

UNITED STATES DEPARTMENT OF LABOR

W. N. DOAK, Secretary

BUREAU OF LABOR STATISTICS

ETHELBERT STEWART, Commissioner

BULLETIN OF THE UNITED STATES } No. 555
BUREAU OF LABOR STATISTICS }

EMPLOYMENT AND UNEMPLOYMENT SERIES

**SOCIAL AND ECONOMIC CHARACTER
OF UNEMPLOYMENT IN PHILADELPHIA
APRIL, 1930**

By

**J. FREDERIC DEWHURST
and ROBERT R. NATHAN**

Industrial Research Department
Wharton School of Finance and Commerce
University of Pennsylvania



MARCH, 1932

UNITED STATES DEPARTMENT OF LABOR

W. N. DOAK, Secretary

BUREAU OF LABOR STATISTICS

ETHELBERT STEWART, Commissioner

BULLETIN OF THE UNITED STATES }
BUREAU OF LABOR STATISTICS } No. 555

EMPLOYMENT AND UNEMPLOYMENT SERIES

**SOCIAL AND ECONOMIC CHARACTER
OF UNEMPLOYMENT IN PHILADELPHIA**

APRIL, 1930

**J. FREDERIC DEWHURST
and ROBERT R. NATHAN**

Industrial Research Department
Wharton School of Finance and Commerce
University of Pennsylvania



MARCH, 1932

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1932

Preface

This survey is the result of the second of a series of studies on unemployment made by the industrial research department of the University of Pennsylvania. The first survey was undertaken in April, 1929, in an effort to collect statistical data showing the unemployment conditions in the city at that time, and also to establish a base for measuring changes taking place between certain periods of time. It is only by first obtaining adequate material to work with that the true conditions can be determined and efforts extended toward correcting the situation. Unemployment is an important problem and, because of technological changes, it is rapidly becoming a major social burden. On account of the significance of the problem, numerous other investigations have been undertaken by this department and many more will follow.

The most desirable method of making such a survey would be to make a house-to-house canvass of the entire city, but as this was out of the question, the next best method was undertaken. That was to select representative areas of the city as samples and to make a complete canvass of these scattered sections. At the time the first survey was being contemplated, it was learned that the bureau of compulsory education was also planning to undertake an unemployment survey. To eliminate any duplication of effort, the two agencies decided to cooperate in the survey, the data to be collected by the bureau of compulsory education and the analysis to be handled by the department of industrial research.

Much credit is due to Mr. Henry J. Gideon, supervisor of the bureau, for his kind cooperation with this department and for his able supervision of the work done by his staff. The 94 attendance officers who covered the sample areas deserve considerable credit for their efficient efforts in filling out the questionnaires in addition to their usual work. Special acknowledgment is also due to the following attendance supervisors for their intelligent supervision: Elizabeth W. Davis, district 1; Nelson Ogden, district 2; Joseph A. Snee, district 3; Samuel E. Van Houten, district 4; Albert W. Whitaker, district 5; Joseph W. Temple, district 6; Carson G. Hansell, district 7; H. Forest Kerbaugh, district 8; Leah A. Gingrich, district 9; and James Marks, district 10.

Contents

	Page
Summary.....	1
Chapter 1.—Scope and method of the survey.....	7
Economic character of Philadelphia.....	7
Method employed in this survey.....	8
Representativeness of the survey data.....	10
Chapter 2.—Unemployment in Philadelphia.....	17
Extent of unemployment.....	17
Regional differences in unemployment.....	19
Racial differences in unemployment.....	21
Unemployment and occupational status.....	24
Unemployment compared with income.....	26
Unemployment and economic status.....	27
Unemployment in families of different size.....	29
Unemployment classified according to age and sex.....	33
Reasons for unemployment.....	35
Time lost by the unemployed since the last regular job.....	37
Chapter 3.—Unemployment in school districts of Philadelphia.....	43
District 1.....	43
District 2.....	46
District 3.....	47
District 4.....	48
District 5.....	49
District 6.....	51
District 7.....	52
District 8.....	53
District 9.....	55
District 10.....	56
APPENDIX.—Part-time unemployment data.....	60

LIST OF CHARTS

Chart 1.—Schedule used in survey.....	9
Chart 2.—Index of factory employment in Philadelphia (1923-1925=100).....	12
Chart 3.—Location of school blocks selected in each school district.....	15
Chart 4.—Per cent of persons in each school district unemployed part time and full time because of inability to find work and per capita income.....	44

BULLETIN OF THE U. S. BUREAU OF LABOR STATISTICS

NO. 555

WASHINGTON

MARCH, 1932

SOCIAL AND ECONOMIC CHARACTER OF UNEMPLOYMENT IN PHILADELPHIA IN APRIL, 1930

Summary

This survey was made in April, 1930, and included 171 selected school census blocks scattered throughout the 10 school districts of Philadelphia. A total of 36,665 families were visited by the attendance officers of the Philadelphia School Bureau of Compulsory Education and in them 160,208 persons were counted—an average of 4.4 persons per family. The number of persons usually employed was 69,884—43.6 per cent of the population of the families enumerated and an average of 1.9 wage earners per family. The enumerators were thoroughly familiar with their respective territories because of their year-round contacts with the inhabitants. Only one call was made at each house in the specified blocks, and in those homes where all members were absent no count was made. From numerous comparisons and interpretations of the data, there is evidence that this sample is representative of Philadelphia, although it is probable that the enumeration of gainfully occupied persons was not entirely complete because of failure to make "back" calls when all members of the family were absent, and presumably at work at the time the call was made. These omissions would probably not result in an understatement of the number unemployed, but might result in an understatement of the number employed. The percentage of unemployment calculated on this basis might therefore be somewhat higher than if an absolutely complete enumeration of the population residing in these selected areas had been made.

In April, 1930, unemployment was found to be 44 per cent more severe than in April, 1929. The previous study¹ revealed 10.4 per cent of all wage earners in the enumerated families as being unemployed, while, according to the present survey, 15 per cent of those usually employed were jobless in April, 1930. No effort was made in April, 1929, to determine the extent of part-time unemployment in the city. This item was included in the current study, and it was found that, aside from the fully unemployed persons, 5.2 per cent of the working population were partially idle. Applying the percentages of unemployment, in this sample, to the 889,837 wage earners in Philadelphia, as reported by the 1930 census of population,

¹ By J. Frederic Dowhurst and Ernest A. Tupper. U. S. Bureau of Labor Statistics Bul. No. 520: Social and Economic Character of Unemployment in Philadelphia, April, 1929. Washington, 1930.

would indicate that there were 133,475 wage earners in Philadelphia entirely without jobs and 46,271 others engaged in part-time work in April, 1930. Of this number of totally unemployed persons, 83.6 per cent, or 111,585, were idle because of the fact that they were unable to find work. Almost the entire increase of unemployment between April, 1929, and April, 1930, was due to this one cause—inability to find work. In 21.2 per cent of the families visited, one or more members were totally unemployed, while 8 per cent of the families reported partially idle members.

Just as the survey results show an increase of unemployment from April, 1929, to one year later, so the Federal Reserve Bank of Philadelphia factory employment index indicates a fall in employment during the same period. The changes in that time in both the employment index and the survey findings are quite close and tend to substantiate each other. The Federal reserve index has continued to fall since April, 1930, when it stood at 97.9, and in December, 1930, it had dropped to 83.5, and in January, 1931, to 79.2, denoting a further increase of unemployment since the time the survey data were collected. The Metropolitan Life Insurance Co. undertook a study of unemployment among the families of its policyholders in December, 1930. Its results showed 24.9 per cent of its industrial policyholders in Philadelphia as being total unemployed and an additional 24 per cent partially idle. Using the factory employment index from April to December, it was found that there was a rather close relationship between the results of this study and of the one made by the Metropolitan Life Insurance Co. The Metropolitan enumeration showed far more part-time unemployment than was found in this survey. The results of the special census of unemployment made in January, 1931, in 19 large cities by the United States Bureau of the Census further substantiate the percentages found in this survey. At that time 23.8 per cent of the gainful workers in Philadelphia were out of a job, able to work, and looking for a job, while an additional 3.9 per cent of the persons having jobs were on lay-off, without pay, excluding those sick or voluntarily idle. Interpreting these findings it is important to remember that the Metropolitan survey covered only industrial policyholders (of the wage-earning group), while the census enumeration included all persons with gainful occupations.

For comparative purposes, officials of the United States Bureau of the Census sorted out from their April, 1930, data the information on the 166 blocks used in the 1929 survey. Unfortunately, a few changes and additions were made and 171 blocks are included in this study. There were also several cases in which the boundaries of the school blocks were confused and this confusion invalidated absolute comparisons in many sections. Nevertheless, all but three of the districts were comparable and these comparisons proved of some value. The census data for April, 1930, revealed 11.7 per cent of those usually employed as being without work in contrast to our results of 15 per cent, while 8.1 per cent of the wage earners in the census analysis were unemployed and in class A,² as compared with 12.2 per cent in our survey who were idle because they were unable to find work. Thus, a comparison of the census returns and the survey findings discloses a rather wide disparity, with the survey revealing greater

² Class A consists of those persons out of a job, able to work, and looking for a job.

severity of unemployment. As indicated above, this disparity may be due to the fact that the census enumeration covered all persons in these blocks while this survey, through inability to make "back calls," probably failed to enumerate all of the workers actually employed at the time of the survey.

Great variations in the intensity of unemployment were found in the various sections of the city. The districts were ranked according to severity of unemployment in April, 1929, and in April, 1930, both full-time and part-time unemployment being considered, and also according to the census returns. District 3 in South Philadelphia reported the largest proportion of wage earners fully unemployed in each analysis, and ranked second in severity of part-time unemployment. One block in this section showed nearly 40 per cent of those usually employed as being entirely without a job. At the opposite extreme, district 1 in West Philadelphia had the lowest percentage of full-time unemployment in each analysis and nearly the lowest proportion of part-time unemployment. The Metropolitan Life Insurance Co. study also showed the largest and smallest percentages of unemployment in South and West Philadelphia, respectively. With few exceptions, the better residential sections reported the least unemployment and the poorer sections indicated the heaviest unemployment. The variations were not so great between the districts in April, 1930, as in April, 1929, showing more equal distribution of unemployment in periods of general inactivity.

Comparisons of unemployment among different racial groups reveal striking variations in the severity of the problem. As for color, the proportion of unemployment among Negroes was much higher than among whites. Of the Negro wage earners, 16.2 per cent were unemployed and unable to find work in contrast to 11.5 per cent of the white persons. In district 3, over one out of three Negroes usually employed were without jobs and unable to find work, as compared with 18.7 per cent of the whites in the same predicament. Just twice as large a portion of the Negro wage earners as of the white workers in district 10 were unable to find a job—21.8 per cent and 10.9 per cent, respectively. The part-time analysis revealed 4.7 per cent of the Negro workers unable to find full-time work and 3.3 per cent of the white workers partially jobless on this account.

The attendance officers were instructed to classify the blocks according to racial, economic, and occupational status, and the results of the racial analysis showed that those blocks with a predominant foreign-white population had the highest proportion of unemployment. The blocks with a native-white population reported 12.3 per cent of full-time and 4.8 per cent of part-time unemployment, while the colored blocks had 16 per cent and 3.9 per cent, respectively, and the foreign-white blocks showed 19.1 per cent and 7.6 per cent, respectively. Thus it appears that while unemployment is more severe among Negroes than among all white persons, the foreign-white persons alone reported higher percentages of unemployment than did the Negroes.

The occupations of the unemployed persons were classified by the enumerators under three heads—manual, clerical, and executive work. As expected, unemployment was most severe in the manual group, less in the clerical class, and the lowest proportion was reported in the executive class. In the districts where a larger than

average proportion of the unemployed were in the clerical and executive groups, total unemployment was less severe than in districts where nearly all of the unemployed persons had held manual jobs.

As previously stated, the enumerators classified the blocks according to the occupations of the residents, and a study of this classification substantiated the above results. This analysis showed 5.9 per cent of full-time and 2.1 per cent of part-time unemployment in the predominantly professional and executive blocks; 8.8 per cent and 2.3 per cent, respectively, in the blocks with clerical and trade workers; 12 per cent and 7.6 per cent, respectively, in the industrial and trade areas; and 17 per cent and 5.4 per cent, respectively, in the blocks where a majority of the wage earners are occupied at industrial jobs. These results show unemployment to be considerably more severe among industrial and manual workers than among those engaged in clerical, professional, and executive occupations. This revelation is also borne out by the fact that district 1, with a large executive and clerical population, reported the lowest proportion of unemployment, while district 3, with its inhabitants engaged mainly in manual and industrial pursuits, showed the largest percentage of unemployment.

The only data available on income distribution in the different parts of the city were furnished by the Cawl survey of the winter of 1927-28 published by the Philadelphia Public Ledger. A comparison of the income information from this source with the unemployment results shows that there is an inverse relationship between income and unemployment. Districts 1 and 8, which reported only 7.9 per cent and 12.5 per cent of unemployment, respectively—less than all the other districts—revealed the highest incomes per capita also—\$750 and \$690, as against \$558 for the city. On the contrary, districts 3 and 7 had the lowest per capita incomes and the highest proportions of full-time unemployment. The relationship between income and part-time unemployment is not as marked as between income and full-time idleness. The lower income groups hold positions subject to much unemployment, and they are least able to bear the burden.

Another method of showing the heavy incidence of unemployment on those of lower incomes is the comparison of severity of unemployment and economic status. The enumerators classified only 13 blocks as having a population of "medium to high" economic status, and in these units 7.3 per cent of the wage earners were totally unemployed and 2.8 per cent were partially unemployed. The 67 blocks in the "medium" group reported 13.6 per cent of full-time and 4.5 per cent of part-time unemployment, while the 91 blocks classed as "medium to low" revealed 18 per cent and 6.5 per cent of full-time and part-time unemployment, respectively. These results were to be expected and merely help to prove the results of the comparison of income and unemployment, for income and economic status are symbolic of similar conditions.

An analysis of unemployment among families of different size reveals a direct relationship between these two sets of data—more unemployment among larger families. District 3, which reported 23.4 per cent of full-time and 7.9 per cent of part-time unemployment, also reported an average of 5.2 persons per family—both severity

of unemployment and size of family exceeding all other districts. Four of the five districts indicating smaller families than found in the city as a whole also showed smaller percentages of unemployment than the entire city. While all families have an average of 1.9 wage earners, the 7,763 families reporting some unemployed members had an average of 2.7 wage earners per family. Only 9.2 per cent of the families having one person usually employed indicated that wage earner as being idle, whereas over 50 per cent of the families containing five to nine wage earners reported at least one of their members out of a job. It was found that of the families having full-time unemployed members, 28 per cent reported all of their wage earners as being idle, while of the families with some partially unemployed members, 38 per cent indicated all wage earners as doing part-time work. Only 16.3 per cent of the families with one to six members had some jobless members, while 35.4 per cent of the families of more than six persons were affected. With the exception of 1-member families, which reported heavy unemployment, the proportion of wage earners unemployed increased definitely with the size of the family.

Although females suffered less unemployment from inability to find work in April, 1930, than did males, the variation between the two was less at this later date than in April, 1929. At the time of the earlier survey 23.4 per cent of those unable to find work were females, while in the later study, females made up 25.5 per cent of that group. According to the census of occupations, 27 per cent of all persons gainfully occupied are females, thus indicating that females experienced slightly less unemployment than males at the time each survey was made. The 1930 census returns reveal this disparity more strikingly, for in their data only 21 per cent of the unemployed persons were females. The opposite tendency was shown in the part-time results, 29.6 per cent of those unable to find work being females.

Comparison of the survey results with figures from the census of occupations indicates that unemployment was more severe among wage earners under 21 years of age than among working adults. While 15 per cent of all gainfully occupied persons are under 21 years of age, it is found that 23.3 per cent of those unable to find work were in that age group. According to the census, 11 per cent of the male workers and 25 per cent of the female workers are under 21 years of age, while 19.2 per cent of the unemployed males and 36.2 per cent of the unemployed females were in that class. The part-time analysis reveals similar tendencies, but less striking variations.

As expected, a larger percentage of the unemployed persons in April, 1930, than the year before gave "inability to find work" as their reason for being without a job. In April, 1929, 75.2 per cent of the unemployed and 7.8 per cent of all wage earners could not find work, while one year later 83.6 per cent of the unemployed and 12.2 per cent of all wage earners were idle for this cause. Of those partially unemployed, 86.6 per cent were unoccupied because they were not able to locate a regular job. Sickness caused 9 per cent of the full-time unemployment; superannuation accounted for 3.9 per cent; indifference, only 1.8 per cent; and the other 1.7 per cent was explained by various other reasons. It can be readily seen that the great increase of unemployment during the year between the two surveys was mainly due to the economic cause of "inability to find

work." An analysis of reasons for unemployment by occupations shows that a larger portion of unemployed manual workers were idle because of economic conditions, while in the executive and clerical groups, illness resulted in rather large proportions of unemployment.

The duration of idleness was found by asking for the number of weeks each unemployed person had lost since his or her last regular job. It was found that 55.5 per cent of those fully unemployed had been without regular work for over three months, 26.4 per cent for over six months, and 9.1 per cent for more than a year. The part-time analysis revealed shorter duration of unemployment among those partially idle, with 45.7 per cent, 22.3 per cent, and 6.1 per cent, respectively, for the above periods. Any definite relationship of duration and severity of unemployment seemed to be lacking. The time lost by persons unemployed on account of superannuation and sickness was naturally greater than for those unable to find work. Of those out of work because of superannuation, 50 per cent had not held a regular position for over a year, while, of persons idle on account of sickness, 28.9 per cent had lost over a year, and only 5 per cent of those unemployed because of inability to find work had been idle for the same time. A similar tendency prevailed among the part-time unemployed.

Not only was intensity of unemployment less among females, but it was also found that duration of unemployment was shorter among them. Whereas 57.5 per cent of the unemployed males had been without a regular job for over three months and 5.6 per cent for over a year, among females only 47 per cent and 3.3 per cent, respectively, had been idle for similar periods. Nearly the same disparities existed among those partially unemployed. According to the racial analysis, it was found that Negroes suffered much less from duration of unemployment than did unemployed white persons. As expected, it was found in both the full-time and the part-time studies that the time lost since the last regular job by executives was much longer than the time lost by clerical or manual workers. The average duration of unemployment among adults was far in excess of that among persons under 21 years of age, and within each age group it was longer for males than for females.

A complete analysis of the findings according to the various factors mentioned above and also a résumé of conditions in each district are given in the following pages.

Chapter 1.—Scope and Method of the Survey

Economic Character of Philadelphia

Philadelphia, according to the 1930 census returns, is the third largest city in the United States, being exceeded in population only by New York City and Chicago. In 1920 there were 1,823,799 persons in the city, while in 1930 the population totaled 1,950,961, an increase of 7 per cent in the last decade. The increase in the population is occurring at a decreasing rate, for there was a 23.6 per cent increase from 1890 to 1900; 19.7 per cent from 1900 to 1910; 17.7 per cent from 1910 to 1920; and only 7 per cent in the last 10-year period. This decreasing rate of growth is representative not only of Philadelphia, but also of the country as a whole. Greater Philadelphia has a total population of well over three and one-half million persons.

The city is important as an industrial, financial, and distribution center. In addition to its importance as a port, numerous large railroad terminals are situated in or near Philadelphia to handle the increasing trade of the city. Similarly, Philadelphia has become a large financial center and one of the 12 Federal reserve banks is located here. A great diversity of industries is to be found in and around the city, the textile group being the most important.

According to the United States census of occupations, of the 819,000 gainfully occupied persons living in Philadelphia in 1920, 388,696, or 47.5 per cent, were engaged in manufacturing and mechanical industries. The next largest group of employees were occupied in "trade," there being 110,579 persons, or 13.5 per cent of the gainful workers in this class. Thus it can be seen that nearly half of the people depend directly upon industry for their maintenance. It has been estimated that nearly one-third of all assessed valuations in the city are in industry. Since 1920, according to the biennial census of manufactures, there has been a relative decline in the importance of manufacturing as compared with other industries. There has been a marked decrease in the number of establishments and in the number of wage earners, as shown in Table 1.

TABLE 1.—*Manufacturing industries in Philadelphia, 1914 to 1927*¹

Year	Number of establishments	Number of wage earners	Wages	Value of products
1914.....	8,454	251,286	\$138,249,000	\$784,500,000
1919.....	9,064	281,105	326,792,000	1,996,481,074
1921.....	6,786	226,042	270,466,814	1,537,327,972
1923.....	6,399	273,980	356,437,915	1,998,749,780
1925.....	5,636	246,680	332,414,915	1,937,414,991
1927.....	5,860	243,608	334,810,843	1,861,501,951

¹ U. S. Biennial Census of Manufactures, 1914, 1919, 1921, 1923, 1925, and 1927.

Further comparisons from the biennial census of manufactures reveal the fact that Philadelphia's industries, as compared with those

of other cities, have experienced a greater relative decline in importance. From 1919 to 1927, employment in manufacturing industries declined 13.3 per cent in Philadelphia, as contrasted to the 7.1 per cent drop for the United States as a whole. Although the local decline was not so great as that which occurred in the lower New England or Middle Atlantic States, it was considerably more than that felt in the East Central States. Some of the large midwestern cities and Southern States showed increases in the same period.

On account of the great diversity of industries in Philadelphia, it is probable that the decline of industrial employment has resulted in a rise of employment in the other types of occupation. Much of this drop can be traced to technological changes in industry. In the face of the recent falling off of the manufacturing industries, this type of economic institution, nevertheless, still holds a position of primary importance in Philadelphia.

Method Employed in This Study

With but a few minor changes in the blocks used and in the questions asked, the current survey is similar to the one taken exactly one year earlier. All of the field work was taken care of by the bureau of compulsory education of the board of public education, and the analysis of the data collected was made by the industrial research department of the University of Pennsylvania. Close contact between these two agencies was maintained in order to avoid, as much as possible, any misunderstanding by the one group of the work done by the other.

The bureau of compulsory education is vested with the responsibility of insuring attendance at school of all children within school-age limits. The entire city of Philadelphia is divided into 10 school districts and within each district there is a supervisor who is responsible to the director of the bureau. There are 115 attendance officers employed for constant field work, the number in each district varying from 9 to 12. Of these 115 persons, 55 have had at least a normal-school course or some college training. A total of 94 of the 115 officers were used in the survey. Since their usual function consists of visiting all the homes in their sections having school children, it is apparent that the officers are thoroughly familiar with their respective territories. Each year during April and May a census of children of school age is taken by the bureau, and during the past two years this census and the unemployment enumeration were taken simultaneously.

After careful consideration by the persons in charge, 166 school census blocks³ were selected from the 10 school districts, and these units, mostly in total and a few of the large ones in part, were enumerated for the 1929 survey. The blocks were scattered throughout the city, and an effort was made to get a sufficient number of blocks in each district to be representative of the inhabitants of that territory. Unfortunately, because of some misunderstanding about the numbers of the blocks and their locations, five blocks used in 1929 were dropped and 10 new ones were added. While it is felt that the sample is just as representative in April, 1930, as one year before, these variations

³ School census blocks are not similar to "city blocks," for one of the former usually includes two or more of the latter.

were occupied at a job, but were working less than their customary full week. All persons who were regarded as retired and not actively seeking a job, and those permanently and totally disabled, were not classed as being unemployed. An employable person was defined as one of working age, able to work, and usually employed. Persons of working age seeking their first position were also included in this group.

Duration of unemployment was not measured by the number of weeks lost since the last work done by the unemployed person, but rather by the number of weeks lost since the last regular job was held. Although a man had not had regular work for a year or so, he might have done an odd job or two very recently, and to measure the duration of unemployment from the time of this odd job, it was believed, would result in an inaccurate presentation of the facts.

Duration of part-time unemployment was measured by the number of weeks lost since the last regular full-time job. In transcribing the number of weeks into months, for analytic purposes, every third month included five weeks.

Although data on part-time unemployment were added to the current study, there were numerous other details which would have proved valuable but were not included because of various limitations. The time involved in filling out the schedules had to be taken into consideration and an effort was made to allow for the collection of the most important facts in a minimum space of time. This was primarily the reason why no questions were asked about the occupations of employed persons. Another factor which restricted the collection of certain information was the necessity of maintaining the good-will relationship which already existed between the attendance officers and the public. For this reason, no data on family income were requested, and the ages of wage earners and even specific ages of unemployed persons also were not included in the questionnaire. Definite knowledge of all ages, which most persons are hesitant to give, would have proved interesting in analyzing the problem of unemployment among "older" workers.

Following the completion of the field work, the cards were turned over to the department of industrial research and the tabulation was begun. Each schedule was carefully coded and then the information was transferred to tabulating machine cards, one for each family and also one for each fully or partially unemployed person. Tables were made of the analysis of each block and each district and finally were combined into city totals. Then analyses were made of unemployment according to different factors. The coding, punching, and tabulations were thoroughly checked and every precaution was taken to assure the accuracy of the survey.

Representativeness of the Survey Data

As was previously pointed out, the selection of the school census blocks used in the study was made only after a careful study of the characteristics of each district and with the cooperation of the attendance officers and supervisors. Within each district, an effort was made to include blocks which would represent all types of inhabitants in that area and in the same proportion that each type bore to the total population of the district. The number of families included

in the survey from each district is in nearly the same proportion as the total number of families in that district is to the total number of families in the entire city.

TABLE 2.—*Number of families and persons included in unemployment survey*

District	Number of census blocks	Number of families	Number of persons	Number of persons usually employed
No. 1.....	13	3,894	16,677	7,050
No. 2.....	15	3,654	16,757	7,207
No. 3.....	12	2,493	13,028	4,837
No. 4.....	18	3,880	17,338	7,801
No. 5.....	20	4,455	20,125	9,451
No. 6.....	15	2,714	10,439	5,032
No. 7.....	22	3,237	15,435	6,418
No. 8.....	10	5,195	21,221	9,466
No. 9.....	18	4,532	17,866	7,757
No. 10.....	28	2,611	11,322	4,865
Total.....	171	36,665	160,208	69,884

In the 171 blocks included in the survey, 36,665 families were visited and information from that number was made available. The number of persons enumerated in these families totaled 160,208, and of these individuals 69,884 were found to be employable. The population per district varied from 10,439 persons in district 6—a very small area—to 21,221 persons in the large and mostly residential district 8, while 5 of the 10 school districts had from 14,000 to 17,000 persons included in the survey. Although the total population of each section is not available, it is believed that the survey sample of each district is representative of that district and that the combined samples represent a fairly accurate cross section of the city.

Unfortunately, at this date, only a part of the data from the 1930 census has been made available—total population figures, the number of gainful workers, and some unemployment returns having already been published. The census officials separated the 166 blocks which were used in the 1929 survey and a distinct analysis of unemployment in these units was made. In comparing the census and the survey results, it must be noted that in the former the 166 blocks were taken in total, while 171 blocks were enumerated in the survey and a few of these were taken only in part. Seven of the 10 districts are absolutely comparable in these two sets of data because similar blocks in these sections were enumerated in the total. As far as territory is concerned, the 166 blocks used in the 1929 survey and the 1930 census release cover nearly the same section of the city as do the 171 blocks used in the 1930 survey. Of course, the population in these 166 blocks, as reported in the census results, was in excess of that of the 171 survey blocks because of the larger area covered and also because every house must be enumerated in the census, whereas only one call was made by the attendance officers.

The proportion of unemployment found in the 166 blocks used by the census proved to be exactly the same as for the entire city. Similarly, the percentage of population usually employed was not very different in these areas from that in the city as a whole. In the sample territories 44.6 per cent of all persons were usually gainfully occupied, while 45.6 per cent of the entire city's population were

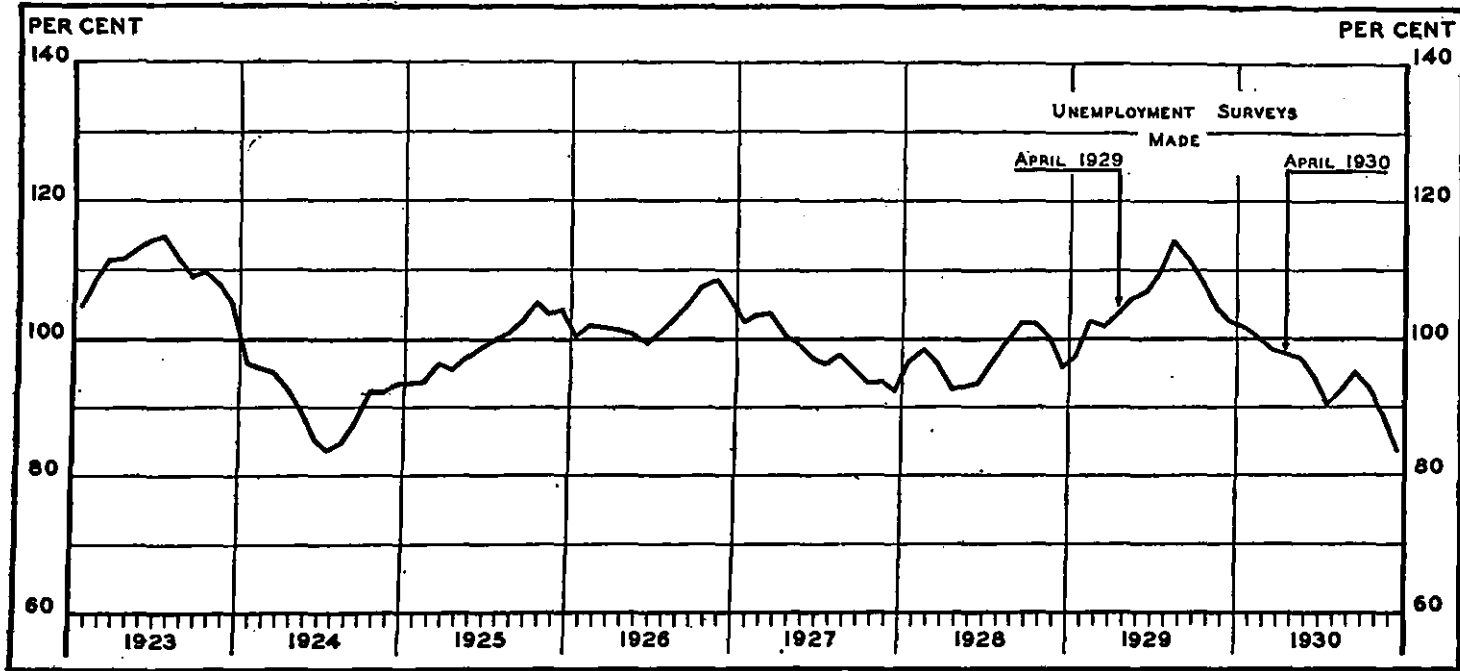


CHART 2.—INDEX OF FACTORY EMPLOYMENT IN PHILADELPHIA (1925=100)

usually employed in April, 1930. These two measures tend to establish the 166 blocks as representative of the city and, as was previously shown, there is a fair degree of similarity between these 166 blocks and the 171 survey units.

The collection of the data for this survey took place during the last two weeks of the month of April, 1930. There is little question that employment was not "normal" at that time, for a period of business depression had set in many months before. Although there was some seasonal activity at the time, nevertheless from all indications the severity of excessive unemployment was being felt in many quarters. According to the index of employment in manufacturing industries in Philadelphia, as shown in Chart 2, the index had fallen below 100 in March, stood at 97.9 in April, and has continued to fall since that time. Thus in interpreting the results of the survey, it is necessary to remember that, in general, employment and business activity were below normal and in the midst of a continued drop at the time the data were collected.

For other comparisons it is necessary to revert to the policy used in the 1929 survey of making 1930 estimates on the basis of the 1920 census. The average size of the families in Philadelphia has shown a definite decrease since the start of the century. The average number of persons per family in 1900 was 4.87; in 1910, 4.73; and in 1920, 4.53. It is probable that the decrease in the past decade was at a decreasing rate, but at just what rate it is difficult to determine. Assuming the same drop as occurred in the previous decade, the average size of Philadelphia families in 1930 was 4.33 persons. Applying this average to the total population, there were 450,799 families in Philadelphia in April, 1929. The average number of persons per family included in the survey was 4.37.

The proportion of white persons and of Negroes is extremely difficult to estimate because of the uneven migration of the latter. Negro population in Philadelphia increased 56.5 per cent from 1890 to 1900; 34.9 per cent in the next 10-year period; and 58.9 per cent from 1910 to 1920. In 1910 only 5.5 per cent of the population of the city was colored and 10 years later the proportion was 7.4 per cent, a 35 per cent increase. Assuming the same increase for the past decade, then 10 per cent of Philadelphia's population in 1930—195,096—were Negroes. This figure can not be accepted with as much certainty as the above estimates, but it must do in the absence of more definite information.

TABLE 3.—Comparison of families and persons in unemployment survey with entire population of Philadelphia

Item	Census (some are estimates)	Unemployment survey	
		Number	Per cent
Families.....	450,799	36,665	8.1
Persons.....	1,950,061	1,100,208	8.2
Persons per family.....	4.33	4.73	-----
Persons usually employed.....	889,837	69,884	7.9
Persons per family usually employed.....	2.0	1.9	-----
White persons.....	1,755,805	140,880	8.0
Negroes.....	195,096	17,971	9.2

¹ Includes 1,357 persons for whom color was not specified.

A comparison of the survey data with some of the actual and estimated census figures in Table 3 is of interest in regarding the representativeness of the sample. A summary analysis reveals the fact that the sample represents slightly over 8 per cent of Philadelphia's total population and families. The fact that only 7.9 per cent of the gainful workers had been reached, while 8.1 per cent of the families and 8.2 per cent of the population were included, might indicate the fact that the attendance officers had missed families with high proportions of the members usually employed. This discrepancy is probably better explained on the ground that the census classification of gainfully occupied persons is more inclusive than the survey's group of "employable," or those usually employed. The fact that the percentage of population included exceeds that of the number of families would indicate that, if anything, the large-sized families had been emphasized. The elimination of lodging houses in the survey and the differences in the classifications, as outlined above, are helpful in explaining the variations. The same tendency prevailed in last year's study, when larger proportions of the population and the number of families than of the wage earners were enumerated. Of course, there is the question whether a "one-call" survey misses the families in which all the members are gainfully occupied.

The outstanding disparity revealed in Table 3 is the seemingly more than proportionate share of colored persons enumerated in the survey. Whether this is an actual condition or whether the estimated colored population of the city is too low can not be definitely decided until the census returns on this group are available.⁴

It is definitely known that Philadelphia is made up of a heterogeneous population and the aim was to include a proportionate sample of each group in the survey. It was not deemed advisable to determine the race or the economic status and other such information from each family. In so far as such data would be valuable and as the attendance officers and supervisors were well acquainted with their respective territories, the characteristics of each block were requested from the enumerator and the results are presented in Table 4. As a close investigation will reveal, every type of population is included in the block classifications.

TABLE 4.—Racial, occupational, and economic character of population in blocks included in survey, by districts

Item	District No.—										Total
	1	2	3	4	5	6	7	8	9	10	
Number of school census blocks.....	13	15	12	18	20	15	22	10	18	28	171
Racial characteristics:											
Native white.....	8	5		3	8	2	13	5	17	15	76
Native and foreign white.....	3	3		4				3			16
Foreign white.....		4	10		6	5	7	1	1	6	40
Native and colored, foreign and colored.....	2	1	2	6	4	4		1		3	23
Colored.....		2		5	2	4	2			1	16
Occupational status:											
Professional and executive.....	4							2			6
Clerical and trade.....	4	2	2	1				1		4	15
Industrial and trade.....	2				7			1	5	11	20
Industrial.....	3	13	10	17	13	15	21	6	13	13	124
Economic status:											
High to medium.....	7	2		8				3		1	13
Medium.....	6	9	6	8	13			4	9	8	67
Medium to low.....		4	6	10	7	15	4	3	9	19	91

⁴ According to census data just released the Philadelphia colored population in 1930 totaled 219,559, which figure would make the survey sample more representative.

Of the 171 school-census blocks, the attendance officers classified 76 as predominantly native white, 40 foreign white, and 16 as having predominantly a colored population. The remaining 32 blocks contained a combination of foreign and native white, or white and colored persons. In the classification according to occupational status, 124

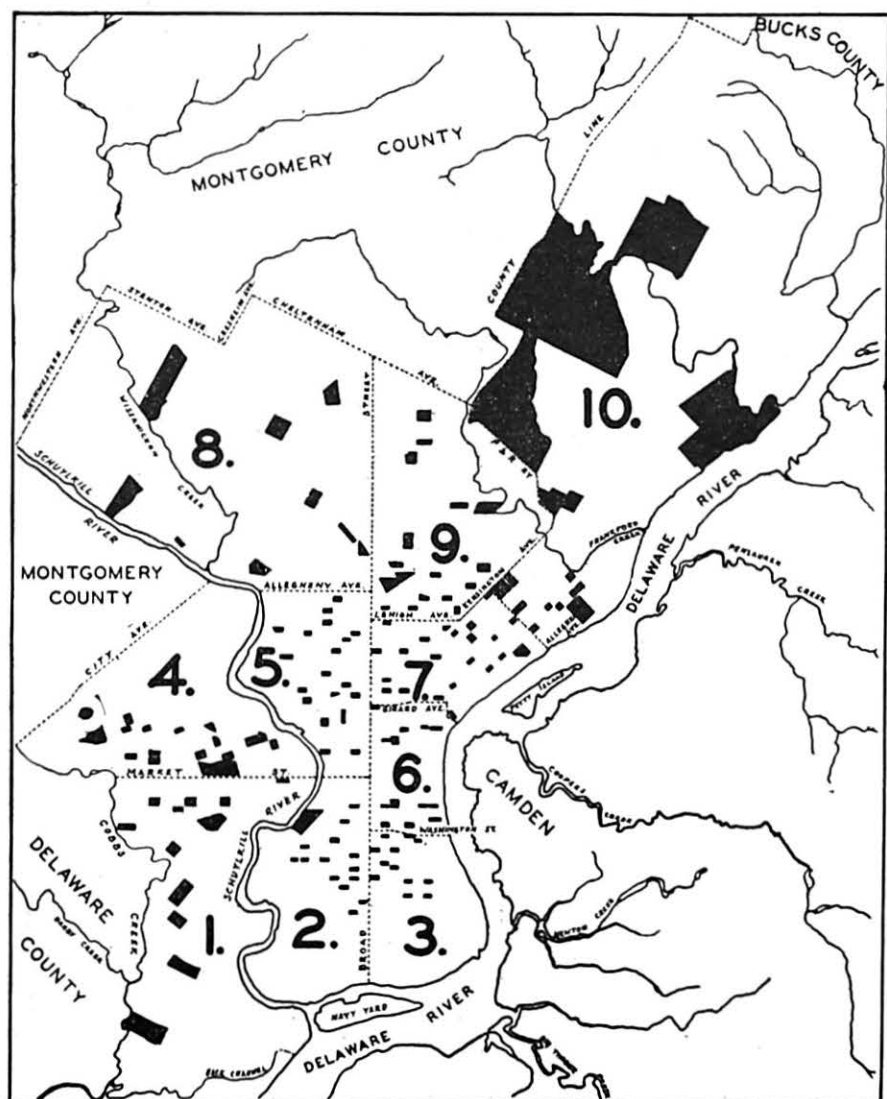


CHART 3.—LOCATION OF SCHOOL BLOCKS SELECTED IN EACH SCHOOL DISTRICT

of the blocks contained persons holding industrial jobs, 26 consisted of industrial and trade workers, 15 had predominantly clerical employees, and the other 6 blocks were settled by people engaged in professional and executive positions. Thirteen blocks were placed in the high-to-medium economic classification, 67 in the medium group, and 91 as having a population of medium to low economic status.

Although these results might be questioned on account of the relative meanings of the classes, nevertheless the wide distribution in each analysis sheds further light on the representativeness of the sample. The thorough acquaintance of each attendance officer with his or her territory gives added weight to the value of these block groupings. The similar training and experience of the officers would tend to make for a uniform interpretation of the classes from one district to another. In view of the above findings, it is felt that an adequate cross section of Philadelphia's population has been included in the survey sample.

An examination of Chart 3 shows the wide geographic distribution in the city of the 171 school-census blocks. Each blackened area represents one of the blocks included in the survey. Not only are these units widely scattered throughout the city, but the blocks are also widely distributed within each district so as to give an accurate sample of each section of the city. The large darkened areas are representative of loosely settled territories, while the smaller blocks are more densely populated.

In these various comparisons and presentations, an effort has been made to justify the sample as being representative of the city of Philadelphia. The block selections were the result of careful investigations and the above findings seem to warrant their acceptance as a satisfactory sample. The next chapter shows the results of a complete analysis of unemployment in these selected 171 blocks.

Chapter 2.—Unemployment in Philadelphia

Extent of Unemployment

As was pointed out in Chapter 1, the sample is a rather satisfactory representation of the city of Philadelphia, and as such the conditions discovered in these areas can be said to be typical of the city as a whole. Some error is involved, however, because of the fact that the enumerators made but one call, and possibly a larger percentage of the houses whose residents were not enumerated were without unemployment than of those enumerated. It is believed, however, that the error involved in applying the percentages of unemployment in the sample areas to the population of the entire city will not be large.

There were 36,665 families enumerated in the survey, and of these, 7,763, or 21.2 per cent, were found to have some members wholly unemployed and 8 per cent reported part-time unemployment. Many of the families had both part-time and full-time unemployed members, but it is conservative to state that at least one-fourth of the families visited were found to have some wholly or partially jobless members. Of the 69,884 wage earners included in the 171 blocks, 10,448, or 15 per cent, were without jobs, and 3,648, or 5.2 per cent, were working at part-time jobs. Thus, fewer than four out of five of Philadelphia's working population were fully employed in April, 1930.

According to the census releases, there were 889,837 persons in Philadelphia in April, 1930, who were usually gainfully occupied. Applying the percentages from the survey sample to the working population of the city, it is found that 133,475 were totally without work and 46,271 were employed part of the time in April, 1930. In the 1929 survey, 10.4 per cent of those usually employed were out of work and assuming that there were the same number of wage earners in April, 1929, as in April, 1930, the number of unemployed on the former date was 92,543. This means that there were nearly 41,000 more persons unemployed in April, 1930, than one year previously. In the earlier study 75.2 per cent of the jobless were unable to find work and in the later survey 83.6 per cent. Therefore, the persons who were unable to find work in April, 1929, totaled 69,592 and in April, 1930, 111,585, so that the entire increase in unemployment was due to this cause—purely an economic one. This application of the survey results to the city as a whole might be questioned, just as the representativeness of the sample can be, and therefore the above totals are not presented as facts, but rather as estimates.

An examination of Chart 2 in Chapter 1 shows that factory employment in Philadelphia, at the time the survey was taken, was abnormally low. This index had fallen from 103.8 in April, 1929, to 97.9 a year later. Assuming that the index of factory employment is representative of all employment, some interesting comparisons are possible. If there were 889,837 wage earners in April, 1929, and 92,543 of these were unemployed, then 797,294 were employed, represented by 103.8 on the Philadelphia factory employment index. According to the index for April, 1930, namely 97.9, there were only 751,796 persons employed, or there were approximately 138,040 persons unemployed in Philadelphia on the latter date. As expected, this estimate is higher than the one based entirely on the survey percentages, for a factory employment index is undoubtedly more sensitive than an all-occupational employment index.

Another comparison of interest can be made with the results found by the Metropolitan Life Insurance Co. in an unemployment study made among its policyholders during December, 1930. Of the 27,656 wage earners included, 24.9 per cent were unemployed full time and 24 per cent were employed only part time. The Philadelphia factory employment index had dropped to 83.5 in December, 1930, and using the 133,475 unemployment estimate for April, there would have been over 248,000 unemployed in December, 1930. As stated before, a factory employment index is highly sensitive and therefore is to be accepted with caution in such comparisons. If the Metropolitan Life Insurance Co. results were applied to the 889,837 wage earners, there would have been 221,500 wholly unemployed persons in Philadelphia last December. Since the sample of that survey is relatively small and composed only of the families of industrial wage-earning policyholders, it may not be very representative. Nevertheless it seems to substantiate, somewhat, the 133,475 estimate for April, 1930. The part-time results from the Metropolitan Life Insurance Co. report are far in excess of those found in this study. The enumerators in April, 1930, found only 5.2 per cent of part-time unemployment, while the December report showed 24 per cent of all wage earners working part time.

As stated in Chapter 1, the United States Bureau of the Census separated from the 1930 enumeration the 166 blocks used in the 1929 survey, and the results of that compilation and of the 1930 survey are shown in Table 5:

TABLE 5.—Comparison of census results in 166 school-census blocks and 1930 survey results in 171 school-census blocks

District	Number of blocks	Population	Gainful workers	Per cent of population ¹ or of persons enumerated ² usually employed	Unemployed—all reasons		Unemployed—Class A or "inability to find work" ³	
					Number	Per cent	Number	Per cent
1930 census results for sample area								
No. 1.....	13	17,750	8,355	47.1	501	6.0	359	4.3
No. 2.....	13	17,514	7,752	44.3	997	12.9	725	9.4
No. 3.....	12	16,232	6,350	39.1	1,168	18.4	706	11.1
No. 4.....	18	30,230	13,336	44.1	1,546	11.6	1,178	8.8
No. 5.....	20	23,508	10,813	46.0	1,283	11.9	884	8.2
No. 6.....	14	12,472	6,179	49.7	918	14.9	666	10.8
No. 7.....	22	22,662	10,425	46.0	1,601	15.4	1,089	10.4
No. 8.....	10	17,209	7,390	42.9	748	10.1	578	7.8
No. 9.....	18	19,785	9,026	45.6	1,089	12.1	781	8.7
No. 10.....	26	46,687	20,317	43.5	1,835	9.0	1,109	5.5
Total.....	166	224,049	99,943	44.6	11,686	11.7	8,075	8.1
1930 unemployment survey								
No. 1.....	13	16,677	7,050	42.3	557	7.9	464	6.6
No. 2.....	15	16,757	7,207	43.0	1,063	14.7	850	11.8
No. 3.....	12	13,028	4,837	37.1	1,133	23.4	941	19.4
No. 4.....	18	17,338	7,801	45.0	1,070	13.8	892	11.4
No. 5.....	20	20,125	9,461	47.0	1,450	15.4	1,190	12.6
No. 6.....	15	10,439	5,032	48.2	900	19.7	812	16.1
No. 7.....	22	15,435	6,418	41.6	1,312	20.4	1,115	17.4
No. 8.....	10	21,221	9,466	44.6	1,181	12.5	920	9.7
No. 9.....	18	17,866	7,757	43.4	990	12.7	799	10.2
No. 10.....	28	11,322	4,865	43.0	691	14.2	565	11.6
Total.....	171	160,208	69,884	43.6	10,448	15.0	8,538	12.2

¹ 1930 census results for sample area.

² 1930 unemployment survey.

The two sets of data shown in the table are not comparable so far as the absolute figures are concerned, since 10 new blocks were added and 5 old blocks dropped in the 1930 survey and also because all blocks were taken in their entirety in the census and not in the survey. District 10 is somewhat out of line, with the census reporting about four times as much population in the entire 26 blocks as did the attendance officers in parts of those 26 and 2 additional blocks. This district contains some very large school-census blocks which were covered only in part by the attendance officers, and this fact was not known when arrangements were made for the Census Bureau to tabulate separately the 166 blocks. District 4 likewise shows a large discrepancy, while district 8 returns show a higher enumeration for the survey than for the census in supposedly the same blocks. Probably this is due to some mistake in the block locations and definitions. It was expected that more persons would be included in the census because of the one-call method of this survey and the fact that more territory was covered in the former, but the variations are too great for comparison on an absolute basis.

As far as the variations between the districts are concerned, district 3 has the largest percentage and district 1 the smallest percentage of unemployment in both sets of data. Likewise most of the other districts have the same or nearly the same rank in intensity of unemployment in each study. The proportions of unemployment differ widely in the two analyses. In the census data, the percentage of unemployment in Class A—those persons out of a job, able to work, and looking for a job—was found actually to be the same for the 166 block sample as for the city as a whole. Thus while the estimated number of persons unemployed in the city on account of "inability to find work" was 111,585, based on the survey, the census reports 71,156 as being out of work and in Class A. Class A and "inability to find work" are not synonymous classifications, but are the closest groups in each series for comparative purposes. This analysis indicates that unemployment may not have been so severe for the city in April as the survey sample denotes. It is interesting to note from Table 5 that the actual number unemployed in Class A was nearly equal to the number in the survey unable to find work. Probably there was a tendency for the houses missed in this survey to contain families where everyone was employed, as indicated by the fact that the census results showed a much larger population and a larger number of persons with gainful occupations in these sample areas, but approximately the same number of unemployed persons as were shown by the present survey.

Regional Differences in Unemployment

Unemployment figures for each of the 10 school districts disclosed the fact that there were wide variations in the extent of unemployment in the various areas of the city. Likewise, great differences were found in the blocks within the districts, and their presentation would show even greater inequalities than district analyses.

TABLE 6.—Unemployment in school census districts of Philadelphia

District	Number of families interviewed	Families having unemployment		Number of persons—		Persons unemployed (all reasons)	
		Number	Per cent	In families	Usually employed	Number	Per cent
Full-time unemployment							
No. 1.....	3,894	445	11.4	16,677	7,050	557	7.9
No. 2.....	3,654	782	20.9	16,757	7,207	1,063	14.7
No. 3.....	2,493	783	31.4	13,028	4,837	1,133	23.4
No. 4.....	3,880	809	20.9	17,338	7,801	1,079	13.8
No. 5.....	4,455	1,060	23.8	20,125	9,451	1,456	15.4
No. 6.....	2,714	729	26.9	10,439	5,032	990	19.7
No. 7.....	3,237	966	29.8	15,435	6,418	1,312	20.4
No. 8.....	5,195	917	17.7	21,221	9,466	1,181	12.5
No. 9.....	4,532	764	16.9	17,866	7,757	986	12.7
No. 10.....	2,611	528	20.2	11,322	4,865	691	14.2
Total.....	36,665	7,763	21.2	160,208	69,884	10,448	15.0
Part-time unemployment							
No. 1.....	3,894	242	6.2	16,677	7,050	288	4.1
No. 2.....	3,654	239	6.5	16,757	7,207	314	4.4
No. 3.....	2,493	294	11.8	13,028	4,837	382	7.9
No. 4.....	3,880	124	3.2	17,338	7,801	146	1.9
No. 5.....	4,455	303	6.8	20,125	9,451	364	3.9
No. 6.....	2,714	320	11.8	10,439	5,032	381	7.6
No. 7.....	3,237	364	11.2	15,435	6,418	434	6.8
No. 8.....	5,195	393	7.6	21,221	9,466	493	5.2
No. 9.....	4,532	369	8.1	17,866	7,757	448	5.8
No. 10.....	2,611	299	11.5	11,322	4,865	398	8.2
Total.....	36,665	2,947	8.0	160,208	69,884	3,648	5.2

Table 6 shows that district 3 was hardest hit, with 23.4 per cent of full-time unemployment, while district 1 shows only 7.9 per cent. It is interesting to note that these districts occupied the same extreme positions in the 1929 survey. Wide variations were also revealed in the part-time unemployment figures, with deviations from 1.9 per cent in district 4 to 8.2 per cent in district 10. Six of the 10 districts had a lower proportion of unemployment than the 15 per cent for the city. In three districts the figures were within 1 per cent above or below the city average. The severity of unemployment was felt less in the medium to high class residential sections of West Philadelphia, Germantown, Chestnut Hill, Logan, and Overbrook, while the heaviest unemployment was found in the districts bordering the Delaware River, especially the crowded area south of Market Street and east of Broad Street. One block in district 1 showed less than 3 per cent, while another block in South Philadelphia revealed 40 per cent of unemployment. These figures represent the extreme conditions in all blocks included in the survey.

In an effort to determine the variations of the districts from 1929 to 1930 and from full-time to part-time unemployment, the districts are ranked in Table 7 according to severity of unemployment. The percentages for the districts from the 1930 census data on the 166 blocks are also included in this table.

TABLE 7.—Rank of districts according to per cent of unemployment

District	1929 survey— full-time unemployment		1930 survey				1930 census (sample area)— unemployment	
	Per cent	Rank	Full-time unem- ployment		Part-time unem- ployment		Per cent	Rank
			Per cent	Rank	Per cent	Rank		
No. 1.....	5.3	1	7.9	1	4.1	3	6.0	1
No. 2.....	11.6	7	14.7	6	4.4	4	12.9	7
No. 3.....	18.9	10	23.4	10	7.9	9	18.4	10
No. 4.....	9.9	5	13.8	4	1.9	1	11.6	4
No. 5.....	9.5	4	15.4	7	3.9	2	11.9	5
No. 6.....	14.8	9	19.7	8	7.6	8	14.9	8
No. 7.....	14.6	8	20.4	9	6.8	7	15.4	9
No. 8.....	6.9	3	12.5	2	5.2	5	10.1	3
No. 9.....	6.3	2	12.7	3	5.8	6	12.1	6
No. 10.....	10.3	6	14.2	5	8.2	10	9.0	2

It is apparent from Table 7 that each of the 10 districts was affected in relation to the others in nearly the same order in 1930 as in 1929. Only district 5 shows a marked increase in relation to the others. In comparing the district ratings between full-time and part-time unemployment in 1930, a greater disparity is shown than in the comparison of the full-time figures for the two years. Likewise, the districts line up in the census figures with nearly the same ranking as in the survey. In the Metropolitan Life Insurance Co. study of unemployment for December, 1930, the city was divided into four sections and South Philadelphia was reported to have the most unemployment. The map in Chapter 1 shows that district 3 is in South Philadelphia, and that district reported the heaviest unemployment. West Philadelphia had the lowest percentage of unemployment and district 1, which held the same position in the survey, is in that section. The figures for North Philadelphia were nearly as low as for West Philadelphia. Districts 8 and 9 are in that section and they both had relatively small proportions of unemployment. The Frankford area had a high proportion of unemployment and districts 7, 10, and part of 6, are included in that area.

A close investigation shows that there was less dispersion among the percentages of the 10 districts in 1930 than existed in 1929, and, therefore, that in a period of depression all classes suffer more equally from unemployment. In normal years the burden of unemployment falls almost entirely on the laboring and lower income classes, while in periods of general inactivity the higher income classes are also strongly affected. There are still great variations in different areas, on account of occupational, racial, and economic differences, as will be seen in the following analyses.

Racial Differences in Unemployment

An investigation of unemployment conditions among Negroes as compared with white persons disclosed much greater unemployment among the former. Though a few Mongolians were listed, their number was not sufficient to warrant separate classification and they were regarded as unspecified. A larger percentage of the persons enumerated in this year's survey than in last year's study are colored,

and the relative proportion appears to be more representative. In both full-time and part-time figures there was over 40 per cent more unemployment among the Negroes than among white workers. In contrast to this figure, 1929 showed the Negro unemployment to exceed that of the white persons by approximately 75 per cent. This change again denotes the more even spread of unemployment in hard times.

TABLE 8.—*Number and per cent of white persons and of Negroes unable to find work*

District	White persons			Negroes			All races		
	Number usually employed	Unable to find work		Number usually employed	Unable to find work		Number usually employed	Unable to find work	
		Number	Per cent		Number	Per cent		Number	Per cent
No. 1.....	6,775	433	6.4	247	30	12.2	7,050	464	6.6
No. 2.....	5,027	662	13.2	1,958	164	8.4	7,207	850	11.8
No. 3.....	4,535	848	18.7	258	87	33.7	4,837	941	19.4
No. 4.....	5,599	525	9.4	2,137	356	16.7	7,801	892	11.4
No. 5.....	7,438	819	11.0	1,931	354	18.3	9,451	1,190	12.6
No. 6.....	3,287	507	15.4	1,731	305	17.6	5,032	812	16.1
No. 7.....	5,935	970	16.5	449	132	29.4	6,418	1,115	17.4
No. 8.....	8,789	842	9.6	661	75	11.3	9,466	920	9.7
No. 9.....	7,728	786	10.2	(¹)	—	—	7,757	789	10.2
No. 10.....	4,512	493	10.9	306	67	21.8	4,865	565	11.6
Total.....	59,625	6,894	11.5	9,680	1,570	16.2	69,884	8,538	12.2

¹ No Negroes usually employed.

From Table 8 it can be seen that in 8 of the 9 comparable districts, unemployment was more severe among the Negroes. As in 1929, district 2 was the one exception to this condition and it is difficult to know exactly to what this might be attributed. In district 3 over one out of three Negroes usually employed were unable to find work. District 7 also showed a striking severity of unemployment among the Negro wage earners, with 29.4 per cent suffering from inability to get a job. The most pronounced contrast existed in district 10 where just twice as large a percentage of Negroes as white persons were unemployed for this cause. In the part-time analysis (see Table 1 in the Appendix, where all of the part-time tables are presented) there was a range from less than 1 per cent of partial unemployment in district 1 to 8.8 per cent in district 10 among the Negroes, as compared with a range from 1.4 per cent in district 4 to 6.2 per cent in district 3 among the white wage earners.

This disparity of unemployment between white persons and Negroes can be attributed mainly to the differences in their occupational and economic status. The type of work done by Negroes is mostly manual or domestic, and it is generally conceded that there is a large turnover in these types of occupations, particularly the former. Thus it is to be expected that the floating unemployed population among the Negroes would be greater than among the white workers. Furthermore the lack of education and the general occupational characteristics of the Negroes help to explain the heavier unemployment among them.

A further presentation of the variations in unemployment among different races can be made by comparing the results of Table 4 with the percentages of unemployment in different blocks. As was

previously pointed out, the enumerators were asked to classify each of the survey blocks according to their racial characteristics. Table 9 shows the severity of unemployment in all blocks as classified by the enumerators. Of the 171 blocks included in the survey, 76 were classified as having predominantly native-white occupants and in those blocks only 12 per cent of the wage earners were jobless. The 40 blocks which were classified as foreign born showed the most severe unemployment, 20 per cent. It was also found that the 23 blocks of mixed colored and white population had a higher percentage of unemployment than the city as a whole, while the 16 blocks with predominantly colored inhabitants showed a slightly lower average than did the entire city. The 16 blocks classified as native and foreign white had only 13.8 per cent of unemployment. It seems that the native whites suffer the least from unemployment, foreign whites shoulder the heaviest burden, and the Negroes have slightly less of a burden to carry. Nearly all the foreign whites are employed at manual labor or factory work, both of which are sensitive to general business conditions. Their lack of education is even more pronounced than among the Negroes.

TABLE 9.—Comparison of unemployment by racial characteristics of blocks

District	Native white			Native and foreign white			Foreign white		
	Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment	
		Full time	Part time		Full time	Part time		Full time	Part time
No. 1.....	8	7.0	1.2	3	9.1	8.9	4	18.4	5.4
No. 2.....	5	14.8	1.7	3	16.2	2.0	4	18.4	5.4
No. 3.....	3	8.2	.4	4	11.6	2.3	10	24.0	8.7
No. 4.....	8	13.6	5.5	5	15.2	3.0	6	15.5	2.9
No. 5.....	2	13.0	3.0	2	16.3	5.7	5	22.0	0.6
No. 6.....	13	18.9	8.2	7	21.1	4.1	8	21.1	4.1
No. 7.....	5	8.3	2.8	3	10.9	3.9	1	20.2	23.5
No. 8.....	17	12.8	5.5	1	11.7	13.4	1	11.7	13.4
No. 10.....	15	12.8	6.6	3	15.5	3.5	6	17.0	15.6
Total.....	76	12.0	4.3	16	13.8	4.8	40	20.0	8.4
	Native and colored, and foreign and colored			Colored			All races		
No. 1.....	2	9.7	6.3	13	7.9	4.1	13	7.9	4.1
No. 2.....	1	13.6	3.9	2	7.9	10.4	15	14.7	4.4
No. 3.....	2	19.3	2.6	12	23.4	7.9	12	23.4	7.9
No. 4.....	6	17.3	2.7	5	14.6	1.7	18	13.8	1.9
No. 5.....	4	17.7	2.1	2	16.3	5.7	20	15.4	3.9
No. 6.....	4	21.6	0.6	4	14.5	0.2	15	19.7	7.6
No. 7.....	1	12.1	1.5	2	29.0	6.7	22	20.4	6.8
No. 8.....	1	12.1	1.5	18	12.5	5.2	10	12.5	5.2
No. 9.....	1	12.1	1.5	18	12.7	5.8	18	12.7	5.8
No. 10.....	3	14.3	6.1	1	8.1	2.9	28	14.2	8.2
Total.....	23	16.5	3.5	16	14.6	5.7	171	15.0	5.2

From the part-time figures shown in Table 9, it is found that the foreign whites show the heaviest part-time unemployment also. Less than 3 out of 4 of the foreign born were working full time in

April, 1930. Just as in the full-time analysis, the part-time figures show this type of unemployment to be heavier among Negroes than among native whites. Thus we can summarize the part-time unemployment situation by stating that the foreign born show the highest proportion of part-time workers, while the Negroes have a slightly higher and the white persons a much lower proportion than the city percentage of part-time unemployment.

Unemployment and Occupational Status

A comparison of unemployment according to various occupations was made more difficult by the fact that occupations were determined only for those who were unemployed and not for all wage earners. Nevertheless, the available data are sufficient to show that there are conspicuous differences in the intensity of unemployment in the different occupational groups. In the occupational analysis only three classifications were used—manual, clerical, and executive.

As in the case of racial and economic classifications, the enumerators were asked to state the predominant occupational status of the persons in each block. A comparison of this information with the severity of full-time and part-time unemployment in the 171 blocks is presented in Table 10. Nearly three-fourths, or 124, of the blocks were specified as industrial. In this group it was found that 17.2 per cent of the wage earners were wholly unemployed and an additional 5.6 per cent were working but part of the time. In contrast to this, only 5.9 per cent of full-time and 2.1 per cent of part-time unemployment were found in the six blocks classed as having a predominantly professional and executive working class. In blocks described as clerical and trade, and also in those indicated as industrial and trade, the unemployment was less severe than for the city as a whole. In the former group only 8.5 per cent, and in the latter but 11.6 per cent, of those usually employed were out of work. The part-time results showed quite a discrepancy between these two classes, with more than three times as much part-time unemployment in the latter as in the former class. Just as in many other part-time analyses, the discrepancies seem to be of doubtful significance.

TABLE 10.—Comparison of unemployment with occupational characteristics of blocks

District	Professional and executive			Clerical and trade			Industrial and trade			Industrial			All occupations		
	Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment	
		Full time	Part time		Full time	Part time		Full time	Part time		Full time	Part time		Full time	Part time
No. 1.....	4	5.1	1.4	4	5.5	1.9	2	9.6	10.7	3	10.7	2.9	13	7.9	4.1
No. 2.....				2	13.4	2.3				13	14.9	4.0	15	14.7	4.4
No. 3.....				2	13.2	3.5				10	26.1	9.0	12	23.4	7.9
No. 4.....				1	3.4					17	15.5	2.2	18	13.8	1.0
No. 5.....							7	12.8	5.8	13	18.9	2.8	20	15.4	3.9
No. 6.....										15	19.7	7.6	15	19.7	7.6
No. 7.....				1	19.4	4.4				21	20.5	6.9	22	20.4	6.8
No. 8.....	2	6.6	2.7	1	7.5	3.0	1	12.1	1.5	6	16.2	7.6	10	12.5	5.2
No. 9.....							5	9.1	5.3	13	13.9	6.9	18	12.7	5.8
No. 10.....				4	7.6	1.6	11	13.5	10.0	13	17.2	9.2	28	14.2	8.2
Total..	6	5.9	2.1	15	8.5	2.2	26	11.6	6.7	124	17.2	5.6	171	15.0	5.2

In districts 3, 6, and 7, where the unemployment was more severe than in the other districts, nearly all of the blocks were industrial in character. In contrast, districts 1 and 8, with the lowest proportions of unemployment, had some blocks in each class. District 1 was classified as having 8 of its 13 blocks in the two higher occupational groups and also showed the lowest proportion of unemployment among all the districts. Districts 2 and 4 were exceptions to the general rule, for nearly all of their blocks were in the industrial class, while each district disclosed a smaller percentage of unemployment than was reported for the sample as a whole.

Although there is no available information on the number of wage earners in the manual, clerical, and executive classes, there is an occupational distribution for Philadelphia in the United States census of occupations for 1920. A careful study was made of this census material and all of the jobs were classified into the three major groups mentioned above. Of course, the results can not be taken as absolutely accurate, for there may be differences of opinion as to within just which of these classes a certain job falls. From this investigation it was found that of the 819,000 gainfully employed persons in Philadelphia in 1920, 70.5 per cent held manual jobs, 18.1 per cent did clerical work, and 11.4 per cent occupied executive positions. In the survey, of the 9,991 unemployed persons for whom occupations were specified, 88.6 per cent had manual jobs, 9.8 per cent did clerical work, and only 1.6 per cent were executives. A comparison of these two sets of figures accentuates the previous findings. Thus while 7 out of 10 wage earners in Philadelphia usually do manual work, nearly 9 out of 10 of the unemployed were in this class. Although nearly 1 out of 5 usually employed have clerical jobs, less than 1 out of 10 of the unemployed belongs to this classification. An even greater disparity is found in the executive group, with 11.4 per cent of all wage earners in this class and only 1.6 per cent of the unemployed workers usually engaged in executive work. Most of the manual workers are in the lower income and economic groups and, as will be shown later, there is an inverse relationship between income and economic status and unemployment. Therefore, it is logical to suppose that there would be more unemployment among those workers in manual occupations, and the results pointed out above confirm this theory.

TABLE 11.—Number and per cent of unemployed persons, by customary occupations and by districts

District	Number of unemployed persons in all occupations	Unemployed persons in specified customary occupations							
		Manual		Clerical		Executive		Unspecified	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
No. 1.....	557	304	65.3	120	22.6	50	10.1	11	2.0
No. 2.....	1,063	883	83.1	114	10.7	6	.6	60	5.6
No. 3.....	1,133	1,011	89.2	74	6.5	3	.3	45	4.0
No. 4.....	1,079	971	90.0	75	6.9	15	1.4	18	1.7
No. 5.....	1,458	1,178	80.9	148	10.2	20	1.4	110	7.5
No. 6.....	990	883	89.2	50	5.1	11	1.1	46	4.6
No. 7.....	1,312	1,164	88.7	100	7.6	4	.3	44	3.4
No. 8.....	1,181	950	80.4	147	12.5	30	2.5	54	4.6
No. 9.....	986	865	87.7	95	9.7	13	1.3	13	1.3
No. 10.....	691	580	84.0	50	7.2	5	.7	56	8.1
Total.....	10,448	8,849	84.7	979	9.4	163	1.5	457	4.4

Table 11 shows the distribution of the unemployed persons in each occupation for each district, and for the sample as a whole. As expected, the variations between districts are numerous and wide. In district 1 only 65.3 per cent of the unemployed persons had had manual occupations, while 90 per cent of the jobless in district 4 had held such jobs. The percentage of clerical workers among the unemployed likewise showed marked variations—from 22.6 per cent in district 1 to 6.5 per cent in district 3. The disparity in the proportion of the unemployed who are executives is also large between the various districts. District 1 has a larger percentage of its unemployed among the clerical and executive classes than has any other district. District 3 is just the opposite, with next to the smallest proportion of its jobless in these two groups. In this connection, it is important to note that district 1 had the least proportionate unemployment while district 3 had the most. District 8, which was second to district 1 in scarcity of unemployment, was also second in the proportion of jobless who were in the clerical or executive classes. District 4 was somewhat of an exception, with the highest percentage of unemployed persons in the manual class, but with a percentage of unemployment for all reasons much less than for the city as a whole. District 9, also with a relatively low percentage of unemployment, had most of its unemployed persons in the manual group.

While the above analyses are not so complete as might be desired, nevertheless there is sufficient proof that great variations existed in unemployment among different occupational groups. The industrial and manual workers are the ones most affected by the unemployment burden, while the executive and professional groups are the least affected. The clerical and trade classes have more unemployment than the professional-executive group, but not nearly so much as the manual and industrial workers. It is unfortunate that the occupational results of this year's study are not comparable with those of the 1929 survey, as the classification of occupations was changed. Nevertheless, it is readily discernible from a review of the last year's results that manual and industrial occupations showed the highest proportions of unemployment.

In the part-time data (see p. 60) a similar but less marked tendency as in the full-time analysis is evident, although the figures for a couple of districts were distorted by the large percentage of persons not specifying their occupation.

Unemployment Compared with Income

It was thought desirable, but not advisable, to determine the income per family and per capita directly from the families interviewed. Many persons are hesitant about furnishing wage information, and it was decided not to request these data, so as to eliminate the possibility of antagonism among those being interviewed. Although the data obtained in this survey are entirely lacking in information concerning income, a study of this factor has been made in Philadelphia.

In 1927-28 Dr. F. R. Cawl, of the University of Pennsylvania, made a study of family income in the city of Philadelphia for the Philadelphia Public Ledger. In that survey, the city was not divided into the 10 school districts, but rather into 47 areas in which the

families were of uniform economic status. Although the study is over three years old, it remains the only comprehensive one of its kind for this city. There probably have been no important relative changes in the various sections of the city as far as income is concerned, and therefore it was decided to use the Cawl survey figures.

Using the data collected by Doctor Cawl as the basis, estimates of the average family incomes were calculated for each of the 10 school districts. These calculations, along with average individual incomes, and the percentages of unemployment in each school district, are presented in Table 12.

TABLE 12.—*Unemployment and income in school census districts of Philadelphia*

District	Number of families	Average number in family	Average family income ¹	Average per capita income ¹	Per cent of full-time unemployment		Per cent of part-time unemployment	
					All reasons	Unable to find work	All reasons	Unable to find work
No. 1.....	3,894	4.3	\$3,208	\$750	7.9	6.6	4.1	3.3
No. 2.....	3,054	4.6	2,035	444	14.7	11.8	4.4	3.4
No. 3.....	2,493	5.2	2,321	444	23.4	19.4	7.9	6.4
No. 4.....	3,880	4.5	2,496	559	13.8	11.4	1.9	1.6
No. 5.....	4,455	4.5	2,210	489	15.4	12.6	3.9	2.2
No. 6.....	2,714	3.8	2,341	609	19.7	16.1	7.6	5.4
No. 7.....	3,237	4.8	1,939	407	20.4	17.4	6.8	3.5
No. 8.....	5,195	4.1	2,817	690	12.5	9.7	5.2	2.1
No. 9.....	4,532	3.9	2,587	657	12.7	10.2	5.8	5.0
No. 10.....	2,611	4.3	2,166	500	14.2	11.6	8.2	4.6
All districts.....	36,665	4.4	2,440	558	15.0	12.2	5.2	3.5

¹ These figures are calculated from the Cawl survey (1927-28) districts.

An analysis of this table reveals a marked relation in nearly all districts between high income per family or per capita and low proportions of unemployment. In ranking the districts according to the per capita income in each, it was noted that 8 of the 10 districts held the same or an adjacent rank as when arranged according to the percentages—low to high—of wage earners unable to find work. There is almost as close an inverse relationship between family income and unemployment as between per capita income and unemployment. The three districts with the highest family and per capita income are likewise the three districts having the lowest proportions of wage earners out of work. Just as in the 1929 survey, district 6 was the one outstanding exception and there the income was far above the average for the city, while the percentage of unemployment was similarly above the city results. In fact this district ranked third in severity of unemployment, but, at the same time, its per capita income was the fourth highest in the city.

Unemployment and Economic Status

It has long been known that the burden of unemployment falls more heavily on those who are least able to shoulder it. No direct inquiries were made by the enumerators in reference to economic status, for no definite measure of this factor is available. As stated, questionnaires were sent to the 10 school district supervisors, asking them to have the enumerators classify each block which was included

in the survey as to its economic, racial, and occupational status. The facts on economic status were compiled and are shown in Table 13. Each block was specified as "high to medium," "medium," or "medium to low." These classes are, of course, not specific, but are relative terms as used by the enumerators and must be regarded as such. The fact that the enumerators were thoroughly familiar with each block makes this analysis more valuable than if the classification had been made by enumerators who had no contact in the blocks other than for the purpose of taking this census.

TABLE 13.—Comparison of unemployment with economic status of blocks

District	High to medium			Medium			Medium to low			All groups		
	Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment		Number of blocks	Per cent of unemployment	
		Full time	Part time		Full time	Part time		Full time	Part time		Full time	Part time
No. 1.....	7	4.5	0.9	6	10.2	6.2	-----	-----	-----	13	7.9	4.1
No. 2.....	2	13.4	2.3	9	12.8	4.9	4	18.5	4.1	15	14.7	4.4
No. 3.....	-----	-----	-----	6	25.4	10.2	6	21.6	5.7	12	23.4	7.9
No. 4.....	-----	-----	-----	8	9.7	1.5	10	16.6	2.1	18	13.8	1.9
No. 5.....	-----	-----	-----	13	13.8	4.0	7	19.7	3.5	20	15.4	3.9
No. 6.....	-----	-----	-----	-----	-----	-----	15	19.7	7.6	15	19.7	7.6
No. 7.....	-----	-----	-----	4	14.5	2.9	18	22.0	7.8	22	20.4	6.8
No. 8.....	3	7.0	2.8	4	12.1	3.3	3	19.2	10.0	10	12.5	5.2
No. 9.....	-----	-----	-----	9	10.2	3.8	9	15.8	8.2	18	12.7	5.8
No. 10.....	1	4.4	5.5	8	13.1	3.4	19	14.8	10.0	28	14.2	8.2
Total.....	13	6.5	2.0	67	13.1	4.5	91	18.5	6.6	171	15.0	5.2

Of the 171 blocks included in the survey, only 13 were specified as having a "high to medium" economic status, while 91 were placed in the "medium to low" group. In the former blocks, only 6.5 per cent of those usually employed were without a job in April, 1930. The 67 blocks classed as having a "medium" economic status reported 13.1 per cent of unemployment, while there was 18.5 per cent of unemployment in those blocks having the lowest economic status. Thus, for the city as a whole, there was an apparent inverse relationship between economic status and the severity of unemployment. In analyzing each district separately, the same tendency was found, except for slight variation in districts 2 and 3. District 8, with the blocks evenly distributed in the three economic groups, and also district 10, showed a marked similarity to the entire city as far as the proportions of unemployment in each group are concerned.

For the city as a whole, part-time unemployment was also found to be heavier in the lowest economic classes and lighter in the better economic classes. As is indicated by Table 13, the disparity between various districts is very pronounced and many of the districts do not show the same tendency as do the figures for the entire city.

The Curtis Publishing Co. recently prepared a map of Philadelphia on which was shown the various characteristics of different sections of the city. Although the classification was not of one characteristic—i. e., occupational, racial or residential status alone—yet the available data proved of sufficient value to substantiate the findings of the preceding paragraphs. An experienced field worker made a study of

each street and block in the city for the company and his findings were transferred to the map by coloring the different areas of the city. Each of the 171 school census blocks was located on that map and the nature of the population in these units was recorded. The results are presented in Table 14.

TABLE 14.—*Unemployment in school-census blocks according to various characteristics, as shown on Curtis Publishing Co. survey map*

Block characteristics	Number of blocks	Number of persons usually employed	Full-time unemployment		Part-time unemployment	
			Number	Percent	Number	Percent
Very best, very good, and good residential—white.....	5	931	42	4.5	11	1.2
Skilled and clerical workers—very best, very good, and good residential—white.....	17	9,519	846	8.9	181	1.9
Skilled and clerical workers—white.....	27	14,018	1,577	11.2	418	3.0
Skilled and clerical workers—white and colored persons.....	5	1,580	221	14.0	51	3.2
Colored population.....	24	9,870	1,463	14.8	365	3.7
Skilled and clerical workers and unskilled labor and foreign workers.....	25	8,975	1,415	15.7	1,010	11.3
Unskilled labor and foreign workers and colored population.....	12	6,675	1,172	17.6	293	4.4
Unskilled labor and foreign population.....	49	17,893	3,030	20.3	1,281	7.2
Miscellaneous ¹	7	423	82	19.4	38	9.0
Total.....	171	69,884	10,448	15.0	3,648	5.2

¹ Includes business and industrial blocks, and also some blocks undeveloped and with widely scattered population.

The findings shown in Table 14 are of definite value in proving the racial, economic, and occupational distribution of unemployment, as previously pointed out. As anticipated, the blocks with the lowest proportions of both full-time and part-time unemployment were those occupied by a native-white population engaged in skilled and clerical occupations and representing the best residential sections. It can be definitely seen that unemployment is least severe among the native whites, more heavy among the Negroes, and most severe among the foreign born. A much larger percentage of unemployment exists among the unskilled laborers than among the skilled and clerical wage earners, as indicated in the table. Almost without exception these results confirm the previous results; a comparison between the attendance officers' analyses of the 171 blocks and the characteristics taken from the map shows marked similarity in the two series.

Unemployment in Families of Different Size

Of the 36,665 families enumerated in this survey it has been shown that 7,763, or 21.2 per cent, of these families had some full-time unemployment. This also is indicative of the increase of unemployment, since 15.6 per cent of the families surveyed in Philadelphia in April, 1929, included one or more jobless members. There has been a 35 per cent increase in families having unemployment and a 44 per cent increase in persons unemployed from April, 1929, to April, 1930. This fact denotes not only more families having unemployment, but also more unemployed in these families. There was a total of 20,574 persons usually employed in these 7,763 families and of this number

10,448, or 51 per cent (as compared with 47.5 per cent last year), were unemployed in April, 1930. In other words, over half of the wage earners in all families reporting some unemployment were jobless. An analysis of the part-time returns shows 2,951 or 8 per cent of the families interviewed as affected, while 3,648 persons or 5.2 per cent of those usually employed were employed only a part of the time. It has not been determined how many families experienced both full-time and part-time unemployment, but undoubtedly there were a great number in which both types prevailed.

Another relationship which sheds light on the severity of unemployment in families of different sizes is the comparison of the average size of a family in each district with the percentage of unemployment in that district. These figures are shown in Table 12 (p. 27), which was also used to show the effect of income on unemployment. Four of the five districts which have fewer persons per family than the 4.4 for the survey as a whole showed also smaller proportions of unemployment than that found for the entire survey. District 6 is again the exception, having the smallest number of persons per family and at the same time a higher percentage of unemployment than was found for the entire sample. Aside from this district, it is apparent that the larger the size of the families in any one territory, the higher will be the percentage of unemployment in that area.

TABLE 15.—Number of persons in family compared with number usually employed

Number in family	Number of families	Number of families in which number of persons usually employed was—															
		0	1	2	3	4	5	6	7	8	9	10	11	12			
1 person.....	1,052	160	802														
2 persons.....	6,245	190	4,282	1,773													
3 persons.....	7,216	66	3,894	2,582	674												
4 persons.....	7,296	30	3,458	2,241	1,251	316											
5 persons.....	5,557	11	2,149	1,590	1,094	574	139										
6 persons.....	3,740	10	1,173	1,033	783	445	232	64									
7 persons.....	2,380	5	591	629	547	371	143	70	24								
8 persons.....	1,446	3	280	344	345	259	123	55	31	8							
9 persons.....	807		122	176	189	172	88	36	15	7							
10 persons.....	496		49	90	119	111	70	28	21	7	4						
11 persons.....	209		14	31	59	50	37	12	1	3	2						
12 persons.....	112		9	15	23	28	14	10	7	5							
13 persons.....	50		1	2	10	11	11	3	7	4							
14 persons.....	24			2	6	8	8	4	2		1						
15 persons.....	14				1	1	5	3	1	1	1						
Over 15 persons.....	11			1	2	2	3	2		1							
Total.....	36,665	475	16,914	10,509	5,103	2,348	873	287	109	31	13						3

The average number of persons per family was found to be 4.4 in both the 1929 and the current survey, and also in the Metropolitan Life Insurance Co.'s study. In the 36,665 families enumerated, there were 69,884 persons usually employed, an average of 1.9 persons usually employed in each family, which coincides with the result of the 1929 report. The Metropolitan Life Insurance Co. reported 1.8 wage earners per family. As was previously stated, the 7,763 families reporting full-time unemployment showed 20,574 persons, or 2.7 per family, as usually employed. Since the number of persons per family usually employed is so much greater in those families with unemployment than for the entire population and, as we shall find, the percentage of unemployment varies directly with

the number usually employed, it indicates much more intensity of unemployment in the larger families.

Comparison of the number of persons in each family and the number usually employed discloses, as anticipated, a direct relationship between these two sets of data. The distribution as shown in Table 15 reveals nearly the same results as were found in the previous survey. Only 2.9 per cent of all families have one member, while just 1.3 per cent of the families have no workers, in comparison with 1.4 per cent of all families showing none usually employed in 1929. In both years, in 82 per cent of all families, there were between two and six persons. In both years, also, just 90 per cent of all the families had from one to three persons usually employed.

TABLE 16.—Number of persons in family usually employed compared with number unemployed

Number in family usually employed	Number of families	Families with unemployed workers		Number of families with specified number of persons unemployed						
		Number	Per cent	1	2	3	4	5	6	
None.....	475									
1 person.....	10,914	1,504	9.2	1,504						
2 persons.....	10,509	2,501	23.8	2,059	442					
3 persons.....	5,103	1,858	36.4	1,237	491	130				
4 persons.....	2,348	1,154	49.1	595	305	159	35			
5 persons.....	873	450	51.5	204	131	72	33	10		
6 persons.....	287	101	56.1	56	51	36	14	2		2
7 persons.....	109	57	52.3	22	11	11	9	3		1
8 persons.....	31	16	51.6	6	7	1	2			
9 persons.....	13	7	53.8	1	4	1	1			
12 persons.....	3	1	33.3	1						
Total.....	36,665	7,769	21.2	5,745	1,502	410	94	15		3

The greater severity of unemployment among families with a large number of wage earners is strikingly presented in Table 16. Among all the families with two or more persons usually employed there is a greater percentage of families with unemployment than the 21.2 per cent for the entire sample. With the exception of the three families with 12 workers, which is too small a sample for comparison, over one-half of all the families having more than four wage earners report some members of the family as being unemployed full time. About 75 per cent of the families with unemployment reveal only one person unemployed, while over 93 per cent of these families have only one or two persons unemployed. In the part-time analysis (see p. 60) there is also a progressive increase in the percentage of families reporting unemployment as the number of wage earners per family mounts. Of the families showing part-time unemployment 82 per cent had one person out of work and 96 per cent had only one or two persons not working steadily.

There are several figures which show that there has been an increase in unemployment, not only among families, but also within the family. Of those families reporting unemployment, each had 1.34 persons out of work in comparison with 1.24 persons in April, 1929. While the previous survey showed that in 25 per cent of the families having unemployment all the wage earners were out of work, the 1930 data reveal 28 per cent of families with unemployment having all wage-earners idle. In part-time unemployment, 38 per cent of the families affected have all of their wage earners idle part of the time. Of the

families with full-time unemployment in April, 1930, 70 per cent had one-half or more of their wage earners out of work in contrast to 66 per cent the preceding year, and 72 per cent for the part-time unemployment. Thus in April, 1930, it is found that 14.8 per cent of the families, against 10.3 per cent in April, 1929, were without income from half or more of their wage earners.

As has been shown, there is a direct relationship between the size of the family and the number of persons usually employed in these families. Likewise the unemployment is more severe in those families with larger numbers of wage earners. From these facts it might be expected that there is more unemployment in larger than in smaller families, and this conclusion is emphasized in Table 17. As the size of the family increases there is a proportional increase in the percentage of families with unemployment, save where the sample becomes too small for significance. Over 50 per cent of all families consisting of 11 to 14 persons have some unemployment, while less than 13 per cent of one and two member families have unemployment. Only 16.3 per cent of the families with fewer than six members were affected, while 35.4 per cent of larger families reported unemployment. Somewhat similar conditions were disclosed in the 1929 survey, except that the percentages of afflicted families were somewhat lower throughout, but the tendency for unemployment to increase with the size of the family was just as pronounced. Furthermore, an analysis of families with less than six persons, as compared with families of six or more members, shows a marked difference in the proportion of families affected. Since, in 35.4 per cent of all large families there were some full-time jobless, while of the families with fewer than six members only 16.3 per cent were reported as having some unemployment, the proportion of large families showing unemployment is 117 per cent greater than the percentage of small families. The 1929 survey revealed 24.7 per cent of the large families having experienced unemployment as against 12.3 per cent of the small families, a 100 per cent higher proportion for the larger-sized families. A similar tendency is found in the part-time results (see p. 61) where only 3.9 per cent of families with one person were affected, and 25.8 per cent of families with 11 members showed some part-time idleness, with a rather definite upward trend between these two.

TABLE 17.—*Unemployment in families of different size*

Number in family	Number of families	Families with unemployment		Number of persons usually employed	Persons unemployed	
		Number	Per cent		Number	Per cent
1 person.....	1,052	135	12.8	892	135	15.1
2 persons.....	6,245	783	12.5	7,828	882	11.3
3 persons.....	7,216	1,036	14.4	11,080	1,245	11.2
4 persons.....	7,296	1,231	16.9	12,957	1,552	12.0
5 persons.....	5,557	1,288	23.2	11,602	1,717	14.8
6 persons.....	3,740	1,093	29.2	8,912	1,530	17.2
7 persons.....	2,380	833	35.0	6,277	1,197	19.1
8 persons.....	1,446	552	38.2	4,249	829	19.7
9 persons.....	807	353	43.7	2,504	545	21.8
10 persons.....	496	236	47.6	1,763	400	22.7
11 persons.....	209	106	51.7	759	179	23.6
12 persons.....	112	63	56.3	461	118	26.2
13 persons.....	50	27	54.0	242	55	22.7
14 persons.....	34	22	64.7	171	47	27.5
15 persons.....	14	6	42.9	86	11	12.8
Over 15 persons.....	11	3	27.3	51	0	11.8
Total.....	36,665	7,769	21.2	60,884	10,448	15.0

Not only are there more of the larger-sized families affected, but the percentage of unemployed workers also increases with the size of the family, as shown in Table 17. With the exception of 1-member families, there is a persistent rise in unemployment with family size as far as the data are comparable. This exception—severe unemployment in 1-member families—also existed in the previous report and was aptly explained as being due to the lack of family responsibility in single persons. In both years, families of more than one and fewer than six members showed a smaller percentage of wage earners out of work than was found for the entire city. All families of 6 or more persons, in comparable classes, had more unemployment than the 15 per cent survey average. About 75 per cent of all families enumerated in each year had fewer than six members. In 1929 there was 9.1 per cent and in 1930 there was 12.5 per cent of unemployment for all families of fewer than six persons. The 25 per cent of families which comprised those of six or more members showed 12.5 per cent of unemployment in 1929 and 19.3 per cent in 1930. In comparing the two years, it is noted that unemployment was 37 per cent more severe in larger families in 1929, and in 1930 the disparity was even greater with families of six or over, which had 54 per cent more unemployment than the smaller-sized ones.

Unemployment as Classified According to Sex and Age

A study of the amount of unemployment of males and females and of those under 21 years of age and those 21 years of age and over showed great similarity to the results obtained in 1929. Since "inability to find work" measures unemployment conditions more accurately than all reasons, these groups were compared on this basis. Females made up a larger portion of the unemployed who could not find work in April, 1930, than in the previous year. They represented 23.4 per cent of this group in 1929 as compared with 25.5 per cent a year later. Thus, the increase in unemployment fell more heavily on the female group, but even in 1930 they did not suffer as severely as males, for in estimates based on the census of occupations, 27 per cent of all workers are females. This is another indication of the fact that in periods of depression the effect of unemployment is more equally spread among all groups. According to the Bureau of the Census returns for 1930, nearly 79 per cent of the unemployed persons able to work were males, and slightly over 21 per cent were females. These figures also show that the incidence of unemployment fell more heavily on the males than the survey might indicate. A different result was found as to part-time unemployment, where 29.6 per cent of the workers unemployed were females. Thus it is apparent that, while lack of full-time work is less severe among females, nevertheless a larger percentage of wage-earning females hold positions which keep them occupied for less than a full working week.

TABLE 18.—Number and per cent of persons unable to find work, by district, sex, and age

District	Sex			Age						Total
	Males	Females	Total	Males		Females		Males and Females		
				Under 21 years	21 years and over	Under 21 years	21 years and over	Under 21 years	21 years and over	
Number										
No. 1.....	337	124	461	64	270	49	72	113	342	455
No. 2.....	637	199	836	149	486	88	108	237	594	831
No. 3.....	726	210	936	144	582	103	106	247	688	935
No. 4.....	666	224	890	142	524	77	147	219	671	890
No. 5.....	860	328	1,188	132	721	89	233	221	954	1,175
No. 6.....	619	192	811	101	516	60	132	161	648	809
No. 7.....	841	270	1,111	128	709	82	183	210	892	1,102
No. 8.....	656	255	911	142	513	86	167	228	680	908
No. 9.....	593	196	789	93	499	61	135	154	634	788
No. 10.....	388	168	556	105	274	67	99	172	373	545
Total....	6,323	2,166	8,489	1,200	5,094	762	1,382	1,962	6,476	8,438
Per cent										
No. 1.....	73.1	26.9	100.0	19.2	80.8	40.5	59.5	24.8	75.2	100.0
No. 2.....	76.2	23.8	100.0	23.5	76.5	44.9	55.1	28.5	71.5	100.0
No. 3.....	77.6	22.4	100.0	19.8	80.2	49.3	50.7	26.4	73.6	100.0
No. 4.....	74.8	25.2	100.0	21.3	78.7	34.4	65.6	24.6	75.4	100.0
No. 5.....	72.4	27.6	100.0	15.5	84.5	27.6	72.4	18.8	81.2	100.0
No. 6.....	76.3	23.7	100.0	16.4	83.6	31.3	68.7	19.9	80.1	100.0
No. 7.....	75.7	24.3	100.0	15.3	84.7	30.9	69.1	19.1	80.9	100.0
No. 8.....	72.0	28.0	100.0	21.7	78.3	34.0	66.0	25.1	74.9	100.0
No. 9.....	75.2	24.8	100.0	15.7	84.3	31.1	28.9	19.5	80.5	100.0
No. 10.....	69.8	30.2	100.0	27.7	72.3	40.4	59.6	31.6	68.4	100.0
Total....	74.5	25.5	100.0	19.1	80.9	35.5	64.5	23.3	76.7	100.0

The distribution of unemployment of both sexes under 21 years of age and 21 years of age and over was found to be, in each case, within 1 per cent of the 1929 results. Over three-fourths of the full-time jobless were of voting age, while the census of occupations shows that 85 per cent of all wage earners fall in this class. As 23.3 per cent of those unable to find work were under 21 years of age, and they comprise only 15 per cent of those holding positions, it is apparent that unemployment falls more severely on the youthful workers. While 11 per cent of all male workers are under 21, 19.1 per cent of the unemployed males are under 21 years of age. Of the females usually employed, 25 per cent are under 21 years of age and 35.5 per cent of the females who are out of work are in this age group. While the part-time results (see p. 61) reveal the fact that the percentages of unemployment of both males and females under 21 are greater than their respective proportions of wage earners, nevertheless the difference is not so wide as in the full-time figures. It is significant, therefore, to note that workers under 21 years of age suffer more from unemployment than older workers, but the part-time unemployment is more evenly distributed between the two age groups than is the full-time unemployment. The increase of unemployment from April, 1929, to April, 1930, was spread among the sex and age groups in much the same proportion as the 1929 unemployment figures revealed.

Reasons for Unemployment

As stated, the severity of unemployment is more accurately measured by the number of persons unable to find work than by the entire number of unemployed. While the other reasons given for idleness are important and merit some attention in studying the labor situation, the real problem concerns those who are able and willing to work, but can not locate a job. There are always some persons who are kept from working by sickness or indifference, but their number does not vary closely with economic conditions, as the figures will show. Much interest has been manifested in the problem of unemployment among persons of advanced age, but the percentage of persons unemployed because of superannuation sheds but little light on this matter. Elderly persons who were not seeking employment were regarded as being in the retired group and therefore not counted as unemployed, nor as employable.

In an analysis of the 10,217 unemployed persons for whom the reasons for unemployment were recorded, it was found that 83.6 per cent of these persons were unable to find work. This reason was found to be predominant in April, 1929, also, but not to so great an extent, for then only 75.2 per cent of the jobless gave this cause. The effect on unemployment of the economic depression, existent when the 1930 survey was being taken, is emphasized by this disparity. In April, 1929, only 7.8 per cent of all wage earners enumerated could not find work, in contrast to 12.2 per cent one year later. Thus while the percentage of unemployment for all reasons increased 44 per cent from April, 1929, to April, 1930, the increase of the persons unable to find work amounted to 57 per cent. Unemployment from all other reasons, including "reason unspecified," amounted to 2.6 per cent in 1929 and 2.8 per cent in 1930.

In the part-time results there was a larger percentage of unemployment due to inability to find work than in the full-time figures. Thus, 86.6 per cent of all those working only part of the time blamed their condition on lack of work.

TABLE 19.—Per cent of idle workers unemployed for specified reasons, by districts

District	Number of unemployed persons	Per cent of idle workers unemployed for each specified reason				
		Unable to find work ¹	Sickness	Superannuation	Indifference	Other reasons
No. 1.....	548	84.7	10.0	2.4	1.1	1.8
No. 2.....	1,027	82.8	11.5	2.6	2.3	.8
No. 3.....	1,085	86.7	6.3	4.4	1.9	.7
No. 4.....	1,067	83.6	8.8	4.8	1.8	1.0
No. 5.....	1,422	83.7	9.2	3.7	1.9	1.5
No. 6.....	967	84.0	11.0	2.7	1.7	.6
No. 7.....	1,296	86.0	6.8	3.2	2.8	1.2
No. 8.....	1,158	79.4	10.0	6.7	1.3	2.6
No. 9.....	977	80.8	8.7	3.0	1.9	5.6
No. 10.....	670	84.3	9.0	5.2	.3	1.2
All districts ²	10,217	83.6	9.0	3.9	1.8	1.7

¹ Includes also such reasons as "slack season," "laid off," etc.

² Does not include 231 persons for whom the reasons for unemployment were not given.

In Table 19, the percentage of total unemployment due to each principal reason is shown. As already stated, inability to find work

accounts for most of the full-time unemployed persons. Sickness accounted for only 9 per cent of the jobless this year in contrast to 14.2 per cent in 1929, although the proportion of wage earners out of work because of illness has remained approximately the same. Only 3.8 per cent of the part-time unemployed (see p. 62) reported sickness as the reason for their partial inactivity. Superannuation was responsible for 3.9 per cent of the unemployment among those enumerated in this survey, as compared with 5 per cent in 1929. On the basis of the number of persons usually employed, a slightly larger percentage of unemployment was due to old age in 1930 than in 1929. This is as might be expected, for, in case of forced lay-offs, those of advanced age would no doubt be laid off first. A smaller proportion of both the unemployed and the wage earners was found idle on account of indifference in April, 1930, as against the preceding year. Probably it is not so easy to get along without a job in hard times as in "normal" periods, and the pangs of hunger and the humiliation of standing in bread lines make for less laziness among those capable of working. Superannuation and indifference each accounted for only 1 per cent of the part-time unemployed persons. There were a few more out of work on account of strikes this year than last, but the proportion of jobless in this class amounted to an almost negligible percentage of the total.

As in the previous study, there were but few significant variations between districts in the reasons for unemployment. Districts 3 and 7, which showed the heaviest unemployment, also had a larger percentage of the unemployed who gave as their reason inability to find work. There was not so wide a range between the district percentages of full-time unemployment due to this reason as in 1929. For part-time unemployment, 95.8 per cent of the unemployed could not locate a job in district 10, while only 74 per cent gave this reason in district 6. The relationship between severity of unemployment and the proportion unable to find work is closer in full-time than in part-time unemployment. For sickness and superannuation the district variations are of a random nature and show no particularly interesting differences.

TABLE 20.—Per cent of idle workers unemployed for specified reasons, by occupations

Occupation	Number of unemployed persons	Per cent of idle workers unemployed for each specified reason				
		Unable to find work	Illness	Superannuation	Indifference	Other reasons
Full-time unemployment						
Manual.....	8,840	84.6	8.5	3.8	1.0	1.5
Clerical.....	979	83.1	10.3	2.4	2.6	1.6
Executive.....	163	72.9	17.3	6.2	1.8	1.8
Unspecified.....	467	65.6	18.3	10.0	4.7	4.4
All occupations.....	10,448	83.6	9.0	3.9	1.8	1.7
Part-time unemployment						
Manual.....	2,966	87.4	3.5	0.8	1.0	7.3
Clerical.....	162	75.5	7.7	2.1	1.4	13.3
Executive.....	30	75.0	-----	4.2	-----	20.8
Unspecified.....	490	86.8	7.0	1.8	.9	3.5
All occupations.....	3,648	86.6	3.8	1.0	1.0	7.6

An analysis of the reasons for unemployment in different occupations is presented in Table 20. A larger portion of unemployed manual workers are out of jobs because of inability to find work than of either the clerical or executive group. In the former class 84.6 per cent could not find work, while 83.1 per cent of the clerical jobless and only 72.9 per cent of unemployed executives gave as their reason inability to find work. The proportion of jobless in each of these three groups who are unemployed because of illness shows an opposite tendency to the figures given for the former cause. Sickness was responsible for 17.3 per cent of those unemployed in the executive class; 10.3 per cent in the clerical class; and 8.5 per cent in the manual group. Although the occupations in the previous survey were classified differently, nevertheless an investigation discloses a result similar to the above figures, viz, that inability to find work accounted for a larger proportion of the unemployed in occupations of the manual type than in the professional class. Part-time figures show practically the same conditions as do the full-time unemployment results as far as the reasons for unemployment in different occupations are concerned.

It is of interest to note that 86.8 per cent of all unemployed Negroes, as contrasted with 82.8 per cent of the white jobless, gave as the reason for their plight inability to find work; but a larger proportion of the unemployed white persons than Negroes were out of work because of illness.

Time Lost by the Unemployed Since the Last Regular Job

A study of the length of time lost by each worker since his or her last regular job was made in order to measure the intensity of unemployment as to duration. All persons enumerated who were found to be unemployed were asked to specify the number of weeks lost since leaving their last regular job. All but 436 of the full-time unemployed persons and 665 of those who were unemployed part time reported their time lost.

TABLE 21.—Number and per cent of unemployed persons, by length of time lost since last regular job

Length of time lost	All unemployed persons		Per cent of all persons usually employed
	Number	Per cent	
1 day and over.....	10,448	100.0	18.0
Over 1 week.....	9,743	93.3	13.9
Over 1 month.....	8,357	80.0	12.0
Over 2 months.....	7,174	68.7	10.3
Over 3 months.....	5,801	55.5	8.3
Over 4 months.....	4,614	44.2	6.6
Over 5 months.....	3,830	36.7	5.6
Over 6 months.....	2,760	26.4	3.9
Over 7 months.....	2,376	22.7	3.4
Over 8 months.....	2,100	20.1	3.0
Over 9 months.....	1,934	18.5	2.8
Over 10 months.....	1,802	17.2	2.6
Over 11 months.....	1,775	17.0	2.5
Over 1 year.....	955	9.1	1.4

¹ Includes 436 unemployed who did not specify time lost since last regular job.

Table 21 reveals the length of idleness for those who are unemployed. Four-fifths of the total number of full-time jobless are reported as hav-

ing been without a regular job for one month, while over one-half had lost three months, and more than a fourth had not had a regular job for over six months. Nearly 1 out of 10 of the unemployed lost his regular job over a year ago. In comparing this table with a similar one in the 1929 report, it is noted that the percentage of those reporting idleness for over six months was larger in the earlier year. In contrast to this fact, it is found that a larger porportion of the unemployed in 1930 had been without a regular job from one to five months. An investigation of the part-time unemployment (see p. 62) reveals the fact that less time has been lost by the partially employed than by those fully unemployed, with 68.2 per cent out of a regular job for over one month and only 22.3 per cent without regular work for over six months.

The differences in duration of idleness among the 10 districts reveal some wide variations. District 3 had the highest percentage of wage earners out of work and also the largest proportion out of work for over one month. District 6, with the second highest percentage of unemployment, also held the same rank in the proportion out of a regular job for over one month. Outside of these two districts there does not seem to be a direct relationship between these two factors. In district 8, where unemployment was moderately light, it was found that nearly one out of every seven of those who were unemployed had been without a regular job for over a year, while in district 3, with the heaviest unemployment, only 6.8 per cent had lost over one year. A much wider disparity between districts is found in an analysis of the part-time workers, but no definite direct or indirect relationships are conspicuous.

TABLE 22.—Number and per cent of unemployed persons, by length of time lost since last regular job and by school districts

District	Number of unemployed persons	Per cent of all idle workers unemployed for over—					
		One week	One month	Two months	Three months	Six months	One year
No. 1.....	557	94.1	79.0	67.5	55.1	26.8	7.9
No. 2.....	1,063	88.8	70.4	59.2	47.6	22.6	8.0
No. 3.....	1,133	96.4	89.9	79.2	64.0	30.5	6.8
No. 4.....	1,079	94.6	79.0	60.9	57.4	28.3	8.4
No. 5.....	1,456	92.3	78.0	66.4	55.4	28.3	8.2
No. 6.....	990	95.5	83.3	72.4	55.9	28.4	10.0
No. 7.....	1,312	94.7	80.0	64.6	47.3	19.4	7.4
No. 8.....	1,181	91.6	80.6	68.9	60.3	33.4	14.0
No. 9.....	986	95.2	83.9	72.6	58.4	23.4	10.1
No. 10.....	691	88.1	78.4	66.0	54.6	24.2	11.3
Total.....	10,448	93.3	80.0	68.7	55.5	26.4	9.1

In an effort to determine any possible reasons for this dispersion among the districts, it was decided to compare Table 19 with Table 22, i. e., the reasons for unemployment and the time lost in each district. When the percentages of unemployment due to illness and superannuation were combined, it was found that without exception those districts with heavy unemployment for these reasons showed the largest proportions of their unemployed as having been without a regular job for over a year. This study of the comparison of time lost with causes for unemployment is further carried out in Table 23.

TABLE 23.—Per cent of unemployed persons, by length of time lost since last regular job and by reasons why unemployed

Length of time lost	Per cent of persons unemployed for specified reason					
	Unable to find work	Sickness	Superannuation	Indifference	Other reasons	All reasons
1 day and over.....	100.0	100.0	100.0	100.0	100.0	100.0
Over 1 week.....	95.2	92.9	78.3	91.9	84.9	83.3
Over 2 weeks.....	91.3	89.6	77.0	90.9	77.9	89.5
Over 3 weeks.....	87.5	86.4	76.0	89.2	75.0	85.9
Over 1 month.....	81.2	81.7	74.3	82.8	71.5	80.0
Over 2 months.....	69.1	72.5	71.3	72.6	64.0	68.7
Over 3 months.....	54.8	62.8	68.8	64.5	50.0	55.5
Over 4 months.....	42.3	56.7	68.0	58.6	29.7	44.2
Over 5 months.....	33.8	53.3	67.0	53.8	25.6	36.7
Over 6 months.....	22.4	47.3	65.3	46.2	20.9	26.4
Over 7 months.....	18.4	44.6	64.3	43.5	20.9	22.7
Over 8 months.....	15.5	43.5	63.5	40.9	20.3	20.1
Over 9 months.....	13.7	42.3	63.5	39.2	19.2	18.5
Over 10 months.....	12.3	41.3	63.3	38.2	19.2	17.2
Over 11 months.....	12.1	40.9	63.0	37.6	18.6	17.0
Over 1 year.....	5.0	28.9	50.0	18.8	10.5	9.1

The results shown in this table bring out more clearly the fact that those persons unemployed on account of sickness or superannuation are without a regular job for a longer period than those unemployed for other reasons. One-half of the persons out of work on account of superannuation and nearly 1 out of 3 unemployed as a result of illness have not held a regular job for over a year, while only one out of 20 of those unable to find work have been idle that long. Apparently, indifference is a difficult habit to shake off, for those who were reported as unemployed because of this reason had been without regular jobs for much longer than those who could not find a job. Nearly the same results were found from this comparison of cause and time lost in the previous survey. In the part-time analysis (see p. 63) illness accounted for longer duration of idleness than did superannuation, but the sample was not large enough to warrant general acceptance of these figures. It is important to note, with reference to those unemployed on account of superannuation, that once they lose their job they find it increasingly difficult to get another, probably on account of the hesitancy on the part of employers to hire "older" workers.

Recently the Bureau of the Census released the results of a study of the period of idleness among the unemployed persons in Philadelphia in April, 1930. Only the data for idle persons in class A were made available and, as was previously stated, this class is comparable to those grouped in the survey as unable to find work. The census reported 79.2 per cent as being idle for over one month; 44.5 per cent for over three months; 18.4 per cent for over six months; and 5.9 per cent for longer than one year. For the same periods, the survey results were 81.2 per cent, 54.8 per cent, 22.4 per cent, and 5 per cent, respectively. Although there are a few minor disparities, in general the two series show a close relationship.

Variations in the duration of unemployment among males and females and white persons and Negroes are shown in Table 24. Not only was unemployment less severe among females, as previously indicated, but the duration of unemployment is likewise shorter.

Of the unemployed males, 83.3 per cent had been out of work over a month, while only 75.3 per cent of the females had been idle for the same period. An even greater disparity is found for those out of work for over six months and over one year, with males showing 24.1 and 5.6 per cent, and females showing 17.6 and 3.3 per cent for these periods, respectively. A striking similarity was found between these results and those of the 1929 survey and also of the current part-time facts.

TABLE 24.—Per cent of persons unable to find work, by length of time lost since last regular job and by sex and race

Length of time lost	Per cent of persons unable to find work				
	Males	Females	White persons	Negroes	Total
1 day and over.....	100.0	100.0	100.0	100.0	100.0
Over 1 week.....	95.9	93.6	95.4	94.1	95.2
Over 2 weeks.....	92.4	88.2	91.5	89.9	91.3
Over 3 weeks.....	89.0	83.3	87.9	85.3	87.5
Over 1 month.....	83.3	75.3	81.7	78.9	81.2
Over 2 months.....	71.7	61.5	69.5	66.8	69.1
Over 3 months.....	57.5	47.0	55.2	52.5	54.8
Over 4 months.....	45.0	34.6	42.7	40.2	42.3
Over 5 months.....	36.4	26.5	34.3	31.2	33.8
Over 6 months.....	24.1	17.6	22.9	20.1	22.4
Over 7 months.....	19.7	14.9	19.1	15.5	18.4
Over 8 months.....	16.4	12.6	16.2	12.3	15.5
Over 9 months.....	14.5	11.4	14.7	9.5	13.7
Over 10 months.....	13.0	10.4	13.4	7.6	12.3
Over 11 months.....	12.7	10.8	13.2	7.1	12.1
Over 1 year.....	5.6	3.3	5.7	1.9	5.0

The Census Bureau release also presented an analysis of the period of idleness by sex. Our survey results show 57.5 per cent of the males and 47 per cent of the females having been idle over three months, while the census reports 46.8 and 36.7 per cent, respectively, for the same period. For over six months of idleness, the survey shows 24.1 per cent for males and 17.6 per cent for females as against 19.2 and 15.2 per cent, respectively, for the census. Thus, while the census seems to reveal a shorter duration of unemployment, nevertheless the relationship between males and females in both sets of data is somewhat similar.

While in the preceding analysis it was found that females suffered less unemployment and also lost less time since their last regular job a similar comparison of racial data disclosed different results. As previously indicated, unemployment was much more severe among the Negroes than among white persons. In contrast the duration of unemployment among Negroes was less in each instance than among the white unemployed. Just three times as large a percentage of whites as of Negroes was reported without a regular job for over a year. This disparity is partially explainable by the types of jobs held by Negroes.

For those reported as partially unemployed, the differences in the duration of unemployment of males and females and of whites and Negroes do not differ greatly from the full-time results (see p. 63). Of the part-time unemployed males, 80.3 per cent had been without a regular job for over a month and 25.8 per cent had lost over six months, while for corresponding periods, the female group showed

71.9 and 19.2 per cent. Nearly one-fourth of the white persons reported as jobless had been without a regular job for over six months, while less than 1 out of 5 Negroes showed a similar length of idleness.

Information concerning the time lost by unemployed persons in different occupations is presented in Table 25.

TABLE 25.—Per cent of persons unable to find work, by length of time lost since last job and by occupations

Length of time lost	Per cent of persons unable to find work			
	Manual	Clerical	Executive	Total
1 day and over.....	100.0	100.0	100.0	100.0
Over 1 week.....	95.5	93.3	94.1	95.2
Over 2 weeks.....	91.5	89.8	91.5	93.6
Over 3 weeks.....	87.7	87.3	86.4	87.5
Over 1 month.....	81.6	79.2	82.2	81.2
Over 2 months.....	69.5	66.5	73.7	69.1
Over 3 months.....	55.2	53.1	59.3	54.8
Over 4 months.....	42.6	40.8	50.0	42.3
Over 5 months.....	34.0	32.0	45.8	33.8
Over 6 months.....	22.4	22.8	30.0	22.4
Over 7 months.....	18.1	20.6	37.3	18.4
Over 8 months.....	15.0	18.4	35.6	15.5
Over 9 months.....	13.2	16.8	33.9	13.7
Over 10 months.....	11.8	15.7	33.1	12.3
Over 11 months.....	11.5	15.4	33.1	12.1
Over 1 year.....	4.8	5.8	15.3	5.0

From Table 25 it is apparent that executives without a regular job are subject to a longer period of idleness than unemployed persons in other types of work. While one-half of all unemployed persons have lost three months of regular work, the executive group reports 59.3 per cent for this period. Likewise the proportion of executives out of a regular job for over six months and over one year is greater than for all occupations. The table shows that the unemployed manual workers are out of work longer than those in the clerical class, except for over six months, when the time for the latter exceeds that of the former group. The same relationship exists in the part-time analysis (see p. 63), except that most of the variations between the occupations are wider than in the full-time results.

Table 26, by age, shows the same contrast as the racial analysis. As previously indicated, unemployment was more severe among those under 21 years of age, while in this table it is noted that the duration of unemployment falls less heavily on the youthful jobless. Of those under 21, only 50.7 per cent were reported as having been without regular work for over three months, 16.8 per cent for over six months, and 2.1 per cent for over one year. For corresponding periods, unemployed adults showed 56.2, 24.2, and 5.9 per cent, respectively. The disparity in the duration of unemployment is greater between part-time unemployed persons under 21 years of age and those older than in the full-time analysis (see p. 64). The percentages for 3-month, 6-month, and 1-year idleness are 42, 16, and 3.1, respectively, for those under 21 years of age, and 53.1, 25.8, and 6.8, respectively, for adults unemployed part time. Of the entire group, females under 21 years of age show the shortest time out of work and adult males the longest.

TABLE 26.—Per cent of persons unable to find work, by length of time lost since last regular job and by age and sex

Length of time lost	Persons under 21			Persons 21 years and over		
	Males	Females	Total	Males	Females	Total
1 day and over.....	100.0	100.0	100.0	100.0	100.0	100.0
Over 1 week.....	95.2	94.1	94.8	96.1	93.6	95.6
Over 2 weeks.....	91.2	87.9	90.0	92.8	88.5	91.8
Over 3 weeks.....	87.8	83.5	86.1	89.4	83.4	88.1
Over 1 month.....	80.5	74.7	78.2	84.0	75.7	82.2
Over 2 months.....	68.6	59.3	65.0	72.5	62.9	70.4
Over 3 months.....	55.4	43.2	50.7	58.1	49.3	56.2
Over 4 months.....	41.0	28.5	36.1	46.0	38.3	44.3
Over 5 months.....	32.2	20.2	27.5	37.4	30.2	35.8
Over 6 months.....	20.0	11.7	16.8	25.1	21.1	24.2
Over 7 months.....	15.3	8.9	12.8	20.7	18.2	20.2
Over 8 months.....	12.4	7.7	10.6	17.4	15.4	17.0
Over 9 months.....	11.0	7.0	9.4	15.3	14.0	15.0
Over 10 months.....	9.3	6.4	8.2	13.8	12.7	13.6
Over 11 months.....	9.1	6.4	8.1	13.5	12.6	13.3
Over 1 year.....	2.6	1.4	2.1	6.3	4.4	5.9

From the foregoing studies of the time lost since the last regular job, it appears that no definite correlation between duration of unemployment and severity of unemployment can be found, either directly or indirectly. In the district study, some regions showed a direct relation between the two factors, but some even showed an inverse relation. In connection with causes of unemployment, it was found that inability to find work, which accounted for most of the unemployment, resulted in shorter duration of unemployment than did the reasons which accounted for but a small portion of the unemployed. As for sex, females showed less than the average proportion and also a shorter duration of unemployment. The opposite condition existed in the results of racial and age comparisons; Negroes and those under 21 years of age had higher percentages of unemployment, but were out of work for shorter periods than were the white unemployed and the adult jobless, respectively. Although unemployment among Negroes and among all persons under 21 years of age was exceedingly high, the time lost since the last regular job in these two groups was relatively short. Likewise, the occupations which showed the lightest unemployment indicated that the time lost was longer than the average for all occupations. From these few illustrations it can readily be seen that no definite relation between incidence and duration of unemployment appears to exist.

Chapter 3.—Unemployment in School Districts of Philadelphia

Chapter 2 presented a complete analysis of the social and economic character and also of the extent of both full-time and part-time unemployment in the combined 171 blocks of the 10 school districts of the city. Although frequent references were made in that chapter to the disparities between the various districts, it was believed that a separate analysis of each district would also prove valuable. As has already been pointed out, there are striking variations between the districts in their racial, economic, and occupational characteristics; all of which have different effects on the unemployment situation. Although within each district the selected blocks show a great diversity of traits, yet each district represents a more homogeneous group than does the entire city and also discloses the character of the different geographic areas of Philadelphia.

Not only is there need of an analysis and discussion of the various phases of the unemployment problem in the entire city, but it is necessary to determine the conditions existing in the different parts of the city. Many of the disparities of unemployment in the different districts can be directly and satisfactorily explained by the varying conditions in the sections. It is definitely known that South Philadelphia is a densely settled area with a population of mixed racial characteristics and of an economic and social status below that of other sections. Likewise, it is generally believed that unemployment is most severe in just such sections. As will be seen in the analysis of district 3, such results were obtained and corroborate this axiom. These disclosures are helpful in planning relief for the unemployed, particularly in periods of severe unemployment, and, as such, these data have already proved of distinct value in this way.

Chart 4 presents a summary of the severity of both full-time and part-time unemployment and the amount of per capita income in each district. Chart 3 showed the boundaries of each district and also the location of each of the 171 blocks enumerated. Several tables in chapter 2 present definite information of variations in the characteristics of each district and also numerous findings about the character of unemployment in each area. In the following pages an effort has been made to bring together all of the loose ends, and to disclose the actual conditions in each district, with special emphasis on points in which the various districts show great differences.

District 1

This district consists of all the territory between the Schuylkill River and Cobbs Creek, extending south from Market Street to the Delaware River. The western and southern boundaries of this district also mark the city limits in these directions. The northern half of this division is densely populated and is a medium to high grade residential section with little industrial development. The

southeastern portion is highly industrialized and the inhabitants are of a lower economic status than those in the northern part. A large area to the southwest, bordering along Cobbs Creek, is less thickly populated and some of the land is used for agricultural purposes. Thus, while this district includes various types of persons, by far the

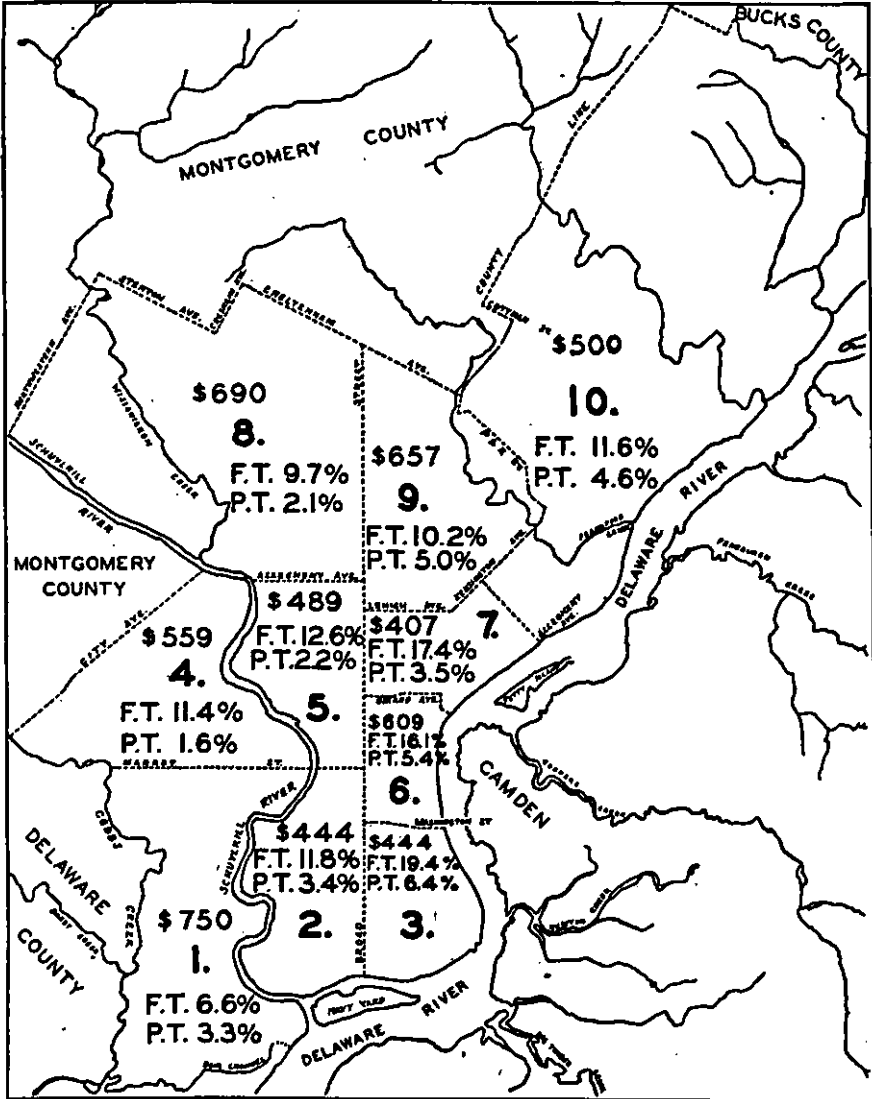


CHART 4.—PER CENT OF PERSONS IN EACH SCHOOL DISTRICT UNEMPLOYED PART TIME AND FULL TIME BECAUSE OF INABILITY TO FIND WORK, AND PER CAPITA INCOME

largest part of the population is made up of the better class in the northern half.

Eight of the thirteen blocks in this district were specified as having a native white population, three as having native and foreign white inhabitants, and two as having a combination of white and colored persons. Even in these latter two blocks the number of colored

persons was small, for only 137 colored families were enumerated in the entire section. The block which showed the highest percentage of unemployment in this area—11 per cent—was the only block with a large colored population. The percentage of unemployment among white wage earners was 6.4 per cent, as compared with 12.2 per cent for colored persons. As for occupation, the enumerators classified eight blocks as having professional and executive or clerical and trade inhabitants. Two blocks were placed in the industrial and trade group and three were totally industrial. The proportion of unemployment in the blocks with professional and executive inhabitants was 5.1 per cent full time and 1.4 per cent part time, in contrast to 10.7 per cent full time for the industrial and 10.7 per cent part time for the industrial and trade divisions. In this district only 65.3 per cent of those unemployed usually had manual jobs, as against 84.7 per cent for the entire sample.

Of the 171 school-census blocks included in the survey only 13 were classed as having a high to medium economic status and 7 of these were from district 1. The percentage of unemployment in the seven blocks was 4.5 in comparison with 10.2 for the remaining six blocks whose economic status was sufficiently high to merit medium-class rating. The part-time results showed 0.9 per cent and 6.2 per cent, respectively, for these blocks. The average family income in this district is \$3,208 and the per capita income \$750, both of which are the highest for any of the 10 districts.

From these analyses it can readily be seen that district 1 is favored with a largely native white population engaged in professional, mercantile, and clerical pursuits, and its inhabitants are receiving a higher income on the average than are those in any other section. As would be expected, this district had the lowest percentage of unemployment in this survey as well as in the 1929 study and also in the census enumeration. Only 7.9 per cent of those usually employed were without work, which is but slightly over half the city proportion of 15 per cent. Nearly a 50 per cent increase of unemployment over the 5.3 per cent for April, 1929, was found this year. The part-time employment—4.1 per cent—is also under the city average. Likewise, only 11.4 per cent of the families reported some full-time unemployment and 6.2 per cent had some partially unemployed members, while these averages for the entire sample were 21.2 per cent and 8 per cent, respectively. The Metropolitan Life Insurance Co.'s study in December, 1930, showed that in West Philadelphia the unemployment—both part-time and full-time—was less severe than in any other section of the city.

The distribution of full-time unemployment according to sex and age was somewhat similar to that for the entire survey. In the part-time analysis, 76.5 per cent of the unemployed in this section, as compared with 70.4 per cent for the city, were males. Of the part-time unemployed females, 78.2 per cent were reported as being 21 years of age or over, while for the city only 67.4 per cent of the partially unemployed females were in this age group. Thus, in this area, severity of unemployment fell more heavily on males and on all adults. In part-time unemployment, illness and superannuation were more important reasons for idleness here than in other districts. The duration of unemployment among the full-time jobless is closely related to the city's findings. Of the part-time unemployed persons

in this district, 34.7 per cent had been without regular work for over six months and 9.7 per cent for over a year, while for the entire city only 22.3 per cent had been without a regular job for over six months and 6.1 per cent for over a year. The longer extension of idleness in this district is due to the large number of professional and clerical workers residing in this section, and, as was shown in chapter 2, the duration of unemployment is most severe among those whose usual occupations are of that kind.

The sample for district 1, while including the same blocks, is about 60 per cent larger in this survey than in the 1929 study. This increase is explained by the fact that some blocks were not properly taken in April, 1929, and had to be retaken later. As some of the enumerators were not then available, only representative portions of these blocks were enumerated. Nevertheless, the samples for both years appear to have similar characteristics and both seem representative of West Philadelphia.

District 2

School district 2 includes the western part of South Philadelphia which is between Broad Street and the Schuylkill River. Although in area it is not a very large section, yet it contains a wide diversification of persons as to income, racial, economic, and occupational status. That part of the district which adjoins Market Street and extends a few blocks to the south is mostly a commercial area, while along Pine and Spruce Streets there is a wealthy residential and apartment section which grades into a poorer population as the Schuylkill River is approached. All along the Schuylkill River and in the extreme southern area shipping and industrial activities predominate. The central portion of this district from South to Mifflin Streets contains a low economic group with a large colored and foreign-born population. A higher-class group lives to the south of this area for some distance.

Although unemployment substantially increased in this district from April, 1929, to April, 1930, the change was not so great as in most of the other areas. In the former survey, district 2 had a higher percentage of unemployment than the city as a whole (11.6 per cent to 10.4 per cent), while in this study it showed a lower proportion than did the entire city (14.7 per cent to 15 per cent). The part-time unemployment analysis also revealed a lower average in this district than in the whole city. The reasons for unemployment were mostly similar to those for the entire sample, except that illness was a bigger factor in full-time unemployment here than in any other district. Just as the proportion of persons unemployed in this section is below the city average, so the percentage of families affected is also below. Only 20.9 per cent of families reported full-time and 6.5 per cent reported part-time unemployment, as compared with 21.2 per cent and 8 per cent, respectively, for the total areas.

The diversification of inhabitants found in this district is shown by the classification of the blocks by enumerators according to racial characteristics. Each one of the five racial classes is represented in at least one of the blocks. Five of the 15 blocks have a native white population, 4 are in the foreign white group, and 2 are predominantly colored. The other four are not homogeneous in race. The block with the highest percentage of full-time unemployment (25.6 per cent) is classed as foreign white, while the one with the heaviest part-time

unemployment has a large colored population. Only 2 of the 15 blocks were placed outside of the industrial class and those were classed as composed of clerical and trade workers. Both of these blocks showed less severity than the district as a unit. In classifying according to economic status, only 2 blocks were in the high to medium class and they showed a lower proportion of unemployment than did the entire district. Likewise, the nine blocks in the medium group reported a percentage lower than the entire district and much lower than the four blocks in the low to medium class which showed 16.5 per cent of full-time unemployment. This relationship is similar to that found in most other districts. Incomes per family and per capita, as estimated on the basis of the Cawl survey, were \$2,035 and \$444, respectively, both much lower than the city average.

The average number of persons per family was 4.8 and the average number of wage earners per family was 2.0, both of which were above the results of the entire sample. In this district workers under 21 years of age reported a higher than average proportion of unemployment. Whereas for the city 23.3 per cent of the jobless were under 21 years of age, 28.5 per cent of those unemployed in this area were in that age group. Duration of unemployment was relatively less severe in this district, with 70.4 per cent of the unemployed persons having been without a regular job for over one month as against 80 per cent of all jobless in the sample. Likewise, in the part-time analysis the unemployed persons in this district had not been without work for as long as those in other parts of the city.

District 3

Extending from Broad Street to the Delaware River and south of Washington Street to the city limits, also along the Delaware River, this district is characterized by a densely settled population of relatively low economic and social status. The area along the river is given over to numerous shipping and industrial activities, while the rest of the section is mostly of a poor residential character. Only 37.1 per cent of the population are usually employed as compared with 43.6 per cent for the entire sample. This fact is explained by the size of the families, which average larger than in any other district—5.2 persons per family. According to estimates based on the Cawl survey, the average family income was \$2,321 and the per capita income \$444, both well below the city average, particularly the latter figure.

Ten of the twelve blocks in this section were specified by the enumerators as having a predominantly foreign-white population, while the other two blocks had both colored and white inhabitants. As was pointed out in chapter 2, the severity of unemployment fell mostly among the foreign whites and, as expected, the 10 blocks in this classification had higher proportions of both full-time and part-time jobless than were found in the blocks with mixed races. Only two blocks were not placed in the industrial classification of occupation status, and they have a clerical and trade status. Only 13.2 per cent of unemployment existed in these two blocks as compared with 26.1 per cent of unemployment in the 10 industrial blocks. Half of the blocks were placed in the medium and the other half in the medium to low economic classes. An exception exists here, in

that more unemployment was found in the medium than in the medium to low blocks. One of the blocks in this area had 39.9 per cent of full-time unemployment and it was characterized as having an industrial foreign-white population of low economic status.

Unemployment was more severe in this section than in any other, in both the 1929 and the current survey, and also in the census report. Part-time results showed only one other district with as large a proportion of partially employed persons. Of the 4,837 usually employed, 23.4 per cent were totally without work and an additional 7.9 were only partially unemployed. Only 2 of the 12 blocks had less than the 15 per cent average for the city, while 5 blocks reported over one-fourth of their wage earners as being totally idle. Over 1 out of every 3 Negroes usually employed were unable to find work, while 18.7 per cent of the white wage earners were in this class. A higher percentage of the unemployed attributed their condition to inability to find work than in any other section. More than 31 per cent of the families in this district had some totally idle members, while 11.8 per cent had some part-time workers. For the city as a whole only 21.2 per cent of the families reported some full-time unemployed members and 8 per cent indicated some partially unemployed. A higher proportion of the full-time unemployed in this district than in the city were out of work for over three months and over six months, while the percentage without a regular job for over a year was the smallest—6.8 per cent to 9.1 per cent for the survey total. The part-time analysis also revealed a high percentage of jobless who had lost over one month, and also over three months' time, since their last regular full-time job. For the city, 74.5 per cent of those unable to find work were males, while in this district 77.6 per cent of them were males, and 49.3 per cent of the females unable to locate a position were under 21 years of age, as contrasted with 35.5 per cent for the city.

Nearly 90 per cent of the unemployed, both full time and part time, had had manual occupations. Unemployment in general was extremely severe in this area, with the foreign-white and colored population sharing most of it. The males accounted for more than their share of the jobless, as did the females under 21 years of age.

District 4

A triangular area bordered on the south by Market Street and on the other two sides by the Schuylkill River and city line is all included in this district. Much of the section is taken up by such nonresidential areas as Fairmount Park, the Pennsylvania Hospital for the Insane, and Cobbs Creek Park. A large part of the population is of a high social and economic status, particularly that residing in Wynnefield and in the area west of Sixty-third Street. A lower economic class is found near the Schuylkill River and for some distance westward, particularly along Market Street and along the railroad lines to the north. Both the proportion of the population usually employed and the average size of the families were very close to the results found for the entire sample. The average income per family and per capita, of \$2,496 and \$559, respectively, were but slightly above the averages for the city.

Full-time unemployment in this district was less severe than for the city as a whole, while a lower proportion of part-time unemploy-

ment was registered here than in any one of the other nine districts. Only 1.9 per cent of the wage earners were partially unemployed, while 13.8 per cent were totally jobless. For the city as a whole, 8 per cent of the families reported some part-time unemployment, whereas in this district but 3.2 per cent of the families did so. The distribution of unemployment in this area was very similar to that in the rest of the city in most respects. None of the part-time jobless had held executive positions, while a very high percentage of both the full-time and part-time unemployed persons were accustomed to doing manual work. Over 57 per cent of the partially idle had been without a full-time regular job for over three months, as compared with 45.7 per cent for all districts combined.

In both the 1929 and the 1930 surveys and in the census report, 18 blocks were enumerated in this district. The population in these blocks as reported by the census was far in excess of that indicated by the attendance officers. Likewise, the census enumerators reported many more wage earners and a few more unemployed persons. This large variation can partially be explained by the fact that our enumerators made but one call and they also aimed primarily at getting a 10 per cent sample of the population in these blocks and no more, with the result that some of the school-census blocks were not taken in their entirety.

Approximately one-fourth of the families enumerated in this district were colored and the percentage of full-time unemployed Negroes unable to find work was 16.2 in comparison with 11.4 for the white persons. Both races reported very little part-time unemployment. In the three blocks specified by the attendance officers as native white, only 8.4 per cent of those usually employed were fully unemployed and 0.4 per cent partially unemployed. The four native and foreign white blocks had 11.6 per cent and the five colored blocks showed 14.6 per cent of full-time jobless. The heaviest extent of both full-time and part-time unemployment—17.3 per cent and 2.7 per cent, respectively—was found to exist in the six blocks with mixed colored and white inhabitants. In the economic analysis, the eight blocks given a medium status indicated 9.7 per cent of full-time unemployment as against 16.6 per cent for the remaining blocks, rated in the medium to low classification. In spite of the high-class residential areas in some parts of this district, all but one of the sample blocks were classed as having an industrial population, while the one exception was placed in the clerical and trade group. This one block reported the lowest proportion of full-time unemployment in the district—3.4 per cent—and no part-time unemployed. It was also classed as having a predominantly native white population of a medium economic status. One block in the section had 23.9 per cent of wage earners out of work, and it had a mixed racial population of an industrial and low economic rating. Two of the 18 blocks had no part-time unemployment, while the highest was 5.2 per cent, the same proportion as was found for the entire sample.

District 5

This district includes the part of Philadelphia between Broad Street and the Schuylkill River, north of Market Street to Allegheny Avenue. Much of the southeastern part of this section, particularly along

Market and Broad Streets, is taken up by various business houses, mostly mercantile establishments. In the extreme northern and western parts a middle class of persons live, while in the central areas there is a mixed population of a somewhat lower economic status. The largest number of wage earners per family for any area was found in this division, with an average of 2.1 persons usually employed for each family included in this survey. The economic status as interpreted by the income figures based on the Cawl survey shows an income per family of \$2,210 and a per capita of \$489, much below the city average. Within the district there were wide income variations, some being far above and others far below these averages.

In the 1929 survey this district reported a smaller percentage of unemployment than was found for the city, while in the current report it was found that the proportion of jobless in this area was larger than for the entire city. While unemployment was 44 per cent more severe in Philadelphia in April, 1930, than the year before, the increase in this district was over 62 per cent. Of the 9,451 wage earners in this area, 15.4 per cent were unemployed and 12.6 per cent were unable to find work in April, 1930. Part-time unemployment, on the other hand, was less extensive in this section than in eight of the other nine districts, with only 3.9 per cent of those usually employed idle part of the time.

A distribution of the full-time unemployed persons according to reasons gave results very similar to those found for the entire city. This was the only district in which none of the partially unemployed stated that their idleness was due to superannuation. In both the full-time and part-time unemployed groups, a larger portion had done clerical work in this district than in the entire city. The duration of unemployment for the fully unemployed was about the same as for the entire survey, while the part-time workers lost much less time in this area than in others. Unemployment was a bit more severe among females and particularly heavy among adults in both sexes. For the city, 64.5 per cent of the fully unemployed females were over 21 years of age, while in this area 72.6 per cent of them were in that age group. Likewise, among the jobless males and among all those partially unemployed, the severity fell upon adults.

The same number of blocks as were used in the 1929 survey was included in this study, though one replacement was made. The investigators had covered this one block for their school census prior to the start of this enumeration and rather than duplicate their efforts, an adjoining block of similar characteristics was used. The 13 blocks classed as having a medium economic status reported 13.8 per cent of full-time unemployment as against 19.7 per cent for the remaining 7 blocks placed in the medium to low class. In the occupational classification 13 blocks were indicated as industrial and 7 as industrial and trade. The former reported 16.9 per cent and the latter 12.8 per cent of unemployment. Only 8 of the 20 blocks in the district were classed as having a predominantly native white population and it was found that 13.6 per cent of the wage earners there were without work, while the 4 blocks of a mixed colored and white population reported 17.7 per cent. The 6 foreign white and the 2 colored blocks showed slightly higher percentages of unemployment than did the district. More than one-sixth of those enumerated in this area were colored and 18.3 per cent of their wage earners were unable to

find work, while of the white persons usually employed only 11 per cent were in the same predicament. Two blocks reported less than 10 per cent while 4 blocks reported over 25 per cent of full-time unemployment. In the part-time results wide variations were also found—1.2 per cent in 1 block to 15.9 per cent in another.

District 6

Although this district is the smallest in area it consists mainly of Philadelphia's most important business sections. It lies between Broad Street and the Delaware River, extending from Girard Avenue south to Washington Avenue. All along the river front and in the northern portion of this division extensive shipping and industrial activities are carried on. In the central section, extending a few blocks to the north and south of Market Street, a large wholesale and retail commercial area is located. In the northwestern and the southern parts of the district there is a population of relatively low economic and social status. While the income per family of \$2,341 was below the city average, the income per capita of \$609 was far more than the average for the entire city. This discrepancy is due to the small families in this territory, the average being only 3.8 persons per family. Nearly one-half of the population—48.2 per cent—in this district is usually employed. Probably this exceptional condition is due to the number of single persons working and living alone in this area.

In the 1929 survey this district had the second largest percentage of unemployment, while in April, 1930, it had the third highest proportion in the part-time and full-time analyses and also in the census data for the 166 blocks. Of the 5,032 wage earners enumerated in April, 1930, 19.7 per cent were totally unemployed and an additional 7.6 per cent were working only on a part-time basis. Of the white workers, 15.4 per cent were unable to find work, as compared with 17.6 per cent of the Negroes. In the part-time analysis the racial disparity was greater, with 8.4 per cent of the Negroes and 3.8 per cent of the white wage earners working on a part-time basis because they were unable to locate regular jobs. Duration of unemployment in this district for those totally without work was about the same as for the city as a whole, but the partially unemployed persons in this district had been without a regular job longer than those in other divisions of Philadelphia. A larger than average proportion of the full-time and part-time unemployed persons were from the manual class. Inability to find work accounted for a smaller percentage of unemployment in this district than in any other. Relative to conditions in other districts, in this one the males bore the burden of full-time unemployment and females suffered more severely from part-time unemployment. In both cases those wage earners over 21 years of age shared a larger portion of the unemployment than for the city in its entirety.

All of the 15 blocks in district 6 were classified by the attendance officers as being industrial and having a population of a medium to low economic status. In the racial analysis only 2 blocks were specified as having predominantly native white inhabitants and in them only 13 per cent of full-time unemployment existed as compared to 19.7 per cent for the district. The 4 colored blocks reported

14.5 per cent, while 22 per cent of the wage earners in the 5 foreign white blocks were without jobs. Similarly, unemployment was severe in the blocks which consisted of a mixed colored and white population. In 2 blocks—one native white and the other colored—less than 10 per cent of the wage earners were out of work, while 1 block with a colored and foreign white population reported 37.3 per cent of idle wage earners. Seven of the 15 blocks showed over 20 per cent of full-time unemployment.

District 7

District 7, which contributed 22 of the 171 blocks used in the survey, is densely settled by an industrial population of a relatively low economic status. Only in the extreme western part of the district along Broad Street, and somewhat along Lehigh Avenue, does one find a higher-class residential section. The area included in district 7 lies between Broad Street on the east, Girard Avenue and the Delaware River on the south, and Lehigh, Kensington, and Allegheny Avenues along the north and east. Considerable industrial development is spread over the whole section, while extensive mill operations are found in the eastern portion and shipbuilding activities border the Delaware. Although the incomes are small, the families in this district were found to be larger than in most other districts, with an average of 4.8 persons for each family included in the survey. From the Cawl survey estimates the average income per family was \$1,939 and the per capita was \$407, both of which were by far the lowest found in any district.

As might be expected from the economic and occupational character of this district, unemployment was extremely severe here, being exceeded only by that in district 3 in South Philadelphia. According to the census data for the 10 districts, this one was similarly found to rank second only to district 3 in intensity of unemployment. Over one out of five—20.4 per cent, to be exact—of those usually employed were without jobs, and 6.8 per cent were on part-time jobs. Only in 3 of the 22 blocks was there a smaller percentage of unemployment than was calculated for the city, while 1 block reported 31.2 per cent and 6 blocks indicated more than one-fourth of their wage-earners as being entirely jobless. One particular block in this district showed 22.7 per cent of full-time and 24.4 per cent of part-time unemployment, leaving slightly over one-half of the wage earners holding regular full-time jobs. For the entire city it was found that 21.2 per cent of the families enumerated reported some of their members without any work, while in this area 29.8 per cent of the families had at least one member out of a job.

Inability to find work accounted for 86 per cent of the full-time unemployment and 95 per cent of the part-time unemployment. Only 6.8 per cent, as contrasted with 9 per cent for the city, gave illness as the reason for their being totally unemployed. Four of the 1,312 full-time unemployed persons and but one of the 434 partially unemployed persons had held executive positions prior to their idleness. The average duration of both full-time and part-time unemployment in this division seems to have been less than for the city as a whole. Particularly was this condition true among the partially unemployed, of whom 20 per cent had lost over three months

and only 2.3 per cent had been without regular work for over a year, as compared with 45.7 per cent and 6.1 per cent for the city for like periods. Among both males and females unemployment was felt more severely by those over 21 years of age.

Only one block was specified by the attendance officers as not being industrial and in that block the major occupations were of a clerical and trade nature. In that block the severity of unemployment was nearly the same as in the 21 industrial units. Eighteen blocks were given a medium to low economic rating, while the other four were placed in the medium class. Only 14.5 per cent of the wage earners were totally unemployed and 2.9 per cent partially unemployed in the medium blocks, as against 22 and 7.8 per cent, respectively, for the medium to low units. In the racial analysis the two blocks specified as having predominately a colored population reported 29 per cent of unemployment, whereas the native white blocks showed only 18.9 per cent. Inability to find work accounted for 29.4 per cent of unemployment among colored wage earners and for only 16.5 per cent among the unemployed white persons. Although, for the entire city, unemployment was most severe among the foreign whites, in this district the Negroes had the highest proportion. The block with the lowest percentage of unemployment in this district—12.9 per cent—consisted of a native white population with a medium economic status. On the other hand, the block which reported 31.2 per cent of full-time unemployment was composed mainly of Negro laborers with a low economic rating.

District 8

Covering the large northwestern corner of Philadelphia, north of Allegheny Avenue and the Schuylkill River and west of Broad Street, this district is composed of a great diversity of inhabitants. The area to the east of the Wissahickon Creek consists of a much higher type of residential section than is to be found to the west of this dividing line. Chestnut Hill is one of the finest residential sections in the entire city and there the family income is higher than in any of the other Cawl survey areas. Germantown also contains a population of high economic and social character. Directly west of Broad Street and to the north is a newly settled division with a higher than average class. To the west of the Wissahickon Creek are the Roxborough and Manayunk districts, both of which contain families of a lower economic standing than do the districts to the east and north. The Manayunk section houses a densely settled industrial population, along with numerous factories and mills. In Roxborough, the economic status of the people is somewhat higher than in Manayunk, but the income there is also below the city average.

Mainly because of the high-income families in parts of this district, the average income per family of \$2,817 and per capita of \$690 were higher than in any other district with the exception of district 1 in West Philadelphia. The average size of the families in this section was found to be 4.1 members per family, which is considerably lower than that indicated for the entire survey. The proportion of the population usually employed in this area was higher than in most of the other districts.

Although but 10 large blocks were enumerated in district 8, nevertheless these blocks furnished a larger population than did those in any one other district. Three of the blocks were classified as having a high to medium economic status, and in them only 7 per cent of full-time and 2.8 per cent of part-time unemployment was reported, while the four blocks with a medium rating indicated 12.1 per cent of full-time and 3.3 per cent of part-time unemployment. The attendance officers placed the remaining three blocks in the medium to low class and in these blocks 19.2 per cent of those usually employed were totally jobless, while an additional 10 per cent were working only on a part-time basis. These results show a distinct indirect relationship between economic status and the severity of unemployment. According to occupational rating, the two blocks which were specified as having a professional and executive standing showed only 6.6 per cent of full-time unemployment. For the rest of the district, the one clerical and trade block reported 7.5 per cent, the industrial and trade block had 12.1 per cent, and the other six blocks, rated as industrial, showed 16.2 per cent of full-time unemployment. The facts derived from this section also reveal the same tendency as was found for the combined districts. The racial analysis similarly presents the same picture in this district as that shown for the entire city. The most severe unemployment was found in one block specified as foreign white, where 20.2 per cent of the working population were not holding any job and 23.5 per cent had only part-time work. This is quite a contrast to the results found in the five native white blocks, which reported 8.3 per cent of full-time and 2.8 per cent of part-time unemployment. The remaining blocks, with mixed native and foreign white and white and colored population, disclosed proportions of unemployment between these extremes.

Unemployment was lighter in this district than in any other one except district 1, where incomes likewise averaged higher. In the 1929 survey and also in the census report this district ranked third and not second in severity of unemployment. Exactly 1 out of 8 wage earners—12.5 per cent—in this area was without any work, while 5.2 per cent were partially unemployed. Inability to find work accounted for a relatively smaller portion of unemployment, both full-time and part-time, in this district than in other sections. One block in Chestnut Hill reported only 12 persons fully unemployed and 1 person partially unemployed among the 382 workers; i. e., only 3.1 per cent and 0.3 per cent, respectively. On the other hand, within the same district, one of the Manayunk blocks showed 24.2 per cent of the wage earners out of work and 16.8 per cent unemployed part of the time. The former block was specified as having a native white population of professional and executive employment character and of a high economic status, while the block with the extreme unemployment consists of mixed foreign and native white inhabitants of low economic status and industrial occupations.

Duration of unemployment in this district was considerably longer than for the whole city. For all districts 26.4 per cent of the full-time unemployed had been without regular work for more than six months and 9.1 per cent for more than a year, while in this section the proportions for similar periods were 33.4 per cent and 14 per cent, respectively. The part-time analysis disclosed a similar tendency, 64.7 per cent of the partially jobless having lost over three months in

this district as compared with 45.7 per cent for the city as a whole. Both males and females over 21 years of age reported more than their proportionate share of unemployment as compared with those under that age limit.

A relatively large proportion of the full-time unemployed were in the professional, executive, and clerical classes. The part-time results, on the other hand, disclosed a very large percentage of the partially unemployed persons as having held manual jobs.

District 9

Extending north of Lehigh and Kensington Avenues to the city limits and east of Broad Street to the Tacony Creek, this district is representative of a medium to high residential section. In the entire northern portion of the district and all along Broad Street, the population is made up of a high income and economic group of families. The southern and eastern parts are settled by a mediocre social class engaged in industrial occupations. The average family in this area consisted of only 3.9 persons, which is smaller than in any other area with the exception of district 4. According to the Cawl survey an average per capita income of \$657 was found for the entire district, while a much higher income prevailed in the northern part and much less to the south and east.

The attendance officers specified 9 of the 18 blocks as having a medium economic status and the other 9 were rated as being in the medium to low class. For the former group 10.2 per cent of full-time and 3.8 per cent of part-time unemployment was reported, while the medium to low blocks had 15.8 and 8.2 per cent, respectively. In the occupational analysis only five blocks were placed outside of the industrial category and these were classed as industrial and trade. The industrial blocks showed 13.9 per cent of full-time unemployment as compared with 9.1 per cent for the industrial and trade units. All except one block had predominantly a native white population, while that exception was a block with foreign white inhabitants. Little disparity of unemployment was found to exist in this one block. It is interesting to note that of the 17,866 persons included in the survey from this district only 11 persons were colored and not one of them was unemployed, either all or part of the time, when the survey was made.

Severity of unemployment in this district was not much above district 8, which was one of the two districts reporting a smaller percentage of jobless than this section. Of the 7,757 wage earners, 986 or 12.7 per cent were totally unemployed and 5.8 per cent were partially unemployed. Thus, while full-time unemployment was relatively small in this area, part-time idleness was more intense than for the city as a whole. Only 16.9 per cent of the families interviewed indicated some idle members as against 21.2 per cent for the survey total. Part-time unemployed members were found in 8.1 per cent of this district's families as compared with 8 per cent for the city. The recent census report showed a slightly higher proportion of unemployment in this section than was found for the 10 districts combined. Full-time unemployment within the district varied from 6.1 per cent in one block to 28.7 per cent in another. Likewise the part-time analysis revealed wide variations, with extremes of 0.2 and 15.4 per cent.

Duration of unemployment was but slightly longer in this district than in the city. Similarly the distribution of unemployment according to reasons found this section following the total survey findings very closely. Unemployed workers under 21 years of age were less affected in this district than in most others. Whereas for the entire survey 85 per cent of unemployed males were 21 years of age or over, in this area 92.4 per cent of them were 21 years of age or over.

An extremely large proportion of both full-time and part-time unemployed persons in this district had held manual jobs. Of those totally idle, 87.7 per cent were recruited from the manual group, and of the partially unemployed wage earners 94.2 per cent had held such jobs prior to their part-time inactivity.

District 10

The entire northeastern section of Philadelphia extending north and east of Frankford Creek is included in this district, the largest in the city. Much of the vast acreage in this section is undeveloped and only scattered houses are to be found in certain of these parts, particularly in the northern half of the district. The portion which borders on the Delaware River is industrial in character and consists mostly of low economic and social groups. The economic status improves toward the west, with a medium class in the central area and a very high income group in Lawndale and Fox Chase along the western end of the district. The Cawl survey income figures for this area were found to average \$2,166 per family and \$500 per capita, which were well below the averages for the city as a whole.

This district is less comparable, from the 1929 to 1930 survey, than is any other one district. Four of the 26 blocks used in 1929 were dropped, either because of incorrect enumeration or because of errors in block definitions. In place thereof, six new blocks were added, two of which yielded very few families, so that the size of the sample was little changed. What is more significant is the fact that the census for the 26 blocks which were included in the 1929 study showed about four times as large a population for these blocks as was found in the 28 blocks included in this survey. The attendance officers reported 11,322 persons in the 28 blocks and the census showed 46,687 persons for nearly the same area. Most of this disparity is due to misunderstandings of block definitions and locations. The attendance officers included in the survey only a part of the extremely large blocks in this section, while the census enumerators took the entire population of each specified block, no matter how large, which procedure was quite proper. The proportion of the population usually employed was quite close for the census and this survey, 43.5 and 43 per cent, respectively.

Unemployment was less severe in this district than in the entire city, as far as total idleness is concerned, while part-time unemployment was more severe in this district than in any other section. Of the 4,865 wage earners, 14.2 per cent were totally unoccupied and an additional 8.2 per cent were partially idle. Incidence of unemployment in this district varied from no unemployment in two small blocks and only 2.3 per cent in a large block to 31 per cent in another unit. Eleven of the twenty-eight blocks reported less than 10 per cent while eight blocks had over 20 per cent of full-time unemploy-

ment. In the part-time analysis it was found that three blocks reported 1 per cent or less idleness, whereas thirteen blocks indicated more than 10 per cent of the wage earners as being partially unemployed. These variations reflect the great differences of economic character within the district.

Except for the professional and executive class in the occupational analysis, the enumerators found that each classification in the racial, economic, and occupational analyses included one or more of the blocks in the district. One block was rated as having a high economic character and only 4.4 per cent of the working population there were unemployed, as compared with 13.1 per cent for the medium and 14.8 per cent for the medium to low economic blocks. Similarly, the relationship of unemployment and occupational status was the same for this district as for the city. The blocks with clerical and trade groups reported only 7.6 per cent of full-time and 1.6 per cent of part-time unemployment, while the industrial and trade blocks showed 13.5 per cent and 10 per cent and the totally industrial ones reported 17.2 per cent and 9.2 per cent, respectively. In the racial analysis an exception was found when the one block specified as having predominantly a Negro population showed the lowest proportion of idleness, with 8.1 per cent of full-time and 2.9 per cent of part-time unemployment. True to other findings the foreign white blocks reported the heaviest unemployment, with those of mixed whites and mixed white and colored inhabitants following closely, while in the 15 native white areas only 12.8 per cent of those usually employed were reported as being entirely unemployed.

For both the full-time and part-time unemployed persons, idleness was generally of shorter duration in this district than in the city as a whole. Particularly was this true in the part-time results, where 52.3 per cent of the unemployed had been without regular work for over one month and 35.9 per cent for over three months, as contrasted with 68.2 per cent and 45.7 per cent, respectively, for the city. Full-time unemployment was distributed, according to reasons, about the same in this as in most other districts. Whereas in the entire city 86.6 per cent of those partially idle were unable to find work, 95.8 per cent of the part-time unemployed in this area attributed their idleness to this cause. The incidence of unemployment in this section fell more heavily on female wage earners and those usually employed who are under 21 years of age, than in any other section. For the entire sample 25.5 per cent of the totally jobless were females, while in this district 30.2 per cent were females. The occupational distribution of both full-time and part-time unemployment in this section was representative of the city, except that over one-third of the part-time unemployed persons failed to specify their usual occupations.

TABLE 27.—Unemployment statistics of Philadelphia, in April, 1930, by districts

Item	Phila- delphia	District									
		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10
Number of families interviewed.....	36,665	3,894	3,654	2,493	3,880	4,455	2,714	3,237	5,195	4,532	2,611
Number of persons in families.....	160,208	16,677	16,757	13,028	17,338	20,125	10,439	15,435	21,221	17,866	11,322
Average size of family.....	4.4	4.3	4.6	5.2	4.5	4.6	3.8	4.8	4.1	3.9	4.3
Number of persons employable.....	69,884	7,050	7,207	4,837	7,801	9,451	5,032	6,418	9,466	7,757	4,885
Number employable per family.....	1.9	1.8	2.0	1.9	2.0	2.1	1.9	2.0	1.8	1.7	1.9
Average family income.....	\$2,440	\$3,208	\$2,035	\$2,321	\$2,496	\$2,210	\$2,341	\$1,939	\$2,817	\$2,587	\$, 168
Average per capita income.....	\$558	\$750	\$444	\$444	\$559	\$489	\$609	\$407	\$690	\$657	\$500
Proportion of families with full-time unemployment.....	21.2	11.4	20.9	31.4	20.9	23.8	26.9	20.8	17.7	16.9	20.2
Proportion of families with part-time unemployment.....	8.0	6.2	6.5	11.8	3.2	6.8	11.8	11.2	7.6	8.1	11.6
FULL-TIME UNEMPLOYED PERSONS											
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Total unemployed.....	15.0	7.9	14.7	23.4	13.8	18.4	19.7	20.4	12.5	12.7	14.2
Unable to find work.....	12.2	6.6	11.8	19.4	11.4	12.6	16.1	17.4	9.7	10.2	11.6
White persons unable to find work.....	11.5	6.4	13.2	18.7	9.4	11.0	15.4	16.5	9.6	10.2	10.9
Negroes unable to find work.....	16.2	12.2	8.4	33.7	16.7	18.3	17.6	29.4	11.8	21.8	21.8
Occupations:											
All occupations.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manual.....	84.7	65.3	83.1	89.2	90.0	80.9	89.2	88.7	80.4	87.7	84.0
Clerical.....	9.4	22.6	10.7	6.5	6.9	10.2	5.1	7.6	12.5	9.7	7.2
Executive.....	1.5	10.1	.6	.3	1.4	1.4	1.1	.3	2.5	1.8	.7
Unspecified.....	4.4	2.0	5.6	4.0	1.7	7.5	4.6	3.4	4.6	1.3	8.1
Unable to find work—Sex:											
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Males.....	74.5	73.1	76.2	77.6	74.8	72.4	76.3	73.7	72.0	75.2	69.8
Females.....	25.5	26.9	23.8	22.4	25.2	27.6	23.7	24.3	28.0	24.8	30.2
Unable to find work—Age:											
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 21 years.....	23.3	24.8	26.5	28.4	24.6	18.8	19.9	19.1	25.1	19.5	31.6
21 years and over.....	76.7	75.2	71.5	73.6	75.4	81.2	80.1	80.9	74.9	80.5	68.4
Reasons for unemployment:											
All reasons.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Unable to find work.....	83.6	84.7	82.8	86.7	83.6	83.7	84.0	86.0	79.4	80.8	84.3
Sickness.....	9.0	10.0	11.5	6.3	8.8	9.2	11.0	6.8	10.0	8.7	9.0
Superannuation.....	3.9	2.4	2.6	4.4	4.8	3.7	2.7	3.2	6.7	3.0	5.2
Indifference.....	1.8	1.1	2.3	1.9	1.8	1.9	1.7	2.8	1.3	1.9	.3
Other reasons.....	1.7	1.8	.8	.7	1.0	1.5	.6	1.2	2.6	5.6	1.2

Time lost since last regular job:													
1 day or more.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
More than 1 month.....	59.0	79.0	70.4	58.9	79.9	78.0	83.3	80.0	80.6	83.9	78.4	78.4	78.4
More than 3 months.....	55.5	55.1	47.6	64.0	57.4	55.4	55.9	47.3	60.3	58.4	54.6	54.6	54.6
More than 6 months.....	26.4	26.8	22.6	30.5	28.3	28.3	26.4	19.4	33.4	23.4	24.2	24.2	24.2
More than 1 year.....	9.1	7.9	8.0	6.8	8.4	8.2	10.0	7.4	14.0	10.1	11.3	11.3	11.3
PART-TIME UNEMPLOYED PERSONS													
Total unemployed.....	5.2	4.1	4.4	7.9	1.9	3.9	7.6	6.8	5.2	5.8	8.2	8.2	8.2
Unable to find work.....	3.5	3.3	3.4	6.4	1.6	2.2	5.4	3.5	2.1	5.0	4.6	4.6	4.6
White persons unable to find work.....	3.3	3.1	2.4	6.2	1.4	2.1	3.8	3.6	2.2	5.0	4.3	4.3	4.3
Negroes unable to find work.....	4.7	.4	6.1	8.5	2.0	2.6	8.4	3.3	1.4	.....	8.8	8.8	8.8
Occupations:													
All occupations.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manual.....	81.4	81.3	85.7	89.8	91.1	82.7	88.7	84.4	90.2	94.2	61.8	61.8	61.8
Clerical.....	4.4	13.9	6.4	2.1	3.4	6.0	2.9	1.2	4.3	4.2	2.5	2.5	2.5
Executive.....	.8	3.1	.6	1.3	.....	1.4	.5	.2	.4	.7	.3	.3	.3
Unspecified.....	13.4	1.7	7.3	6.8	5.5	9.9	7.9	44.2	5.1	.9	35.4	35.4	35.4
Unable to find work—Sex:													
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Males.....	70.4	76.5	69.0	75.1	70.2	70.5	69.4	69.9	70.6	71.5	70.4	70.4	70.4
Females.....	29.6	23.5	31.0	24.9	29.8	29.5	40.6	30.1	29.4	28.5	29.6	29.6	29.6
Unable to find work—Age:													
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 21 years.....	20.2	16.7	21.2	30.1	16.1	19.9	14.4	19.9	23.4	16.0	23.6	23.6	23.6
21 years and over.....	79.8	83.3	78.8	69.9	83.9	80.1	85.6	80.1	76.6	84.0	76.4	76.4	76.4
Reasons for unemployment:													
All reasons.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Unable to find work.....	86.6	84.5	87.2	94.2	89.9	84.0	74.0	95.0	76.6	89.4	95.8	95.8	95.8
Sickness.....	3.8	6.4	4.6	1.2	3.6	6.3	6.3	2.1	3.9	1.6	3.4	3.4	3.4
Superannuation.....	1.0	2.5	.7	2.2	.7	.3	.4	1.2	.9	.4	.4	.4	.4
Indifference.....	1.0	.4	.7	1.5	.7	1.2	1.6	2.1	.8	.7	.4	.4	.4
Other reasons.....	7.6	6.1	6.8	.9	5.1	9.2	17.8	.4	17.5	7.4	.....	.....	.....
Time lost since last regular job:													
1 day or more.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
More than 1 month.....	68.2	77.8	67.3	84.3	82.2	61.1	80.8	33.7	81.3	82.8	52.3	52.3	52.3
More than 3 months.....	45.7	59.0	31.5	59.9	57.5	35.4	50.1	20.0	64.7	49.1	35.9	35.9	35.9
More than 6 months.....	22.3	34.7	13.7	29.3	28.1	16.2	25.2	8.5	32.3	20.5	19.1	19.1	19.1
More than 1 year.....	6.1	9.7	4.8	5.2	4.8	4.7	6.8	2.3	8.9	6.0	7.3	7.3	7.3

SCHOOL DISTRICTS

Appendix.—Part-time Unemployment Data

In order that the text should not be broken up too much by tables, it was decided to assemble most of the tables analyzing part-time unemployment in one group and to present them in this appendix.

TABLE 1.—Number and per cent of white persons and of Negroes unable to find work

District	White persons			Negroes			All races		
	Number usually employed	Unable to find work		Number usually employed	Unable to find work		Number usually employed	Unable to find work	
		Number	Per cent		Number	Per cent		Number	Per cent
No. 1.....	6,775	213	3.1	247	19	0.4	7,050	234	3.3
No. 2.....	5,027	122	2.4	1,958	120	6.1	7,207	245	3.4
No. 3.....	4,535	281	6.2	258	22	8.5	4,837	310	6.4
No. 4.....	5,599	78	1.4	2,137	44	2.0	7,801	124	1.6
No. 5.....	7,438	158	2.1	1,931	50	2.6	9,451	210	2.2
No. 6.....	3,287	126	3.8	1,731	145	8.4	5,032	271	5.4
No. 7.....	5,935	211	3.6	449	15	3.3	6,418	226	3.5
No. 8.....	8,789	188	2.2	661	9	1.4	9,466	197	2.1
No. 9.....	7,728	386	5.0	(¹)	-----	-----	7,767	387	5.0
No. 10.....	4,512	195	4.3	308	27	8.8	4,865	225	4.6
Total.....	59,625	1,958	3.3	9,680	451	4.7	69,894	2,429	3.5

¹ No Negroes usually employed.

TABLE 2.—Number and per cent of unemployed persons, by customary occupations and by districts

District	Number of unemployed persons in all occupations	Unemployed persons in specified customary occupations							
		Manual		Clerical		Executive		Unspecified	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
No. 1.....	288	234	81.3	40	13.9	9	3.1	5	1.7
No. 2.....	314	269	85.7	20	6.4	2	.6	23	7.3
No. 3.....	382	343	89.8	8	2.1	5	1.3	26	6.8
No. 4.....	146	133	91.1	5	3.4	-----	-----	8	5.5
No. 5.....	364	301	82.7	22	6.0	5	1.4	36	9.9
No. 6.....	381	338	88.7	11	2.9	2	.5	30	7.9
No. 7.....	434	236	54.4	5	1.2	1	.2	102	44.2
No. 8.....	493	445	90.2	21	4.3	2	.4	25	5.1
No. 9.....	448	422	94.2	19	4.2	3	.7	4	.9
No. 10.....	398	246	61.8	10	2.5	1	.3	141	35.4
Total.....	3,648	2,967	81.4	161	4.4	30	.8	400	13.4

TABLE 3.—Number of persons in family usually employed compared with number unemployed

Number in family usually employed	Number of families	Families with un-employed workers		Number of families with specified number unemployed				
		Number	Per cent	1	2	3	4	5
None.....	475	-----	-----	-----	-----	-----	-----	-----
1 person.....	16,914	920	5.4	920	-----	-----	-----	-----
2 persons.....	10,509	904	8.6	764	140	-----	-----	-----
3 persons.....	5,103	601	11.8	446	120	35	-----	-----
4 persons.....	2,348	330	14.1	205	72	37	16	-----
5 persons.....	873	127	14.5	67	33	16	8	3
6 persons.....	287	45	15.7	16	17	4	5	3
7 persons.....	109	15	13.8	8	4	2	-----	-----
8 persons.....	31	7	22.6	3	2	1	-----	-----
9 persons.....	13	2	15.4	2	-----	-----	-----	-----
Total.....	36,665	2,951	8.0	2,431	288	95	29	8

TABLE 4.—Unemployment in families of different size

Number in family	Number of families	Families with unemployment		Number of persons usually employed	Persons unemployed	
		Number	Per cent		Number	Per cent
1 person.....	1,052	41	3.9	892	41	4.6
2 persons.....	6,245	288	4.6	7,828	306	3.9
3 persons.....	7,216	384	5.3	11,080	441	4.0
4 persons.....	7,298	509	7.0	12,957	594	4.6
5 persons.....	5,557	498	9.0	11,602	600	5.2
6 persons.....	3,740	381	10.2	8,912	482	5.4
7 persons.....	2,380	302	12.7	6,277	381	6.1
8 persons.....	1,446	213	14.7	4,249	305	7.2
9 persons.....	807	148	18.3	2,564	208	8.1
10 persons.....	490	91	18.3	1,703	128	7.3
11 persons.....	209	54	25.8	750	84	11.1
12 persons.....	112	19	17.0	451	31	6.9
13 persons.....	50	13	26.0	242	27	11.2
14 persons.....	34	4	11.8	171	9	5.3
15 persons.....	14	5	35.7	86	8	9.3
Over 15 persons.....	11	3	27.3	51	3	5.9
Total.....	30,665	2,951	8.0	69,884	3,648	5.2

TABLE 5.—Number and per cent of persons unable to find work, by districts, sex, and age

District	Sex			Age						Total
	Males	Females	Total	Males		Females		Males and females		
				Under 21 years	21 years and over	Under 21 years	21 years and over	Under 21 years	21 years and over	
Number										
No. 1.....	179	85	234	27	151	12	43	39	194	233
No. 2.....	169	78	245	25	139	25	47	50	186	236
No. 3.....	232	77	309	57	175	36	41	93	216	309
No. 4.....	87	37	124	10	77	10	27	20	104	124
No. 5.....	146	61	207	26	120	15	45	41	165	206
No. 6.....	161	110	271	16	145	23	87	39	232	271
No. 7.....	158	68	226	23	135	22	46	45	181	226
No. 8.....	139	58	197	23	118	23	35	46	151	197
No. 9.....	270	110	386	21	254	40	67	61	321	382
No. 10.....	157	66	223	27	128	25	40	52	168	220
Total.....	1,704	718	2,422	255	1,440	231	478	486	1,918	2,404
Per cent										
No. 1.....	70.5	23.5	100.0	15.2	84.8	21.8	78.2	16.7	83.3	100.0
No. 2.....	69.0	31.0	100.0	15.2	84.8	34.7	65.3	21.2	78.8	100.0
No. 3.....	75.1	24.9	100.0	24.6	75.4	46.8	53.2	30.1	69.9	100.0
No. 4.....	70.2	29.8	100.0	11.5	88.5	27.0	73.0	16.1	83.9	100.0
No. 5.....	70.5	29.5	100.0	17.8	82.2	25.0	75.0	19.9	80.1	100.0
No. 6.....	59.4	40.6	100.0	9.9	90.1	20.9	79.1	14.4	85.6	100.0
No. 7.....	69.9	30.1	100.0	14.6	85.4	32.4	67.6	19.9	80.1	100.0
No. 8.....	70.6	29.4	100.0	16.5	83.5	39.7	60.3	23.4	76.6	100.0
No. 9.....	71.5	28.5	100.0	7.0	92.4	37.4	62.6	16.0	84.0	100.0
No. 10.....	70.4	29.6	100.0	17.4	82.6	38.5	61.5	23.6	76.4	100.0
Total.....	70.4	29.6	100.0	15.0	85.0	32.6	67.4	20.2	79.8	100.0

TABLE 6.—Per cent of idle workers unemployed for specified reasons, by districts

District	Number of unemployed persons	Per cent of idle workers unemployed for each specified reason				
		Unable to find work ¹	Sickness	Superannuation	Indifference	Other reasons
No. 1.....	277	84.5	6.5	2.5	0.4	6.1
No. 2.....	281	87.2	4.6	.7	.7	0.8
No. 3.....	329	94.2	1.2	2.2	1.5	.9
No. 4.....	138	89.9	3.6	.7	.7	5.1
No. 5.....	250	84.0	5.6	-----	1.2	9.2
No. 6.....	366	74.0	6.3	.3	1.6	17.8
No. 7.....	238	95.0	2.1	.4	2.1	.4
No. 8.....	257	78.6	3.9	1.2	.8	17.5
No. 9.....	433	89.4	1.6	.9	.7	7.4
No. 10.....	235	95.8	3.4	.4	.4	-----
Total.....	2,804	86.6	3.8	1.0	1.0	7.6

¹ Includes also such reasons as "slack season," "laid off," etc.² Does not include 844 persons for whom the reasons for unemployment were not given.

TABLE 7.—Number and per cent of unemployed persons, by length of time lost since last regular job

Length of time lost	All unemployed persons		Per cent of all persons usually employed ¹
	Number	Per cent	
1 day and over.....	13,648	100.0	5.2
Over 1 week.....	2,927	80.2	4.2
Over 1 month.....	2,488	68.2	3.6
Over 2 months.....	2,081	57.0	3.0
Over 3 months.....	1,667	45.7	2.4
Over 4 months.....	1,363	37.4	2.0
Over 5 months.....	1,132	31.0	1.6
Over 6 months.....	815	22.3	1.2
Over 7 months.....	609	19.2	1.0
Over 8 months.....	626	17.2	.9
Over 9 months.....	581	15.9	.8
Over 10 months.....	540	14.8	.8
Over 11 months.....	534	14.6	.8
Over 1 year.....	223	6.1	.3

¹ Includes 665 unemployed who did not specify time lost since last regular job.

TABLE 8.—Number and per cent of unemployed persons, by length of time lost since last regular job and by districts

District	Number of unemployed persons	Per cent of all workers unemployed for over—					
		One week	One month	Two months	Three months	Six months	One year
No. 1.....	288	90.6	77.8	69.4	59.0	34.7	9.7
No. 2.....	314	75.2	57.3	42.0	31.5	13.7	4.8
No. 3.....	332	95.6	84.3	73.8	59.9	29.3	5.2
No. 4.....	146	91.8	82.2	71.9	57.5	28.1	4.8
No. 5.....	304	59.0	51.1	43.1	35.4	16.2	4.7
No. 6.....	381	92.1	80.5	64.8	50.1	25.2	6.8
No. 7.....	434	55.3	38.7	27.6	20.0	8.5	2.3
No. 8.....	493	90.7	81.3	71.8	64.7	32.3	8.9
No. 9.....	448	94.9	82.8	68.1	49.1	20.5	6.0
No. 10.....	398	62.1	52.3	45.0	35.9	19.1	7.3
Total.....	3,648	80.2	68.2	57.0	45.7	22.3	6.1

TABLE 9.—Per cent of unemployed persons, by length of time lost since last regular job and by reasons why unemployed

Length of time lost	Per cent of persons unemployed for specified reason					
	Unable to find work	Sickness	Superannuation	Indifference	Other reasons	All reasons
1 day and over.....	100.0	100.0	100.0	100.0	100.0	100.0
Over 1 week.....	92.3	87.9	92.6	82.8	90.6	80.2
Over 2 weeks.....	88.7	84.1	92.6	79.3	88.7	77.1
Over 3 weeks.....	84.6	81.3	85.2	79.3	84.9	73.8
Over 1 month.....	77.6	79.4	81.5	75.9	82.5	68.2
Over 2 months.....	64.0	70.1	74.1	72.4	68.9	57.0
Over 3 months.....	50.7	58.9	55.6	62.1	51.9	45.7
Over 4 months.....	40.9	50.5	48.1	51.7	42.5	37.4
Over 5 months.....	33.5	45.8	44.4	51.7	36.8	31.0
Over 6 months.....	23.8	42.1	40.7	48.3	26.4	22.3
Over 7 months.....	20.7	41.1	40.7	44.8	15.6	19.2
Over 8 months.....	18.2	41.1	40.7	44.8	13.7	17.2
Over 9 months.....	16.8	40.2	40.7	41.4	13.2	15.9
Over 10 months.....	15.5	37.4	40.7	41.4	11.8	14.8
Over 11 months.....	15.2	37.4	40.7	41.4	11.8	14.6
Over 1 year.....	6.1	25.2	14.8	20.7	4.2	6.1

TABLE 10.—Per cent of persons unable to find work, by length of time lost since last regular job and by sex and race

Length of time lost	Per cent of persons unable to find work				Total
	Males	Females	White persons	Negroes	
1 day and over.....	100.0	100.0	100.0	100.0	100.0
Over 1 week.....	92.7	92.1	93.8	86.3	80.2
Over 2 weeks.....	89.6	86.9	90.0	82.7	77.1
Over 3 weeks.....	86.2	81.3	86.0	78.5	73.8
Over 1 month.....	80.3	71.9	78.8	72.9	68.2
Over 2 months.....	67.2	57.0	65.2	59.0	57.0
Over 3 months.....	53.8	43.9	51.7	46.6	45.7
Over 4 months.....	44.5	32.6	41.9	36.4	37.4
Over 5 months.....	36.9	25.6	34.5	28.8	31.0
Over 6 months.....	25.8	19.2	24.7	19.7	22.3
Over 7 months.....	22.2	17.3	21.3	18.2	19.2
Over 8 months.....	19.5	15.2	18.9	15.5	17.2
Over 9 months.....	18.0	13.9	17.8	12.9	15.9
Over 10 months.....	16.8	12.5	16.6	10.9	14.8
Over 11 months.....	16.5	12.4	16.5	10.2	14.6
Over 1 year.....	7.0	8.9	6.5	4.7	6.1

TABLE 11.—Per cent of persons unable to find work, by length of time lost since last regular job and by occupations

Length of time lost	Per cent of persons unable to find work			Total
	Manual	Clerical	Executive	
1 day and over.....	100.0	100.0	100.0	100.0
Over 1 week.....	92.9	88.2	88.2	92.6
Over 2 weeks.....	89.4	80.8	88.2	89.0
Over 3 weeks.....	85.2	70.2	82.4	84.8
Over 1 month.....	77.9	70.7	82.4	77.0
Over 2 months.....	64.0	62.4	76.5	64.0
Over 3 months.....	50.3	54.1	64.7	50.6
Over 4 months.....	40.7	37.6	58.8	40.7
Over 5 months.....	33.5	31.2	47.1	33.5
Over 6 months.....	23.7	20.2	41.2	23.7
Over 7 months.....	20.5	19.3	41.2	20.6
Over 8 months.....	17.9	18.3	41.2	18.1
Over 9 months.....	16.6	17.4	41.2	16.8
Over 10 months.....	15.2	16.5	41.2	15.5
Over 11 months.....	15.0	15.6	41.2	15.2
Over 1 year.....	6.0	7.8	11.8	6.1

TABLE 12.—Per cent of persons unable to find work, by length of time lost since last regular job and by sex and age

Length of time lost	Persons under 21 years			Persons 21 years and over		
	Males	Females	Total	Males	Females	Total
1 day and over.....	100.0	100.0	100.0	100.0	100.0	100.0
Over 1 week.....	92.9	93.5	93.2	92.6	92.3	92.5
Over 2 weeks.....	87.8	87.4	87.7	89.9	87.4	89.3
Over 3 weeks.....	82.0	81.4	81.7	86.9	82.0	85.7
Over 1 month.....	74.9	68.8	72.0	81.2	73.8	79.4
Over 2 months.....	59.6	50.2	55.1	68.5	60.5	66.5
Over 3 months.....	47.8	35.5	42.0	54.8	47.9	53.1
Over 4 months.....	38.0	24.2	31.5	45.6	36.6	43.4
Over 5 months.....	30.2	17.3	24.1	38.0	30.1	36.0
Over 6 months.....	18.8	13.0	16.0	26.9	22.6	25.8
Over 7 months.....	16.5	12.6	14.2	23.1	19.9	22.3
Over 8 months.....	13.7	10.8	12.3	20.4	17.6	19.7
Over 9 months.....	11.8	9.5	10.7	19.0	16.3	18.4
Over 10 months.....	11.8	8.7	10.3	17.6	14.5	16.8
Over 11 months.....	11.8	8.7	10.3	17.2	14.4	16.5
Over 1 year.....	3.5	2.6	3.1	7.5	4.6	6.8

LIST OF BULLETINS OF THE BUREAU OF LABOR STATISTICS

The following is a list of all bulletins of the Bureau of Labor Statistics published since July, 1912; except that in the case of bulletins giving the results of periodic surveys of the bureau only the latest bulletin on any one subject is here listed.

A complete list of the reports and bulletins issued prior to July, 1912, as well as the bulletins published since that date, will be furnished on application. Bulletins marked thus () are out of print.*

Conciliation and Arbitration (including strikes and lockouts).

- *No. 124. Conciliation and arbitration in the building trades of Greater New York. [1913.]
- *No. 133. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements. [1913.]
- No. 139. Michigan copper district strike. [1914.]
- *No. 144. Industrial court of the cloak, suit, and skirt industry of New York City. [1914.]
- *No. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City. [1914.]
- *No. 191. Collective bargaining in the anthracite-coal industry. [1916.]
- *No. 198. Collective agreements in the men's clothing industry. [1916.]
- No. 223. Operation of the industrial disputes investigation act of Canada. [1918.]
- No. 255. Joint industrial councils in Great Britain. [1919.]
- No. 283. History of the Shipbuilding Labor Adjustment Board, 1917 to 1919.
- No. 287. National War Labor Board: History of its formation, activities, etc. [1921.]
- *No. 303. Use of Federal power in settlement of railway-labor disputes. [1922.]
- No. 341. Trade agreement in the silk-ribbon industry of New York City. [1923.]
- No. 402. Collective bargaining by actors. [1923.]
- No. 468. Trade agreements, 1927.
- No. 481. Joint industrial control in the book and job printing industry. [1928.]

Cooperation.

- No. 313. Consumers' cooperative societies in the United States in 1920.
- No. 314. Cooperative credit societies (credit unions) in America and in foreign countries. [1922.]
- No. 437. Cooperative movement in the United States in 1925 (other than agricultural).
- No. 531. Consumers', credit, and workers' productive cooperative societies, 1929.

Employment and Unemployment.

- *No. 109. Statistics of unemployment and the work of employment offices in the United States. [1913.]
- No. 172. Unemployment in New York City, N. Y. [1915.]
- *No. 183. Regularity of employment in the women's ready-to-wear garment industries. [1915.]
- *No. 195. Unemployment in the United States. [1916.]
- No. 196. Proceedings of Employment Managers' Conference held at Minneapolis, Minn., January 19 and 20, 1916.
- *No. 202. Proceedings of the conference of Employment Managers' Association of Boston, Mass., held May 10, 1916.
- No. 206. The British system of labor exchanges. [1916.]
- *No. 227. Proceedings of the Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.
- No. 235. Employment system of the Lake Carriers' Association. [1918.]
- *No. 241. Public employment offices in the United States. [1918.]
- No. 247. Proceedings of Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918.
- *No. 310. Industrial unemployment: A statistical study of its extent and causes. [1922.]
- No. 409. Unemployment in Columbus, Ohio, 1921 to 1925.
- No. 520. Social and economic character of unemployment in Philadelphia, April, 1929.
- No. 542. Report of the Advisory Committee on Employment Statistics. [1931.]
- No. 544. Unemployment benefit plans in the United States and unemployment insurance in foreign countries. [1931.]
- No. 553. Employment in Ohio, 1914 to 1929. (In press.)

Foreign Labor Laws.

- *No. 142. Administration of labor laws and factory inspection in certain European countries. [1914.]
- No. 494. Labor legislation of Uruguay. [1929.]
- No. 510. Labor legislation of Argentina. [1930.]
- No. 529. Workmen's compensation legislation of Latin American countries. [1930.]
- No. 549. Labor legislation of Venezuela. [1931.]
- No. 554. Labor legislation of Paraguay. [1931.]

Housing.

- *No. 158. Government aid to home owning and housing of working people in foreign countries. [1914.]
- No. 263. Housing by employers in the United States. [1920.]
- No. 295. Building operations in representative cities in 1920.
- No. 545. Building permits in the principal cities of the United States in [1921 to] 1930.

Industrial Accidents and Hygiene.

- *No. 104. Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories. [1912.]
- No. 120. Hygiene of painters' trade. [1913.]
- *No. 127. Danger to workers from dusts and fumes, and methods of protection. [1913.]
- *No. 141. Lead poisoning in the smelting and refining of lead. [1914.]
- *No. 157. Industrial accident statistics. [1915.]
- *No. 165. Lead poisoning in the manufacture of storage batteries. [1914.]
- *No. 179. Industrial poisons used in the rubber industry. [1915.]
- No. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings. [1916.]
- *No. 201. Report of the committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions. [1916.]
- *No. 209. Hygiene of the printing trades. [1917.]
- *No. 219. Industrial poisons used or produced in the manufacture of explosives. [1917.]
- No. 221. Hours, fatigue, and health in British munition factories. [1917.]
- No. 230. Industrial efficiency and fatigue in British munition factories. [1917.]
- *No. 231. Mortality from respiratory diseases in dusty trades (inorganic dusts). [1918.]
- No. 234. Safety movement in the iron and steel industry, 1907 to 1917.
- No. 236. Effects of the air hammer on the hands of stoncutters. [1918.]
- No. 249. Industrial health and efficiency. Final report of British Health of Munitions Workers Committee. [1919.]
- No. 251. Preventable death in the cotton-manufacturing industry. [1919.]
- No. 256. Accidents and accident prevention in machine building. [1919.]
- No. 267. Anthrax as an occupational disease. [1920.]
- No. 276. Standardization of industrial accident statistics. [1920.]
- No. 280. Industrial poisoning in making coal-tar-dyes and dye intermediates. [1921.]
- *No. 291. Carbon monoxide poisoning. [1921.]
- No. 293. The problem of dust phthisis in the granite-stone industry. [1922.]
- No. 298. Causes and prevention of accidents in the iron and steel industry, 1910-1919.
- No. 306. Occupational hazards and diagnostic signs: A guide to impairments to be looked for in hazardous occupations. [1922.]
- No. 392. Survey of hygienic conditions in the printing trades. [1925.]
- No. 405. Phosphorus necrosis in the manufacture of fireworks and in the preparation of phosphorus. [1926.]
- No. 427. Health survey of the printing trades, 1922 to 1925.
- No. 428. Proceedings of the Industrial Accident Prevention Conference, held at Washington, D. C., July 14-16, 1926.
- No. 460. A new test for industrial lead poisoning. [1928.]
- No. 466. Settlement for accidents to American seamen. [1928.]
- No. 488. Deaths from lead poisoning, 1925-1927.
- No. 490. Statistics of industrial accidents in the United States to the end of 1927.
- No. 507. Causes of death by occupation. [1929.]

Industrial Relations and Labor Conditions.

- No. 237. Industrial unrest in Great Britain. [1917.]
- No. 340. Chinese migrations, with special reference to labor conditions. [1923.]
- No. 349. Industrial relations in the West Coast lumber industry. [1923.]
- No. 361. Labor relations in the Fairmont (W. Va.) bituminous-coal field. [1924.]
- No. 380. Postwar labor conditions in Germany. [1925.]
- No. 383. Works council movement in Germany. [1925.]
- No. 384. Labor conditions in the shoe industry in Massachusetts, 1920-1924.
- No. 399. Labor relations in the lace and lace-curtain industries in the United States. [1925.]
- No. 534. Labor conditions in the Territory of Hawaii, 1920-30.

Labor Laws of the United States (including decisions of courts relating to labor).

- No. 211. Labor laws and their administration in the Pacific States. [1917.]
- No. 229. Wage payment legislation in the United States. [1917.]
- No. 285. Minimum wage laws of the United States: Construction and operation. [1921.]
- No. 321. Labor laws that have been declared unconstitutional. [1922.]
- No. 322. Kansas Court of Industrial Relations. [1923.]

Labor Laws of the United States (including decisions of courts relating to labor)—Continued.

- No. 343. Laws providing for bureaus of labor statistics, etc. [1923.]
- No. 370. Labor laws of the United States, with decisions of courts relating thereto. [1925.]
- No. 408. Laws relating to payment of wages. [1926.]
- No. 548. Decisions of courts and opinions affecting labor, 1929-30.
- No. 552. Labor legislation, 1930.

Proceedings of Annual Conventions of the Association of Governmental Officials in Industry of the United States and Canada. (Name changed in 1928 from Association of Governmental Labor Officials of the United States and Canada.)

- *No. 266. Seventh, Seattle, Wash., July 12-15, 1920.
- No. 307. Eighth, New Orleans, La., May 2-6, 1921.
- *No. 323. Ninth, Harrisburg, Pa., May 22-26, 1922.
- *No. 352. Tenth, Richmond, Va., May 1-4, 1923.
- *No. 389. Eleventh, Chicago, Ill., May 19-23, 1924.
- *No. 411. Twelfth, Salt Lake City, Utah, August 13-15, 1925.
- *No. 429. Thirteenth, Columbus, Ohio, June 7-10, 1926.
- *No. 455. Fourteenth, Paterson, N. J., May 31 to June 3, 1927.
- *No. 480. Fifteenth, New Orleans, La., May 21-24, 1928.
- No. 508. Sixteenth, Toronto, Canada, June 4-7, 1929.
- No. 530. Seventeenth, Louisville, Ky., May 20-23, 1930.

Proceedings of Annual Meetings of the International Association of Industrial Accident Boards and Commissions.

- No. 210. Third, Columbus, Ohio, April 25-28, 1916.
- No. 248. Fourth, Boston, Mass., August 21-25, 1917.
- No. 294. Fifth, Madison, Wis., September 24-27, 1918.
- *No. 273. Sixth, Toronto, Canada, September 23-26, 1919.
- No. 281. Seventh, San Francisco, Calif., September 20-24, 1920.
- No. 304. Eighth, Chicago, Ill., September 19-23, 1921.
- No. 333. Ninth, Baltimore, Md., October 9-13, 1922.
- *No. 359. Tenth, St. Paul, Minn., September 24-26, 1923.
- No. 385. Eleventh, Halifax, Nova Scotia, August 26-28, 1924.
- No. 395. Index to proceedings, 1914-1924.
- No. 406. Twelfth, Salt Lake City, Utah, August 17-20, 1925.
- No. 432. Thirteenth, Hartford, Conn., September 14-17, 1926.
- *No. 456. Fourteenth, Atlanta, Ga., September 27-29, 1927.
- No. 485. Fifteenth, Paterson, N. J., September 11-14, 1928.
- No. 511. Sixteenth, Buffalo, N. Y., October 8-11, 1929.
- No. 536. Seventeenth, Wilmington, Del., September 22-26, 1930.

Proceedings of Annual Meetings of the International Association of Public Employment Services.

- No. 192. First, Chicago, December 19 and 20, 1913; second, Indianapolis, September 24 and 25, 1914
third, Detroit, July 1 and 2, 1915.
- No. 220. Fourth, Buffalo, N. Y., July 20 and 21, 1916.
- No. 311. Ninth, Buffalo, N. Y., September 7-9, 1921.
- No. 337. Tenth, Washington, D. C., September 11-13, 1922.
- No. 355. Eleventh, Toronto, Canada, September 4-7, 1923.
- No. 400. Twelfth, Chicago, Ill., May 19-23, 1924.
- No. 414. Thirteenth, Rochester, N. Y., September 15-17, 1925.
- No. 478. Fifteenth, Detroit, Mich., October 25-28, 1927.
- No. 501. Sixteenth, Cleveland, Ohio, September 18-21, 1928.
- No. 538. Seventeenth, Philadelphia, Pa., September 24-27, 1929; eighteenth, Toronto, Canada,
September 9-12, 1930.

Productivity of Labor.

- No. 326. Productivity costs in the common-brick industry. [1924.]
- No. 360. Time and labor costs in manufacturing 100 pairs of shoes, 1923.
- No. 407. Labor cost of production and wages and hours of labor in the paper box-board industry.
[1926.]
- No. 412. Wages, hours, and productivity in the pottery industry, 1925.
- No. 441. Productivity of labor in the glass industry. [1927.]
- No. 474. Productivity of labor in merchant blast furnaces. [1928.]
- No. 475. Productivity of labor in newspaper printing. [1929.]
- No. 550. Labor productivity in cargo handling and longshore labor conditions. [1932.]

Retail Prices and Cost of Living.

- *No. 121. Sugar prices, from refiner to consumer. [1913.]
- *No. 130. Wheat and flour prices, from farmer to consumer. [1913.]
- *No. 164. Butter prices, from producer to consumer. [1914.]
- No. 170. Foreign food prices as affected by the war. [1915.]
- No. 357. Cost of living in the United States. [1924.]
- No. 369. The use of cost-of-living figures in wage adjustments. [1925.]
- No. 495. Retail prices, 1899 to 1928.

Safety Codes.

- *No. 331. Code of lighting: Factories, mills, and other work places.
- No. 336. Safety code for the protection of industrial workers in foundries.
- No. 350. Rules for governing the approval of headlighting devices for motor vehicles.
- *No. 351. Safety code for the construction, care, and use of ladders.
- No. 375. Safety code for laundry machinery and operations.
- No. 382. Code of lighting school buildings.
- No. 410. Safety code for paper and pulp mills.
- No. 430. Safety code for power presses and foot and hand presses.
- No. 433. Safety codes for the prevention of dust explosions.
- No. 447. Safety code for rubber mills and calenders.
- No. 451. Safety code for forging and hot-metal stamping.
- No. 463. Safety code for mechanical power-transmission apparatus—first revision
- No. 509. Textile safety code.
- No. 512. Code for identification of gas-mask canisters.
- No. 519. Safety code for woodworking plants, as revised, 1830.
- No. 527. Safety code for the use, care, and protection of abrasive wheels.

Vocational and Workers' Education.

- *No. 159. Short-unit courses for wage earners, and a factory school experiment. [1915.]
- *No. 162. Vocational education survey of Richmond, Va. [1915.]
- *No. 199. Vocational education survey of Minneapolis, Minn. [1917.]
- No. 271. Adult working-class education in Great Britain and the United States. [1920.]
- No. 459. Apprenticeship in building construction. [1928.]

Wages and Hours of Labor.

- *No. 146. Wages and regularity of employment and standardization of piece rates in the dress and waist industry of New York City. [1914.]
- *No. 147. Wages and regularity of employment in the cloak, suit, and skirt industry. [1914.]
- No. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
- No. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
- *No. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
- No. 204. Street-railway employment in the United States. [1917.]
- No. 218. Wages and hours of labor in the iron and steel industry, 1907 to 1915, with a glossary of occupations.
- No. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
- No. 265. Industrial survey in selected industries in the United States, 1919.
- No. 297. Wages and hours of labor in the petroleum industry, 1920.
- No. 356. Productivity costs in the common-brick industry. [1924.]
- No. 358. Wages and hours of labor in the automobile-tire industry, 1923.
- No. 360. Time and labor costs in manufacturing 100 pairs of shoes, 1923.
- No. 365. Wages and hours of labor in the paper and pulp industry, 1923.
- No. 394. Wages and hours of labor in metalliferous mines, 1924.
- No. 407. Labor cost of production and wages and hours of labor in the paper box-board industry. [1926.]
- No. 412. Wages, hours, and productivity in the pottery industry, 1925.
- No. 416. Hours and earnings in anthracite and bituminous coal mining, 1922 and 1924.
- No. 472. Wages and hours of labor in the slaughtering and meat-packing industry, 1927.
- No. 476. Union scales of wages and hours of labor, 1927. [Supplement to Bulletin 457.]
- No. 484. Wages and hours of labor of common street laborers, 1928.
- No. 487. Wages and hours of labor in woolen and worsted goods manufacturing, 1910 to 1928.
- No. 497. Wages and hours of labor in the lumber industry in the United States, 1928.
- No. 499. History of wages in the United States from colonial times to 1928.
- No. 502. Wages and hours of labor in the motor-vehicle industry, 1928.
- No. 503. Wages and hours of labor in the men's clothing industry, 1911 to 1928.
- No. 504. Wages and hours of labor in the hosiery and underwear industries, 1907 to 1928.
- No. 513. Wages and hours of labor in the iron and steel industry, 1920.
- No. 514. Pennsylvania Railroad wage data. From Report of Joint Fact Finding Committee in wage negotiations in 1927.

Wages and Hours of Labor—Continued.

- No. 516. Hours and earnings in bituminous-coal mining, 1929.
- No. 522. Wages and hours of labor in foundries and machine shops, 1929.
- No. 523. Hours and earnings in the manufacture of airplanes and aircraft engines, 1929.
- No. 525. Wages and hours of labor in the Portland cement industry, 1929.
- No. 526. Wages and hours of labor in the furniture industry, 1910 to 1929.
- No. 532. Wages and hours of labor in the cigarette-manufacturing industry, 1930.
- No. 533. Wages and hours of labor in woolen and worsted goods manufacturing, 1910 to 1930.
- No. 534. Labor conditions in the Territory of Hawaii, 1929-1930.
- No. 535. Wages and hours of labor in the slaughtering and meat-packing industry, 1929.
- No. 537. Wages and hours of labor in the dyeing and finishing of textiles, 1930.
- No. 539. Wages and hours of labor in cotton-goods manufacturing, 1910 to 1930.
- No. 540. Union scales of wages and hours of labor, May 15, 1930.
- No. 546. Wages and hours in rayon and other synthetic textile manufacturing, 1930. (In press.)
- No. 547. Wages and hours in cane-sugar refining industry, 1930.
- No. 551. Wages and hours of labor in the boot and shoe industry, 1910 to 1930. (In press.)

Welfare Work.

- *No. 123. Employers' welfare work. [1913.]
- No. 222. Welfare work in British munitions factories. [1917.]
- *No. 250. Welfare work for employees in industrial establishments in the United States. [1919.]
- No. 458. Health and recreation activities in industrial establishments, 1926.

Wholesale Prices.

- No. 284. Index numbers of wholesale prices in the United States and foreign countries. [1921.]
- No. 453. Revised index numbers of wholesale prices, 1923 to July, 1927.
- No. 543. Wholesale price, 1930.

Women and Children in Industry.

- No. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia. [1913.]
- *No. 117. Prohibition of night work of young persons. [1913.]
- *No. 118. Ten-hour maximum working-day for women and young persons. [1913.]
- No. 119. Working hours of women in the pea canneries of Wisconsin. [1913.]
- *No. 122. Employment of women in power laundries in Milwaukee. [1913.]
- *No. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories. [1914.]
- *No. 167. Minimum-wage legislation in the United States and foreign countries. [1915.]
- *No. 175. Summary of the report on condition of woman and child wage earners in the United States. [1915.]
- *No. 176. Effect of minimum-wage determinations in Oregon. [1915.]
- *No. 180. The boot and shoe industry in Massachusetts as a vocation for women. [1915.]
- *No. 182. Unemployment among women in department and other retail stores of Boston, Mass. [1916.]
- No. 193. Dressmaking as a trade for women in Massachusetts. [1916.]
- No. 215. Industrial experience of trade-school girls in Massachusetts. [1917.]
- *No. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children. [1918.]
- *No. 223. Employment of women and juveniles in Great Britain during the war. [1917.]
- No. 253. Women in the lead industries. [1919.]
- No. 467. Minimum wage legislation in various countries. [1928.]

Workmen's Insurance and Compensation (including laws relating thereto).

- *No. 101. Care of tuberculous wage earners in Germany. [1912.]
- *No. 102. British national insurance act, 1911.
- No. 103. Sickness and accident insurance law in Switzerland. [1912.]
- No. 107. Law relating to insurance of salaried employees in Germany. [1913.]
- *No. 155. Compensation for accidents to employees of the United States. [1914.]
- *No. 212. Proceedings of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions, Washington, D. C., December 5-9, 1916.
- *No. 243. Workmen's compensation legislation in the United States and foreign countries, 1917 and 1918.
- No. 301. Comparison of workmen's compensation insurance and administration. [1922.]
- No. 312. National health insurance in Great Britain, 1911 to 1921.
- No. 379. Comparison of workmen's compensation laws of the United States as of January 1, 1925.
- No. 477. Public-service retirement systems, United States and Europe. [1929.]
- No. 496. Workmen's compensation legislation of the United States and Canada as of January 1, 1929. (With text of legislation enacted in 1927 and 1928.)
- No. 529. Workmen's compensation legislation of the Latin American countries. [1930.]

Miscellaneous series.

- *No. 174. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915.
- No. 208. Profit sharing in the United States. [1916.]
- No. 242. Food situation in central Europe, 1917.
- No. 254. International labor legislation and the society of nations. [1919.]
- No. 268. Historical survey of international action affecting labor. [1920.]
- No. 282. Mutual relief associations among Government employees in Washington, D. C. [1921.]
- No. 319. The Bureau of Labor Statistics: Its history, activities, and organization. [1922.]
- No. 326. Methods of procuring and computing statistical information of the Bureau of Labor Statistics. [1923.]
- No. 342. International Seamen's Union of America: A study of its history and problems. [1923.]
- No. 346. Humanity in government. [1923.]
- No. 372. Convict labor in 1923.
- No. 386. Cost of American almshouses. [1925.]
- No. 398. Growth of legal-aid work in the United States. [1926.]
- No. 401. Family allowances in foreign countries. [1926.]
- No. 461. Labor organizations in Chile. [1928.]
- No. 462. Park recreation areas in the United States. [1928.]
- No. 465. Beneficial activities of American trade-unions. [1928.]
- No. 479. Activities and functions of a State department of labor. [1928.]
- No. 483. Conditions in the shoe industry in Haverhill, Mass., 1928.
- No. 489. Care of aged persons in the United States. [1929.]
- No. 491. Handbook of labor statistics: 1929 edition.
- No. 505. Directory of homes for the aged in the United States. [1929.]
- No. 506. Handbook of American trade-unions: 1929 edition.
- No. 518. Personnel research agencies: 1930 edition.
- No. 541. Handbook of labor statistics: 1931 edition.