# Wisconsin's changing population. 1942

Madison, Wisconsin: University of Wisconsin, 1942

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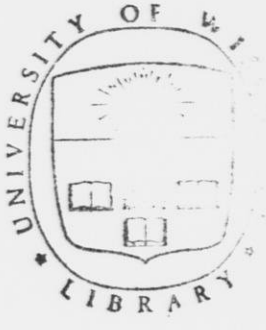
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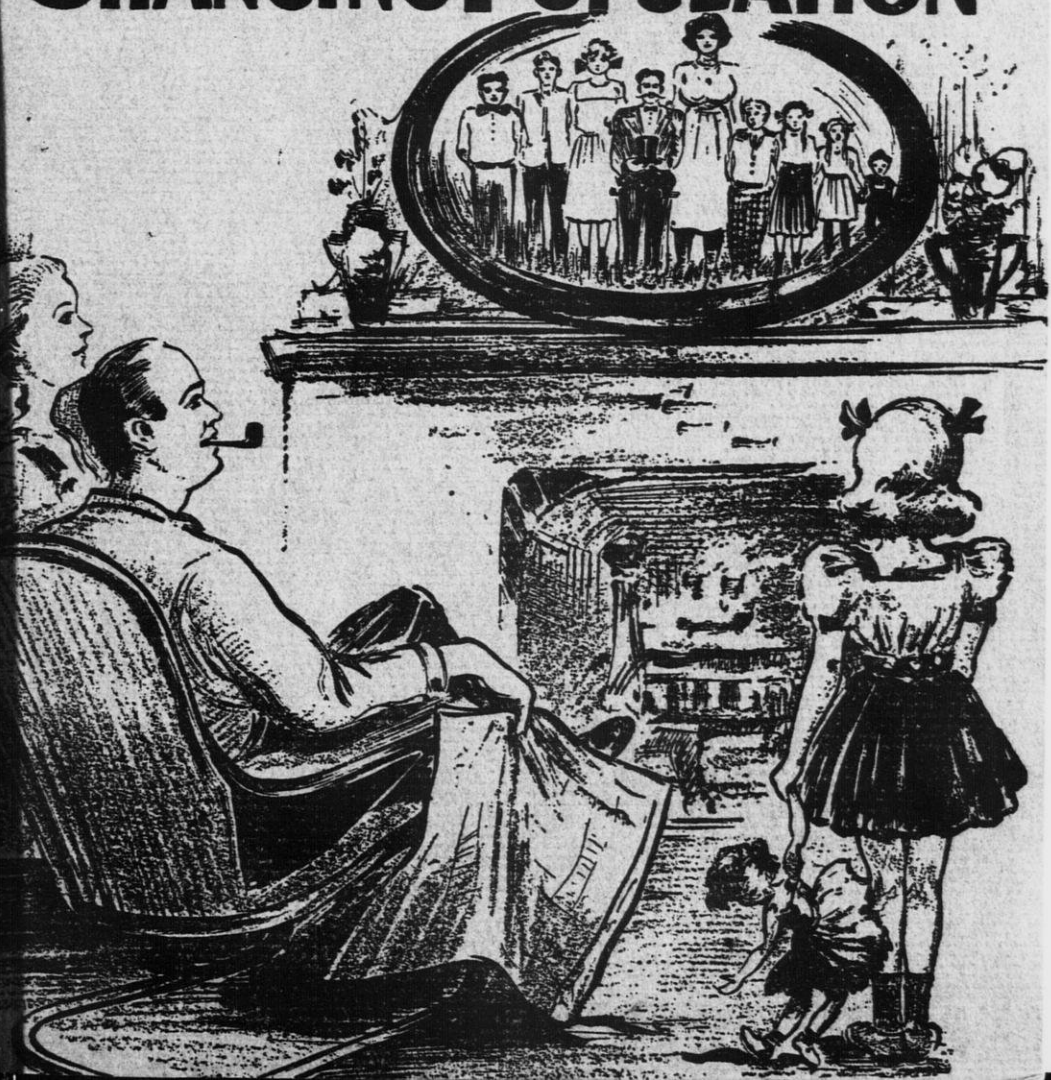
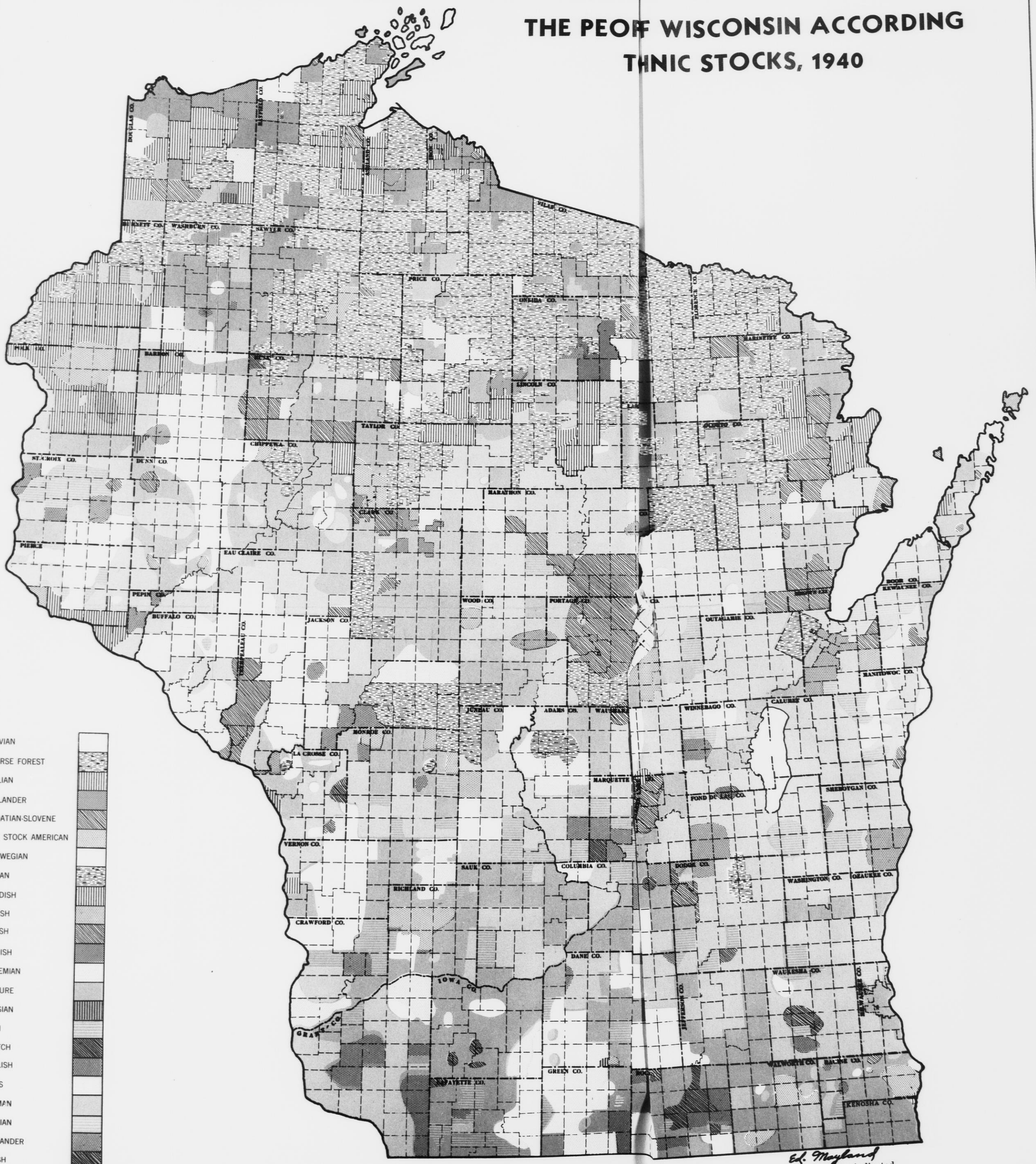
# Wisconsin's CHANGING POPULATION



# THE PEOPLE OF WISCONSIN ACCORDING TO ETHNIC STOCKS, 1940




Ed. Mayland

Census data and other public and private records were used in delineating the nationality areas. In some localities the indicated nationality group might include all of the residents; in those areas where two or three groups were present, the one clearly in dominance was indicated. Where no single group appeared dominant, the area was placed in the "mixed" category. The complete pattern shows clearly how every major European nationality group has contributed to the building of Wisconsin.

Bulletin of the University of Wisconsin
Serial No. 2642 General Series No. 2426 October, 1942

# WISCONSIN'S CHANGING POPULATION



PUBLICATION IX

ISSUED MONTHLY BY THE UNIVERSITY OF WISCONSIN AT MADISON, WISCONSIN. ENTERED AS SECOND-CLASS MATTER, JULY 11, 1916, AT THE POST OFFICE AT MADISON, WISCONSIN, UNDER THE ACT OF CONGRESS OF AUGUST 24, 1912. . . .

PUBLISHED AT MADISON, WISCONSIN
October, 1942

# CONTENTS

# FOREWORD

THIS is the ninth in the series of Science Inquiry reports that has been published by the University. The previous reports have dealt with various subjects of broad general interest that cut across the conventional confines of academic departments. In these emphasis has been given particularly to the conservation of Wisconsin's natural resources, such as soil, water, minerals, forests, and wildlife. This report might very properly carry the sub-title, "The Conservation of Wisconsin's Human Resources."

The Science Inquiry is not a formal division of the University, but is instead a voluntary cooperative effort on the part of staff members who have the desire to: (1) insure that the research personnel and facilities of the University are directed toward the solution of problems which concern the people of Wisconsin; (2) familiarize each staff member with all that is being undertaken throughout the University in his particular field of interest; and (3) learn ways in which the University's program of teaching, research, or state service can be made more effective in particular activities or fields of study being considered by the several committees working under the sponsorship of the Science Inquiry.

In recent years the Science Inquiry has been under the leadership of C. K. Leith, E. B. Fred, and Noble Clark.

The membership of the committee studying Wisconsin's population problems included: William Beard (Political Science), Elizabeth Brandeis (Economics), Noble Clark (Agricultural Experiment Station), Helen I. Clarke (Sociology), L. J. Cole (Genetics), John Guy Fowlkes (Education), John M. Gaus (Political Science), J. L. Gillin (Sociology), M. F. Guyer (Zoology), Dr. John W. Harris (Obstetrics and Gynecology), George W. Hill (Rural Sociology), W. W. Howells (Anthropology), Dr. Amy Louise Hunter (Bureau of Maternal and Child Health, State Board of Health), Dr. William C. Keettel (Bureau of Maternal and Child Health, State Board of Health), George M. Keith (Division of Public Assistance, State Department of Public Welfare), J. H. Kolb (Rural Sociology), Dr. W. F. Lorenz (Neuropsychiatry), T. C. McCormick (Sociology), H. Scudder Mekeel (Anthropology), L. A. Salter, Jr. (Agricultural Economics), Mrs. Sophie Siebecker (Family Welfare and Childrens' Service Association, Madison), Arne Skaug (Economics), Glenn T. Trewartha (Geography), and Edwin E. Witte (Economics). The manuscript of the report was prepared by Noble Clark, chairman, and George W. Hill, secretary, of the committee.

The persons whose names appear in the previous paragraph wish to have it understood that they subscribe individually to the statements made in this report, and not as representatives of the agencies or departments in which they are employed.

The committee was grateful for the participation and counsel of the individuals connected with other public agencies who joined with the University staff members in making the survey and drawing up the report. Special mention should be made of the deep interest and active cooperation given the project by the late Dr. G. E. Seaman, Director of the Division of Mental Hygiene of the State Department of Public Welfare. It is regretted that his untimely death prevented his reading the final draft of the committee's report and authorizing his name as one of the sponsors, for he contributed much toward the preparation of the document.

To a University administrator, it seems a matter worthy of more than passing note that these twenty-four specialists, from more than a dozen fields of interest, were able to find so much common ground on which they could agree, when we remember that so large a part of the subject matter they have considered is highly

controversial. It is my conviction that this group has made a contribution to academic procedure when it has shown how to synthesize and to coordinate such a large body of information dealing with public welfare and human conservation. It is obvious that the considered judgment of these authorities in their several specialities should be invaluable in supplying laymen and public leaders with the information on which further progress can be made in making the most of our state's human resources.

When this appraisal of the population of our state was undertaken in 1939, large-scale unemployment and public assistance were major maladjustments contributing to the problems of our commonwealth. As I write this foreword, we are at war. The complexion of our population problems has undergone a change, so that in contrast to the "depression thirties" we are now concerned with the recruitment of all available man power, and woman power as well, to fill the jobs at hand.

War does not do away with population problems. It merely highlights and brings them into focus. For example, facts regarding the physical disability of large numbers of our youth, and of the shortage of skilled workmen, indicate two of the serious difficulties which have persisted for years, but which the war now brings to the front. The war-time demand for a fighting force that is physically fit and mentally sound, and for a citizenry that is capable of meeting the intricate demands of a hitherto undreamed of industrial production, only serve to emphasize the central theme of this bulletin—that on the quality of a nation's human resources rests its ability to survive and to push civilization forward.

At this time when totalitarian demagogues are using their skilled experts of propaganda to depreciate and to destroy all of the ideals and values of democratic population policy, it is important that the University publish this statement concerning our population assets and resources, pointing out some of our most serious shortcomings, and making recommendations which seem wise on the basis of the facts now available.

After this war will come the years of reconstruction. There will be the gigantic tasks of bringing about financial stability and the preventing of unemployment. We will need to restore international trade, rehabilitate the homeless, and feed the hungry. Normal family life will have to be reestablished. The loss of youthful man power will bring about a decline in marriages and in births. Inevitably, therefore, the quality and quantity of our population will be of primary importance in building for a successful national and international democracy.

We can not drift in this area as mere spectators or even as reporters. The more effective our thinking and actions during the present period of radical change and readjustment, the easier will be the tasks ahead. It is my hope that the people of Wisconsin will study the results of this inquiry to the end that our public policies as regards population matters shall be formulated in the light of the best information and technical counsel available. "Population is becoming, and must become still more, the subject of political discussion everywhere—in the folk-parliaments of street, workshop, and family circle, as well as in the parliaments of state. . . ."

C. A. DYKSTRA.

CHAPTER I

# A PERSPECTIVE

ONE HUNDRED years have passed since Wisconsin, as a territory, was first included in the federal census. In these one hundred years—1840 to 1940—the population of the state has increased one hundred-fold—from 30,000 to 3,000,000. The most rapid *rate* of increase was during the early years, so that thirty years after the first census—by 1870—the population had increased to 1,000,000. Within another thirty years—by 1900—it was 2,000,000.

The rapid early development of Wisconsin was in part a reflection of a general acceleration of population growth in Europe and America. Through the lowering of mortality, especially infant mortality, the introduction of sanitary measures, and the resulting increased longevity, the population in America and in Europe continued to grow throughout most of the nineteenth century. The retarding of the rate in the twentieth century in Wisconsin is again a partial reflection of a similar trend in the larger national and international population areas.

*Minerals, Timber, and Fertile Soils Brought Early Settlers.*

As interesting as these figures may be, their real meaning comes to light when we consider some of the forces that have affected this growth. As time is reckoned, a hundred years may be a very short period, but the single century which covers the statistically-recorded history of Wisconsin has been studded with a diversity of influential forces. The expansion of the mining industry in the southwestern area of the state, cessation of Indian warfare in the fourth decade of the past century, the resulting availability of the rich timber and agricultural lands—together with other developing factors, caused the population to increase more than twenty-five-fold during the earliest years of statehood. Subsequently, the numerical increase, decade by decade, has been consistently about 300,000 each decade. The flow of new settlers followed the natural gateways along the waterfront of Lake Michigan, Green Bay, the Wisconsin and Mississippi rivers, and over the Illinois border. It was not until the railroad expansion into the northern third of the state at the turn of the century that permanent settlers located in much of that area.

*Adjustments Necessary Because of Reduction in Population Growth.*

No area, be it a nation or a state, can make the transition from an era of such phenomenal expansion to a period of approaching stability without encountering many problems in adjustment. Any people primarily motivated by expansion and development must necessarily overlook some of the lasting fundamentals from which a sound population-institutional growth emerges. When a single century covers the span from the periods of exploration, development, maturity, and possible decline, problems—social, economic, political, physical—are bound to appear. It is when the plateau of life cycle is reached that we usually stop to take stock of our resources and to consider the advisability of alterations in our behavior.

This stock-taking, it seems, is what has brought the Science Inquiry into existence on the campus of the University of Wisconsin and has led to this present study of the problems of a changing population. Changes inevitably produce strain and instability in our family, community, and institutional life, and in the administration and control of public services. The population equilibrium that is facing Wisconsin does not necessarily imply that it may not be beneficial to the life of the state. Many dynamic factors during the ensuing years will cause classes of the population to continue to increase rapidly, whereas other areas and other classes may continue to decrease or even tend toward gradual extinction.

"The protection and promotion of the interests of the people who comprise a nation are the sole ends of organized national life. Natural resources, industrial institutions, and all forms of social cooperation are valuable only insofar as they contribute to the welfare of the people. The conservation of human resources is therefore a matter of primary national importance." [1] The report of this committee could very well be entitled "Wisconsin and the Conservation of Its Human Resources," and thus follow the tradition of previous reports on the conservation of Wisconsin's natural resources which have been made by committees under the auspices of the Science Inquiry.

*The Scope and Purpose of This Report.*

The problems of a changing population are inevitably reflected in the teaching program of a state university. The subject matter of specific courses, and even the method of presenting this subject matter,

[1] National Resources Committee. *The Problems of a Changing Population*, Washington, May, 1938, p. 11.

changes to meet newly-developed conditions and needs. The objectives of a university's research likewise reflect the changing demands. Starting with these two propositions, this Committee on Wisconsin's Population Problems considered its task to be the following:

*First,* to summarize the essential facts of early settlement, the differential contributions of foreign-born and native-born to the growth of population; outline the numerical aspects of the population of the state in terms of its distribution and composition.

*Second,* to study the trends which are influencing our population—birth and death rates, marriage and divorce rates, changes in occupation —and to suggest the probable consequences of these trends.

*Third,* to attempt a statement of the probable population trends in the future, with their attendant social and economic problems, in the light of past and present developments.

*Fourth,* to inventory the qualitative aspects of our population resources by portraying the growth and present number of the mentally handicapped, the asocial, and the incorrigible, together with their peculiar problems, and the probable effects resulting from the transmission of their traits to their descendants.

*Fifth,* to show the nature of the problems among the disadvantaged classes, the physically handicapped or sick, the unemployed, those receiving general relief, work relief, or pensions, and the otherwise publicly-cared-for population, as well as to suggest the probable magnitude of these problems in the future.

*Sixth,* to evaluate the University's educational program in terms of the present offering of courses on the campus, to consider their adequacy as regards current population problems; to determine if any important gaps exist in these course offerings; to consider any needed research that should be undertaken under the auspices of the state university, separately or cooperatively with other state services and organizations; and to disseminate the information that will make possible a more intelligently-informed professional, legislative, and lay public who can deal constructively with the population problems that are facing the people of Wisconsin.

CHAPTER II

# SETTLEMENT AND POPULATION GROWTH

*Streams of Settlement.*

WISCONSIN, from its earliest days as a home for white Europeans, was as much a part of the international as of the national scene. Jean Nicolet disembarked at the great Winnebago settlement on the shores of Green Bay in 1634. He was French and had come from the French Canadian colonies. Nicolet established no permanent settlement. A Jesuit Father, Allouez, built the first hut for white man on the shore of Lake Superior in Chequamegon Bay before 1660. He established the St. Esprit mission there in 1665 and a similar mission at De-Pere in 1671. Thus the first European settlements in Wisconsin came from France and Canada rather than from England and New England as we might expect. From that date until the close of the French and Indian War, Wisconsin was French territory. The French inhabitants were not settlers in the sense that they desired to develop the territory as a home. They were interested in Wisconsin as a base for their fur trade and as a link in the Great Lakes-Mississippi transportation system which they fondly hoped would lead at length to the Orient. Though their sovereignty over the territory which later became Wisconsin was longer than that of any other culture group, the French left little in the way of permanent culture patterns. They did survey and establish the primary water routes of the territory, and they fixed the sites of, and gave names to, many of the important cities; otherwise their influence is almost negligible.

*The Coming of the British.*

After the French and Indian War, the territory came under British domination. Though this sovereignty ended nominally with the close of the Revolutionary War, actually the British were the real rulers of Wisconsin until the conclusion of the War of 1812. They did little to extend what the French had already achieved. They differed principally from the French in the attitude which they maintained toward the Indian. The French had exploited the Indian economically but accepted him socially. Intermarriage was frequent and not in any sense con-

demned. The British gave the Indian an even lower position: not only did they exploit him economically, but they relegated him to an inferior status. He was not an equal in social matters, and intermarriage was discouraged and opposed. This attitude toward the Indian was accepted by the pioneers who later settled the state, and the attitude largely prevails today.

After the War of 1812, further settlement of Wisconsin began again as a result of an international situation. At that time England had almost a monopoly of the world's lead. Naturally, she had little desire to supply this important raw material for munitions to her new competitor, the American Republic. The Federal Congress was under necessity of securing a native supply of lead. Rumors of lead deposits sent a rush of southern pioneers into Missouri. Then came reports of richer deposits in southwestern Wisconsin. At once a trek of these Jacksonian pioneers headed for Wisconsin and established themselves in what came to be known as Wisconsin's lead region. It was the migrating lead miners from Missouri and Illinois who organized the first permanent settlement in southwestern Wisconsin.

These immigrants from the South were the first to bring organized local government to any considerable area of the state; they likewise dominated the early history of Wisconsin as a federal territory. The early pioneer was frankly exploitative in his attitude toward natural resources. He was not a farmer, but, with little planning on his part, lived off what the land provided. He was preeminently an individualist, accustomed to making his way in difficult situations, spurning the formal authority of law, giving his loyalty to persons, and exulting in personal domination.

In 1825 the population of the lead region of Wisconsin was 200; in 1828 it had risen to 10,000. The territorial legislature had decreed the county as the unit of local government, because this was the unit with which the southern pioneers were familiar. For six out of the twelve years of Wisconsin's life as a territory, the delegate in the national Congress was from the lead region. For eight out of twelve years, the governor of the territory was from that same area. For all twelve years, the chief justice was of that area. These figures give some indication of the tremendous influence of the southern pioneer on early Wisconsin life and culture.

*Yankee Farmers Come from New England and New York.*

The Jacksonian dominance began to break down, however, in the

later 1830's before the rising influence of the Yankee. The New Englander and New Yorker had heard tales of the fertile soil of the new West and had begun to come by the thousands. When the New Englanders arrived, they found lead mining already beginning to decline. Many of the earlier lead miners were moving farther west. Cornish people were beginning to arrive in large numbers, and by the latter part of the decade, they had taken over most of the lead mining. The regard for personal leadership and disregard of formal law put the Southerner in disrepute with the conservative, recently-arrived Germans and Norwegians and other immigrants who threw their support behind the rising tide of Yankee leadership. A significant sign of the rise of the New England and New York influence is the fact that in 1841 the township was made permissible as the unit of local government if the majority of the electors voted in its favor; and when Wisconsin became a state, the township unit of local government was made the uniform pattern.

For a generation, the Yankee was in the saddle culturally. He gave to Wisconsin local government, free and public education; he supported the doctrine of freedom of religion. These were the basic principles which he brought with him in his westward trek, and he wrought them into the constitution and culture of Wisconsin. This he was able to do, not because such principles were in the culture of the many European migrants with which Wisconsin was beginning to be peopled, but because these principles were congenial to the new arrivals. Many of the early immigrants saw in these principles and their expressive institutions opportunities denied them in their home lands. They were consequently readily accepted.

*Continental Europeans Find Opportunities Here.*

After the Civil War, the steadily increasing number of migrant groups with European background exerted a larger influence on the life of the state. Also, by that time the exploitative wheat economy of the New Englander was beginning to deplete the soil. These two facts permitted the rise of what we may perhaps call the Continental European influence, which is the result of the interaction of the European cultures in Wisconsin. Before the influence made itself felt, however, the people had been in Wisconsin for some time. In 1850 the United States census was able to identify and locate the following nationalities: English, Canadian, Welsh, Scotch, Irish, German, Norwegian, Swedish, Dane, Russian, Austrian, Italian, Swiss, Dutch, and Belgian. This accounts for all the important nationality groups now represented in the state,

What about Luxembourgers?

except for the Poles who appear in the census of 1860, the Bohemians in 1870, and the Finns in 1900. It is probable that some of these latter groups were represented earlier, but were counted under some other nationality by virtue of the intricacies of national sovereignties.

The Continental influence, largely German and Norwegian, reflected the centralized governments under which these migrants had once lived. They believed in centralized educational standards for local educational institutions. They became the foundation of the state's greatest agricultural pursuit, dairying.

Dairying was initiated in Wisconsin under the leadership of a few Yankees who had sensed the bankruptcy of wheat culture and who were seeking a more solid and permanent base for agriculture. But dairying was accepted and made a practical working farm industry by the Germans and Swiss preeminently. The Yankees did not wish "to be tied to a cow," but the regularity of the work and of the income were the very things which appealed to the industrious Germans and Swiss. They had brought with them from Europe a familiarity with cheese and butter-making. Their practical pioneering became the basis for the Wisconsin dairy industry of today.

We have shown that they came, but we have not told *why* these people came to Wisconsin. "Land" was the word upon their lips and the dream in their eyes as they came overland or over the sea to this state. Land, first of all, had value as an economic good to be exploited as in the lead mines of the Jacksonian, or the wheat culture of the Yankee, or to be cultivated and improved in the German and Swiss dairy culture. But land meant more than economic wealth to the immigrant. It meant room, a space to stand, elbow-room for him and his family, a chance to be different, to try one's own ideas, to take a place in the sun. And yet more—they sought not only the land but *a* land, a land which offered positive legislation favoring the immigrant, a land which provided free and public education, a land in which religious opportunity was a part of the basic law. Because of "land" in these three senses, the people of the world have come to Wisconsin as to other parts of the United States to build a new culture.

*Census Reflects Changes in Place of Birth and Nationality of State's Citizens.*

The source of Wisconsin population is classified in the census by place of birth. People are either born in Wisconsin or born elsewhere.

The born-elsewhere may be divided into two sub-groups: those born in the United States and its possessions, and those born in foreign countries. The first of these may have sub-classes by state of birth, while the corresponding sub-classes for the second may be country of birth.

In 1850 not more than one-fifth of the 305,000 inhabitants were born in Wisconsin, but thereafter the population replaced itself more rapidly by births within the state than by immigration from without. The next decade showed that almost one-third of the population was born in Wisconsin; by 1880 more than one-half were so born. After 1880 the proportion born within the state rose slowly until in 1930 it reached almost three-fourths of the total.

The majority of the Wisconsin-born came from foreign families or families of foreign stock. In 1850 approximately 46% of the people had been born in other states of the United States, and 36% in foreign countries; but that was the only census report to show more individuals born in the first than in the latter regions. The numbers were approximately equal in 1860, each class constituting about one-third of the whole. The number born in other states fell from 250,600 in 1860 to 206,500 in 1890. The following decades showed a continued rise to 378,438 in 1930. The foreign-born numbers followed an opposite trend. Passing the other-state class in 1860 with a total of 276,900, they increased rapidly to 519,200 in 1890, fell slightly in 1900 and 1910, and dropped more rapidly in the next two decades. The total foreign-born in Wisconsin was 388,300 in 1930, only slightly larger than the number born in other states reported for the same decade. It is quite probable that these two classes will reverse their position in 1940.[2]

At the present time the main contributions to Wisconsin population by immigration are being made by the neighboring states. Those born in Illinois constituted 21% of the out-of-state native births in 1930. Minnesota contributed 18%, Michigan ranked third with 12%, and Iowa next with 10%. Together these four made up only 60% of the total, but no other single state contributed more than 5%. Only one state, New York, sent that many. This has been the approximate picture for the last three decades. The first four decades of Wisconsin state history presented a radically different picture. The periods between these, as represented by the 1890 and 1900 census returns, may be regarded as a transitional period from the old to the new.

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[2] Total foreign-born in 1940, 289,000. Number born in other states not yet available.

Wisconsin today is an outstanding example of that phenomenon which is a peculiar heritage of the United States—a fusion of diverse nationality stocks into one unified commonwealth. Even today, some two or three generations after the arrival of the first immigrants, distinct nationality concentrations can be found, as the frontispiece *People of Wisconsin* reveals. Some are widespread in their coverage; others are mere "cultural islands."

Contemporary Wisconsin, then, is made up of a diversity of cultures. It consists of old stock Americans, of first and second generation Americans from immigrant stocks, and of newly-transformed Americans only recently arrived from their ancestral homelands. It is in this situation in which the temperaments, aptitudes, prejudices, superiorities—all of which stem out of the values and traditions of culture—are fused into the dynamic reality which *is* Wisconsin. Understood and appreciated, these traits form the bulwarks of democracy.

This brief statement of settlement may be familiar knowledge to many. It is recounted, however, so that we may bear in mind the tremendous socio-political forces that, in one brief century, have operated to make present-day Wisconsin what it is. Some historical perspective is desirable before we attempt a consideration of the current problems in our population.

*Population Growth and Distribution.*

In the year 1840, the federal census located and enumerated 30,945 persons in what was then the Territory of Wisconsin. Since that year, the average annual increase of population within the state has been 30,000 persons, a number equivalent to her 1840 population. It will be noted from Table 1 that the percentage increase has been declining; the increase from 1930 to 1940 was only 6.8%, which is the smallest decennial increase since the first census was taken one hundred years ago.

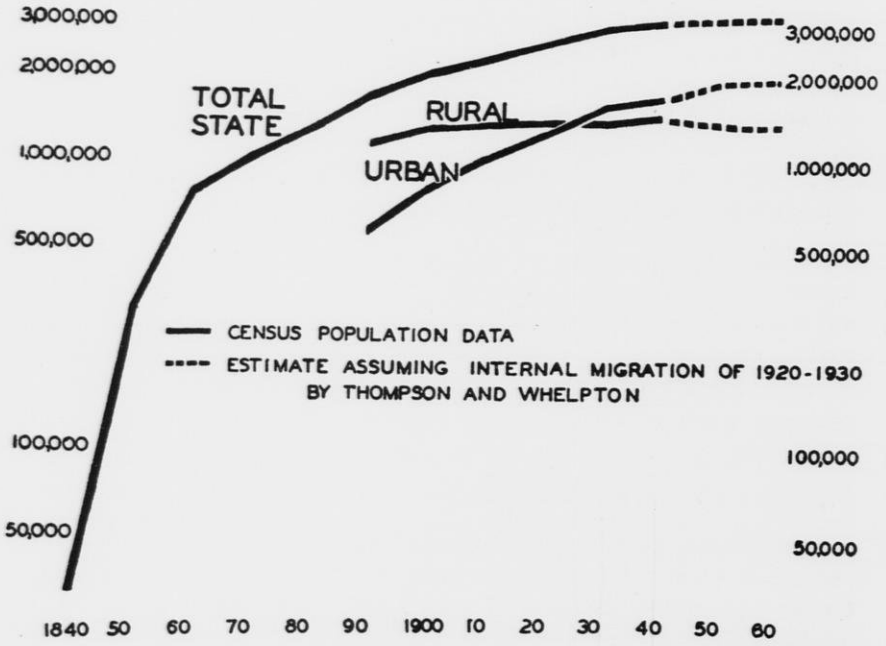
The population of Wisconsin, together with that of the nation as a whole, appears to be approaching stabilization. It must be emphasized, however, that the approaching equilibrium thus indicated is not static but a dynamic equilibrium, in which some large groups are increasing rapidly while others are tending toward extinction.

Figure 1 represents the growth by a curve, giving data for the state as a whole since 1840, and a breakdown for rural and urban population since 1890. This rural-urban breakdown, which was not available prior

to the census of 1890, shows clearly that the growth of the state's population has been due to the much more rapid increase in the urban than in the rural population.

Figure 1.

POPULATION GROWTH OF WISCONSIN IN 100 YEARS




While the rapid growth during the early years was in the rural areas, since 1900 the growth has been chiefly in the cities.

The rate of increase in Wisconsin's population in the last decade exceeded that of Illinois and Iowa but was lower than that of Michigan and Minnesota.

These figures by themselves, however, do not give either a complete or a correct picture. Furthermore, insofar as this report is concerned, we are interested in factors associated with population growth as much as in the mere numbers which describe this growth. It may be

Table 1. Wisconsin's Population Growth

| Year | Population | Pct. increase over preceding decade |
|---|---|---|
| *1840 | 30,945 | —.- |
| 1850 | 305,391 | 886.9 |
| 1860 | 775,881 | 154.1 |
| 1870 | 1,054,670 | 35.9 |
| 1880 | 1,315,497 | 24.7 |
| 1890 | 1,693,330 | 28.7 |
| 1900 | 2,069,042 | 22.2 |
| 1910 | 2,333,860 | 12.8 |
| 1920 | 2,632,067 | 12.8 |
| 1930 | 2,939,006 | 11.7 |
| 1940 | 3,137,587 | 6.8 |

*The figure for 1840 is for the Territory, not the State of Wisconsin.

that an understanding of the geographic, social, and economic factors that have caused the differing density areas of population will aid in suggesting solutions to our present problems. Population is never evenly spread geographically, merely increasing its thickness with the passage of years. Population is rather a series of clusters of persons forming and re-forming themselves about different centers in response to constant economic and social needs and the changing economic and social resources.

*Factors Influencing the Spread of Population.*

The geographical distribution of Wisconsin's population reflects five economic activities which have been successively dominant in the state. Since these activities overlapped, the history of settlement cannot be divided into five distinct periods. Still each of the five in turn played the major role in determining the course of settlement.

The earliest economic activity of white men in the region which later became the state of Wisconsin was fur trading. The fur trader exploited a rich natural resource, not directly, but through trade with the Indians. Hence he sought not the areas where furs were most abundant but rather those where he could best come in contact with Indians coming from a wide territory. Consequently the first white settlements in Wisconsin were along the natural travel routes long used by the aborigines—lakes and rivers.

The second economic activity in Wisconsin was lead mining. As noted above the discovery of lead in southwestern Wisconsin in the 1820's, at a time when that metal was in great demand, brought an influx of population into a region which would not otherwise have been

settled at that early date. By 1828 the miners and their families concentrated in that area outnumbered the population of the rest of the territory.

The third economic activity in Wisconsin was farming, which became important in the 1840's. Farmers in search of free land gradually spread a thin layer of population over the whole southern and central portion of the state. The difficulties of land clearing in the northern pine region, the shorter growing season, and the poorer quality soils all played their part in closing the northern part of the state to early agricultural development. The central sand plains constituted an effective natural barrier against development north of them and helped to bring about a by-passing of northern Wisconsin in favor of a westward expanding agricultural economy.

The evolution of agriculture from the self-sufficing to the commercial stage tended to concentrate agriculture where transportation facilities were available. This meant, in earlier years, along navigable water routes—the many rivers emptying into the Mississippi or Lake Michigan. The spread of the railway net beginning in the fifties freed the farming population from their dependence on waterways. Commercial agriculture also led to concentrations of population in cities and towns which grew up as marketing centers for agricultural products and the manufacturing of goods for which these products were exchanged.

The fourth economic activity to develop was lumbering, which assumed substantial proportions in 1870 and reached a peak in the decade 1890-1900. Up to 1870 the northern third of the state had remained virtually unsettled. By 1910 most of the virgin timber had been cut. With the closing of the saw mills because of the exhaustion of nearby supplies of timber, it became necessary for those who had been dependent on the lumber industry for employment to migrate to the lumber regions of the Far West or to seek other local work. Unfortunately, all too frequently there has been no new local employment that has been adequate to meet the new needs, and for several years there has been a considerable number of former timber and sawmill workers in northern Wisconsin who have had no steady employment.

Finally, manufacturing constitutes the fifth economic activity to develop in Wisconsin. Certain types of small-scale manufacturing to supply local needs went along with agriculture. Small mills and shops were widely scattered through the state. But large-scale manufacturing

grew rapidly only after 1890. From then on it operated to concentrate population in certain areas best suited for industry. For the most part, manufacturing developed in cities and towns which had first grown up as centers of trade.

Before it became important as a manufacturing city, Milwaukee was Wisconsin's principal lake port through which wheat and flour were shipped east. Good transportation facilities are essential for large-scale industrial development—both to bring raw materials together and to get finished products to market. Despite the building of railways, water transportation continued to be advantageous, particularly for bulky commodities such as coal, lumber, and ore. Thus transportation advantages go far to explain the concentration of industry and population in southeastern Wisconsin along Lake Michigan.

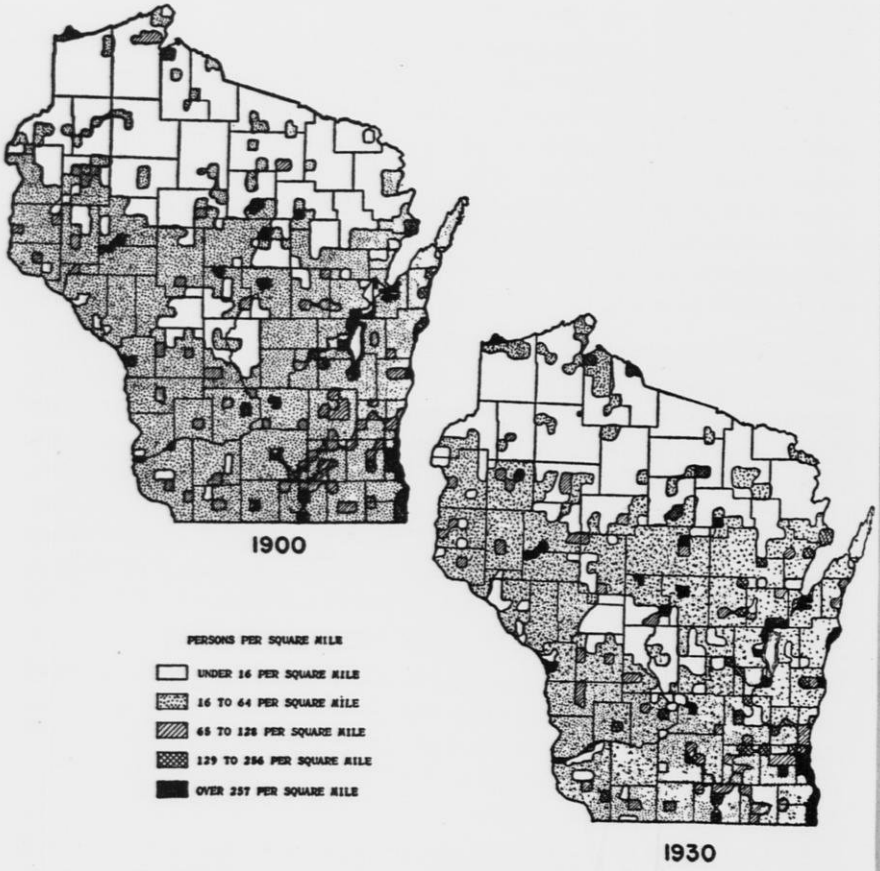
The initial industrial plants attracted a labor supply to these lake-shore cities, which in turn was a factor in attracting other industries. Other industrial concentrations of population developed in the Fox River Valley because of the wood supply available for paper making and the water power furnished by the river. Towns which had started as trade and flour mill centers turned into paper and woodworking cities as flour milling moved on to Minneapolis. Smaller industrial concentrations developed at water power sites in the Rock and Wisconsin river valleys. Wisconsin's industrial activity explains the concentration of 49% of the population in eleven of the seventy-one counties of the state.

That the pattern of settlement was set pretty definitely by 1900, and has altered only slightly since that date, is evident from an examination of Figure 2. That is, the areas of population density in 1900 are still the centers of population. Only minor changes occurred in the intervening period.

Present-day Wisconsin is thus the result of diverse influences that have been active during the past century. Population patterns and developments that were appropriate at one time have now, under our changed conditions, become problems that urgently need public attention.

Figure 2.

AREAS OF POPULATION DENSITY, 1900 AND 1930




Changes in the concentrations of settlement have been of a minor character during the past several decades. The present pattern was quite definitely set by 1900.

Source: Bulletin No. 4, Wis. State Planning Board.

CHAPTER III

# SOME QUANTITATIVE TRENDS IN THE POPULATION OF WISCONSIN

THE approaching stabilization in the growth of the nation and of Wisconsin, referred to in the preceding chapter, is due to several causes. Some of the more obvious ones are: a drastic slowing down in immigration, a lower number of births in varying degrees among different groups, a general aging of the total population, and an increase in the divorce rate. Another factor that is less obvious than any of the foregoing, but one that is perhaps as influential as any, is the trend toward urbanism. With each passing decade, Wisconsin becomes less rural and more urban. City living pulls people into a system of cultural values which brings down the birth rate of an otherwise fertile population.

In Wisconsin and the United States, the birth rate (i.e., total number of births per 1000 population) has shown a steady drop for many decades. It reached the lowest ebb in 1933 in both areas. The birth rate in Wisconsin in that year was 16.8, and in the United States it was 16.6. There has been a gradual, but very slow, upward trend since, resulting in a rate of 17.4 in Wisconsin in 1940.[3] Accurate statistics in this state are available from 1908. The highest rates occurred in the years 1916 and 1918, when they were 24.0 for each year. In the United States the highest rate was recorded in 1915, when it was 25.1.

Although the years 1934 to 1940 show a slight increase, the evidence quite clearly suggests that the long-time trend is downward and that this drop will be more rapid than the rise in the survival rate (i.e., length of life). A peak in the number of people of marriageable age is anticipated about 1945.

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[3] The effect of the "defense boom" of 1940, and of the war, on population growth is well summarized by the Metropolitan Life Insurance Company's *Statistical Bulletin* for February, 1942. It says, "For 1941 we have at present only provisional data, which indicate that the true rate of natural increase for that year will be about 2.8 per 1,000—practically identical with that for 1930. The sharp rise in 1941 over 1940 reflects in part the revival of economic activity, and in part a rather sudden upswing in the marriage rate. The outlook for the next few years, however, is not quite as reassuring. With a large element of our able-bodied men in the armed services—and the consequent disruptions of family life and postponements of marriage—the effective fertility of the American people is likely to fall below the level required to maintain a stationary population. Evidently, our population policy must be given serious consideration in the councils that are guiding the nation through its problems in these difficult times."

*The Population Is Aging.*

The average individual in the United States counted in the census of 1940 was 29 years of age as compared to 26.4 in 1930. This age has risen continuously from 1820, the first year for which the age distribution was available for the entire population of the nation. In 1820 the average age was 16.7 years. This trend in the nation at large is duplicated in Wisconsin. The details are given in Table 2.

Table 2. Average Ages for the United States and Wisconsin

| Year | United States | Wisconsin |
|---|---|---|
| 1890 | 21.4 | 20.4 |
| 1900 | 22.9 | 20.5 |
| 1910 | 24.0 | 20.8 |
| 1920 | 25.2 | 25.1 |
| 1930 | 26.4 | 27.3 |
| 1940 | 29.0 | 29.8 |

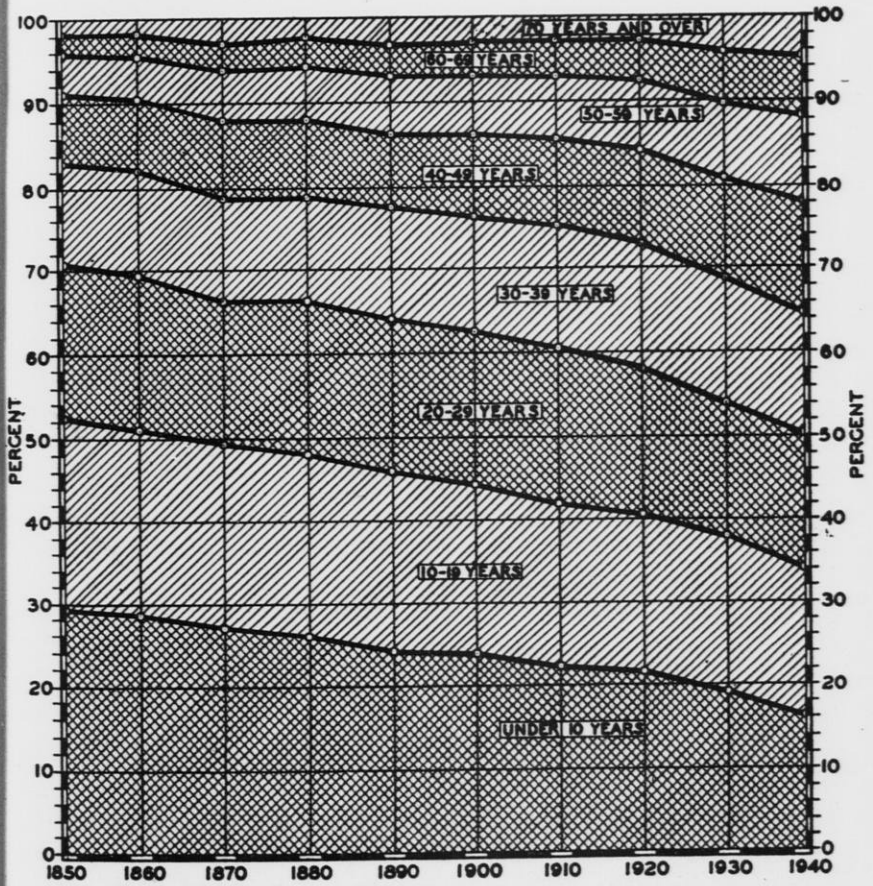
The 1940 census returns also disclose that persons 65 years of age or over numbered 8,956,000 in the United States, an increase of 35% over the number in this age group in 1930. In Wisconsin the increase was 26%.

Another indication of the aging population in Wisconsin is shown by the average age at death. This average has risen from 40 in 1910 to 55.4 in 1935. When the figures become available, there is little question that the 1940 records will show a continued rise.

Figure 3 shows many interesting trends in the age structure of Wisconsin over a period of years. In 1850, over half (52.5%) of the population was under 20 years of age, and in 1930 this group comprised only 38.8%. This change in the age structure in Wisconsin is, in part, a reflection of a larger phenomenon which embraces the entire nation. The lowering birth rate, which causes a larger proportion of people to fall in the older age groups, may lead to several developments. It has already affected school enrollment, bringing about a decrease in the number of children in the lower grades. The rise in the number of potentially employable people in the age groups 20 to 45 should normally add to the economic strength of the state. The "depression 'thirties'," however, made of this potential asset a liability: the increase in this age group brought about greater population pressure and aggravated unemployment.

Figure 3.
AGE DISTRIBUTION OF THE WISCONSIN POPULATION, 1850-1940

| AGE GROUP | YEARS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1850 | 1860 | 1870 | 1880 | 1890 | 1900 | 1910 | 1920 | 1930 | 1940 |
| 70 & OVER | 1.5 | 1.7 | 1.8 | 2.1 | 2.5 | 2.6 | 2.6 | 2.7 | 3.8 | 4.7 |
| 60-69 | 2.6 | 2.8 | 3.3 | 3.6 | 3.9 | 4.1 | 4.3 | 4.8 | 6.0 | 6.8 |
| 50-59 | 4.8 | 5.0 | 5.8 | 6.2 | 6.4 | 6.8 | 7.2 | 7.9 | 8.8 | 10.5 |
| 40-49 | 8.0 | 8.3 | 9.1 | 9.1 | 9.5 | 10.1 | 10.6 | 11.5 | 12.3 | 13.2 |
| 30-39 | 12.2 | 12.8 | 12.6 | 12.7 | 13.5 | 13.8 | 14.6 | 15.0 | 14.8 | 14.4 |
| 20-29 | 18.4 | 18.2 | 17.7 | 18.2 | 18.2 | 18.3 | 18.7 | 17.4 | 16.0 | 16.3 |
| 10-19 | 23.4 | 22.5 | 22.9 | 21.4 | 21.7 | 20.5 | 19.8 | 19.0 | 18.9 | 17.9 |
| UNDER 10 | 29.1 | 28.7 | 26.8 | 26.7 | 24.3 | 23.8 | 22.2 | 21.7 | 19.1 | 16.2 |




Each decade shows a larger portion of the people in the older age groups. The number 60 years of age and older has trebled since 1850. A changing age composition means a change in the problems of population which confront the state.

Source: Bulletin No. 4, Wis. State Planning Board, and U. S. Census, 1940.

*The Death Rate Is Dropping.*

The death rate (i.e., number of deaths annually per 1000 population) for the state has shown a small but gradual decline during the past generation. It has dropped from 11.7 in 1908 to 9.9 in 1940. Wisconsin's situation in relation to the United States and several foreign countries may be seen in Table 3. While Wisconsin has a lower death rate than the United States, Canada has reduced the death rate still lower, and New Zealand is in the most enviable position of all.

Table 3. Deaths per 1000 Population

| Year | Wisconsin* | United States* | Canada | New Zealand** |
|---|---|---|---|---|
| 1908 | 11.7 | | | |
| 1909 | 11.6 | | | |
| 1910 | 12.1 | | | |
| 1911 | 11.5 | | | |
| 1912 | 11.3 | | | |
| 1913 | 11.6 | | | |
| 1914 | 11.3 | | | |
| 1915 | 10.9 | 13.6 | | |
| 1916 | 12.0 | 14.0 | | |
| 1917 | 11.6 | 14.3 | | |
| 1918 | 13.9 | 18.1 | | |
| 1919 | 11.0 | 12.9 | | |
| 1920 | 11.3 | 13.0 | | 10.1 |
| 1921 | 10.4 | 11.6 | 11.6 | 8.7 |
| 1922 | 10.2 | 11.7 | 11.5 | 8.8 |
| 1923 | 10.8 | 12.2 | 11.7 | 9.0 |
| 1924 | 10.2 | 11.7 | 10.8 | 8.3 |
| 1925 | 10.5 | 11.8 | 10.6 | 8.3 |
| 1926 | 10.7 | 12.3 | 11.4 | 8.7 |
| 1927 | 10.4 | 11.4 | 10.9 | 8.4 |
| 1928 | 11.0 | 12.1 | 11.1 | 8.5 |
| 1929 | 10.8 | 11.9 | 11.3 | 8.8 |
| 1930 | 10.4 | 11.3 | 10.7 | 8.6 |
| 1931 | 10.2 | 11.1 | 10.1 | 8.3 |
| 1932 | 10.1 | 10.9 | 9.9 | 8.0 |
| 1933 | 9.8 | 11.0 | 9.6 | 8.0 |
| 1934 | 10.0 | 11.0 | 9.4 | 8.5 |
| 1935 | 10.1 | 10.9 | 9.7 | 8.2 |
| 1936 | 10.8 | 11.5 | 9.7 | 8.7 |
| 1937 | 10.4 | 11.3 | | |
| 1938 | 10.0 | 10.6 | | |
| 1939 | 10.1 | 10.6 | | |
| 1940 | 10.1 | 10.8 | | |

*Figures since 1931 have been corrected in terms of the Census Bureau estimates.

**New Zealand figures are for the white population only.

Wisconsin stands in a very favorable position in the nation with its low infant mortality (i.e., deaths under one year of age per 1000 live births). In the years from 1908 to 1939, the infant mortality rate has been cut down from a high of 106.6 to 40.2. The United States had a rate of 48 in 1939. (This phenomenon will be discussed at greater length in a later chapter on public health.)

*Trends in Marriages and Divorces.*

Wisconsin has consistently had a much lower marriage rate (i.e., number of marriages annually per 1000 population) than the nation as a whole. For example, in 1908 the marriage rate in Wisconsin was 7.4, compared to 9.6 in the United States as a whole. In 1937, the last year for which data are available for the United States, the rate was 7.6 in the state and 11.0 in the United States. In 1940, the rate was 7.5 in Wisconsin—one-tenth of one per cent higher than in 1908.

These statistics do not tell the whole story as far as Wisconsin is concerned. The Wisconsin marriage law requires blood tests of the prospective grooms and a seven-day waiting period which must lapse between the time of the application for license and the actual marriage. Both of these provisions result in some Wisconsin residents going to neighboring states to be married. For example, in 1936 there were 1,615 marriages of persons known to be Wisconsin residents which were performed in other states. The number of such marriages was 1,712 in 1937. Were these marriages reported as of Wisconsin, the state rate would be increased. This addition would not, however, bring the rate up to that of the nation as a whole.

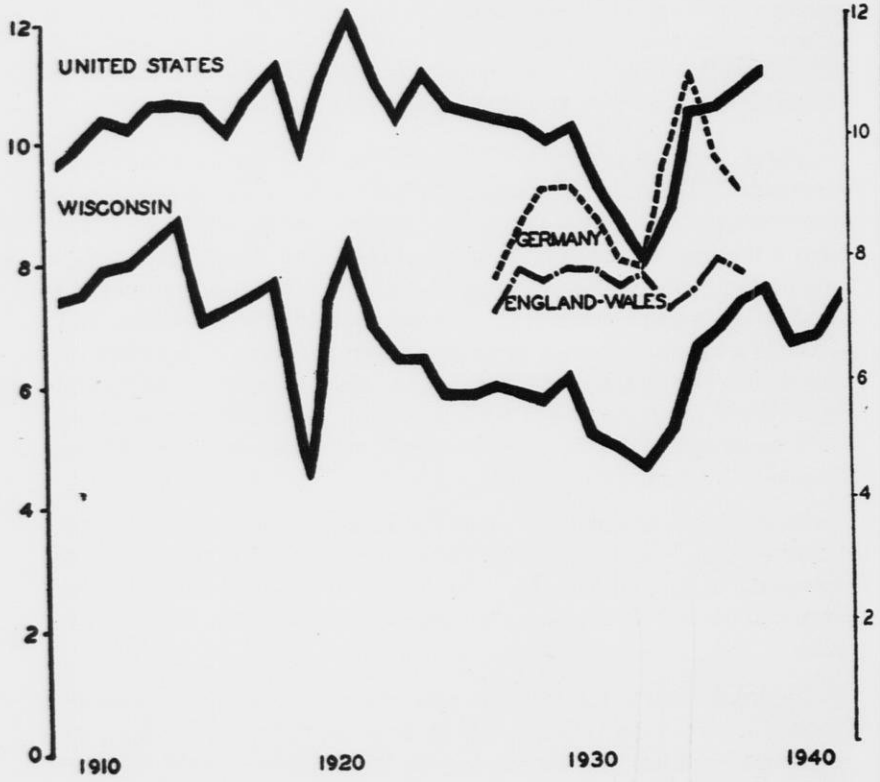
As a result of these lower marriage rates, a somewhat smaller proportion of the Wisconsin population is married than is the case in the United States as a whole. In 1930, 59.7% of the population 15 years of age and over in Wisconsin were married, compared to 60.5% in the nation.

Figure 4 depicts the trend in marriages in the United States and Wisconsin. Two sharp drops will be noted in the trend for both geographic areas. One occurred during the World War in 1918, when the rate was almost cut in two. The other took place during the darkest days of the depression of the past decade. There were sharp recoveries in each case, but the general long-time trend appears to be slightly downward.

If the marriage rate in Wisconsin is at the same level now as in 1908, this is not true of the divorce rate (i.e., the number of divorces per 1000 population). The divorce rate has doubled in this same period. The divorce rate in Wisconsin was 0.6 in 1908. It reached 1.2 in 1935, 1.3 in 1937, 1.2 in 1938 and 1939, and dropped to 1.1 in 1940. The divorce rate in Wisconsin, however, has remained consistently below that of the country as a whole.

Figure 4.

MARRIAGE RATES PER 1000 POPULATION,
1908-1940




Marriage rates have risen with improved economic conditions; they have fallen during economic depressions. The 1940 rate was approximately equal that of 1908.

Table 4 shows the rate of divorces in Wisconsin over the years 1908-1940 as compared with the United States and other countries over the years for which statistics are available. The low rate of divorce and the lack of change in the rate in Canada, and in England and Wales, are striking. In these countries the rate has remained at one-tenth of one per cent over many years.

Table 4. Divorces per 1000 Population in

| Year | Wisconsin | United States | Canada | Germany | England Wales | Japan |
|---|---|---|---|---|---|---|
| 1908 | 0.6 | 0.9 | | | | |
| 1909 | 0.6 | 0.9 | | | | |
| 1910 | 0.5 | 0.9 | | | | |
| 1911 | 0.5 | 1.0 | | | | |
| 1912 | 0.7 | 1.0 | | | | |
| 1913 | 0.6 | 1.0 | | | | |
| 1914 | 0.7 | 1.0 | | | | |
| 1915 | 0.7 | 1.1 | | | | |
| 1916 | 0.7 | 1.1 | | | | |
| 1917 | 0.7 | 1.2 | | | | |
| 1918 | 0.6 | 1.1 | | | | |
| 1919 | 0.7 | 1.4 | | | | |
| 1920 | 0.9 | 1.6 | | | | |
| 1921 | 0.8 | 1.5 | 0.1 | –.– | 0.1 | 0.9 |
| 1922 | 0.8 | 1.4 | 0.1 | 0.6 | 0.1 | 0.9 |
| 1923 | 0.8 | 1.5 | 0.1 | 0.5 | 0.1 | 0.9 |
| 1924 | 0.9 | 1.5 | 0.1 | 0.6 | 0.1 | 0.9 |
| 1925 | 0.9 | 1.5 | 0.1 | 0.6 | 0.1 | 0.9 |
| 1926 | 0.9 | 1.6 | 0.1 | 0.5 | 0.1 | 0.8 |
| 1927 | 0.9 | 1.6 | 0.1 | 0.6 | 0.1 | 0.8 |
| 1928 | 0.9 | 1.6 | 0.1 | 0.6 | 0.1 | 0.8 |
| 1929 | 0.9 | 1.7 | 0.1 | 0.6 | 0.1 | 0.8 |
| 1930 | 0.9 | 1.6 | 0.1 | 0.6 | 0.1 | 0.8 |
| 1931 | 0.9 | 1.5 | 0.1 | 0.6 | 0.1 | 0.8 |
| 1932 | 0.8 | 1.3 | 0.1 | 0.6 | 0.1 | 0.8 |
| 1933 | 0.8 | 1.3 | 0.1 | 0.6 | 0.1 | 0.7 |
| 1934 | 1.1 | 1.6 | 0.1 | 0.8 | 0.1 | 0.7 |
| 1935 | 1.2 | 1.7 | 0.1 | 0.8 | 0.1 | 0.7 |
| 1936 | 1.2 | 1.8 | 0.1 | 0.7 | 0.1 | 0.7 |
| 1937 | 1.3 | 1.9 | | | | |
| 1938 | 1.2 | | | | | |
| 1939 | 1.2 | | | | | |
| 1940 | 1.1 | | | | | |

*The Birth Rate Is Falling.*

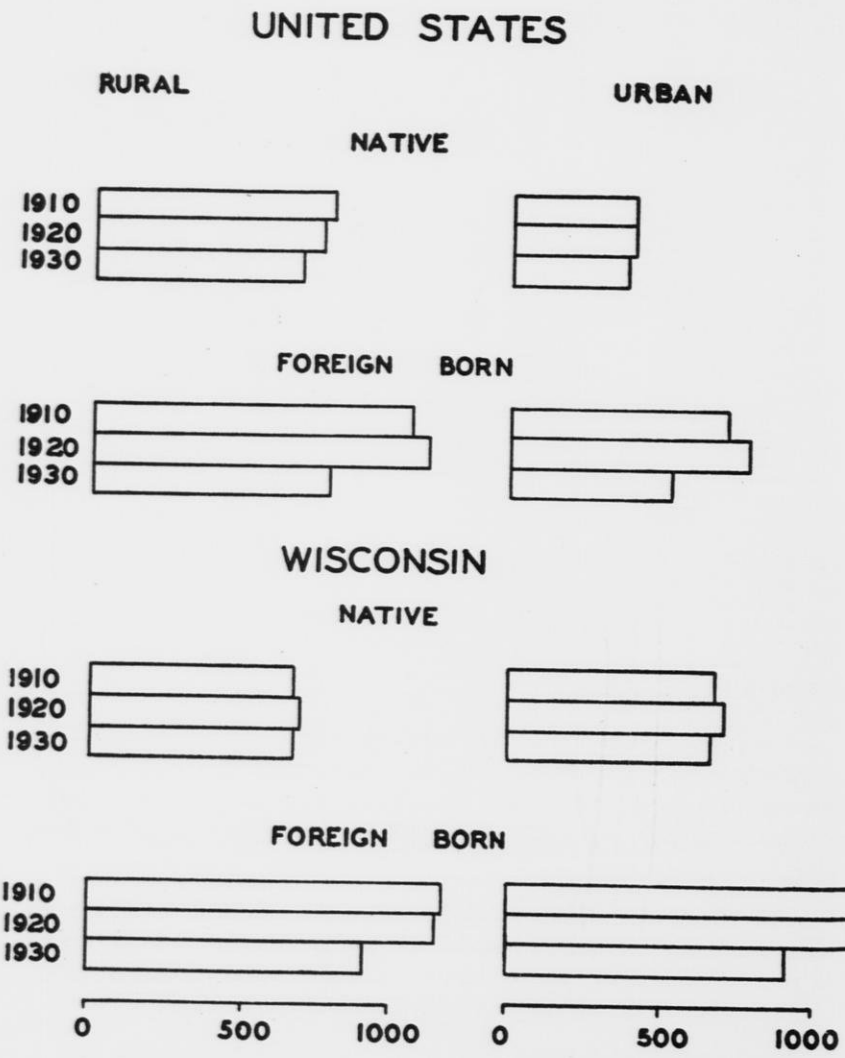
It is impossible to get reliable birth statistics for the United States as a whole for any long period of time. Some states have only recently kept adequate records of births. The available statistics, however, indicate that Wisconsin has a slightly higher birth rate than has the United States.

One of the most reliable ways in which the long time trend can be inferred is from the "fertility ratio," i.e., the number of children under five years of age shown in the census for a given year, as compared to the number of women in the child-bearing age of 20-44 years.

The trend in the fertility ratio in the United States over the period 1910-1930 is shown in Figure 5. It will be noticed that the trend for the population as a whole, as well as for the rural and urban populations separately, is downward.

Figure 5.

NUMBER OF CHILDREN UNDER 5 YEARS OF AGE PER 1000 WHITE WOMEN AGED 20-44 IN THE UNITED STATES AND WISCONSIN, 1910-1930




The "fertility ratio" above pictured shows fewer and fewer children with each passing decade. With the near cessation of immigration, the foreign-born no longer can be relied upon to keep up our population numbers.

The fertility ratio for Wisconsin shows some similarities to the national situation. The year 1920 is marked in both instances by a distinct lowering of the number of children for the foreign born group. The native born group in the state and the nation showed a low ratio, which continued to decrease in this period. In both the nation and the state, the ratio for urban population was markedly lower than for the rural.

In the period from 1880 to 1930, the fertility ratio in Wisconsin has been cut in half. The details for each census period in these years are shown in Table 5. While in 1880 there were 1,044 children under five years of age for every 1,000 women aged 20 to 44, in 1930 this had dropped to 508.

Table 5. Ratio of Children Under 5 Years of Age to 1,000 Women Aged 20-44 in Wisconsin

| Year | Children under five | Women 20-44 | Children under five per 1,000 Women 20-44 |
|---|---|---|---|
| 1880 | 217,018 | 207,835 | 1,044 |
| 1890 | 216,266 | 279,652 | 773 |
| 1900 | 256,734 | 353,609 | 726 |
| 1910 | 256,171 | 410,521 | 624 |
| 1920 | 285,042 | 476,925 | 598 |
| 1930 | 271,360 | 534,028 | 508 |
| *1940 | 256,980 | 580,858 | 437 |

*1940 data are estimates based on a preliminary tabulation of a 5% cross-section of the 1940 census returns.

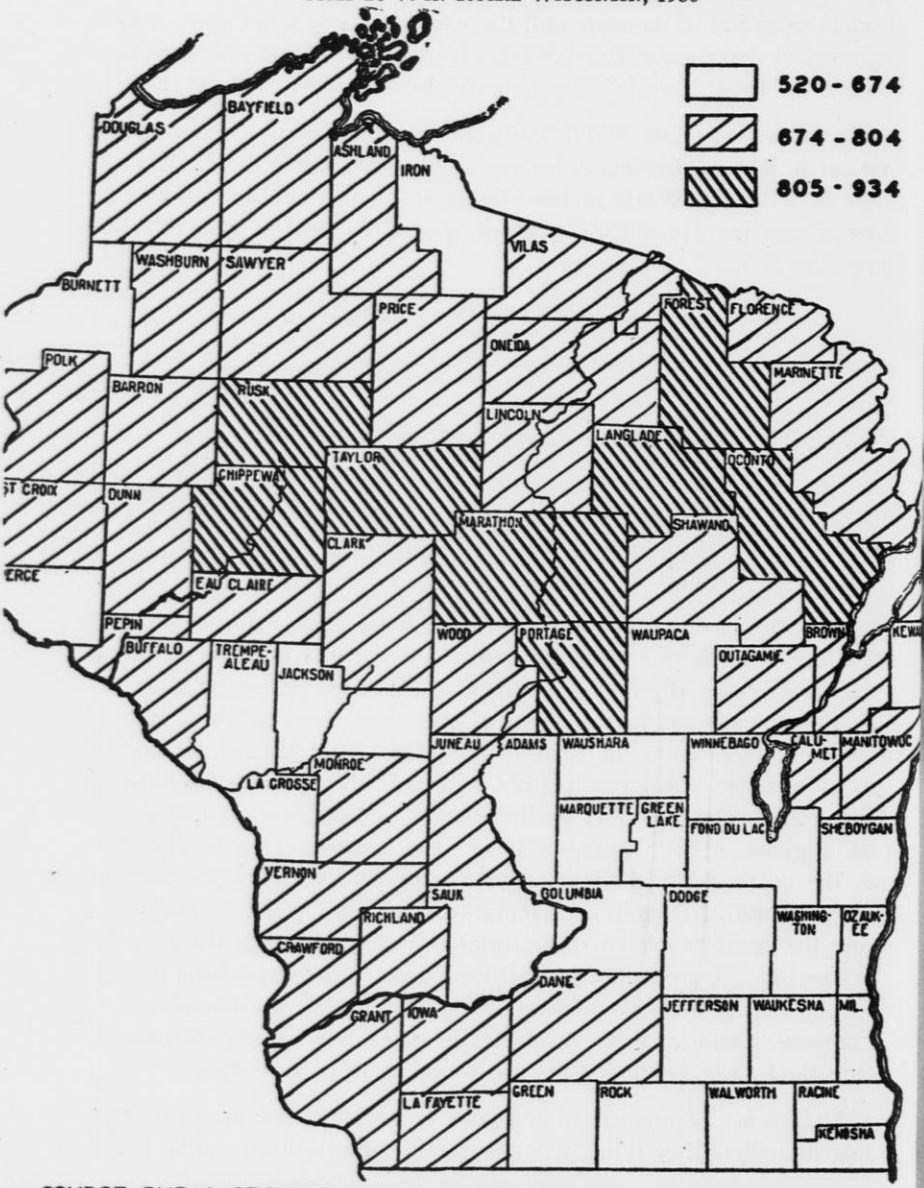
Although the rural areas of the state and of the nation have had a much higher birth rate than the urban, the rural population in recent years has been rapidly taking on the characteristics of the urban. The least economically productive areas of our state, those in which an adequate standard of living is hardest to maintain, tend to have the highest rates of increase. Wisconsin is not unique in this respect, for national studies tell us that "fertility declines rapidly as the level of living rises in all regions of the United States.[4] The cut-over area of the state (i.e., the northern third of Wisconsin), together with similar areas in Minnesota and Michigan, are known to have the highest fertility rates among the rural people of these states.[5] Figure 6 depicts the situation in Wisconsin. A preponderance of the counties which have high fertility rates among the farm population are located within the boundaries of the cut-over problem area. Conversely, only four of the 28 counties having the lowest fertility rates are found in this same area.

The excess population of the poor economic areas naturally tends to migrate where they think better economic opportunities can be found.

[4] *The Problems of a Changing Population*, National Resources Committee, May, 1938, p. 136.
[5] *Ibid.*, p. 138.

Figure 6.

NUMBER OF CHILDREN UNDER 5 PER 1000 WHITE WOMEN AGED 20-44 IN RURAL WISCONSIN, 1930




SOURCE: RURAL REGIONS OF THE UNITED STATES, W.P.A., 1940

The smallest families in the rural population are usually to be found in the more highly developed agricultural areas of the state.

Again the movement in Wisconsin is similar to a national phenomenon. "Areas of high fertility seldom retain all of their natural increase, because as fertility increases, economic opportunity is likely to decrease."[6]

Inasmuch as the more prosperous communities of the state must depend upon this migration for a large share of their future population, it is certainly to the advantage of the state as a whole to protect and promote the health and education, as well as otherwise improve the lot, of those living in the poorest areas. City people, therefore, have almost as much at stake in the betterment of living conditions for rural youth as have the folks who actually live in the rural areas, because the future welfare of the cities is directly influenced by the health, education, and personal capacity of the rural people who will make up a considerable portion of the city's population in the years ahead.

In addition to the rural-urban differences, what other factors are associated with this declining birth rate? That they are many and complex is known to anyone who has attempted any systematic study of the situation. We can draw on a few recent Wisconsin studies for part of the explanation.

McCormick and Glick found that fertility has been positively correlated with business conditions.[7] Put in other words, more children have been born when business conditions have been good. Moreover, they learned that families in Wisconsin counties having the largest proportion of Catholic and foreign-born populations were the most productive in the early nineteen-twenties. They also discovered that declines in fertility have been smaller in the counties having a low per capita index of wealth as contrasted to the wealthier counties. "Also, among 23 rural counties where relief standards were about equal, those that spent the most per capita for relief tended to have the highest fertility rates." Finally, McCormick and Glick state that, while the fertility rates of the most urban counties have been consistently lower than those in the rural parts of the state in the decade 1920-30, the two rates were steadily converging.

Another study, by McCormick and Brooks, revealed interesting trends between the relationship of occupations and birth rates in both rural and urban areas.[8] During the period 1923 to 1935, the urban birth rate decreased 27%, and the rural rate, 31%. Varying rates of decline

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[6] *Rural Migration in the United States,* Works Projects Administration, Res. Monograph XIX, 1939, p. 64.

[7] T. C. McCormick and P. G. Glick, "Fertility Rates in Wisconsin, 1920-1935," *American Journal of Sociology,* Nov., 1938.

[8] T. C. McCormick and Melvin Brooks, "Occupational Birth and Marriage Rates in Wisconsin," *American Sociological Review,* December, 1941, pp. 806-817.

among the occupations were found by the authors. For example, those classified in the category of proprietors, managers, and officials had a birth rate 39% smaller in 1935 than in 1923. Skilled workers showed a decline of 35%. The clerical workers had a drop of only 9%. The domestic and personal service groups showed practically no change, whereas the semi-professional group had an increase of 6% in its birth rate. Over the period 1923-1935, the farm birth rate was one and three-fifths as large as the urban.

That interfering factors entered to affect these rates is highly probable. Part of these changes may have been due to the change in the age composition of the groups. That is, with the depression there was a stoppage of the number of younger people entering the higher-paid groups. Nevertheless, the data suggest that the fertility trend has operated quite differently among different occupational groups.

Smith has found significant variations in the fertility rate among religious groups in rural Wisconsin.[9] Comparing families of the same economic status, he found that the fertility rate among a sample of German Catholic families was more than twice as high as that among Norwegian Lutheran families in the same area. Furthermore, the fertility rate among German Lutheran families was quite like that among Norwegian Lutherans, whereas that among the Polish Catholic families approached that of the German Catholics but was still far below the latter group.

That economic status is tending to have a greater influence on fertility than either nationality or religious background, is suggested in another recent study of Wisconsin rural people.[10] Cultural factors play a large influence among the poorer classes; among those in the higher economic brackets there is a trend toward convergence of family size, irrespective of cultural backgrounds.

Finally, it is believed important to call attention to the net reproduction rate of Wisconsin and of the United States. The rate for 1940 is based on an estimate of the 1940 census age composition statistics and is tentative. With unity (1.00) as a measure of a stationary population, the net reproduction rate of the United States in 1940 was about .96. Thus, if the 1940 birth and death rates continue, the national population would fail to reproduce itself by about 4% per generation. In Wisconsin, the rate was 1.04, or 4% above unity.

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[9] Rockwell C. Smith, *Church Affiliation as Social Differentiator Among Wisconsin Rural People*, Unpublished Ph.D. Thesis, Univ. of Wis., 1942.

[10] George W. Hill and Harold T. Christensen, "Some Factors In Family Fertility Among Selected Wisconsin Farmers," *American Sociological Review*, Vol. 7, No. 4, August, 1942.

The nation as a whole experienced a decline of 8.6% in net reproductivity during the past decade. The decline was 8.8% in Wisconsin. Table 6 presents the details of the net reproductive rates for the urban, rural non-farm, and farm population separately. It will be noted that the net reproduction in 1940 in the urban centers was .85 and .74 for Wisconsin and the United States respectively. The decline in reproductivity in the United States was quite uniform during the decade in the three residential areas. In Wisconsin, however, the decline was the sharpest in the urban and farm populations.

Table 6. Net Reproduction Rates for Wisconsin and the United States, 1930-1940

| | Total | | Urban | | Rural Non-Farm | | Rural Farm | |
|---|---|---|---|---|---|---|---|---|
| | U.S. | Wis. | U.S. | Wis. | U.S. | Wis. | U.S. | Wis. |
| 1940 — | 96 | 104 | 74 | 85 | 114 | 122 | 144 | 142 |
| 1930 — | 111 | 118 | 88 | 97 | 132 | 131 | 159 | 165 |

In summary, Wisconsin, as is true of the nation, is experiencing a marked slowing down of its population growth. The age composition is being altered. The younger groups have been shrinking and the older groups expanding. The birth rate continues to decline. While the marriage rate has not changed during the past thirty years, the occurrence of divorce is about twice as great now as compared to thirty years earlier. While the net reproduction rate in the state in 1930 was above unity, the rate is approaching unity.

All these changes and trends necessitate readjustments in our pattern of life. They emphasize the fact that we are enmeshed in a dynamic, changing situation which will continue to require adjustments.

CHAPTER IV

# SOME QUALITATIVE ASPECTS OF WISCONSIN'S POPULATION

ANY consideration of Wisconsin's human population must inevitably deal with its qualitative aspects, particularly with those individuals, groups, or classes that require special care or expense on the part of the public as a whole. The present chapter, therefore, undertakes to summarize the available information on the unfortunate members of our commonwealth who, by inheritance or disease, are handicapped physically or mentally. It is likewise proposed to discuss the more important facts relating to juvenile delinquents and criminals and others who, by their asocial behavior, constitute a public problem.

## *The Mentally Diseased and Deficient*

No less than 60% of all occupied hospital beds in the United States are now assigned to patients suffering from nervous and mental diseases. In the nation as a whole, about 120,000 new cases of mental disease each year develop to the point calling for hospitalization.

In his address in 1939, as President of the American Medical Association, Dr. Rock Slyster of Wisconsin pointed out that on any day, 1% of all the people in this country—that is, 1,300,000—are incapacitated by epilepsy, feeblemindedness, and by various other types of mental and nervous disease. He further stated that the number of persons hospitalized for mental disease in the United States increased more than 40% in the period 1926-36.

This increase may be due in large part to better methods of diagnosis and a growing tendency to institutionalize persons known to need medical care. The estimated annual cost of maintenance of hospital beds for this type of case is over 230 million dollars, with an additional cost of more than 18 million dollars for patients in purely private institutions. Every day 300 Americans enter the institutions for mental patients. In addition to hospitalized patients, several million Americans are more or less incapacitated because of mental illness or disease.

Attention is called to the report of the State Department of Public Welfare for the month of December, 1941, which shows a grand total of 15,194 in state and county mental institutions at the end of the month, and a total of 3,665 listed as on parole.

The exact extent to which inheritance is a contributing factor in mental diseases is not completely clear. Some persons believe that the environment is much more influential than heredity, but it is pretty well agreed that the problem "is not heredity or environment, but heredity and environment in their inter-relationships."

The National Resources Committee in their report, *"The Problems of a Changing Population,"* state: "The problem of mental illness is sometimes confused in public discussion with the problem of mental deficiency, although little relation exists between them. Present evidence indicates that hereditary factors play a very important role in causing mental deficiency."

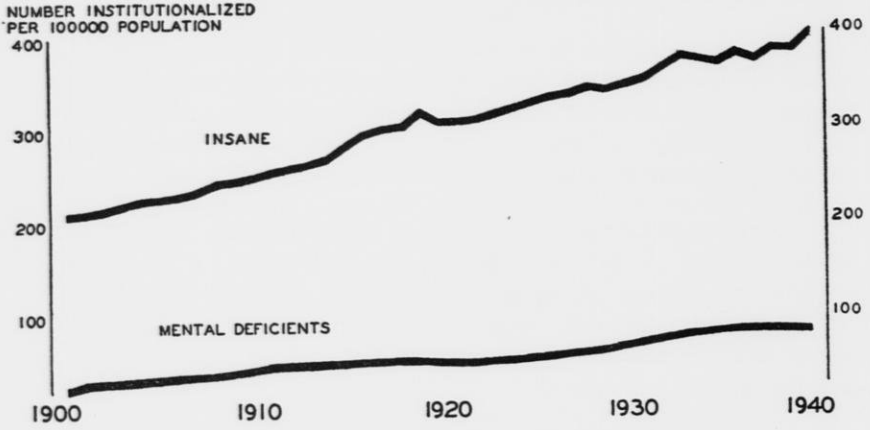
Contemporary research in the study of individual capacity comes to the same conclusion as it does in the field of mental diseases and disorders. Both nature and nurture play their parts in determining response to an intelligence test situation. Some psychological tests have revealed apparent differences between certain socio-economic groups, but further questioning of the same data, especially of the tests themselves, has indicated the culturally-determined nature of the tests employed. There is indication, however, that if such environmental factors as economic well-being, geographic location, nationality, and educational opportunity could be held constant, heredity would appear as a factor of great importance in the determination of individual differences. Conversely, it is to be expected that not even the most favorable environmental conditions could raise all individuals to the same high level of competency.

There is complete agreement that if individuals are to develop normal behavior they need to have both good inheritance *and* a good environment. If either factor is seriously deficient, the result is usually a personality that is below the level needed in our present complex society.

The steadily increasing number of hospitalized insane patients in public sanatoria in Wisconsin is shown in Figure 7. The same chart shows a similar upward trend in the mentally deficient patients that are being cared for in the public institutions. Even more signifi-

Figure 7.

THE NUMBER OF MENTALLY HANDICAPPED IN STATE AND COUNTY INSTITUTIONS OF WISCONSIN, 1900-1940




The trends in the chart show that the mentally handicapped population in state institutions is increasing in numbers and proportion year after year.

cant than the increase in numbers is the evidence of a rising proportion of mentally handicapped persons per 100,000 of state population. Two thousand mental patients are admitted annually into the state hospitals. As stated previously, however, this increase may be in large part due to better methods of diagnosis and a growing practice of hospitalizing persons known to need special care.

That there is a relationship between mental deficiency and penal population is evidenced by certain data of the Psychiatric Field Service of the State Department of Public Welfare. Their most recent report shows the following percentages of mental deficiency, as defined by them, in the several state correctional institutions: Women's Prison, mental deficiency, 50%; Wisconsin State Prison, mental deficiency, 45%; Men's Reformatory, mental deficiency, 20%; Industrial School for Girls, mental deficiency, 20%; Industrial School for Boys, mental deficiency, 14%.

Regarding the hopefulness with which mental problems can be studied and the methods of cure, prevention, control, and segregation attempted, the following excerpt from the British Ministry of Health is indicative of possibilities:

1. Heredity plays a large part in the causation of mental disorders . . . .
2. In many mental disorders . . . the part played by heredity varies widely between different types.
3. Manic-depressive insanity and schizophrenia appear to show a markedly higher familial incidence than other types of mental disorder which are of frequent occurrence.
4. While psychopathic parents tend to have psychopathic children, the view that familial mental instability is usually progressive and tends to become more severe in each succeeding generation is not established. The familial incidence in such cases is not necessarily entirely genetic in origin, since the environmental conditions in which children of psychopathic parents are brought up may tend to aggravate any inherited instability.
5. Familial mental disorder is not necessarily transmitted in the same form, and in many cases what appears to be transmitted is not a specific character but a generalized predisposition.
6. Where such a predisposition exists, the immediate or exciting cause of breakdown may be of an apparently trivial nature.
7. In a proportion of cases of mental disorder, an environmental factor such as a toxic condition, syphilis, or arteriosclerosis, is the immediate cause and often the only discoverable cause. In some of these cases, there is evidence that these environmental factors are associated with an inherited predisposition.
8. There is little evidence that alcoholism is a frequent cause of mental disorder, and in many cases which at present are classed as alcoholic the alcoholism appears to be a symptom of mental abnormality rather than its cause.[11]

*The Imprisoned Populations.*

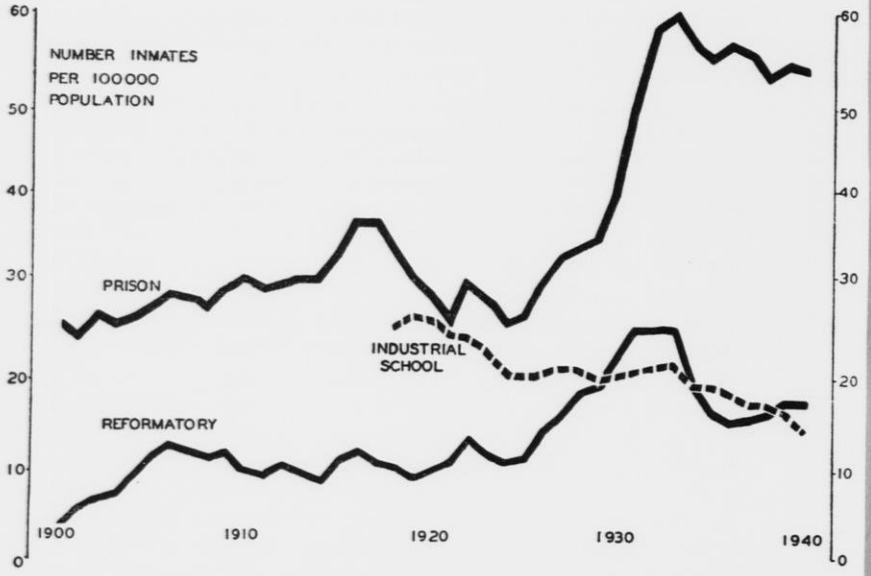
No report on population problems would be complete without a consideration of those who do not conform with the accepted rules of social behavior and who are consequently confined to correctional institutions. Many theories have been advanced as to the effect of lack of economic opportunity, inherited characteristics, social organization, etc., and criminal tendency or behavior. The same controversies occur in this field as in others regarding the relative importance of certain factors which condition or determine behavior.

The trend in the number of inmates in Wisconsin's prisons and reformatories for the past 40 years is given in Figure 8. There was an increase in the number of imprisoned felons at the close of the

[11] "Report of the Departmental Committee on Sterilization," December, 1933, London, taken from *The Problems of a Changing Population*, op. cit., p. 161.

Figure 8.

NUMBER OF INMATES IN WISCONSIN'S PRISONS, REFORMATORIES, AND INDUSTRIAL SCHOOLS, 1900-1940




Students of criminology tell us that the surest way to reduce the incidence of crime is to begin at the source. Better economic and social advantages for underprivileged youth are called for.

'twenties and in the early 'thirties, a sharp increase of reformatory inmates from 1925 to 1931, and a precipitous increase in the rate of state prison commitments in 1930 and 1931. It is encouraging to note that there has been a drop since 1932.

Compared with other states, Wisconsin is in a rather favorable position. The Uniform Crime Reports of the Federal Bureau of Investigation show that Wisconsin has had a low crime rate, based upon the number of offenses known to police, per 100,000 inhabitants. In December, 1941, the State Division of Corrections had a total of 5,542 individuals under its care. Of these, 338 were in the Central State Hospital, 1,583 in the State Prison and its prison camps, 458 in the Reformatory, 47 in the Industrial Home for Women, 56 in the Prison for Women, 286 in the Industrial School for Boys, and 90 in the Industrial School for Girls. Also, 1,578 were on probation, and 1,077

were on parole. There were also 29 men in the Milwaukee House of Correction who were serving a sentence of one year or more.[12]

This distribution leaves out of account entirely those sentenced to county jails, and the juvenile delinquents not placed on probation to the division nor sent to these state institutions. Four per cent of the probation load are from juvenile courts.

The characteristics of criminals, especially their social backgrounds, constitute one of the oldest areas of research in which both anthropologists and sociologists have been engaged. Numerous studies have been conducted in cooperation with penal institutions throughout the world in an attempt to understand the factors which have been responsible in bringing about the asocial behavior of criminals. Notable among the studies are those which have been made by J. L. Gillin of the University of Wisconsin. The following data came from one of his most recent studies of 1,747 inmates of the Wisconsin State Prison and Reformatory.

Using the intelligence test in which 100 represents the normal, Gillin found 1.52 times as many men in the State Reformatory with an I. Q. (Intelligence Quotient) below 70 (approaching the intelligence of a moron) as were found in the intelligence tests given to the Wisconsin men in the World War Draft in 1917-1918. The proportion with a low I. Q. was even greater among the men in the State Prison than in the Reformatory—1.75 compared to 1.52. When these two prisoner groups are combined (making a total of 1,747 prisoners), it was found that one and two-thirds as many prisoners as draft men had an I. Q. below 70.

The evidence is unmistakable that the prison population comes from the younger age groups of our state. Only 11.5% of the Wisconsin male population were in the age group 20-24, according to the United States Census of 1930, while 19.3% of the prisoners were in that age group at the time of their commitment. The differences between the two populations of the age 25-29 were even more marked: only 10.6% of the general male population were of this age, compared to 26.3% of the inmates of the State Prison.

The prison population likewise tends to be made up of a larger proportion of single and divorced men than there are in the general

[12] In addition to the individuals under the care of the State Division of Corrections, Milwaukee county has a group of probationers under its care. In 1940, the average daily population in the Milwaukee probation department was 629.

population. While 36.3% of the Wisconsin male population 15 years of age and over were single, of the cases in the prison, 46.2% were single. Likewise, while only 1.0% of the Wisconsin male population 15 years of age and over were divorced, 11.9% of the Wisconsin prison cases were divorced.

Further evidence of abnormality on the part of the prison inmates was discovered when 178 inmates were compared with a like number of their brothers not in prison. They were less steady on a job and held a job a shorter time. More of the prisoners than of their brothers followed city occupations. They left home earlier and got away from the influence of home and school earlier. More of the prisoners married wives from a lower economic status than did their brothers. As compared with their brothers, fewer of the prisoners married wives of the same nationality as themselves, of the same religion as themselves, and with the same degree of education as themselves.

The whole picture which grew out of this study suggests that, while still children, the prisoners developed an abnormal reaction to life's situations. They later had an unstable economic career, an unstable family life. They were unable to build an economical and social foundation which would tend to keep them from a delinquent career. They developed a self-centeredness which did not make for social stability and which tended to result in serious conflict with the law.

More detailed studies to obtain certain specific information as to the physical make-up, the mental endowment, the early experiences, the home and community environment, and the effect of these experiences upon conduct, might enable us to determine more exactly the factors which differentiate the criminal population from the rest of the state. Further, since Gillin's study was confined to the criminals who were caught and convicted, he recognizes it is biased in the direction of the poor, those mentally poorly equipped, and the disadvantaged in other respects. The white-collar criminals frequently escape the consequences of their acts and, therefore, have not entered into the picture to the same extent. A thorough-going study, without question, would reveal much more concerning the typical characteristics of the lawbreakers of our population. Only as that is done can we segregate more precisely the factors which make for criminality and those which produce good citizenship.

CHAPTER V

# SOME FACTORS THAT INFLUENCE THE QUALITY OF COMING GENERATIONS

WHEN the question is asked, "Who should bear children, and how many," the answer will depend on the kind of government and civilization it is desired to build in the years ahead. A totalitarian government is interested primarily in producing more soldiers and more citizens who will do as they are told. A democracy, on the other hand, depends for its progress on increasingly intelligent voters who can wisely decide the governmental and economic issues that are constantly being referred to the electorate.

The viewpoint that totalitarianism has adopted, and that which democracy might adopt, are aptly stated by L. J. Cole in *Generations to Come:*

"The political philosophy in Russia appears to be based on the theorem that heredity is of little importance and that regulation of environment can accomplish everything. Whether by this means all are to be brought to a similar state of perfection is not clear, but available reports do not indicate that great progress in that direction is being made.

"The Germans, on the other hand, take heredity very seriously, so much so in fact that they go to absurd and tragic lengths in their conceptions of race and genetic racial differences. Their interpretation of Natural Selection is literal in its application of Darwinian dogma to human affairs,—survival proves superiority; domination assures survival; it is not only a right but duty to survive; therefore domination is to be attained by any means whatever. Might is right and all other values, as between nations at least, are thrown into the discard.

" 'This idea that they belong to the best race in the world, and that they are its finest family, inspires them with noble pride, indomitable courage, and a hatred for the human race.'

"And what of the democracies? Have they perhaps taken too literally the dictum that all men are created equal? At any rate they have proceeded on the social philosophy that the duty of the state is to improve the condition of all its citizens insofar as possible. The most obvious need of improvement is at the bottom, and there most of the direct help has gone. What about a eugenic philosophy? They have mostly had none, and they display a curious apathy to the suggestion

that anything of the sort is needed. Possibly while we are giving so much of our attention and money to preparedness it might be well to give some thought at the same time to those *Generations to Come.*"[13]

All over the world, as well as in Wisconsin, it is generally true that those with small incomes have more children than families having a better economic status. We, in the United States, have in recent years come to expect that a rising standard of living and a higher culture are associated with family limitation. This belief carries with it two serious implications: A. If our birth rates continue to decline as they have in the past few decades, our nation faces a reduction in total population before the end of the present century. B. With birth rates lowest among the groups that are best able to give their children adequate food, shelter, education, and other opportunities, we are not providing the coming generations with adequate numbers from the present groups of our people who should be able to do the most for our nation.

It is significant that there is almost complete agreement on the part of students of human inheritance that neither race nor nationality offers a sure guide to superior heredity. On the other hand, the evidence is very clear that human beings differ widely in their intelligence and other characteristics, and that these qualities are many of them of a genetic character. This is just another way of saying that there is a tendency for like to produce like, with man as with plants and animals.

This being true, it is obvious that any improvement in the general character of the human population can be attained by (a) increasing the number of offspring of the persons having the larger quota of the desirable characteristics, and (b) decreasing the number of offspring of those persons who are obviously seriously defective genetically.

To meet the first of these, consideration must be given to encouraging the abler persons in our present population to have larger families. There must be re-education to build up a desirable attitude toward larger families. Young couples must be encouraged to have children in the early years of their marriage. This may require our government to encourage and assist parents in the rearing of children under adequate conditions as regards health, food, shelter, and the other essentials of a normal life.

Attention must also be given to childless marriages resulting from inability rather than unwillingness of the individuals to have children.

[13] *The Biologist*, Vol. XXII, No. 2, December, 1940.

It is known that some 20% of all marriages are sterile, the female being responsible in approximately two-thirds of the cases and the male responsible in the remaining one-third. Many cases of sterility occur in individuals whose background and opportunities would seem to indicate they would be excellent parents.

If methods can be developed for more precision in the determination of the causes of sterility, more rapid progress in correctional treatment of individual cases would likely follow. Although a number of cases of sterility are due to infections and diseases both in the male and female, recent research at Wisconsin General Hospital and elsewhere has shown some other cases of sterility are due to disturbances of endocrine balance, emotional maladjustment, and malnutrition. These conditions are often amenable to correction.

Injuries following attempts at abortions in former pregnancies, and other conditions resulting from improper methods of family limitation, which cause sterility, may be reduced if the public can be educated to seek and to use medical guidance in such matters. Physicians will be benefited by special training to understand conditions under which birth control should be used, as well as keeping informed on latest knowledge as to safe methods.

Instruction in preparation for marriage should be available at both the senior high school and college levels. Information on planned parenthood should be easily available through competent physicians to married couples of all income groups who desire such information. This is compatible with the federal laws and those of the State of Wisconsin. Some states go so far as to finance public clinics with tax funds. It is a recognized fact that where contraceptive information is available, criminal abortions are less frequently resorted to.

Criminal abortions are a very real problem at the present time. In many cases they result in loss of life or permanent injury to individual women. As indicated above, the problems of sterility, abortions, and education for encouraging parenthood deserve serious study and investigative activity in any program aimed toward human betterment.

The second of our obligations in regard to quality of our population, that of decreasing the number of offspring of those persons who are obviously seriously defective genetically, also needs careful study and planning. Frederick Osborne, chairman of the Joint Army and Navy Committee on Welfare and Recreation, in March, 1941, pointed

out that two or three million people in the United States are so seriously defective in mind and body that they are a tragic burden to themselves, their families, and their communities. Many of these defective characteristics are hereditary, and he quoted Justice Holmes' famous legal opinion that "three generations of feebleminded are enough."

Wisconsin has its share of this national problem. On December 31, 1941, there were 2,303 mentally deficient inmates in the two state colonies. On the same date there were 12,891 mental patients in all other state and county institutions. Our institutional statistics do not separate the total mentally deficient from the total insane population, and there are no accurate data on the number of defective and mental cases not institutionalized.

Reduction in the number of defectives produced may be attained by limiting reproduction in those cases in which there is a strong probability that the defect is due to hereditary causes. One method of such reduction is segregation. This is costly and cannot be adequately carried out. It is justified only when it is not otherwise desirable to have the afflicted individual live with the family. Refusal of marriage licenses, although it does not necessarily control all reproduction in this group, should result in some limitation. Our Wisconsin Statute 245.03 states that "no insane, imbecile, feebleminded epileptic person or idiot shall be capable of contracting marriage." At the present time the law sets up no adequate provisions to insure that marriage licenses are denied to such individuals; consequently it has little effect. Public opinion should be aroused to demand enforcement of this law for the limited contribution it can make.

Finally, there is a surgical method of limiting reproduction. This procedure, known as sterilization, has been proposed as a means of prevention when for obvious biological or health reasons reproduction seems undesirable; also, as a measure for rehabilitation of persons who might safely be released from institutions and become useful members of society if the danger of reproduction is removed. Sterilization should not be used or regarded as a punitive measure; on the contrary, it may be a distinct boon to many who must otherwise be segregated in institutions, or to others who live in constant fear of pregnancies which are undesirable for medical or biological reasons. Advocates of sterilization as a biological and medical tool to use in special cases would be the last to approve its widespread and promiscuous use. Whatever part it may play as a social and medical instrument must be under

strict advisory and supervisory control by properly constituted health authorities.

There is need for a more accurate understanding by the general public as to what is involved in sterilization. The operation is not particularly hazardous or difficult. Sterilization prevents the union of the reproductive elements (sperm and ovum), and in no other way interferes with the normal sex life. It should be differentiated sharply from castration, which involves the removal of the sex glands. Sterilization of the male is a very simple operation, consisting merely of the ligation and severance of the spermatic duct. It can be performed in a few minutes with a local anesthetic. The operation in the female is somewhat more serious, but not more so than an appendectomy.

The public welfare aspects of sterilization are presented in a rather full fashion in the 1936 report of the Special Committee of the American Neurological Association for the Investigation of Eugenical Sterilization. This report should be read by all persons interested in eugenical sterilization. After expressing disappointment at the inadequacy of most of the studies made on the inheritance of the diseases and mental conditions under consideration, the committee recommended that, under supervision of a properly qualified board, and with the consent of the patients or those responsible for them, selective sterilization be considered in cases of certain diseases.

The committee concludes that although the problem of mental disease and deficiencies is enormous, no great or radical change in the complexion of society can be expected from the sterilization program it recommends. It is generally admitted that sterilization as recommended, or as at present practised in certain states, can effect only slowly a reduction in the incidence of these genetic deficiencies; any progress in that direction, however, is a distinct gain. Furthermore, the immediate and direct benefit to the individual and to society by the rehabilitation made possible by sterilization of persons who would otherwise be institutionalized, should be considered.[14]

The marriage of such closely related persons as cousins raises additional questions of heredity. No arbitrary rules can be laid down in this matter. The traits, desirable or undesirable, revealed in the offspring of such matings will depend upon the qualities, either latent or expressed, which are already present in the family stock. Such inbreed-

[14] *Eugenical Sterilization: A Reorientation of the Problem*, report of the Committee of the American Neurological Association for the Investigation of Eugenical Sterilization, New York, 1936.

ing, by bringing together like characteristics, tends to perpetuate particular traits more certainly in a given strain. If they are valuable, well and good; but if undesirable, if defect meets defect, the result may be disastrous. The greatest difficulty in deciding on the advisability of marriage between relatives lies in the fact that every individual carries in transmissible form innumerable latent characteristics as well as those which are evident. When two such concealed tendencies are brought together—a situation more likely to occur in cousin marriages than in matings between unrelated persons, they become fully expressed in the new individual.

Since mental deficiencies, hereditary epilepsy, various insanities, susceptibility to tuberculosis, and many other human ills, are of the type which thus remain dormant in an unsound stock only so long as overruled by a normal inheritance from one parent, one should scan the family pedigree with careful eye before consummating a cousin marriage. There are few families which do not possess some undesirable hereditary traits; and if cousins decide to marry, they should at least do so with a clear-eyed vision of the extra hazards they are imposing upon their children.

In concluding the consideration of the qualitative matters presented in this chapter, we should appreciate the two very different policies or goals of population broached by this discussion. The first was fertility increase; the other was family limitation. Some, because of their financial inability to maintain a desired level of living if additional children come into the family, or because of the necessity of spacing children to safeguard the health of both the mother and children, or because of an unwillingness to transmit an undesirable hereditary trait, must adopt family limitation. Individual families, therefore, reserve the right of planning their childbearing. On the other hand, if the cost of children is one of the strongest motives for family limitation, there is then need for equalizing opportunities and thus encouraging children where they are wanted and where, according to all evidence, they will have the widest opportunities. The doctrine of individual rights cannot be separated from equal opportunities. The reconciliation of these two policies of population should not be difficult in a democracy where parenthood should be a wholly voluntary matter.[15]

[15] Cf. Alva Myrdal, *Nation and Family*, Chapters IV and VII, Harper & Bros., New York, 1941.

CHAPTER VI

# STATE AGENCIES SERVING HUMAN NEEDS

EVER since Wisconsin became a state, it has charged certain public agencies with responsibility for promoting health and welfare. The State Board of Health is assigned the duty of conserving life and reducing deaths, as well as collecting statistical data on births, deaths, marriages, and divorces. Through its various divisions it deals directly with many matters which have an important bearing on population problems. Likewise, the Public Welfare Department, with responsibility for promoting public welfare in terms of care of the unfortunates, relief of those in distress, and caring for the needs of dependent and delinquent children, has a vital part to play in meeting the needs of the state's human population.

Today health and welfare agencies require a large share of the budgets of state and local governments, and it is widely recognized that the work they are doing is of tremendous importance in terms of Wisconsin's future. As complexities of our industrial civilization have increased, there have been added burdens laid upon public agencies. Continued energy must be applied to carrying these burdens, but it is vitally important that studies be made of the needs of individual communities, and of the possibilities of diverting an ever increasing proportion of available funds to long-range plans which may prevent for the future many of the problems facing us today.

*Preventive Health Programs Safeguard Population.*

Preventive health programs to safeguard population should include the following:

1. Housing.
2. Water supply and sewage disposal.
3. Provision of minimum nutritional requirements for all citizens, so as to insure that both young and old are protected from illness and that physical unfitness due to malnutrition is reduced.
4. Industrial hygiene, not only aimed to improve working conditions and prevention of illness and accidents among employees,

but also educational and demonstration programs for their families.

5. Home education and community programs of trained public health nurses in cities, towns, and counties with sufficient nurses to give adequate service.
6. Classes and health conferences for expectant mothers and the mothers of young children.
7. School health programs organized by school authorities with the cooperation of local health personnel, again emphasizing prevention.
8. Control of communicable disease through immunization and vaccination in the early years of life.
9. Efforts for more prompt and adequate reporting of communicable disease, and better enforcement of rules and regulations regarding quarantine.
10. Prompt reporting to the health department and adequate treatment of venereal disease.
11. Social hygiene education and courses on marriage.
12. Adult hygiene with special attention to health problems of the young adult population, such as tuberculosis, heart disease, cancer, and control and reduction of common colds, which are at present responsible for a high proportion of absenteeism from work for adults as well as from school in the younger age group.

Only as individuals within local communities become cognizant of local needs, and make an effort to meet them, can real progress be made; therefore community education becomes an essential part of every public health activity.

Since in recent years we have been faced with a declining birth rate and an aging population, conservation of life in the early age period, through reduction of abortions, stillbirths, and infant deaths, becomes of special importance. Likewise, more emphasis must be given to programs for children and young adults, especially young mothers. A recent article in the Journal of the American Medical Association emphasized the need for preventive pediatrics and for using to the fullest extent available resources for prevention of unnecessary deaths in childhood.[16] It pointed out that the 37 conditions causing 56% of the deaths

[16] Wilburt C. Davison, M. D., "Preventive Pediatrics," *J. A. M. A.*, Vol. 114, No. 9, p. 742, March 2, 1940.
Clara E. Hayes, Sc. D., and Elizabeth Candy, Sc. D., "Causes and Prevention of Death Among Children in the United States," *The Child-Monthly News Summary*, Vol. IV, No. 10, p. 268, April, 1940.

of children in the United States, of which there were 240,000 in 1937, were due to preventable cause; and 21% to curable conditions, provided adequate care had been promptly given. A similar study in Wisconsin would show the same general situation. Looking further than this, we see that for every death, many times that number of children are left handicapped with impaired health. Much of this waste of human resources is likewise unnecessary.

Unnecessary deaths and the chronic illnesses among our young adult population are also of profound economic significance. This age group is bearing the economic burden and carrying the responsibility for the establishment of homes and the rearing of the children of the next generation. Tuberculosis, a preventable disease, is even today, in spite of reduced incidence, taking a heavy toll from the young adult group. It is difficult to obtain the exact cost to the state of this disease, but we do know that in the fiscal year 1938-39, the actual cash cost to the counties and the state for sanatoria care of tuberculosis patients totalled over $2,000,000 for the institutionalized cases. Sanatoria bed capacity is about 2,200, or two and one-half beds per annual death.

Looking at the problem more closely, it is seen that many cases are hospitalized in the late stages of the disease when cure is more difficult and after opportunity has been given for extensive spread of the infection. Actual figures show only 16% of admissions are in the early stages of the disease. Care for persons in advanced stages may extend over a period of many years. A study of 102 cases hospitalized for five years or more showed that the cost of care in sanatoria amounted to $754,500.

Ninety per cent of all patients in sanatoria are hospitalized at the expense of the state or counties. Individual cases have cost the county and state as much as $10,000 to $15,000, and in two instances $30,000 or more. This particular disease has been discussed in more detail to show the community cost of health neglect which seems particularly appalling because of the preventability of tuberculosis.

Maternal deaths likewise cause losses of grave social and economic importance. For the first time in the United States the 1938 figures showed less than 10,000 deaths from causes associated with maternity and childbirth. This was a marked reduction over early figures. The challenging thing about these deaths is that, from numerous careful studies made, it has been shown that from one-half to two-thirds of such deaths are preventable.

Most maternal deaths mean broken homes. Although a number of mothers die in first pregnancies, many leave a large number of children motherless. The average, from a study a few years ago, is 2.3. From 109 death certificates for which corresponding birth certificates were found in 1939, forty-nine mothers died in a first pregnancy; the others left from one to fourteen living children—an average of 2.5. From these broken homes come many of our dependent and delinquent children who again are costly to the communities and to the state. Many of the children from these homes fall directly upon the community for partial or complete support.

The above figures tell the story as regards maternal mortality, but do not take into account the much larger number of mothers who escape death in childbirth but who are left with health so impaired that their ability to face the increased responsibilties of motherhood is seriously affected. The value of preventive obstetrics to both mother and child is well established. There still remains the need of educating the lay public as to the vital necessity of prenatal care and insuring the availability of such services to all prospective mothers.

Stillbirths are significant in a period of low birth rates and especially so as many of these occur at term and with every indication that many of these babies were normal and should have been saved. Unfortunately, this problem has not been solved. Over the period of years of record, rates have remained fairly stationary except for a slight increase in the level maintained since 1917.

During the past decade, 1930-39, in Wisconsin there has been a striking reduction in infant death rates (i. e., deaths of babies under one year of age per 1000 live births). These rates have dropped from 55.6 in 1930 to 40.2 in 1939, a reduction of almost one-third.

The favorable trend in the reduction of infant deaths is due mainly to the conservation of life after one month of age. Two-thirds of the infant deaths occur in the first month of life. Progress, however, is also being made in the reduction of deaths among infants under one month of age. For example, the neo-natal (under one month) mortality rate in the rural areas of Wisconsin has declined from 29.2 in 1935 to 26.7 in 1939. Undoubtedly, in this neo-natal period rests the greatest opportunity for further conservation of lives of children.

Another phase of preventive medicine and education is that connected with the Wisconsin Psychiatric Institute. The laboratory services of this Institute are available to the entire state. The discovery of

syphilis usually results in subsequent treatment, preventing spread to others and offspring. A corollary service, that of examining cerebro-spinal fluid, serves to detect syphilis of the brain and spinal cord at early stages when the condition may be remedied by treatment. These cerebro-spinal fluid examinations also serve to discover other serious infectious diseases involving the brain cord, such as meningitis, encephalitis, and poliomyelitis.

In its capacity as a clearing house for general practitioners in the dissemination of information regarding the treatment of syphilis and mental and nervous conditions, the Institute is in a strategic position to aid the public in the rational and alert consideration of many qualitative population problems.

The program to eradicate syphilis in Wisconsin has been largely a cooperative effort in which the former Board of Control, the venereal disease clinics operated by the State Board of Health, the Psychiatric Institute, and the medical profession have all played a part. During the last twenty years, this cooperation has greatly reduced the incidence of syphilis in the Wisconsin population, as shown by extensive surveys and factual information.

The incidence of syphilis in the general population of the United States is estimated to be about 5%. A recent survey made in the City of Chicago, in which over 600,000 persons voluntarily sought blood tests that were made available through the City Health Administration and the United States Public Health Service, showed the rate of syphilis to be 6%. In this group the white population showed an incidence of 2.8%; and the negro, 17.2%.

The general rate for the United States is seven times greater than that now found in the Wisconsin population. The following facts are conclusive on this point. During the last twenty-odd years, over 1,600,000 persons have been tested for syphilis through the laboratory of the Wisconsin Psychiatric Institute. Of these, 127,876 were discovered to have syphilis in some form. This includes those found in the various charitable and penal institutions. It represents between 0.7 and 0.8 of one per cent.

The law requiring pre-marital blood tests went into effect in July, 1937. From that time up to December, 1941, 164,732 persons received a blood test under this Act. Of those, 1,063 were discovered to have syphilis. This represents a rate of 0.65%. Quite different from the

generally held belief that males are much more frequently infected than females, it was found that, among the 1,063 infected marriage applicants, the incidence of syphilis was practically the same in both sexes: 49% of the cases were females, and 51% were males.[17]

In several other states where a similar provision exists, the reported incidence of syphilis ranges from a low of 1.2% to a high of over 6%. The fact that most of these young adults with syphilis were ignorant as to any such infection is another significant circumstance. It seems highly probable that syphilis was not even suspected; otherwise plans for marriage, in Wisconsin at least, would not have been made without first seeking definite information beforehand. It is certainly an embarrassing circumstance to have a license to marry refused by the county clerk. The implication is obvious. The knowledge that blood tests are required is now very general. As a consequence, any young person with knowledge or doubt as to any previous venereal disease is likely to have a preliminary test made before applying for a license. Such cases might not then appear in the group we are reporting. Consequently the number of syphilitic persons found by method of pre-marital tests is undoubtedly a minimum for this general age group. The rate found then becomes the incidence of unknown and unsuspected syphilis in the young adults of our general population.

More recently and as a part of the selective service examination for the United States Army, the blood from over 84,701 Wisconsin selectees was tested at the laboratory of the Wisconsin Psychiatric Institute. In this group, the incidence of syphilis was found to be slightly less than six per one thousand.

In comparing the incidence of syphilis of Wisconsin selectees with those of other states, Vonderlehr and Usilton report that only one state had a lower rate of syphilis among its selectees than Wisconsin.[18] This was New Hampshire, where the rate was 5.8 per one thousand. This report also points out the much higher incidence of syphilis among the selectees from metropolitan centers as compared to the remainder of the state population. Vonderlehr and Usilton found that in nine large cities of from 500,000 to one million population, the range was from a low of 11.6 per one thousand in Milwaukee, to a high of 162.5 in Atlanta, Georgia.

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[17] From the Wisconsin Psychiatric Institute, University of Wisconsin, January, 1942.
[18] Vonderlehr and Usilton, "Syphilis Among Selectees and Volunteers," *J.A.M.A.*, Vol. 117, No. 16, pp. 1350-1351, Oct. 18, 1941.

This evidence bears out the worth of carefully planned efforts, which of necessity include research and investigation, legislative appropriation, well-planned administration, and a goodly measure of public education. The effectiveness of concerted action is heartening when one notes that twenty-odd years ago insanity due to syphilis was responsible for between 12% and 13% of all those admitted to Wisconsin state hospitals. This rate has steadily and progressively declined. In 1940, insanity due to syphilis as found among those committed to state hospitals was slightly over 4%, and there is good reason to believe that this proportion will be still further reduced.

Without any doubt, other problems dealing with the health and vigor of our general population also lend themselves to scientific and factual investigations and, if followed by comprehensive action, should bring about equally good results. For example, some states have adopted compulsory pre-natal blood tests. These are designed particularly to prevent congenital syphilis. The progress that these other states are making in controlling congenital syphilis suggests serious consideration of similar legislation in Wisconsin. Information from the 1940 birth certificates indicated that about one-half of the women delivered in Wisconsin in the year 1940 had had voluntary pre-natal blood tests.

Corresponding with every death from preventable causes, there are always a far larger number of individuals unnecessarily left with impaired health, whether from tuberculosis, conditions associated with pregnancy, accidents, communicable diseases of childhood, or other causes. The direct cost of impaired health is impossible even to estimate. We know that we can trace much of the need for relief and other aids directly back to health dificiencies. It seems easier to arouse interest and get action in providing care of undesirable conditions after they occur than it is to stimulate communities to budget for their prevention. Consequently we go on year after year carrying the burdens resulting from health neglect.

*Hospitals too Few; Supervision too Lax.*

Reports of medical societies and other public and semi-public bodies suggest that hospitals if not properly licensed, inspected, and controlled are frequently a menace to public welfare. There are 162 general hospitals and 64 maternity homes in Wisconsin. Forty-two of these hospitals located in 17 counties meet the standards of one or

more of the following agencies: The American College of Surgeons, the Council on Medical Education, or the Bureau of Nursing Education of the State Department of Health.

The remaining general hospitals (120 out of 162) and the maternity homes have no recognized medical standards or inspections with which they must comply. If there are maternity beds, then they must comply with Maternity Hospital Law (48.43 Wisconsin Statutes), but this law simply requires each hospital seeking a license for the first time to meet certain sanitary requirements, the inspection to be carried out by either the local or state health officials. About three-fourths of the local health officers are laymen; in recent years the district health officer has been responsible for inspection and final approval of applications for licenses. If the hospital meets the initial inspection requirements and keeps the required records of all births, a license to operate is granted.

It is evident that there is very little regular inspection or actual regulation of hospitals not having internes or a nursing school. Control over medical practice in each hospital is nil in the smaller institutions; however, certain of the larger hospital staffs do have staff rules and regulations. In this state the local county medical societies exert little control over hospital procedures, but in many other states certain county societies have become very active in control of hospital management and medical practices.

The test of adequate community hospital facilities has been the number of hospitals per unit of square miles; however, hospital equipment, management, and availability to all licensed physicians in the community, should also be considered. Four Wisconsin counties have no hospitals or maternity homes. Three counties have only maternity homes. However, these are in sparsely populated counties, and adjoining counties in Wisconsin or neighboring states do have hospitals. Twenty-two counties have hospitals of under 50 beds.

Wisconsin needs fewer of the small uncontrolled hospitals, but an increasing number of well distributed hospitals that are adequately controlled and equipped. A well regulated hospital becomes an integral part of community health. In addition, it acts as a stimulus to the doctors, and maintains medical practice on a high plane, with restraint of unnecessary radical procedures. If the hospitals are to safeguard health, more stringent and frequent competent inspection is necessary than that which is now possible under the existing statutes.

*Protecting the Rights of Children.*

The 1940 Census reveals that there are some 41,000,000 children under 18 years of age in the United States—almost a third of our population. It is a truism that the America of tomorrow depends upon the children of today. Any consideration of population resources therefore must concern itself with child welfare.

The needs of the great majority of children under 16 years of age are met by their families and by community services that should be available to all children. Every community has an obligation to assure the availability of such community services as health protection, schools, and playgrounds. But it has the further duty of making sure that care and protection are within reach of those children whom we classify as dependent, neglected, delinquent, and physically and mentally handicapped.

With varying degrees, social protection has been extended during the first three decades of the twentieth century to special classes of children through programs for the prevention of infant mortality, regulation of child labor, establishment of juvenile courts, improvements in methods of care of dependent children, and psychological and psychiatric studies of delinquent children.

The most significant developments in the child welfare movement in the past decade have been the emphasis on conserving the child's home, and the extension of public responsibility for children, which have found expression in various federal and state activities. Relief and work programs, aid to dependent children, social insurance, extension of child welfare services, especially in rural areas, various forms of aid for the education and employment of youth—all are direct or indirect methods of protecting children.

As of January 1, 1941, the Division of Public Assistance estimated that there were approximately 100,000 children under 16 benefiting by the various relief and works programs carried on in the state. About 30,000 children directly benefit by the aid-to-dependent-children program, commonly referred to as mothers' pensions.

The Bureau of Handicapped Children reports that, of the 650,000 Wisconsin children of school age, about 10% have vision defects and about 10% have hearing defects. There are approximately 18,000 children in the state receiving some type of special teacher instruction. Included are those with speech, hearing, and vision defects, the mentally

sub-normal, the crippled, and those living at the resident school for the blind and the resident school for the deaf. At present the Bureau has a registration of about 9,000 individuals under 21 years of age with orthopedic disabilities, who are crippled seriously enough to constitute a handicap for employment. About 2,000 children are served annually in the State Orthopedic Hospital. Over 5,000 mentally subnormal children are in special classes and in the state institutions at Chippewa Falls and Union Grove—these figures do not include Milwaukee.

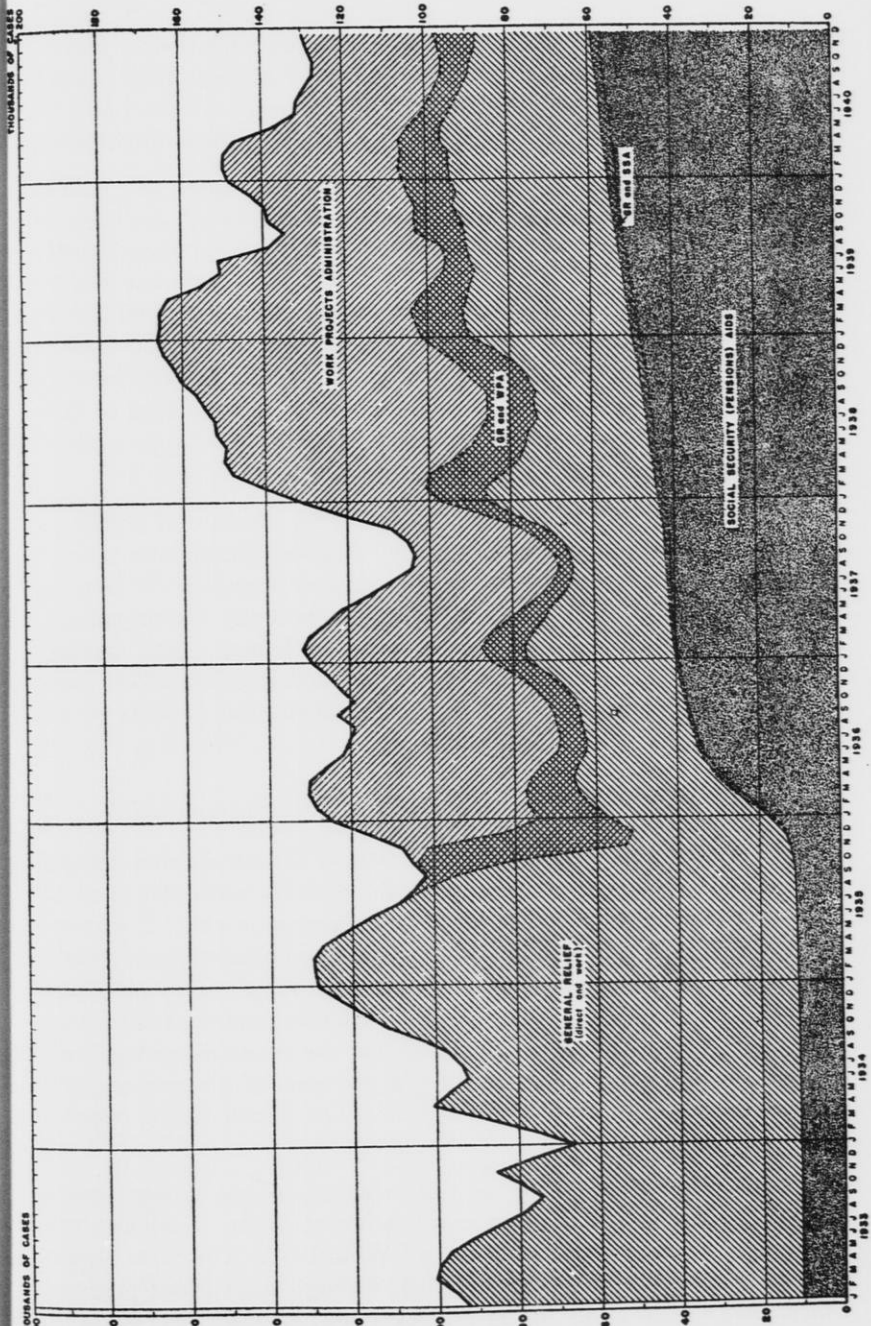
One of the oldest of population problems is illegitimacy. Its occurrence is as old and universal as the family itself, and that we are making very little, if any, progress in its control, is evident from the available statistics. During the years 1930-1940, there were reported in Wisconsin an average of 21 illegitimate births for every 1,000 births. Approximately 80% of the illegitimate births are first children; the remainder are second and third, and even fourth or fifth children.

The rate of illegitimacy varies from state to state, and even from county to county in our own state. These variances cannot be taken as reliable criteria of the moral goodness or badness of respective areas, because the differences are due mainly to other reasons. The chief of these are the differences in the reporting systems, a lack of uniformity in statutes from state to state, and even because of the reluctance of some public officials and attending physicians in the recording of illegitimate births. Variation also occurs between communities due to the fact that greater pressure is brought to bear by the family and officials to locate fathers and force marriages when children have been conceived out of wedlock.

Causes leading to illegitimacy are difficult to isolate. Available information indicates that it is most prevalent among the young. In 1939, a typical year, 37.7% of mothers having illegitimate children were under 20 years of age; 76.8% under 24; whereas, of the *total births* in the state that year, 7.9% of the mothers were under 20 and 38.3% were under 24 years of age.

This is a youth problem which every community must face, and it can best be met by planning long-range programs which help all children and youth to adjust to life. Every community has a definite responsibility, not only to provide education, but also occupation and recreation. The interest of parents must be obtained, for the home is undoubtedly the most important factor in the emotional development

Figure 9. NUMBER OF CASES RECEIVING ASSISTANCE IN WISCONSIN, BY PROGRAMS, 1933-1940.




Some form of unemployment aid or relief reached into one of every three households in Wisconsin during the "depression thirties." In August, 1941, the number of public assistance cases fell below 100,000 for the first time in seven years.

Source: Wisconsin Public Welfare Review, Fourth Quarter, 1940.

of individual children, especially in their attitude toward sex. Patterns of behavior are formed very early in life. Although these may be influenced by school and community, the influence of the home and inter-relationships therein cannot be discounted in social adjustment.

Undoubtedly in some instances illegitimacy is related to ignorance, and sound education of youth in regard to problems of sex might reduce the incidence slightly. However, too much is not to be expected, as there is little evidence to indicate that the mothers of illegitimate children would rate at a lower intelligence level than the average. A well rounded plan for youth, allowing supervised group recreational activities for boys and girls of a type to hold their interest, is important for every community. Evidence seems to indicate that fewer problems of delinquency arise when young people are kept occupied and happy. Illegitimacy is but one of the problems of delinquency.

Although there is an extensive program for the care of children in the state of Wisconsin, there are many variations throughout the state in the quality and effectiveness of the services provided. It behooves the citizenry, legislators, and administrators to study the organization and administration of these programs, so that federal, state, and local funds will be wisely spent, duplication of services avoided, and to insure that the child population of the state receives the full measure of care and protection to which it is entitled.

*Meeting the Needs of the Unemployables and the Unemployed.*

During the years 1931 to 1940 inclusive, Wisconsin went through a decade of unemployment which, for its intensity and consequent human suffering, the state had never previously experienced. The intensity of need during this decade was not always at a constant level; neither were the forces which precipitated the need the same from year to year. During the first years of the decade, local communities took care of their needs, but it soon became evident that the resources of local communities were not sufficient; and the larger units of government, state and federal, were forced to share and finally to assume major responsibility for public assistance.

Some idea of the extent of the public assistance granted during these years can be had from an examination of Figure 9, which shows the number of cases each month from 1933 to 1940. The State Department of Public Welfare estimates that, through the various programs which were in operation during the years 1931 to 1940, over one-third

of all families in the state were provided assistance at some time in the form of money, employment, or commodities. In every year but one, from 1936 to 1940, the total amount spent for public assistance in Wisconsin has exceeded one hundred million dollars.

This decade of public assistance experience in Wisconsin has been but a part of a phenomenon with which the entire nation has grappled during the same period. It is impossible to list specifically the forces which brought about this decade of unprecedented public assistance expenditures, but several major trends in our socio-economic life may be pointed out as closely connected with the problem. They are as follows:

(1) An increasing mechanization of industry and a corresponding reduction in employment opportunities for less skilled and less efficient workers.

(2) A shift in welfare functions from the family to the state.

(3) An aging of the population so that we have a rapid increment both in the total number and in the proportion of persons in the older age groups.

(4) The precipitating factor was of course the almost complete collapse of our economic system which we call the crash of 1929, and the resulting economic depression during the ensuing decade.

There have been variations within the different sections of the state, both in the intensity and in the nature of the relief problem. For example, in September, 1940, the per cent of population receiving public assistance ranged by counties from 3.1% to 37%. Likewise, the proportion of public assistance cases having no employable member ranged by counties in September, 1940, from 36% to 83%. The responses of the local public assistance loads to economic changes from year to year have been, to a large extent, dependent upon this variable in the local case load.

Even with the revival of employment that characterized the year 1941, there were 113,469 cases on the public assistance rolls in Wisconsin in December, 1941. There were 21,900 employed on Works Projects, 68,457 receiving social security aids, and 23,112 on general relief.

The case load is now made up largely of a growing "hard core" of unemployable cases. This is demonstrated by the growth of the social

security aid programs during the past few years and the increasing proportion of general relief cases having no employable members. This qualitative change in the public assistance load forces us to revise our concepts of public assistance. The public assistance problem is not a problem of temporary unemployment, but several separate and distinct socio-economic problems of a permanent character. This change in the quality of the case load, and the probable developments of the future, are of significance for those who are charged with the planning of the public welfare program of the state.

Just what particular problems are ahead in the field of public assistance, no one can say, but some general trends are discernable in view of past experiences. It seems reasonable, then, to the Science Inquiry Committee that now is the time to develop plans for public assistance in accord with our probable needs in the years immediately ahead.

The emergence of old age assistance, aid to the blind, and aid to dependent children is, in part, a response to our population trends. With a steadily aging population, old age assistance security will continue to demand a large share of governmental appropriations. Repercussions of the present war will be of terrific import in this field. While long over-due reforms have been made in the depression period in the administration of public assistance, there is still much to be done. One of the major problems will be the striking of an economic balance in the benefits to be paid the aged, as contrasted to children, and to adult employables.

We need planning to meet any future recurrences of nation-wide unemployment. Undoubtedly, the demobilization years will bring about shifts in population. Certainly these population shifts will have to be accompanied by unemployment benefits, by direct grants in aid, and by public employment programs. We should have public projects of social and economic value which can be put into immediate operation to take care of any large scale unemployment. We must not allow ourselves to be caught in the type of situation which prevailed in the early "emergency relief" years of 1932-1935, when there was a mixing of employables and unemployables, skilled and unskilled alike, in one undifferentiated "work program."

CHAPTER VII

# ECONOMIC CONSIDERATIONS IN A CHANGING POPULATION

A BRIEF discussion of the economics of population trends in Wisconsin may be divided into three parts: first, a summary of the economic factors which contributed both to the rapid expansion of Wisconsin's population and, subsequently, to the retardation in the rate of this growth; second, a sketch of economic opinion as to the desirability or undesirability of present and expected future population trends; and third, suggestions toward a policy to deal with the economic causes of declining population growth. Economic factors, of course, do not alone account for population trends in either the upward or the downward swing. Previous chapters have shown how social, cultural, and biological factors influence population growth. This chapter will be limited to economic considerations.

*How Economic Factors Affect Immigration and Birth Rates.*

Obviously, there were two sources of Wisconsin's rapid population increase: immigration and a high birth rate. It has been pointed out that immigrants, both from the eastern states and from Europe, were attracted to this region by its rich natural resources in the shape of furs, lead deposits, farming land, and forests. The drawing power of these resources was augmented by the efforts of transportation companies and land speculators who profited by the stream of immigrants. Due to their influence, the state government itself for many years had an immigration agent who advertised extensively both abroad and in foreign language newspapers in order to attract settlers to Wisconsin. As industry developed, employers also sought to attract immigrants in order to augment their labor supply.

Economic factors also afford some explanation of the changed immigration trend apparent in Wisconsin since 1900 and particularly since 1920. Immigration into the state declined with the approaching scarcity of desirable agricultural lands and of virgin timber, and the decline in foreign immigration into the United States. For a time these causes of declining immigration were offset by the rising industrial develop-

ment along the Lake Shore and the efforts of industry to attract cheap labor. These efforts ceased after 1929.

Birth rates, likewise, have been influenced by changing economic forces. When Wisconsin was predominantly an agricultural area, and when low standards prevailed as to child labor and compulsory schooling, a child was definitely an economic asset. From an early age, he was useful as a laborer on the farm. With machinery scarce, the farmer needed family labor to help work the farm. And farm children cost little to raise. Food and shelter were often available with little extra cost; clothing was home made; shoes were used only in winter. Schooling was free. Relatively little was spent on medical care for children and their mothers. Thus economic factors afford at least a partial explanation of the high birth rate prevailing in Wisconsin, as in most agricultural regions, in the nineteenth century. This high birth rate was only partially offset by a death rate much higher than at present.

As with immigration, so with birth rates; since 1900, changing economic values have helped to bring about a corresponding shift in the birth rate. As a larger proportion of Wisconsin's population came to live in cities, and as child labor and compulsory schooling standards were raised in both city and country, the economic status of children was changed. Instead of assets, children tended to become liabilities. On the farm in the nineteenth century, they were economic necessities. Today, especially in the city, they have become expensive luxuries. For in the city food must be bought, and every extra mouth adds to the expense. Shelter must be paid for at high prices. Rent for a large family often becomes prohibitive. Medical care, at least at childbirth, has come to be regarded as a necessity. Finally, today in a Wisconsin city a child must go to school full time until he is sixteen. His earnings up to that age cannot amount to much. Even in rural areas, children must ordinarily stay in school until they are fourteen. Clearly, economic factors help to explain the falling birth rate.

*Declining Population Growth Changes Economic Assumptions.*

Until comparatively recently, orthodox economic opinion regarding population continued to follow the line laid down by Malthus. It was assumed that population would continue to increase and would tend in the long run to outrun the food supply or, more generally, the natural resources available for support. It was feared that the continuing industrial revolution with its astounding advances in technology could

offset this tendency only temporarily. Sooner or later the pressure of population on natural resources would force a gradual but inevitable reduction in the standard of living in all parts of the world.

About two decades ago, European economists realized that, despite falling death rates, population was ceasing to expand at previously expected rates. Vital statisticians, especially in the Scandinavian countries and in Great Britain, pointed out that even current population increases were really a reflection of past birth rates. Birth rates appeared to be falling so sharply, they forecast not merely the end of population increase in the near future, but the likelihood—unless something happened to reverse the trend—of a declining population. Most British and Scandinavian economists regard such a decline as undesirable. Particularly in Sweden and Denmark, since 1935 they have advocated governmental programs designed to make children less of an economic burden to families of moderate to low income. They hope by this means to counteract the tendency to population decline. An outstanding example of such a program is contained in the report of a royal commission set up in Sweden in 1935. Many of the recommendations of this commission were being put into effect before the outbreak of the present war. More recently the Australian government has inaugurated a policy that provides direct aid to stimulate larger families.

Economists in the United States have been slower to shift their position in regard to population policy. Many of them, until very recently, held that a declining rate of population growth was desirable as our country became filled up. They frequently joined with organized labor in advocating restriction of immigration. The possibility of an actual decline in population either did not occur to them or did not strike them as economically undesirable.

The report on "The Problems of a Changing Population" published by the National Resources Committee in 1938 was the first to draw widespread attention in the United States as to how far birth rates had already fallen and how soon we might expect to reach the peak in population. This report forecast actual decline in numbers beginning some time between 1955 and 1980, unless a change were made in our immigration policy or a radical increase occurred in the birth rate. American economists, therefore, have only recently begun to discuss the effects of the shift in population trends and to consider to what extent this shift may have contributed to the depressed conditions of the past decade.

In addition to changes in immigration and birth rates, there have been changes in the age composition. Temporarily, the proportion of the population falling in the age groups which are normally gainfully employed has increased. While ideally this should make possible a high standard of living, it has probably helped to increase unemployment. The emergence of the old age problem is due in part to the fact that smaller families mean fewer persons to assume the support of each old person. Of course, greater longevity and increased urbanization are also factors to be considered.

Finally, economists are wondering whether the slowing down in population growth in the last few decades has been a factor in reducing the demand for new housing and new capital equipment. Additions and expansions to the country's capital plant were estimated to employ one-third of the gainfully employed before 1929. At least one reason for adding to our capital plant is gone if we are nearing the end of population growth. How much has this building curtailment contributed to unemployment?

All of these difficulties created by changing population trends may be temporary. They may affect the functioning of our economic system only until it has adjusted itself to a new situation. More fundamental is the query whether an economic system based on free enterprise is suitable only to a period of population expansion, whether a stable or declining population makes necessary more planning and control.

### *What Policies Are Appropriate on the Basis of Economic Considerations?*

If economic factors first contributed to rapid population growth and later helped bring about a slackening in that growth, it follows that economic considerations are important in a constructive population policy. In order that the people of Wisconsin may formulate this policy, they should give thought to some of the probable alternative lines of action that will help solve the present complex population problems. This committee, therefore, sets forth some lines of attack which seem to follow from a rational discussion of the economic side of our present population predicament. In no way are these proposals to be interpreted as recommendations—they are intended only to suggest where a constructive population policy may lead.

First, we need better conservation of our most valuable resource, human beings, since this resource now approaches the point of scarcity.

Therefore, we should concern ourselves with the health and welfare of *all* our children. We can not permit any of them to be impaired in health or otherwise stunted in development because of the inability of their parents to provide the basic necessities of food, clothing, shelter, and medical care.

Second, the public should assume a larger share of the cost of raising children, for only in this manner can the economic factors be offset that now operate to limit the bearing of children by parents otherwise capable of producing healthy, normal offspring.

These two basic aims call for consideration of such policies as the following:

(1) Liberalization of income tax credits for dependent children to insure that they more nearly represent the added cost of rearing these children.

(2) Payment of maternity benefits to cover costs of childbirth.

(3) Public medical care for children.

(4) Public provision for at least partial feeding of children through the schools.

(5) Public subsidy for housing for large families.

All of these methods of helping to meet the economic burdens of family living have been used, at least in part, in certain other nations, particularly in Sweden, Denmark, Norway, Finland, England, New Zealand, and Australia. Apparently these nations have already had to answer the question raised above—they have been acting to meet the problems of a declining population.

CHAPTER VIII

# THE ROLE OF EDUCATION IN POPULATION POLICY

THERE is an old saying that no man can lift himself by his own boot straps. Foregoing chapters of this report, however, make it very clear that the improvement of the welfare of Wisconsin's population depends directly upon how well the citizens of the state understand the factors which aid or impede progress and upon how effectively they take action to remove the obstructions and handicaps to such progress. In other words, the standards of welfare of a state can be expected to rise as education lifts the general level of understanding.

In a democracy there are no short-cuts which will enable a few leaders to impose on citizens the policies which could even be defended on the basis that they would benefit the general public. The better days must wait until a majority of the people know what improvements are needed, and until they are willing to support changes necessary to bring them about. It is no exaggeration, therefore, to say that more and better education is a first requirement if we are to make further progress in the solution of those problems of population which have been discussed in this report.

Citizens of Wisconsin need to know not only the facts about population numbers and the qualitative factors which underlie a policy for improvement, but they must prepare themselves for the future with much broader and more intensive education. We live in a world much more complex than that of our fathers, and we need more knowledge than was available to them.

The regret is that so many of our people have not had the educational opportunities which adequately fit them for living in the year 1942. How much more important it is, however, that the future citizenry of the state now of school age be given the kind and amount of educational preparation which they will need for their own personal development and for taking their places in a turbulent world. This great task cannot all be delegated to the schools; home, church, and community must give their full share. Nor can education be confined to those of school-going age; enterprises of adult education, both formal and informal, are needed.

*Some Shortcomings of Our Educational Program.*

Superior intelligence, as evidenced by the I. Q. test, or the academic record in high school or college, does not necessarily indicate leadership qualities, or the ability of a person to make his way in the world. The fact remains, however, that the nation's welfare requires that its leaders in public and private affairs come from the group with above average intelligence, and that these leaders have had the benefit of an adequate education. The present war emphasizes the importance of the development of the abilities and skills of future leaders. When we examine the extent to which those with better than average mental ability have not been able to receive training for potential leadership, we are impressed with the human waste and frustration which we confront.

Real progress has been made in providing at least the physical opportunities for a greater number of students in high schools and in colleges in recent decades. Despite the increase in total high school enrollment, there are these serious qualifications to be noted: There are many drop-outs during the high school years, so that, whereas the freshman class is 31% of the total high school enrollment, the senior class is but 19% of the total enrollment. For the nation as a whole, 1,120,000 were graduated from high school in 1938, and 370,000, or 33%, of these entered college in 1939; while in Wisconsin, out of a graduating group of 26,500, only 5,553, or 21%, entered college during the following years.[19]

What is even more significant for the development of our human resources, is the fact that a substantial number of the students of greatest ability do not go on to college, and the chief handicap which prevents their going on is lack of money. Here is a major loss so far as the development and use of the abilities of our population are concerned. A recent study in the state of Pennsylvania uncovered some very significant information regarding the wastage that is represented in the large numbers of very promising high school graduates who are unable to secure any college training.

Among other facts given in the report, two are of special importance to this committee. First, "the group that goes to work after leaving high school includes many pupils fully as able to secure high test scores as any pupils who go directly on to college. . . . In the intelligence test, 25% of the non-college group make scores between 52 and the top of the test (75). In the college group, considerably more than

[19] *Biennial Survey of Education in the U. S.*, 1938-40, U. S. Office of Education.

half make lower scores than this." [20] Second, "about 25% of the pupils who were in college for at least two years after leaving high school had lower high school test scores than over half of those who left high school to go to work." [21]

A study of the returns of a college aptitude test given some years ago to seniors in Wisconsin high schools revealed a situation somewhat similar to that in Pennsylvania. Twelve hundred graduating seniors who ranked in the upper 25% of over 20,000 students, as indicated by the intelligence test, did not plan to go on to college; whereas an equal number who ranked in the lowest 25% in the intelligence test planned to go on to college.

The facts from these two studies speak for themselves. Taken as a group, the high school pupils who go on to college exhibit a superior average, but that fact takes no account of the able and often brilliant young minds that are left behind because they cannot pay college bills.

The amount of public financial aid available to students of good ability, but inadequate economic status, is very limited. In recent years the NYA program has helped a number in high school and college, but the total amount of public aid to students in colleges in the form of scholarships or grants of some sort for the whole United States is only about sixty million dollars, as contrasted with the amount of one billion dollars per year contributed by students for their own education. Of the sixty million dollars, scholarships and NYA assistance together account for about one-half the total, about fifteen million is payment for services rendered to the institution by the student, and about six million are loans, which after all will have to be repaid at some later time.

On the other side, it also can be said that colleges and universities sometimes accept as students individuals who really should not undertake higher education, even though these persons are adequately able to meet the financial costs involved. The general public has the right to question the wisdom of using our limited educational resources to serve young men and women of below average mental ability, or who have no real desire for academic learning. Likewise, it needs to be recognized that colleges and universities are turning out some graduates with a high I. Q., and with good records as students, who still are inadequate to take their place in society, and to make full use of the money and

[20] *The Student and His Knowledge*, The Carnegie Foundation for the Advancement of Teaching, Bulletin #29, pp. 37-38, 1938.
[21] *Ibid.*

time spent in their training. How much of this inadequacy is in their personality, and how much in the shortcomings of their education, is not always clear.

*Increased Need for Vocational Training.*

The need for vocational training is another one of the "musts" in the educational process. In our present complex society, the opportunity for unskilled workers is becoming increasingly limited. Machines now do most of the heavy work which formerly put a burden upon human backs and arms. Today the need is for those who can operate machines.

During the depression years of the 1930's, unskilled workers found it especially difficult to secure employment. The records of the WPA show clearly that most of the unemployed, and those who were hardest to get off of public assistance rolls, were the unskilled.

Upon the educational system of the state fall two specific responsibilities as regards the unemployed: (a) training present day youth so that when they reach maturity they may be qualified for something more than unskilled labor, and (b) training or re-training present adults so as to enable them to make their largest contribution to national production, and at the same time advance their own welfare.

When the war emergency required all-out production, we found ourselves with an acute shortage of skilled workers, even though thousands of Wisconsin citizens were still unemployed and dependent upon WPA employment or some other type of public assistance. Federal agencies, especially the NYA, CCC, and the WPA, undertook educational programs to train our people for war industries. These federal activities have been of great assistance, but in terms of the needs of Wisconsin's unskilled workers it can be said that it was "too little and too late." It has been simply impossible to correct in a few months educational shortcomings that have accumulated over many years.

Little would be gained by trying to fix the responsibility for the failure of Wisconsin's educational system to meet adequately the long standing needs of its unskilled workers. Some groups have not wanted to have more persons trained to compete for the available jobs in the skilled vocations. Many rural communities have thought of vocational training for boys only in terms of agriculture, meanwhile totally ignoring that 30 to 50% of the boys in most communities would have to find non-farm employment because there simply were not enough good farms to go around.

The state legislature has continued to perpetuate duplicating and competing teachers colleges and county normal schools to train teachers primarily for academic subjects, when every survey and investigation has shown that large savings could be made, and efficiency promoted, if we had fewer and better financed teacher training institutions. Other states, notably New York, have found it possible to give four years of academic and professional preparation for rural teachers in the state teachers colleges without a system of county rural normal schools, of which we have 28 in Wisconsin. Certainly these are among the urgent problems of education in rural Wisconsin demanding study and action by laymen and professional educators, to the end that necessary changes be made in our statutes.

Looking backward, we can see many mistakes that have been made in our educational policies. Some of these were not obvious at the time, and are of the kind that are much easier to recognize now than when the mistakes were made. Still others were the result of the all too common human failing of continuing the pattern of the past, even though the conditions and needs had greatly changed.

In times of national stress, like the present, the sins and omissions of the past rise up to make more difficult the emergencies that confront us. With our hands more than full with wartime activities, it is not possible to make quickly all the changes in our governmental activities that experience now indicates are urgently needed.

But of one thing we can be very sure; educational policies should focus on the needs of our citizens rather than on the educational institutions and programs that happen to have won public support in the past. Likewise, there can be no excuse for leaving thousands of our Wisconsin youth and adults educationally handicapped because pressure groups are willing to put local educational institutions and traditional policies ahead of the welfare of those of our citizens who are most hampered because of our present shortages of educational opportunity.

Many of our larger cities have excellent vocational schools that are doing a good job of training persons to become skilled workers. In recent years their facilities have not been large enough to meet adequately the demands that have been put upon them. The earlier chapters of this report call attention to the fact that the larger birth rates, and the greater relative numbers of boys and girls, are to be found in agricultural Wisconsin, the villages and the smaller cities. It is in these local-

ities that the opportunities for training for the skilled trades are most deficient, and often almost completely lacking.

Clearly, the challenge to Wisconsin is to provide training for these boys and girls that will best enable them to serve the nation and advance their own welfare. Our Wisconsin youth need work experience as an integral part of their high school education. A state policy of supplementing the secondary school curriculum with profitable work experience in shops, on farms, in factories, and in commercial occupations, in order to give our boys and girls an appreciation of the dignity of labor and a beginning in vocational skills, would be a definite advance in education.

*Wisconsin's School Load and How It Is Carried.*

Formal schooling at public expense is the only phase of education which can be considered in this brief review. The legally established school census of Wisconsin includes children from four to twenty years of age. In the school year 1940-41, there were 815,665 in this age group. This number has been declining steadily for the past five years at an average rate of nearly ten thousand per year, some years more and some less. The reasons for this trend should be plain to those who understand the population changes which have been outlined in this report, such as decline of net reproduction rates, rise of the average ages of the state's population, larger proportion of women over forty-five years of age, and migration of farm youth to urban centers outside the state.

Actual school enrollments, however, have decreased very little—only about 2½%—during the same period, indicating that a larger proportion of those of school age are in school. In 1940 there were about 423,000 children between the ages of six and thirteen years, and practically all of them were in school. The greatest increase in the proportion of the age groups in school is found in the high school group, fourteen through seventeen years of age.

During the ten years, 1930 to 1940, enrollment in the public high schools of the state increased by over a half to about 160,000 pupils, while the number of graduates increased 87%. The number of tuition pupils largely from farm homes located outside legal high school districts increased by 80% in the same period. Nevertheless, it is estimated that about 40,000, or 18%, of this age were not enrolled in either

public or private schools during the year 1939-40. Of those seventeen to twenty years of age, it is believed that hardly one-half were in school.

By comparison with other states, Wisconsin ranks in the third quarter of the states with respect to the per cent of total school population enrolled in school as well as in the per cent of school tax revenue drawn from state sources. With regard to the share of total school costs provided by the state, it ranks twenty-fourth, or right in the middle. This is particularly significant since it ranks twelfth in per capita income. It seems clear from this that our state is not supporting public education in relation to its financial ability to a degree comparable with many other states of the nation.

*What Are Wisconsin's Educational Offerings?*

The competence of any commonwealth depends upon the attitude of its citizens toward the development of human resources and abilities; in a word, educational opportunities. Three years after it became a territory, Wisconsin expressed its belief in public education by imposing a real estate tax of one-fourth of one per cent on every county, for school purposes.

One of the first major actions taken after the adoption of the state constitution was the enactment of legislation authorizing and requiring the establishment of public schools by local areas. This ideal of local school units starting with 2,000 in 1849 continued until by 1910 there were about 7,400 local school districts in the state. In 1940 there were about 7,100, of which approximately 5,900 were one-room school districts. Their distribution by number enrolled is shown in the accompanying table.

Table 7. Number of Students per One-room School in Wisconsin, 1939-1940

| Number Enrolled | Number of one-room Schools |
|---|---|
| Total | 5,869 |
| 1 to 5 children | 89 |
| 6 to 9 children | 490 |
| 10 to 14 children | 1,215 |
| 15 to 19 children | 1,385 |
| 20 to 24 children | 1,079 |
| 25 to 29 children | 778 |
| 30 to 34 children | 403 |
| 35 to 39 children | 237 |
| 40 to 44 children | 100 |
| 45 to 49 children | 59 |
| 50 to 54 children | 22 |
| 55 to 59 children | 7 |
| 60 children or over | 5 |

A school is obviously more than a building or a room. One of the most important features of any school at any age level is the opportunity of associating with those of comparable maturity, congenial interests, and varied experiences. Education is an internal experience which is greatly conditioned by the social situation in which it takes place. Social development resulting in desirable balance and bearing among individuals can be gained in no other way than through this group association.

An educational unit, therefore, may be too small or it may be too large. This principle is recognized in recent legislation whereby the state superintendent is authorized to reduce more or less drastically state and county aids to one-room schools that have less than ten pupils in average daily attendance, as well as to combine school district units wherever districts have an assessed valuation of less than $100,000. In 1940 there were 579 one-room schools with less than ten pupils enrolled; more than that enrollment is needed to insure a minimum of ten in average daily attendance. At the other end of the scale it can be observed from the table that there were 1,611 one-room, one-teacher schools with more than twenty-five pupils, a maximum which educators say should not be greatly exceeded if effective learning is to be expected. The one teacher must handle all of the eight grades of work. In thirty-four of the schools the enrollment was over fifty pupils.

Wisconsin ranks in the lowest fourth of the states in the number of one-room schools, compared to the total number of school buildings. There may be honest differences of opinion regarding the relative merits of country schools with capable teachers, good courses of study, adequate supervision, and appropriate number of pupils when compared with specialized urban elementary schools. Yet, from the evidence in hand, there can be little doubt of the unequal opportunities in the state's educational offerings for many country children. The lack of equalized educational advantages between rural and urban situations carries over into the secondary or high school level.

First of all, 88% of the area of the state lies outside any legal high school district. About 80,000 boys and girls of high school age who live in rural areas, are without high schools of their own. The very irregular distribution of such legal high school districts throughout the state is illustrated in Figure 10. Somewhat more than half of the rural boys and girls, a far lower proportion than of village or city youth of similar age, do go to high school. They go on the tuition basis. The township simply pays the tuition while the educational

Figure 10.

WISCONSIN HIGH SCHOOL DISTRICTS

1937-1938


Eighty-seven per cent of the area of Wisconsin lies outside any of the existing high school districts. Educational opportunities would be better equalized if all of the state shared in supporting the high schools.

policy is in the hands of village or city school boards. Rural people of the state are not likely to develop any great enthusiasm for an educational system in which they have little sense of responsibility. Country territory was even withdrawn from the legal areas of ninety high school districts under the permissive legislation of 1927 known as the Detachment Law. The time has come to recognize that education, especially high school education, is a joint responsibility of country and village or city people, and should be assumed on an enlarged community basis, with the state through its program of aids serving as the equalizing agency.

Second, the principle of adequate numbers of pupils for a good school also comes into play with the high school. Many educators insist that a minimum for a good high school is 250 pupils and ten teachers, including the principal. More than half of the high schools in the state have less than this enrollment and teaching staff. Everyone seems to agree that the handicaps are too great for maintaining a good school with fewer than one hundred pupils and six teachers. The costs become excessive, or services such as library facilities, health work, physical education, manual arts, agriculture, and home economics cannot be offered.

The distribution of the 485 high schools, public, parochial, and other private, of the state, according to number of teachers for the year 1940-41 is given in the table. It is significant to find that more than one-third of the high schools, 194 to be exact, fall below this number of six teachers; and such schools are, with few exceptions, located in the rural areas of the state.

Table 8. Number of Teachers per Four-year High School, 1940-1941 (Public, parochial, and other private)

| Number of Teachers per school | Number of four-year High schools |
|---|---|
| 2 | 9 |
| 3 | 20 |
| 4 | 54 |
| 5 | 61 |
| 6 | 50 |
| 7 | 47 |
| 8 | 32 |
| 9 | 16 |
| 10 | 20 |
| 11 | 16 |
| 12 | 16 |
| 13 | 17 |
| 14 | 11 |
| 15 | 11 |
| 16-20 | 33 |
| 21-25 | 20 |
| 26-30 | 15 |
| 31-35 | 15 |
| 36-40 | 6 |
| 41-45 | 7 |
| 46-50 | 9 |
| Total | 485 |

Finally, it should be pointed out that even those rural youth who are able to go to high school, through much personal effort and in spite of inadequate transportation facilities, are often handicapped if they have attended a school which is too small to offer first-class instruction. University and college records suggest that freshmen entering from the very small schools are in general much less well prepared, and that more of them have scholastic and social adjustment difficulties than such students as come from the larger and more adequately equipped and staffed high schools.

*Rural-Urban School Opportunities Need to Be Equalized.*

The sharp discrepancies between the educational offerings now available to children in rural as compared to urban areas can be corrected only as the citizens of the state recognize the wisdom of providing at least a minimum standard of school opportunity for all children. It is neither the part of wisdom nor of justice for either the individual or the state to withhold from any boy or girl educational opportunities to develop his capabilities to the fullest, just because he happened to have been born and reared in a rural rather than in an urban section of the state. The history of Wisconsin, as well as all other states, shows that some of its best human resources are to be found in rural areas.

The challenge to equalize opportunity for all can be met if the state as a whole accepts the responsibility seriously. The state can afford an effective school system, elementary and secondary, which will provide the minimum of facilities and program for all its children. Funds that are largely wasted in maintaining small district units with their inadequate offerings and high per pupil costs would go far toward meeting the obligations necessary to provide superior offerings for all if district boundaries were reorganized with this end in view.

The state, if it will, can set about to reorganize its rural educational system. In such reorganization it should be recognized, however, that the closing of those small one-room schools that happen to be located in low valuation areas is a relatively insignificant first step toward meeting the situation. Small schools in high valuation areas and schools with too many pupils per teacher are as much in need of readjustment as are those with low enrollments in low valuation districts. The so-called "consolidation" plans for rural schools carried on during 1939-41 may be justified both in terms of educational efficiency and of financial expediency, but they can not be regarded as

more than a small part of the fundamental changes which are in keeping with the changing population trends and educational needs which have been traced in this report.

The effort to bring about an equality of educational opportunity must go much further. Ultimately the entire area of the state must be brought within the legal limits of the various high school districts, all elementary schools within such districts must be adjusted to this larger educational unit, and some method for state equalizing of transportation costs must be provided.

It is recognized, of course, that there are some sparsely settled areas, some difficult road conditions, and other real obstacles in the way of reaching an ideal system of public education all in one fell swoop. But it is important to recognize desirable goals, and to strive for them wherever feasible and practical. It is complacency with the mediocre which impedes all progress.

Finally, the role of education in a population policy for the state involves not only better buildings and equipment and better adjusted educational units which are essential, but most important of all are the teachers and their abilities to instruct and to inspire. This ability can be greatly strengthened and developed by training and self-improvement. A truly successful teacher is usually a person who would also be successful if engaged in another vocation.

The children of Wisconsin deserve to be taught by men and women who have the personality and the native ability to make them sought for by other employers than school boards. Therefore, the public is short-changing the children of any community when it encourages school boards to pay salaries less than private enterprises or than other public professions are paying their group leaders.

In view of the extreme necessity, not only of using the abilities of our people to the limit in the war effort, but also in the extended and difficult period of post-war adjustments when so much of the productive equipment and organization of society all over the world will have been destroyed, there is no more important aspect of the population problem of any American community than the preparation and application of a comprehensive and integrated program of education. Such a program should provide for the most effective use, free from duplication and without gaps, of all the educational facilities needed to enable young and old to make their largest contribution toward the national welfare as well as permit their individual achievement and satisfaction.

CHAPTER IX

# LOOKING FORWARD

IN A DEMOCRACY, the chief purpose of government is the promotion of the welfare of the individuals who make up the population. Conservation of Wisconsin's human resources is thus in a sense the most important enterprise in which the people of the state are engaged.

That the citizens of Wisconsin have been aware of their opportunity and responsibility in this field is evidenced by the remedial measures that have been taken in the form of unemployment relief, provision for children and for the aged, the crippled, the sick, the mentally handicapped, and such groups as the alcoholics and the criminals. Good progress has been made in relieving the needs of these groups, but there is still much that needs doing.

A democratic policy in human conservation, however, must go further than only caring for the needy. It is both ethical and charitable to care for those less fortunate persons in our midst, but we have a greater responsibility than this: *to foresee and to prevent* disease, ignorance, and abnormal behavior. To the extent that the citizens of Wisconsin accept and act in accordance with this concept of prevention, they will be practicing the most effective method of human conservation. Likewise, they will also be using good business judgment, because prevention, in the long run, is usually much cheaper than correction.

A broad preventive policy in human conservation naturally must begin with the family and with children. It will not and cannot limit itself to the families or to the children of the unemployed or otherwise handicapped. We need a unified, coordinated policy that will make it possible for every Wisconsin child and every Wisconsin family to secure the minimum requirements for food, clothing, shelter, medical care, education, and similar basic needs. It is under these circumstances that each individual can make his largest contribution toward the state's economic and cultural progress. For public policy to attempt less than this is neither wisdom nor economy.

This type of program will increase the immediate costs of government, but the benefits to the general welfare will abundantly justify the costs. Preventive measures that reduce the number of persons who must depend, at least in part, on direct public assistance of some kind, in the long run represent an opportunity for constructive governmental economy as well as constitute a social responsibility.

Furthermore, the effective measures for prevention are necessary and urgent from the standpoint of national defense. The discovery that nearly half of the young men called during the past year for selective service are physically so unfit that the army does not want them is certainly convincing evidence that we have not conserved our human resources as we should, because the major portion of the defects brought to light in the physical examinations are definitely preventable.

In fact, it is now planned to spend millions of dollars correcting the defects of these young men so as to make it possible for thousands of them to play their part in the defense of the nation. The regret is that these same millions could not have been spent earlier to prevent these conditions from occurring: a procedure that would have been infinitely better from the standpoint of the men concerned as well as of the nation.

## FINDINGS AND RECOMMENDATIONS

1. *Human Beings—Our Most Valuable Resource—Should Be Conserved.*

The conservation of Wisconsin's population means giving each citizen the opportunity to make the most of his inherent capabilities. It also means putting into effect those public policies which will enable the state in the years ahead to have the number and kinds of people that will permit Wisconsin to maintain leadership in the material well-being and the cultural development of its citizens.

To attain these goals will require constructive action on the part of the state government in addition to what the three million citizens can and should do as individuals.

Whatever may be the arguments pro and con about the desirability of a constantly increasing size of population, there is virtually unanimous agreement that an actual decrease in the numbers of our people

would be unfortunate in a great many ways. Present birth rates, if continued, make such a decrease inevitable, unless the United States is to open more widely its doors to immigration.

We thus face a situation in which the need for more children has become a matter of state and national concern. Translating that concern into wise public policies constitutes a challenge to the thinking of educational, professional, and political leaders, as well as to citizens generally.

Nor will it be enough to reverse the trend in birth rate and again look forward to an increase in the number of Wisconsin children, if this increase comes chiefly in families that are least able to supply their children with the essentials for health, food, shelter, and the other requisites of a normal life in the United States in the middle of the twentieth century. Clearly, the need is for a "society in which, at every economic level, parents who are responsible and competent will have more children than their irresponsible neighbors. This is not the sort of society we have today." Likewise, it should be an aim of government to reduce the inequalities in living costs between married and unmarried persons, and between families of different sizes. To fail to do this is to put a premium on childlessness.

This nation has the material resources to make it possible for every child to have adequate food, housing, medical care, and the other requirements for a normal life. The task before us is to devise more effective ways of utilizing these material resources in the service of our people, particularly children.

This nation can never again defend a policy of spending hundreds of millions annually to induce farmers to reduce agricultural production when meanwhile we have millions of our children inadequately nourished.

With each year witnessing an increased percentage of our population being in the age groups above sixty years, the competition for public aid by these older persons at the expense of children and young parents is likely to become still more acute. The children cannot vote, whereas the aged can. Pensions to those who at some time served in the army or navy also constitute a very large burden on the public funds that otherwise might be available to provide the essentials of life to the children of the nation.

We have an obligation to our aged and to our war veterans who are in need, but this obligation is certainly not greater than to the nation's children. In terms of both national welfare and social justice, no public policy is open to more condemnation than permitting pressure groups of older citizens to extract public subsidies for themselves while the nation's children are deprived of adequate nutrition and health because there were not enough public funds to take care of both the pensioners and the children. Children should come first in our planning and in our provision for the nation's future. Our natural resources are capable of providing for all our citizens, if we will but develop and use them efficiently, but children have the first claim.

2. *Educational Revisions Vital to a Conservation of Our Human Resources.*

In June, 1933, Wisconsin had more children than it will ever have again unless the trends traced in this report are completely reversed. This is highly improbable. A first consideration should therefore be the conservation and education of those children.

Thousands of the boys and girls of this state are today failing to receive the educational opportunities that will enable them to hold their own in the competition which they are sure to face as adults. Rural youth especially should be given more and better education.

School programs should take more fully into account those population factors and those cultural backgrounds which have been described in this report.

The gap between the grade school and the high school should be bridged.

The cleavage in educational responsibility between country and village or small city should be closed.

The state could well afford to make a first-rate study of its educational system to the end that future policies might be intelligently formed to overcome much of its outmoded past.

3. *Population Facts Should Be Widely Disseminated.*

A primary consideration in any constructive program to meet Wisconsin's population problems is the requirement that *all significant facts* concerning human resources be made available to the public at large. We live in an age of unprecedented pressure from propaganda groups.

The best protection from the selfish or narrow programs of pressure groups is the wide dissemination of factual knowledge. The public should know the facts concerning the state's human resources, concerning the problems that we as a people have created by ignoring or misusing these resources, and concerning the democratic ways in which a sound population policy can be developed and carried forward.

The obligation to make known the facts regarding population problems rests upon the educational institutions of the state and the service agencies in the fields of health and public welfare. None of these is now doing all that it can or should to disseminate information regarding the changing numbers and qualities of our people and the factors responsible for these changes. This information can be presented impersonally and objectively, but there should be no hanging back simply because some of the facts may not be pleasant and comfortable.

In the 1940's, there is no excuse for an educational program that stresses conservation of birds, and trees, and minerals, and soils, but tells the children and their parents little or nothing about the conservation of human resources. Human erosion in the form of malnutrition, disease, and other preventable handicaps, is just as real and just as much in need of united public action as the control of soil erosion. The school or college graduates who know all the laws in the physics textbook, but have been told nothing about the natural laws of inheritance that will determine what kind of children they are likely to have if they marry, are certainly inadequately educated to meet the tasks of life.

Population problems in a democracy are corrected by the concerted action of the citizens themselves. The judgment and actions of the people can hardly be expected to be any better than their information. The gathering, the analysis, and the dissemination of information on factors concerned with population are, therefore, activities of prime importance. Much more needs to be done in this field than has been undertaken in the past. Science has put new and highly useful information in our hands. Human needs are greater in number and infinitely more complicated than they were a generation ago. Progress in lifting the standard of living, and in promoting the welfare of the public as a whole, is held back until we can enable our citizens to secure the information required to meet the human problems that confront the commonwealth.

4. *Social-Cultural Resources Need Development*

Wisconsin, as much as any state in the union, has benefited by the settlement of peoples of many nationalities and many cultures. The majority of our citizens are less than three generations removed from foreign nations. Many are more recent arrivals. All of us are descended from immigrants.

Each of the groups brought with it a set of ideals, of values, of traditions—a culture. They recognize that the degree of happiness and success which they have achieved in their new environment has been made possible by the two-way process of assimilation. They have contributed to the new American culture, and have borrowed from it. It is this exchange which makes our present day Wisconsin culture one of the most cherished and powerful assets which the state possesses.

The Science Inquiry has uncovered no evidence to support the theory that the quality of a population depends on racial factors. There are large differences between the capabilities of the three million persons now living in Wisconsin, but these are primarily individual and family differences; they are not dependent on racial or nationality factors.

Wisconsin has its areas of socio-cultural poverty, which have arisen from these individual differences and disadvantages. It is difficult to delineate with exactness the size of this population, but of its existence everyone is aware who has contact with the problems of the state. This group can be found in some of the rural problem areas, as well as in some clearly defined neighborhoods of our cities. This group is not necessarily made up of the foreign-born, although they, together with the native-born, are included. Their difficulties are not primarily the result of biological weaknesses, although undernourishment and a lack of physical care in childhood are definitely causing their problems to persist and to increase.

In Wisconsin, as elsewhere, as the social and cultural level rises, many population problems become less acute. The very fact that these population problems are associated with social factors lends encouragement toward their correction. In other words, the line of approach toward their solution is not eugenic, because we are not in this section dealing with imbeciles or the low-grade feebleminded. We are talking of those groups where home environment, community, family outlook, interests and traditions, and limited opportunities for self-expression

hinder the growth of normal personalities. Until these social and cultural handicaps are removed, they operate as a drag on our general cultural advance.

5. *College Students Need More Instruction in Human Conservation.*

In addition to the separate specialized courses in such subjects as human genetics, population statistics, etc., that are taken by the relatively few students who have a special interest in these fields, there are thousands of students in the University and the colleges of the state who are majoring in other lines of work but who would be greatly benefited by taking a course in the conservation of the human resources of their state. Not only do these young men and women need this information for their own enlightenment, but just as important is the desirability of having these persons, when they graduate, carry into every community of Wisconsin a knowledge of the more significant facts regarding the state's population.

This non-technical course might carry a title like "The People of Wisconsin" or "Wisconsin's Population Problems." The factual data submitted in this report, somewhat amplified, would be presented in such a course. Likewise, the instructor would explain the economic and cultural factors that have brought about the present population pattern. He would show the origin and growth of the population problems now existing. In particular, he would delve into the sore spots or areas of maladjustment which are most in need of attention. The medical and the biological factors would be considered as well as the economic and the social. Some of the discussion might be on a national basis, in order to compare the relative importance of the phenomena in Wisconsin and the nation as a whole. Two chief objectives would be sought: First, to acquaint the students with the people of Wisconsin and their needs; second, to enable these young men and women to see their individual and group opportunities for playing a part in the conservation and better use of the state's human resources.

6. *A Knowledge of the Population and Resources of the State Is an Essential Factor in Training Our Public Servants.*

The great expansion in the range and size of the public services in the past fifty years has led to a wider interest in the selection of civil servants and their education prior to, and further training after, entrance into the service. The state of Wisconsin is notable for pioneer-

ing in the selection of a well qualified civil service and the fostering of fruitful relations between education and the public services. The recent survey of *University Education for Public Administration* by George Graham emphasizes the unique contributions of the University of Wisconsin to the improvement of the public service in the past and indicates its present and future opportunities for further achievement.

The development of the functions of government in the past decade has increased the importance of the civil service in state and local governments in areas directly related to the problems discussed in this report. The opportunity of a local community, and the families and individuals within it, to maintain a healthy, satisfying, and productive life depends much upon the knowledge and skill of their public agents in dealing with natural resources and population problems related to health, education, welfare, highways, and land use.

We need to keep the university programs up-to-date so as to meet the rising qualifications for the civil services of national, state, and local governments, especially in view of the rapid increase in positions in the competitive merit classification. The Social Security, Soil Conservation, and related acts, create new and complex administrative tasks for local and state as well as national officials. Public servants will need to have a better acquaintance with basic natural resources and population factors and an understanding of how research might aid in solving some of the difficulties facing the various administrative agencies.

A committee appointed by President Frank in 1934-35 reported on training for the public service at the University. Subsequent developments in training public personnel, including reports by official organizations such as the Graham study and those by the Civil Service Assembly, have made it desirable to re-survey the training resources of the University again. We recommend that this be undertaken by an all-university committee, since training is a responsibility of so many colleges and departments.

The current economic revival has reduced unemployment and thereby lightened some of the public assistance tasks, but it has added to the burden of other public agencies and functions. Thousands of our people are moving to new locations. Equally large shifts will be sure to occur with the inevitable readjustment after the defense program has stopped. Sums ranging from $75,000,000 to over $100,000,000 annually have been spent in Wisconsin in the various governmental

assistance programs. Certainly, we need to profit by the experience with these programs in the past. It is poor economy to have the new employees of these public agencies begin their work without training, or to ask the administrative agencies to supply their entire training after they get on the public payroll. However, we should take account, in any educational program relating to the public service, of the important developments in in-service training that have been taking place in recent years in this country, and relate our University program to these developments.

As the Frank committee reported, we need to integrate flexibly, and without unnecessary centralized control, our already rich offerings in various aspects of public administration, including such central managerial staff and auxiliary problems as personnel, finance, organization and reporting, and such subject matter fields as health, welfare, social insurance, conservation of natural resources, housing, industrial relations, etc. We have a peculiar and well recognized distinction in our resources for work in many of these fields in which this University has pioneered. One has only to mention such teaching, research, and public service as has been done by members of this University in social security legislation, labor relations, land use planning, rural community analysis, and training and research in social administration, to make this point clear.

We can prepare personnel here for service in both urban and rural communities with an understanding of the problems and the interrelations of both. The Committee believes that by building carefully on our existing resources and developing our potential resources, we can greatly increase the effectiveness of what we have and establish one of the outstanding centers of public service, research, and training to be found anywhere in the world.

*7. The University Can Help With Research.*

Primarily, the University is charged by the state with responsibility for research and for teaching. The state departments depend upon the University staff for leadership in research in their lines of work. In the sessions of our Committee, many urgent problems requiring research were cited by the officials in the various state departments who took part in our conferences. This Committee recommends that the excellent cooperative relationship between the state departments and the University be used as the foundation for greatly expanded

joint action in research by the staff members in all University departments that have a relationship to the state's population problems.

The University has graduate students who are interested in the various aspects of population. These students are required to carry forward research as a part of their graduate training. The state departments have available data that, properly analyzed, would contribute directly toward the betterment of the programs being conducted by these departments. Well qualified graduate students under the supervision of senior members of the University staff, working in close association with the officials of the state departments concerned, could render real service to the state, as well as profit personally from the close contacts with the practical problems that exist in the state.

Effective study of some of these problems will require modest funds, sometimes for the collection, and nearly always for the tabulation and analysis, of the desired information. It would seem that the provision of such funds might properly be a joint function and responsibility of the University Research Committee and those departments interested in population problems. Surely, those research projects that contribute directly toward the conservation of the state's human resources deserve special consideration by the University.

The Committee cites the following problems in population that are in need of further study. The list is indicative of the fields in which thorough going research is needed before final answers can be proposed to many of the questions which have been raised in this report. The University departments and state agencies which might assume leadership in their study are indicated.

*Economics:*

(1) Trends in the redistribution of economic opportunity: location, distribution, and shifts of manufacturing industries in relation to population. (Departments of Economics, Commerce, and Agricultural Economics)

(2) Economic effects of the decreasing rate of population growth and the changing age structure. (Departments of Economics, and Sociology and Anthropology)

*Health:*

(1) Analysis of the causes for the physical rejections under the selective service law. (Selective Service Administration, State Board

of Health, University Medical School, and Departments of Economics, and Sociology and Anthropology)

(2) Public expenditures in Wisconsin for medical and related care for recipients of public assistance. (State Board of Health, Department of Public Welfare, University Medical School, and Departments of Economics, and Sociology and Anthropology)

(3) A study of sterilizations in Wisconsin, including those performed under the state law, and a sampling of voluntary and therapeutic cases. (Department of Public Welfare, University Medical School, and Department of Sociology and Anthropology)

(4) A mental hygiene study concerning desirability and practicability of course of instruction for student teachers—particularly what aspects of personality defects discoverable in children can be detected by teachers and what, if any, methods of treatment or prevention can be practically applied. (Wisconsin Psychiatric Institute, School of Education, and Department of Psychology)

(5) A study of physiological sterility among childless couples in the general population in relation to age, nativity, religion, and social status. (University Medical School)

*Public Welfare:*

(1) The legal aspects of divorce in Wisconsin with special reference to defenses and to functions of divorce counsels. (University Law School, State Department of Public Welfare)

(2) Effects of divorce on children: delinquency, retardation, neurotic patterns. (State Department of Public Welfare, University Medical School, and Department of Sociology and Anthropology)

(3) A study of juvenile and adolescent delinquency: social causes and recommended treatment. (State Department of Public Welfare, and Department of Sociology and Anthropology)

(4) A study of the public assistance population (general relief, Social Security, and W.P.A.) with reference to reasons for receiving aid, employment history, possibilities of rehabilitation. (State Department of Public Welfare, and Departments of Economics, Sociology and Anthropology, Rural Sociology, and Agricultural Economics)

*Biology:*

(1) An analysis of the mental and physical disabilities of cases committed to public mental and penal institutions, to determine the probable occurrence and extent of similar maladies in the ancestry and collateral kinsmen of committed cases. (State Departments of Public Welfare and Health, University Medical School, and Departments of Zoology and Genetics)

(2) Anthropometric analysis of the general population, its physical characteristics and their relation to racial, national, economic, and cultural factors. (University Medical School, and Departments of Anthropology, Zoology, and Psychology)

(3) Study of the changes in the life span; extent to which longevity is inherited; relation of sex, race, and fertility to mortality. (State Board of Health, and Departments of Zoology and Genetics)

*Population:*

(1) Specific birth rates by race, nativity, and age for urban and rural areas. (Federal Bureau of the Census, State Board of Health, and Departments of Sociology, Rural Sociology, and Economics)

(2) Marriage and birth rates by nationality, religion, education, and socio-economic status, in rural and urban areas. (State Board of Health, and Departments of Rural Sociology, Sociology and Anthropology, and Economics)

(3) The extent and nature of intrastate migration, its social and economic results and causes. (State Board of Health, and Departments of Economics, Sociology and Anthropology, Agricultural Economics, and Rural Sociology)

*Sociology:*

(1) Cultural, economic, and social factors associated with problems of adjustment in differing nationality, social, and economic groups in rural areas. (Departments of Rural Sociology, Agricultural Economics, and Sociology and Anthropology)

(2) Evaluation of scholastic attainment and social adjustment of University students in relation to their family, community, and high school background. (State Department of Public Instruction, and Departments of Sociology and Anthropology, Rural Sociology, and Education)

*Government:*

(1) The character of governmental activities; trends in the nature and functions of government as related to changes in the age, place, and density of population. (State Departments of Public Instruction, Health, and Welfare, Department of Political Science, and units of local government)

(2) Determination of the requirements of students preparing for local, state, and national positions in the field of population problems. (Departments of Political Science, Economics, Sociology, and Agricultural Economics)

(3) Specific area studies showing the interrelations of governmental policy and population change, such as in the Badger Ordnance development, expansions of Metropolitan Milwaukee, and development of programs for special regions, such as the "cut-over." (State Planning Board, and Departments of Political Science, Economics, Sociology and Anthropology, Agricultural Economics, and Rural Sociology)

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