreciation factors, financing, governmental regulations on a national and local level, and general economic conditions will continue.

Thus the future of multiple versus single family housing in Oakland County is subject to many forces which cannot be pinpointed at this time. For this reason it was deemed undesirable to make a forecast of the split between these two fundamental housing types, but instead to talk in terms of total dwelling units regardless of type.

Summary

We now have listed the most important factors influencing the growth and distribution of the future population of Oakland County. It is evident that there are many unknown parameters. Yet we are still faced with making the forecast. Obviously we must resort to a series of assumptions which will have to serve until future wants make it clear that some or all of these assumptions are in error.

Method of distributing 1970, 1980 and 1990 population

As previously mentioned a rationale must be worked out for determining

the future population densities. That is, certain new areas will begin to receive additional population long before all of the older areas are completely filled. Perhaps a county (or any other geographic area large enough to contain a variety of component parts) grows according to some regular slope or curve. Accordingly, the percent of population living at each density level was calculated for 1940, 1950, 1960 and 1965 for Oakland County. Tables D-1 & D-2 are also shown in the form of a series of ogives (Fig. 1). It can be seen that Oakland County is following a regular pattern from 1940 to 1965. That is, as the population increases, the proportion living at higher densities increases. That in itself is hardly a remarkable discovery but the slope of the curve as it changes from 1940 to 1950 to 1960 and finally to 1965, seems to be sufficiently regular that some generalization is warranted. It will also be noticed that Macomb County conforms quite closely to the same configuration. Wayne County, which appears to be running out of low density land seems to represent some end point in the process. It should be pointed out this does not mean Wayne County is running out of places to put people; it just means that the last of the very low density land is disappearing, and that future population in Wayne County will have to live in areas which are at present partly filled. Eventually this must happen to every urban county. In Oakland County we are making the assumption that by 1990 the population will be diffused at more than a rural density level, throughout the entire county. Again this does not mean that Oakland County will be totally built up by that date, just as Wayne County is not totally built up today. If this assumption is reasonably correct it means that the curve of number of persons by density in

TABLE D-1

NUMBER OF PERSONS LIVING AT VARIOUS DENSITY LEVELS, OAKLAND COUNTY 1940-1965, AND
WAYNE AND MACOMB COUNTIES 1960

Density Persons/Sq. Mile	Oakland, 1965		Oakland, 1960		Oakland, 1950		Oakland, 1940		Wayne, 1960		Macomb, 1960	
	No.	Per	No.	Per	No.	Per	No.	Per	No.	Per	No.	Per
Under 1,000	170,415	21.5	186,256	27.0	132,907	33.6	110,074	43.4	68,252	6.9	95,456	23.5
1,000 - 1,999	185,750	23.5	97,956	14.2	30,602	7.7	4,006	1.6	76,131	7.6	13,987	3.5
2,000 - 2,999	21,700	2.8	16,891	2.5	9,475	2.4	46,448	18.4	144,911	14.5	89,246	22.0
3,000 - 3,999	5,900	.7	12,312	1.8	94,097	23.8	66,626	26.4	40,009	4.0	3,327	.8
4,000 - 4,999	95,950	12.1	118,327	17.1	49,488	12.5	---	--	154,500	15.6	---	--
5,000 - 5,999	44,050	5.6	42,418	6.1	---	--	---	--	177,935	17.9	71,211	17.5
6,000 - 6,999	25,525	3.2	14,795	2.1	21,364	5.4	25,914	10.2	144,768	14.5	86,821	21.4
7,000 - 7,999	149,240	18.8	121,051	17.6	47,606	11.9	---	--	63,514	6.4	---	--
8,000 - 8,999	31,900	4.0	31,347	4.5	---	--	---	--	---	--	45,756	11.3
9,000 & Over	61,500	7.8	48,906	7.1	10,508	2.7	---	--	126,133	12.6	---	--
	792,000	100.0	690,256	100.0	396,057	100.0	253,068	100.0	996,153	100.0	405,804	100.0

TABLE D-2

CUMULATIVE PERCENT DISTRIBUTION OF NUMBER OF PERSONS
LIVING AT VARIOUS DENSITY LEVELS, OAKLAND COUNTY 1940-1990, AND
WAYNE AND MACOMB COUNTIES 1960

	- Oakland -			/Wayne / Macomb/			- Oakland -		
	<u>1965</u>	<u>1960</u>	<u>1950</u>	<u>1940</u>	<u>1960</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>
Under 1,000	21.5	27.0	33.6	43.4	6.9	23.5	16	10	8
1,000 - 1,999	45.0	41.2	41.3	45.0	14.5	27.0	38	28	19
2,000 - 2,999	47.8	43.7	43.7	63.4	29.0	49.0	45	39	29
3,000 - 3,999	48.5	45.5	67.5	89.8	33.0	49.8	48	45	37
4,000 - 4,999	60.6	62.6	80.0	--	48.6	49.8	52	52	45
5,000 - 5,999	66.2	68.7	--	--	66.5	67.3	66	60	55
6,000 - 6,999	69.4	70.8	85.4	100.0	81.0	88.7	69	65	60
7,000 - 7,999	88.2	88.4	97.3		--	88.7	85	80	75
8,000 - 8,999	92.2	92.9	2.7		87.4	100.0	93	88	83
9,000 & Over	100.0	100.0	100.0		100.0		100.	100	100

Oakland County will tend to move towards assuming the approximate shape of the Wayne County curve. This is shown in Fig. 2 where a series of hand drawn curves describe the estimated proportional densities of 1970, 1980 and 1990.

What can be said about this assumption, and its potential accuracy? For one thing the direction of the change cannot be wrong. Once an area has reached a certain density it is extremely unlikely that it would become less dense. Therefore the curve virtually must deflect towards higher densities. The density curve for Wayne County provides a model for Oakland County, at least for densities below 4,000 persons per square mile. Even if this assumption is incorrect it would not make a massive difference in the eventual results. Given Oakland County's present (1965) characteristics slope, and the certainty of direction the results should at least be reasonable.

The next step is simple. The values for 1970, 1980 and 1990 can be read directly from the theoretical curves. Results are shown in Table D-3

TABLE D-3

Total Population By Density Grouping 1970, 1980, 1990

<u>Occupied DU's</u>	<u>Low Density</u>	<u>Moderate Density</u>	<u>High Density</u>
1970	43,000	86,000	138,000
1980	37,000	129,000	202,000
1990	37,000	134,000	292,000
 <u>Population</u>			
1960	186,000	127,000	337,000
1965	180,000	207,130	400,640
1970	152,000	303,000	487,000
1980	124,000	432,000	674,000
1990	126,000	453,000	990,000

Using this percentage distribution and the total number of dwelling units as projected earlier, Table D-4 provides the projected number of dwelling units by density levels for 1970, 1980 and 1990. Also using the previously calculated ratio dwelling units to population, projected population figures for 1970, 1980 and 1990 by density level are calculated.

This is the basic framework upon which geographic distribution of the future population is hung. The number of persons living in each of the three density situations (Low-under 1,000 persons per square mile), (Moderate-1,000 - 3,999 per square mile) and (High-over 4,000 per square mile) forms a series of limits, which controls the essential shape of the proportion of persons at each density level for each decade which we are projecting. However, this is but the first step.

The next step is to play a game, in which the 29 population analysis zones are chess pieces and a density map of Oakland County is the chess board. The rules of this game are as follows.

(1) The population of any of the three density zones in any given year must conform to the number of persons as determined in Table D-5. By making this rule we have severely restricted the number of possible moves (population changes) that occur. This may sound rather complex but in practice it's simple as an illustration will show. A township, say Brandon (PAZ 1) cannot move into the high density group between 1960 and 1970, because:

(1) with a geographic size of 35 square miles it would need a population of 140,000 persons by 1970 to move into this range. The movement population of this size within the next five years is extremely unlikely. Now PAZ can

TABLE D-4

NUMBER OF OCCUPIED DWELLING UNITS BY VARIOUS DENSITY
LEVELS, OAKLAND COUNTY 1970, 1980
AND 1990

	<u>1970</u>	<u>1980</u>	<u>1990</u>
Under 1,000	43,000	37,000	1,990
1,000 - 1,999	59,000	66,000	37,000
2,000 - 2,999	19,000	41,000	46,000
3,000 - 3,999	5,000	22,000	37,000
4,000 - 4,999	11,000	26,000	37,000
5,000 - 5,999	37,000	29,000	46,000
6,000 - 6,999	8,000	18,000	23,000
7,000 - 7,999	37,000	56,000	69,000
8,000 - 8,999	21,000	29,000	37,000
9,000 & Over	24,000	44,000	80,000
	267,000	368,000	463,000

attain the Moderate Density category by acquiring only 35,000 persons, (35 square mile at 1,000 persons per square mile). This is a possibility and must be further considered using further game rules. This means that our game conforms to reality, because it indicates an area must proceed by stages up the density range and this is what actually happens.

Another aspect of the rule must be remembered. If we advance a PAZ to the next density group - then a second (or a number of) PAZ's must be advanced from the lower density group to take its place, because the number of persons at each density level has been pre-determined. This also is in accord with reality. As an area begins to fill up new areas are penetrated for new dwelling unit construction.

This "density upgrading" process greatly cuts down the number of further decisions that must be made to distribute future growth. Further decision may be necessary, but his one rule has severely liminated choice, and still conforms with the "real world".

(2) As a PAZ fills it eventually reaches a critical density of about 4,000 persons per square mile (this purposely coincides with the lower limit of our high density category) and will then fill to full capacity within the next decade.

This rule puts a top on any future growth in many of the PAZ's (actually PAZ 20 through PAZ 29). This theoretically derived number was then checked against actual empty building sites located in the above PAZ's. Checking individually with planning offices and city engineers offices in those PAZ's it was found that with one exception (PAZ 28) all PAZ's were from 90 to 95 percent full in 1965. This strengthened the belief in the validity of using 4,000

persons per square mile as the cut off point in deciding whether an area has reached full residential capacity or not.

The application of this second rule results in a really restriction on the degrees of freedom in moving the PAZ's.

Having laid down two rules which can be quantitatively expressed, and which also have the property of non-subjectivity i. e., a computer could "administer" them, the next step is to "play the game". The game must be played in successive steps. That is, 1970 must be completed and the "pieces" moved, before 1980 can be "played". Nineteen eighty must be "played" before 1990.

Distributing The Future Population Of Oakland County

The 1970 Game

- (1) All PAZ's with a density over 4,000 persons per square mile will be put aside and individually checked with the local engineers and planners to determine the exact number of residential sectors still available.
- (2) PAZ's in the Low Density group which could possibly be advanced to the Moderate Density group are examined.

Computation Of 1970 Population Of Fully Built-up PAZ's

	<u>Percent Filled</u>	<u>Pop. 1965</u>	<u>Additional Population Possible</u>	<u>Total</u>	<u>1970 Population</u>
PAZ 20	90	126,350	14,000	139,000	152,000
21	100	42,340	.....	42,000	46,000
22	95	23,600	1,000	25,000	27,000
23	95	84,000	4,000	88,000	96,000
24	95	2,650	.....	3,000	3,000
25	100	11,900	.....	12,000	13,000
26	90	31,900	3,000	35,000	38,000
27	90	26,000	3,000	29,000	32,000
28	65	35,000	19,000	54,000	59,000
29	90	169,000	2,000	19,000	21,000

Only three, PAZ's 6, 11, and 13 could advance to the Moderate Density group. Why is this true? Because the density of the remaining the PAZ's is so low that to advance any one would require an unreasonable number of new dwelling units. Which of the three PAZ's will it be? To advance all of them would mean that at least 135,000 new persons would enter the Moderate Density Zone. Since only 96 thousand can be "allowed in" this is obviously too much. On the other hand, the Moderate Density group may lose, through transfer to the High Density group. Therefore this possibility must be looked at before the first decision is made. Looking at PAZ's 14 through 19 which comprise the Moderate Density Group we see that to transfer any of them would add at least 140,000 persons.¹ Since the High Density Group can take no more than 86,000 new persons, it is clear that none can transfer. Now we can return to the Low - Moderate transfer. It must be less than 96,000 but must be at least one of the three PAZ's (PAZ 6, 11, 13). If we transfer PAZ 6, we transfer at least 18,000 persons, but this is not enough. If we transfer PAZ 11 or PAZ 13 we transfer at least 70,000 persons. What it amounts to is that either PAZ 11 or PAZ 13, but not both, as well as PAZ 6 must transfer to the Moderate Density Group. The choice is obvious. PAZ 11 has a much higher density (706 persons per square mile compared with 495) so it is in a much better position to transfer. Thus PAZ's 6 and 11 can transfer to

¹The High Density group today is mostly made out of old Royal Oak Township which was, as all townships, 35 square miles. To transfer a new township or its equivalent to High Density takes 140,000 persons. We shall see as the game is played that this will occur.

the Moderate Density Group. However, if we do this we add at least 89,000 persons, which leaves only (104,000 - 89,000 or 15,000 persons) to be split up among the 8 PAZ's comprising the Moderate Density group in 1970. This is an unnecessarily small amount of growth to spread among so many PAZ's. PAZ 6 can be dropped without violating any rules. If this is done, we have 33,000 persons to distribute among seven PAZ's.

This would end the transfer for the 1965-1970 period, and the following situation would hold:

	<u>Density Group</u>		
	<u>High</u>	<u>Moderate</u>	<u>Low</u>
1965 Population	401,000	207,000	184,000
1970 Population (temporary)	401,000	257,000	134,000
1970 Final Population	487,000	303,000	152,000
Population to distribute	86,000	46,000	18,000

A method of distribution which is consistent with the general theory of growth, is to distribute growth within a broad density group proportionate to existing density. This is called the rule of proportionate density and constitutes a third rule. For example; if 10,000 persons are to be distributed among four PAZ's with densities of 100, 200, 300, and 400, the PAZ with the density of 200 will be assigned 2,000 etc. Several exceptions must be made, but they also can be generalized. In the case of the high density areas, we must find out exactly how full they are and how many more persons or dwelling units can be expected. This was done and it was determined that 46,000 more persons could be added to the 1965 High Density Group before it

could be considered "full". However, a total of 86,000 persons had been assigned to this group, so that 40,000 persons still were "homeless". It was felt that since this was less than 1 percent of the total population they could be "squeezed in". This is not unrealistic. As any area fills additional building lots are intensively used.

The second exception concerns the case of a PAZ which has transferred from one broad density group to another. To be admitted to this group it must achieve a minimum density, even if it means taking more than its share as assigned. In this case PAZ with a 1965 density of 706 persons per square mile, must attain 1,000 persons per square mile by 1970. This means adding 20,000 (70,000-50,000) persons by 1970. Since the entire Moderate Density group can receive only 46,000 persons, PAZ must get more than its normal share. Only 26,000 remain to be distributed according to the proportionate density rule as previously specified.

We are now ready to distribute the 1965-1970 population increase:

(1) Low Density

Low density areas will get 18,000 additional persons proportionate to their 1965 density.

(2) Moderate Density

Moderate density areas will get 46,000 persons minus the 20,000 which must be assigned to PAZ 11. Also these Moderate Density PAZ's (PAZ 16, 18, 19) which are towns and villages will grow according to the actual amount of open residential land as determined by consultation with their local planning authorities. In this case the average empty space was about 10 percent.

These three PAZ's will then get 900 more persons, leaving about 25,000 to be assigned to the three remaining PAZ's by the proportionate increase method.

(3) High Density

Eighty-six thousand persons must be added: Checking all planners and city engineers in the municipalities involved it was found that 46,000 more persons would fill all PAZ's to 100 percent capacity. Adding these by community we were still 40,000 short of the necessary 86,000. Therefore the remaining 40,000 had to be "packed in", i. e., spread among the PAZ's proportionate to their numerical size. However, this simulates the real situation where remaining lots are filled even after the area is theoretically full. The total "pack" was less than 1 percent of the total population.

We have now played one round of the game. 1970 populations are shown in Table D-5. Now the next round begins using the 1980 benchmarks (Table D-5) and the 1970 populations and densities. This round will be described much more briefly, for it is just a repeat of the same four principles.

The 1970-1980 Game.

High Density

The number of persons projected to be 647,000 in 1980, an increase of 187,000 over 1970. Obviously no more can be packed into the existing PAZ's. Therefore we must take the 187,000 from PAZ's (11, 14, 15, 17) in the 1970 Moderate Density Group. In 1970 these four PAZ's had a population of 293,000. To fill them to the average density of 4,000 persons per square mile, necessary to transfer them to the High Density Group, would mean a population 574,000 or an increase of 281,000. Obviously not all four can enter. If

we distribute the 187,000 persons proportionate to the 1970 density we find that only PAZ 15 with a 1980 population of 143,000 persons qualifies for transfer. The next largest PAZ - PAZ 14 with a 1970 population of 89,000 and the 280,000 persons necessary to transfer it to the High Density Group. Thus among larger PAZ's only 15 can transfer. The small community PAZ's, 16, 18, and 19 can also be transferred, and although they were declared full by their local officials as early as 1965, and increased 10 percent by 1970, a small additional population can be assumed. This would add 19,000 more persons to the High Density Group. This still leaves 25,000 persons short of the theoretical total of 187,000 for 1980. However, the 25,000 can be added to the Moderate Density Group.

Moderate Density

The Moderate Density Group is expected to increase by 129,000 persons between 1970 and 1980, with PAZ 15 transferring out, it needs 74,000 more persons plus the 25,000 left over from the High Density deficiency, for a total need of 228,000 new persons. Looking at the Low Density Group we see that if we transfer PAZ 5 with a 1970 population of 15,200 persons and a density of 809 persons/square mile, we don't meet the 228,000 person requirement. Thus a second PAZ must transfer. PAZ 13 with a 1970 population of 35,000 persons and a 1970 density of 552 persons per square mile must also be transferred. This addition of 50,000 persons plus the additional 32,000 persons necessary to bring PAZ's 5 and 13 up to minimal density reduces the 228,000 persons to 146,000 persons to be added to the Moderate Density Group.

Low Density

Low Density

The Low Density Area has lost PAZ 5 and PAZ 13 for a total loss of 50,000 persons. According to Table D-5 it is scheduled to lose 28,000 persons so that 22,000 persons must be distributed by proportionate density. We have now played two rounds of the game, and only the third round, the 1980-1990 distribution remains.

The 1980 - 1990 Game

High Density

High Density is expected to gain 316,000 persons between 1980 and 1990. In addition 25,000 more should be added to make of the deficiency of the past decade. This makes a total of 341,000 persons to be added. The existing High Density PAZ's are all full so all addition must come from the Moderate Density PAZ's. PAZ 5, with a 1980 density of 2,393 persons/square mile and PAZ 17 with a 1980 density of 2,997 persons per square mile, are immediate candidates because of their relatively high density. They will, when filled to high density, contribute 215,000 of the necessary 341,000 additional persons. The next highest density PAZ in 1980 is PAZ 14. However, this is a large, two township PAZ, with a theoretical population of 280,000 persons at the required density. Our geographic gradations are not fine enough to give a very good result here. Actually the PAZ should be subdivided at this point. The best thing that can be done is to transfer the entire PAZ and accept the over estimate of high density territory. Therefore PAZ 14 is added giving a total of 1,135,000 persons living in High Density Areas in 1990.

Moderate Density

Moderate Density PAZ's are expected to add 21,000 persons between 1980 and 1990. However, the Moderate Density Group lost 272,000 persons to the High Density Group so that 293,000 persons need to be assigned to this category between 1980 and 1990. In addition the Moderate Density Group had an extra 25,000 persons from its 1980 over-assignment so that only 268,000 persons need to be assigned to complete the requirements of 453,000 persons by 1990. However, we must make up for the 1990 over-assignment of 154,000 persons to the High Density Group so that a final net total of 114,000 persons must be assigned, the Low Density Group must be considered. PAZ 9 was over 1,000 persons/square mile by 1980 anyhow. Therefore it must be included, and since it contained 9,200 persons the total distribution is reduced to 105,000 persons. However, if we don't transfer another PAZ from the Low Density Group we get a "no growth" situation which is unlikely. Therefore PAZ 12 with a 1980 density of 464 persons per square mile is also transferred, adding at least 72,000 more persons, and leaving a net of 33,000 persons to be distributed by proportionate density.

Low Density

The Low Density Group gains only 2,000 persons between 1980 and 1990. However in transferring PAZ's 9 and 12 the group lost 43,000 persons so 45,000 persons must be distributed by proportionate density.

TABLE D-5

BASIC DATA FOR POPULATION ASSIGNMENT BY POPULATION ANALYSIS ZONE: 1965, 1970, 1980, 1990

Paz	Area Sq. Mi.	1965		1970		1980		1990	
		Population	Density	Population	Density	Population	Density	Population	Density
1	214.32	22,760	1.06	23,400	1.09	24,800	1.15	27,900	1.30
2	70.07	11,670	1.66	12,800	1.82	14,800	2.11	20,800	2.96
3	36.17	1,870	.52	2,200	.60	2,900	.80	5,100	1.41
4	36.50	3,100	.85	3,600	.98	4,700	1.28	8,200	2.24
5&6	18.80	11,370	6.04	15,300	8.13	46,000	2.44	75,000	39.89
7	31.94	8,250	2.58	8,500	2.66	11,600	3.63	21,400	6.70
8	35.23	5,740	1.62	6,800	1.93	9,000	2.53	16,400	4.65
9	8.75	1,710	1.95	3,000	.85	9,200	10.51	9,200	10.51
10	36.57	9,900	2.70	11,600	13.25	16,200	4.42	26,700	7.30
11	33.46	49,500	14.79	70,100	19.16	97,000	28.98	110,000	32.87
12	71.51	26,980	3.77	29,400	8.78	35,100	4.90	84,000	11.74
13	59.63	31,380	5.26	35,000	4.89	99,000	16.60	105,000	17.60
14	69.98	82,200	11.74	88,700	12.67	123,000	17.57	280,000	40.01
15	31.47	63,400	20.14	73,900	23.48	143,000	45.44	143,000	45.44
16	.83	2,200	26.50	2,400	28.91	2,400	28.91	2,400	28.91
17	35.03	52,700	15.04	61,000	17.41	105,000	29.97	140,000	39.96
18	1.64	2,830	17.25	3,100	18.90	3,100	18.90	3,100	18.90
19	2.35	3,800	16.17	4,200	17.87	4,200	17.87	4,200	17.87
20	17.50	126,350	72.20	152,000	86.85	152,000	86.85	152,000	86.85
21	5.63	42,340	75.20	46,000	81.70	46,000	81.70	46,000	81.70
22	2.47	23,600	95.54	27,000	109.31	27,000	109.31	27,000	109.31
23	19.07	84,000	44.04	96,000	50.34	96,000	50.34	96,000	50.34
24	.59	2,650	44.91	3,000	50.84	3,000	50.84	3,000	50.84
25	.64	11,900	185.93	13,000	203.12	13,000	203.12	13,000	203.12
26	3.75	31,900	85.06	38,000	101.33	38,000	101.13	38,000	101.33
27	2.68	26,000	97.01	32,000	119.40	32,000	119.40	32,000	119.40
28	6.98	35,000	50.14	59,000	84.52	59,000	84.52	59,000	84.52
29	2.13	16,900	79.34	21,000	98.59	21,000	98.59	21,000	98.59

TABLE A-1 - BIRTHS BY NATION, REGION, COUNTY AND METROPOLITAN AREA: 1940 - 1964

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
United States	2,559,000	2,703,000	2,989,000	3,104,000	2,939,000	2,858,000	3,411,000	3,817,000	3,637,000	3,649,000
East North Central Region	454,935	492,387	562,315	564,395	522,090	512,639	643,267	734,011	698,839	710,373
Macomb County	2,218	2,702	3,348	3,619	3,254	3,133	3,822	4,419	4,650	5,000
Oakland County	5,166	6,109	7,435	7,619	6,443	6,535	8,170	9,763	9,805	10,171
Wayne County	35,537	39,560	47,872	48,484	42,148	42,558	51,761	58,349	56,287	57,417
Detroit SMSA	42,921	48,371	58,655	59,722	51,865	52,226	63,753	72,531	70,762	72,588
City of Detroit	28,271	31,016	37,020	37,351	32,129	32,452	39,426	44,552	42,807	43,732
	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
United States	3,632,000	3,823,000	3,913,000	3,965,000	4,078,000	4,104,000	4,218,000	4,308,000	4,255,000	4,245,000
East North Central Region	711,971	766,073	785,213	795,844	833,071	841,426	878,324	903,506	880,674	882,773
Macomb County	5,528	6,223	6,752	7,466	8,552	9,761	10,994	12,014	12,241	12,617
Oakland County	11,465	12,836	14,130	14,502	15,769	16,909	18,442	18,635	18,146	18,117
Wayne County	59,624	64,004	65,451	67,253	69,599	69,484	72,191	71,567	67,861	64,470
Detroit SMSA	76,347	83,063	86,333	89,221	93,920	96,154	101,627	102,216	98,248	95,204
City of Detroit	44,548	46,374	46,867	46,911	47,475	46,136	46,596	44,736	41,681	38,234
	1960	1961	1962	1963	1964					
United States	4,258,000	4,268,000	4,167,000	4,098,020	4,054,000					
East North Central Region	877,300	871,142	834,462	815,382	800,169					
Macomb County	12,777	12,846	12,450	12,855	12,859					
Oakland County	17,756	17,200	16,101	15,796	15,677					
Wayne County	61,866	59,813	55,510	54,140	53,183					
Detroit SMSA	92,393	89,859	84,061	82,791	81,719					
City of Detroit	36,096	34,461	32,045	31,458	31,039					

TABLE A-3 - NATURAL INCREASE BY NATION, REGION, COUNTY AND METROPOLITAN AREA: 1940 - 1964

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
United States	1,141,731	1,305,358	1,603,813	1,644,456	1,527,662	1,456,281	2,015,383	2,371,630	2,190,663	2,205,393
East North Central Region	162,677	204,468	273,488	259,174	228,651	218,395	349,002	427,478	397,992	407,311
Macomb County	1,612	1,778	2,351	2,500	2,211	2,127	2,679	3,285	3,398	3,757
Oakland County	3,162	3,968	5,196	5,236	4,199	4,285	5,731	7,385	7,278	7,604
Wayne County	18,325	21,891	29,202	28,328	23,056	23,672	32,495	38,521	36,383	37,434
Detroit SMSA	22,703	27,607	33,897	36,064	29,486	30,064	40,907	49,191	47,079	48,795
City of Detroit	13,907	16,349	21,787	20,751	16,486	17,064	23,831	28,556	26,616	27,461
	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
United States	2,179,546	2,340,901	2,416,162	2,447,459	2,596,909	2,575,283	2,653,524	2,674,872	2,607,114	2,589,331
East North Central Region	418,640	456,850	472,453	474,674	523,207	520,206	550,833	562,427	539,926	541,785
Macomb County	3,928	4,861	5,320	5,870	7,035	7,964	9,063	10,017	10,152	10,391
Oakland County	8,691	9,950	11,018	11,157	12,410	13,357	14,699	14,782	14,098	14,076
Wayne County	38,942	42,239	43,673	44,612	47,802	46,853	49,326	47,757	44,630	40,847
Detroit SMSA	51,561	60,050	60,011	61,639	67,193	68,174	73,088	72,556	68,890	65,314
City of Detroit	27,848	28,937	29,682	29,130	30,517	28,700	29,383	26,799	24,383	20,668
	1960	1961	1962	1963	1964					
United States	2,550,878	2,571,151	2,414,886	2,284,471	2,253,000					
East North Central Region	529,379	527,250	480,152	449,065	440,401					
Macomb County	10,512	10,516	9,843	10,201	10,050					
Oakland County	13,511	13,023	11,634	11,083	10,760					
Wayne County	37,616	35,830	30,486	28,430	27,575					
Detroit SMSA	61,639	59,369	51,963	49,714	48,385					
City of Detroit	18,003	16,816	13,765	12,879	12,426					

TABLE -A-4- BIRTHS BY NATION, REGION, COUNTY AND MET. AREA: 1940 - 1964

	<u>1940</u>	<u>1941</u>	<u>1942</u>	<u>1943</u>	<u>1944</u>	<u>1945</u>	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>
United States										
East North Central Region	17.77	18.21	18.81	18.18	17.76	17.93	18.85	19.23	19.21	19.46
Macomb County	.08	.09	.11	.11	.11	.10	.11	.11	.12	.13
Oakland County	.20	.22	.24	.24	.21	.22	.23	.25	.26	.27
Wayne County	.67	1.46	1.60	1.56	1.43	1.48	1.51	1.52	1.54	1.57
Detroit SMSA	1.67	1.78	1.96	1.92	1.76	1.82	1.86	1.90	1.94	1.98
City of Detroit	1.10	1.14	1.23	1.20	1.09	1.13	1.15	1.16	1.17	1.19
	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
United States										
East North Central Region	19.60	20.03	20.06	20.07	20.42	20.50	20.82	20.97	20.69	20.79
Macomb County	.15	.16	.17	.18	.20	.23	.26	.27	.28	.29
Oakland County	.31	.33	.36	.36	.38	.41	.43	.43	.42	.42
Wayne County	1.64	1.67	1.67	1.69	1.70	1.69	1.71	1.66	1.59	1.51
Detroit SMSA	2.10	2.17	2.20	2.25	2.30	2.34	2.40	2.37	2.30	2.24
City of Detroit	1.22	1.21	1.19	1.18	1.16	1.12	1.10	1.03	.97	.90
	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>					
United States										
East North Central Region	20.60	20.41	20.02	19.89	19.73					
Macomb County	.30	.30	.29	.31	.31					
Oakland County	.41	.40	.38	.38	.38					
Wayne County	1.45	1.40	1.33	1.32	1.31					
Detroit SMSA	2.16	2.10	2.01	2.02	2.01					
City of Detroit	.84	.80	.76	.76	.76					

TABLE A-5 DEATHS BY NATION, REGION, COUNTY AND MET. AREA: 1940 - 1964

	<u>1940</u>	<u>1941</u>	<u>1942</u>	<u>1943</u>	<u>1944</u>	<u>1945</u>	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>
United States										
East North Central Region	20.62	20.60	20.85	20.91	20.79	20.99	21.08	21.20	20.80	20.99
Macomb County	.07	.06	.07	.07	.07	.07	.08	.07	.08	.08
Oakland County	.14	.15	.16	.16	.15	.16	.17	.16	.17	.17
Wayne County	1.21	1.26	1.34	1.38	1.35	1.34	1.38	1.37	1.37	1.38
Detroit SMSA	1.42	1.48	1.78	1.62	1.58	1.58	1.63	1.61	1.63	1.64
City of Detroit	1.01	1.06	1.09	1.13	1.10	1.09	1.11	1.10	1.11	1.12
	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
United States										
East North Central Region	20.19	20.86	20.89	21.16	20.90	21.01	20.93	20.88	20.67	20.59
Macomb County	.09	.09	.09	.10	.10	.11	.12	.12	.12	.13
Oakland County	.19	.19	.20	.22	.22	.23	.23	.23	.24	.24
Wayne County	1.42	1.46	1.45	1.49	1.47	1.48	1.46	1.45	1.40	1.42
Detroit SMSA	1.70	1.75	1.75	1.81	1.80	1.83	1.82	1.81	1.78	1.80
City of Detroit	1.14	1.17	1.14	1.17	1.14	1.14	1.10	1.09	1.04	1.06
	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>					
United States										
East North Central Region	20.38	20.26	20.22	20.19	19.97					
Macomb County	.13	.13	.14	.14	.15					
Oakland County	.24	.24	.25	.25	.27					
Wayne County	1.42	1.41	1.42	1.41	1.42					
Detroit SMSA	1.80	1.79	1.83	1.82	1.85					
City of Detroit	1.05	1.04	1.04	1.02	1.03					

TABLE A-6 NATIONAL INCREASE RATES BY NATION, REGION, COUNTY AND MET. AREA: 1940-1964

	<u>1940</u>	<u>1941</u>	<u>1942</u>	<u>1943</u>	<u>1944</u>	<u>1945</u>	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>
United States										
East North Central Region	14.24	15.66	17.05	15.76	14.96	14.99	17.31	18.02	18.16	18.46
Macomb County	.14	.13	.14	.15	.14	.14	.13	.13	.15	.17
Oakland County	.27	.30	.32	.31	.27	.27	.28	.31	.33	.34
Wayne County	1.60	1.67	1.82	1.72	1.50	1.62	1.61	1.62	1.66	1.69
Detroit SMSA	1.98	2.11	2.11	2.19	1.93	2.06	2.02	2.07	2.14	2.21
City of Detroit	1.21	1.25	1.35	1.26	1.07	1.17	1.18	1.20	1.21	1.24
	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
United States										
East North Central Region	19.20	19.51	19.55	19.39	20.14	20.19	20.75	21.02	20.70	20.92
Macomb County	.18	.20	.22	.23	.27	.30	.34	.37	.38	.40
Oakland County	.39	.42	.45	.45	.47	.51	.55	.55	.54	.54
Wayne County	1.78	1.80	1.80	1.82	1.84	1.81	1.85	1.78	1.71	1.57
Detroit SMSA	2.36	2.56	2.48	2.51	2.58	2.64	2.75	2.71	2.64	2.52
City of Detroit	1.27	1.23	1.22	1.19	1.17	1.11	1.10	1.00	.93	.79
	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>					
United States										
East North Central Region	20.75	20.50	19.88	19.65	19.54					
Macomb County	.42	.40	.40	.44	.44					
Oakland County	.52	.50	.48	.48	.47					
Wayne County	1.47	1.39	1.26	1.24	1.22					
Detroit SMSA	2.41	2.30	2.15	2.17	2.14					
City of Detroit	.70	.65	.57	.56	.55					

TABLE A-7

AGE, RACE AND SEX: OAKLAND COUNTY, 1940

Age	All Classes			White			Non-White		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	254,068	129,800	124,268	248,661	127,206	121,455	5,407	2,594	2,813
Under 5 Years	23,509	12,074	11,435	23,062	11,864	11,198	447	210	237
5 to 9 Years	23,274	12,006	11,268	22,780	11,768	11,012	494	238	256
10 to 14 Years	24,262	12,447	11,815	23,731	12,197	11,534	522	250	272
15 to 19 Years	22,436	11,239	11,197	22,023	11,047	10,976	413	192	221
20 to 24 Years	20,506	10,002	10,504	20,066	9,822	10,244	440	180	260
25 to 29 Years	20,870	10,053	10,817	20,373	9,840	10,533	497	213	284
30 to 34 Years	21,540	10,636	10,904	21,044	10,413	10,631	496	223	273
35 to 39 Years	21,387	11,251	10,136	20,853	10,993	9,855	534	253	281
40 to 44 Years	19,103	10,083	9,020	18,610	9,831	8,779	493	252	241
45 to 49 Years	16,601	8,981	7,620	16,250	8,775	7,475	369	206	163
50 to 54 Years	12,997	7,086	5,891	12,727	6,950	5,777	250	136	114
55 to 59 Years	9,157	4,838	4,319	8,978	4,738	4,240	179	100	79
60 to 64 Years	6,478	3,349	3,129	6,385	3,290	3,095	93	59	34
65 to 69 Years	4,988	2,491	2,497	4,924	2,459	2,465	64	32	32
70 to 74 Years	3,354	1,573	1,781	3,295	1,546	1,749	59	27	32
75 Years and Older	3,626	1,691	1,935	3,578	1,668	1,910	48	23	25

TABLE A-8

AGE, RACE AND SEX: OAKLAND COUNTY 1950

Age	All Classes			White			Non-White		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	396,001	198,718	197,283	377,613	189,630	187,983	18,388	9,088	9,300
Under 5	49,285	25,433	23,852	46,638	24,077	22,561	2,647	1,356	1,291
5 - 9	40,217	20,515	19,702	37,843	19,330	18,513	2,374	1,185	1,189
10 - 14	31,173	15,931	15,242	29,453	15,059	14,394	1,720	872	848
15 - 19	25,678	12,708	12,970	24,368	12,057	12,311	1,310	651	659
20 - 24	28,171	13,258	14,903	26,702	12,656	14,046	1,469	612	857
25 - 29	34,701	16,524	18,177	32,863	15,665	17,198	1,838	859	979
30 - 34	33,334	16,188	17,146	31,567	15,378	16,189	1,767	810	957
35 - 39	30,617	15,175	15,742	29,090	14,400	14,690	1,527	775	752
40 - 44	27,847	14,207	13,640	26,717	13,609	13,108	1,130	598	532
45 - 49	24,604	13,037	11,567	23,714	12,557	11,157	890	480	410
50 - 54	20,596	10,869	9,727	19,999	10,531	9,468	597	338	259
55 - 59	16,575	8,772	7,803	16,167	8,550	7,617	408	222	186
60 - 64	12,382	6,447	5,935	12,107	6,308	5,799	275	139	136
65 - 69	8,784	4,325	4,459	8,566	4,229	4,337	218	96	122
70 - 74	5,515	2,527	2,988	5,423	2,487	2,936	92	40	52
75 +	6,522	2,792	3,730	6,396	2,737	3,659	126	55	71

TABLE A-9
AGE, RACE AND SEX: OAKLAND COUNTY 1960

Age	Total	All Classes		Total	White		Non-White		
		Male	Female		Male	Female	Total	Male	Female
All Ages	690,259	342,380	347,879	666,181	330,807	335,374	24,078	11,573	12,505
Under 5	93,018	47,293	45,725	89,322	45,475	43,847	3,696	1,818	1,878
5 - 9	86,208	44,016	42,192	82,683	42,282	40,401	3,525	1,734	1,791
10 - 14	69,386	35,563	33,823	66,819	34,270	32,549	2,567	1,293	1,274
15 - 19	47,016	23,261	23,755	45,285	22,432	22,853	1,731	829	902
20 - 24	33,769	14,844	18,925	32,411	14,286	18,125	1,358	558	800
25 - 29	42,940	20,170	22,770	41,296	19,448	21,848	1,644	722	922
30 - 34	53,040	25,756	27,284	51,166	24,913	26,253	1,874	843	1,031
35 - 39	55,601	27,298	28,303	53,875	26,442	27,433	1,716	856	860
40 - 44	48,023	23,894	24,129	46,529	23,189	23,340	1,494	705	789
45 - 49	40,458	20,428	20,030	39,145	19,797	19,348	1,313	631	682
50 - 54	33,897	17,332	16,565	32,932	16,860	16,072	965	472	493
55 - 59	28,141	14,798	13,343	27,336	14,392	12,944	805	406	399
60 - 64	21,120	10,797	10,323	20,568	10,491	10,077	552	306	246
65 - 69	15,813	7,583	8,230	15,411	7,372	8,039	402	211	191
70 - 74	10,537	4,900	5,637	10,309	4,793	5,516	228	107	121
75 +	11,292	4,538	6,845	10,984	4,365	6,619	208	82	126

TABLE A-10

INCOME OF FAMILIES AND PERSONS, OAKLAND COUNTY 1960

Family Income

All Families	173,063
Under \$1,000	3,986
\$1,000 to \$1,999	5,483
\$2,000 to \$2,999	6,421
\$3,000 to \$3,999	7,702
\$4,000 to \$4,999	12,203
\$5,000 to \$5,999	19,859
\$6,000 to \$6,999	20,177
\$7,000 to \$7,999	18,572
\$8,000 to \$8,999	15,676
\$9,000 to \$9,999	13,079
\$10,000 to \$14,999	32,643
\$15,000 to \$24,999	11,889
\$25,000 and Over	5,373
Median Income: Families	\$7,576
Unrelated Individuals	\$2,272
Families and Unrel. Individ.	\$7,042
Husband-Wife Families, Head an Earner Two Children Under 18	29,908
Median Income	\$7,751

Income of Persons

Male, Total	220,549
Total With Income	201,052
\$1 to \$499 or Loss	12,224
\$500 to \$999	7,026
\$1,000 to \$1,499	7,707
\$1,500 to \$1,999	5,297
\$2,000 to \$2,499	5,856
\$2,500 to \$2,999	4,641
\$3,000 to \$3,499	5,893
\$3,500 to \$3,999	5,753
\$4,000 to \$4,499	8,511
\$4,500 to \$4,999	9,809
\$5,000 to \$5,999	29,454
\$6,000 to \$6,999	23,830
\$7,000 to \$9,999	42,072
\$10,000 and Over	32,979
Median Income	\$5,944
Female, Total	231,875
Total With Income	108,102
\$1 to \$499 or Loss	26,610
\$500 to \$999	17,899
\$1,000 to \$1,499	9,866
\$1,500 to \$1,999	7,378
\$2,000 to \$2,499	7,279
\$2,500 to \$2,999	5,774
\$3,000 to \$3,499	6,251
\$3,500 to \$3,999	4,882
\$4,000 to \$4,499	5,708
\$4,500 to \$4,999	4,643
\$5,000 to \$5,999	6,115
\$6,000 to \$6,999	2,756
\$7,000 to \$9,999	2,007
\$10,000 and Over	934
Median Income	\$1,484

TABLE A-13
 DENSITY FOR OAKLAND COUNTY

	Sq. Mile	1960 Population	Persons Per Sq. Mi. (1960)
1 Madison Heights City	4.02	9,640	2,398
2 Madison Heights City	1.52	11,622	7,646
3 Madison Heights City	1.44	12,081	8,390
4 Hazel Park City	.73	4,710	6,452
5 Hazel Park City	.70	7,286	10,409
6 Hazel Park City	.59	6,188	10,488
7 Hazel Park City	.66	7,447	11,283
8 Ferndale City	1.29	9,634	7,468
9 Ferndale City	.79	7,210	9,127
10 Ferndale City	1.67	14,503	8,684
11 Royal Oak Township	.64	8,147	12,730
12 Oak Park City	1.86	10,091	5,425
13 Oak Park City	1.87	13,079	6,994
14 Oak Park City	1.36	13,462	9,899
15 Pleasant Ridge City	.54	3,907	7,050
16 Huntington Woods City	1.54	8,746	5,679
17 Berkley City	1.07	8,571	8,010
18 Berkley City	1.40	14,704	10,503
19 Royal Oak City	1.58	12,456	7,884
20 Royal Oak City	1.00	7,743	7,743
21 Royal Oak City	1.76	12,849	7,301
22 Royal Oak City	1.03	5,568	5,406
23 Royal Oak City	2.37	10,011	4,224
24 Royal Oak City	1.82	13,961	7,671
25 Royal Oak City	1.14	9,335	8,189
26 Royal Oak City	.78	8,689	11,140
27 Clawson City	2.13	14,795	6,946
28 Birmingham City	.80	4,452	5,565
29 Birmingham City	.83	6,850	8,253
30 Birmingham City	1.94	7,627	3,931
31 Birmingham City	.91	6,596	7,248
32 Beverly Hills City	.96	5,088	5,300
33 Beverly Hills City	3.18	3,563	1,120
34 Lathrup Village City	1.44	3,558	2,471
35 Southfield City	2.55	4,213	1,652
36 Southfield City	4.59	6,331	1,379
37 Southfield City	3.05	3,197	1,048
38 Southfield City	2.93	6,111	2,085
39 Southfield City	2.83	4,399	1,554
40 Southfield City	2.97	2,770	933
41 Southfield City	4.45	3,014	677
42 Southfield City	2.52	1,466	582
43 Bingham Farms & Franklin Village	3.84	2,666	694
44 Farmington Township	7.94	5,859	738
45 Farmington Township	8.00	7,907	988

		1960	Persons
	Sq. Mile	Population	Per Sq. Mi.
			(1960)
46	Farmington Township	7.67	1,099
47	Farmington Township	5.40	2,357
48	Farmington Township	4.41	9,470
49	Farmington City	1.90	6,881
50	Novi Village	31.34	6,603
51	Northville City	.60	836
52	Wixom City	8.75	1,531
53	South Lyon City	1.27	1,753
54	Lyon Township	34.13	2,880
55	Milford Village	2.48	4,323
56	Milford Township	32.19	1,548
57	Commerce Township	17.62	3,933
58	Commerce Township	10.71	5,675
59	Wolverine Lake Village	1.64	2,404
60	Walled Lake City	2.35	3,550
61	West Bloomfield Township	10.63	6,603
62	West Bloomfield Township	14.85	2,444
63	West Bloomfield Township	9.62	5,947
64	Keego Harbor City	.59	2,761
65	Sylvan Lake City	.83	2,004
66	Bloomfield Township	2.59	2,541
67	Bloomfield Township	7.77	3,892
68	Bloomfield Township	7.36	6,390
69	Bloomfield Township	2.28	5,575
70	Bloomfield Township	5.82	4,132
71	Bloomfield Hills City	5.00	2,378
72	Troy City	6.38	3,222
73	Troy City —	6.36	2,030
74	Troy City	6.00	2,612
75	Troy City	5.94	3,435
76	Troy City	5.52	5,963
77	Troy City	3.21	2,140
78	Rochester Village	1.57	5,431
79	Avon Township	10.87	3,265
80	Avon Township	6.10	4,887
81	Avon Township	5.71	4,781
82	Avon Township	12.40	3,013
83	Pontiac Township	3.87	3,913
84	Pontiac Township	13.32	5,046
85	Lake Angelus Village	1.61	231
86	Pontiac City	2.36	7,414
87	Pontiac City	3.62	6,819
88	Pontiac City	1.36	5,999
89	Pontiac City	.98	6,143
90	Pontiac City	.57	4,902
91	Pontiac City	.93	2,842
92	Pontiac City	1.02	3,895
93	Pontiac City	.32	3,434
94	Pontiac City	.41	3,906
95	Pontiac City	.30	2,287
96	Pontiac City	.70	5,445
97	Pontiac City	2.80	2,401

	Sq. Mile	1960 Population	Persons Per Sq. Mi. (1960)
98 Pontiac City	.77	9,186	11,930
99 Pontiac City	1.14	6,677	5,857
100 Pontiac City	.59	4,801	8,137
101 Pontiac City	1.20	6,082	5,068
102 Waterford Township	1.79	4,427	2,473
103 Waterford Township	3.66	5,138	1,404
104 Waterford Township	3.05	4,551	1,492
105 Waterford Township	3.63	6,479	1,785
106 Waterford Township	4.58	6,131	1,350
107 Waterford Township	2.60	3,524	1,355
108 Waterford Township	2.31	2,561	1,109
109 Waterford Township	3.05	4,327	1,419
110 Waterford Township	4.96	2,646	533
111 Waterford Township	5.40	7,144	1,329
112 White Lake Township	36.57	8,381	229
113 Highland Township	35.23	4,855	138
114 Rose Township	35.80	1,482	41
115 Springfield Township	36.51	2,664	73
116 Independence Township	36.19	10,890	301
117 Lake Orion Village	1.33	2,698	2,029
118 Orion Township	34.49	9,146	265
119 Oakland Township	36.50	2,469	68
120 Addison Township & Leonard Village	36.17	1,691	47
121 Oxford Village	1.50	2,357	1,571
122 Oxford Township	33.48	3,204	96
123 Brandon Township & Ortonville Vill.	35.65	3,187	89
124 Groveland Township	35.87	1,306	36
125 Holly Village	2.06	3,269	1,587
126 Holly Township	34.45	2,282	66

TABLE A-11
Detailed Occupational Characteristics: Oakland County;
as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Managers, Off's & Propr's, Exc. Farm--Con.						
Officials, Lodge, Society, Union, Etc.	142	7	812	60	17.5	11.7
Postmasters	36	8	89	8	40.4	100.0
Purchasing Agents and Buyers (N.E.C.)	731	39	2,906	154	25.2	25.3
Managers, Off'ls, and Propr's (N.E.C.)--Salaried	12,432	1,100	42,979	6,125	28.9	18.0
Construction	783	37	2,513	119	21.2	21.1
Manufacturing	5,071	168	15,377	965	33.0	17.4
Transportation	304	15	1,814	82	16.8	18.3
Communications, & Utilities & Sanitary Services	461	29	1,460	228	31.6	12.7
Wholesale Trade	875	50	3,089	253	28.3	19.8
Retail Trade	2,292	328	8,896	1,882	25.8	17.4
Food and Dairy Products Stores	378	40	1,972	226	19.2	17.7
Eating and Drinking Places	198	65	849	319	23.3	20.4
Gen. Merchandise & Ltd. Price Variety Stores	295	81	1,119	474	26.4	17.1
Apparel and Accessories Stores	220	67	820	408	26.8	16.4
Furniture, Housefurnishing, & Equip. Stores	148	8	424	69	34.9	11.6
Motor Vehicles and Accessories Retailing	443	14	1,555	91	28.5	15.4
Gasoline Service Stations	115	...	571	4	20.1	...
Hardware, Farm Equip., & Bldg. Material' Ret.	227	9	650	38	34.9	23.7
Other Retail Trade	268	44	936	253	28.6	17.4
Banking and Other Finances	676	76	3,008	382	22.5	19.9
Insurance and Real Estate	482	66	1,810	540	26.6	12.2
Business Services	591	53	1,443	270	41.0	19.6
Automobile Repair Services and Garages	108	3	410	6	26.3	50.0
Miscellaneous Repair Services	33	...	131	27	25.2	...
Personal Services	131	66	815	401	16.1	16.5
All Other Industries (Incl. Not Reported)	625	209	2,213	970	28.2	21.6

TABLE A-11
Detailed Occupational Characteristics: Oakland County;
as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Clerical and Kindred Workers	11,144	22,441	71,110	138,204	15.7	16.2
Agents (N.E.C.)	538	67	2,727	505	19.7	13.3
Attendants and Assistants, Library	20	92	149	392	13.4	24.5
Attendants, Physician's and Dentist's Office	4	476	58	2,168	6.9	22.0
Baggagemen, Transportation	...	...	45	...	--	--
Bank Tellers	102	367	819	2,106	12.5	17.4
Bookkeepers	501	2,854	2,419	13,474	20.7	21.2
Cashiers	229	1,432	1,748	8,173	13.1	17.5
Collectors, Bill and Account	109	24	564	145	19.3	16.6
Dispatchers and Starters, Vehicle	250	16	1,416	135	17.7	11.9
Express Messengers and Railway Mail Clerks	4	...	67	4	6.0	--
File Clerks	53	284	406	2,472	13.1	11.5
Insurance Adjusters, Examiners, and Investigators	189	21	1,090	164	17.3	12.8
Mail Carriers	667	16	3,959	50	16.8	32.0
Messengers and Office Boys	120	24	1,144	222	10.5	10.8
Office Machine Operators	333	889	2,173	6,688	15.3	13.3
Payroll and Timekeeping Clerks	128	189	1,028	1,384	12.5	13.7
Postal Clerks	308	139	3,096	711	9.9	19.6
Receptionists	12	650	24	3,215	50.0	20.2
Secretaries	118	5,347	664	29,227	17.8	18.3
Shipping and Receiving Clerks	603	82	5,394	515	11.2	15.9
Stenographers	29	858	181	6,082	16.0	14.1
Stock Clerks and Storekeepers	1,433	89	8,491	821	16.9	10.9
Telegraph Messengers	8	...	105	21	7.6	--
Telegraph Operators	32	8	105	86	30.5	9.3
Telephone Operators	45	947	273	6,384	16.5	14.8
Ticket, Station, and Express Agents	80	24	749	347	10.7	6.9
Typists	53	1,535	597	12,741	8.9	12.0
Clerical and Kindred Workers (N.E.C.)	5,176	6,011	31,619	39,972	16.4	15.0

TABLE A-11
Detailed Occupational Characteristics: Oakland County;
as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Sales Workers	16,618	6,788	68,822	38,486	24.1	17.6
Advertising Agents and Salesmen	246	37	756	120	32.5	30.8
Auctioneers	13	...	21	4	61.9	--
Demonstrators	3	155	25	639	12.0	24.3
Hucksters and Peddlers	105	187	596	697	17.6	26.8
Insurance Agents, Brokers, and Underwriters	1,603	84	6,445	647	24.9	13.0
Newsboys	1,750	87	8,775	204	19.9	42.6
Real Estate Agents and Brokers	900	282	3,466	800	26.0	35.3
Stock and Bond Salesmen	131	8	548	27	23.9	29.6
Salesmen and Sales Clerks (N.E.C.)	11,867	5,948	48,190	35,348	24.6	16.8
Manufacturing	3,191	348	10,405	2,121	30.7	16.4
Wholesale Trade	2,844	112	10,532	579	27.0	19.3
Retail Trade	5,022	5,341	24,103	31,749	20.8	16.8
Other Industries (Incl. Not Reported)	810	147	3,150	899	25.7	16.4

TABLE A-11
Detailed Occupational Characteristics: Oakland County;
as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Mgrs., Off'ls, & Propr's (N.E.C.)--Self-Employed	6,861	802	26,884	3,473	25.5	23.1
Construction	1,133	4	3,642	23	31.1	17.4
Manufacturing	1,029	46	3,240	189	31.8	24.3
Transportation	135	15	583	48	23.2	31.3
Communications, & Utilities & Sanitary Services	9	...	38	4	23.7	--
Wholesale Trade	581	35	2,118	107	27.4	32.7
Retail Trade	2,764	451	12,411	2,151	22.3	21.0
Food and Dairy Products Stores	487	71	2,981	461	16.3	15.4
Eating and Drinking Places	409	161	2,445	930	16.7	17.3
Gen. Merchandise & Ltd. Price Variety Stores	73	8	292	52	25.0	15.4
Apparel and Accessories Stores	156	59	527	182	29.6	32.4
Furniture, Housefurnishings, & Equip. Stores	149	8	587	49	25.4	16.3
Motor Vehicles and Accessories Retailing	216	...	710	4	30.4	--
Gasoline Service Stations	596	8	2,513	28	23.7	28.6
Hardware, Farm Equip., & Bldg. Material, Ret.	258	33	917	59	28.1	55.9
Other Retail Trade	420	103	1,439	386	29.2	26.7
Banking and Other Finance	68	...	227	22	30.0	--
Insurance and Real Estate	212	18	616	61	34.4	29.5
Business Services	175	32	671	131	26.1	24.4
Automobile Repair Services and Garages	125	8	686	51	18.2	15.7
Miscellaneous Repair Services	53	12	232	27	22.8	44.4
Personal Services	296	105	1,349	375	21.9	28.0
All Other Industries (Incl. Not Reported)	281	76	1,071	284	26.2	28.8

TABLE A-11
 Detailed Occupational Characteristics: Oakland County;
 as Percent of Detroit S.M.S.A., 1960

Detailed Occupation	Oakland County		Detroit S.M.S.A.		Oakland County Detroit S.M.S.A.	
	Male	Female	Male	Female	Male	Female
Operatives and Kindred Workers--Con.						
Operatives and Kindred Workers (N.E.C.)--Con.						
Manufacturing--Con.						
Nondurable Goods--Con.						
Tobacco Manufactures	...	4	10	143	...	2.8
Textile Mill Products	4	28	200	159	2.0	17.6
Knitting Mills	...	4	...	4	...	100.0
Dyeing & Fin. Text., Exc. Wool & Knit Gds.	...	...	5	...	...	...
Floor Covering, Exc. Hard Surface	...	...	15	...	...	...
Yarn, Thread, and Fabric Mills	4	4	31	33	12.9	12.1
Miscellaneous Textile Mill Products	...	20	149	122	...	16.4
Apparel & Other Fabricated Textile Products	45	4	234	383	19.2	1.0
Apparel and Accessories	28	...	112	200	25.0	...
Miscellaneous Fabricated Textile Products	17	4	122	183	13.9	2.2
Paper and Allied Products	90	8	995	411	9.0	1.9
Pulp, Paper, and Paperboard Mills	31	4	391	71	7.9	5.6
Paperboard Containers and Boxes	29	4	271	186	10.7	2.2
Miscellaneous Paper and Pulp Products	30	...	333	154	9.0	...
Printing, Publishing, and Allied Industries	127	84	824	488	15.4	17.2
Newspaper Publishing and Printing	29	27	197	48	14.7	56.3
Printing, Publishing, and Allied Industries, Exc. Newspapers	98	57	627	440	15.6	13.0
Chemicals and Allied Products	228	33	3,066	573	7.4	5.8
Synthetic Fibers	4	...	8	...	50.0	...
Drugs and Medicines	8	12	369	373	2.2	3.2
Paints, Varnishes, and Related Products	88	...	772	69	11.4	...
Miscellaneous Chemicals & Allied Products	128	21	1,917	131	6.7	17.0
Petroleum and Coal Products	...	...	299	8	...	...
Petroleum Refining	...	...	276	8	...	...
Miscellaneous Petroleum and Coal Products	...	...	23	...	...	...

TABLE A-11
Detailed Occupational Characteristics: Oakland County;
as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Rubber and Misc. Plastic Products	397	87	2,477	493	16.0	17.6
Rubber Products	148	144	523	535	28.3	26.9
Misc. Plastic Products	12	12	91	109	13.2	11.0
Leather and Leather Products	12	...	20	...	60.0	...
Leather: Tanned, Curried, and Finished	...	...	8	...	...	...
Footwear, Exc. Rubber	...	12	63	109	...	11.0
Leather Products, Exc. Footwear	27	4	147	35	18.4	11.4
Not Specified Manufacturing Industries	1,087	166	8,061	1,523	13.5	10.9
Nonmanufacturing Industries (Incl. Not Reported)	256	5	1,282	14	20.0	35.7
Construction	29	...	394	13	7.4	...
Railroads and Railway Express Service	58	...	441	33	13.2	...
Transportation, Exc. Railroad	76	15	941	57	8.1	26.3
Communications, and Utilities & Sanitary Serv.	337	59	2,826	738	11.9	8.0
Wholesale and Retail Trade	156	41	960	171	16.3	24.0
Business and Repair Services	23	16	114	111	20.2	14.4
Personal Services	30	4	346	57	8.7	7.0
Public Administration	122	26	757	329	16.1	7.9
All Other Industries (Incl. Not Reported)	211	4,795	1,025	26,086	20.6	18.4
Private Household Workers	105	1,946	285	6,499	36.8	29.9
Baby Sitters, Private Household	4	553	40	2,470	10.0	22.4
Housekeepers, Private Household	4	357	28	1,291	14.3	27.7
Living In	...	196	12	1,179	...	16.6
Living Out	...	54	8	218	...	24.8
Laundresses, Private Household	...	...	...	...	...	...
Living In	...	54	8	218	...	24.8
Living Out	102	2,242	692	16,899	14.7	13.3
Private Household Workers (N.E.C.)	48	549	135	1,931	35.6	28.4
Living In	54	1,693	557	14,968	9.7	11.3
Living Out						

TABLE A-11
 Detailed Occupational Characteristics: Oakland County;
 as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Waiters	85	2,737	1,205	15,914	7.1	17.2
Service Workers, Exc. Private Household (N.E.C.)	205	214	1,583	1,415	13.0	15.1
Farm Laborers and Foremen	608	102	1,692	348	35.9	29.3
Farm Foremen	...	...	22	...	--	--
Farm Laborers, Wage Workers	552	60	1,501	196	36.8	30.6
Farm Laborers, Unpaid Family Workers	49	38	157	148	31.2	25.7
Farm Service Laborers, Self-Employed	7	4	12	4	58.3	100.0

TABLE A-11
Detailed Occupational Characteristics: Oakland County;
as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Service Workers, Exc. Private Household	7,075	9,163	55,031	59,906	12.9	15.3
Attendants, Hospital and Other Institution	163	961	1,908	6,525	8.5	14.7
Attendants, Professional & Personal Serv. (N.E.J.)	65	113	460	1,022	14.1	11.0
Attendants, Recreation and Amusement	249	15	1,139	183	21.9	8.2
Barbers	506	14	3,709	39	13.6	35.9
Bartenders	398	96	3,608	384	11.0	25.0
Boarding and Lodging House Keepers	...	52	50	215	--	24.2
Bootblacks	23	...	127	...	18.1	--
Chambermaids and Maids, Exc. Private Household	5	90	60	1,990	8.3	4.5
Charwomen and Cleaners	317	322	1,802	3,302	17.6	9.8
Cooks, Exc. Private Household	503	962	3,540	4,865	14.2	19.8
Counter and Fountain Workers	47	475	365	2,618	12.9	18.1
Elevator Operators	24	62	639	901	3.8	6.9
Hairdressers and Cosmetologists	117	870	774	5,529	15.1	15.7
Housekeepers and Stewards, Exc. Private Household	76	407	448	2,215	17.0	18.4
Janitors and Sextons	1,634	269	11,687	3,519	14.0	7.6
Kitchen Workers (N.E.C.), Exc. Private Household	202	652	1,638	4,561	12.3	14.3
Midwives	3	...	7	4	42.9	--
Porters	117	...	3,002	65	3.9	--
Practical Nurses	108	751	382	3,757	28.3	--
Protective Service Workers	2,193	73	16,609	781	13.2	9.3
Firemen, Fire Protection	405	...	3,035	...	13.3	--
Guards, Watchmen, and Doorkeepers	998	8	6,333	157	15.8	5.1
Marshals and Constables	4	...	35	4	11.4	--
Policemen and Detectives	663	24	6,764	251	9.8	9.6
Government	636	12	6,458	161	9.7	7.5
Private	27	12	306	90	8.8	13.3
Sheriffs and Bailiffs	52	...	245	8	21.2	--
Watchmen (Crossing) and Bridge Tenders	71	41	197	361	36.0	11.4
Ushers, Recreation and Amusement	35	28	289	102	12.1	27.5

TABLE A-11

Detailed Occupational Characteristics: Oakland County
as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Total Employed	174,726	66,135	927,024	401,711	18.8	16.5
Professional, Technical, and Kindred Wkrs.	27,258	10,398	110,499	50,393	24.7	20.6
Accountants and Auditors	2,262	207	10,097	1,495	22.4	13.8
Actors	4	12	56	37	7.1	32.4
Airplane Pilots and Navigators	88	...	359	4	24.5	----
Architects	230	4	641	9	35.9	44.9
Artists and Art Teachers	600	201	2,391	835	25.1	24.1
Athletes	19	...	107	...	17.8	----
Authors	214	28	848	78	25.2	35.9
Chiropractors	40	3	264	7	15.2	42.9
Clergymen	415	17	2,529	85	16.4	20.0
College Presidents, Prof'rs, & Instr's (N.E.C.)	312	41	1,457	382	21.4	10.7
Dancers and Dancing Teachers	13	82	72	313	18.1	26.2
Dentists	465	...	1,715	27	27.1	----
Designers	727	40	2,971	125	24.5	32.0
Dietitians and Nutritionists	5	47	13	495	38.5	9.5
Draftsmen	2,046	12	9,682	149	21.1	8.1
Editors and Reporters	370	116	1,215	444	30.5	26.1
Engineers, Technical	8,358	38	27,462	132	30.4	28.8
Aeronautical	56	5	281	5	19.9	100.0
Chemical	137	4	714	11	19.2	36.4
Civil	588	4	2,439	15	23.6	26.7
Electrical	923	8	3,162	39	29.2	20.5
Industrial	848	...	3,489	20	24.3	----
Mechanical	3,496	17	11,120	29	31.4	58.6
Metallurgical, and Metallurgists	307	...	818	...	37.5	----
Mining	8	...	27	...	29.6	----
Sales	1,134	...	2,591	...	43.8	----
Not Elsewhere Classified	861	...	2,821	13	30.5	----

	Oakland County		Detroit S.M.S.A.		Oakland County Detroit S.M.S.A.	
	Male	Female	Male	Female	Male	Female
Entertainers (N.E.C.)	57	13	185	50	30.8	26.0
Farm and Home Management Advisors	4	14	9	30	44.4	46.7
Foresters and Conservationists	32	...	116	...	27.6	--
Funeral Directors and Embalmers	67	...	453	27	14.8	--
Lawyers and Judges	929	17	3,742	142	24.8	12.0
Librarians	36	236	206	1,008	17.5	23.4
Musicians and Music Teachers	331	571	1,610	1,951	20.6	29.3
Natural Scientists	424	79	1,683	230	25.2	34.3
Agricultural Scientists	8	4	42	8	19.0	50.0
Biological Scientists	44	32	118	80	37.3	40.0
Chemists	301	31	1,324	117	22.7	26.5
Geologists and Geophysicists	8	...	11	...	72.7	--
Mathematicians	12	4	56	13	21.4	30.8
Physicists	41	8	97	12	42.3	75.0
Miscellaneous Natural Scientists	10	...	35	...	28.6	--
Nurses, Professional	29	1,995	203	10,100	14.3	19.8
Nurses, Student Professional	...	43	11	683	--	6.3
Optometrists	99	8	319	20	31.0	20.0
Osteopaths	59	4	188	12	31.4	33.3
Personnel and Labor Relations Workers	539	85	2,302	693	23.4	12.3
Pharmacists	482	47	1,921	183	25.1	25.7
Photographers	203	16	1,017	77	20.0	20.8
Physicians and Surgeons	1,098	50	4,959	311	22.1	16.1
Public Relations Men and Publicity Writers	193	27	632	113	30.5	23.9
Radio Operators	38	15	433	56	8.8	26.8
Recreation and Group Workers	102	49	365	282	27.9	17.4
Religious Workers	46	73	426	660	10.8	11.1
Social and Welfare Workers, except Group	154	148	1,427	1,241	15.0	11.9
Social Scientists	289	39	1,089	255	26.5	15.3
Economists	34	8	566	11	23.7	19.5
Psychologists	31	27	155	...	23.9	27.3
Statisticians and Actuaries	114	4	343	108	33.2	3.7
Miscellaneous Social Scientists	4	...	25	7	16.0	--
Sports Instructors and Officials	282	154	968	564	29.1	27.3
Surveyors	71	...	335	10	21.2	--

	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female	Male	Female
Teachers: Elementary Schools	692	3,790	3,282	16,691	21.1	22.7		
ary Schools	1,527	1,053	5,599	4,000	27.3	22.6		
...)	162	365	982	1,798	16.5	20.3		
Medical and Dental	147	309	1,021	1,729	14.4	17.2		
Electrical and Electronic	263	...	1,253	20	21.0	---		
Other Engineer'g & Physical Science	988	46	4,989	302	19.8	15.2		
(N.E.C.)	103	34	630	295	16.3	11.5		
and Healers (E.C.)	67	120	325	452	20.6	26.5		
...ans	36	...	151	9	23.8	---		
...onal, Technical, & Kindred Wkrs. (N.E.C.)	1,541	150	6,179	1,052	24.9	14.3		
Farmers and Farm Managers	767	48	2,607	203	29.4	23.6		
Farmers (Owners and Tenants)	732	44	2,551	199	28.7	22.1		
Farm Managers	35	4	56	4	62.5	100.0		
Manager's Officials & Propr's, Exc. Farm	22,162	2,240	83,635	12,199	26.5	18.4		
Buyers and Department Heads, Store	1,026	120	4,217	1,059	24.3	11.3		
...s and Ship...s, Farm Products	15	...	64	...	23.4	---		
...ductors, Railroad	31	...	661	4	4.7	---		
...t Men	166	28	682	149	24.3	18.8		
...omen and Floor Managers, Store	36	12	177	266	20.3	4.5		
...ectors, Public Administration	156	...	1,214	41	12.9	---		
Federal Public Administration and Postal Service	88	...	595	16	14.8	---		
State Public Administration	...	...	49	5	---	---		
Local Public Administration	68	...	570	20	11.9	---		
Manager and Superintendents, Building	70	27	499	438	14.0	6.2		
Officer, Pilots, Passengers, and Engineers, Ship	9	...	317	4	2.8	---		
Officials & Administrators (N.E.C.), Public Administration	451	97	2,134	418	21.1	23.2		
Federal Public Administration and Postal Service	150	8	715	91	21.0	8.8		
State Public Administration	90	4	323	68	27.9	5.9		
Local Public Administration	211	85	1,096	259	19.3	32.8		

TABLE A-11
 Detailed Occupational Characteristics: Oakland County;
 as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Craftsmen, Foremen, and Kindred Workers	38,319	796	203,353	4,750	18.8	16.8
Bakers	129	54	1,848	456	7.0	11.8
Blacksmiths	49	4	231	8	21.2	50.0
Boilermakers	5	...	237	...	2.1	--
Bookbinders	25	20	130	331	19.2	6.0
Brickmasons, Stonemasons, and Tile Setters	603	4	3,574	9	16.9	55.6
Cabinetmakers	127	5	631	16	20.1	31.3
Carpenters	2,261	...	9,043	7	25.0	--
Cement and Concrete Finishers	85	...	670	...	12.7	--
Compositors and Typesetters	423	43	2,956	230	14.3	18.7
Cranemen, Derrickmen, and Hoistmen	527	...	4,333	41	12.2	--
Decorators and Window Dressers	155	119	871	454	17.8	26.2
Electricians	1,514	4	8,121	36	18.6	11.1
Electrotypers and Stereotypers	70	...	245	...	28.6	--
Engravers, except Photoengravers	11	13	132	29	8.3	44.8
Excavating, Grading, and Road Machinery Operators	495	4	1,966	19	25.2	21.1
Foremen (N.E.C.)	6,052	163	29,457	1,210	20.5	13.5
Construction	275	...	1,191	...	23.1	--
Manufacturing	4,842	75	23,105	554	21.0	13.5
Metal Industries	605	4	4,367	54	13.9	7.4
Machinery, Including Electrical	851	8	3,434	27	24.8	29.6
Transportation Equipment	2,851	13	11,898	104	24.0	12.5
Other Durable Goods	139	12	681	32	20.4	37.5
Textiles, Textile Products, and Apparel	16	9	129	23	12.4	39.1
Other Nondurable Goods (Incl. not Spec. Mfg.)	380	29	2,596	314	14.6	9.2
Railroads and Railway Express Service	30	...	298	...	10.1	--
Transportation, Except Railroad	49	...	455	...	10.8	--
Communications, and Utilities and Sanitary Serv.	299	4	1,376	59	21.7	6.8
Other Industries (Incl. Not Reported)	557	84	3,032	597	18.4	14.1

TABLE A-11 (Cont'd)

	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Forgemen and Hammermen	91	...	800	8	11.3	--
Furriers	12	5	36	8	33.3	62.5
Glaziers	87	4	402	4	21.6	100.0
Heat Treaters, Annealers, and Temperers	234	8	1,523	20	15.4	20.0
Inspectors, Scalers, and Graders, Log and Lumber	24	...	102	4	23.5	--
Inspectors (N.E.C.)	179	13	1,581	113	11.3	11.5
Construction	31	...	255	...	12.2	--
Railroads and Railway Express Service	31	...	368	...	8.4	--
Trans., Exc. R.R., Commun., & Other Pub. Util.	48	...	292	8	16.4	--
Other Industries (Incl. Not Reported)	69	13	666	105	10.4	12.4
Jewelers, Watchmakers, Goldsmiths, & Silversmiths	82	8	458	27	17.9	29.6
Job Setters, Metal	863	...	4,749	21	18.2	--
Linemen & Servicemen, Telegraph, T'phone & Power	1,133	56	4,780	263	23.7	21.3
Locomotive Engineers	43	...	568	...	7.6	--
Locomotive Firemen	51	...	449	...	11.4	--
Loom Fixers	...	...	...	...	--	--
Machinists	1,550	57	7,968	148	19.5	38.5
Mechanics and Repairmen	9,956	102	53,124	606	18.7	16.8
Air Conditioning, Heating, and Refrigeration	225	...	1,273	5	17.7	--
Airplane	78	...	621	...	12.6	--
Automobile	4,160	19	19,435	107	21.4	17.8
Office Machine	93	...	613	13	15.2	--
Radio and Television	361	...	1,682	4	21.5	--
Railroad and Car Shop	32	...	480	...	6.7	--
Not Elsewhere Classified	5,007	83	29,020	477	17.3	17.4
Millers, Grain, Flour, Feed, Etc.	4	...	43	...	9.3	--
Millwrights	592	...	4,010	5	14.8	--
Molders, Metal	108	4	1,132	12	9.5	33.3
Motion Picture Projectionists	54	...	241	...	22.4	--
Opticians and Lens Grinders and Polishers	43	9	293	33	14.7	27.3
Painters, Construction and Maintenance	931	21	5,449	66	17.1	31.8
Paperhangers	12	...	56	...	21.4	--
Pattern and Model Makers, Except Paper	917	4	4,687	21	19.6	19.0
Photoengravers and Lithographers	93	3	432	27	21.5	11.1
Piano and Organ Tuners and Repairmen	28	...	88	...	31.8	--
Plasterers	114	...	810	...	14.1	--
Plumbers and Pipe Fitters	1,220	4	6,566	15	18.6	26.7
Pressmen and Plate Printers, Printing	230	4	1,251	43	18.4	9.3

	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Rollers and Roll Hands, Metal	76	...	1,061	16	7.2	--
Roofers and Slaters	131	...	795	...	16.5	--
Shoemakers and Repairers, Except Factory	77	5	685	21	11.2	23.8
Stationary Engineers	1,132	4	5,915	36	19.1	11.1
Stone Cutters and Stone Carvers	22	...	88	5	25.0	--
Structural Metal Workers	205	...	1,095	...	18.7	--
Tailors	44	25	616	134	7.1	18.7
Tinsmiths, Coppermiths, and Sheet Metal Workers	742	4	3,225	12	23.0	33.3
Toolmakers, and Die Makers and Setters	4,297	12	22,490	94	19.1	12.8
Upholsterers	128	11	980	113	13.1	9.7
Craftsmen and Kindred Workers (N.E.C.)	283	...	2,360	29	12.0	--
Former Members of the Armed Forces	...	...	...	...	--	--
Operatives and Kindred Workers	38,309	6,275	237,235	46,906	16.1	13.4
Apprentices	504	9	2,626	49	19.2	18.4
Auto Mechanics	12	...	34	...	35.3	--
Bricklayers and Masons	8	...	34	...	25.0	--
Carpenters	33	5	78	5	42.3	100.0
Electricians	50	...	171	...	29.2	--
Machinists and Toolmakers	184	...	1,171	8	15.7	--
Mechanics, Exc. Auto.	20	...	139	...	14.4	--
Plumbers and Pipe Fitters	30	...	99	...	30.3	--
Building Trades (N.E.C.)	...	...	14	...	--	--
Metalworking Trades (N.E.C.)	24	...	149	4	16.1	--
Printing Trades	32	4	244	12	13.1	33.3
Other Specified Trades	60	...	208	8	28.8	--
Trade Not Specified	51	...	285	12	17.9	--

TABLE A-11
Detailed Occupational Characteristics: Oakland County;
as Percent of Detroit S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Operatives and Kindred Workers--Con.						
Asbestos and Insulation Workers	91	4	395	14	23.0	28.6
Assemblers	3,794	1,154	23,302	8,001	16.3	14.4
Attendants, Auto Service and Parking	1,366	11	6,572	71	20.8	15.5
Blasters and Powdermen	...	...	25	...	---	---
Boatmen, Canalmen, and Lock Keepers	...	...	20	5	---	---
Brakemen, Railroad	31	...	444	...	7.0	---
Bus Drivers	303	186	2,638	421	11.5	44.2
Chainmen, Rodmen, and Axmen, Surveying	28	...	110	11	25.5	---
Checkers, Examiners, and Inspectors, Mfg.	2,728	502	15,142	3,956	18.0	12.7
Conductors, Bus and Street Railway	...	...	4	...	---	---
Deliverymen and Routemen	1,652	51	9,404	268	17.6	19.0
Dressmakers and Seamstresses, Exc. Factory	16	284	93	2,097	17.2	13.5
Dyers	12	5	48	5	25.0	100.0
Filers, Grinders, and Polishers, Metal	2,750	99	14,315	476	19.2	20.8
Fruit, Nut, & Veg. Graders & Packers, Exc. Factory	4	3	47	51	9.5	5.9
Furnacemen, Smelters, and Pourers	180	...	2,250	40	8.0	---
Graders and Sorters, Mfg.	23	17	145	132	15.9	12.9
Heaters, Metal	17	...	433	8	3.9	---
Knitters, Loopers, and Toppers, Textile	...	...	4	...	---	---
Laundry and Dry Cleaning Operatives	221	490	2,337	5,351	9.5	9.2
Meat Cutters, Exc. Slaughter and Packing House	585	16	3,467	122	16.9	13.1
Milliners	...	4	16	60	---	6.7
Mine Operatives and Laborers (N.E.C.)	33	...	193	...	17.1	---
Coal Mining	...	...	31	...	---	---
Crude Petroleum and Natural Gas Extraction	8	...	21	...	38.1	---
Mining and Quarrying, Exc. Fuel	25	...	141	...	17.7	---
Motormen, Mine, Factory, Logging Camp, Etc.	8	...	59	...	13.6	---
Motormen, Street, Subway, and Elevated Railway	...	...	25	5	---	---

TABLE A-11 (Cont'd)

	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Machinery, Exc. Electrical	2,772	377	13,610	2,253	20.4	16.7
Farm Machinery and Equipment	20	...	207	12	9.7	--
Office, Computing, and Accounting Machines	174	109	1,416	1,327	12.3	8.2
Miscellaneous Machinery	2,578	268	11,987	914	21.5	29.3
Electrical Machinery Equipment, & Supplies	214	36	1,312	440	16.3	8.2
Transportation Equipment	6,104	771	37,021	4,295	16.5	18.0
Motor Vehicles & Motor Vehicle Equipment	5,929	756	36,306	4,205	16.3	18.0
Aircraft and Parts	121	8	378	31	32.0	25.8
Ship and Boat Building and Repairing	12	...	92	4	13.0	--
Railroad and Misc. Transportation Equipment	42	7	245	55	17.1	12.7
Profess'l & Photographic Equip., & Watches	60	12	439	110	13.7	10.9
Professional Equipment and Supplies	52	12	348	102	14.9	11.8
Photographic Equipment and Supplies	4	...	66	8	6.1	--
Watches, Clocks, & Clockwork-Oper. Devices	4	...	25	...	16.0	--
Miscellaneous Manufacturing Industries	111	69	613	294	18.1	23.5
Nondurable Goods	1,363	462	12,822	4,332	10.6	10.7
Food and Kindred Products	312	58	4,103	1,030	7.6	5.6
Meat Products	75	4	1,033	208	7.3	1.9
Dairy Products	144	...	790	21	18.2	--
Canning & Pres. Fruits, Veg., & Sea Foods	4	...	79	68	5.1	--
Grain-Mill Products	4	...	59	...	6.8	--
Bakery Products	21	20	643	472	3.3	4.2
Confectionary and Related Products	12	12	80	108	15.0	11.1
Beverage Industries	48	5	1,265	59	3.8	8.5
Misc. Food Preparations & Kindred Products	4	8	147	67	2.7	11.9
Not Specified Food Industries	...	9	7	27	--	33.3

TABLE A-11
 DETAILED OCCUPATIONAL CHARACTERISTICS: OAKLAND COUNTY;
 AS PERCENT OF DETROIT S.M.S.A., 1960

<u>Detailed Occupation</u>	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Laborers, Exc. Farm and Mine	6,484	291	49,231	2,097	13.2	13.9
Carpenters' Helpers, Ex. Logging and Mining	16	...	66	...	24.2	--
Fishermen and Oystermen	...	...	8	...	--	--
Garage Laborers, and Car Washers and Greasers	324	8	2,342	65	13.8	12.3
Gardeners, Exc. Farm, and Groundskeepers	713	9	2,718	29	27.2	31.0
Longshoremen and Stevedores	12	...	145	3	8.3	--
Lumbermen, Raftsmen, and Wood Choppers	10	...	35	...	28.6	--
Teamsters	7	...	11	...	63.6	--
Truck Drivers' Helpers	36	4	544	9	6.6	44.4
Warehousemen (N.E.C.)	91	4	1,000	24	9.1	16.7
Laborers (N.E.C.)	5,275	266	42,462	1,967	12.4	13.5
Manufacturing	1,739	142	18,909	878	9.2	16.2
Durable Goods	1,510	99	16,153	639	9.3	15.5
Sawmills, Planing Mills, & Misc. Wood Prod.	15	...	91	3	16.5	--
Sawmills, Planing Mills, and Mill Work	8	...	29	3	27.6	--
Miscellaneous Wood Products	7	...	62	...	11.3	--
Furniture and Fixtures	...	...	81	9	--	--
Stone, Clay, and Glass Products	64	4	508	38	12.6	10.5
Glass and Glass Products	...	...	52	7	--	--
Cement, & Concr., Gypsum, & Plaster Prod.	31	...	218	4	14.2	--
Structural Clay Products	4	...	79	...	5.1	--
Pottery and Related Products	16	...	81	19	19.8	--
Misc. Nonmetallic Mineral and Stone Prod.	13	4	78	8	16.7	50.0
Metal Industries	342	7	5,960	147	5.7	4.8
Primary Metal Industries	184	...	4,619	63	4.0	--
Blast Furnaces, Steel Works, and Rolling and Finishing Mills	78	...	3,654	23	2.1	--
Other Primary Iron and Steel Industries	92	...	595	13	15.5	--

	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Primary Nonferrous Industries	14	...	370	27	3.8	...
Fabr'd Metal Ind. (Incl. Not Spec. Metal)	158	7	1,341	84	11.8	8.3
Cutlery, Hand Tools, and Other Hardware	16	...	155	9	10.3	...
Fabricated Structural Metal Products	30	...	307	4	9.8	...
Misc. Fabricated Metal Products	112	7	876	71	12.8	9.9
Not Specified Metal Industries	...	...	3	...	...	...
Machinery, Ex. Electrical	153	7	1,112	52	13.8	13.5
Farm Machinery and Equipment	4	...	42	...	9.5	...
Office, Computing, & Accounting Machines	4	...	111	7	3.6	...
Miscellaneous Machinery	145	7	959	45	15.1	15.6
Electrical Machinery, Equip., & Supplies	28	...	120	11	23.3	...
Transportation Equipment	908	77	8,200	353	11.1	21.8
Motor Vehicles and Motor Vehicle Equip.	900	77	8,111	353	11.1	21.8
Aircraft and Parts	...	...	24	...	...	...
Ship and Boat Building and Repairing	...	...	20	...	...	...
Railroad & Misc. Transportation Equip.	8	...	45	...	17.8	...
Profess'l & Photographic Equip., & Watches	...	4	12	7	...	57.1
Professional Equipment and Supplies	...	4	4	4	...	100.0
Photographic Equipment and Supplies	...	...	4	3	...	...
Watches, Clocks, Clockwork-Oper. Devices	...	...	4	...	...	...
Miscellaneous Manufacturing Industries	...	...	69	19	...	...
Non-durable Goods	229	36	2,695	232	8.5	15.5
Food and Kindred Products	69	7	881	80	7.8	8.8
Meat Products	12	...	131	12	9.2	...
Dairy Products	36	...	242	...	14.9	...
Canning & Pres. Fruits, Veg., & Sea Foods	...	...	22	8	...	...
Grain-Mill Products	...	...	31	...	...	...
Bakery Products	3	3	157	41	1.9	7.3
Confectionery and Related Products	4	...	29	8	13.8	...
Beverage Industries	14	...	195	4	7.2	...
Misc. Food Preparations & Kindred Products	...	...	66	...	...	...
Not Specified Food Industries	...	4	8	7	...	57.1
Tobacco Manufactures	...	...	11	13	...	...
Textile Mill Products	...	...	65	13	...	...

	<u>Oakland County</u>		<u>Detroit S.M.S.A.</u>		<u>Oakland County</u> <u>Detroit S.M.S.A.</u>	
	Male	Female	Male	Female	Male	Female
Yarn, Thread, and Fabric Mills	...	...	4	...	...	...
Other Textile Mill Products	...	...	61	13	...	...
Apparel & Other Fabricated Textile Products	5	...	33	16	15.2	...
Paper and Allied Products	8	...	183	24	4.4	...
Pulp, Paper, and Paperboard Mills	...	...	50	4	...	...
Paperboard Containers and Boxes	4	...	79	12	5.1	...
Miscellaneous Paper and Pulp Products	4	...	54	8	7.4	...
Printing, Publishing and Allied Industries	21	...	176	9	11.9	...
Chemicals and Allied Products	54	12	964	44	5.6	27.3
Synthetic Fibers	...	...	...	...	...	...
Drugs and Medicines	4	4	84	8	4.8	50.0
Paints, Varnishes, and Related Products	8	4	100	12	8.0	23.3
Miscellaneous Chemicals & Allied Products	42	4	780	24	5.4	16.7
Petroleum and Coal Products	...	...	54	...	...	...
Petroleum Refining	...	...	44	...	...	...
Misc. Petroleum and Coal Products	...	...	10	...	...	...
Rubber and Misc. Plastic Products	72	17	307	29	23.5	58.6
Leather and Leather Products	...	...	21	4	...	...
Not-Specified Manufacturing Industries	...	7	61	7	...	100.0
Nonmanufacturing Industries (Incl. Not Rptd.)	3,536	124	23,553	1,089	15.0	11.4
Construction	1,157	...	7,547	53	15.3	...
Railroads and railway Express Service	57	4	788	74	7.2	5.4
Transportation, Ex. Railroad	146	...	1,533	12	9.5	...
Communications, & Utilities & Sanitary Serv.	195	4	1,963	27	9.9	14.8
Wholesale and Retail Trade	1,481	56	8,554	480	17.3	11.7
Business and Repair Services	91	4	469	38	19.4	10.5
Personal Services	87	11	408	111	21.3	9.9
Public Administration	40	...	873	18	4.6	...
All Other Industries (Incl. Not Reported)	282	45	1,418	276	19.9	16.3
Occupation Not Reported	5,771	2,798	40,784	22,133	14.2	12.6

Table A-12

Resident Employment by Industry: Oakland County as Percent
of Detroit S.M.S.A., 1960.

<u>Industry Group of Employed 1960</u>	<u>Oakland County Percent of Detroit S.M.S.A.</u>
Both Sexes	19.2
Agriculture	64.5
Forestry and Fisheries	35.5
Mining	45.0
Construction	24.4
Manufacturing	19.4
Furniture, and Lumber and Wood Products	16.6
Primary Metal Industries	10.2
Fabricated Metal Ind. (Incl. Not. Spec. Metal)	18.8
Machinery, Except Electrical	23.5
Electrical Machinery, Equip. & Supplies	19.8
Motor Vehicles and Motor Veh. Equipment	21.0
Transportation Equipment Exc. Motor Veh.	23.8
Other Durable Goods	18.4
Food and Kindred Products	11.8
Textile Mill Products	14.7
Apparel & Other Fabricated Textile Products	12.3
Printing, Publishing and Allied Products	20.0
Chemical and Allied Products	12.3
Other Nondur. Goods (Incl. Not Spec. Mfg.)	18.8
Railroad and Railway Express Service	9.7
Trucking Service and Warehousing	17.7
Other Transportation	10.6
Communications	20.9
Utilities and Sanitary Service	16.1
Wholesale Trade	20.9
Food and Dairy Products Stores	17.5
Eating and Drinking Places	16.9
Other Retail Trade	20.6
Finance, Insurance, and Real Estate	18.2
Business Services	21.4
Repair Services	18.2
Private Households	19.6
Other Personal Services	13.7
Entertainment and Recreation Services	24.6
Hospitals	15.4
Educational Services, Government	24.6
Private	20.2
Welfare, Religious & Nonprofit Membership Orgns.	16.5
Other Professional and Related Services	24.8
Public Administration	14.9
Industry not Reported	16.0
Female	17.3
Agriculture, Forestry, and Fisheries	66.2
Construction and Mining	22.9
Manufacturing	16.7
Machinery	20.0
Transportation Equipment	19.2
Other Durable Goods	14.4
Food and Kindred Products	9.9
Textile Mill Products	17.4
Apparel & Other Fabricated Textile Products	6.6
Other Nondur. Goods (Incl. Not Spec. Mfg.)	15.3
Transportation, Communication and Other Public Utilities	14.6
Wholesale Trade	15.2
Food and Dairy Products Stores	17.2
Eating and Drinking Places	18.3
Other Retail Trade	17.4
Finance, Insurance and Real Estate	14.0
Business and Repair Services	15.8
Personal Services	16.9
Entertainment and Recreation Services	24.8
Hospitals	16.0
Educational Services, Government	24.7
Private	19.0
Other Professional and Related Services	19.9
Public Administration	14.0
Industry Not Reported	13.2

TABLE A-1

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1940:

Age	1. Addison Township			2. Avon Township			3. Berkley, City			4. Birmingham, City		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	1,015	556	459	8,776	4,457	4,319	6,406	3,318	3,088	11,196	5,365	5,831
Under 15	245	132	113	2,559	1,283	1,276	1,986	1,062	924	2,683	1,401	1,282
15 - 24	162	84	78	1,470	740	730	1,150	585	565	2,016	953	1,063
25 - 44	260	147	113	2,736	1,391	1,345	2,055	1,035	1,020	3,605	1,610	1,995
45 - 64	232	127	105	1,530	808	722	1,055	566	489	2,335	1,184	1,151
65 and over	116	66	50	481	235	246	160	70	90	557	217	340
Age	5. Bloomfield Township			6. Bloomfield Hills, City			7. Brandon Township			8. Clawson, City		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	1,771	879	892	1,381	667	714	1,621	846	775	No data available		
Under 15	418	213	205	318	208	110	436	214	222			
15 - 24	313	160	153	214	90	124	268	146	122			
25 - 44	616	285	331	449	180	269	372	200	172			
45 - 64	346	184	162	329	155	174	384	207	177			
65 and over	78	37	41	71	34	37	161	79	82			

TABLE A-14

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1940:

Age	9. <u>Commerce Township</u>			10. <u>Farmington, City</u>			11. <u>Farmington Township</u>			12. <u>Ferndale, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	2,957	1,530	1,427	1,510	747	763	5,695	3,029	2,666	22,523	11,436	11,087
Under 15	790	413	377	352	175	177	1,861	994	867	6,486	3,352	3,134
15 - 24	504	262	242	250	135	115	927	501	426	3,867	1,912	1,955
25 - 44	890	440	450	493	244	249	1,651	834	817	7,693	3,807	3,886
45 - 64	586	327	259	311	155	156	1,006	562	444	3,793	2,082	1,711
65 and over	187	88	99	104	38	66	250	138	112	684	283	401
Age	13. <u>Groveland Township</u>			14. <u>Hazel Park, City</u>			15. <u>Highland Township</u>			16. <u>Holly Township</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	930	507	423	No data available			1,726	906	820	3,379	1,673	1,706
Under 15	276	136	140				503	260	243	870	415	455
15 - 24	169	104	65				256	138	118	547	277	270
25 - 44	206	111	95				455	239	216	890	450	440
45 - 64	205	113	92				372	198	174	688	333	355
65 and over	74	43	31				139	71	68	384	198	186

TABLE A-14

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1940:

Age	17. <u>Huntington Woods, City</u>			18. <u>Independence Township</u>			19. <u>Keego Harbor, City</u>			20. <u>Lathrup Village, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	1,705	816	889	2,180	1,179	1,001	No data available			No data available		
Under 15	384	202	182	547	336	211						
15 - 24	265	112	153	373	204	169						
25 - 44	676	315	361	684	345	339						
45 - 64	325	157	168	401	203	198						
65 and over	55	30	25	175	91	84						
	21. <u>Lyon Township</u>			22. <u>Madison Heights, City</u>			23. <u>Milford Township</u>			24. <u>Northville, City</u>		
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	1,324	705	619	No data available			2,550	1,339	1,211	No data available		
Under 15	325	162	163				599	328	271			
15 - 24	258	134	124				450	233	217			
25 - 44	358	203	155				687	357	330			
45 - 64	297	162	135				552	281	271			
65 and over	86	44	42				262	140	122			

TABLE A-14

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1940:

<u>Age</u>	<u>25. Novi Township</u>			<u>26. Oakland Township</u>			<u>27. Oak Park, City</u>			<u>28. Orion Township</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	2,428	1,309	1,119	966	543	423				4,333	2,202	2,131
Under 15	579	310	269	251	140	111				1,373	691	682
15 - 24	438	232	206	177	99	78				672	332	340
25 - 44	713	389	324	283	156	127				1,288	651	637
45 - 64	521	279	242	187	107	80				715	389	326
65 and over	177	99	78	68	41	27				285	139	146

<u>Age</u>	<u>29. Oxford Township</u>			<u>30. Pleasant Ridge, City</u>			<u>31. Pontiac, City</u>			<u>31A. Pontiac, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	3,357	1,698	1,659	3,391	1,616	1,775	66,626	34,220	32,406	2,794	1,398	1,396
Under 15	919	454	465	848	425	423	17,202	8,737	8,465	770	376	400
15 - 24	552	274	278	544	251	293	11,583	5,524	6,059	421	198	223
25 - 44	843	437	406	1,113	496	617	22,596	11,987	10,609	1,035	512	523
45 - 64	676	344	332	760	395	365	12,021	6,437	5,584	471	265	206
65 and over	367	189	178	125	48	77	3,224	1,535	1,689	91	47	44

TABLE A-14

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1940:

Age	32. Pontiac Township			33. Rose Township			34. Royal Oak, City			35. Royal Oak Township		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	3,581	1,835	1,746	796	431	365	25,087	12,527	12,560	24,958	12,917	12,041
Under 15	1,131	576	555	206	97	109	6,427	3,318	3,109	8,392	4,336	4,054
15 - 24	580	263	317	128	79	49	4,622	2,289	2,333	4,178	2,069	2,109
25 - 44	1,186	624	562	185	105	80	7,997	3,871	4,126	8,400	4,254	4,146
45 - 64	524	293	231	186	99	87	4,994	2,613	2,381	3,421	1,973	1,448
65 and over	160	79	81	91	51	40	1,047	436	611	569	285	284
Age	35A. Royal Oak Township			36. Southfield, City			37. Southfield Township			38. South Lyon, City		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	No data available			No data available			8,486	4,427	4,059	1,017	526	491
Under 15							2,575	1,350	1,225	243	120	123
15 - 24							1,241	675	566	198	106	92
25 - 44							2,965	1,483	1,482	282	155	127
45 - 64							1,421	790	631	175	86	89
65 and over							284	129	155	119	59	60

TABLE A-14

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1940:

Age	39. <u>Springfield Township</u>			40. <u>Sylvan Lake, City</u>			41. <u>Troy, City</u>			42. <u>Walled Lake, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	1,273	687	586	No data available			8,505	4,405	4,100	No data available		
Under 15	342	177	165				2,758	1,405	1,353			
15 - 24	235	136	99				1,408	750	658			
25 - 44	308	162	146				2,558	1,275	1,283			
45 - 64	272	148	124				1,437	794	643			
65 and over	116	64	52				344	181	163			
	43. <u>Waterford Township</u>			44. <u>West Bloomfield Township</u>			45. <u>White Lake Township</u>			46. <u>Wixom, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	12,396	6,330	6,066	6,579	3,406	3,173	1,443	765	678	No data available		
Under 15	3,763	1,944	1,819	1,939	1,020	919	460	241	219			
15 - 24	1,721	809	912	959	457	502	247	126	121			
25 - 44	4,585	2,327	2,258	2,328	1,200	1,128	293	157	136			
45 - 64	1,784	963	821	1,048	565	483	323	174	149			
65 and over	543	287	256	305	164	141	120	67	53			

TABLE A-15

PERCENT OF AGE, RACE & SEX FOR MINOR CIVIL DIVISIONS, OAKLAND COUNTY, 1940

	Addison Twp.	Avon Twp.	Berkley	Birmingham	Bloomfield Twp.	Bloomfield Hills	Brandon Twp.	Clawson
Age								
All Ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	No Data
Under 15	24.1	29.2	31.0	24.0	23.6	23.0	26.9	
15 - 24	16.0	16.8	18.0	18.0	17.7	15.5	16.5	
25 - 44	25.6	31.2	32.1	32.2	34.8	32.5	22.9	
45 - 64	22.9	17.4	16.5	20.9	19.5	23.8	23.7	
65 and over	11.4	5.5	2.5	5.0	4.4	5.1	9.9	
	Commerce Twp.	Farmington	Farmington Twp.	Ferndale	Groveland Twp.	Hazel Park	Highland Twp.	Holly Twp.
Age								
All Ages	100.0	100.0	100.0	100.0	100.0	No Data	100.0	100.0
Under 15	26.7	23.3	32.7	28.8	29.7		29.1	25.7
15 - 24	17.0	16.6	16.3	17.2	18.2		14.8	16.2
25 - 44	30.1	32.6	29.0	34.2	22.2		26.4	26.3
45 - 64	19.8	20.6	17.7	16.8	22.0		21.6	20.4
65 and over	6.3	6.9	4.4	3.0	8.0		8.1	11.4
	Huntington Woods	Independence Twp.	Keego Harbor	Lathrup Village	Lyon Twp.	Madison Heights	Milford Twp.	Northville
Age								
All Ages	100.0	100.0	No Data	No Data	100.0	No Data	100.0	No Data
Under 15	22.5	25.1			24.5		23.5	
15 - 24	15.5	17.1			19.5		17.6	
25 - 44	39.6	31.4			27.0		26.9	
45 - 64	19.1	18.4			22.4		21.6	
65 and over	3.2	8.0			6.5		10.3	

(Percent of Age, Race and Sex for Minor Civil Divisions - Continued) -2-

	Novi Twp.	Oakland Twp.	Oak Park	Orion Twp.	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac
Age								
All Ages	100.0	100.0		100.0	100.0	100.0	100.0	100.0
Under 15	23.8	26.0	No Data	31.7	27.4	25.0	25.8	27.8
15 - 24	18.0	18.3		15.5	16.4	16.0	17.4	15.1
25 - 44	29.4	29.3		29.7	25.1	32.8	33.9	37.0
45 - 64	21.5	19.4		16.5	20.1	22.4	18.0	16.7
65 and over	7.3	7.0		6.6	10.9	3.7	4.8	3.3

	Pontiac Twp.	Rose Twp.	Royal Oak	Royal Oak Twp.	Royal Oak Twp.	Southfield	Southfield Twp.	South Lyon
Age								
All Ages	100.0	100.0	100.0	100.0			100.0	100.0
Under 15	31.6	25.9	25.6	33.6	No Data	No Data	30.3	23.9
15 - 24	16.2	16.1	18.4	16.7			14.6	19.5
25 - 44	33.1	23.2	31.9	33.7			34.9	27.7
45 - 64	14.6	23.4	19.9	13.7			16.7	17.2
65 and over	4.5	11.4	4.2	2.3			3.3	11.7

	Springfield Twp.	Sylvan Lake	Troy	Walled Lake	Waterford	West Bloomfield	White Lake	Wixom
Age								
All Ages	100.0		100.0		100.0	100.0	100.0	
Under 15	26.9	No Data	32.4	No Data	30.4	29.5	31.9	No Data
15 - 24	18.5		16.6		13.9	14.6	17.1	
25 - 44	24.2		30.1		37.0	35.4	20.3	
45 - 64	21.4		16.9		14.4	15.9	22.4	
65 and over	9.1		4.0		4.4	4.6	8.3	

TABLE A-16

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1950:

Age	1. <u>Addison Township</u>			2. <u>Avon Township</u>			3. <u>Berkley, City</u>			4. <u>Birmingham, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	No data available			No data available			17,931	9,001	8,930	15,467	7,466	8,001
Under 15							6,324	3,250	3,074	4,404	2,262	2,142
15 - 24							1,999	956	1,043	1,550	720	830
25 - 44							6,651	3,294	3,357	4,987	2,332	2,655
45 - 64							2,454	1,278	1,176	3,551	1,758	1,793
65 and over							503	223	280	975	394	581
Age	5. <u>Bloomfield Township</u>			6. <u>Bloomfield Hills, City</u>			7. <u>Brandon Township</u>			8. <u>Clawson City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	No data available			1,468	672	796	No data available			5,196	2,611	2,585
Under 15				271	139	132				1,522	797	725
15 - 24				173	80	93				796	373	423
25 - 44				431	180	251				1,550	759	791
45 - 64				443	203	240				1,040	543	497
65 and over				150	70	80				289	140	149

TABLE A-16

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1950:

Age	9. <u>Commerce Township</u>			10. <u>Farmington, City</u>			11. <u>Farmington Township</u>			12. <u>Ferndale, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	1,075	540	535	2,325	1,158	1,167	No data available			29,675	14,838	14,837
Under 15	367	180	187	615	336	279			8,379	4,352	4,027	
15 - 24	125	64	61	314	150	164			4,206	2,067	2,139	
25 - 44	388	190	198	727	360	367			9,472	4,557	4,915	
45 - 64	145	83	62	509	250	259			6,233	3,247	2,986	
65 and over	50	23	27	160	62	98			1,385	615	770	
Age	13. <u>Groveland Township</u>			14. <u>Hazel Park, City</u>			15. <u>Highland Township</u>			16. <u>Holly Township</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	No data available			17,770	9,047	8,723	No data available			2,662	1,294	1,368
Under 15				5,434	2,778	2,656				735	366	369
15 - 24				2,825	1,397	1,428				372	176	196
25 - 44				5,754	2,847	2,907				693	346	347
45 - 64				3,188	1,736	1,452				552	266	286
65 and over				569	289	280				310	140	170

TABLE A-16

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1950:

<u>Age</u>	17. <u>Huntington Woods, City</u>			18. <u>Independence Township</u>			19. <u>Keego Harbor, City</u>			20. <u>Lathrup Village, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	4,949	2,425	2,524	No data available			No data available			No data available		
Under 15	1,580	809	771									
15 - 24	375	182	193									
25 - 44	1,788	824	964									
45 - 64	1,030	533	497									
65 and over	176	77	99									
	21. <u>Lyon Township</u>			22. <u>Madison Heights, City</u>			23. <u>Milford Township</u>			24. <u>Northville, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
<u>Age</u>												
All Ages	No data available			No data available			1,924	964	960	No data available		
Under 15							525	281	244			
15 - 24							243	119	124			
25 - 44							559	276	283			
45 - 64							399	200	199			
65 and over							198	88	110			

TABLE A-16

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1950:

<u>Age</u>	<u>25. Novi Township</u>			<u>26. Oakland Township</u>			<u>27. Oak Park, City</u>			<u>28. Orion Township</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	No data available			No data available			5,237	2,583	2,654	2,385	1,138	1,247
Under 15							1,880	939	941	689	314	375
15 - 24							581	215	366	352	172	180
25 - 44							2,125	1,105	1,020	692	332	360
45 - 64							527	266	261	477	244	233
65 and over							124	58	66	175	76	99
<u>Age</u>	<u>29. Oxford Township</u>			<u>30. Pleasant Ridge, City</u>			<u>31. Pontiac, City</u>			<u>31A. Pontiac, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	2,305	1,103	1,202	3,594	1,735	1,859	73,681	36,745	36,936	No data available		
Under 15	581	302	279	843	417	426	18,682	9,364	9,318			
15 - 24	343	170	173	418	218	200	11,287	5,331	5,956			
25 - 44	575	281	294	894	390	504	23,331	11,724	11,607			
45 - 64	459	211	248	1,217	610	607	15,365	8,049	7,316			
65 and over	347	139	208	222	100	122	4,980	2,241	2,739			

TABLE A-16

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1950:

Age	32. <u>Pontiac Township</u>			33. <u>Rose Township</u>			34. <u>Royal Oak, City</u>			35. <u>Royal Oak Township</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	No data available			No data available			46,898	23,230	23,668	No data available		
Under 15							14,174	7,292	6,882			
15 - 24							6,166	2,849	3,317			
25 - 44							16,007	7,862	8,145			
45 - 64							8,396	4,285	4,111			
65 and over							2,155	942	1,213			
Age	35A. <u>Royal Oak Township</u>			36. <u>Southfield, City</u>			37. <u>Southfield Township</u>			38. <u>South Lyon, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	No data available			No data available			No data available			1,312	658	654
Under 15										371	184	187
15 - 24										199	107	92
25 - 44										360	176	184
45 - 64										254	138	116
65 and over										128	53	75

TABLE A-16

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1950:

Age	39. <u>Springfield Township</u>			40. <u>Sylvan Lake, City</u>			41. <u>Troy, City</u>			42. <u>Walled Lake, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	No data available			1,165	579	586	No data available			3,119	1,740	1,370
Under 15				289	141	148				953	489	464
15 - 24				136	72	64				365	194	171
25 - 44				358	167	191				948	505	443
45 - 64				320	168	152				608	395	213
65 and over				62	31	31				236	157	79
Age	43. <u>Waterford Township</u>			44. <u>West Bloomfield Township</u>			45. <u>White Lake Township</u>			46. <u>Wixom, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	No data available			No data available			1,385	704	681	No data available		
Under 15							426	221	205			
15 - 24							175	77	98			
25 - 44							392	191	201			
45 - 64							304	167	137			
65 and over							88	48	40			

TABLE A-17

PERCENT OF AGE, RACE AND SEX FOR MINOR CIVIL DIVISIONS, OAKLAND COUNTY, 1950 (continued)

	<u>11. Farmington Township</u>			<u>12. Ferndale, City</u>			<u>13. Groveland Township</u>			<u>14. Hazel Park, City</u>		
<u>Age</u>	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	100.0											
Under 15	No Data Available			28.2	29.3	34.2	No Data Available			30.6	30.7	30.4
15 - 24				14.2	13.9	14.4				15.9	15.4	16.4
25 - 44				31.9	30.7	33.1				32.4	31.5	33.3
45 - 64				21.0	21.9	20.1				17.9	19.2	16.7
65 and over				4.7	4.2	5.2				3.2	3.2	3.2

	<u>15. Highland Township</u>			<u>16. Holly Township</u>			<u>17. Huntington Woods, City</u>			<u>18. Independence Township</u>		
<u>Age</u>	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	100.0											
Under 15	No Data Available			27.6	28.3	27.0	31.9	33.3	30.5	No Data Available		
15 - 24				14.0	13.7	14.3	7.6	7.5	7.7			
25 - 44				26.0	26.7	25.4	36.1	34.0	38.2			
45 - 64				20.7	20.6	20.9	20.8	22.0	19.7			
65 and over				11.7	10.8	12.4	3.6	3.2	3.9			

TABLE A-17

PERCENT OF AGE, RACE AND SEX FOR MINOR CIVIL DIVISIONS, OAKLAND COUNTY, 1950 (continued)

<u>Age</u>	<u>27. Oak Park, City</u>			<u>28. Orion Township</u>			<u>29. Oxford Township</u>			<u>30. Pleasant Ridge, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	100.0											
Under 15	35.9	36.4	35.5	28.9	27.6	30.1	25.2	27.4	23.2	23.4	24.0	22.9
15 - 24	11.1	8.3	13.8	14.8	15.1	14.4	14.9	15.4	14.4	11.6	12.6	10.8
25 - 44	40.6	42.8	38.4	29.0	29.2	28.9	24.9	25.5	24.5	24.9	22.5	27.1
45 - 64	10.1	10.3	9.8	20.0	21.4	18.7	19.9	19.1	20.6	33.9	35.1	32.6
65 and over	2.3	2.2	2.5	7.3	6.7	7.9	15.6	12.6	17.3	6.2	5.8	6.6

<u>Age</u>	<u>31. Pontiac, City</u>			<u>31A. Pontiac, City</u>			<u>32. Pontiac Township</u>			<u>33. Rose Township</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	100.0											
Under 15	25.4	25.5	25.2	No Data Available			No Data Available			No Data Available		
15 - 24	15.3	14.6	16.2									
25 - 44	31.6	31.9	31.4									
45 - 64	20.9	21.9	19.8									
65 and over	6.8	6.1	7.4									

TABLE A-17

PERCENT OF AGE, RACE AND SEX FOR MINOR CIVIL DIVISIONS, OAKLAND COUNTY, 1950 (continued)

Age	34. <u>Royal Oak, City</u>			35. <u>Royal Oak Township</u>			35A. <u>Royal Oak Township</u>			36. <u>Southfield, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	100.0			No Data Available			No Data Available			No Data Available		
Under 15	30.2	31.4	29.1	No Data Available			No Data Available			No Data Available		
15 - 24	13.2	12.3	14.0	No Data Available			No Data Available			No Data Available		
25 - 44	34.1	33.8	34.4	No Data Available			No Data Available			No Data Available		
45 - 64	17.9	18.4	17.4	No Data Available			No Data Available			No Data Available		
65 and over	4.6	4.1	5.1	No Data Available			No Data Available			No Data Available		

Age	37. <u>Southfield Township</u>			38. <u>South Lyon, City</u>			39. <u>Springfield Township</u>			40. <u>Sylvan Lake, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	100.0			28.3	28.0	28.6	No Data Available			24.8	24.4	25.3
Under 15	No Data Available			15.2	16.3	14.1	No Data Available			11.7	12.4	10.9
15 - 24	No Data Available			27.4	26.7	28.1	No Data Available			30.7	28.8	32.6
25 - 44	No Data Available			19.4	21.0	17.7	No Data Available			27.5	29.0	25.9
45 - 64	No Data Available			9.7	8.5	11.5	No Data Available			5.3	5.4	5.3
65 and over	No Data Available						No Data Available					

TABLE A-17

PERCENT OF AGE, RACE AND SEX FOR MINOR CIVIL DIVISIONS, OAKLAND COUNTY, 1950

Age	1. <u>Addison Township</u>			2. <u>Avon Township</u>			3. <u>Berkley, City</u>			4. <u>Birmingham, City</u>			5. <u>Bloomfield Township</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	100.0														
Under 15	No Data Available			No Data Available			35.3	36.1	34.4	28.5	30.3	26.8	No Data Available		
15 - 24							11.1	10.6	11.7	10.0	9.6	10.4			
25 - 44							37.1	36.6	37.6	32.2	31.3	33.2			
45 - 64							13.7	14.2	13.2	23.0	23.6	22.4			
65 and over							2.8	2.5	3.1	6.3	5.2	7.2			

Age	6. <u>Bloomfield Hills, City</u>			7. <u>Brandon Township</u>			8. <u>Clawson City</u>			9. <u>Commerce Township</u>			10. <u>Farmington, City</u>		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	100.0														
Under 15	18.5	20.7	16.6	No Data Available			29.3	30.5	28.0	34.1	33.3	35.0	26.4	29.0	23.9
15 - 24	11.8	11.9	11.7				15.3	14.3	16.4	11.7	11.8	11.4	13.5	12.9	14.1
25 - 44	29.3	26.8	31.5				29.8	29.1	30.6	36.1	35.2	37.0	31.3	31.1	31.4
45 - 64	30.2	30.2	30.2				20.0	20.8	19.2	13.5	15.4	11.6	21.9	21.6	22.2
65 and over	10.2	10.4	10.0				5.6	5.3	5.8	4.7	4.3	5.0	6.9	5.4	8.4

TABLE A-18

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1960:

Age	Total %	1. Addison Township			2. Avon Township			3. Berkley, City				
		Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	1,691	885	806	100.0	21,377	10,559	10,818	100.0	23,275	11,427	11,848
Under 15	33.1	560	291	269	36.6	7,815	3,908	3,907	37.0	8,615	4,392	4,223
15 - 24	13.2	223	133	90	12.3	2,629	1,253	1,376	12.3	2,867	1,328	1,539
25 - 44	24.9	421	202	219	28.2	6,034	2,911	3,123	28.7	6,679	3,168	3,511
45 - 64	21.8	368	204	164	17.1	3,649	1,908	1,741	17.7	4,110	2,100	2,010
65 and over	7.0	119	55	64	5.7	1,250	579	671	4.3	1,004	439	565

Ages	Total %	4. Birmingham, City			5. Bloomfield Township			6. Bloomfield Hills, City				
		Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	25,525	12,294	13,231	100.0	22,530	11,158	11,372	100.0	2,378	1,110	1,268
Under 15	34.0	8,691	4,468	4,223	35.2	7,934	4,060	3,874	21.5	512	256	256
15 - 24	9.0	2,286	1,042	1,244	9.3	2,104	1,072	1,032	12.3	292	146	146
25 - 44	29.8	7,614	3,624	3,990	28.5	6,429	2,913	3,516	18.9	450	197	253
45 - 64	20.1	5,125	2,470	2,655	22.4	5,038	2,646	2,392	36.5	869	413	456
65 and over	7.1	1,809	690	1,119	4.6	1,025	467	558	10.8	255	98	157

TABLE A-18

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1960

Ages	7. <u>Brandon Township</u>				8. <u>Clawson City</u>				9. <u>Commerce Township</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	3,187	1,622	1,565	100.0	14,795	7,352	7,443	100.0	12,012	6,178	5,834
Under 15	37.7	1,202	594	608	42.3	6,252	3,176	3,074	39.4	4,729	2,448	2,281
15 - 24	12.9	411	214	197	9.3	1,371	626	745	12.8	1,542	803	739
25 - 44	24.8	790	383	407	32.7	4,831	2,402	2,429	28.5	3,419	1,701	1,718
45 - 64	17.2	547	301	246	12.3	1,817	926	891	15.1	1,812	961	851
65 and over	7.4	237	130	107	3.4	526	222	304	4.2	510	265	245

Ages	10. <u>Farmington, City</u>				11. <u>Farmington Township</u>				12. <u>Ferndale, City</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	6,881	3,424	3,457	100.0	5,859	2,917	2,942	100.0	31,347	15,338	16,009
Under 15	39.5	2,715	1,399	1,316	38.2	2,240	1,143	1,097	29.1	9,130	4,669	4,461
15 - 24	9.1	627	322	305	9.2	539	260	279	13.5	4,233	2,006	2,227
25 - 44	31.5	2,166	1,048	1,118	29.3	1,717	806	911	25.1	7,874	3,792	4,082
45 - 64	15.2	1,049	527	522	18.5	1,083	589	494	24.2	7,579	3,743	3,836
65 and over	4.7	324	128	196	4.8	280	119	161	8.1	2,531	1,128	1,403

TABLE A-18

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1960:

Ages	13. <u>Groveland Township</u>				14. <u>Hazel Park, City</u>				15. <u>Highland Township</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	1,306	660	646	100.0	25,631	12,856	12,775	100.0	4,855	2,440	2,415
Under 15	36.4	475	243	232	35.0	8,976	4,580	4,396	36.1	1,752	906	846
15 - 24	14.3	187	86	101	13.2	3,392	1,584	1,808	13.3	644	299	345
25 - 44	23.9	312	153	159	29.3	7,512	3,749	3,763	25.5	1,238	614	624
45 - 64	18.8	245	138	107	17.9	4,578	2,363	2,215	16.9	822	431	391
65 and over	6.6	87	40	47	4.6	1,173	580	593	8.2	399	190	209

Ages	16. <u>Holly Township</u>				17. <u>Huntington Woods, City</u>				18. <u>Independence Township</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	5,551	2,739	2,812	100.0	8,746	4,265	4,481	100.0	10,890	5,455	5,435
Under 15	33.7	1,872	963	909	34.4	3,009	1,540	1,469	42.3	4,610	2,352	2,258
15 - 24	16.5	918	434	484	9.9	866	430	436	11.0	1,199	537	662
25 - 44	23.8	1,323	646	677	26.7	2,331	1,023	1,308	30.8	3,353	1,672	1,681
45 - 64	17.5	970	496	474	24.0	2,101	1,077	1,024	12.3	1,338	717	621
65 and over	8.5	468	200	268	5.0	439	195	244	3.6	390	177	213

TABLE A-18

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1960:

Ages	19. <u>Keego Harbor, City</u>				20. <u>Lathrup Village, City</u>				21. <u>Lyon Township</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	2,761	1,394	1,367	100.0	3,556	1,771	1,785	100.0	2,880	1,476	1,404
Under 15	30.6	844	443	401	31.1	1,105	563	542	37.8	1,088	569	519
15 - 24	15.5	428	210	218	9.3	330	175	155	14.2	409	197	212
25 - 44	24.8	684	342	342	24.7	879	392	487	25.0	720	369	351
45 - 64	22.6	623	317	306	28.4	1,009	521	488	16.6	477	258	219
65 and over	6.5	182	82	100	6.5	233	120	113	6.4	186	83	103

Ages	22. <u>Madison Heights, City</u>				23. <u>Milford Township</u>				24. <u>Northville, City</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	33,343	16,716	16,627	100.0	5,871	2,940	2,931	100.0	985	489	496
Under 15	42.5	14,185	7,211	6,974	38.9	2,282	1,183	1,099	38.4	378	192	186
15 - 24	11.7	3,891	1,599	2,292	12.5	732	328	404	9.1	90	42	48
25 - 44	34.1	11,383	5,983	5,490	28.3	1,663	845	818	35.3	348	168	180
45 - 64	9.6	3,189	1,701	1,488	13.5	790	413	377	13.9	137	73	64
65 and over	2.1	695	312	383	6.8	404	171	233	3.3	32	14	18

TABLE A-18

Ages, Race and Sex for Minor Civil Divisions, Oakland County, 1960:

Age	25. Novi Township				26. Oakland Township				27. Oak Park, City			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	6,603	3,370	3,233	100.0	2,469	1,303	1,166	100.0	36,632	18,189	18,443
Under 15	37.4	2,469	1,310	1,159	36.9	910	493	417	39.1	14,335	7,348	6,987
15 - 24	12.1	797	388	409	11.5	285	162	123	8.6	3,157	1,435	1,722
25 - 44	28.0	1,849	910	939	28.4	701	341	360	33.9	12,418	5,980	6,438
45 - 64	16.1	1,062	585	477	17.7	436	232	204	15.2	5,577	2,886	2,691
65 and over	6.4	426	177	249	5.5	137	75	62	3.2	1,141	537	604

Age	28. Orion Township				29. Oxford Township				30. Oxford Village			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	11,844	5,968	5,876	100.0	3,204	1,646	1,558	100.0	2,357	1,121	1,236
Under 15	37.8	4,480	2,308	2,172	37.3	1,196	644	552	28.5	671	344	327
15 - 24	13.8	1,636	759	877	14.4	460	209	251	14.0	331	155	176
25 - 44	27.0	3,201	1,583	1,618	28.0	898	449	449	21.4	505	233	272
45 - 64	15.9	1,883	1,001	882	14.6	469	243	226	21.5	507	245	262
65 and over	5.5	644	317	327	5.7	181	101	80	14.6	343	144	199

TABLE-18

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1960:

Age	31. Pleasant Ridge, City				32. Pontiac, City				32A. Pontiac, City			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	3,807	1,818	1,989	100.0	82,233	40,117	42,116	100.0	13,975	6,841	7,134
Under 15	26.1	992	509	483	31.6	25,987	13,041	12,946	41.5	5,794	2,848	2,946
15 - 24	10.6	402	183	219	13.4	10,996	5,045	5,951	11.7	1,637	712	925
25 - 44	21.7	825	385	440	26.1	21,472	10,553	10,919	28.6	3,997	1,841	2,056
45 - 64	28.8	1,098	513	585	20.8	17,087	8,549	8,538	14.7	2,053	1,092	961
65 and over	12.8	490	228	262	8.1	6,691	2,929	3,762	3.5	494	248	246

Age	33. Pontiac Township				34. Rose Township				35. Royal Oak, City			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	9,091	4,629	4,462	100.0	1,482	758	724	100.0	80,612	39,367	41,245
Under 15	36.8	3,343	1,684	1,659	36.3	538	276	262	35.6	28,687	14,565	14,122
15 - 24	13.7	1,248	629	619	12.8	190	104	86	11.2	9,050	4,201	4,849
25 - 44	27.6	2,511	1,228	1,283	23.3	345	166	179	30.2	24,371	11,800	12,571
45 - 64	17.8	1,614	894	720	19.9	295	152	143	17.4	14,066	6,953	7,113
65 and over	4.1	375	194	181	7.7	114	60	54	5.6	4,438	1,848	2,590

TABLE A-18

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1960:

Age	36. <u>Royal Oak Township</u>				36A. <u>Royal Oak Township</u>				37. <u>Southfield, City</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	8,147	3,951	4,196	100.0	8,010	3,884	4,126	100.0	31,501	15,899	15,602
Under 15	42.6	3,474	1,733	1,741	43.0	3,445	1,721	1,724	34.5	10,855	5,566	5,289
15 - 24	14.9	1,214	588	626	15.1	1,209	586	623	11.8	3,711	1,851	1,860
25 - 44	24.7	2,017	917	1,100	24.9	1,995	905	1,090	29.3	9,244	4,524	4,720
45 - 64	14.5	1,182	601	581	13.9	1,113	568	545	19.8	6,229	3,263	2,966
65 and over	3.3	260	112	148	3.1	248	104	144	4.6	1,462	695	767

Age	38. <u>Southfield Township</u>				39. <u>South Lyon, City</u>				40. <u>Springfield Township</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	11,319	5,586	5,733	100.0	1,753	858	895	100.0	2,664	1,396	1,268
Under 15	33.9	3,833	1,983	1,850	32.9	577	292	285	35.2	939	461	478
15 - 24	8.6	976	478	498	14.5	254	112	142	15.8	420	254	166
25 - 44	27.6	3,125	1,431	1,694	25.7	451	225	226	24.2	646	323	323
45 - 64	24.4	2,761	1,429	1,332	18.7	327	165	162	17.5	465	259	206
65 and over	5.5	624	265	359	8.2	144	64	80	7.3	194	99	95

TABLE A-18

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1960:

Age	41. <u>Sylvan Lake, City</u>				42. <u>Troy, City</u>				43. <u>Walled Lake, City</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	2,004	964	1,040	100.0	19,058	9,564	9,494	100.0	3,550	1,781	1,769
Under 15	31.6	633	320	313	37.9	7,224	3,701	3,523	40.2	1,428	740	688
15 - 24	9.3	186	82	104	11.7	2,236	1,070	1,166	13.3	472	211	261
25 - 44	27.2	546	263	283	29.0	5,519	2,679	2,840	29.7	1,054	520	534
45 - 64	24.1	483	235	248	16.8	3,207	1,674	1,533	12.2	434	223	211
65 and over	7.8	156	64	92	4.6	872	440	432	4.6	162	87	75

Age	44. <u>Waterford Township</u>				45. <u>West Bloomfield Township</u>				46. <u>White Lake Township</u>			
	Total %	Total	Male	Female	Total %	Total	Male	Female	Total %	Total	Male	Female
All Ages	100.0	47,107	23,464	23,643	100.0	14,994	7,632	7,362	100.0	8,381	4,294	4,087
Under 15	37.8	17,818	9,070	8,748	36.1	5,414	2,842	2,572	36.9	3,091	1,562	1,529
15 - 24	11.3	5,344	2,449	2,895	10.9	1,639	856	783	12.3	1,028	514	514
25 - 44	30.4	14,305	7,008	7,297	28.9	4,326	2,076	2,250	28.7	2,407	1,217	1,190
45 - 64	16.3	7,699	4,027	3,672	18.8	2,822	1,487	1,335	16.3	1,370	746	624
65 and over	4.2	1,944	913	1,031	5.3	793	371	422	5.8	485	255	230

TABLE A-18

Age, Race and Sex for Minor Civil Divisions, Oakland County, 1960:

47. Wilcox, City

<u>Age</u>	Total %	Total	Male	Female
All Ages	100.0	1,531	769	762
Under 15	33.7	516	265	251
15 - 24	12.9	198	102	96
25 - 44	26.1	399	189	210
45 - 64	17.8	272	145	127
65 and over	9.5	146	68	78

TABLE A-19

PERCENT OF AGE, RACE AND SEX FOR MINOR CIVIL DIVISIONS, OAKLAND COUNTY, 1960
 PERCENT OF TOTAL

	Addison Twp.	Avon Twp.	Berkley	Birmingham	Bloomfield Twp.	Bloomfield Hills	Brandon Twp.	Clawson
<u>Age</u>								
All Ages	100.0							
Under 15	33.1	36.6	37.0	34.0	35.2	21.5	37.7	42.3
15 - 24	13.2	12.3	12.3	9.0	9.3	12.3	12.9	9.3
25 - 44	24.9	28.2	28.7	29.8	28.5	18.9	24.8	32.7
45 - 64	21.8	17.1	17.7	20.1	22.4	36.5	17.2	12.3
65 or over	7.0	5.8	4.3	7.1	4.5	10.7	7.4	3.6

	Commerce Twp.	Farmington	Farmington Twp.	Ferndale	Groveland Twp.	Hazel Park	Highland Twp.	Holly Twp.
<u>Age</u>								
All Ages	100.0							
Under 15	39.4	39.5	38.2	29.1	36.4	35.0	36.1	33.7
15 - 24	12.8	9.1	9.2	13.5	14.3	13.2	13.3	16.5
25 - 44	28.5	31.5	29.3	25.1	23.9	29.3	25.5	23.8
45 - 64	15.1	15.2	18.5	24.2	18.8	17.9	16.9	17.5
65 or over	4.2	4.7	4.8	8.1	6.7	4.6	8.2	8.4

AGE, RACE AND SEX FOR MINOR CIVIL DIVISIONS, OAKLAND COUNTY 1960

PERCENT OF TOTAL
(continued)

	Huntington Woods	Independence Twp.	Keego Harbor	Lathrup Village	Lyon Twp.	Madison Heights	Milford Twp.	Northville
<u>Age</u>								
All Ages								
Under 15	34.4	42.3	30.6	31.1	37.8	42.5	38.9	38.4
15 - 24	9.9	11.0	15.5	9.3	14.2	11.7	12.5	9.1
25 - 44	26.7	30.8	24.8	24.7	25.0	34.1	28.3	35.3
45 - 64	24.0	12.3	22.6	28.4	16.6	9.6	13.5	13.9
65 or over	5.0	3.6	6.6	6.6	6.5	2.1	6.9	3.2

	Novi Twp.	Oakland Twp.	Oak Park	Orion Twp.	Oxford Twp.	Oxford Village	Pleasant Ridge	Pontiac
<u>Age</u>								
All Ages								
Under 15	37.4	36.9	39.1	37.8	37.3	28.5	26.1	31.6
15 - 24	12.1	11.5	8.6	13.8	14.4	14.1	10.6	13.4
25 - 44	28.0	28.4	33.9	27.0	28.0	21.4	21.7	26.1
45 - 64	16.1	17.7	15.2	15.9	14.6	21.5	28.8	20.8
65 or over	6.5	5.5	3.1	5.4	5.6	14.6	12.9	8.1

AGE, RACE AND SEX FOR MINOR CIVIL DIVISIONS, OAKLAND COUNTY 1960

PERCENT OF TOTAL

(continued)

Age	Pontiac	Pontiac Twp.	Rose Twp.	Royal Oak	Royal Oak Twp.	Royal Oak Twp.	Southfield	Southfield Twp.
All Ages								
Under 15	41.5	36.8	36.3	35.6	42.6	43.0	34.5	33.9
15 - 24	11.7	13.7	12.8	11.2	14.9	15.1	11.8	8.6
25 - 44	28.6	27.6	23.3	30.2	24.8	24.9	29.3	27.6
45 - 64	14.7	17.8	19.9	17.4	14.5	13.9	19.8	24.4
65 or over	3.5	4.1	7.7	5.5	3.2	3.1	4.6	5.5

Age	South Lyon	Springfield Twp.	Sylvan Lake	Troy City	Walled Lake	Waterford Twp.	West Bloomfield	White Lake Twp.
All Ages								
Under 15	32.9	35.2	31.6	37.9	40.2	37.8	36.1	36.9
15 - 24	14.5	15.8	9.3	11.7	13.3	11.3	10.9	12.3
25 - 44	25.7	24.2	27.2	29.0	29.7	30.4	28.9	28.7
45 - 64	18.7	17.5	24.1	16.8	12.2	16.3	18.8	16.3
65 or over	8.2	7.3	7.8	4.6	4.6	4.1	5.3	5.8

Age	Wixom
All Ages	
Under 15	33.7
15 - 24	12.9
25 - 44	26.1
45 - 64	17.8
65 or over	9.5

TABLE A-20 ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1950

EMPLOYED	OCCUPATION							
	Berkley 6,431	Birmingham 4,782	Clawson 1,997	Ferndale 11,798	Hazel Park 6,658	Holly 970	Huntington Woods 1,818	
Professional, technical, and kindred workers	849	1,021	172	1,346	282	68	499	
Managers, officials, and props., incl. farm	664	894	131	907	299	79	516	
Clerical and kindred workers	935	599	270	1,924	824	107	202	
Sales workers	688	705	178	1,076	446	85	264	
Craftsmen, foremen, and kindred workers	1,436	556	521	2,612	1,619	161	137	
Operatives and kindred workers	1,223	450	485	2,732	2,436	333	65	
Private household workers	97	198	23	127	37	10	85	
Service workers, except private household	346	198	110	684	405	68	35	
Laborers, except mine	181	113	65	306	283	50	9	
Occupation not reported	12	48	42	84	27	9	6	

EMPLOYED	OCCUPATION				
	Oak Park 1,800	Pleasant Ridge 1,437	Rochester 1,813	Royal Oak 17,821	Walled Lake 1,036
Professional, technical, and kindred workers	207	401	212	2,705	73
Managers, officials, and props., incl. farm	164	257	179	2,638	125
Clerical and kindred workers	266	190	193	2,760	100
Sales workers	190	227	172	1,942	79
Craftsmen, foremen, and kindred workers	485	159	324	3,556	195
Operatives and kindred workers	339	105	424	3,167	313
Private household workers	6	37	61	226	12
Service workers, except private household	53	27	149	941	82
Laborers, except mine	37	18	86	465	49
Occupation not reported	53	18	13	83	8

TABLE A-21 ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960 MAJOR OCCUPATION GROUP

	Addison	Avon	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.	Brandon
Male, Employed	451	4045	5907	2311	6717	688	5817	780
Profess'l, Tech. & Kindred Wkrs.	35	512	906	801	1968	159	1560	41
Mgrs., Offs., & Propr's Inc. Farm	84	409	579	693	1691	340	2000	68
Clerical and Kindred Workers	8	190	496	103	396	25	204	41
Sales Workers	16	228	557	376	1212	56	1008	60
Craftsmn, Foremen & Kindred Wkrs.	68	980	1596	185	619	20	420	155
Operatives and Kindred Workers	140	1111	1204	64	381	16	224	260
Private Household Workers		4	-	-	15	21	23	-
Service Wkrs., Exc. Priv. Household	16	197	221	20	187	34	81	37
Laborers, except Mine	51	270	199	21	103	9	62	81
Occupation Not Reported	33	144	149	48	145	8	235	37
Female, Employed	167	1471	2217	665	2450	319	1479	224
Profess'l, Tech. & Kindred Wkrs.	19	177	313	175	602	76	380	51
Mgrs, Offs, & Prop's Incl. Farm	3	52	79	43	119	38	54	9
Clerical and Kindred Wkrs.	43	496	871	206	944	39	468	26
Sales Workers	15	128	321	85	217	16	129	12
Craftsmen, Foremen & Kindred Wkrs.	-	28	20	12	43	4	21	-
Operatives and Kindred Wkrs.	43	236	140	12	92	4	36	28
Private Household Wkrs.	13	117	106	80	192	105	223	20
Service Wkrs., Exc. Priv. Household	20	171	261	20	158	22	74	78
Laborers, Except Mine	3	8	8	-	8	-	8	-
Occupation Not Reported	8	58	98	32	75	15	86	-
Total Employed	618	5516	8124	2976	9167	1007	7296	1004
Private Wage and Salary Wkrs.	486	4624	7013	2318	7132	795	5511	713
Government Wkrs.	50	438	609	201	914	25	420	146
Self-Employed Workers	68	405	458	445	1080	179	1319	132
Unpaid Family Workers	14	49	44	12	41	8	46	13

Table A-21 Economic Characteristics By Minor Civil Division: Oakland County, 1960, Major Occupation Group

	Clawson	Commerce	Farmington Twp.	Farmington City	Ferndale	Franklin	Groveland	Hazel Park
Male, Employed	3698	2273	1539	1670	8506	775	315	6594
Profess'l, Tech. & Kindred Wkrs.	638	281	279	391	1022	194	7	393
Mgrs., Offs., & Propr's Inc. Farm	334	152	378	207	711	261	59	287
Clerical and Kindred Workers	303	120	98	132	641	32	19	470
Sales Workers	316	215	150	247	634	95	4	296
Craftsmen, Foremen & Kindred Wkrs.	982	609	326	305	2220	73	83	1823
Operatives and Kindred Wkrs.	738	468	174	233	2182	40	108	2464
Private Household Wkrs.	4	-	4	4	4	-	-	-
Service Wkrs., Exc. Priv. Household	174	117	39	73	431	15	4	367
Laborers, except Mine	138	112	63	34	346	30	27	253
Occupation Not Reported	71	99	28	44	315	35	4	241
Female, Employed	1266	701	435	620	3747	181	77	2532
Profess'l, Tech. & Kindred Wkrs.	212	127	63	181	531	42	7	158
Mgrs., Offs., & Prop's Incl. Farm	28	24	20	27	96	8	5	62
Clerical and Kindred Wkrs.	440	248	124	228	1573	51	20	828
Sales Workers	163	37	35	61	416	26	14	292
Craftsmen, Foremen & Kindred Wkrs.	12	4	-	5	46	4	-	53
Operatives and Kindred Wkrs.	128	101	27	8	371	4	12	460
Private Household Wkrs.	107	27	30	36	130	23	-	116
Service Wkrs, Exc. Priv. Household	161	91	120	70	415	12	11	439
Laborers, Except Mine	3	11	-	-	17	-	4	25
Occupation Not Reported	12	31	16	4	152	11	4	99
Total Employed	4964	2974	1974	2290	12253	956	392	9126
Private Wage and Salary Wkrs.	4207	2328	1490	1796	10419	708	294	8165
Government Wkrs.	467	322	125	282	1160	47	20	587
Self-Employed Wkrs.	266	304	339	186	625	201	67	354
Unpaid Family Wkrs.	24	20	20	26	49	-	11	20

Table A-21 Economic Characteristics By Minor Civil Division: Oakland County, 1960, Major Occupation Group

	Highland	Holly Twp.	Holly Village	Huntington Woods	Independence Twp.	Keego Harbor	Lake Angeles	Lake Orion
Male, Employed	1116	564	821	2329	2637	699	57	660
Profess'l, Tech. & Kindred Wkrs.	80	47	63	745	222	17	28	79
Mgrs., Offs., & Propr's Inc. Farm	102	92	48	750	248	33	15	51
Clerical and Kindred Workers	52	27	79	73	167	33	-	32
Sales Workers	106	49	36	321	180	62	-	69
Craftsmen, Foremen & Kindred Wkrs.	285	112	220	189	774	193	9	170
Operatives and Kindred Wkrs.	353	165	267	92	798	61	-	147
Private Household Workers	-	-	-	4	-	-	5	-
Service Wkrs., Exc. Priv. Household	47	17	23	41	93	26	-	53
Laborers, except Mine	58	44	44	32	90	42	-	26
Occupation Not Reported	33	11	41	81	65	32	-	33
Female, Employed	404	227	372	682	839	370	25	355
Profess'l, Tech. & Kindred Wkrs.	48	24	55	176	127	42	8	45
Mgrs, Offs, & Prop's Incl. Farm	20	-	16	12	19	28	17	8
Clerical and Kindred Wkrs.	128	60	86	219	258	88	-	114
Sales Workers	40	40	58	76	72	23	-	45
Craftsmen, Foremen & Kindred Wkrs.	-	-	-	8	-	8	-	9
Operatives and Kindred Wkrs.	26	24	63	-	118	55	-	43
Private Household Wkrs.	25	20	31	135	78	27	-	16
Service Wkrs., Exc. Priv Household	83	35	42	24	133	83	-	58
Laborers, Except Mine	8	7	-	-	-	-	-	-
Occupation Not Reported	26	17	22	32	34	16	-	17
Total Employed	1520	791	1194	3011	3476	1069	82	1015
Private Wage and Salary Wkrs.	1145	624	971	1960	2916	858	52	795
Government Wkrs.	173	54	113	284	297	124	15	124
Self-Employed Workers	174	105	98	739	251	74	15	80
Unpaid Family Workers	28	8	12	28	12	13	-	16

Table A-21 Economic Characteristics By Minor Civil Division: Oakland County, 1960, Major Occupation Group

	Lathrup Village	Lyon Twp.	Madison Heights	Milford Twp.	Milford	Northville	Novi	Oak Park
Male, Employed								
Profess'l, Tech, & Kindred Wkrs.	968	734	8156	396	1070	225	1619	9728
Mgrs., Offs, & Propr's Inc. Farm	275	41	1244	34	174	56	195	2026
Clerical and Kindred Workers	359	148	459	68	95	37	208	2049
Sales Workers	43	32	535	21	75	26	53	529
Craftsmen, Foremen & Kindred Wkrs.	135	19	573	16	63	30	117	2143
Operatives and Kindred Workers	97	144	2154	109	257	39	447	1502
Private Household Workers	21	216	2356	91	288	33	372	897
Service Wkrs., Exc. Priv. Household	-	-	-	-	-	-	8	23
Laborers, except Mine	9	23	285	4	62	-	47	233
Occupation Not Reported	5	73	335	37	44	4	120	122
	24	38	215	16	12	-	52	204
Female, Employed								
Profess'l, Tech. & Kindred Wkrs.	228	252	2729	108	345	113	479	2965
Mgrs., Offs., & Prop. Incl. Farm	75	32	245	43	75	36	47	590
Clerical and Kindred Wkrs.	28	21	71	4	8	10	15	163
Sales Workers	86	68	1063	18	115	29	166	1149
Craftsmen, Foremen & Kindred Wkrs.	12	19	320	12	17	12	41	432
Operatives and Kindred Wkrs.	7	8	24	-	13	-	-	41
Private Household Wkrs.	-	42	433	4	19	6	52	159
Service Wkrs., Exc. Priv. Household	8	15	107	8	22	16	27	170
Laborers, Except Mine	4	43	342	16	69	4	115	149
Occupation Not Reported	-	4	16	3	-	-	-	-
	8	-	108	-	7	-	16	112
Total Employed								
Private Wage and Salary Wkrs.	1196	986	10885	504	1415	338	2098	12693
Government Workers	811	728	9794	351	1053	233	1694	8933
Self-Employed Workers	93	99	668	71	211	50	161	947
Unpaid Family Workers	275	151	390	82	138	45	232	2650
	17	8	33	-	13	10	11	163

Table A-21 Economic Characteristics By Minor Civil Division: Oakland County, 1960, Major Occupation Group

	Oakland Twp.	Orion Twp.	Oxford Village	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quakertown
Male, Employed	667	2290	564	787	1006	19792	2267	5152
Profess'l, Tech., & Kindred Wkrs.	101	187	76	50	303	1586	139	896
Mgrs., Offs., & Propr's Inc. Farm	130	140	55	80	211	1120	123	719
Clerical and Kindred Workers	31	114	46	77	50	1316	169	278
Sales Workers	36	101	51	55	146	936	102	488
Craftsmen, Foremen & Kindred Wkrs.	149	648	146	224	154	3907	553	1328
Operatives and Kindred Workers	106	727	100	242	82	7446	767	879
Private Household Workers	8	4	-	-	5	16	-	11
Service Wkrs, Exc. Priv. Household	20	138	37	11	22	1346	88	115
Laborers, except Mine	64	97	44	37	21	1263	172	259
Occupation Not Reported	22	134	9	11	12	856	64	179
Female, Employed	209	717	305	248	400	10086	825	1591
Profess'l, Tech. & Kindred Wkrs.	15	76	32	23	113	1116	130	210
Mgrs., Offs., & Prop. Incl. Farm	5	16	16	-	32	250	8	72
Clerical and Kindred Wkrs.	94	171	60	63	117	2807	216	489
Sales Workers	13	72	51	42	45	845	70	178
Craftsmen, Foremen & Kindred Wkrs.	18	20	4	-	3	126	-	13
Operatives and Kindred Wkrs.	15	117	36	46	15	1279	140	164
Private Household Wkrs.	20	65	45	8	31	1061	39	121
Service Wkrs., Exc. Priv. Household	24	124	33	27	25	2027	172	249
Laborers, except Mine	-	8	-	12	-	94	3	12
Occupation Not Reported	5	48	28	27	19	481	47	83
Total Employed	876	3007	869	1035	1406	29878	3092	6743
Private Wage and Salary Wkrs.	674	2542	653	845	1014	25419	2611	5637
Government Workers	59	258	116	46	152	2993	289	434
Self-Employed Workers	135	195	92	125	231	1368	180	640
Unpaid Family Workers	8	12	8	19	9	98	12	32

Table A-21 Economic Characteristics By Minor Civil Division: Oakland County, 1960, Major Occupation Group

	Rochester	Rose Twp.	Royal Oak City	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake
Male, Employed	1387	340	21115	1216	461	8363	630	519
Profess'l, Tech., & Kindred Wkrs.	193	16	4302	17	15	1494	33	124
Mgrs., Offs., & Propr's Inc. Farm	144	97	2681	43	35	1489	81	116
Clerical and Kindred Workers	78	8	1872	44	46	462	25	41
Sales Workers	149	8	2292	43	7	895	24	46
Craftsmen, Foremen & Kindred Wkrs.	319	64	4697	166	122	2009	165	87
Operatives and Kindred Workers	284	86	3168	497	137	1351	199	59
Private Household Workers	-	5	11	4	-	-	4	-
Service Wkrs., Exc. Priv. Household	85	12	798	127	36	279	40	4
Laborers, except Mine	92	44	606	173	46	190	37	16
Occupation Not Reported	43	-	688	102	17	194	22	26
Female, Employed	728	113	8494	486	194	2905	152	244
Profess'l, Tech. & Kindred Wkrs.	139	12	1701	13	16	420	27	58
Mgrs., Offs., & Prop. Incl. Farm	39	4	301	14	8	114	16	11
Clerical and Kindred Wkrs.	211	21	3469	28	61	1188	32	85
Sales Workers	42	16	873	15	23	320	24	46
Craftsmen, Foremen & Kindred Wkrs.	16	-	68	4	-	24	-	3
Operatives and Kindred Wkrs.	62	16	472	25	32	197	24	5
Private Household Wkrs.	55	16	388	207	17	150	13	-
Service Wkrs., Exc. Priv. Household	140	20	836	131	28	393	12	19
Laborers, Except Mine	8	8	28	11	4	13	-	-
Occupation Not Reported	16	-	358	38	5	86	4	17
Total Employed	2115	453	29609	1702	655	11268	782	763
Private Wage and Salary Wkrs.	1601	300	24434	1545	498	8773	561	536
Government Workers	270	36	2973	110	78	865	122	138
Self-Employed Workers	225	91	2098	39	68	1520	99	77
Unpaid Family Workers	19	26	104	8	11	110	-	12

Table A-21 Economic Characteristics By Minor Civil Division: Oakland County, 1960, Major Occupation Group

	Troy	Walled Lake	Waterford Twp.	W. Bloomfield Twp.	White Lake	Wixom	Wolverine Lake
Male, Employed	4764	768	12051	3783	1992	380	567
Profess'l, Tech., & Kindred Wkrs.	697	106	1402	740	165	38	64
Mgrs., Offs., & Propr's Inc. Farm	541	70	1108	649	135	15	32
Clerical and Kindred Workers	237	43	781	270	71	7	23
Sales Workers	334	61	734	518	127	38	38
Craftsmen, Foremen & Kindred Wkrs.	1307	184	3206	770	576	112	171
Operatives and Kindred Workers	1083	215	3276	471	694	116	160
Private Household Workers	8	-	4	12	-	-	-
Service Wkrs., Exc. Priv. Household	187	38	522	99	49	18	28
Laborers, except Mine	216	31	551	87	111	26	34
Occupation Not Reported	154	20	467	167	64	10	17
Female, Employed	1677	329	4932	1389	685	154	227
Profess'l, Tech. & Kindred Wkrs.	177	85	744	335	123	16	35
Mgrs., Offs., & Prop. Incl. Farm	45	5	118	60	24	8	15
Clerical and Kindred Wkrs.	640	75	1580	493	198	56	35
Sales Workers	185	34	502	106	61	12	27
Craftsmen, Foremen & Kindred Wkrs.	24	9	71	8	11	-	4
Operatives and Kindred Wkrs.	177	48	486	52	63	19	39
Private Household Wkrs.	92	23	279	88	24	9	14
Service Wkrs., Exc. Priv. Household	271	42	896	155	139	19	58
Laborers, Except Mine	23	-	12	17	4	3	-
Occupation Not Reported	43	8	244	75	38	12	-
Total Employed	6441	1097	16983	5172	2677	534	794
Private Wage and Salary Wkrs.	5438	799	13478	3977	2205	426	681
Government Workers	470	180	2183	524	233	58	56
Self-Employed Workers	468	109	1206	642	227	41	53
Unpaid Family Workers	65	9	116	29	12	9	4

TABLE A-22

SELECTED SOCIAL CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

MALE EMPLOYMENT

	Addison	Avon	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Township	Brandon
MALE EMPLOYED								
Profess'l, Tech., Kindred	7.8	12.7	15.3	34.7	29.3	23.1	26.8	5.3
Mgrs., Offs., Props.	18.6	10.1	9.8	30.0	25.2	49.4	34.4	8.7
Clerical	1.8	4.7	8.4	4.5	5.9	3.6	3.5	5.3
Sales	3.5	5.6	9.4	16.3	18.0	8.1	17.3	7.7
Craftsmen	15.1	24.2	27.0	8.0	9.2	2.9	7.2	19.9
Operative	31.0	27.5	20.4	2.8	5.7	2.3	3.9	33.3
Private Household	----	0.1	----	----	0.2	3.1	0.4	----
Service Workers	3.5	4.9	3.7	0.9	2.9	4.9	1.4	4.7
Laborers	11.3	6.7	3.4	0.9	1.5	1.3	1.1	10.4
Not Reported	7.3	3.6	2.5	2.1	2.2	1.2	5.1	4.7
	Clawson	Commerce	Farmington	Farmington City	Ferndale	Franklin	Groveland	Hazel Park
MALE EMPLOYED								
Profess'l, Tech., Kindred	17.3	12.4	18.1	23.4	12.0	25.0	2.2	6.0
Mgrs., Offs., Props.	9.0	11.1	24.6	12.4	8.4	33.7	18.7	4.4
Clerical	8.2	5.3	6.4	7.9	7.5	4.1	6.0	7.1
Sales	8.5	9.5	9.7	14.8	7.5	12.3	1.3	4.5
Craftsmen	26.6	26.8	21.2	18.3	26.1	9.4	26.3	27.6
Operative	20.0	20.6	11.3	14.0	25.7	5.2	34.3	37.4
Private Household	0.1	----	0.3	0.2	----	----	----	----
Service Workers	4.7	5.1	2.5	4.4	5.1	1.9	1.3	5.6
Laborers	3.7	4.9	4.1	2.0	4.1	3.9	8.6	3.8
Not Reported	1.9	4.4	1.8	2.6	3.7	4.5	1.3	3.7

TABLE A-22

SELECTED SOCIAL CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

MALE EMPLOYMENT

	Highland	Holly Twp.	Holly	Huntington Woods	Independence	Keego Harbor	Lake Angelus	Lake Orion
MALE EMPLOYMENT								
Profess'l, Tech., Kindred	7.2	8.3	7.7	32.0	8.4	2.4	49.1	12.0
Mgrs., Offs., Props.	9.1	16.3	5.8	32.2	9.4	4.7	26.3	7.7
Clerical	4.7	4.8	9.6	3.1	6.3	4.7	----	4.8
Sales	9.5	8.7	4.4	13.8	6.8	8.9	----	10.5
Craftsmen	25.5	19.9	26.8	8.1	29.4	27.6	15.8	25.8
Operatives	31.6	29.3	32.5	4.0	30.3	37.3	----	22.3
Private Household	----	----	----	0.2	----	----	8.8	----
Service Workers	4.2	3.0	2.8	1.8	3.5	3.7	----	8.0
Laborers	5.2	7.8	5.4	1.4	3.4	6.0	----	3.9
Not Reported	3.0	2.0	5.0	3.5	2.5	4.6	----	5.0

	Lathrup Village	Lyon Twp.	Madison Heights	Millford Twp.	Milford	Northville	Novi	Oak Park
MALE EMPLOYMENT								
Profess's, Tech., Kindred	28.4	5.6	15.3	8.6	16.3	24.9	12.0	20.8
Mgrs., Offs., Props.	37.1	20.2	5.6	17.2	8.9	16.4	12.8	21.1
Clerical	4.4	4.4	6.6	5.3	7.0	11.6	3.3	5.4
Sales	13.9	2.6	7.0	4.0	5.9	13.3	7.2	22.0
Craftsmen	10.0	19.6	26.4	27.5	24.0	17.3	27.6	15.4
Operatives	2.2	29.4	28.9	23.0	26.9	14.7	23.0	9.2
Private Household	----	----	----	----	----	----	0.5	0.2
Service Workers	0.9	3.1	3.5	1.0	5.8	----	2.9	2.4
Laborers	0.5	9.9	4.1	9.3	4.1	1.8	7.4	1.3
Not Reported	2.5	5.2	2.6	4.0	0.1	----	3.2	2.1

TABLE A-22
SELECTED SOCIAL CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

MALE EMPLOYMENT

	Oakland	Orion Twp.	Oxford Village	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quakertown
MALE EMPLOYED								
Profess'l, Tech., Kindred	15.1	8.2	13.5	6.4	30.1	8.0	6.1	17.4
Mgrs., Offs., Proprs.	19.5	6.1	9.8	10.2	21.0	5.7	5.4	14.0
Clerical	4.6	5.0	8.2	9.8	5.0	6.6	7.5	5.4
Sales	5.4	4.4	9.0	7.0	14.5	4.7	4.5	9.5
Craftsmen	22.3	28.3	25.9	28.5	15.3	19.7	28.4	25.8
Operatives	15.9	31.7	17.7	30.7	8.2	37.6	33.8	17.1
Private Household	1.2	0.2	----	----	0.5	0.1	----	0.2
Service Workers	3.0	6.0	6.6	1.4	2.2	6.8	3.9	2.2
Laborers	9.6	4.2	7.8	4.7	2.1	6.4	7.6	5.0
Not Reported	3.3	5.9	1.6	1.4	1.2	4.3	2.8	3.5

	Rochester	Rose	Royal Oak	Royal Oak Township	South Lyon	Southfield	Springfield	
MALE EMPLOYED								
Profess'l, Tech., Kindred	13.9	4.7	20.4	1.4	3.3	17.9	5.2	23.9
Mgrs., Offs., Proprs.	10.4	28.5	12.7	3.5	7.6	17.8	12.9	22.4
Clerical	5.6	2.4	8.9	3.6	10.0	5.5	4.0	7.9
Sales	10.7	2.4	10.9	3.5	1.5	10.7	3.8	8.8
Craftsmen	23.0	18.8	22.2	13.7	26.5	24.0	26.2	16.8
Operatives	20.5	25.3	15.0	40.9	29.7	16.2	31.6	11.4
Private Household	----	1.5	0.1	0.3	----	----	0.6	----
Service Workers	6.1	3.5	3.8	10.4	3.8	3.3	6.3	0.8
Laborers	6.6	12.9	2.9	14.2	10.0	2.3	5.9	3.1
Not Reported	3.1	----	3.3	8.4	3.7	2.3	3.5	5.0

TABLE A-22
 SELECTED SOCIAL CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

MALE EMPLOYMENT

	Sylvan Lake	Troy	Walled Lake	Waterford	W. Bloomfield Township	White Lake	Wixom	Wolverine Lake
MALE EMPLOYMENT								
Profess'l, Tech., Kindred	23.9	14.6	13.8	11.6	19.6	8.3	10.0	11.3
Mgrs., Offs., Props.	22.4	11.4	9.1	9.2	17.2	6.8	3.9	5.6
Clerical	7.9	5.0	5.6	6.5	7.1	3.6	1.8	4.1
Sales	8.8	7.0	7.9	6.1	13.7	6.4	10.0	6.7
Craftsmen	16.8	27.4	24.0	26.6	20.4	28.9	29.5	30.2
Operatives	11.4	22.7	28.0	27.2	12.5	34.8	30.5	28.2
Private Household	----	0.2	----	----	0.3	----	----	----
Service Workers	0.8	3.9	4.9	4.3	2.6	2.5	4.7	4.9
Laborers	3.1	4.5	4.0	4.6	2.3	5.6	6.8	6.0
Not Reported	5.0	3.2	2.6	3.9	4.4	3.2	2.6	3.0

TABLE A-23- ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

OCCUPATION AND INDUSTRY GROUP

TOTAL EMPLOYED	Addison 618	Avon 5,516	Berkley 8,124	Beverly Hills 2,976	Birmingham 9,167	Bloomfield Hills 1,007	Bloomfield Township 7,296	Brandon 1,004
1. Construction	17	281	391	119	343	28	294	41
2. Manufacturing	290	2,685	3,358	1,203	3,082	232	3,077	360
3. Transportation Commun., & Other Public Utilities	19	287	479	101	407	32	207	61
4. Wholesale & Retail Trade	81	902	1,726	518	1,675	122	1,184	160
5. Business & Repair Service	4	163	240	108	437	48	301	13
6. Personal Services	33	216	292	108	400	134	294	58
7. Professional & Related Services	29	498	840	495	1,483	252	1,074	141
8. Public Administration	24	98	235	40	354	4	70	29
9. Other Industries & Mining (Inc. Not Reported)	121	386	563	284	986	155	795	141

TABLE ~~A-23~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	OCCUPATION AND INDUSTRY GROUP							
	Clawson	Commerce	Farmington Township	Farmington City	Ferndale	Franklin	Groveland	Hazel Park
TOTAL EMPLOYED	4,964	2,974	1,974	2,290	12,253	956	392	9,126
1. Construction	252	251	179	120	421	61	21	337
2. Manufacturing	2,289	1,208	716	849	5,443	387	196	4,755
3. Transportation Commun., & Other Public Utilities	287	140	76	130	629	24	23	494
4. Wholesale & Retail Trade	909	528	426	373	2,312	135	63	1,618
5. Business & Repair Service	97	85	63	82	340	32	12	290
6. Personal Services	239	115	57	99	401	39	10	318
7. Professional & Related Services	453	353	289	383	1,364	131	7	538
8. Public Administration	141	55	21	53	424	8	3	229
9. Other Industries & Mining (Inc. Not Reported)	297	239	147	201	919	139	57	547

TABLE ~~A-23~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

OCCUPATION AND INDUSTRY GROUP

	Highland	Holly Township	Holly Village	Huntington Woods	Independence Township	Keego Harbor	Lake Angelus	Orion
TOTAL EMPLOYED	1,520	791	1,194	3,011	3,476	1,069	82	1,015
1. Construction	96	36	53	166	171	50	--	33
2. Manufacturing	612	298	558	812	1,715	468	24	397
3. Transportation Commun., & Other Public Utilities	75	17	50	76	208	39	9	47
4. Wholesale & Retail Trade	295	183	226	735	561	202	14	186
5. Business & Repair Service	19	15	17	83	45	25	--	29
6. Personal Services	54	31	71	191	134	49	5	49
7. Professional & Related Services	132	97	109	664	339	108	30	121
8. Public Administration	61	8	27	49	72	43	--	42
9. Other Industries & Mining (Inc. Not Reported)	176	106	83	235	231	85	--	111

TABLE ~~A-22~~ ^{A-23} ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

OCCUPATION AND INDUSTRY GROUP

	Lathrup Village	Lyon Township	Madison Heights	Milford Township	Milford	Northville	Novi	Oak Park
TOTAL EMPLOYED	1,196	986	10,885	504	1,415	338	2,098	12,693
1. Construction	65	49	600	28	71	7	175	674
2. Manufacturing	455	401	5,637	215	643	113	868	3,239
3. Transportation, Commun., & Other Public Utilities	42	63	439	28	65	27	97	365
4. Wholesale & Retail Trade	187	95	1,909	50	217	61	343	4,249
5. Business & Repair Service	45	30	359	13	16	6	73	405
6. Personal Services	27	38	265	20	62	22	70	594
7. Professional & Related Services	235	111	771	69	215	84	208	1,727
8. Public Administration	20	14	243	7	61	---	47	285
9. Other Industries & Mining (Inc. Not Reported)	120	185	662	74	65	18	217	1,155

TABLE ~~A-23~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	OCCUPATION AND INDUSTRY GROUP							
	Oakland Township	Orion Township	Oxford Village	Oxford Township	Pleasant Ridge	Pontiac	Pontiac Township	Quakertown
TOTAL EMPLOYED	876	3,007	869	1,035	1,406	29,878	3,092	6,743
1. Construction	54	197	44	55	57	860	148	531
2. Manufacturing	364	1,509	305	452	417	13,418	1,508	2,767
3. Transportation, Comm., & Other Public Utilities	46	151	41	62	79	1,472	226	357
4. Wholesale & Retail Trade	102	404	155	170	265	4,762	433	1,396
5. Business & Repair Service	9	46	---	8	37	634	74	181
6. Personal Services	36	92	74	40	83	1,901	93	232
7. Professional & Related Services	78	276	112	66	282	3,713	284	682
8. Public Administration	32	60	24	13	33	893	102	103
9. Other Industries & Mining (Inc. Not Reported)	155	272	114	169	153	2,225	224	499

TABLE A-23 ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

OCCUPATION AND INDUSTRY GROUP

	Rochester	Rose Township	Royal Oak City	Royal Oak Township	South Lyon	City of Southfield	Springfield Township	Sylvan Lake
TOTAL EMPLOYED	2,115	453	29,609	1,702	655	11,268	782	763
1. Construction	90	16	1,353	53	20	1,004	91	12
2. Manufacturing	739	136	11,709	700	335	4,083	330	261
3. Transportation, Commun., & Other Public Utilities	109	24	1,694	40	15	535	21	31
4. Wholesale & Retail Trade	394	70	5,435	202	105	2,425	111	134
5. Business & Repair Service	65	---	936	88	11	300	8	16
6. Personal Services	104	25	941	248	59	370	33	3
7. Professional & Related Services	361	49	3,913	142	65	1,391	102	160
8. Public Administration	66	4	966	48	16	258	15	25
9. Other Industries & Mining (Inc. Not Reported)	187	129	2,662	181	29	902	73	121

TABLE A-23. ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	OCCUPATION AND INDUSTRY GROUP						
	Troy	Walled Lake	Waterford Township	W. Bloomfield Township	White Lake	Wixom	Wolverine Lake
TOTAL EMPLOYED	6,441	1,097	16,983	5,172	2,677	534	794
1. Construction	487	70	853	329	204	37	40
2. Manufacturing	2,737	423	6,957	1,914	1,108	222	326
3. Transportation, Commun., & Other Public Utilities	339	68	1,001	217	192	38	48
4. Wholesale & Retail Trade	1,115	178	2,935	908	435	94	175
5. Business & Repair Service	201	20	409	162	64	---	24
6. Personal Services	193	32	634	173	75	23	22
7. Professional & Related Services	549	163	2,265	811	290	40	105
8. Public Administration	142	44	534	130	65	35	8
9. Other Industries & Mining (Inc. Not Reported)	678	99	1,395	528	244	45	46

%TABLE A-2h ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

OCCUPATION AND INDUSTRY GROUP

	Addison	Avon	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Township	Brandon
TOTAL EMPLOYED 100 %								
1. Construction	2.8	5.1	4.8	4.0	3.7	2.8	4.0	4.1
2. Manufacturing	46.9	48.7	41.4	40.5	33.6	23.0	42.3	35.9
3. Transportation, Commun., & Other Utilities	3.1	5.2	5.9	3.4	4.4	3.2	2.8	6.1
4. Wholesale & Retail Trade	13.1	16.3	21.2	17.4	18.3	12.1	16.2	15.9
5. Business & Repair Services	0.6	3.0	3.0	3.6	4.8	4.8	4.1	1.3
6. Personal Services	5.3	3.9	3.6	3.6	4.4	13.3	4.0	15.8
7. Professional & Related Services	4.7	9.0	10.3	16.7	16.2	25.0	14.7	14.0
8. Public Administration	3.9	1.8	2.9	1.3	3.9	0.4	1.0	2.9
9. Other Industries & Mining (Incl. Not Reported)	19.6	7.0	6.9	9.5	10.7	15.4	10.9	14.0

% TABLE ~~A-24~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	OCCUPATION AND INDUSTRY GROUP							
	Clawson	Commerce	Farmington Township	Farmington City	Ferndale	Franklin	Groveland	Hazel Park
TOTAL EMPLOYED 100 %								
1. Construction	5.1	8.4	9.1	5.2	3.4	6.4	5.4	3.7
2. Manufacturing	46.1	40.6	36.3	37.1	44.4	40.6	49.9	52.1
3. Transportation, Commun., 7 Other Utilities	5.9	4.7	3.8	5.7	5.1	2.5	5.9	5.4
4. Wholesale & Retail Trade	18.3	17.8	21.6	16.3	18.9	14.0	16.0	17.7
5. Business & Repair Services	2.0	2.9	3.2	3.6	2.8	3.3	3.1	3.2
6. Personal Services	4.8	3.9	2.9	4.3	3.3	4.1	2.6	3.5
7. Professional & Related Services	9.1	11.9	14.6	16.7	11.1	13.7	1.8	5.9
8. Public Administration	2.8	1.8	1.1	2.3	3.5	0.8	0.8	2.5
9. Other Industries & Mining (Incl. Not Reported)	5.9	8.0	7.4	8.8	7.5	14.5	14.5	6.0

% TABLE ^{A-24} ----- ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	OCCUPATION AND INDUSTRY GROUP							
	Highland	Holly Township	Holly Village	Huntington Woods	Independence Township	Keego Harbor	Lake Angelus	Lake Orion
TOTAL EMPLOYED 100 %								
1. Construction	6.3	4.6	4.4	5.5	4.9	4.7	---	3.3
2. Manufacturing	40.3	37.7	46.8	27.0	49.4	43.9	29.3	39.2
3. Transportation, Commun., & Other Utilities	4.9	2.1	4.2	2.5	6.0	3.6	11.0	4.6
4. Wholesale & Retail Trade	19.4	23.1	18.9	24.4	16.1	18.9	17.1	18.3
5. Business & Repair Services	1.2	1.9	1.4	2.8	1.3	2.3	---	2.9
6. Personal Services	3.6	3.9	5.9	6.3	3.9	4.6	6.1	4.8
7. Professional & Related Services	8.7	12.3	9.1	22.1	9.7	10.1	36.5	11.9
8. Public Administration	4.0	1.0	2.3	1.6	2.1	4.0	---	4.1
9. Other Industries & Mining (Inc. Not Reported)	11.6	13.4	7.0	7.8	6.6	8.0	---	10.9

% TABLE ~~A-24~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	OCCUPATION AND INDUSTRY GROUP							Oak Park
	Lathrup Village	Lyon Township	Madison Heights	Milford Township	Milford	Northville	Novi	
TOTAL EMPLOYED 100 %								
1. Construction	5.4	5.0	5.5	5.6	5.0	2.1	8.3	5.3
2. Manufacturing	38.1	40.6	51.9	42.6	45.5	33.4	41.5	25.5
3. Transportation, Commun., & Other Utilities	3.5	6.4	4.0	5.6	4.6	8.0	4.6	2.9
4. Wholesale & Retail Trade	15.6	9.6	17.5	9.9	15.3	18.0	16.4	33.5
5. Business & Repair Services	3.8	3.0	3.3	2.6	1.1	1.8	3.5	3.2
6. Personal Services	2.3	3.9	2.4	4.0	4.4	6.5	3.3	4.7
7. Professional & Related Services	19.6	11.3	7.1	13.7	15.2	24.9	9.9	13.6
8. Public Administration	1.7	1.4	2.2	1.4	4.3	---	2.2	2.2
9. Other Industries & Mining (Inc. Not Reported)	10.0	18.8	6.1	14.6	4.6	5.3	10.3	9.1

% TABLE A-24 ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

OCCUPATION AND INDUSTRY GROUP

	Oakland Township	Orion Township	Oxford Village	Oxford Township	Pleasant Ridge	Pontiac	Pontiac Township	Quakertown
TOTAL EMPLOYED 100 %								
1. Construction	6.2	6.6	5.1	5.3	4.1	2.9	4.8	7.9
2. Manufacturing	41.5	50.2	35.1	43.6	29.7	45.0	48.8	41.0
3. Transportation, Commun., & Other Utilities	5.3	5.0	4.7	6.0	5.6	4.9	7.3	5.3
4. Wholesale & Retail Trade	11.6	13.4	17.8	16.4	18.8	15.9	14.0	20.7
5. Business & Repair Services	1.0	1.5	----	0.8	2.6	2.1	2.4	2.7
6. Personal Services	4.1	3.1	8.5	3.9	5.9	6.4	3.0	3.4
7. Professional & Related Services	8.9	9.2	12.9	6.4	20.1	12.4	9.2	10.1
8. Public Administration	3.7	2.0	2.8	1.3	2.3	3.0	3.3	1.5
9. Other Industries & Mining (Inc. Not Reported)	17.7	9.0	13.1	16.3	10.9	7.4	7.2	7.4

% TABLE ~~A-24~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

OCCUPATION AND INDUSTRY GROUP

	Rochester	Rose Township	Royal Oak City	Royal Oak Township	South Lyon	Southfield City	Springfield Township	Sylvan Lake
TOTAL EMPLOYED 100 %								
1. Construction	4.3	3.5	4.6	3.1	3.1	8.9	11.5	1.6
2. Manufacturing	34.9	30.0	39.4	41.1	51.2	36.3	42.2	34.1
3. Transportation, Commun., & Other Related Utilities	5.2	5.3	5.7	2.4	2.3	4.7	2.7	4.1
4. Wholesale & Retail Trade	18.6	15.5	18.4	11.9	16.0	21.5	14.2	17.6
5. Business & Repair Services	3.1	----	3.2	5.2	1.7	2.7	1.0	2.1
6. Personal Services	4.9	5.5	3.2	14.6	9.0	3.3	4.2	0.4
7. Professional & Related Services	17.1	10.8	13.2	8.3	9.9	12.3	13.0	20.9
8. Public Administration	3.1	0.9	3.3	2.8	2.4	2.3	1.9	3.3
9. Other Industries & Mining (Inc. Not Reported)	8.8	28.5	9.0	10.6	4.4	8.0	9.3	15.9

% TABLE -A-24 ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	OCCUPATION AND INDUSTRY GROUP								
	Rochester	Rose Township	Royal Oak City	Royal Oak Township	South Lyon	Southfield City	Springfield Township	Sylvan Lake	
TOTAL EMPLOYED 100 %									
1. Construction	4.3	3.5	4.6	3.1	3.1	8.9	11.5	1.6	
2. Manufacturing	34.9	30.0	39.4	41.1	51.2	36.3	42.2	34.1	
3. Transportation, Commun., & Other Related Utilities	5.2	5.3	5.7	2.4	2.3	4.7	2.7	4.1	
4. Wholesale & Retail Trade	18.6	15.5	18.4	11.9	16.0	21.5	14.2	17.6	
5. Business & Repair Services	3.1	----	3.2	5.2	1.7	2.7	1.0	2.1	
6. Personal Services	4.9	5.5	3.2	14.6	9.0	3.3	4.2	0.4	
7. Professional & Related Services	17.1	10.8	13.2	8.3	9.9	12.3	13.0	20.9	
8. Public Administration	3.1	0.9	3.3	2.8	2.4	2.3	1.9	3.3	
9. Other Industries & Mining (Inc. Not Reported)	8.8	28.5	9.0	10.6	4.4	8.0	9.3	15.9	

% TABLE ~~A-24~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

OCCUPATION AND INDUSTRY GROUP

	Troy	Walled Lake	Waterford Township	W. Bloomfield Township	White Lake	Wixom	Wolverine Lake
TOTAL EMPLOYED 100 %							
1. Construction	7.6	6.4	5.0	6.3	7.6	6.9	5.0
2. Manufacturing	42.5	38.6	41.1	37.1	41.5	41.6	41.2
3. Transportation, Commun., & Other Related Utilities	5.3	6.2	5.9	4.2	7.2	7.1	6.0
4. Wholesale & Retail Trade	17.3	16.2	17.3	17.6	16.2	17.6	22.0
5. Business & Repair Services	3.1	1.8	2.4	3.1	2.4	----	3.0
6. Personal Services	3.0	2.0	3.7	3.3	2.8	4.3	2.8
7. Professional & Related Services	8.5	14.9	13.3	15.7	10.8	7.5	13.2
8. Public Administration	2.2	4.0	3.1	2.5	2.4	6.6	1.0
9. Other Industries & Mining (Inc. Not Reported)	10.5	9.0	8.2	10.2	9.1	8.4	5.8

TABLE A-25 ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISIONS: OAKLAND COUNTY 1950

*INCOME IN 1949	FAMILY INCOME						
	Berkley	Birmingham	Clawson	Ferndale	Hazel Park	Holly	Huntington Woods
Total families and unrelated individuals	5,120	4,870	1,590	8,850	5,215	790	1,425
Less than \$500	215	245	100	410	165	115	40
\$500 to \$999	70	150	45	235	130	55	10
\$1,000 to \$1,499	115	150	10	155	140	45	55
\$1,500 to \$1,999	70	170	45	210	180	45	5
\$2,000 to \$2,499	185	145	45	355	170	75	5
\$2,500 to \$2,999	275	165	105	535	475	85	10
\$3,000 to \$3,499	460	140	200	1050	830	125	35
\$3,500 to \$3,999	575	300	185	1005	705	55	40
\$4,000 to \$4,499	560	225	190	905	525	30	55
\$4,500 to \$4,999	580	240	110	655	370	10	60
\$5,000 to \$5,999	830	510	230	1210	615	35	125
\$6,000 to \$6,999	420	380	120	770	290	20	195
\$7,000 to \$9,999	505	540	115	730	340	15	285
\$10,000 and over	185	980	40	260	85	10	395
Income not reported	165	430	50	325	195	70	110
Median Income	4,522	_____	4,092	_____	_____	2,647	7,237

TABLE ~~A-25~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISIONS: OAKLAND COUNTY 1950

FAMILY INCOME

(continued)

*INCOME IN 1949	Oak Park	Pleasant Ridge	Rochester	Royal Oak	Walled Lake
Total families and unrelated individuals	1,295	1,040	1,480	13,655	810
Less than \$500	40	65	115	620	30
\$500 to \$999	20	15	95	280	35
\$1,000 to \$1,499	25	10	75	320	50
\$1,500 to \$1,999	10	20	70	340	50
\$2,000 to \$2,499	25	20	90	565	70
\$2,500 to \$2,999	60	35	115	640	80
\$3,000 to \$3,499	185	50	150	1350	95
\$3,500 to \$3,999	125	25	170	1365	80
\$4,999 to \$4,499	130	25	145	1320	55
\$4,500 to \$4,999	125	40	110	1150	50
\$5,000 to \$5,999	200	115	130	1925	70
\$6,000 to \$6,999	140	110	70	1210	50
\$7,000 to \$9,999	90	175	75	1275	25
\$10,000 and over	50	260	25	750	45
Income not reported	70	95	45	545	25
Median Income	4,471	6,659	3,522	_____	3,408

TABLE ~~A-26~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

FAMILY INCOME

*FAMILY INCOME IN 1959	Addison	Avon	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Township	Brandon	Clawson
ALL FAMILIES	449	3,844	5,803	2,304	6,674	621	5,749	728	
Under \$1,000	12	67	82	25	102	---	108	17	
\$1,000 to \$1,999	19	101	123	16	139	15	119	40	
\$2,000 to \$2,999	31	113	173	12	99	---	127	56	
\$3,000 to \$3,999	31	174	250	16	173	3	96	66	
\$4,000 to \$4,999	48	319	385	31	257	47	116	60	
\$5,000 to \$5,999	37	482	663	69	355	4	118	122	
\$6,000 to \$6,999	51	507	760	76	469	12	195	134	
\$7,000 to \$7,999	60	357	790	150	536	19	221	78	
\$8,000 to \$8,999	46	360	625	141	492	23	201	49	
\$9,000 to \$9,999	17	308	516	171	472	20	229	40	
\$10,000 to \$14,999	70	797	1,121	792	1,681	60	1,474	57	
\$15,000 to \$24,999	27	213	283	564	1,247	60	1,582	4	
\$25,000 and over	-----	46	32	241	652	358	1,163	5	
MEDIAN INCOME FAMILIES	6,912	-----	7,589	-----	10,723	10,000+	-----	6,022	
FAM. & UNREL. INDIV.	6,473	-----	7,333	-----	9,370	13,559	-----	5,641	

TABLE ~~A-26~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

FAMILY INCOME

	Holly Township	Holly Village	Huntington Woods	Independence	Keego Harbor	Lake Angelus	Lake Orion	Lathrup Village
*FAMILY INCOME IN 1959								
ALL FAMILIES	528	823	2,270	2,593	697	59	681	982
Under \$1,000	8	27	72	53	15	---	36	17
\$1,000 to \$1,999	32	53	56	51	30	---	46	12
\$2,000 to \$2,999	31	49	48	74	32	---	54	16
\$3,000 to \$3,999	53	50	49	140	54	5	34	15
\$4,000 to \$4,999	71	112	36	215	56	---	67	24
\$5,000 to \$5,999	59	112	57	435	142	---	126	23
\$6,000 to \$6,999	69	117	125	464	103	---	54	24
\$7,000 to \$7,999	35	79	80	305	65	---	45	11
\$8,000 to \$8,999	59	100	135	215	42	16	51	39
\$9,000 to \$9,999	37	41	120	195	34	8	29	67
\$10,000 to \$14,999	51	60	650	327	104	15	114	288
\$15,000 to \$24,999	23	14	487	95	16	6	21	255
\$25,000 and over	---	9	355	24	4	9	4	191
MEDIAN INCOME FAMILIES	6,145	6,073	12,746	6,708	6,189	---	5,821	14,219
FAM. & UNREL. INDIV.	5,593	5,535	11,988	6,553	5,770	---	5,418	13,878

TABLE ~~A-25~~ ^{A-26} ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

FAMILY INCOME

	Lyon Township	Madison Heights	Milford Township	Milford	Northville	Novi	Oak Park	Oakland
*FAMILY INCOME IN 1959								
ALL FAMILIES	697	8,250	362	1,051	223	1,587	9,325	617
Under \$1,000	30	141	4	36	---	65	195	9
\$1,000 to \$1,999	17	198	5	14	13	49	152	10
\$2,000 to \$2,999	59	230	16	30	---	58	190	30
\$3,000 to \$3,999	41	311	22	46	3	72	266	33
\$4,000 to \$4,999	67	591	22	67	11	141	520	43
\$5,000 to \$5,999	100	1,195	70	118	3	221	733	55
\$6,000 to \$6,999	102	1,270	51	202	40	174	932	41
\$7,000 to \$7,999	74	1,203	62	138	34	175	1,050	63
\$8,000 to \$8,999	58	875	44	112	23	127	918	66
\$9,000 to \$9,999	39	745	12	80	25	102	796	66
\$10,999 to \$14,999	71	1,337	37	141	54	300	2,289	149
\$15,000 to \$24,999	32	142	9	48	17	84	950	43
\$25,000 and over	7	12	8	19	--	19	334	9
MEDIAN INCOME FAMILIES	6,358	7,157	6,824	7,091	8,326	7,077	8,680	8,371
FAM. & UNREL. INDIV.	5,951	6,985	6,333	6,770	8,196	6,576	8,417	7,849

TABLE -A-26 ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

FAMILY INCOME

*FAMILY INCOME IN 1959	Commerce	Farmington Township	Farmington City	Ferndale	Franklin	Groveland	Hazel Park	Highland
ALL FAMILIES	2,285	1,450	1,631	8,390	730	316	6,612	1,225
Under \$1,000	53	4	28	137	16	10	130	50
\$1,000 to \$1,999	90	39	19	246	8	17	288	56
\$2,000 to \$2,999	95	33	43	378	---	20	351	94
\$3,000 to \$3,999	86	56	47	415	16	20	385	67
\$4,000 to \$4,999	166	57	66	710	4	39	676	126
\$5,000 to \$5,999	286	63	88	1,130	8	45	1,079	161
\$6,000 to \$6,999	324	148	182	1,112	39	45	1,016	187
\$7,000 to \$7,999	245	118	235	1,049	23	53	824	167
\$8,000 to \$8,999	227	128	166	763	19	9	580	94
\$9,000 to \$9,999	140	100	162	660	34	19	444	62
\$10,000 to \$14,999	427	440	420	1,442	162	29	750	140
\$15,000 to \$24,999	117	141	146	290	219	10	85	21
\$25,000 and over	29	123	29	58	182	--	4	--
MEDIAN INCOME FAMILIES	-----	9,790	8,648	7,064	16,644	6,156	6,391	6,313
FAM. & UNREL. INDIV.	-----	9,250	7,992	6,523	14,938	5,733	6,109	6,078

TABLE ^{A-26} ----- ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

FAMILY INCOME

	Orion Township	Oxford Village	Oxford Township	Pleasant Ridge	Pontiac	Pontiac Township	Quakertown	Rochester
*FAMILY INCOME IN 1959								
ALL FAMILIES	2,268	597	783	1,054	19,734	2,219	5,017	1,443
Under \$1,000	44	28	28	16	708	76	114	40
\$1,000 to \$1,999	76	46	24	28	1,232	71	139	63
\$2,000 to \$2,999	89	42	29	17	1,182	149	160	48
\$3,000 to \$3,999	93	77	75	35	1,388	131	194	77
\$4,000 to \$4,999	193	64	54	34	2,120	185	417	111
\$5,000 to \$5,999	473	119	145	65	3,211	364	446	153
\$6,000 to \$6,999	362	67	109	70	2,407	395	561	174
\$7,000 to \$7,999	275	42	59	67	1,925	203	472	163
\$8,000 to \$8,999	164	28	82	71	1,552	147	461	192
\$9,000 to \$9,999	135	35	49	82	1,227	128	386	105
\$10,000 to \$14,999	305	38	100	270	2,259	330	1,138	262
\$15,000 to \$24,999	55	11	25	182	431	40	427	47
\$25,000 and over	4	---	4	117	92	---	102	8
MEDIAN INCOME FAMILIES	6,459	5,349	6,335	10,778	6,011	-----	-----	7,340
FAM. & UNREL. INDIV.	6,271	4,299	5,920	9,854	5,461	-----	-----	6,449

TABLE ~~A-26~~ ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

	FAMILY INCOME							
	Rose	Royal Oak	Royal Oak Township	South Lyon	Southfield	Springfield	Sylvan Lake	Troy
*FAMILY INCOME IN 1959								
ALL FAMILIES	375	20,446	1,683	460	8,196	613	577	4,870
Under \$1,000	21	547	204	12	118	30	11	84
\$1,000 to \$1,999	54	405	279	7	169	35	7	140
\$2,000 to \$2,999	28	525	236	37	240	45	18	225
\$3,000 to \$3,999	28	607	223	40	307	52	11	218
\$4,000 to \$4,999	57	1,109	257	35	493	62	10	388
\$5,000 to \$5,999	29	1,994	168	53	800	113	44	464
\$6,000 to \$6,999	37	2,399	109	55	759	89	45	543
\$7,000 to \$7,999	38	2,403	64	49	886	42	67	634
\$8,000 to \$8,999	23	2,358	70	49	843	48	71	523
\$9,000 to \$9,999	16	2,019	29	17	631	38	78	314
\$10,000 to \$14,999	36	4,673	45	85	1,841	45	163	899
\$15,000 to \$24,999	---	1,308	11	21	734	9	40	332
\$25,000 and over	8	299	8	---	375	5	12	106
MEDIAN INCOME FAMILIES	4,991	8,184	3,549	6,836	8,387	5,730	9,058	7,588
FAM. & UNREL. INDIV.	4,746	7,629	3,094	6,356	7,934	4,940	8,803	7,340

TABLE -A-26 ECONOMIC CHARACTERISTICS BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

FAMILY INCOME

	Walled Lake	Waterford	W. Bloomfield Township	White Lake	Wixom	Wolverine Lake
*FAMILY INCOME IN 1959						
ALL FAMILIES	853	11,908	3,753	2,038	406	596
Under \$1,000	52	241	56	103	39	12
\$1,000 to \$1,999	36	295	135	95	15	23
\$2,000 to \$2,999	39	415	146	76	19	16
\$3,000 to \$3,999	36	254	106	139	44	32
\$4,000 to \$4,999	81	771	167	181	28	65
\$5,000 to \$5,999	174	1,709	311	319	50	76
\$6,000 to \$6,999	106	1,681	333	223	27	61
\$7,000 to \$7,999	95	1,494	346	249	44	92
\$8,000 to \$8,999	60	1,133	271	174	52	56
\$9,000 to \$9,999	52	1,057	345	162	37	20
\$10,000 to \$14,999	110	2,137	928	249	47	135
\$15,000 to \$24,999	12	378	401	59	---	8
\$25,000 and over	---	70	208	9	4	---
MEDIAN INCOME FAMILIES	6,080	-----	-----	6,475	6,296	7,141
FAM. & UNREL. INDIV.	5,911	-----	-----	6,013	5,731	6,962

TABLE A-27 INCOME: MINOR CIVIL DIVISION: OAKLAND COUNTY; 1960

	<u>Addison</u>	<u>Avon</u>	<u>Berkley</u>	<u>Beverly Hills</u>	<u>Brimingham</u>	<u>Bloomfield Hills</u>	<u>Bloomfield Township</u>	<u>Brandon Township</u>	<u>Clawson City</u>	<u>Commerce Township</u>
FAMILY INCOME 1959										
Total Families	449	3,844	5,803	2,304	6,674	621	5,749	728	3,618	2,285
Under \$3,000	62	281	378	53	340	15	354	113	187	238
\$10,000 and over	97	1,056	1,436	1,597	3,580	478	4,219	66	822	573
	<u>Farmington City</u>	<u>Farmington Township</u>	<u>Ferndale</u>	<u>Franklin</u>	<u>Groveland</u>	<u>Hazel Park</u>	<u>Highland Township</u>	<u>Holly Township</u>	<u>Holly Village</u>	<u>Huntington Woods</u>
Total Families	1,631	1,450	8,390	730	316	6,612	1,225	528	823	2,270
Under \$3,000	90	76	761	24	47	769	200	71	129	176
\$10,000 and over	595	704	1,790	563	39	839	161	74	83	1,492
	<u>Indep. Township</u>	<u>Keego Harbor City</u>	<u>Lake Angelus V.</u>	<u>Lake Orion Vill.</u>	<u>Lathrup Village</u>	<u>Lyon Township</u>	<u>Madison Heights</u>	<u>Milford Township</u>	<u>Milford Village</u>	<u>Northville City</u>
Total Families	2,593	697	59	681	982	697	8,250	362	1,051	223
Under \$3,000	178	77	--	136	45	106	569	25	80	13
\$10,000 and over	446	124	30	139	734	110	1,491	54	208	71
	<u>Novi Village</u>	<u>Oak Park</u>	<u>Oakland Township</u>	<u>Orion Township</u>	<u>Oxford Village</u>	<u>Oxford Township</u>	<u>Pleasant Ridge</u>	<u>Pontiac City</u>	<u>Pontiac Township</u>	<u>Quakertown</u>
Total Families	1,587	9,325	617	2,268	597	783	1,054	19,734	2,219	5,017
Under \$3,000	172	537	49	209	116	81	61	3,122	296	413
\$10,000 and over	133	3,573	201	364	49	129	569	2,782	370	1,667

TABLE A-27 INCOME: MINOR CIVIL DIVISION: OAKLAND COUNTY; 1960.

	<u>Rochester Village</u>	<u>Rose Township</u>	<u>Royal Oak City</u>	<u>Royal Oak Township</u>	<u>South Lyon Township</u>	<u>Southfield</u>	<u>Springfield Township</u>	<u>Sylvan Lake</u>	<u>Troy</u>	<u>Walled Lake °</u>
Total Families	1,443	375	20,446	1,683	460	8,196	613	577	4,870	853
Under \$3,000	151	103	1,277	719	56	527	110	36	449	127
\$10,000 and over	317	44	6,280	64	106	2,950	59	215	1,337	122

	<u>West Bloomfield Township</u>	<u>White Lake Township</u>	<u>Wixom City</u>	<u>Wolverine Lake Village</u>	<u>Waterford Township</u>
Total Families	3,753	2,038	406	596	11,908
Under \$3,000	337	274	73	51	951
\$10,000 and over	1,537	317	51	143	2,585

% TABLE -A-28 INCOME: MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	<u>Addison</u>	<u>Avon</u>	<u>Berkley</u>	<u>Beverly Hills</u>	<u>Birmingham</u>	<u>Bloomfield Hills</u>	<u>Bloomfield Township</u>	<u>Brandon Township</u>	<u>Clawson</u>	<u>Commerce Township</u>
FAMILY INCOME 1959										
Total Families										
Under \$3,000	13.8	7.3	6.5	2.3	5.1	2.4	6.2	15.5	5.2	10.4
\$10,000 and over	21.6	27.5	24.7	69.3	53.6	77.0	73.4	9.1	22.7	25.1
	<u>Farmington City</u>	<u>Farmington Township</u>	<u>Ferndale</u>	<u>Franklin</u>	<u>Groveland Township</u>	<u>Hazel Park</u>	<u>Highland Township</u>	<u>Holly Township</u>	<u>Holly Village</u>	<u>Huntington Woods</u>
Total Families										
Under \$3,000	5.5	5.2	9.1	3.3	14.9	11.6	16.3	13.4	15.7	7.8
\$10,000 and over	36.5	48.6	21.3	77.1	12.3	12.7	13.1	14.0	10.1	65.7
	<u>Indep. Township</u>	<u>Keego Harbor City</u>	<u>Lake Angelus V.</u>	<u>Lake Orion</u>	<u>Lathrup Village</u>	<u>Lyon Township</u>	<u>Madison Heights</u>	<u>Milford Township</u>	<u>Milford Village</u>	<u>Northville City</u>
Total Families										
Under \$3,000	6.9	11.0	---	20.0	4.6	15.2	6.9	6.9	7.6	5.8
\$10,000 and over	17.2	17.8	50.8	20.4	74.7	15.8	18.1	14.9	19.8	31.8
	<u>Novi Village</u>	<u>Oak Park</u>	<u>Oakland Township</u>	<u>Orion Township</u>	<u>Oxford Village</u>	<u>Oxford Township</u>	<u>Pleasant Ridge</u>	<u>Pontiac City</u>	<u>Pontiac Township</u>	<u>Quakertown</u>
Total Families										
Under \$3,000	10.8	5.8	7.9	9.2	19.4	10.3	5.8	15.8	13.3	8.2
\$10,000 and over	8.4	38.3	32.6	16.0	8.2	16.5	54.0	14.1	16.7	33.2

% TABLE -A-28 INCOME: MINOR CIVIL DIVISION: OAKLAND COUNTY, 1960

	<u>Rochester Village</u>	<u>Rose Township</u>	<u>Royal Oak City</u>	<u>Royal Oak Township</u>	<u>South Lyon Township</u>	<u>Southfield</u>	<u>Springfield Township</u>	<u>Sylvan Lake</u>	<u>Troy</u>	<u>Walled Lake</u>
Total Families										
Under \$3,000	10.5	27.5	6.2	42.7	12.2	6.4	17.9	6.2	9.2	14.9
\$10,000 and over	22.0	11.7	30.7	3.8	23.0	36.0	9.6	37.3	27.5	14.3
	<u>West Bloomfield Township</u>	<u>White Lake Township</u>	<u>Waterford Township</u>	<u>Wixom City</u>	<u>Wolverine Lake Village</u>					
Total Families										
Under \$5,000	9.0	13.4	8.0	18.0	8.5					
\$10,000 and over	41.0	15.6	21.7	12.6	24.0					

TABLE A-29

Relative Income By Minor Civil Divisions, 1950-1960

	Addison Twp. & Leonard Village	Avon Twp.	Berkley City	Beverly Hills Village	Birmingham City	Bloomfield Hills City	Bloomfield Township
1950 Median Family Income			4,522		5,898		
1950 Median Family Income as % of County Total			112.17		146.31		
1960 Median Family Income	6,912	7,896	7,589	10,561	10,723	25,000	14,912
1960 Median Family Income as % of County Total	91.23	104.21	100.16	139.40	141.43	329.98	196.82
	Brandon Twp. & Ortonville Village	Clawson City	Commerce Township	Farmington City	Farmington Township	Quakertown & Woodcreek Farms V.	Ferndale City
1950 Median Family Income		4,092					4,337
1950 Median Family Income as % of County Total		101.51					107.88
1960 Median Family Income	6,022	7,586	7,175	8,648	9,790	8,013	7,064
1960 Median Family Income as % of County Total	79.84	100.12	94.70	114.14	129.21	105.76	93.23

TABLE A-29

Relative Income By Minor Civil Divisions, 1950-1960

	Franklin & Bingham Farms Village	Groveland Twp.	Hazel Park City	Highland Township	Holly Village	Holly Township	Huntington Woods City
1950 Median Family Income			3,911		2,647		7,237
1950 Median Family Income as % of County Total			97.02		65.66		179.52
1960 Median Family Income	16,644	6,156	6,391	6,313	6,073	6,145	12,746
1960 Median Family Income as % of County Total	219.68	81.25	84.35	83.23	80.15	81.10	168.23
	Independence Twp. & Clarkston Village	Keego Harbor City	Lake Angelus Village	Lake Orion Village	Lathrup Village	Lyon Twp.	Madison Heights City
1950 Median Family							
1950 Median Family Income as % of County Total							
1960 Median Family Income	6,708	6,189	10,000	5,821	14,219	6,338	7,157
1960 Median Family Income as % of County Total	88.53	81.68	131.99	76.83	187.67	83.65	94.46

TABLE A-29

Relative Income By Minor Civil Divisions, 1950-1960

	Milford Village	Milford Twp.	Northville City	Novi Village & Township	Oak Park City	Oakland Township	Orion Township
1950 Median Family Income					4,471		
1950 Median Family Income as % of County Total					110.91		
1960 Median Family Income	7,091	6,824	8,326	7,077	8,680	8,371	6,459
1960 Median Family Income as % of County Total	93.59	90.06	109.89	93.40	114.56	110.48	85.25
	Oxford Village	Oxford Twp.	Pleasant Ridge City	Pontiac City	Pontiac Twp.	Rochester Village	Rose Twp.
1950 Median Family Income			6,659	3,691		3,522	
1950 Median Family Income as % of County Total			165.18	91.56		87.37	
1960 Median Family Income	5,349	6,335	10,778	6,011	6,339	7,340	4,991
1960 Median Family Income as % of County Total	70.60	83.61	142.25	79.33	83.66	96.88	65.87

TABLE A-29

Relative Income By Minor Civil Divisions, 1950-1960

	Royal Oak City	Royal Oak Township	South Lyon City	Southfield	Springfield Township	Sylvan Lake City	Troy City
1950 Median Family Income	4,633						
1950 Median Family Income as % of County Total	114.93						
1960 Median Family Income	8,184	3,549	6,836	8,373	5,730	9,058	7,588
1960 Median Family Income as % of County Total	108.02	46.84	90.22	110.51	75.63	119.55	100.15
	Walled Lake City	Waterford Township	W. Bloomfield Twp. & Orchard Lake Village	White Lake Township	Wixom City	Wolverine Lake Village	
1950 Median Family Income	3,408						
1950 Median Family Income as % of County Total	84.54						
1960 Median Family Income	6,080	7,210	9,017	6,475	6,296	7,141	
1960 Median Family Income as % of County Total	80.24	95.16	119.01	85.46	83.10	94.25	

TABLE A-30

Selected Social Characteristics for Minor Civil Divisions, Oakland County: 1950

	30. <u>Fleasant Ridge</u>	52. <u>Rochester</u>	35. <u>Royal Oak</u>	42. <u>Walled Lake</u>	
Race and Country of Origin					No data available for the following:
White	3,587	4,276	46,829	2,782	1. Addison Township
Negro	7	2	37	1	2. Avon Township
Other Races	0	1	32	5	5. Bloomfield Township
Foreign Born	388	256		215	6. Bloomfield Hills City
					7. Brandon Township
					9. Commerce Township
					10. Farmington City
					11. Farmington Township
					13. Groveland Township
					15. Highland Township
					18. Independence Township
					19. Keego Harbor City
					20. Lathrup Village
					21. Lyon Township
					22. Madison Heights City
					23. Milford Township
					24. Northville City
					25. Novi Village & Twp.
					26. Oakland Township
					28. Orion Township
					29. Oxford Township
					32. Pontiac Township
					33. Rose Township
					34. Royal Oak City
					36. Southfield City
					37. Southfield Township
					38. South Lyon City
					39. Springfield Township
					40. Sylvan Lake City
					41. Troy City
					43. Waterford Township
					44. W. Bloomfield Twp.
					45. White Lake Twp.
					46. Wixom City
					47. Beverly Hills
					48. Franklin & Bingham Farms Village
					49. Quakertown & Wood Creek
					50. Milford Village
					51. Wolverine Lake Village
					53. Lake Angelus Village
					54. Lake Orion Village
					55. Oxford Village
Household Relationship					
Total Population in Household	3,592		46,502		
Population per Household	3.40		2.52		
Institutional Population	0		64		
Married Couples	885		11,905		
With Own Household	850		11,255		
Unrelated Individuals					
School Years Completed					
Persons 25 & Over	2,320	2,320	26,010	1,480	
No School Years Completed	10	10	60	10	
Elementary: 1 to 4 Years	30	30	510	60	
5 to 7 Years	130	130	1,540	145	
8 Years	155	155	3,480	295	
High School: 1 to 3 Years	250	250	5,500	415	
4 Years	600	600	8,725	340	
College: 1 to 3 Years	400	400	3,155	90	
4 Years or More	715	715	2,615	75	
Median School Years Completed	13.0	13.0	12.2	10.5	

TABLE A-30

Selected Social Characteristics by Minor Civil Divisions, Oakland County: 1960

	11. <u>Farmington</u> <u>Township</u>	12. <u>Ferndale</u>	13. <u>Groveland</u>	14. <u>Hazel</u> <u>Park</u>	15. <u>Highland</u>	16. <u>Holly</u>	17. <u>Huntington</u> <u>Woods</u>	18. <u>Independence</u>	19. <u>Keego</u> <u>Harbor</u>	20. <u>Lathrup</u> <u>Village</u>
Race and Country of Origin										
White	5,821	31,206	1,291	25,582	4,845	3,266	8,634	10,874	2,755	3,558
Negro	25	106	14	3	10	1	106	4	2	0
Other Races	13	35	1	46	0	2	6	12	4	0
Foreign Born	488	3,531	33	1,861	199	119	914	322	125	219
Household Relationship										
Total Population in Household	5,632	31,284	1,306	25,588	4,842	3,255	8,746	10,869	2,761	3,558
Population per Household	3.68	3.25	3.86	3.55	3.66	3.36	3.74	4.01	3.39	3.52
Institutional Population	202	1	0	0	12	12	0	20	0	0
Married Couples										
Married Couples	1,418	7,758	303	6,090	1,168	720	2,179	2,500	629	961
With Own Household	1,398	7,616	299	6,010	1,140	715	2,150	2,476	611	961
Unrelated Individuals	136	1,725	42	834	118	182	226	199	152	41
Years of School Completed										
Persons 25 Years & Over	3,077	18,020	644	13,263	2,462	1,680	4,869	5,083	1,486	2,117
No School Years Completed	31	103	0	131	7	5	36	26	4	17
Elementary:										
1 to 4 Years	49	427	10	519	77	51	43	74	29	8
5 to 7 Years	135	1,806	70	2,067	310	129	132	412	275	55
8 Years	314	3,290	225	3,097	450	375	328	822	340	116
High School:										
1 to 3 Years	622	4,492	136	3,773	635	377	574	1,410	412	296
4 Years	975	5,286	133	2,997	680	561	1,398	1,617	297	603
College:										
1 to 3 Years	488	1,478	51	445	196	103	1,020	407	76	451
4 Years or More	463	1,138	19	234	107	79	1,338	315	53	571
Median School Years Completed	12.4	11.3	9.4	9.7	10.8	11.2	12.9	11.6	9.7	12.9

TABLE A-30

Selected Social Characteristics by Minor Civil Divisions, Oakland County: 1960

	21. <u>Lyon</u> <u>Township</u>	22. <u>Madison</u> <u>Heights</u>	23. <u>Milford</u> <u>Township</u>	24. <u>Northville</u>	25. <u>Novi</u>	26. <u>Oakland</u>	27. <u>Oak Park</u>	28. <u>Orion</u>	29. <u>Oxford</u>	30. <u>Pleasant</u> <u>Ridge</u>
Race and Country of Origin										
White	2,871	33,257	1,526	836	6,603	2,464	36,465	9,127	3,182	3,800
Negro	1	13	19	0	9	2	98	9	0	4
Other Races	8	73	3	0	7	3	69	10	22	3
Foreign Born	114	1,959	58	44	330	105	5,085	334	64	341
Household Relationship										
Total Population in Household	2,880	33,327	1,512	836	6,475	2,455	36,620	9,126	3,119	3,807
Population per Household	3.70	3.90	3.71	3.65	3.77	3.79	3.78	3.86	3.70	3.21
Institutional Population	0	2	34	0	105	11	1	0	0	0
Married Couples										
Married Couples	679	7,885	351	204	1,540	593	8,936	2,161	751	985
With Own Household	668	7,776	347	204	1,498	584	8,852	2,129	728	965
Unrelated Individuals	116	555	77	6	222	68	619	153	133	180
Years of School Completed										
Persons 25 Years & over	1,382	15,243	819	448	3,334	1,283	19,089	4,289	1,550	2,417
No School Years Completed	15	76	0	0	12	5	410	20	12	8
Elementary: 1 to 4 Years	63	439	28	0	98	0	245	107	29	13
5 to 7 Years	150	1,356	49	10	385	54	922	488	254	91
8 Years	270	2,358	156	40	536	217	1,527	884	278	218
High School: 1 to 3 Years	273	4,113	158	51	784	274	3,525	1,140	332	360
4 Years	395	4,815	227	177	878	457	6,840	1,205	467	587
College: 1 to 3 Years	145	1,182	127	71	347	168	2,725	247	116	509
4 Years or More	71	904	74	99	294	108	2,895	198	62	631
Median School Years Completed	11.1	11.5	12.1	12.7	11.4	12.2	12.4	10.7	10.8	12.9

TABLE A-30

Selected Social Characteristics by Minor Civil Divisions, Oakland County: 1960

	31. <u>Pontiac</u> <u>City</u>	32. <u>Pontiac</u> <u>Township</u>	33. <u>Rose</u>	34. <u>Royal Oak</u> <u>City</u>	35. <u>Royal Oak</u> <u>Township</u>	36. <u>Southfield</u> <u>City</u>	37. <u>Southfield</u> <u>Township</u>	38. <u>South</u> <u>Lyon</u>	39. <u>Springfield</u>	40. <u>Sylvan</u> <u>Lake</u>
Race and Country of Origin										
White	68,256	8,954	1,433	80,470	137	31,435	No data	1,753	2,581	2,002
Negro	13,773	2	47	24	8,007	34	available	0	83	1
Other Races	203	3	2	118	3	32		0	0	1
Foreign Born	4,446	278	44	6,774	58	3,321		43	102	101
Household Relationship										
Total Population in Household	77,775	8,910	1,482	80,322	8,147	31,336		1,744	2,551	2,004
Population per Household	3.35	3.64	3.75	3.52	4.35	3.59		3.36	3.69	3.29
Institutional Population	3,982	10	0	199	0	0		5	0	0
Married Couples										
Married Couples	17,614	2,115	360	19,373	1,343	7,911		411	581	540
With Own Household	17,246	2,085	360	19,141	1,291	7,761		407	573	535
Unrelated Individuals	5,603	332	46	3,378	352	975		76	232	45
Years of School Completed										
Persons 25 Years & Over	45,138	4,416	748	42,905	3,459	16,874		918	1,303	1,182
No School Years Completed	683	19	13	137	78	145		17	0	6
Elementary:										
1 to 4 Years	2,686	149	25	608	478	343		41	48	5
5 to 7 Years	7,072	578	92	2,451	787	1,131		108	169	52
8 Years	9,086	980	125	4,944	543	2,231		181	276	97
High School:										
1 to 3 Years	11,299	1,207	183	8,975	794	3,767		169	343	246
4 Years	9,883	1,162	244	14,246	601	5,242		289	296	365
College:										
1 to 3 Years	2,509	171	46	5,770	143	2,006		86	82	206
4 Years or More	2,020	150	20	5,774	35	2,009		27	89	205
Median School Years Completed	9.8	10.2	11.0	12.3	8.7	12.2		11.0	10.4	12.5

TABLE A-30

Selected Social Characteristics by Minor Civil Divisions, Oakland County: 1960

	41. <u>Troy</u>	42. <u>Walled Lake</u>	43. <u>Waterford</u>	44. <u>West Bloomfield</u>	45. <u>White Lake</u>	46. <u>Wixom</u>	47. <u>Beverly Hills</u>	48. <u>Franklin Bingham</u>	49. <u>Quaker Wood Creek</u>	50. <u>Milford Village</u>
Race and Country of Origin										
White	19,369	3,547	46,924	14,845	8,326	1,531	8,626	2,645	20,792	4,320
Negro	4	0	22	37	63	0	7	18	18	0
Other Races	29	3	62	12	2	0	0	3	23	3
Foreign Born	1,391	174	1,988	977	510	158	641	163	1,167	130
Household Relationship										
Total Population in Household	19,384	3,537	46,728	14,724	8,235	1,524	8,633	2,657	20,720	4,308
Population per Household	3.77	3.85	3.68	3.72	3.0	3.50	3.56	3.55	3.80	3.71
Institutional Population	0	0	211	75	127	0	0	0	82	0
Married Couples										
Married Couples	4,682	777	11,415	3,581	1,928	392	2,246	715	4,830	963
With Own Household	4,587	773	11,288	3,535	1,905	385	2,242	711	4,796	956
Unrelated Individuals	380	94	1,114	496	258	45	161	76	590	145
Years of School Completed										
Persons 25 Years & Over	9,729	1,648	23,820	7,917	4,266	815	4,926	1,578	10,177	2,035
No School Years Completed	69	9	67	29	26	13	12	0	32	4
Elementary:										
1 to 4 Years	230	44	406	145	92	36	12	20	234	30
5 to 7 Years	870	172	2,024	316	435	96	85	12	774	150
8 Years	1,607	202	3,739	801	852	164	350	136	1,480	267
High School:										
1 to 3 Years	2,382	427	6,415	1,425	1,322	165	575	193	2,136	450
4 Years	2,780	489	7,616	2,704	1,072	244	1,563	427	3,151	721
College:										
1 to 3 Years	908	121	2,085	1,142	288	72	961	372	1,165	214
4 Years or More	883	184	1,468	1,355	179	25	1,377	418	1,205	199
Median School Years Completed	11.9	11.8	10.5	12.4	10.7	10.8	12.5	13.0	11.7	12.2

TABLE A-30

Selected Social Characteristics by Minor Civil Divisions, Oakland County: 1960

	51. <u>Wolverine</u>	52. <u>Rochester</u>	53. <u>Lake Angelus</u>	54. <u>Lake Orion</u>	55. <u>Oxford Village</u>	56. <u>Holly Township</u>
Race and Country of Origin						
White	2,402	5,431	228	2,698	2,355	2,163
Negro	0	0	2	0	0	115
Other Races	2	0	1	0	2	4
Foreign Born	98	284	6	161	138	80
Household Relationship						
Total Population in Household	2,404	5,413	231	2,683	2,319	2,022
Population per Household	3.93	3.17	3.16	3.32	3.13	3.53
Institutional Population	0	17	0	0	0	0
Married Couples						
Married Couples	565	1,316	44	630	566	503
With Own Household	561	1,296	44	622	537	503
Unrelated Individuals	31	409	14	163	217	68
Years of School Completed						
Persons 25 Years & Over	1,138	3,084	123	1,434	1,339	1,088
No School Years Completed	0	9	0	12	12	0
Elementary: 1 to 4 Years	32	54	0	28	55	25
5 to 7 Years	134	361	0	168	156	75
8 Years	226	470	0	282	304	175
High School: 1 to 3 Years	276	546	19	351	278	266
4 Years	354	1,012	47	439	348	376
College: 1 to 3 Years	72	305	12	59	95	88
4 Years or More	44	327	45	95	91	83
Median School Years Completed	10.9	12.1	...	10.9	10.5	12.0

TABLE A-30

Selected Social Characteristics for Minor Civil Divisions, Oakland County: 1950

	3. <u>Berkley</u>	4. <u>Birmingham</u>	8. <u>Clawson</u>	12. <u>Ferndale</u>	14. <u>Hazel Park</u>	16. <u>Holly</u>	17. <u>Huntington Woods</u>	27. <u>Oak Park</u>	31. <u>Pontiac</u>
Race and Country of Origin:									
White	16,294	14,238	5,190	29,500	17,757	2,660	4,921	36,465	66,704
Negro	5	58	1	165	5	2	27	98	6,867
Other Races	2	3	5	10	5	1	1	69	110
Foreign Born			573			111	443	5,085	
Household Relationship									
Total Population in Household	17,912	15,431	5,182	29,631	17,726		4,949	45,502	68,121
Population per Household	3.71	3.32	3.55	3.51	3.70		3.53	3.52	3.39
Institutional Population	0	1	0	5	0		0	64	3,307
Married Couples									
	4,775	4,040	1,385	7,640	4,665		1,310	11,905	17,565
With Own Household									
Unrelated Individuals	4,590	3,875	1,330	7,215	4,340		1,265	11,255	16,230
	250	720	100	865	435		110	1,410	5,585
School Years Completed									
Persons 25 & Over	9,620	9,535	2,895	16,350	9,545	1,425	2,830	26,010	43,080
No School Years Completed	10	20	10	100	35	0	5	60	535
Elementary:									
1 to 4 Years	155	115	120	460	390	10	45	510	2,370
5 to 7 Years	565	305	215	1,445	1,495	105	65	1,540	5,885
8 Years	1,135	790	580	2,990	2,395	355	185	3,480	9,385
High School:									
1 to 3 Years	2,275	1,200	660	4,065	2,610	365	275	5,500	10,320
4 Years	3,625	2,700	950	4,910	1,945	435	965	8,725	9,125
College:									
1 to 3 Years	1,065	1,730	180	1,510	395	65	610	3,155	2,220
4 Years or More	695	2,460	120	1,065	180	45	615	2,615	1,730
Median School Years Completed	12.2	13.0	11.2	11.4	9.6	10.8	12.8	12.2	9.8

Table A-30 Selected Social Characteristics by Minor Civil Divisions, Oakland County: 1960

	<u>Addison</u>	<u>Avon</u>	<u>Berkley</u>	<u>Birmingham</u>	<u>Bloomfield Township</u>	<u>Bloomfield Hills City</u>	<u>Brandon</u>	<u>Clawson</u>	<u>Commerce</u>	<u>Farmington City</u>
Race and Nativity										
White	1,684	15,809	23,273	25,415	22,349	2,294	3,179	14,744	9,579	6,877
Negro	0	33	4	59	146	79	3	4	11	3
Other Races	7	24	34	51	35	5	5	47	18	1
Foreign Born	94	816	1,841	1,627	1,358	154	87	927	486	370
Households										
Total Population in Household	1,683	15,782	23,361	25,502	22,306	2,196	3,187	14,781	9,541	6,835
Population Per Household	3.49	3.89	3.78	3.34	3.73	3.26	3.88	3.88	3.87	3.84
Institutional Population	0	83	0	3	157	28	0	0	0	8
Married Couples										
Married Couples	425	3,716	5,460	6,213	4,575	602	705	3,438	2,174	1,558
With Own Household	421	3,659	5,393	6,147	4,530	578	685	3,399	2,143	1,537
Unrelated Individuals	55	410	500	1,391	643	286	163	315	278	280
Years of School Completed										
Persons 25 Years & Over	914	7,861	11,791	14,548	12,493	1,571	1,575	7,154	4,603	3,523
No School Years Completed	3	34	40	27	59	0	11	34	26	8
Elementary: 1 to 4 Years	23	201	177	107	85	18	61	114	79	54
5 to 7 Years	111	872	755	352	319	52	169	421	248	160
8 Years	181	1,448	1,516	851	657	87	338	876	691	312
High School: 1 to 3 Years	249	1,769	2,861	1,694	1,247	163	379	1,636	1,114	608
4 Years	239	2,327	4,153	3,925	3,580	328	464	2,737	1,518	1,239
College: 1 to 3 Years	64	587	1,290	2,908	2,635	408	72	705	505	603
4 Years or More	44	623	99	4,684	3,911	515	81	631	322	539
Median School Years Completed	10.7	11.2	12.1	13.3	13.6	14.0	10.7	12.2	11.8	12.5

Table A-31
 Selected Social Characteristics by Minor Civil Division:
 Oakland County; 1960
 Means of Transportation and Place of Work

	Addison Twp.	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.
All Workers	607	5,379	7,961	2,842	9,036	956	7,085
Private car	494	4,696	6,598	2,557	7,316	594	5,979
Railroad	0	4	69	16	298	45	227
Subway or Elevated	0	0	0	0	0	0	0
Bus or Streetcar	0	37	372	43	262	4	77
Walk to Work	16	207	448	72	430	145	126
Other Means	7	116	160	60	271	0	125
Worked at Home	54	145	111	46	249	154	209
Not Reported	36	174	203	48	210	14	342
Inside SMSA	562	5,117	7,417	2,707	8,631	921	6,496
Detroit	48	576	2,328	1,268	3,152	277	2,769
Rest of Wayne	4	188	660	207	628	44	635
Macomb	60	669	461	251	395	12	340
Oakland	450	3,684	3,968	981	4,456	588	2,752
Outside SMSA	8	104	153	79	202	16	179
Place of Work Not Reported	37	158	391	56	203	19	410
	Brandon Twp.	Clawson	Commerce	Farmington	Farmington City	Ferndale	Franklin
All Workers	976	4,831	2,977	1,921	2,232	12,009	929
Private car	798	4,164	2,569	1,681	1,878	9,739	832
Railroad	0	24	0	4	4	95	0
Subway or Elevated	0	0	0	0	0	0	0
Bus or Streetcar	0	155	8	20	54	868	4
Walk to Work	60	235	46	73	189	667	12
Other Means	12	117	76	51	34	239	12
Worked at Home	60	81	118	60	43	67	20
Not Reported	46	55	160	32	30	334	49
Inside SMSA	853	4,692	2,750	1,873	2,115	11,363	858
Detroit	5	1,116	555	793	808	4,225	468
Rest of Wayne	13	383	287	265	355	1,139	46
Macomb	4	600	58	35	37	919	46
Oakland	831	2,593	1,850	780	915	5,080	298
Outside SMSA	83	71	100	24	66	94	25
Place of Work Not Reported	40	68	127	24	51	552	46

Table A-31

	Groveland	Hazel Park	Highland	Holly Twp.	Holly Vill.	Huntington Woods	Independence
All Workers	369	8,918	1,480	778	1,164	2,962	3,353
Private car	302	7,514	1,341	644	917	2,503	3,007
Railroad	0	4	4	0	4	41	12
Subway or Elevated	0	0	0	0	0	0	0
Bus or Streetcar	0	514	0	0	4	116	21
Walk to Work	4	441	44	58	129	60	99
Other Means	7	126	25	16	4	48	67
Worked at Home	56	84	44	47	50	77	65
Not Reported	0	235	22	13	56	117	82
Inside SMSA	276	8,644	1,316	483	814	2,670	3,132
Detroit	4	3,086	100	8	0	1,329	105
Rest of Wayne	3	829	79	0	4	225	73
Macomb	0	1,334	8	0	0	137	64
Oakland	269	3,395	1,129	475	810	979	2,890
Outside SMSA	54	60	138	258	285	17	136
Place of Work Not Reported	39	214	26	37	65	275	85
	Keego Harbor	Lake Angelus	Lake Orion	Lathrup Village	Lyon Twp.	Madison Heights	Milford Twp.
All Workers	1,014	82	978	1,192	953	10,666	504
Private car	859	77	765	1,107	759	9,582	402
Railroad	0	0	0	8	0	35	0
Subway or Elevated	0	0	0	0	0	0	0
Bus or Streetcar	26	0	0	14	11	313	0
Walk to Work	69	5	134	8	33	287	4
Other Means	32	0	12	11	15	201	16
Worked at Home	0	0	33	12	124	59	53
Not Reported	28	0	34	32	11	189	29
Inside SMSA	964	82	927	1,110	826	10,363	455
Detroit	35	9	44	715	55	3,748	81
Rest of Wayne	16	0	22	103	104	904	28
Macomb	0	9	53	68	0	1,793	4
Oakland	913	64	808	224	667	3,918	342
Outside SMSA	17	0	13	42	94	114	33
Place of Work Not Reported	33	0	38	40	33	189	16

Table A-31

	Milford	Northville	Novi	Oak Park	Oakland	Orion Twp.	Oxford Vill.
All Workers	1,388	327	2,008	12,424	858	2,958	837
Private car	1,168	280	1,717	10,965	695	2,585	623
Railroad	0	0	0	36	3	7	0
Subway or Elevated	0	0	0	0	0	0	0
Bus or Streetcar	0	0	20	540	4	8	0
Walk to Work	133	24	71	310	46	85	151
Other Means	45	11	64	227	3	39	5
Worked at Home	32	8	90	150	93	89	37
Not Reported	10	4	46	196	14	145	21
Inside SMSA	1,270	304	1,905	11,961	830	2,767	808
Detroit	94	70	491	7,014	59	138	15
Rest of Wayne	127	179	466	1,270	23	73	7
Macomb	15	0	39	556	121	84	28
Oakland	1,034	55	909	3,121	627	2,472	758
Outside SMSA	103	23	49	216	15	61	8
Place of Work Not Reported	15	0	54	247	13	130	21
	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quakertown	Rochester	Rose Twp.
All Workers	1,017	1,372	28,972	2,952	6,609	2,048	441
Private	861	1,128	23,225	2,636	5,743	1,603	324
Railroad	0	33	73	11	0	0	0
Subway or Elevated	0	0	0	0	0	0	0
Bus or Streetcar	0	72	399	22	108	0	4
Walk to Work	30	51	2,636	88	189	253	9
Other Means	18	29	1,029	61	173	62	15
Worked at Home	89	36	412	48	144	87	89
Not Reported	19	23	1,198	86	244	43	0
Inside SMSA	963	1,266	27,557	2,842	6,176	1,984	313
Detroit	32	645	674	93	2,441	97	8
Rest of Wayne	28	68	415	88	1,182	11	13
Macomb	43	59	227	68	182	147	0
Oakland	860	494	26,241	2,593	2,371	1,729	292
Outside SMSA	32	48	207	32	176	24	128
Place of Work Not Reported	22	58	1,208	78	257	40	0

Table A-31

	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake
All Workers	28,989	1,652	651	10,974	770	748
Private Car	24,129	1,042	483	9,791	570	673
Railroad	490	0	0	32	4	3
Subway or Elevated	0	0	0	0	0	0
Bus or Streetcar	1,328	335	0	212	8	12
Walk to Work	1,102	154	115	192	35	16
Other Means	655	4	0	269	19	4
Worked at Home	377	7	16	228	104	13
Not Reported	908	110	37	250	30	27
Inside SMSA	27,544	1,486	560	10,570	705	722
Detroit	8,988	574	25	5,179	45	61
Rest of Wayne	2,122	238	67	1,306	21	34
Macomb	2,980	41	0	433	0	9
Oakland	13,454	633	468	3,652	639	618
Outside SMSA	356	15	78	121	44	3
Place of Work Not Reported	1,089	151	13	283	21	23

	Troy	Walled Lake	Waterford	W.Bloomfield Twp.	White Lake	Wixom	Wolverine Lake
All Workers	6,285	1,080	16,590	5,043	2,593	523	758
Private Car	5,276	943	14,873	4,356	2,250	436	711
Railroad	99	0	43	24	0	0	0
Subway or Elevated	0	0	0	0	0	0	0
Bus or Streetcar	171	4	100	42	12	0	0
Walk to Wrok	116	48	548	189	79	23	15
Other Means	212	21	294	149	46	17	8
Worked at Home	206	30	204	108	103	24	8
Not Reported	205	34	528	175	103	23	16
Inside SMSA	5,990	1,032	15,747	4,643	2,431	483	730
Detroit	1,352	125	701	1,192	336	66	167
Rest of Wayne	394	184	314	407	155	91	102
Macomb	722	8	232	172	42	5	8
Oakland	3,522	715	14,500	2,872	1,898	321	453
Outside SMSA	95	23	301	144	47	17	16
Place of Work not Reported	200	25	542	256	115	23	12

Table A-32 Natural Increase by Minor Civil Division, Oakland County: 1940 - 1964

	1940	1941	1942	1943	1944	1945	1946	1947	1948
Oakland County	3,126	3,871	5,118	5,090	4,118	4,204	5,665	7,284	7,265
Balance of County	1,475	2,014	2,744	2,588	2,142	1,957	2,717	3,775	3,857
Birmingham	162	186	267	243	217	236	293	286	331
Ferndale	292	370	455	477	381	445	688	800	776
Pontiac	876	885	1,036	1,021	777	865	1,151	1,485	1,277
Royal Oak	321	416	616	761	601	701	816	938	1,024
	1950	*1951	*1952	1953	1954	1955	1956	1957	1958
Oakland County	8,717	4,295	4,428	11,186	12,508	13,401	14,586	14,792	13,940
Balance of County	3,200	- 691	- 774	4,732	5,459	6,193	7,224	7,601	7,466
Birmingham	472	- 55	- 52	722	777	869	937	821	849
Ferndale	828	239	238	776	872	707	726	830	735
Pontiac	1,560	4,423	4,641	1,648	1,861	1,893	2,084	1,972	1,828
Royal Oak	1,660	295	306	2,002	2,252	2,449	2,255	2,279	1,944
Berkley	541	- 35	- 38	543	537	493	499	458	496
Hazel Park	456	119	117	763	750	797	861	831	621
	1960	1961	1962	1963	1964				
Oakland County	13,608	13,073	11,596	11,171	10,760				
Berkley	448	349	359	313	287				
Birmingham	604	549	504	578	534				
Clawson	394	329	289	289	230				
Ferndale	612	576	480	441	387				
Hazel Park	503	568	423	427	375				
Madison Heights	1,265	1,198	975	943	826				
Oak Park	668	645	502	458	355				
Pontiac	1,825	857	1,562	1,553	1,531				
Royal Oak	1,559	1,439	1,408	1,298	1,244				
Southfield	602	590	643	569	533				
Troy	362	310	282	237	183				
Balance of County	4,766	4,663	5,167	4,065	2,963				

* By place of occurrence

Table A-32 Births by Minor Civil Division, Oakland County: 1940 - 1964

	1940	1941	1942	1943	1944	1945	1946	1947	1948
Oakland County	5,187	6,109	7,443	7,616	6,477	6,555	8,214	9,820	9,870
Balance of County	2,548	3,095	3,873	3,612	3,277	3,080	3,903	4,981	5,130
Birmingham	231	271	350	346	310	325	375	377	418
Ferndale	431	506	609	639	536	619	897	981	958
Pontiac	1,471	1,614	1,749	1,835	1,527	1,613	1,977	2,315	2,086
Royal Oak	506	623	862	984	827	918	1,062	1,166	1,278
	1950	*1951	*1952	1953	1954	1955	1956	1957	1958
Oakland County	11,490	6,846	7,126	14,518	15,838	16,934	18,328	18,636	17,980
Balance of County	4,536	308	294	6,292	7,070	7,972	9,110	9,546	9,550
Birmingham	611	-----	2	912	978	1,064	1,148	1,028	1,048
Ferndale	1,047	336	346	1,038	1,128	964	1,020	1,072	994
Pontiac	2,160	5,522	5,792	2,310	2,476	2,534	2,774	2,686	2,622
Royal Oak	1,978	500	512	2,408	2,668	2,859	2,660	2,718	2,374
Berkley	619	4	-----	648	640	609	620	596	604
Hazel Park	539	176	180	910	878	932	996	990	788
	1960	1961	1962	1963	1964				
Oakland County	17,852	17,258	16,062	15,884	15,677				
Berkley	574	478	480	464	432				
Birmingham	822	774	734	832	792				
Clawson	454	404	372	370	313				
Ferndale	882	830	746	724	696				
Hazel Park	668	714	582	588	575				
Madison Heights	1,398	1,322	1,116	1,102	973				
Oak Park	814	804	666	634	556				
Pontiac	2,548	2,536	2,276	2,330	2,269				
Royal Oak	2,026	1,892	1,878	1,796	1,773				
Southfield	754	774	828	780	760				
Troy	452	422	380	346	334				
Balance of County	6,460	6,308	6,004	5,918	4,391				

* By place of occurrence

Table A-32 Deaths by Minor Civil Division, Oakland County: 1940 - 1964

	1940	1941	1942	1943	1944	1945	1946	1947	1948
Oakland County	2,061	2,238	2,325	2,526	2,359	2,351	2,549	2,536	2,605
Balance of County	1,073	1,081	1,129	1,224	1,135	1,123	1,186	1,206	1,273
Birmingham	69	85	83	103	93	89	82	91	87
Ferndale	139	136	154	162	155	174	209	181	182
Pontiac	595	729	713	814	750	748	826	830	809
Royal Oak	185	207	246	223	226	217	246	228	254
	1950	*1951	*1952	1953	1954	1955	1956	1957	1958
Oakland County	2,773	2,551	2,698	3,332	3,330	3,533	3,742	3,844	4,041
Balance of County	1,336	999	1,068	1,560	1,611	1,779	1,886	1,945	2,084
Birmingham	139	55	64	190	201	195	211	207	199
Ferndale	219	97	108	262	256	257	294	242	259
Pontiac	600	1,099	1,151	662	615	641	690	714	794
Royal Oak	318	205	206	406	416	410	405	439	430
Berkley	78	39	38	105	103	116	121	138	108
Hazel Park	83	57	63	147	128	135	135	159	167
	1960	1961	1962	1963	1964				
Oakland County	4,244	4,185	4,466	4,713	4,917				
Berkley	126	129	121	151	145				
Birmingham	218	225	230	254	258				
Clawson	60	75	83	81	83				
Ferndale	270	254	266	283	309				
Hazel Park	165	146	159	161	200				
Madison Heights	133	124	141	159	147				
Oak Park	146	159	164	176	201				
Pontiac	723	679	712	777	738				
Royal Oak	467	453	470	498	529				
Southfield	152	184	185	211	227				
Troy	90	112	98	109	151				
Balance of County	1,694	1,645	837	1,853	1,428				

* By place of occurrence

Table A-33

Selected Social Characteristics by Minor Civil Division: Oakland County 1960

Means of Transportation and Place of Work

	Addison Twp.	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield			Brandon Twp.
						Hills	Bloomfield Twp.		
All Workers									
Private Car	81.4	87.3	82.9	90.0	81.0	62.1	84.4	81.8	81.8
Railroad	----	0.1	0.9	0.6	3.3	4.7	3.2	----	----
Subway or Elevated	----	----	----	----	----	----	----	----	----
Bus or Streetcar	----	0.7	4.7	1.5	2.9	0.4	1.1	----	----
Walk to Work	2.6	3.8	5.6	2.5	4.8	15.2	1.8	6.1	6.1
Other Means	1.2	2.2	2.0	2.1	3.0	----	1.8	1.2	1.2
Worked at Home	8.9	2.7	1.4	1.6	2.8	16.1	2.9	6.1	6.1
Not Reported	5.9	3.2	2.5	1.7	2.3	1.5	4.8	4.7	4.7
Inside S.M.S.A.	92.6	95.1	93.2	95.2	95.5	96.3	91.6	87.4	87.4
Detroit	7.9	10.7	29.2	44.6	34.9	29.0	42.6	0.5	0.5
Rest of Wayne	0.7	3.5	8.3	7.3	6.9	4.6	9.8	1.3	1.3
Macomb	9.9	12.4	5.8	8.8	4.4	1.3	5.2	0.4	0.4
Oakland	74.1	68.5	49.8	34.5	49.3	63.8	42.4	85.1	85.1
Outside S.M.S.A.	1.3	1.9	1.9	2.8	2.2	1.7	2.6	8.5	8.5
Place of Work Not Reported	6.1	2.9	4.9	2.1	2.2	2.0	5.8	4.1	4.1
	Clawson	Commerce	Farmington	Farmington City	Ferndale	Franklin	Groveland	Hazel Park	
All Workers									
Private Car	86.2	86.3	87.5	84.1	81.1	89.6	81.8	84.3	84.3
Railroad	0.5	----	0.2	0.2	0.8	----	----	----	----
Subway or Elevated	----	----	----	----	----	----	----	----	----
Bus or Street Car	3.2	0.3	1.0	2.4	7.2	0.4	----	5.8	5.8
Walk to Work	4.9	1.5	3.8	8.5	5.6	1.3	1.1	4.9	4.9
Other Means	2.4	2.6	2.7	1.5	2.0	1.3	1.9	1.4	1.4
Worked at Home	1.7	4.0	3.1	1.9	0.6	2.2	15.2	0.9	0.9
Not Reported	1.1	5.4	1.7	1.3	2.8	5.3	----	2.6	2.6
Inside S.M.S.A.	97.1	92.4	97.5	94.8	94.6	92.4	74.8	96.9	96.9
Detroit	23.1	18.6	41.3	36.2	35.2	50.4	1.1	34.6	34.6
Rest of Wayne	7.9	9.6	13.8	15.9	9.5	5.0	0.8	9.3	9.3
Macomb	12.4	2.1	1.8	1.7	7.7	5.0	----	15.0	15.0
Oakland	53.7	62.1	40.6	41.0	42.3	32.1	72.9	38.1	38.1
Outside S.M.S.A.	1.5	3.4	1.2	3.0	0.8	2.7	14.6	0.7	0.7
Place of Work Not Reported	1.4	4.3	1.2	2.3	4.6	5.0	10.6	2.4	2.4

(Means of Transportation and Place of Work - Continued)

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Table A-33

	Highland	Holly Twp.	Holly Village	Huntington Woods	Independence	Keego Harbor	Lake Angelus	Lake Orion
All Workers								
Private Car	90.6	82.8	78.8	84.5	89.7	84.7	93.9	78.2
Railroad	0.3	----	0.3	1.4	0.4	----	----	----
Subway or Elevated	----	----	----	----	----	----	----	----
Bus or Streetcar	----	----	0.3	3.9	0.6	2.6	----	----
Walk to Work	3.0	7.5	11.1	2.0	3.0	6.8	6.1	13.7
Other Means	1.7	2.1	0.3	1.6	2.0	3.2	----	1.2
Worked at Home	3.0	6.0	4.3	2.6	1.9	----	----	3.4
Not Reported	1.5	1.7	4.8	4.0	2.4	2.8	----	3.5
Inside SMSA	88.9	62.1	69.9	90.1	93.4	95.1	100.0	94.8
Detroit	6.8	1.0	----	44.9	3.1	3.5	11.0	4.5
Rest of Wayne	5.3	----	0.3	7.6	2.2	1.6	----	2.2
Macomb	0.5	----	----	4.6	1.9	----	11.0	5.4
Oakland	76.3	61.1	69.6	33.1	86.2	90.0	78.0	82.6
Outside SMSA	9.3	33.2	24.5	0.6	4.1	1.7	----	1.3
Place of Work Not Reported	1.8	4.8	5.6	9.3	2.5	3.3	----	3.9
	Lathrup Village	Lyon Twp.	Madison Heights	Milford Twp.	Milford	Northville	Novi	Oak Park
All Workers								
Private Car	92.9	79.6	89.8	79.8	84.1	85.6	85.5	88.3
Railroad	0.7	----	0.3	----	----	----	----	0.3
Subway or Elevated	----	----	----	----	----	----	----	----
Bus or Streetcar	1.2	1.2	2.9	----	----	----	1.0	4.3
Walk to Work	0.7	3.5	2.7	0.8	9.6	7.3	3.5	2.5
Other Means	0.9	1.6	1.9	3.2	3.2	3.4	3.2	1.8
Worked at Home	1.0	13.0	0.6	10.5	2.3	2.4	4.5	1.2
Not Reported	2.7	1.2	1.8	5.8	0.7	1.2	2.3	1.6
Inside E.M.S.A.	93.1	86.7	97.2	90.3	91.5	93.0	94.9	96.3
Detroit	60.0	5.8	35.1	16.1	6.8	21.4	24.5	56.5
Rest of Wayne	8.6	10.9	8.5	5.6	9.1	54.7	23.2	10.2
Macomb	5.7	----	16.8	0.8	1.1	----	1.9	4.5
Oakland	18.8	70.0	36.7	67.9	74.5	16.8	45.3	25.1
Outside S.M.S.A.	3.5	9.9	1.1	6.5	7.4	7.0	2.4	1.7
Place of Work Not Reported	3.4	3.5	1.8	3.2	1.1	----	2.7	2.0

Table A-33

	Oakland	Orion Twp.	Oxford Village	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quakertown
All Workers								
Private Car	81.0	87.4	74.4	84.7	82.2	80.2	89.3	86.9
Railroad	0.4	0.2	----	----	2.4	0.3	0.4	----
Subway or Elevated	----	----	----	----	----	----	----	----
Bus or Streetcar	0.5	0.3	----	----	5.2	1.4	0.7	1.6
Walk to Work	5.4	2.9	18.0	2.9	3.7	9.1	3.0	2.9
Other Means	0.3	1.3	0.6	1.8	2.1	3.6	2.1	2.6
Worked at Home	10.8	3.0	4.4	8.8	2.6	1.4	1.6	2.2
Not Reported	1.6	4.9	2.5	1.9	1.7	4.1	2.9	3.7
Inside S.M.S.A.	96.7	93.5	96.5	94.7	92.3	95.1	96.3	93.4
Detroit	6.9	4.7	1.8	3.1	47.0	2.3	3.2	36.9
Rest of Wayne	2.7	2.5	0.8	2.8	5.0	1.4	3.0	17.9
Macomb	14.1	2.8	3.3	4.2	4.3	0.8	2.3	2.8
Oakland	73.1	83.6	90.6	84.6	36.0	90.6	87.8	35.9
Outside S.M.S.A.	1.7	2.1	1.0	3.1	3.5	0.7	1.1	2.7
Place of Work Not Reported	1.5	4.4	2.5	2.2	4.2	4.2	2.6	3.9
	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake
All Workers								
Private Car	78.3	73.5	83.2	63.1	74.2	89.2	74.0	90.0
Railroad	----	----	1.7	----	----	0.3	0.5	0.4
Subway or Elevated	----	----	----	----	----	----	----	----
Bus or Streetcar	----	0.9	4.6	20.3	----	1.9	1.0	1.6
Walk to Work	12.4	2.0	3.8	9.3	17.7	1.7	4.5	2.1
Other Means	3.0	3.4	2.3	0.2	----	2.5	2.5	0.5
Worked at Home	4.2	20.2	1.3	0.4	2.5	2.1	13.5	1.7
Not Reported	2.1	----	3.1	6.7	5.7	2.3	3.9	3.6
Inside S.M.S.A.	96.9	71.0	95.0	90.0	86.0	96.3	91.6	96.5
Detroit	4.7	1.8	31.0	34.7	3.8	47.2	5.8	8.2
Rest of Wayne	0.5	2.9	7.3	14.4	10.3	11.9	2.7	4.5
Macomb	7.2	----	10.3	2.5	----	3.9	----	1.2
Oakland	84.4	66.2	46.4	38.3	71.9	33.3	83.0	82.6
Outside S.M.S.A.	1.2	29.0	1.2	0.9	12.0	1.1	5.7	0.4
Place of Work Not Reported	2.0	----	3.8	9.1	2.0	2.6	2.7	3.1

(Means of Transportation and Place of Work - Continued)

Table A-33

-4-

	Troy	Walled Lake	Waterford	West Bloomfield Twp.	White Lake	Wixom	Wolverine Lake
All Workers							
Private Car	83.9	87.3	89.7	86.4	86.8	83.4	93.8
Railroad	1.6	----	0.3	0.5	----	----	----
Subway or Elevated	----	----	----	----	----	----	----
Bus or Streetcar	2.7	0.4	0.6	0.8	0.5	----	----
Walk to Work	1.8	4.4	3.3	3.7	3.0	4.4	2.0
Other Means	3.4	1.9	1.8	3.0	1.8	3.3	1.1
Worked at Home	3.3	2.8	1.2	2.1	4.0	4.6	1.1
Not Reported	3.3	3.1	3.2	3.5	4.0	4.4	2.1
Inside S.M.S.A.							
Detroit	95.3	95.6	94.9	92.1	93.8	92.4	96.3
Rest of Wayne	21.5	11.6	4.2	23.6	13.0	12.6	22.0
Macomb	6.3	17.0	1.9	8.1	6.0	17.4	13.5
Oakland	11.5	0.7	1.4	3.4	1.6	1.0	1.1
Outside S.M.S.A.	56.0	66.2	87.4	57.0	73.2	61.4	59.8
Place of Work Not Reported	1.5	2.1	1.8	2.9	1.8	3.3	2.1
	3.2	2.3	3.3	5.1	4.4	4.4	1.6

TABLE A-34

School Enrollment by Minor Civil Division: Oakland County, 1960

	Addison Twp.	Aven Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.	Brandon	Clawson	Commerce Twp.
Total Enrollment	456	4839	7059	2626	7127	642	7278	955	4118	2942
Kindergarten	21	480	663	254	619	21	678	77	475	236
Public	21	458	651	250	591	12	637	77	467	236
Private	0	22	12	4	28	9	41	0	8	0
Elementary (1 to 8 years)	349	3196	4658	1700	4632	342	4475	682	2882	1964
Public	341	2749	3739	1141	3798	177	3419	678	2264	1718
Private	8	447	919	559	834	165	1056	4	618	246
High School (1 to 4 years)	83	1005	1483	590	1503	180	1929	188	614	667
Public	83	984	1271	474	1205	96	1563	188	551	647
Private	0	21	212	116	298	84	366	0	63	20
College	3	158	255	82	373	99	196	8	147	75

	Farmington City	Farmington Twp.	Ferndale	Franklin Village	Groveland Twp.	Hazel Park	Highland Twp.	Holly Twp.	Holly Village	Huntington Woods
Total Enrollment	2079	1759	7623	833	380	6660	1348	764	877	2944
Kindergarten	223	169	521	47	28	634	108	64	84	199
Public	219	137	500	40	28	626	108	60	84	187
Private	4	32	21	7	0	8	0	4	0	12
Elementary (1 to 8 years)	1344	1180	4795	536	260	4522	925	386	613	1831
Public	1046	960	4054	432	260	4015	925	334	605	1603
Private	298	220	741	104	0	597	0	52	8	228
High School (1 to 4 years)	455	345	1837	219	89	1350	291	271	163	708
Public	346	279	1525	183	89	1279	287	251	159	571
Private	109	66	312	36	0	71	4	20	4	137
College	57	65	470	31	3	154	24	43	17	206

TABLE A-34

School Enrollment by Minor Civil Division; Oakland County, 1960

	Independence Twp.	Keego Harbor	Lake Angeles	Lake Orion	Lathrup Village	Lyon Twp.	Madison Heights	Milford Twp.	Milford Village	Northville
Total Enrolled	3285	675	78	699	1103	807	7949	416	1111	234
Kindergarten	411	47	-	77	57	70	1099	29	154	31
Public	403	47	-	72	53	70	1083	29	154	31
Private	8	0	-	5	4	0	16	0	0	0
Elementary(1 to 8 Years)	2249	413	24	436	704	530	5319	292	740	133
Public	2216	393	24	364	441	526	4696	292	736	133
Private	33	20	0	72	263	4	623	0	4	0
High School(1 to 4 Years)	572	215	54	177	265	162	1198	92	189	51
Public	552	202	54	173	212	150	1145	84	182	44
Private	20	13	0	4	53	12	53	8	7	7
College	53	-	-	9	77	45	333	3	28	19

	Novi	Oak Park	Oakland Township	Orion Township	Oxford Village	Oxford Township	Pleasant Ridge	Pontiac City	Pontiac Township	Quakertown
Total Enrolled	1829	10760	731	2657	536	979	927	18976	2409	6203
Kindergarten	136	1140	63	278	57	84	66	1730	250	553
Public	136	1132	63	278	57	60	66	1684	241	545
Private	0	8	0	0	0	24	0	46	9	8
Elementary(1 to 8 Years)	1292	7135	496	1800	323	639	558	12922	1617	4179
Public	1155	6165	441	1704	323	561	502	11830	1562	3747
Private	137	970	55	96	0	78	56	1092	55	432
High School(1 to 4 Years)	367	1811	165	559	132	222	261	3768	485	1304
Public	343	1704	165	547	118	215	207	3332	458	1070
Private	24	107	0	12	14	7	54	436	27	234
College	34	674	7	20	24	34	42	556	57	167

TABLE A-34

School Enrollment by Minor Civil Division: Oakland County, 1960

	Rochester	Rose Twp.	Royal Oak	Royal Oak South Township	Lyon Twp.	Southfield	Springfield Township	Sylvan Lake	Troy	Walled Lake
Total Enrolled	1,293	442	22,415	2,713	478	8,505	874	497	5,559	977
Kindergarten	83	40	2,031	233	70	853	69	36	533	97
Public	83	40	1,963	224	70	824	69	33	529	97
Private	0	0	68	9	0	29	0	3	4	0
Elementary (1 to 8 Years)	858	291	14,607	1,967	271	5,321	534	324	3,797	676
Public	741	277	11,207	1,905	271	4,305	530	288	3,494	654
Private	117	14	3,400	62	0	1,016	4	36	303	22
High School (1 to 4 Years)	301	91	4,543	472	114	1,779	189	119	1,107	195
Public	301	87	3,841	460	114	1,628	172	94	1,014	195
Private	0	4	702	12	0	151	17	25	93	0
College	51	20	1,234	41	23	552	82	18	122	9
	Waterford	Bloomfield Township	White Lake	Wixom	Wolverine Lake					
Total Enrolled	12,974	4,449	2,393	426	759					
Kindergarten	1,299	346	224	33	47					
Public	1,263	334	220	33	71					
Private	36	12	4	0	3					
Elementary (1 to 8 Years)	8,825	2,939	1,629	274	530					
Public	8,120	2,415	1,546	256	433					
Private	705	524	83	18	97					
High School (1 to 8 Years)	2,552	941	495	111	143					
Public	2,383	880	491	111	139					
Private	169	61	4	0	4					
College	298	223	45	8	12					

TABLE A-35

PERCENT TABLE - SCHOOL ENROLLMENT BY MINOR CIVIL DIVISION: OAKLAND COUNTY 1960

	1	2	3	4	5	6	7
	Addison Twp.	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.
Total Enrolled	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Kindergarten	4.6	9.9	9.4	9.7	8.7	3.3	9.3
Public	100.0	95.4	98.2	98.4	95.5	57.1	94.0
Private	-----	4.6	1.8	1.6	4.5	42.9	6.0
Elementary (1 to 8 yrs.)	76.5	66.0	66.0	64.7	65.0	53.3	61.5
Public	97.7	86.0	80.3	67.1	82.0	51.8	76.4
Private	2.3	14.0	19.7	32.9	18.0	48.2	23.6
High School (1 to 4 yrs.)	18.2	20.8	21.0	22.5	21.1	28.0	26.5
Public	100.0	97.9	85.7	80.3	80.2	53.3	81.0
Private	-----	2.1	14.3	19.7	19.8	46.7	19.0
College	.7	3.3	3.6	3.1	5.2	15.4	2.7

	8	9	10	11	12	13	14	15
	Brandon Twp.	Clawson	Commerce Twp.	Farmington City,	Farmington Twp.	Ferndale	Franklin Village	Groveland Twp.
Total Enrolled	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Kindergarten	8.1	11.5	8.0	10.7	9.6	6.8	5.6	7.4
Public	100.0	98.3	100.0	98.2	81.1	96.0	85.1	100.0
Private	---	1.7	----	1.8	18.9	4.0	14.9	-----
Elementary (1 to 8 yrs.)	71.4	70.0	66.8	64.7	67.1	62.9	64.4	68.4
Public	99.4	78.6	87.5	77.8	81.4	84.5	80.6	100.0
Private	0.6	21.4	12.5	22.2	18.6	15.5	19.4	-----
High School (1 to 4 yrs.)	19.7	14.9	22.7	21.9	19.6	24.1	26.3	23.4
Public	100.0	89.7	97.0	76.0	80.9	83.0	83.6	100.0
Private	---	10.3	3.0	24.0	19.1	17.0	16.4	-----
College	0.8	3.6	2.5	2.7	3.7	6.2	3.7	0.8

TABLE A-40

HOUSING CHARACTERISTICS BY MINOR CIVIL DIVISIONS: OAKLAND COUNTY 1960

YEAR STRUCTURE BUILT

	<u>Addison Lecnard</u>	<u>Avon Township</u>	<u>Berkley</u>	<u>Beverly Hills</u>	<u>Birmingham</u>	<u>Bloomfield Hills</u>	<u>Bloomfield Township</u>	<u>Brandon Ortonville</u>	<u>Clawson</u>	<u>Commerce</u>
1950 to March 1960	231	2,025	1,676	1,950	3,359	367	5,331	340	2,487	1,513
1940 to 1949	106	984	3,096	337	1,713	43	385	251	380	689
1939 or Earlier	358	1,315	1,519	170	2,856	305	570	556	1,036	1,067
Total	695	4,324	6,291	2,457	7,928	715	6,286	1,147	3,903	3,269
	<u>Farmington</u>	<u>Farmington Township</u>	<u>Ferndale</u>	<u>Franklin Bingham</u>	<u>Groveland</u>	<u>Hazel Park</u>	<u>Highland</u>	<u>Holly Township</u>	<u>Holly Village</u>	<u>Huntington Woods</u>
1950 to March 1960	1,247	1,105	1,582	506	129	2,667	705	227	210	953
1940 to 1949	239	254	2,636	135	52	1,292	489	117	99	1,029
1939 or Earlier	386	256	5,668	144	208	3,509	802	258	774	399
Total	1,872	1,615	9,886	785	389	7,468	1,996	602	1,083	2,381

TABLE A-40

HOUSING CHARACTERISTICS BY MINOR CIVIL DIVISIONS: OAKLAND COUNTY 1960

YEAR STRUCTURE BUILT

	<u>Independence Clarkson</u>	<u>Keego Harbor</u>	<u>Lake Angelus</u>	<u>Lake Orion</u>	<u>Lathrup Village</u>	<u>Lyon Township</u>	<u>Madison Heights</u>	<u>Milford</u>	<u>Milford Township</u>	<u>Northville</u>
1950 to March 1960	1,872	68	38	98	574	372	6,423	681	149	174
1940 to 1949	454	104	28	136	313	113	1,268	87	75	24
1939 or Earlier	928	809	38	835	152	359	1,182	498	303	48
Total	3,254	981	104	1,069	1,039	844	8,873	1,266	527	246

	<u>Novi Twp. Novi Village</u>	<u>Oak Park</u>	<u>Oakland</u>	<u>Orion Twp.</u>	<u>Oxford</u>	<u>Oxford Township</u>	<u>Pleasant Ridge</u>	<u>Pontiac</u>	<u>Pontiac Township</u>	<u>Quaker Wood Creek</u>
1950 to March 1960	938	8,323	362	1,221	59	460	144	5,545	977	3,278
1940 to 1949	322	1,366	111	742	36	132	161	2,505	632	1,320
1939 or Earlier	734	197	328	942	704	401	905	16,704	992	1,204
Total	1,994	9,886	801	2,905	799	993	1,210	24,754	2,581	5,802

TABLE A-40
HOUSING CHARACTERISTICS BY MINOR CIVIL DIVISIONS: OAKLAND COUNTY 1960

	YEAR STRUCTURE BUILT									
	<u>Rochester</u>	<u>Rose Township</u>	<u>Royal Oak</u>	<u>Royal Oak Township</u>	<u>South Lyon</u>	<u>Southfield</u>	<u>Springfield</u>	<u>Sylvan Lake</u>	<u>Troy</u>	<u>Walled Lake</u>
1950 to March 1960	481	183	10,991	230	164	5,440	392	279	2,710	521
1940 to 1949	155	163	5,521	1,709	57	2,218	201	74	1,226	188
1939 or Earlier	1,160	303	7,025	508	331	1,445	418	299	1,465	332
Total	1,796	649	23,537	2,447	552	9,103	1,011	652	5,401	1,041

	<u>Waterford</u>	<u>West Bloomfield</u>	<u>White Lake</u>	<u>Wixom</u>	<u>Wolverine</u>
1950 to March 1960	7,016	2,428	1,165	163	380
1940 to 1949	3,098	852	877	150	205
1939 or Earlier	3,823	1,483	1,260	359	166
Total	13,937	4,763	3,302	672	751

Table A-36
Fertility Ratios for Oakland County

	1940			1950			1960		
	Population Under 5	Women 15-44	Fertility Ratio	Population Under 5	Women 15-44	Fertility Ratio	Population Under 5	Women 15-44	Fertility Ratio
Berkley	652	1585	.4113	2893	4400	.6575	2974	5050	.5889
Beverly Hills							847	1693	.5002
Birmingham	809	3058	.2645	1826	3485	.4749	2933	5244	.5593
Clawson	364	949	.3835	607	1214	.5000	2637	3184	.8282
Farmington	102	364	.2802	261	531	.4915	1019	1423	.7160
Ferndale	2076	5841	.3554	3383	7054	.4795	3191	6309	.5057
Hazel Park				2166	4335	.4996	3465	5571	.6219
Holly Village	173	519	.3333	306	543	.5635	425	644	.6599
Huntington Woods	139	514	.2704	598	1157	.5168	771	1744	.4420
Keego Harbor							320	560	.5714
Lake Orion	189	443	.4266	279	540	.5166	312	563	.5541
Madison Heights							7142	7782	.9177
Milford Village	126	370	.3405	197	407	.4840	762	930	.8193
Novi Township	173	530	.3264	468			921	1300	.7084
Oak Park	109	279	.3906	1081	1386	.7799	5352	8171	.6470
Pleasant Ridge	219	910	.2406	261	704	.3707	298	659	.4522
Pontiac	5942	16668	.3564	7610	17563	.4332	10340	16870	.6129
Rochester	332	898	.3697	424	950	.4463	616	1124	.5480
Royal Oak City	1902	6459	.2944	6376	10711	.5952	10575	17420	.6070
Southfield	905	2048	.4418	2273			4137	6580	.6287
Troy	880	1941	.4533	1205					
Walled Lake				378	614	.6156	593	795	.7459

1. Oak Park Village in 1940
2. Southfield Twp. in 1940 and 1950
3. Troy Twp. in 1940 and 1950; totals incorrect for 1960
4. Farmington Village in 1940
5. Hazel Park not available before 1950
6. Madison Heights not available before 1960

TABLE A-37

SELECTED SOCIAL CHARACTERISTICS BY MINOR CIVIL DIVISION 10,000 AND OVER: OAKLAND COUNTY 1960

STATE OF BIRTH, MIGRATION, FERTILITY

STATE OF BIRTH	Berkley	Birmingham	Clawson	Ferndale	Hazel Park	Madison Heights	Oak Park	Pontiac
Total native population	21,434	23,898	13,868	27,816	23,770	31,384	31,547	77,786
Born in state of residence	16,147	14,339	10,696	18,942	15,478	22,622	24,335	46,327
Born in different state	4,908	9,168	3,059	8,179	7,917	8,380	6,874	28,563
Born in U.S. outlying area, at sea, etc.	55	108	29	70	48	67	51	346
State of birth not reported	324	283	84	625	327	315	287	2,551
RESIDENCE IN 1955								
Population 5 years old and over, 1960	20,304	22,593	12,158	13,601	22,167	26,301	31,280	71,905
Same house as in 1960	12,984	11,057	6,230	7,213	12,735	9,715	16,686	36,187
Different house in U.S.	7,051	11,091	5,824	6,200	9,119	15,844	14,077	32,979
Same county	3,802	4,760	3,381	4,365	4,032	5,400	1,927	25,987
Different county	3,249	6,331	2,443	1,835	5,087	10,444	12,150	6,992
Same state	2,369	3,135	1,866	890	4,100	8,679	10,664	3,512
Different state	880	3,196	577	945	987	1,765	1,486	3,480
Abroad	114	284	88	69	184	431	367	518
Moved residence in 1955 not reported	155	161	16	119	129	211	150	2,221
CHILDREN EVER BORN								
Women ever married 15 to 24 years old	509	380	373	341	890	1,404	608	2,965
Children per 1,000 women ever married	1,477	1,053	1,335	1,364	1,329	1,574	1,173	1,481
Women ever married, 25 to 34 years old	1,462	1,643	1,382	800	1,954	3,466	3,251	5,073
Children per 1,000 women ever married	2,508	2,242	2,468	2,789	2,469	2,337	2,263	2,671
Women ever married, 35 to 44 years old	1,891	2,100	929	903	1,738	1,951	3,074	5,196
Children per 1,000 women ever married	2,714	2,440	2,807	2,918	2,752	2,659	2,309	2,768

TABLE A-37

SELECTED SOCIAL CHARACTERISTICS BY MINOR CIVIL DIVISION 10,000 AND OVER: OAKLAND COUNTY 1960

STATE OF BIRTH, MIGRATION, FERTILITY

STATE OF BIRTH	Royal Oak	Southfield	Troy
Total native population	73,838	28,180	18,064
Born in state of residence	52,662	21,047	12,899
Born in different state	19,293	6,709	4,642
Born in U.S. outlying area, at sea, etc.	181	78	39
State of birth not reported	1,702	346	484
RESIDENCE IN 1955			
Population 5 years old and over, 1960	70,036	27,364	16,681
Same house as in 1960	38,301	13,042	8,167
Different house in U.S.	28,957	13,962	8,173
Same county	15,159	3,629	4,722
Different county	13,798	10,333	3,451
Same state	9,471	9,037	2,599
Different state	4,327	1,296	852
Abroad	954	242	138
Moved residence in 1955 not reported	824	118	203
CHILDREN EVER BORN			
Women ever married 15 to 24 years old	1,782	688	496
Children per 1,000 women ever married	1,065	1,289	1,433
Women ever married, 25 to 34 years old	5,519	2,115	1,392
Children per 1,000 women ever married	2,380	2,394	2,593
Women ever married, 35 to 44 years old	6,466	2,401	1,372
Children per 1,000 women ever married	2,587	2,503	2,794

TABLE A-38

Housing Characteristics by Minor Civil Division: Oakland County 1960

Units in Structure

	Addison Twp. Leonard	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.	Brandon Ortonville	Clawson	Commerce
Units in Structure										
One	691	4,170	6,191	2,457	7,310	684	6,217	1,125	3,769	3,181
Two	---	90	91	-----	170	---	25	12	45	55
Three and Four	4	27	9	-----	182	11	12	-----	44	14
Five to Nine	---	13	-----	-----	106	15	8	-----	13	5
Ten or More	---	14	-----	-----	160	5	24	10	32	14
TOTAL	695	4,314	6,291	2,457	7,928	715	6,286	1,147	3,903	3,269
	Farmington	Farmington Twp.	Ferndale	Franklin Bingham	Groveland	Hazel Park	Highland	Holly Twp.	Holly Village	Huntington Woods
Units in Structure										
One	1,814	3,181	9,053	769	386	6,903	1,968	592	878	2,381
Two	17	55	607	11	3	341	11	5	114	-----
Three and Four	41	14	67	5	-----	106	5	5	58	-----
Five to Nine	-----	5	105	---	-----	10	12	---	24	-----
Ten or More	-----	14	54	---	-----	108	-----	---	9	-----
TOTAL	1,872	3,269	9,886	785	389	7,468	1,996	602	1,083	2,381

TABLE A-38

-2-

(Units in Structure - Continued)

Units in Structure	Independence Clarkston	Keego Harbor	Lake Angelus	Lake Orion	Lathrup Village	Lyon Twp.	Madison Heights	Milford	Milford Twp.	Northville
One	3,173	937	104	903	1,039	747	8,609	987	498	241
Two	67	25	---	82	-----	30	68	54	25	5
Three and Four	5	14	---	48	-----	45	26	54	4	---
Five to Nine	5	5	---	36	-----	7	32	167	---	---
Ten or More	4	---	---	---	-----	15	138	4	---	---
TOTAL	3,254	981	104	1,069	1,039	844	8,873	1,266	527	246

Units in Structure	Novi Twp. Novi Village	Oak Park	Oakland	Orion Twp.	Oxford	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quaker Wood Creek
One	1,895	10,576	789	2,842	635	988	1,173	18,752	2,485	5,687
Two	67	81	8	54	83	---	33	9,209	49	58
Three and Four	16	99	4	9	48	5	-----	1,519	15	36
Five to Nine	16	146	---	-----	-----	---	4	1,179	18	16
Ten or More	-----	284	---	-----	33	---	-----	1,342	14	5
TOTAL	1,994	11,186	801	2,905	799	993	1,210	32,001	2,581	5,802

(Units in Structure - Continued)

TABLE A-38

-3-

	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy	Walled Lake
Units in Structure										
One	1,634	644	20,285	980	486	9,042	993	638	5,181	986
Two	61	5	821	181	36	31	----	14	96	19
Three and Four	71	----	652	504	30	30	18	----	44	10
Five to Nine	10	----	914	652	----	----	----	----	6	26
Ten or More	20	----	865	130	----	----	----	----	92	---
TOTAL	1,796	649	23,537	2,447	552	9,103	1,011	652	5,422	1,041

	West Waterford	Bloomfield & Orchard Lake	White Lake	Wixom	Wolverine
Units in Structure					
One	15,185	4,739	3,207	672	631
Two	152	10	26	---	14
Three and Four	45	9	35	---	6
Five to Nine	39	----	15	---	---
Ten or More	37	5	19	---	---
TOTAL	15,458	4,763	3,302	672	751

(Percent of Total Housing Units in Structure - Continued)

TABLE A-39

-3-

Units in Structure	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy	Walled Lake
One	91.0	99.2	86.2	40.0	88.0	99.3	98.2	97.9	95.6	94.7
Two	3.4	0.8	3.5	7.4	6.5	0.3	----	2.1	1.8	1.8
Three and Four	4.0	----	2.8	20.6	5.4	0.3	1.8	----	0.8	1.0
Five to Nine	0.6	----	3.9	26.6	----	----	----	----	0.1	2.5
Ten or More	1.1	----	3.7	5.3	----	----	----	----	1.7	----
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Units in Structure	West Bloomfield &				
	Waterford	Orchard Lake	White Lake	Wixom	Wolverine
One	98.2	99.5	97.1	100.0	97.3
Two	1.0	0.2	0.8	----	1.9
Three and Four	0.3	0.2	1.1	----	0.8
Five to Nine	0.3	----	0.5	----	----
Ten or More	0.2	0.1	0.6	----	----

TABLE A-41

Housing Characteristics by Minor Civil Division: Oakland County, 1960

Percent, Year Structure Built

	Addison Twp. Leonard	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.	Brandon Ortonville	Clawson	Commerce
1950 to March 1960	33.2	46.8	26.6	79.4	42.4	51.3	84.8	29.6	63.7	46.3
1940 to 1949	15.3	22.8	49.2	13.7	21.6	6.0	6.1	21.9	9.7	21.1
1939 or Earlier	51.5	30.4	24.1	6.9	36.0	42.7	9.1	48.5	26.5	32.6
	Farmington	Farmington Twp.	Ferndale	Franklin Bingham	Groveland	Hazel Park	Highland	Holly Twp.	Holly Village	Huntington Woods
1950 to March 1960	66.6	68.4	16.0	64.5	33.2	35.7	35.3	37.7	19.4	40.0
1940 - 1949	12.8	15.7	26.7	17.2	13.4	17.3	24.5	19.4	9.1	43.2
1939 or Earlier	20.6	15.9	57.3	18.3	53.5	47.0	40.2	42.9	71.5	16.8
	Independence Clarkston	Keego Harbor	Lake Angelus	Lake Orion	Lathrup Village	Lyon Twp.	Madison Heights	Milford	Milford Twp.	Northville
1950 to March 1960	57.5	6.9	36.5	9.2	55.2	44.1	72.4	53.8	28.3	70.7
1940 to 1949	14.0	10.6	26.9	12.7	30.1	13.4	14.3	6.9	14.2	9.8
1939 or Earlier	28.5	82.5	36.5	78.1	14.6	42.5	13.3	39.3	57.5	19.5

TABLE A-41

-2-

Percent, Year Structure Built and Median of Rooms - Continued)

	Novi Village		Oakland	Orion Twp.	Oxford	Oxford Twp.	Pleasant Ridge	Pontiac	Quakertown & Wood Creek Farms	
	Novi Twp.	Oak Park							Pontiac Twp.	Creek Farms
1950 to March 1960	47.0	84.2	45.2	42.0	7.4	46.3	11.9	22.4	37.9	56.5
1940 - 1949	16.1	13.8	13.9	25.5	4.5	13.3	13.3	10.1	24.5	22.8
1939 or Earlier	36.8	2.0	40.9	32.4	88.1	40.4	74.8	67.5	37.7	20.8
	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy	Walled Lake
	1950 to March 1960	26.8	28.2	46.7	9.4	29.7	59.8	38.8	42.8	50.2	50.0
1940 - 1949	8.6	25.1	23.5	69.8	10.3	24.4	19.9	11.3	22.7	18.1
1939 or Earlier	64.6	46.7	29.8	20.8	60.0	15.9	41.3	45.9	27.1	31.9
	West Bloomfield & White			Wixom	Wolverine					
	Waterford	Orchard Lake	Lake							
1950 to March 1960	50.3	51.0	35.3	24.3	50.6					
1940 - 1949	27.2	17.9	26.6	22.3	27.3					
1939 or Earlier	27.5	31.1	38.2	53.4	22.1					

TABLE A-42

Housing Characteristics by Minor Civil Division: Oakland County 1960

Tenure

	Addison Twp. Leonard	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.	Brandon Ortonville	Clawson	Commerce
Owner Occupied	380	3,634	5,645	2,362	5,971	450	5,739	656	3,470	2,157
Renter Occupied	102	439	493	56	1,653	224	209	166	339	304
Vacant	213	251	153	44	304	41	346	325	94	808
TOTAL	695	4,324	6,291	2,462	7,928	715	6,294	1,147	3,903	3,269

	Farmington	Farmington Twp.	Ferndale	Franklin Bingham	Groveland	Hazel Park	Highland	Holly Twp.	Holly Village	Huntington Woods
Owner Occupied	1,605	1,430	7,840	724	271	5,934	1,104	469	744	2,297
Renter Occupied	175	100	1,772	24	67	1,284	219	103	224	43
Vacant	92	85	274	31	51	250	673	30	115	41
TOTAL	1,872	1,615	9,886	779	389	7,468	1,996	602	1,083	2,381

	Independence Clarkston	Keego Harbor	Lake Angelus	Lake Orion	Lathrup Village	Lyon Twp.	Madison Heights	Milford	Milford Twp.	Northville
Owner Occupied	2,404	637	60	542	1,007	605	7,642	960	326	224
Renter Occupied	307	178	13	266	5	174	903	201	81	5
Vacant	543	166	31	261	28	65	328	105	120	17
TOTAL	3,254	981	104	1,069	1,040	844	8,873	1,266	527	246

TABLE A-42

-2-

(Tenure - Continued)

	Novi. Twp. Novi Village	Oak Park	Oakland	Orion Twp.	Oxford	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quaker Wood Creek
Owner Occupied	1,334	8,337	549	2,077	523	726	1,114	15,451	2,044	4,780
Renter Occupied	384	1,341	108	285	217	116	71	7,773	395	649
Vacant	276	208	153	543	59	151	25	1,530	142	373
TOTAL	1,994	9,886	801	2,905	799	993	1,210	24,754	2,581	5,802

	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy	Walled Lake
Owner Occupied	1,244	310	18,365	678	361	8,137	576	528	4,558	713
Renter Occupied	465	85	4,438	1,195	158	593	115	81	574	206
Vacant	87	254	734	574	33	373	320	43	271	122
TOTAL	1,796	649	23,537	2,447	552	9,103	1,011	652	5,403	1,041

	West Waterford	Bloomfield & Orchard Lake	White Lake	Wixom	Wolverine
Owner Occupied	11,389	3,570	1,902	374	537
Renter Occupied	1,345	359	324	62	74
Vacant	1,206	834	1,076	236	140
TOTAL	13,940	4,763	3,302	672	751

TABLE A-43

-2-

(Tenure Continued)

	Novi Twp. Novi Village	Oak Park	Oakland	Orion Twp.	Oxford	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quaker Wood Creek
Owner Occupied	66.9	84.3	67.4	71.5	65.5	73.1	92.1	62.4	79.2	82.4
Renter Occupied	19.3	13.6	13.5	9.8	27.2	11.7	5.9	31.4	15.3	11.2
Vacant	13.8	2.1	19.1	18.7	7.4	15.2	2.1	6.2	5.5	6.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy	Walled Lake
Owner Occupied	69.3	47.8	78.0	27.7	65.4	89.4	57.0	81.0	84.4	68.5
Renter Occupied	25.9	13.1	18.9	48.8	28.6	6.5	11.4	12.4	10.6	19.8
Vacant	4.8	39.1	3.1	23.5	6.0	4.1	31.7	6.6	5.0	11.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	West Waterford	West Bloomfield & Orchard Lake	White Lake	Wixom	Wolverine					
Owner Occupied	81.7	75.0	57.6	55.7	71.5					
Renter Occupied	9.6	7.5	9.8	9.2	9.9					
Vacant	8.7	17.5	32.6	35.1	18.6					
TOTAL	100.0	100.0	100.0	100.0	100.0					

(Tenure Continued)

TABLE A-43

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	Novi Twp. Novi Village	Oak Park	Oakland	Orion Twp.	Oxford	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quaker Wood Creek
Owner Occupied	66.9	84.3	67.4	71.5	65.5	73.1	92.1	62.4	79.2	82.4
Renter Occupied	19.3	13.6	13.5	9.8	27.2	11.7	5.9	31.4	15.3	11.2
Vacant	13.8	2.1	19.1	18.7	7.4	15.2	2.1	6.2	5.5	6.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy	Walled Lake
Owner Occupied	69.3	47.8	78.0	27.7	65.4	89.4	57.0	81.0	84.4	68.5
Renter Occupied	25.9	13.1	18.9	48.8	28.6	6.5	11.4	12.4	10.6	19.8
Vacant	4.8	39.1	3.1	23.5	6.0	4.1	31.7	6.6	5.0	11.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

	West Bloomfield & Waterford Orchard Lake	White Lake	Wixom	Wolverine	
Owner Occupied	81.7	75.0	57.6	55.7	71.5
Renter Occupied	9.6	7.5	9.8	9.2	9.9
Vacant	8.7	17.5	32.6	35.1	18.6
TOTAL	100.0	100.0	100.0	100.0	100.0

TABLE A-44

Housing Characteristics by Minor Civil Division: Oakland County 1960

Condition & Plumbing

	Addison Twp. Leonard	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.	Brandon Ortonville	Clawson	Commerce
Sound	531	3,662	6,066	2,450	7,617	678	6,238	901	3,631	2,768
Deteriorating	135	482	209	12	295	29	46	198	212	359
Dilapidated	29	180	16	0	16	8	10	48	60	142
TOTAL	695	4,324	6,291	2,462	7,928	715	6,294	1,147	3,903	3,269

	Farmington	Farmington Twp.	Ferndale	Franklin Bingham	Groveland	Hazel Park	Highland	Holly Twp.	Holly Village	Huntington Woods
Sound	1,799	1,561	9,370	765	266	6,605	1,614	368	844	2,374
Deteriorating	66	32	468	12	94	755	300	180	186	6
Dilapidated	7	22	48	2	29	108	82	54	53	1
TOTAL	1,872	1,615	9,886	779	389	7,468	1,996	602	1,083	2,381

	Independence Clarkston	Keego Harbor	Lake Angelus	Lake Orion	Lathrup Village	Lyon Twp.	Madison Heights	Milford	Milford Twp.	Northville
Sound	2,818	607	103	731	1,033	646	8,313	975	451	246
Deteriorating	328	290	1	280	7	143	487	222	52	---
Dilapidated	108	84	---	58	---	55	73	69	24	---
TOTAL	3,254	981	104	1,069	1,040	844	8,873	1,266	527	246

TABLE A-44

-2-

(Condition of Plumbing - Continued)

	Novi Twp. Novi Village	Oak Park	Oakland	Orion Twp.	Oxford	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quaker Wood Creek
Sound	1,585	9,814	595	2,458	708	801	1,170	20,475	2,040	5,122
Deteriorating	294	57	191	311	90	131	34	3,563	346	541
Dilapidated	115	15	15	136	1	61	6	716	195	139
TOTAL	1,994	9,886	801	2,905	799	993	1,210	24,754	2,581	5,802
	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy	Walled Lake
Sound	1,625	584	22,670	486	490	8,601	909	597	4,698	873
Deteriorating	146	45	766	908	48	408	70	44	573	134
Dilapidated	25	20	101	1,053	14	94	32	11	132	34
TOTAL	1,796	649	23,537	2,447	552	9,103	1,011	652	5,403	1,041
	West Waterford	Bloomfield & Orchard Lake	White Lake	Wixom	Wolverine					
Sound	12,323	4,137	2,656	604	579					
Deteriorating	1,234	511	450	43	126					
Dilapidated	383	115	196	25	46					
TOTAL	13,940	4,763	3,302	672	751					

TABLE A-45

-2-

(Percent of Housing Units - Condition of Plumbing - Continued)

	Novi Twp. Novi Village	Oak Park	Oakland	Orion Twp.	Oxford	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quaker Wood Creek
Condition of Plumbing										
Sound	79.5	99.3	74.3	84.6	88.6	80.7	96.7	82.7	79.0	88.3
Deteriorating	14.7	0.6	23.8	10.7	11.3	13.2	2.8	14.4	13.4	9.3
Dilapidated	5.8	0.2	1.9	4.7	0.1	6.1	0.5	2.9	7.6	2.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Rochester	Rose Twp.	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy	Walled Lake
Sound	90.5	90.0	96.3	20.0	88.8	94.5	89.9	91.6	87.0	83.9
Deteriorating	8.1	6.9	3.3	37.1	8.7	4.5	6.9	6.7	10.6	12.9
Dilapidated	1.4	3.1	0.4	43.0	2.5	1.0	3.2	1.7	2.4	3.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Waterford	West Bloomfield Orchard Lake	White Lake	Wixom	Wolverine					
Sound	88.4	86.9	80.4	89.9	77.1					
Deteriorating	8.9	10.7	13.6	6.4	16.8					
Dilapidated	2.7	2.4	5.9	3.7	6.1					
TOTAL	100.0	100.0	100.0	100.0	100.0					

TABLE A-46
Selected Social Characteristics By Minor Civil Division: Oakland County, 1960

Residence in 1955

	Addison Twp.	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.	Brandon Twp.
Persons 5 yrs. and older	1530	13803	20304	7786	22593	2264	20361	2767
Same household as 1960	959	6710	12984	4255	11057	884	6225	1601
Different House	546	6961	7051	3388	11091	1325	13623	1136
Central City	50	713	1616	887	1780	307	3421	13
Outer Part	404	5273	4231	1603	5294	745	7081	829
Outside S.M.S.A.	92	975	1204	898	4017	273	3121	294
North-West	78	774	1004	836	3407	206	2565	277
South	14	201	200	62	547	67	556	17
Abroad	3	64	114	70	284	31	145	3
Moved	22	68	155	73	161	24	368	27

	Clawson	Commerce	Farmington	Farmington City	Ferndale	Franklin	Groveland	Hazel Park
Persons 5 yrs. and older	12158	8210	5072	5859	28156	2479	1141	22167
Same household as 1960	6230	3548	2370	2309	17978	1211	744	12735
Different House	5824	4456	2541	3473	9782	1248	389	9119
Central City	1097	947	892	1359	2432	433	48	2560
Outer Part	3929	2769	1314	1482	5933	579	207	5257
Outside S.M.S.A.	798	740	335	632	1417	236	134	1302
North-West	628	580	273	578	1090	184	92	671
South	170	160	62	54	327	52	42	631
Abroad	88	57	25	59	237	0	8	184
Moved	16	149	136	18	159	20	0	129

TABLE A-46
 Selected Social Characteristics by Minor Civil Division: Residence in 1955
 Oakland County, 1960

	Highland	Holly Twp.	Holly	Huntington	Independence	Keego Harbor	Lake Angelus	Lake Orion
Persons 5 years and older	4197	2048	2844	7975	9071	2440	201	2385
Same household as 1960	2033	1114	1331	5062	3041	1493	126	1223
Different House	2129	917	1476	2784	5855	909	75	1083
Central City	240	60	65	1508	195	67	0	61
Outer Part	1573	583	879	771	4785	708	75	839
Outside S.M.S.A.	316	274	532	505	875	134	0	183
North-West	265	270	456	461	700	140	0	164
South	51	4	76	44	175	94	0	19
Abroad	15	14	3	57	76	9	0	13
Moved	20	3	34	72	99	29	0	66

	Lathrup	Lyon Twp.	Madison Heights	Milford Twp.	Milford	Northville	Novi	Oak Park
Persons 5 years and older	3261	2432	26201	1355	3562	699	5642	31280
Same household as 1960	1909	1138	9715	723	1094	273	1923	16686
Different House	1344	1259	15844	595	2408	426	3609	14077
Central City	750	199	5733	146	488	81	1926	10069
Outer Park	492	586	7868	335	1410	274	2047	2314
Outside S.M.S.A.	102	474	2243	114	510	71	636	1694
North- West	95	345	1591	114	434	62	548	1446
South	7	129	652	0	76	9	88	248
Abroad	4	12	431	4	46	0	42	367
Moved	4	23	211	35	14	0	68	150

TABLE A-46
 Selected Social Characteristics by Minor Civil Division: Residence in 1955
 Oakland County, 1960

	Oakland	Orion	Oxford Twp.	Oxford	Pleasant Ridge	Pontiac	Pontiac Twp.	Rochester
Persons 5 yrs. and older	2173	7716	2769	2124	3509	71905	7678	4815
Same household as 1960	963	3418	1257	1055	2332	36187	4317	2529
Different House	1202	4206	1477	1007	1091	32979	3285	2182
Central City	111	257	75	33	274	971	53	99
Outer Part	853	3315	1130	767	593	26599	2831	1626
Outside S.M.S.A.	238	634	272	207	224	5409	401	457
North - West	210	428	227	176	195	3710	278	396
South	28	206	45	31	29	1699	123	61
Abroad	4	40	0	47	30	518	17	88
Moved	4	52	35	15	56	2221	49	16

	Quakertown	Rose	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake
Persons 5 yrs. and older	17727	1303	70036	6999	1541	27364	2338	1786
Same household as 1960	6468	776	39301	4148	810	13042	1130	882
Different House	10968	523	28957	2721	715	13962	1175	859
Central City	3909	68	5471	517	54	7106	112	64
Outer Part	4974	261	17279	1899	415	4984	734	546
Outside S.M.S.A.	2085	194	6207	305	246	1872	329	249
North - West	1689	190	5073	52	124	1502	289	201
South	396	4	1134	253	122	370	40	48
Abroad	76	4	954	0	8	242	4	3
Moved	215	0	824	130	8	118	29	42

TABLE A-46
 Selected Social Characteristics by Minor Civil Division: Residence in 1955
 Oakland County, 1960

	Troy	Walled Lake	Waterford	W.Bloomfield Twp.	White Lake	Wixom	Wolverine Lake
Persons 5 years and older	16681	2957	40061	13196	7244	1337	2031
Same household as 1960	8167	1190	18799	6037	3846	797	1043
Different House	8173	1707	20533	6888	3302	514	926
Central City	1352	258	956	1639	653	60	201
Outer Part	5494	1048	16698	3982	2242	411	524
Outside S.M.S.A.	1327	401	2879	1267	407	43	201
North- West	1106	311	2465	1073	363	35	165
South	221	90	414	194	44	8	36
Abroad	138	11	297	74	28	26	12
Moved	206	49	432	200	68	0	50

TABLE A-47
Selected Social Characteristics by Minor Civil Division: Oakland County, 1960

Residence in 1955 as Percent of Population 5 Yrs. old and Older

Percent of Total

	Addison Twp.	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills Twp.	Bloomfield Hills Twp.	Brandon Twp.
Persons 5 yrs. and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same Household as 1960	62.7	48.6	63.9	54.6	48.9	39.0	30.6	57.9
Different House	35.7	50.4	34.7	43.5	49.1	58.5	66.9	41.1
Central City	3.3	5.2	8.0	11.4	7.9	13.6	16.8	0.5
Outer Part	26.4	38.2	20.8	20.6	23.4	32.9	34.8	30.0
Outside S.M.S.A.	6.0	7.1	5.9	21.1	17.8	12.1	15.3	10.6
North-West	5.1	5.6	4.9	10.7	15.1	9.1	12.6	10.0
South	1.0	1.5	1.0	0.8	2.4	3.0	2.7	0.6
Abroad	0.2	0.5	0.6	0.9	1.3	1.4	0.7	0.1
Moved	1.4	0.5	0.8	0.9	0.7	1.1	1.8	1.0

	Clawson	Commerce	Farmington	Farmington City	Ferndale	Franklin	Groveland	Hazel Park
Persons 5 yrs. and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same Household as 1960	51.2	43.2	46.7	39.4	63.9	48.9	65.2	57.5
Different House	47.9	54.3	50.1	59.3	34.7	50.3	34.1	41.1
Central City	9.0	11.5	17.6	23.2	8.6	17.5	4.2	11.5
Outer Part	32.3	33.7	25.9	25.3	21.1	23.4	18.1	23.7
Outside S.M.S.A.	6.6	9.0	6.6	10.8	5.0	9.5	11.7	5.9
North-West	5.2	7.1	5.4	9.9	3.9	7.4	8.1	3.0
South	1.4	1.9	1.2	0.9	1.2	2.1	3.7	2.8
Abroad	0.7	0.7	0.5	1.0	0.8	---	0.7	0.8
Moved	0.1	1.8	2.7	0.3	0.6	0.8	---	0.6

(Residence in 1955 as Percent of Population 5 Yrs. Old and Older - Continued) -2-
TABLE A-47

	Highland	Holly Twp.	Holly	Huntington Woods	Independence	Keego Harbor	Lake Angelus	Lake Orion
Persons 5 yrs. and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same Household as 1960	48.4	54.4	46.8	63.5	33.5	61.2	62.7	51.3
Different House	50.7	44.8	51.9	34.9	64.5	37.3	37.3	45.4
Central City	5.7	2.9	2.3	18.9	2.1	2.7	---	2.6
Outer Part	37.5	28.5	30.9	9.7	52.8	29.0	37.3	35.2
Outside S.M.S.A.	7.5	13.4	18.7	6.3	9.6	5.5	---	7.7
North-West	6.3	13.2	16.0	5.8	7.7	1.6	---	6.9
South	1.2	0.2	2.7	0.6	1.9	3.9	---	0.8
Abroad	0.4	---	0.1	0.7	0.8	0.4	---	0.5
Moved	0.5	---	1.2	0.9	1.1	1.2	---	2.8

	Lathrup Village	Lyon Twp.	Madison Heights	Milford Twp.	Milford	Northville	Novi	Oak Park
Persons 5 yrs. and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same Household as 1960	58.5	46.8	37.1	53.4	30.7	39.1	34.1	53.3
Different HUse	41.2	51.8	60.5	43.9	67.6	60.9	64.0	45.0
Central City	23.0	8.2	21.9	10.8	13.7	11.6	34.1	32.2
Outer Part	15.1	24.1	30.0	24.7	39.6	39.2	36.3	7.4
Outside S.M.S.A.	3.1	19.5	8.6	8.4	14.3	10.2	11.3	5.4
North-West	2.9	14.2	6.1	8.4	12.2	8.9	9.7	4.6
South	0.2	5.3	2.5	---	2.1	1.3	1.6	0.8
Abroad	0.1	0.5	1.6	0.3	1.3	---	0.7	1.2
Moved	0.1	0.9	0.8	2.3	0.4	---	1.2	0.5

(Residence in 1955 as Percent of Population 5 Yrs. Old and Older - Continued) -3-
TABLE A-47

	Oakland	Orion	Oxford Twp.	Oxford	Pleasant Ridge	Pontiac	Pontiac Twp.	Rochester
Persons 5 yrs. & older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same Household as 1960	44.3	44.3	45.4	49.7	66.5	50.3	56.2	52.5
Different House	55.3	54.5	53.3	47.4	31.1	45.9	42.8	45.3
Central City	5.1	3.3	2.7	1.6	7.8	1.4	0.7	2.1
Outer Part	39.3	43.0	40.8	36.1	16.9	37.0	36.9	33.8
Outside S.M.S.A.	11.0	8.2	9.8	9.7	6.4	7.5	5.2	9.5
North-West	9.7	5.5	8.2	8.3	5.6	5.2	3.6	8.2
South	1.3	2.7	1.6	1.5	0.8	2.4	1.6	1.3
Abroad	0.2	0.5	---	2.2	0.9	0.7	0.2	1.8
Moved	0.2	0.7	1.3	0.7	1.6	3.1	0.6	0.3

	Quakertown	Rose	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake
Persons 5 yrs. and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same Household as 1960	36.5	59.6	56.1	59.3	52.6	47.7	48.3	49.4
Different House	61.9	40.1	41.3	38.9	46.4	51.0	50.3	48.1
Central City	22.1	5.2	7.8	7.4	3.5	26.0	4.8	3.6
Outer Part	28.1	20.0	24.7	27.1	26.9	18.2	31.4	30.6
Outside S.M.S.A.	11.8	14.9	8.7	4.4	16.0	6.8	14.1	13.9
North-West	9.5	14.6	7.2	0.7	8.0	5.5	12.4	11.3
South	2.2	0.3	1.6	3.6	7.9	1.4	1.7	2.7
Abroad	0.4	0.3	1.4	---	0.5	0.9	0.2	0.2
Moved	1.2	---	1.2	1.9	0.5	0.4	1.2	2.4

(Residence in 1955 as Percent of Population 5 Yrs. Old and Older - Continued) -4-
TABLE A-47

	Troy	Walled Lake	Waterford	West Bloomfield Twp.	White Lake	Wixom	Wolverine Lake
Persons 5 yrs. and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same Household as 1960	49.0	40.2	46.9	45.7	53.1	59.6	51.4
Different House	49.0	57.7	51.3	52.2	45.6	38.4	45.6
Central City	8.1	8.7	2.4	12.4	9.0	4.5	9.9
Outer Part	32.9	35.4	41.7	30.2	30.9	30.7	25.8
Outside S.M.S.A.	7.1	13.6	7.2	9.6	5.6	3.2	9.9
North-West	6.6	10.5	6.2	8.1	5.0	2.6	8.1
South	1.3	3.0	1.0	1.5	0.6	0.6	1.8
Abroad	0.8	0.4	0.7	0.6	0.4	1.9	0.6
Moved	1.2	1.7	1.1	1.5	0.9	---	2.5

TABLE A-48
Selected Social Characteristics by Minor Civil Division;
Oakland County, 1960 Foreign Born

	Addison Twp. Leonard	Avon Twp.	Berkley	Beverly Hills	Birmingham	Bloomfield Hills	Bloomfield Twp.
Total Foreign Born	396	3,335	6,956	2,431	6,000	559	5,746
Foreign Born	94	816	1,841	641	1,627	154	1,358
Native Born of Foreign or Mixed Parentage	302	2,519	5,115	1,790	4,373	405	4,388
United Kingdom	35	518	1,249	330	1,131	95	861
Ireland	4	40	167	67	159	12	110
Norway	3	36	44	25	42	17	86
Sweden	0	77	142	61	210	44	154
Germany	82	386	605	318	619	55	615
Poland	46	178	407	210	252	4	372
Czechoslovakia	4	73	32	41	57	0	46
Austria	0	43	136	52	75	16	146
Hungary	12	47	70	33	104	16	92
U.S.S.R.	8	39	89	108	97	13	220
Italy	11	109	357	164	239	24	204
Canada	153	1,303	1,579	783	2,163	165	1,848
Mexico	0	72	12	8	9	0	4
All Other Not Reported	38	414	1,067	229	843	98	988

	Brandon Ortonville	Clawson	Commerce	Farmington	Farmington Twp.	Ferndale	Franklin Bingham
Total Foreign Born	515	3,722	2,057	1,691	1,990	10,648	704
Foreign Born	87	927	486	370	488	3,531	163
Native Born of Foreign or Mixed Parentage	428	2,795	1,571	1,321	1,502	7,117	541
United Kingdom	109	637	294	254	262	2,162	76
Ireland	8	98	18	45	50	231	15
Norway	0	28	52	7	24	75	19
Sweden	14	61	81	63	37	185	21
Germany	116	263	334	204	202	862	115
Poland	33	315	117	133	190	635	51
Czechoslovakia	0	90	20	27	23	101	16
Austria	4	63	36	19	35	211	12
Hungary	8	28	24	21	20	133	20
U.S.S.R.	17	50	10	13	92	209	34
Italy	3	177	33	53	90	371	19
Canada	160	1,426	770	696	639	3,832	210
Mexico	14	0	0	0	4	20	4
All Other Not Reported	29	486	268	156	322	1,621	92

	Groveland	Hazel Park	Highland	Holly Twp.	Holly Vill.	Huntington Woods	Independence Clarkston
Total Foreign Born	188	6,829	807	238	422	3,433	1,526
Foreign Born	33	1,861	199	80	119	914	322
Native Born of Foreign or Mixed Parentage	155	4,968	608	158	303	2,519	1,204
United Kingdom	20	730	177	40	17	333	244
Ireland	4	86	8	0	4	44	8
Norway	5	32	11	4	4	20	13
Sweden	9	69	16	7	13	54	45
Germany	14	582	143	22	101	304	145
Poland	8	992	40	8	5	396	63
Czechoslovakia	13	80	3	0	16	64	12
Austria	17	171	19	0	0	96	17
Hungary	0	139	15	0	0	120	39
U.S.S.R.	4	201	19	22	5	717	47
Italy	4	561	22	0	11	37	97
Canada	37	2,126	237	87	198	702	618
Mexico	0	26	0	0	0	0	8
All Other Not Reported	43	1,034	97	42	48	546	170
	Keego Harbor	Lake Angelus	Lake Orion	Lathrup Village	Lyon Twp.	Madison Heights	Milford
Total Foreign Born	487	36	571	1,129	508	8,253	779
Foreign Born	125	6	161	219	114	1,959	130
Native Born of Foreign or Mixed Parentage	362	30	410	910	394	6,294	649
United Kingdom	92	5	89	159	66	901	126
Ireland	4	0	4	12	17	160	34
Norway	4	0	17	13	0	86	20
Sweden	16	9	15	29	0	105	16
Germany	59	7	60	188	88	654	80
Poland	11	0	44	83	19	1,098	30
Czechoslovakia	0	0	4	9	0	154	0
Austria	13	0	8	35	17	176	4
Hungary	8	0	13	29	4	91	13
U.S.S.R.	4	0	0	16	12	217	13
Italy	9	0	22	39	27	664	26
Canada	206	9	236	279	162	2,872	317
Mexico	5	0	16	16	0	31	0
All Other Not Reported	56	6	43	222	96	1,044	100

(Foreign Born Cont'd)

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- 3 -

	Milford Twp.	Northville	Novi Vill. Novi Twp.	Oak Park	Oakland	Orion Twp.	Oxford
Total Foreign Born	232	168	1,366	18,247	475	1,530	505
Foreign Born	58	44	330	5,085	105	334	138
Native Born of Foreign or Mixed Parentage	265	124	1,036	13,162	370	1,196	367
United Kingdom	47	42	230	1,139	97	241	61
Ireland	8	3	24	85	0	30	8
Norway	0	12	16	56	8	29	0
Sweden	4	4	15	96	20	29	12
Germany	66	22	224	851	79	153	99
Poland	15	0	100	3,457	26	58	9
Czechoslovakia	8	5	15	427	0	0	0
Austria	0	0	24	659	13	13	29
Hungary	4	3	48	590	0	31	4
U.S.S.R.	4	0	31	5,490	25	27	9
Italy	4	12	22	468	33	50	4
Canada	141	58	445	2,668	113	617	191
Mexico	0	0	0	0	0	114	24
All Other Not Reported	22	7	172	2,261	61	138	55

	Oxford Twp.	Pleasant Ridge	Pontiac	Pontiac Twp.	Quaker Wood Creek	Rochester	Rose Twp.
Total Foreign Born	392	1,115	14,855	1,302	4,986	1,101	200
Foreign Born	64	341	4,446	278	1,167	284	44
Native Born of Foreign or Mixed Parentage	328	774	10,409	1,024	3,819	817	156
United Kingdom	44	278	2,044	229	825	261	23
Ireland	20	16	343	40	79	16	4
Norway	4	4	151	35	57	24	0
Sweden	0	25	465	25	159	24	0
Germany	58	117	1,428	140	600	251	47
Poland	14	39	744	62	362	9	8
Czechoslovakia	8	8	218	18	98	4	4
Austria	0	8	263	34	77	25	0
Hungary	0	7	218	4	109	0	5
U.S.S.R.	0	16	496	13	70	7	0
Italy	0	42	702	20	215	16	0
Canada	151	351	4,475	492	1,757	360	73
Mexico	0	0	1,051	8	27	0	9
All Other Not Reported	93	204	2,257	182	551	104	27

(Foreign Born Cont'd)

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- 4 -

	Royal Oak	Royal Oak Twp.	South Lyon	Southfield	Springfield	Sylvan Lake	Troy
Total Foreign Born	24,315	186	229	11,401	461	420	5,101
Foreign Born	6,774	58	43	3,321	102	101	1,391
Native Born of Foreign or Mixed Parentage	17,541	128	186	8,080	359	319	3,710
United Kingdom	4,151	3	29	1,521	75	79	750
Ireland	560	0	9	152	17	10	19
Norway	223	0	0	132	4	9	37
Sweden	346	0	0	283	11	5	89
Germany	2,353	6	44	975	88	81	526
Poland	1,481	3	13	1,078	8	15	574
Czechoslovakia	280	0	4	141	0	0	77
Austria	544	7	17	317	0	7	85
Hungary	281	6	21	232	0	3	69
U.S.S.R.	514	29	4	862	0	0	100
Italy	989	3	13	854	18	4	314
Canada	8,971	50	48	3,209	182	130	1,817
Mexico	68	0	0	8	0	0	19
All Other Not Reported	3,554	79	27	1,637	58	77	622

	Walled Lake	Waterford	West Bloomfield Orchard Lake	White Lake	Wixom	Wolverine
Total Foreign Born	668	8,487	3,856	1,993	505	506
Foreign Born	174	1,988	977	510	158	98
Native Born of Foreign or Mixed Parentage	494	6,499	2,879	1,483	347	408
United Kingdom	111	1,316	733	336	59	61
Ireland	12	205	62	35	4	4
Norway	4	131	29	44	7	8
Sweden	16	280	129	29	16	16
Germany	81	876	328	193	46	58
Poland	24	416	256	138	4	88
Czechoslovakia	5	81	46	30	0	4
Austria	12	126	43	20	9	12
Hungary	4	67	49	21	0	4
U.S.S.R.	4	125	94	47	7	4
Italy	24	310	127	79	14	24
Canada	269	3,234	1,374	765	204	168
Mexico	0	186	4	6	0	0
All Other Not Reported	102	1,134	582	250	135	55

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FOREIGN STOCK BY MINOR CIVIL DIVISION; OAKLAND COUNTY: 1960

	Addison	Avon Township	Berkley City	Beverly Hills Village	Birmingham	Bloomfield Hills, City	Bloomfield Township	Brandon Twp. Ortonville V.	Clawson City
Total Foreign	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Foreign Born	23.7	24.5	26.5	26.4	27.1	27.5	23.6	16.9	24.9
Native, Foreign or Mixed Parentage	76.3	75.5	73.5	73.6	72.9	72.5	76.4	83.1	75.1
United Kingdom	8.8	15.5	18.0	13.6	18.9	17.0	15.0	21.2	17.1
Ireland (Eire)	1.0	1.2	2.4	2.8	2.7	2.1	1.9	1.6	2.6
Norway	0.8	1.1	0.6	1.0	0.7	3.0	1.5	-----	0.8
Sweden	-----	2.3	2.0	2.5	3.5	7.9	2.7	2.7	1.6
Germany	20.7	11.6	8.7	13.1	10.3	9.8	10.7	22.5	7.1
Poland	11.6	5.3	5.9	8.6	4.2	0.7	6.5	6.4	8.5
Czechoslovakia	1.0	2.2	0.5	1.7	1.0	-----	0.8	-----	2.4
Austria	-----	1.3	2.0	2.1	1.2	2.9	2.5	0.8	1.7
Hungary	3.0	1.4	1.0	1.4	1.7	2.9	1.6	1.6	0.8
U.S.S.R.	2.0	1.2	1.3	4.4	1.6	2.3	3.8	3.3	1.3
Italy	2.8	3.3	5.1	6.7	4.0	4.3	3.6	0.6	4.8
Canada	38.7	39.0	37.0	32.3	36.0	29.6	32.1	31.0	38.2
Mexico	-----	2.2	0.2	0.3	0.1	-----	0.1	2.7	-----
All Other Not Reported	9.6	12.4	15.3	9.5	14.1	17.5	17.2	5.6	13.1

TABLE A-49
FOREIGN STOCK BY MINOR CIVIL DIVISION; CAKLAND COUNTY: 1960

	Commerce Township	Farmington City	Farmington Township	Quakentown Woodcreek F.	Ferndale City	Franklin Bingam Farms	Groveland Township	Hazel Park	Highland Township
Total Foreign Stock	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Foreign Born	23.6	21.9	24.5	23.4	33.2	23.2	17.6	27.3	24.7
Native, Foreign or Mixed Parentage	76.4	78.1	75.5	76.6	66.8	76.8	82.4	72.7	75.3
United Kingdom	14.3	15.0	13.2	16.5	20.3	10.8	16.0	10.7	21.9
Ireland	0.9	2.7	2.5	1.6	2.2	2.1	2.1	1.3	1.0
Norway	2.5	0.4	1.2	1.1	0.7	2.7	2.7	0.5	1.4
Sweden	3.9	3.7	1.9	3.2	1.7	3.0	4.8	1.0	2.0
Germany	16.2	12.1	10.2	12.0	8.1	16.4	7.4	8.5	17.6
Poland	5.7	7.9	9.5	7.3	6.0	7.2	4.3	14.5	5.0
Czechoslovakia	1.0	1.6	1.2	2.0	0.9	2.3	6.9	1.2	0.4
Austria	1.7	1.1	1.8	1.5	2.0	1.7	9.0	2.5	2.4
Hungary	1.2	1.2	1.0	2.2	1.2	2.8	-----	2.0	1.9
U.S.S.R.	0.5	0.8	4.6	1.4	2.0	4.8	2.1	2.9	2.4
Italy	1.6	3.1	4.5	4.3	3.5	2.7	2.1	8.2	2.7
Canada	37.5	41.2	32.2	35.3	36.0	29.8	19.7	31.2	29.3
Mexico	-----	-----	0.2	0.5	0.2	0.6	-----	0.4	-----
All Other Not Reported	13.0	9.2	16.2	11.1	13.2	13.1	22.9	15.1	12.0

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FOREIGN STOCK BY MINOR CIVIL DIVISION; OAKLAND COUNTY: 1960

	Holly Township	Holly Village	Huntington Woods City	Independence Township	Keego Harbor	Lake Angelus Village	Lake Orion Village	Lathrup Village
Total Foreign Stock	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Foreign Born	33.6	28.2	26.6	21.1	25.7	16.7	28.2	19.4
Native, Foreign or Mixed Parentage	66.4	71.8	73.4	78.9	74.3	83.3	71.8	80.6
United Kingdom	19.3	4.0	9.7	16.0	18.9	13.9	15.6	14.1
Ireland	-----	0.9	1.3	0.5	0.8	-----	0.7	1.1
Norway	1.7	0.9	0.6	0.9	0.8	-----	3.0	1.2
Sweden	2.9	3.1	1.6	2.9	3.3	25.0	2.6	2.6
Germany	9.2	23.9	8.9	9.5	12.1	19.4	10.5	16.6
Poland	3.4	1.2	11.5	4.1	2.3	-----	7.7	7.3
Czechoslovakia	-----	3.8	1.9	0.8	-----	-----	0.7	0.8
Austria	-----	-----	2.8	1.1	2.7	-----	1.4	3.1
Hungary	-----	-----	3.5	2.6	1.6	-----	2.3	2.6
U.S.S.R.	9.2	1.2	20.9	3.1	0.8	-----	-----	1.4
Italy	-----	2.6	1.1	6.4	1.8	-----	3.9	3.5
Canada	36.7	46.9	20.4	40.6	42.4	25.0	41.3	24.6
Mexico	-----	-----	-----	0.5	1.0	-----	2.8	1.4
All Other Not Reported	17.6	11.4	15.9	11.1	11.5	16.7	7.5	19.7

TABLE A-49
FOREIGN STOCK BY MINOR CIVIL DIVISION; OAKLAND COUNTY: 1960

	Lyon Township	Madison Hts. City	Milford Township	Milford Village	Northville City	Novi Vil. & Twp.	Oak Park	Oakland Township
Total Foreign Stock	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Foreign Born	22.4	23.7	18.0	16.7	26.1	24.2	27.9	22.1
Native, Foreign or Mixed Parentage	77.6	76.3	82.0	83.3	73.9	75.8	72.1	77.9
United Kingdom	13.0	10.9	14.6	16.1	25.0	16.8	6.2	20.4
Ireland	3.3	1.9	2.5	4.4	1.8	1.8	0.5	-----
Norway	-----	1.0	-----	2.6	7.1	1.2	0.3	1.7
Sweden	-----	1.3	1.2	2.1	2.4	1.1	0.5	4.2
Germany	17.3	7.9	20.4	10.3	13.1	16.4	4.7	16.6
Poland	3.7	13.3	4.6	3.9	-----	7.3	18.9	5.5
Czechoslovakia	-----	1.9	2.5	-----	3.0	1.1	2.3	-----
Austria	3.3	2.1	-----	0.5	-----	1.8	3.6	2.7
Hungary	0.8	1.1	1.2	1.7	1.8	3.5	3.2	-----
U.S.S.R.	2.4	2.6	1.2	1.7	-----	2.3	30.0	5.3
Italy	5.3	8.0	1.2	3.3	7.1	1.6	2.6	6.9
Canada	32.0	34.9	43.8	40.6	34.5	32.6	14.6	23.9
Mexico	-----	0.4	-----	-----	-----	-----	-----	-----
All Others Not Reported	18.9	12.7	6.8	12.8	4.2	12.6	12.4	12.8

TABLE A-49
FOREIGN STOCK BY MINOR CIVIL DIVISION; OAKLAND COUNTY: 1960

	Orion Township	Oxford Village	Oxford Township	Pleasant Ridge	Pontiac City	Pontiac Township	Rochester Village	Rose Township
Total Foreign Stock	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Foreign Born	21.8	27.3	16.3	30.6	29.9	21.4	25.8	22.0
Native, Foreign, or Mixed Parentage	78.2	72.7	83.7	69.4	70.1	78.6	74.2	78.0
United Kingdom	15.7	12.1	11.2	24.9	13.8	17.6	23.7	11.5
Ireland	2.0	1.6	5.1	1.4	2.3	3.1	1.5	2.0
Norway	1.9	-----	1.0	0.4	1.0	2.7	2.2	-----
Sweden	1.9	2.4	-----	2.2	3.1	1.9	2.2	-----
Germany	10.0	19.6	14.8	10.5	9.6	10.8	22.8	23.5
Poland	3.8	1.8	3.6	3.5	5.0	4.8	0.8	4.0
Czechoslovakia	-----	-----	2.0	0.7	1.5	1.4	0.4	2.0
Austria	0.8	5.7	-----	0.7	1.8	2.6	2.3	-----
Hungary	2.0	0.8	-----	0.6	1.5	0.3	-----	2.5
U.S.S.R.	1.8	1.8	-----	1.4	3.3	1.0	0.6	-----
Italy	3.3	0.8	-----	3.8	4.7	1.5	1.5	-----
Canada	40.4	37.7	38.6	31.6	30.1	37.8	32.6	36.5
Mexico	7.4	4.8	-----	-----	7.1	0.6	-----	4.5
All Others Not Reported	9.0	10.9	23.7	18.3	15.2	14.0	9.4	13.5

TABLE A-49
 FOREIGN STOCK BY MINOR CIVIL DIVISION; OAKLAND COUNTY: 1960

	Royal Oak City	Royal Oak Township	South Lyon City	Southfield	Springfield Township	Sylvan Lake City	Troy City	Walled Lake City
Total Foreign Stock	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Foreign Born	27.9	31.2	18.8	29.1	22.1	24.0	27.3	26.0
Native, Foreign or Mixed Parentage	72.1	68.8	81.2	70.9	77.9	76.0	72.7	74.0
United Kingdom	17.1	1.6	12.7	13.3	16.3	18.8	14.6	16.6
Ireland	2.3	-----	3.9	1.3	3.7	2.4	0.4	1.8
Norway	0.9	-----	-----	1.2	0.9	2.1	0.7	0.6
Sweden	1.4	-----	-----	2.5	2.4	1.2	1.8	2.4
Germany	9.7	3.2	19.2	8.6	19.1	19.3	10.3	12.1
Poland	6.1	1.6	5.7	9.5	1.7	3.6	11.3	3.6
Czechoslovakia	1.2	-----	1.7	1.2	-----	-----	1.5	0.7
Austria	2.2	3.8	7.4	2.8	-----	1.7	1.7	1.8
Hungary	1.2	3.2	9.2	2.0	-----	0.7	1.4	0.6
U.S.S.R.	2.1	15.6	1.7	7.6	-----	-----	2.0	0.6
Italy	4.1	1.6	5.7	7.5	3.9	1.0	6.2	3.6
Canada	36.8	26.9	21.0	28.0	39.4	30.9	35.5	40.3
Mexico	0.3	-----	-----	0.1	-----	-----	0.4	-----
All Others Not Reported	14.6	42.5	11.8	14.4	12.6	18.3	12.2	15.3

TABLE A-49
 FOREIGN STOCK BY MINOR CIVIL DIVISION; OAKLAND COUNTY: 1960

	Waterford Township	W. Bloomfield Township	White Lake Township	Wixom City	Wolverine Lake, Village
Total Foreign Stock	100.0	100.0	100.0	100.0	100.0
Foreign Born	23.8	25.3	25.6	31.3	19.4
Native, Foreign or Mixed Parentage	76.2	74.7	74.4	68.7	80.6
United Kingdom	14.9	19.0	16.8	11.7	12.0
Ireland	2.3	1.6	1.8	0.8	0.8
Norway	0.9	0.8	2.2	1.4	1.6
Sweden	3.6	3.3	1.5	3.2	3.2
Germany	10.1	8.5	9.7	9.1	11.5
Poland	4.1	6.6	6.9	0.8	17.4
Czechoslovakia	1.0	1.2	1.5	-----	0.8
Austria	1.5	1.1	1.0	1.8	2.4
Hungary	1.0	1.3	1.1	-----	0.8
U.S.S.R.	1.8	2.4	2.4	1.4	0.8
Italy	3.7	3.3	4.0	2.8	4.7
Canada	38.1	35.7	38.3	40.3	33.1
Mexico	3.0	0.1	0.3	-----	-----
All Others Not Reported	1.40	15.1	12.5	26.7	10.9

	16	17	18	19	20	21	22
	Hazel Park	Highland Twp.	Holly Twp.	Holly Village	Huntington Woods	Independence Twp.	Keego Harbor
Total Enrolled	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Kindergarten	9.5	8.0	8.4	9.6	6.8	12.5	7.0
Public	98.7	100.0	93.7	100.0	94.0	98.1	100.0
Private	1.3	---	6.3	---	6.0	1.9	---
Elementary (1 to 8 yrs.)	67.9	68.6	50.5	69.9	62.2	68.5	61.1
Public	88.8	100.0	86.5	98.7	87.5	98.5	95.2
Private	11.2	---	13.5	1.3	12.5	1.5	4.8
High School (1 to 4 yrs.)	20.3	21.6	35.5	18.6	24.0	17.4	31.9
Public	94.7	98.6	92.6	97.5	80.6	96.5	94.0
Private	5.3	1.4	7.4	2.5	19.4	3.5	6.0
College	2.3	1.8	5.6	1.9	7.0	1.6	---

	23 Lake Angelus	24 Lake Orion	25 Lathrup Village	26 Lyon Twp.	27 Madison Heights	28 Milford Twp.	29 Milford Village	30 Northville City
Total Enrolled	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Kindegarten	---	11.0	5.2	8.7	13.8	7.0	13.9	13.2
Public	---	93.5	93.0	100.0	98.5	100.0	100.0	100.0
Private	---	6.5	7.0	---	1.5	---	---	---
Elementary (1 to 8 yrs.)	30.8	62.4	63.8	65.6	66.9	70.2	66.6	56.9
Public	100.0	83.5	62.6	99.2	88.3	100.0	99.5	100.0
Private	---	16.5	37.4	0.8	11.7	---	0.5	---
High School (1 to 4 yrs.)	69.2	25.3	24.0	20.1	15.1	22.1	17.0	21.8
Public	100.0	97.7	80.0	92.6	95.6	91.3	96.3	86.3
Private	---	2.3	20.0	7.4	4.4	8.7	3.7	13.7
College	---	1.3	7.0	5.6	4.2	0.7	2.5	8.1

	31 Novi	32 Oak Park	33 Oakland Twp.	34 Orion Twp.	35 Oxford Village	36 Oxford Twp.	37 Pleasant Ridge	38 Pontiac City	39 Pontiac Twp.	40 Quaker Town	41 Rochester
Total Enrolled	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Kindergarten	7.4	10.6	8.6	10.5	10.6	8.6	7.1	9.1	10.4	8.9	6.4
Public	100.0	99.3	100.0	100.0	100.0	71.4	100.0	97.3	96.4	98.6	100.0
Private	---	0.7	---	---	---	28.6	---	2.7	3.6	1.4	---
Elementary (1 to 8 yrs.)	70.6	66.3	67.8	67.7	60.3	65.2	60.2	68.1	67.1	67.4	66.4
Public	89.4	86.4	88.9	94.7	100.0	87.8	90.0	91.5	96.6	89.7	86.4
Private	10.6	13.6	11.1	5.3	---	12.2	10.0	8.5	3.4	10.3	13.6
High School (1 to 4 yrs.)	20.1	16.8	22.6	21.0	24.6	22.7	28.2	19.9	20.1	21.0	23.3
Public	93.5	94.1	100.0	97.9	89.4	96.8	79.3	88.4	94.4	82.1	100.0
Private	6.5	5.9	---	2.1	10.6	3.2	20.7	11.6	5.6	17.9	---
College	1.9	6.3	1.0	0.8	4.5	3.5	4.5	2.9	2.4	2.7	3.9

	42 Rose Twp.	43 Royal Oak	44 Royal Oak Twp.	45 South Lyon Twp.	46 Southfield	47 Springfield Twp.	48 Sylvan Lake	49 Troy	50 Walled Lake
Total Enrolled	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Kindergarten	9.0	9.1	8.6	14.6	10.0	7.9	7.2	9.6	9.9
Public	100.0	96.7	96.1	100.0	96.6	100.0	91.7	99.2	100.0
Private	---	3.3	3.9	---	3.4	---	8.3	0.8	---
Elementary (1 to 8 yrs.)	65.9	65.1	72.5	56.8	62.6	61.1	65.3	68.3	69.2
Public	95.2	76.7	96.8	100.0	80.9	99.3	88.9	92.0	96.7
Private	4.8	23.3	3.2	---	19.1	0.7	11.1	8.0	3.3
High School (1 to 4 yrs.)	20.6	20.3	17.4	23.8	20.9	21.6	23.9	19.9	20.0
Public	95.6	84.5	97.5	100.0	91.5	91.0	79.0	91.6	100.0
Private	4.4	15.5	2.5	---	8.5	9.0	21.0	8.4	---
College	4.5	5.5	1.5	4.8	6.5	9.4	3.6	2.2	0.9

	51 Waterford	52 West Bloomfield Twp.	53 White Lake	54 Wixom	55 Wolverine Lake
Total Enrolled	100.0%	100.0%	100.0%	100.0%	100.0%
Kindergarten	10.0	7.8	9.4	7.7	9.7
Public	97.2	96.5	98.2	100.0	95.9
Private	2.8	3.5	1.8	---	4.1
Elementary (1 to 8 yrs.)	68.0	66.0	68.0	64.3	69.9
Public	92.0	82.2	94.9	93.4	81.7
Private	8.0	17.8	5.1	6.6	18.3
High School (1 to 4 yrs.)	19.7	21.2	20.7	26.1	18.8
Public	93.4	93.5	99.2	100.0	97.2
Private	6.6	6.5	0.8	---	2.8
College	2.3	5.0	1.9	1.9	1.6