

CHAPTER I: SUMMARY

The 1940 census data relating to the labor force, and to employment and unemployment, are not comparable with the data for gainful workers obtained in the censuses of 1930 and earlier years and the data on unemployment obtained in the 1930 census. In the 1940 census, the questions on these subjects were different from those asked in previous censuses, and different definitions were used. In order to make close comparisons between the data for 1940 and those for earlier census years, it is necessary to make adjustments for these differences.

This report presents estimates of the labor force by employment status, for 1940 and 1930, according to the 1940 census definitions. The estimates are presented for the United States as a whole, by sex and broad age groups. In addition to the adjustments in 1930 figures required to bring them into conformity with the 1940 definitions and procedures, certain adjustments have been made in the data from the 1940 census, in order to take account of errors in the 1940 employment status returns. Consequently, the figures for 1940 as well as those for 1930 that are shown here differ from those given in other census reports.

The estimates provide comparable data for two census years, showing trends in the size and composition of the labor force, and relationships between unemployment of workers and their personal characteristics. Although estimates of the labor force according to the 1940 definition have not been made for 1920 and earlier years, the data presented here make possible a fairly exact analysis of labor force trends during a number of decades prior to 1940. The gainful worker statistics for 1930 and earlier years are based on similar definitions and procedures, and thus provide a series of approximately comparable figures.¹ The estimates and adjustments made in this report provide a means of transition at the year 1930 from the gainful worker level to the labor force level. For example, one can use the gainful worker statistics to measure increases or decreases between 1920 and 1930, and one can continue the trend

by using the labor force estimates to measure the increases or decreases between 1930 and 1940.

ADJUSTED LABOR FORCE FOR 1940

The 1940 census showed 52,789,000 persons 14 years old and over in the labor force. This figure represents persons who were reported as at work, on public emergency work, seeking work, or as having a job during the week of March 24 to 30, 1940. It does not include an estimated total of 103,000 persons on public emergency work (other than the NYA Student Work Program) who were returned, contrary to instructions, as not in the labor force. Nor does it include any persons for whom employment status was not reported, although it is estimated that 529,000 such persons would have been classified as in the labor force if full information had been obtained. On the other hand, it is estimated that the figure includes 122,000 youths working on NYA Student Work projects who were reported as in the labor force. Although these were in the labor force according to the 1940 census definition, they should be excluded for purposes of comparison with data for 1930 and other dates, because most of them probably would not have been in the labor force under normal conditions, if the NYA Student Work Program had not been in operation.

Adding the estimated number of emergency workers (other than NYA student workers) improperly reported as not in the labor force and the number of persons with employment status not reported who were actually in the labor force, and deducting the NYA student workers who were reported as in the labor force, results in an estimated increase of 510,000 in the labor force reported for 1940. Thus the adjusted figure for the total labor force in 1940 (excluding persons on the NYA Student Work Program) is 53,299,000.

Adjusted figures for persons in the labor force in 1940, by age and sex, are shown in table 1.

TABLE 1.—PERSONS IN THE LABOR FORCE, 1940 AND 1930, AND GAINFUL WORKERS, 1930 AND 1900, BY AGE AND SEX, FOR THE UNITED STATES

(Figures in thousands. Statistics for 1940 exclude persons on the NYA Student Work Program; those for 1930 and 1900 include persons of unknown age, distributed in proportion to the age distribution of persons reported as 14 years old and over)

AGE AND SEX	1940			1930					1900		
	Popu- lation	Adjusted labor force		Popu- lation	Estimated labor force		Gainful workers		Popu- lation	Gainful workers	
		Number	Percent		Number	Percent	Number	Percent		Number	Percent
Total, 14 years and over.....	101,103	53,299	52.7	89,101	47,404	53.2	48,595	54.5	51,438	28,282	55.0
Male, 14 years and over.....	50,554	40,284	79.7	45,088	37,008	82.1	37,916	84.1	26,414	23,168	87.7
14 to 19 years.....	7,398	2,819	38.4	6,972	2,795	40.1	2,865	41.1	4,566	2,905	63.6
20 to 24 years.....	5,692	5,085	88.5	5,343	4,747	88.8	4,803	89.9	3,642	3,389	91.7
25 to 44 years.....	19,687	18,817	95.6	18,260	17,498	95.8	17,792	97.4	11,152	10,784	96.3
45 to 64 years.....	13,371	11,954	89.4	11,184	10,173	91.0	10,516	94.0	5,491	5,123	93.3
65 years and over.....	4,406	1,859	42.2	3,329	1,795	53.9	1,940	58.3	1,563	1,067	68.3
Female, 14 years and over.....	50,549	18,015	25.7	44,013	10,396	23.6	10,679	24.3	25,024	5,114	20.4
14 to 19 years.....	7,341	1,395	19.0	6,977	1,591	22.8	1,592	22.8	4,594	1,231	26.8
20 to 24 years.....	5,895	2,688	45.6	5,539	2,316	41.8	2,350	42.4	3,721	1,194	32.1
25 to 44 years.....	19,987	6,107	30.6	17,931	4,404	24.6	4,552	25.4	10,229	1,850	18.1
45 to 64 years.....	12,713	2,550	20.1	10,254	1,842	18.0	1,918	18.7	4,950	700	14.1
65 years and over.....	4,613	275	6.0	3,312	243	7.3	267	8.1	1,530	189	9.1

¹ Estimated.

¹ For a precise analysis, the gainful worker figures obtained in some of the censuses prior to 1930 require adjustments to render them comparable with the 1930 figures. These adjustments are required because of changes in the census date and because of minor variations in the instructions to enumerators, or other factors, which led to relative underenumeration or overenumeration of gainful workers, especially in agriculture, in certain years. See the reports of the Fourteenth Census (1920), Volume IV, pp. 18-24; Thirteenth Census (1910), Volume IV, pp. 26-29; Twelfth Census (1900), Special Reports, Occupations, pp. lxxv-lxxiii. See also Sixteenth Census (1940), "Comparative Occupation Statistics for the United States, 1870 to 1940," by Dr. Alba M. Edwards.

ADJUSTED EMPLOYMENT STATUS OF THE 1940 LABOR FORCE

The adjustments in the 1940 labor force figures were made for each employment status category separately, by age and sex. Public emergency workers on WPA, CCC, NYA Out-of-School, or State or local projects who were returned in the census as employed, seeking work, or not in the labor force were subtracted

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from these categories and added to the group "On public emergency work." Youths attending school and working part-time on NYA Student Work projects who were reported in categories in the labor force were subtracted from these categories and added to the number reported as not in the labor force. The estimated adjustment for persons for whom employment status was not reported was distributed into the groups employed, seeking work, and on public emergency work.

The adjusted distribution of the 1940 labor force by employment status, age, and sex is shown in table 2. These figures indicate a total of 7,961,000 unemployed workers in 1940, made up of 3,042,000 public emergency workers (excluding 472,000 youths on the NYA Student Work Program²), 4,132,000 experienced workers seeking work, and 787,000 new workers.

TABLE 2.—ADJUSTED DISTRIBUTION OF PERSONS IN THE LABOR FORCE BY EMPLOYMENT STATUS, BY AGE AND SEX, FOR THE UNITED STATES: 1940

(Figures in thousands. Figures exclude persons on the NYA Student Work Program)

AGE AND SEX	Total in labor force	Em- ployed (exc. emerg. work)	UNEMPLOYED			
			Total	On public emergency work	Seeking work	
					Experi- enced workers	New workers
Total, 14 years and over.....	53,299	45,338	7,961	3,042	4,132	787
Male, 14 years and over.....	40,284	34,099	6,185	2,498	3,215	472
14 to 19 years.....	2,819	1,782	867	318	246	363
20 to 24 years.....	5,035	5,861	1,074	391	542	141
25 to 44 years.....	18,817	16,458	2,361	1,017	1,319	25
45 to 64 years.....	11,954	10,256	1,698	728	969	3
65 years and over.....	1,659	1,674	185	46	139	-
Female, 14 years and over.....	13,015	11,239	1,776	544	917	315
14 to 19 years.....	1,395	961	434	71	161	202
20 to 24 years.....	2,688	2,263	425	124	218	83
25 to 44 years.....	6,107	5,515	592	195	372	26
45 to 64 years.....	2,550	2,243	307	148	154	5
65 years and over.....	275	257	18	6	12	-

ESTIMATED LABOR FORCE IN 1930

The number of gainful workers 14 years old and over, as reported in the 1930 census, was 48,595,000. This figure represents persons reported as having a gainful occupation, in which they earned money or a money equivalent or assisted in the production of marketable goods, regardless of their activity at the time of the census. Thus the statistics for gainful workers were based on the occupation returns, whereas the 1940 labor force data were based on direct questions regarding activity during a particular week.

It is estimated that the gainful worker figure includes 1,824,000 persons who would not have been classified as in the labor force if the 1940 census procedures had been used. This estimate is made up of the following components:

(a) An estimate of 1,156,000 seasonal workers neither working nor seeking work at the time of the census, who reported occupations in 1930 but who would have been excluded from the 1940 labor force;

(b) An estimate of 196,000 employed inmates of penal and mental institutions and homes for the aged, infirm, and needy, who reported occupations pursued within the institution in 1930, but who would have been excluded from the labor force, regardless of their activity, if the 1940 census procedures had been followed; and

(c) An estimate of 472,000 retired and disabled persons who reported their former occupations at the 1930 census, but who would have been excluded from the 1940 labor force.

On the other hand, the 1930 figure for gainful workers does not include an estimated total of 211,000 inexperienced persons seeking their first jobs, that is, "new workers," who would have been included in the labor force by 1940 census methods. Nor does it include persons who were actually gainful workers according to the 1930 census definition, but who were not

²It is estimated that this total for the NYA Student Work Program comprised 208,000 boys and 203,000 girls 14 to 19 years old, and 31,000 young men and 30,000 young women 20 to 24 years old.

counted as such because they failed to report their occupations. The estimated number in the latter group is 422,000.

Deducting the groups included in gainful workers but excluded from the 1940 labor force, and adding the adjustments for new workers and for persons who failed to report their occupations, results in a net decrease of 1,191,000 in the 1930 figure for gainful workers. Thus the estimated number of persons 14 years old and over in the labor force in 1930, according to the 1940 census definition, was 47,404,000.

Estimates of the 1930 labor force, by age and sex, are shown in table 1.

ESTIMATED EMPLOYMENT STATUS OF THE 1930 LABOR FORCE

In the 1930 census, gainful workers were asked to report whether they were at work "yesterday," that is, on the last regular working day before the enumerator called. For those not at work, unemployment schedules were filled out, showing, among other things, whether they had a job, whether they were able to work, whether they were looking for work, whether they lost pay because they were not at work, and the reason for their idleness. On the basis of this information, gainful workers not at work "yesterday" were classified into the following seven categories:

Class A.—Persons out of a job, able to work, and looking for a job

Class B.—Persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle

Class C.—Persons out of a job and unable to work

Class D.—Persons having jobs but idle on account of sickness or disability

Class E.—Persons out of a job and not looking for work

Class F.—Persons having jobs but voluntarily idle, without pay

Class G.—Persons having jobs and drawing pay, though not at work (on vacation, etc.)

In the 1940 census all persons 14 years old and over were asked to state whether they were at work for pay or profit in private or nonemergency government work during the week of March 24 to 30, 1940. If not, they were asked whether they were engaged in public emergency work during that week. If neither at nonemergency work nor on public emergency work, they were asked whether they were seeking work during the census week; and if not seeking work they were asked whether they had a job. On the basis of the answers to these questions, persons in the labor force were classified into the following employment status categories: (a) "Employed (except on public emergency work)," including those reported as at work and those with a job but not at work; and (b) unemployed, including those "On public emergency work" and those "Seeking work." The category "Seeking work" was subdivided into experienced workers and new workers, the latter being defined as persons who had not previously worked at a full time job for one month or more.

In order to obtain data on employment status for the 1930 labor force on a basis comparable to that of the 1940 census, it was necessary to estimate, for persons reported in 1930 as at work "yesterday," and for each of the 1930 unemployment classes, the numbers who would have been classified as employed and unemployed if the 1940 census procedures had been used. In addition, it was necessary to make similar estimates for the group of persons not classified as gainful workers in 1930 who would have been classified as in the labor force by 1940 census procedures.

Since public emergency work programs were virtually nonexistent in 1930, the category "on public emergency work" is not shown in the employment status classification for 1930. No attempt has been made to estimate separately the groups "at work" and "with a job but not at work," which are combined to form the category "employed" in the 1940 census classification.

The estimated distribution of the 1930 labor force by employment status, age, and sex is shown in table 3. These figures indicate a total of 2,451,000 unemployed workers in 1930,

according to the 1940 census definition, including 2,238,000 experienced workers seeking work and 213,000 new workers. An estimated 2,000 new workers were reported as gainful workers.

TABLE 3.—ESTIMATED DISTRIBUTION OF PERSONS IN THE LABOR FORCE BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution according to 1940 census classification)

AGE AND SEX	Total in labor force	Employed	UNEMPLOYED (SEEKING WORK)		
			Total	Experienced workers	New workers
Total, 14 years and over	47,404	44,953	2,451	2,238	213
Male, 14 years and over....	37,008	34,997	2,011	1,885	126
14 to 19 years.....	2,795	2,575	220	115	105
20 to 24 years.....	4,747	4,409	338	317	21
25 to 44 years.....	17,498	16,652	846	846	-
45 to 64 years.....	10,173	9,845	528	528	-
65 years and over.....	1,795	1,735	79	79	-
Female, 14 years and over..	10,396	9,956	440	353	87
14 to 19 years.....	1,591	1,445	146	71	75
20 to 24 years.....	2,315	2,222	94	82	12
25 to 44 years.....	4,404	4,284	140	140	-
45 to 64 years.....	1,842	1,785	56	56	-
65 years and over.....	245	239	4	4	-

TRENDS IN THE LABOR FORCE BY AGE AND SEX

The adjusted labor force total for 1940 represents 52.7 percent of the population 14 years old and over, whereas the estimated percentage for 1930 is 53.2 percent (table 1). The slight decrease in this percentage was the net result of a larger decline in the percentage of males in the labor force (from 82.1 percent in 1930 to 79.7 percent in 1940), partially offset by a rise in the percentage of females (from 23.6 percent to 25.7 percent).

The decreasing percentage of men in the labor force was characteristic of all age classes, but it was especially marked in the case of youths 14 to 19 years old and men 65 years and over. For boys 14 to 19 years old, the percentage fell from 40.1 percent in 1930 to 35.4 percent in 1940. For men 65 years old and over, the decline was even greater, from 53.9 percent to 42.2 percent. The proportion of men between the ages of 20 and 64 in the labor force decreased only slightly during the decade.

The rise in the proportion of female workers was limited to the age classes 20 to 64 years. In each of the age groups in this range, the percentage of women in the labor force increased markedly. For girls 14 to 19 years old and for women 65 and over, on the other hand, the percentages in the labor force decreased.

In order to show the relationship of these changes between 1930 and 1940 to the trends in earlier decades, unadjusted statistics for gainful workers in 1900 and 1930 are included in table 1.

The sharp decline in the proportion of workers in the population 14 to 19 years old was a continuation of the long-term decline in the employment of children. This trend is associated with advancing educational standards and with the extension of child-labor legislation.

The rising percentages of women in the labor force between the ages of 20 and 64 were in accordance with the long-term increase in the employment of women, which has continued for more than half a century. Increased participation of women in the labor market has been made possible in part by the lightening of housekeeping duties which has resulted from the decline in the birth rate, the trend toward smaller homes, and the increased use of washing machines, vacuum cleaners, and other mechanical appliances in the home. Another important factor in this trend is the increased proportion of the population living in cities, where employment opportunities for women are much greater than in rural areas. Between 1930 and 1940, the influx of women into the labor force was even more rapid than in earlier decades, especially in the age groups 20 to 34 years.

The reduction in the proportion of workers among persons 65 years old and over was due to an acceleration of the long-term trend toward earlier retirement. The introduction of the social security system during the decade 1930 to 1940 was probably responsible for the acceleration of this trend.

EMPLOYMENT STATUS BY AGE AND SEX

Although there was much less unemployment at the time of the 1930 census than in 1940, the statistics on employment status of the labor force from the two censuses reveal certain similarities in the incidence of unemployment by age and sex.

At the time of the census both in 1930 and in 1940, unemployment was most common among youths under 25 years old, particularly those under 20 (table 4). Even in a time of relatively full employment, such as the early part of 1930, a considerable amount of unemployment is likely to be found among young people in the process of leaving school and entering the labor force. Many of the unemployed young men and women were new workers who were handicapped in trying to gain a foothold in the labor market by lack of work experience.

TABLE 4.—ESTIMATED PERCENTAGE OF LABOR FORCE UNEMPLOYED, BY AGE AND SEX, FOR THE UNITED STATES: 1940 AND 1930

(Figures for 1940 exclude persons on the NYA Student Work Program)

AGE AND SEX	1940				1930		
	Total unem- ployed	On public emer- gency	Seeking work Ex- peri- enced wkrs.	New work- ers	Total unem- ployed (seek- ing work)	Ex- peri- enced wkrs.	New work- ers
Total 14 years and over	14.9	5.7	7.8	1.5	5.2	4.7	0.4
Male, 14 years and over....	15.4	6.2	8.0	1.2	5.4	5.1	0.3
14 to 19 years.....	33.1	12.1	9.4	11.6	7.9	4.1	3.8
20 to 24 years.....	21.3	7.8	10.8	2.8	7.1	6.7	0.4
25 to 44 years.....	12.5	5.4	7.0	0.1	4.8	4.8	-
45 to 64 years.....	14.2	6.1	8.1	-	5.2	5.2	-
65 years and over.....	10.0	2.5	7.5	-	4.4	4.4	-
Female, 14 years and over..	13.6	4.2	7.0	2.4	4.2	3.4	0.8
14 to 19 years.....	31.1	5.1	11.5	14.5	9.2	4.5	4.7
20 to 24 years.....	15.8	4.6	8.1	3.1	4.1	3.5	0.5
25 to 44 years.....	9.7	3.2	6.1	0.4	3.2	3.2	-
45 to 64 years.....	12.0	5.8	6.0	0.2	3.0	3.0	-
65 years and over.....	6.5	2.2	4.4	-	1.6	1.6	-

The unemployment problem was also relatively serious for workers approaching the age of retirement. Workers in the age group 45 to 64 years tended to have higher proportions unemployed in both 1930 and 1940 than workers in the next younger age group. If they were available separately, the statistics for workers 55 to 64 years old would probably show a higher proportion unemployed than for workers 45 to 54.

The incidence of unemployment among inexperienced youths and among persons handicapped by old age and disability was especially pronounced in 1940, when the total volume of unemployment was large and the competition for jobs was keen. In the more prosperous year 1930 the proportion of the labor force unemployed tended to vary less among the age groups.

Although in both 1930 and 1940 the proportion of the labor force unemployed was lower for men and women 65 years old and over than for persons in the younger age groups, this difference cannot be interpreted to mean that employment opportunities were most favorable for aged persons. Workers who lose their jobs at ages over 65 tend to retire from the labor force rather than to undertake new enterprises or to search for jobs in competition with younger workers. Thus at the upper limit of the age scale, the labor force tends to be composed almost entirely of employed workers, many of whom are self-employed and not subject to the risk of being dismissed.

Both in 1930 and in 1940 the proportion of the labor force unemployed was lower for women than for men, partly because women are more likely to retire from the labor force on losing their jobs than are men.

CHAPTER II: METHODS OF ADJUSTING THE 1940 LABOR FORCE BY EMPLOYMENT STATUS, AGE, AND SEX

The revised 1940 labor force figures by employment status, age, and sex, which are presented in this report, were estimated by means of three adjustments in the 1940 census statistics. In the first place, the estimated number of public emergency workers (except NYA student workers) who were incorrectly reported in the census was added to the figure for persons on public emergency work, and deducted from the figures for various other employment status categories. In the second place, the estimated number of youths on the NYA Student Work Program who were reported in each employment status category of the labor force was deducted from that category and added to the total for persons not in the labor force. In the third place, there was added to the figure for each employment status category an adjustment for the estimated number of persons actually in the labor force among those for whom employment status was not reported. Estimates of these adjustments in the total labor force are summarized in table 5, and are shown by employment status in table 9.

TABLE 5.—SUMMARY OF ADJUSTMENTS IN THE LABOR FORCE, BY AGE AND SEX, FOR THE UNITED STATES: 1940
(Figures in thousands)

AGE AND SEX	Re-ported in labor force	ESTIMATED ADJUSTMENTS				Ad-justed labor force
		Net ad-just-ment	Emer-gency work-ers ¹	NYA student workers	Omitted entries	
Total, 14 years and over....	52,769	+510	+103	-122	+529	53,299
Male, 14 years and over.....	39,944	+340	+68	-62	+334	40,284
14 to 19 years.....	2,547	+72	+44	-50	+78	2,619
20 to 24 years.....	5,012	+23	+13	-12	+22	5,035
25 to 44 years.....	18,698	+124	+5	-	+119	18,817
45 to 64 years.....	11,854	+90	+5	-	+85	11,954
65 years and over.....	1,828	+31	+1	-	+30	1,859
Female, 14 years and over.....	12,845	+170	+35	-60	+195	13,015
14 to 19 years.....	1,377	+18	+8	-50	+60	1,395
20 to 24 years.....	2,660	+28	+11	-10	+27	2,688
25 to 44 years.....	6,027	+80	+6	-	+74	6,107
45 to 64 years.....	2,511	+39	+9	-	+30	2,550
65 years and over.....	270	+5	+1	-	+4	275

¹ Except NYA student workers.

The methods that were used in estimating the adjustments are described in the paragraphs which follow. There were probably other small groups of persons whose employment status was incorrectly reported, but adjustments were not computed for these, because it is believed that such additional adjustments would not significantly affect the results.

PERSONS ON PUBLIC EMERGENCY WORK

The true number of persons on public emergency work at the time of the census (excluding those on the NYA Student Work Program) was about 3,042,000. According to the official reports of the Federal agencies, there were 2,271,000 persons assigned to the WPA-financed projects on March 27, 1940; 300,000 persons in CCC camps during March 1940 (average number during the month); and 335,000 persons on the NYA Out-of-School Work Program during March 1940 (number of different persons during the month). It is estimated that there were about 136,000 persons assigned to State and local work-relief activities at that time.

The number of persons reported in the census as on public emergency work was only 2,529,000, including those youths on the NYA Student Work Program who were reported by enumerators

as on public emergency work. By the methods described below, it was estimated that the census figure included only 100,000 NYA student workers, or about one-fifth of the total number of youths engaged in the Student Work Program. The remaining four-fifths of the NYA student workers were classified for the most part as in school and not in the labor force, though a few were reported as employed or seeking work. In the majority of the cases, their part-time employment on NYA projects was overlooked by the enumerator or the respondent.

Thus 2,429,000 of the 3,042,000 public emergency workers other than NYA student workers were classified in the census as on public emergency work, and 613,000 were erroneously included in the categories employed, seeking work, and not in the labor force, or had no employment status report. In order to adjust for this error and to eliminate the NYA student workers from the labor force, it was necessary to estimate, for each sex and age group, the actual numbers of NYA student workers and other public emergency workers and the number classified in each employment status category in the census. These estimates were made separately for persons on each emergency work program, by the methods described below.

The distribution by age and sex of the WPA workers was estimated on the basis of data appearing in the 1939 and 1940 annual reports of the Work Projects Administration.¹ According to the 1940 report, 16.6 percent of the workers employed on projects operated by WPA on March 27, 1940, were women. On this basis the total of 2,271,000 WPA workers was divided into 1,894,000 men and 377,000 women. It was assumed that the age distributions of these persons were proportional to those shown in the 1939 report for men and women on WPA payrolls in February 1939, the date nearest that of the census for which age data are available.

The 300,000 men in CCC camps at the time of the census included about 25,000 veterans, enrolled through the cooperation of the Veterans' Administration. It was assumed that all of the veteran group were between 45 and 64 years old. The age distribution of the remaining 275,000 was assumed to be proportional to that of junior enrollees accepted by the CCC during the fiscal year ended June 30, 1940.²

The numbers of males and females employed on the NYA Out-of-School Work Program and on the Student Work Program were obtained from unpublished data furnished to the Bureau of the Census by the National Youth Administration. That agency also furnished results of sample surveys which made it possible to estimate the number of NYA workers in each age group. For the Out-of-School Work Program, the age data used were dated February 1939; for the Student Work Program, they related to the academic year 1939-1940.

The age and sex distribution of emergency workers employed by State and local governments was assumed to be proportional to that of WPA workers, except that the proportions of older workers were assumed to be somewhat greater among State and local emergency workers.

As the next step in the adjustment procedure, it was necessary to estimate for each agency program the number of emergency workers who were classified in each employment status category in the census, by age and sex.

For WPA and NYA workers, these estimates were based on the results of a sample investigation of the actual employment status entries on the census schedules for emergency workers in six cities in various parts of the United States.³ The

¹ Federal Works Agency, Work Projects Administration: Report on Progress of the WPA Program, June 30, 1939, p. 102, and June 30, 1940, p. 40.

² Federal Security Agency: Annual Report of the Director of the Civilian Conservation Corps, 1940, p. 16.

³ Ogden, Utah; Pawtucket, R. I.; Sioux Falls, S. Dak.; Vicksburg, Miss.; Washington, D. C.; and Wilmington, Del.

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Work Projects Administration and the National Youth Administration supplied lists of WPA workers, NYA out-of-school workers, and NYA student workers on their payrolls in each of these cities at the time of the census. The names on the lists were matched with the entries on the census schedules, and the employment status as reported by the census enumerator was noted, together with age, sex, and other information. In this manner, it was possible to determine the proportion of persons actually on WPA and NYA payrolls at the time of the census who were returned in the census as emergency workers, and the proportion returned in each other employment status category, by age and sex. It was assumed that the proportions for the United States as a whole were the same as those found for the six selected cities for which the investigation was made.

For CCC and State and local relief workers, an investigation of the type described above was not possible. In the case of CCC workers it was assumed that the proportion classified in the census in each employment status category was the same as that for male NYA out-of-school workers in each corresponding age group. For State and local emergency workers it was assumed that the proportions were the same as those for WPA workers, by age and sex.

TABLE 6.—ESTIMATED ADJUSTMENTS FOR PERSONS ON PUBLIC EMERGENCY WORK (EXCEPT NYA STUDENT WORKERS) WHOSE EMPLOYMENT STATUS WAS INCORRECTLY REPORTED IN THE CENSUS, BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1940

(Figures in thousands)

AGE AND SEX	IN LABOR FORCE				Not in labor force
	Total	Employed (exc. on emergency work)	On public emergency work	Seeking work, experienced	
Total, 14 years and over.....	+103	-257	+593	-233	-103
Male, 14 years and over.....	+68	-158	+457	-191	-68
14 to 19 years.....	+44	-43	+140	-53	-44
20 to 24 years.....	+13	-47	+103	-43	-13
25 to 44 years.....	+5	-77	+142	-60	-5
45 to 64 years.....	+5	-30	+68	-33	-5
65 years and over.....	+1	-1	+4	-2	-1
Female, 14 years and over.....	+35	-59	+136	-42	-35
14 to 19 years.....	+8	-9	+26	-9	-8
20 to 24 years.....	+11	-17	+44	-16	-11
25 to 44 years.....	+6	-21	+37	-10	-6
45 to 64 years.....	+9	-12	+28	-7	-9
65 years and over.....	+1	-	+1	-	-1

On the basis of the proportions thus established, estimates were made of the numbers to be added to the census figures for persons on public emergency work and subtracted from each other employment status category in order to correct for the errors in classification of WPA, NYA out-of-school, CCC, and State and local emergency workers. These adjustments are shown by age and sex in table 6. In the same way estimates were made of the numbers to be added to the census figures for persons not in the labor force and subtracted from each employment status category of persons in the labor force in order to ad-

TABLE 7.—ESTIMATED ADJUSTMENTS FOR PERSONS ON THE NYA STUDENT WORK PROGRAM REPORTED AS IN THE LABOR FORCE, BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1940

(Figures in thousands)

AGE AND SEX	IN LABOR FORCE				Not in labor force
	Total	Employed (exc. on emergency work)	On public emergency work	Seeking work, experienced	
Total, 14 years and over.....	-122	-14	-100	-8	+122
Male, 14 years and over.....	-82	-7	-50	-5	+82
14 to 19 years.....	-50	-5	-41	-4	+50
20 to 24 years.....	-12	-2	-9	-1	+12
Female, 14 years and over.....	-60	-7	-50	-3	+60
14 to 19 years.....	-50	-5	-43	-2	+50
20 to 24 years.....	-10	-2	-7	-1	+10

just for youths on the NYA Student Work Program. These adjustments are shown in table 7. The adjustments shown in tables 6 and 7 do not include any adjustment for emergency workers whose employment status may not have been reported in the census. The latter adjustment is discussed below.

OMITTED EMPLOYMENT STATUS ENTRIES

The figures for persons in the labor force shown in the 1940 census reports include only persons specifically returned as employed, seeking work, or on public emergency work. There were 1,987,000 persons for whom employment status entries were lacking or were incomplete and could not be classified. About 20 percent of these were persons reported as not in the labor force but not assigned to any particular category of nonworkers, and 80 percent were persons for whom enumerators obtained no information or not enough to determine whether they were in the labor force. The number who would have been classified as in the labor force if full information had been obtained was estimated on the basis of a tabulation for a sample of the latter group according to sex, age, marital status, and school attendance. For each sex, age, marital status, and school attendance group, it was assumed that the proportion who were actually in the labor force was the same as the corresponding proportion for the population as a whole. The resulting adjustment was an addition of 529,000 to the 1940 census figures for persons in the labor force (table 8).

TABLE 8.—ESTIMATED ADJUSTMENTS IN THE LABOR FORCE FOR PERSONS WHOSE EMPLOYMENT STATUS WAS NOT REPORTED IN THE CENSUS, BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1940

(Figures in thousands)

AGE AND SEX	Total with employment status not reported	ADJUSTMENTS FOR NUMBER ESTIMATED TO BE IN THE LABOR FORCE					Estimated number not in labor force
		Total	Employed (exc. on emergency work)	On public emergency work	Seeking work		
					Experienced workers	New workers	
Total, 14 years and over..	1,987	+529	+443	+20	+46	+20	1,458
Male, 14 years and over....	822	+354	+276	+19	+29	+10	488
14 to 19 years.....	387	+78	+51	+9	+9	+9	289
20 to 24 years.....	75	+22	+15	+4	+2	+1	53
25 to 44 years.....	157	+119	+106	+4	+9	-	58
45 to 64 years.....	128	+65	+76	+2	+7	-	45
65 years and over.....	95	+30	+28	-	+2	-	65
Female, 14 years and over..	1,165	+195	+167	+1	+17	+10	970
14 to 19 years.....	386	+60	+43	-	+8	+9	326
20 to 24 years.....	120	+27	+23	+1	+2	+1	95
25 to 44 years.....	337	+74	+69	-	+5	-	263
45 to 64 years.....	215	+30	+28	-	+2	-	185
65 years and over.....	107	+4	+4	-	-	-	103

In order to construct an adjusted employment status distribution of the 1940 labor force, it was necessary to distribute these persons into the various employment status categories of the labor force.

The numbers of these persons to be classified as "on public emergency work" were estimated from the data obtained in the sample investigation of the errors in the reporting of employment status of persons on public emergency work, described above. These totaled 20,000 persons. The remaining 509,000 persons actually in the labor force for whom employment status was not reported were distributed among the categories "employed," "seeking work, experienced workers," and "seeking work, new workers," in each age and sex group, in proportion to the distribution of persons for whom employment status was reported. The resulting estimates of the number to be added to each employment status category of the labor force, as a correction for persons for whom employment status entries were omitted, are shown in table 8.

In table 9 all adjustments in the employment status distribution of the 1940 labor force are summarized for each age and sex group, and the revised 1940 distribution is presented.

ESTIMATES OF LABOR FORCE: 1940 AND 1930

TABLE 9.—ESTIMATED NET ADJUSTMENTS IN THE 1940 LABOR FORCE, BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1940

(Figures in thousands. Adjusted figures exclude persons on the NYA Student Work Program)

AGE AND SEX	Total in labor force	Employed (exc. on emergency work)	On public emergency work	SEEKING WORK		AGE AND SEX	Total in labor force	Employed (exc. on emergency work)	On public emergency work	SEEKING WORK	
				Experienced workers	New workers					Experienced workers	New workers
REPORTED IN LABOR FORCE						NET ADJUSTMENTS—Continued					
Total, 14 years and over.....	52,789	45,156	2,529	4,327	787	Female, 14 years and over.....	+170	+101	+87	-28	+10
Male, 14 years and over.....	39,944	34,028	2,072	3,382	462	14 to 19 years.....	+18	+29	-17	-3	+9
14 to 19 years.....	2,547	1,749	210	294	294	20 to 24 years.....	+28	+4	+38	-15	+1
20 to 24 years.....	5,012	3,995	293	584	140	25 to 44 years.....	+80	+48	+37	-5	-
25 to 44 years.....	18,693	16,427	871	1,370	25	45 to 64 years.....	+39	+16	+28	-5	-
45 to 64 years.....	11,864	10,210	656	995	3	65 years and over.....	+5	+4	+1	-	-
65 years and over.....	1,828	1,647	42	139	-	ADJUSTED LABOR FORCE					
Female, 14 years and over.....	12,845	11,138	457	945	305	Total, 14 years and over.....	53,299	45,338	3,042	4,132	787
14 to 19 years.....	1,377	932	88	164	193	Male, 14 years and over.....	40,284	34,099	2,498	3,215	472
20 to 24 years.....	2,660	2,259	86	233	62	14 to 19 years.....	2,619	1,752	318	246	303
25 to 44 years.....	6,027	5,467	158	377	25	20 to 24 years.....	5,035	3,961	391	542	141
45 to 64 years.....	2,511	2,227	120	159	5	25 to 44 years.....	18,817	16,456	1,017	1,319	25
65 years and over.....	270	253	5	12	-	45 to 64 years.....	11,954	10,256	726	959	3
NET ADJUSTMENTS						65 years and over.....	1,859	1,674	46	139	-
Total, 14 years and over.....	+510	+172	+513	-195	+20	Female, 14 years and over.....	13,015	11,239	544	917	315
Male, 14 years and over.....	+340	+71	+426	-167	+10	14 to 19 years.....	1,395	961	71	161	202
14 to 19 years.....	+72	+8	+108	-48	+9	20 to 24 years.....	2,668	2,263	124	218	83
20 to 24 years.....	+23	-34	+93	-42	+1	25 to 44 years.....	6,107	5,515	195	372	25
25 to 44 years.....	+124	+29	+146	-51	-	45 to 64 years.....	2,550	2,243	148	154	5
45 to 64 years.....	+90	+46	+70	-25	-	65 years and over.....	275	257	6	12	-
65 years and over.....	+31	+27	+4	-	-						

Chapter III: METHODS OF ESTIMATING THE 1930 LABOR FORCE BY AGE AND SEX

The estimates of the labor force in 1930 by age and sex which are presented in this report were made by adding to the 1930 census statistics for gainful workers, adjustments for new workers not counted as gainful workers and for omitted occupational entries, and subtracting adjustments for seasonal workers, inmates of institutions, and retired or disabled persons enumerated as gainful workers who would not have been included in the labor force in the 1940 census. Estimates of these adjustments are summarized in table 10. The methods that were used in making the estimates are described in the paragraphs which follow.

TABLE 10.—SUMMARY OF ADJUSTMENTS IN 1930 STATISTICS FOR GAINFUL WORKERS FOR COMPARISON WITH 1940 STATISTICS FOR THE LABOR FORCE, BY AGE AND SEX, FOR THE UNITED STATES

(Figures in thousands. Figures for gainful workers include persons of unknown age, distributed in proportion to the age distribution of persons reported as 14 years old and over)

AGE AND SEX	Re-ported as gain-ful work-ers	ESTIMATED ADJUSTMENTS						Esti-mated labor force
		Net ad-just-ment	Omitted en-tries	New work-ers	Sea-sonal work-ers	In-mates of in-stitu-tions	Re-tired and dis-abled	
Total, 14 and over	48,595	-1,191	+422	+211	-1,156	-196	-472	47,404
Male, 14 and over..	37,916	-908	+280	+125	-771	-172	-370	37,008
14 to 19 years.....	2,865	-70	+94	+104	-257	-11	-	2,795
20 to 24 years.....	4,803	-56	+53	+21	-102	-28	-	4,747
25 to 44 years.....	17,792	-294	+75	-	-172	-93	-104	17,468
45 to 64 years.....	10,516	-345	+48	-	-196	-36	-159	10,173
65 years and over....	1,940	-145	+10	-	-44	-4	-107	1,795
Female, 14 and over	10,679	-283	+142	+86	-385	-24	-102	10,396
14 to 19 years.....	1,592	-1	+62	+74	-135	-2	-	1,591
20 to 24 years.....	2,350	-34	+28	+12	-69	-5	-	2,316
25 to 44 years.....	4,552	-148	+34	-	-128	-10	-46	4,404
45 to 64 years.....	1,918	-76	+15	-	-50	-6	-35	1,842
65 years and over....	287	-24	+3	-	-5	-1	-21	243

NEW WORKERS

Inexperienced workers who were seeking their first jobs at the time of the 1930 census were probably for the most part not included among gainful workers. Such persons were unlikely to report an occupation; moreover, enumerators were instructed that "young persons who have not yet begun to work" should not be regarded as usually working at a gainful occupation. In the 1940 census, on the other hand, all persons who were seeking work during the census week were classified as in the labor force, regardless of their previous work experience. It was therefore necessary to add to the 1930 figures for gainful workers an adjustment for first-job seekers.

Since 1930 statistics for this group are not available, this adjustment was estimated on the basis of the 1940 census figures for new workers, that is, persons seeking work who had not previously worked for one month or more at a full-time job. There were 767,341 new workers reported in the 1940 census, most of whom were under 25 years old. This group included a large number of young people who had left school in 1939 or earlier years and had not yet found work, in addition to those who had entered the labor force in the months immediately before the census date.

At the time of the 1930 census, only a few months after the beginning of the depression, the number of new workers was unquestionably much smaller than in 1940. The group of persons seeking their first jobs at that time must have been limited for the most part to those who had begun to look for work late in 1929 or early in 1930. The estimates for new workers in

1930 were therefore based on the 1940 census data for new workers who had been unemployed less than six months, rather than on the totals for all new workers in 1940.¹

Employment conditions during the six months preceding the 1930 census were in general considerably better than those during the corresponding period preceding the 1940 census. For inexperienced youths, just out of school, however, the chances of finding a job may have been no better in late 1929 and early 1930, when large-scale lay-offs were being made, than in the more stable period of 1939 and 1940. Moreover, the initial shock of the depression and the unemployment of family breadwinners may have caused a considerable number of young people to leave school early and start looking for work. In view of these considerations, it was assumed for the purpose of the estimate that the number of new workers at the time of the 1930 census was the same, in proportion to the total number of workers, as the number of new workers who had been seeking work less than six months in 1940.

On this assumption the adjustments for new workers not classified as gainful workers in 1930 were estimated on the basis of the 1940 census data for new workers classified by sex, age, and duration of unemployment.² The data used and the resulting estimates are shown in table 11. Estimates were made separately for male and female new workers in the age groups 14 to 19 and 20 to 24 years. The number of new workers 25 years old and over in 1930 was assumed to be negligible, since less than one-eighth of the new workers in 1940 were 25 and over. The estimates for new workers in 1930 totaled 211,000 for the age group 14 to 24 years.³

TABLE 11.—ESTIMATE OF NEW WORKERS NOT REPORTED AS GAINFUL WORKERS, BY AGE AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. 1940 statistics based on 5-percent sample tabulations)

AGE AND SEX	Total in labor force	1940		1930	
		Total	Unemployed less than 6 months	Gainful work-ers ¹	Esti-mated new workers
Total, 14 to 24 years.....	11,651	679	187	11,610	211
Male, 14 to 24 years.....	7,557	413	111	7,658	125
14 to 19 years.....	2,565	283	90	2,865	104
20 to 24 years.....	4,992	130	21	4,803	21
Female, 14 to 24 years.....	4,094	266	78	3,942	86
14 to 19 years.....	1,398	189	62	1,592	74
20 to 24 years.....	2,696	77	14	2,350	12

¹Figures include persons of unknown age, distributed in proportion to the age distribution of persons reported as 14 years old and over.

SEASONAL WORKERS

Gainful workers, as defined in the instructions to enumerators for the 1930 census, included the large group of workers who follow a gainful occupation during only a part of the year. In the 1940 census, enumerators were instructed to report such persons as not in the labor force if they were not employed,

¹ There were undoubtedly some new workers who had been unemployed more than six months at the time of the 1930 census, but this group was probably more than balanced by the number of new workers reported as gainful workers.

² There were about 249,000 new workers 14 to 24 years old in 1940 for whom duration of unemployment was not reported. The number of these who had been unemployed less than six months was estimated on the assumption that the proportion unemployed less than six months was the same for this group as for the group for which duration of unemployment was reported. Thus the total of 187,000 new workers unemployed less than six months, as shown in table 11, is made up of 119,000 who reported less than six months of unemployment and 68,000 who failed to report, but were assumed to have been unemployed less than six months.

³ Additional evidence which was considered in making these estimates is discussed in the section, "Omitted occupational entries," below.

not on public emergency work, and not seeking work during the week of March 24 to 30, 1940. In practice, however, the groups returned by enumerators as gainful workers in 1930 and as in the labor force in 1940 did not conform exactly to the definitions given in these instructions. Not all seasonal workers were enumerated as gainful workers in 1930, because enumerators tended to regard such persons as nonworkers if they were attending school or keeping house at the time of the census, neglecting to ask whether they were gainfully occupied at other times of the year. On the other hand, there is evidence that many seasonal workers who were neither working nor seeking work at the time of the 1940 census were incorrectly reported as in the labor force. In order to estimate the adjustment for seasonal workers that should be deducted from the 1930 gainful worker figures it was therefore necessary first to estimate the number of seasonal workers who were not working and not looking for work in April 1930, and second to estimate the number of these persons for whom gainful occupations were reported, but who would not have been reported as in the labor force if the 1940 census methods had been used.

The materials for the first estimate could not be obtained from either the 1930 or the 1940 census, since seasonal workers were not classified separately in either census. The only source of information on the size of this group, by age and sex, is the Census Bureau's Monthly Report on the Labor Force, which shows monthly variations in the labor force beginning in April 1940. By means of these data, the seasonal increases in the labor force between April and the month in which the labor force reached the seasonal peak were computed for various age and sex groups, for the years 1940 and 1941, as shown in table 12.* Similar computations were not made for the year 1942, because the month-to-month changes in the labor force in that year were strongly affected by wartime abnormalities in the labor market. The average of the seasonal variations in 1940 and 1941 was taken as an estimate of the seasonal variation between April and the seasonal peak in 1930.†

TABLE 12.—ESTIMATED SEASONAL VARIATION IN THE LABOR FORCE BETWEEN APRIL AND SEASONAL PEAK, BY AGE AND SEX, FOR THE UNITED STATES: 1940 AND 1941

(Figures in thousands)

AGE AND SEX	Labor force, March 24-30, 1940	EXCESS OF MAXIMUM OVER APRIL LABOR FORCE		
		1940	1941	Average, 1940-1941
MALE				
14 to 24 years.....	7,569	2,136	1,803	1,970
25 to 54 years.....	26,022	343	188	266
55 years and over.....	6,362	101	301	201
FEMALE				
14 to 24 years.....	4,057	808	1,072	940
25 to 54 years.....	7,693	-	-843	322
55 years and over.....	1,115	59	104	72

* Computed from unpublished tabulations based on the Monthly Report on the Labor Force, showing statistics in thousands, furnished by the Special Surveys Division of the Bureau of the Census.

† Since some of the data from the Monthly Report on the Labor Force were available for only three broad age groups, interpolations were made for the more detailed age grouping that was desired. The interpolated figures are shown in table 14. For the age groups 25 to 54 and 55 years and over, the interpolations were based on the age distributions of males and females in the labor force, as shown by the 1940 census. For the age group 20 to 24, the estimate of the seasonal variation represents the sum of two components: (a) an estimate for student seasonal workers, obtained by doubling the estimated number of student seasonal workers 20 to 24 years old reported as gainful workers (derived in the manner described below), and (b) an estimate for nonstudent seasonal workers, obtained by assuming that the number of such workers in this age group was the same as the average per five-year group in the age range 25 to 44 years. The estimate for the age group 14 to 19 years was obtained by subtracting the estimate for the group 20 to 24 years from the total for persons 14 to 24 years old. It is believed that the errors involved in these interpolations are not very great, since the available statistics by detailed age groups for the months following June 1941 indicate that the great majority of the seasonal variation in the labor force in the age group 14 to 24 occurs in the group 14 to 19 years old, and that in the upper age classes the distribution within broad age groups does not differ greatly from the corresponding distribution of the total labor force.

‡ No allowance was made for the increase between 1930 and 1940 in the number of seasonal workers, which might have been expected to result from the growth of the labor force. It is believed that the average seasonal variation in the labor force in 1940 and 1941 may have been somewhat less than the variation in a more nearly normal year, because of the disturbing effect of war conditions upon the labor market, and because of the effect of military inductions upon the figures for the civilian labor force. It was therefore considered best to take the 1940-1941 average without reduction as an estimate of the seasonal variation in 1930.

The second step in estimating the adjustment for seasonal workers in the 1930 gainful worker figures was to determine the relationship between the seasonal variation in the labor force and the number of seasonal workers counted as gainful workers in 1930 who would not have been included in the labor force if the 1940 census procedures had been used. The method of determining this relationship was different for the various age and sex classes.

For the age group 14 to 19 years, and to some extent for the group 20 to 24, the number of seasonal workers included among gainful workers in 1930 was estimated by comparing 1930 and 1940 census statistics for persons reported as both attending school and gainfully occupied or in the labor force. If the 1940 census procedures had been followed in 1930, the number of students classified as workers in the 1930 census would probably not have differed greatly from the number shown by the 1940 census. Actually the number so classified was much larger in 1930 than in 1940. The difference between the figure for 1930 and the number that would have been obtained if the percentage of students classified as workers had been the same as that shown by the 1940 census was used as an estimate of the number of student seasonal workers included among gainful workers in 1930, who would not have been reported as in the labor force in 1940.† The resulting estimates, for males and females in the age groups 14 to 19 and 20 to 24 years, together with the data on which they were based, are shown in table 13.

TABLE 13.—ESTIMATE OF STUDENT SEASONAL WORKERS REPORTED AS GAINFUL WORKERS IN 1930 WHO WOULD NOT HAVE BEEN REPORTED AS IN THE LABOR FORCE IN 1940, BY AGE AND SEX, FOR THE UNITED STATES

(Figures in thousands)

AGE AND SEX	1940		1930		Estimated deduction for student seasonal workers in 1930‡		
	Total attending school	In experienced labor force	Total attending school	Gainfully occupied			
		Number ¹	Percent	Number	Percent		
MALE							
14 to 19 years....	4,639	267	5.8	4,011	468	12.2	257
20 to 24 years....	467	101	21.6	460	158	34.3	59
FEMALE							
14 to 19 years....	4,519	136	3.0	3,980	244	6.1	124
20 to 24 years....	294	76	25.9	342	119	34.8	31

¹ Statistics based partly on complete count of the 1940 census returns, and partly on tabulations of Sample H (for persons seeking work or on public emergency work and attending school).

² Estimates made by multiplying 1930 figures for total attending school by 1940 percentages in the experienced labor force, and subtracting the results from 1930 figures for gainful workers attending school.

In the case of males 14 to 19 years old, student seasonal workers make up almost all of the seasonal worker group; most boys of these ages who are no longer in school are year-round members of the labor force. The estimate of male student seasonal workers 14 to 19 years old enumerated as gainful workers who would not have been reported as in the labor force in 1940 was therefore taken as the entire adjustment for seasonal workers in the 1930 gainful worker figures, so far as this sex and age group is concerned. In the case of males 20 years old and over, however, additional adjustments were required for seasonal workers who were neither attending school nor engaged in any labor market activity at the time of the census,⁷ while for females, both in the age group 14 to 19 and

⁶ In addition to the difference in classification of seasonal workers, the percentages of students reported as workers in the 1930 and 1940 censuses are affected by two other differences in classification, which offset one another at least to some extent. In the first place, a person was classified as attending school in 1930 if he had attended at any time since September 1929, whereas in 1940 a person was included in this category only if he had attended school since March 1, 1940. Thus the 1930 figures for gainfully occupied students include some persons who had left school during the academic year and had entered the labor force, and who would not have been classified as attending school under the 1940 definitions. In the second place, the 1940 figures doubtless include some students who worked only occasionally or only a short time after school hours, and who would not have been reported as having gainful occupations in the 1930 census. Taking into consideration these differences in classification, it is believed that the figures in table 13 are maximum estimates of the number of student seasonal workers reported as gainful workers who would not have been included in the 1940 labor force.

⁷ There were undoubtedly some few male seasonal workers in the age group 14 to 19 years who were not attending school at the time of the census, but no adjustment was made for this group.

in the groups 20 years and over, adjustments were made for seasonal workers who were engaged in keeping house at the time of the census.

Practically all of the male seasonal workers, other than students, between the ages of 20 and 64 years were probably enumerated as gainful workers in 1930, since enumerators who found such men idle at the time of enumeration were almost certain to inquire whether they did not follow a gainful occupation at other times of the year.⁸ On the other hand, some of the male seasonal workers in this age range were included by error in the 1940 labor force, since enumerators were likely to regard them as unemployed, or as "having a job," and to report them as in the labor force in spite of their inactivity during the census week. Thus a majority, but not all, of the male seasonal workers other than students probably should be deducted from the 1930 gainful worker statistics in order to render the figures from the two censuses comparable. For men 65 years old and over, the proportion of seasonal workers that should be deducted is probably somewhat smaller than for men under 65, since elderly men were less likely than younger men to be regarded as having a gainful occupation.

In the case of females, the proportion of seasonal workers, other than students, who were classified as gainful workers in 1930 was probably much smaller than in the case of males. Enumerators undoubtedly tended to neglect the occupational questions for women who were obviously engaged in housekeeping at the time of the census. Even if such women were asked to state their occupations, they were likely to report themselves

as housewives if the season during which they followed a gainful occupation was limited to a few months of the year. The proportion classified as gainful workers was probably greatest for female seasonal workers (other than students) in the age class 14 to 19 years, and was probably smaller in each successive age group, since the proportion of women in the labor force is much smaller in the higher than in the lower age groups.

In addition to the probable proportions of seasonal workers classified as gainful workers or as in the labor force, it was necessary to consider the fact that the data on seasonal variations tend to understate the number of seasonal workers in the age groups over 20 years. The number of seasonal workers not in the labor force in April is considerably greater than the difference between the April labor force and the labor force at the seasonal peak, because for many of the individual seasonal workers the time of entering the labor force is not the same as the peak month for the group as a whole.⁹ An allowance for this factor increased the deduction from the 1930 gainful worker figures for seasonal workers in the age groups 20 years and over.

The estimated adjustments for seasonal workers in each age and sex group, based on all these considerations, are presented in table 14, together with the estimated seasonal variation in the labor force, and the estimated proportion of this variation which represents the needed adjustment.¹⁰ For both sexes and all age groups combined, the adjustment for seasonal workers was a reduction of 1,156,000 in the 1930 total for gainful workers.

TABLE 14.—ESTIMATE OF SEASONAL WORKERS REPORTED AS GAINFUL WORKERS IN 1930 WHO WOULD NOT HAVE BEEN INCLUDED IN THE LABOR FORCE IN 1940, BY AGE AND SEX, FOR THE UNITED STATES

(Figures in thousands)

AGE AND SEX	AVERAGE SEASONAL VARIATION IN LABOR FORCE, 1940-1941			ESTIMATE OF SEASONAL WORKERS TO BE DEDUCTED FROM 1930 GAINFUL WORKER FIGURES					
	Total (A)	Student (B)	Other (C)	Number			Percent of seasonal variation ²		
				Total (D)	Student (E)	Other ¹ (F)	Total (G)	Student (H)	Other (I)
Male, 14 years and over.....	2,437	1,922	515	771	516	455	32	16	88
14 to 19 years.....	1,804	1,804	-	257	257	-	14	14	-
20 to 24 years.....	166	118	48	102	59	43	61	50	90
25 to 44 years.....	191	-	191	172	-	172	90	-	90
45 to 64 years.....	218	-	218	196	-	196	90	-	90
65 years and over.....	58	-	58	44	-	44	75	-	75
Female, 14 years and over.....	1,354	862	472	385	155	230	29	18	49
14 to 19 years.....	815	800	15	135	124	11	17	16	75
20 to 24 years.....	125	62	63	69	31	38	55	50	60
25 to 44 years.....	252	-	252	128	-	128	50	-	50
45 to 64 years.....	125	-	125	50	-	50	40	-	40
65 years and over.....	17	-	17	5	-	5	30	-	30

¹ Estimated by multiplying figures in Col. C by percentages in Col. I.

² Percentages for age groups 20 and over, and for female nonstudents 14 to 19 years old, estimated directly by methods described in the accompanying text; because of rounding, these figures differ slightly from percentages obtained by dividing Cols. D, E, and F by Cols. A, B, and G, respectively.

INMATES OF INSTITUTIONS

All inmates of penal and mental institutions and homes for the aged, infirm, and needy were excluded from the labor force in the 1940 census, regardless of their activity during the census week. In the 1930 census, enumerators were instructed to report occupations for such persons if they were regularly employed at any occupation within the institution, but not to report the occupations followed by inmates before commitment to the institution. The number of inmates of such institutions for whom occupations were reported should be deducted from the 1930 gainful worker figures to establish comparability with the 1940 labor force.

The amount of this adjustment was determined by estimating first, the number of inmates of such institutions in 1930, and second, the proportion enumerated as gainful workers. These estimates were made separately for males and females in each age group, in each of the types of institutions shown in the 1940 census reports. The results are shown in table 15, which

⁸ Many seasonal workers were probably not enumerated at all, since this group includes a large proportion of migratory workers, but omissions of this type were probably about as frequent in 1940 as in 1930.

gives the estimated number of inmates and the estimated number and proportion returned as gainful workers, by age, sex, and type of institution.

Estimated number of inmates.—The number of inmates 14 years old and over of each specified type of institution in 1930, by sex, was estimated on the basis of the institutional censuses of 1933 and 1923, the Census Bureau's annual reports on certain types of institutions, the 1940 census data on institutional population, and data from various institutional surveys. The age distribution of the inmates of each institutional type was assumed to be the same as that shown by the 1940 census, since the available data indicated relatively little change in ages of inmates during the period 1930 to

⁹ For the age group 14 to 19 years this understatement is unimportant, because the great majority of the seasonal variation for this age group represents students who enter the labor force during the summer vacations, in which the labor force reaches its peak for this age group.

¹⁰ In order to apply the separate estimates of the proportions of the variation representing adjustments for students and for nonstudent seasonal workers, it was necessary to determine by interpolation the numbers of student and nonstudent seasonal workers in the age group 20 to 24 years. For males and females in this age group it was assumed that the number of nonstudent seasonal workers was the same as the average per five-year group for the age range 25 to 44 years, and that the number of student seasonal workers was twice the number reported as gainful workers, as shown in table 15.

ESTIMATES OF LABOR FORCE: 1940 AND 1930

TABLE 15.—ESTIMATE OF GAINFULLY OCCUPIED INMATES OF SPECIFIED TYPES OF INSTITUTIONS, BY AGE AND SEX, FOR THE UNITED STATES: 1930
(Figures in thousands)

TYPE OF INSTITUTION AND AGE	MALE		FEMALE	
	Total inmates	Gainful workers	Total inmates	Gainful workers
All Specified Institutions				
Total, 14 years and over.....	589	172	306	24
14 to 19 years.....	61	11	39	2
20 to 24 years.....	56	20	5	5
25 to 44 years.....	212	93	78	10
45 to 64 years.....	158	36	89	6
65 years and over.....	82	4	65	1
Prisons and Reformatories ¹				
Total, 14 years and over.....	159	111	12	4
14 to 19 years.....	23	6	6	-
20 to 24 years.....	29	22	2	2
25 to 44 years.....	84	56	3	2
45 to 64 years.....	21	16	1	-
65 years and over.....	2	1	-	-
Jails and Workhouses ²				
Total, 14 years and over.....	71	24	7	1
14 to 19 years.....	9	3	2	-
20 to 24 years.....	13	4	1	-
25 to 44 years.....	35	13	3	1
45 to 64 years.....	12	4	1	-
65 years and over.....	2	-	-	-
Mental Institutions				
Total, 14 years and over.....	228	31	191	15
14 to 19 years.....	13	1	10	1
20 to 24 years.....	13	2	10	2
25 to 44 years.....	83	13	66	6
45 to 64 years.....	88	13	74	5
65 years and over.....	51	2	31	1
Homes for the Aged, Infirm, and Needy ³				
Total, 14 years and over.....	111	6	95	4
14 to 19 years.....	16	1	21	1
20 to 24 years.....	1	-	2	1
25 to 44 years.....	10	1	6	1
45 to 64 years.....	37	5	13	1
65 years and over.....	47	1	54	-

¹ State and Federal penal institutions, including State institutions for juvenile delinquents.

² County, municipal, and private penal institutions, including institutions for juvenile delinquents not operated by State governments.

³ Including institutions combining two or more of the specified types.

1940. The methods used to obtain the totals 14 years old and over for each type of institution are described below.

(a) "Prisons and reformatories" comprise State and Federal penal institutions, including those for juvenile delinquents. Data for State and Federal prisons were obtained from surveys made by the Bureau of Labor Statistics in 1932 and 1940, extrapolated back to 1930 on the assumption of a constant annual increase.¹¹ To the resulting figure was added an estimate of the number of inmates 14 years old and over of State institutions for juvenile delinquents, based on the 1933 institutional census.¹²

(b) "Local jails and workhouses" comprise all penal institutions not operated by State and Federal governments, including local institutions for juvenile delinquents. The number of inmates of "local jails and workhouses" was estimated for 1930 on the basis of the 1940 census data, with the assumption that the rate of increase in the number of inmates of such institutions between 1930 and 1940 was the same, for each sex, as the estimated rate of increase for inmates of prisons and reformatories.¹³

¹¹ The surveys showed 154,000 male and 5,000 female prisoners in 1932, and 185,000 males and 7,000 females in 1940. (U. S. Bureau of Labor Statistics, Bulletin 595, *Prison Labor in the United States: 1932*; and *Monthly Labor Review*, September, 1941.) With an allowance for inmates of institutions for juvenile delinquents, these figures for 1940 are about the same as the numbers of inmates 14 years old and over of "prisons and reformatories" shown by the 1940 census.

¹² This census showed a total of 30,000 inmates of public institutions for juvenile delinquents as of January 1, 1933. It was estimated on the basis of data on admissions during the year to each institution that about 20 percent of these inmates were in county and local institutions, and 80 percent were in State institutions. The proportion 14 years old and over was estimated on the basis of data for admissions during the year by age and sex. The figures were increased by 5 percent to allow for the known incompleteness of the data. The institutional census of 1923 showed a somewhat smaller number of inmates of such institutions, but no allowance for trend was made because the 1923 census was less complete than the 1933 census.

¹³ Because of its incomplete coverage, the 1935 *Census of County and City Jails* was not used for the purpose of this estimate.

(c) The number of inmates of mental institutions in 1930 was estimated by means of the statistics presented in the Census Bureau's annual reports for mental patients in State hospitals and for inmates of State institutions for mental defectives and epileptics, with the help of the 1940 census data for inmates of all mental institutions. It was assumed that in 1930 the ratio of the number of inmates of State mental institutions to the total number of inmates of all mental institutions was the same as the corresponding ratio in 1940, as shown by the 1940 annual report and the 1940 census.¹⁴

(d) "Homes for the aged, infirm, and needy" include private homes for the aged; public almshouses and homes for the aged and infirm; resident schools for the blind and deaf; and public and private institutions for children (other than delinquents, mental defectives, and epileptics).

The number of inmates of private homes for the aged in 1930 was estimated at about 80,000 (33,000 males and 47,000 females) on the basis of a survey made by the Bureau of Labor Statistics which indicated that in 1929 such homes had facilities for over 90,000 persons, and that in 1939 the vacancy rate was about 12 percent.¹⁵

An estimate of 70,000 inmates of public almshouses and public homes for the aged and infirm in 1930 (49,000 males and 21,000 females) was made on the basis of the decennial censuses of institutions, which showed 78,000 inmates of such institutions in 1923 and a steadily declining proportion of the population in such institutions in the preceding decades.

The number of pupils 14 years old and over in resident State and private schools for the blind and deaf in 1930 was estimated at 4,000 (2,000 males and 2,000 females), on the basis of data from the Office of Education.¹⁶

The number of inmates of public and private institutions for orphans and dependent and neglected children in 1930 was estimated at 141,000 on the basis of data from the 1933 institutional census, with an allowance for increase between 1930 and 1933.¹⁷ On the basis of data by age obtained in the 1933 census, it was estimated that about 35,000 of this total were children 14 years old and over (18,000 boys and 17,000 girls).

In addition to these four types of institutions, the estimates for "homes for the aged, infirm, and needy" shown in table 15 include an estimated 18,000 inmates (9,000 males and 9,000 females) of institutions that combine the functions of two or more institutional types. In the 1940 census 23,000 inmates of such institutions were enumerated.¹⁸

Estimates of proportions of inmates classified as gainful workers.—The proportion of the inmates of each type of institution who were classified as gainful workers in the 1930 census was estimated by means of a sample count of the entries on the census schedules. Several volumes of schedules from each of 15 States were examined, and all institutions enumerated in these volumes were included in the sample count. In this manner data were obtained for a total of 695 institutions, showing the number of inmates and the number reporting gainful occupations, by sex and type of institution.¹⁹ Percentages of gainful workers among male and female inmates of each type of institution, based on these sample data, were applied to the estimated totals for inmates of each type of institution, to obtain the estimated numbers classified as gainful workers, as

¹⁴ The annual reports for 1930 showed 280,000 patients in State hospitals and 68,000 (including a considerable number of persons under 14 years old) in State institutions for mental defectives and epileptics. The 1940 annual report showed a total of 492,000 inmates for both of these types of State institutions combined, whereas the number of inmates of all mental institutions, 14 years old and over, as shown by the 1940 census, was 591,000. Statistics for mental institutions other than State institutions for the years 1931 and 1935 to 1939 indicate that the rate of increase during the decade for inmates of all mental institutions was about the same as that for inmates of State institutions.

¹⁵ U. S. Bureau of Labor Statistics, Bulletin 677, *Homes for the Aged in the United States*.

¹⁶ In the year 1930 - 1931, there were 21,000 pupils of all ages in such schools of whom fewer than 3,000 were in classes of high-school level. Office of Education, *Biennial Survey of Education: 1930-1932*.

¹⁷ This figure has been adjusted to allow for incompleteness of enumeration, since the figures were only about 98 percent complete. The institutional census of 1923 showed 133,000 inmates of such institutions, but the procedures used for this census differed from those used in 1933, and the results are not comparable.

¹⁸ This figure includes a few inmates of institutions for which insufficient information was obtained in the 1940 census to determine the type of institution.

¹⁹ The States included in the sample were Mass., N. Y., Ohio, Mich., Minn., Iowa, Kans., Ky., Tenn., Ala., Miss., Colo., Utah, Wash., and Calif. Data were obtained for 121,000 male and 54,000 female inmates. A few of the inmates classified as gainful workers were doubtless under 14 years of age, since the question on occupation in the 1930 census referred to persons 10 years old and over, but it was assumed for purposes of the estimate that they were all 14 years old and over.

shown in table 15.²⁰ This procedure yielded a total of 196,000 gainfully occupied inmates of institutions, to be deducted from the 1930 gainful worker figures for purposes of comparison with the 1940 data for the labor force.

RETIRED AND DISABLED WORKERS

The group enumerated as gainful workers in the 1930 census included a considerable number of persons who had recently retired or become disabled or who for other reasons had permanently withdrawn from the labor force. Enumerators were instructed not to return occupations "for persons who on account of old age, permanent invalidism, or other reasons are no longer following any occupation." Since the schedule question asked only for the individual's occupation, however, enumerators probably failed in many cases to make the inquiries which would have been necessary to determine whether the individual was retired or disabled. In the 1940 census, on the other hand, retired and disabled persons were excluded from the labor force by means of specific questions regarding activity during the census week.

The tabulations of the 1930 unemployment schedules give abundant evidence of the inclusion of retired and disabled workers among gainful workers. Data from these tabulations showing the number of persons in various groups that were probably made up largely of persons who were retired, unable to work, or otherwise permanently out of the labor force, are presented in table 16.

TABLE 16.—ESTIMATED NUMBER OF RETIRED AND DISABLED PERSONS REPORTED AS GAINFUL WORKERS, BY SEX, FOR THE UNITED STATES: 1930

(Figures in thousands)

1930 CENSUS CLASSIFICATION	Total gainful workers	ESTIMATED NUMBER RETIRED AND DISABLED		
		Total	Male	Female
Total, 10 years and over.....	48,850	472	370	102
Enumerated on unemployment schedules.....	3,929	372	292	80
Unemployment class A ("Persons out of a job, able to work, and looking for a job").....	2,429	50	39	11
Unemployment class C ("Persons out of a job and unable to work").....	173	173	141	32
Unemployment class D ("Persons having jobs but idle on account of sickness or disability").....	273	46	38	8
Unemployment class E ("Persons out of a job and not looking for work").....	88	80	56	24
Other unemployment classes.....	925	-	-	-
Rejected from unemployment tabulations.....	141	23	215	25
Not enumerated on unemployment schedules.....	344,901	100	278	22

¹ Retired and disabled workers, students, unpaid family workers, etc., for whom unemployment schedules were rejected.

² Sex distribution estimated by assuming the same proportions of males and females as in Unemployment Classes A, C, D, and E.

³ Includes persons reported as not at work for whom unemployment schedules were not returned.

There were 173,000 gainful workers classified as out of a job and unable to work (Unemployment Class C). This entire group probably would have been excluded from the labor force if the 1940 census methods had been used (see Chapter IV).

About 273,000 gainful workers were classified as having jobs but idle on account of sickness or disability (Unemployment Class D). Most of these persons were only temporarily idle and would have been reported as "having a job," and thus included in the labor force, in the 1940 census. That part of the group, however, that had been out of work for more than 13 weeks, numbering 46,000 workers, probably would not have been included in the 1940 labor force.

²⁰ The age distribution of the inmates reported as gainful workers for each sex and type of institution was estimated by assuming that the percentage gainfully occupied varied according to age in the same manner as the percentage of gainful workers in the male or female population as a whole. In the case of penal institutions, however, this procedure was used only to estimate the age distribution of the gainfully occupied inmates 20 years old and over; and in the case of homes for the aged, infirm, and needy it was used only for the age groups 20 to 64 years. The number of gainfully occupied inmates 14 to 19 years old of prisons and reformatories, and of jails and workhouses, was estimated on the basis of the percentage gainfully occupied for inmates of institutions for juvenile delinquents, which were classified separately in the sample count. The number of gainfully occupied inmates of homes for the aged, infirm, and needy in the age group 14 to 19 years was estimated on the basis of the percentage shown by the sample for institutions for children (other than delinquents, defectives, and epileptics), and the number in the age group 65 years and over was obtained from the percentage of gainful workers shown by the sample for homes for the aged.

Nearly 88,000 gainful workers were classified as out of a job and not looking for work (Unemployment Class E). Most of these were probably retired and disabled workers who would not have been included in the 1940 labor force, although the group doubtless included also some persons who were not looking for work because they felt that there was no work to be had, and who would have been classified as "seeking work" in the 1940 census. It was estimated that this class consisted of 80,000 persons who were retired or otherwise not in the labor force and 8,000 who would have been classified as in the labor force by 1940 census methods (see Chapter IV).

There were 23,000 gainful workers for whom unemployment schedules were rejected because they were returned as retired, because they were over 70 years old and had been idle for several years, because there was some entry indicating permanent disability, or because they had been idle for long periods on account of sickness or injury. These rejected cases would not have been included in the 1940 labor force.

Finally, among the gainful workers who were classified as out of a job, able to work and looking for a job (Unemployment Class A), there were 138,000 persons who gave "personal disability" as the reason for their idleness, and 8,000 who stated that they were idle because they were "too old." Of the total giving these two reasons for idleness, 50,000 had been out of work more than 6 months.²¹ It was assumed that these were persons who would have been classified in the 1940 census as not in the labor force because of disability or old age, but who were included in Unemployment Class A in 1930 because of the broad definition of ability to work given in the instructions to enumerators.²²

These groups account for a total of 372,000 gainful workers for whom the entries on the unemployment schedules indicated that they probably would have been classified in the 1940 census as unable to work or not in the labor force for other reasons. In addition, it is estimated that about 100,000 retired or disabled persons were reported as gainful workers on the main population schedule who were not enumerated on the unemployment schedules, either because the enumerators neglected to obtain data on unemployment or because they did not regard these individuals as unemployed. For example, many aged farmers and other self-employed workers who were able to do very little work were probably reported as gainful workers and returned as at work on the last regular working day. There were probably also many retired and disabled persons in the group of gainful workers reported on the main schedule as not at work, but with no entries on the unemployment schedule.

Thus, the total adjustment for retired and disabled workers was a deduction of 472,000 from the 1930 figures for gainful workers.

There were no 1930 statistics available which could be used to estimate the age distribution of these persons. It was therefore assumed that they were distributed by age in proportion to the distribution of persons reported in the 1940 census as unable to work who had worked for one week or more in 1939. Retired and disabled persons who had recently been employed were the ones most likely to report occupations in the 1930 census.

OMITTED OCCUPATIONAL ENTRIES

The statistics for gainful workers obtained in the 1930 census represent tabulations of persons for whom occupational entries were made on the census schedules. Some persons who actually followed a gainful occupation were omitted from the gainful worker statistics because the enumerator carelessly neglected the question on occupation, or because he could not

²¹ This total includes a small allowance for persons giving disability or old age as the reason for their idleness, but not reporting period of idleness. It was assumed that in the latter group the proportion of persons who had actually been idle 6 months or more was the same as in the group that reported period of idleness.

²² The instructions for the question "Is he able to work?" in the 1930 unemployment census were as follows: "In deciding whether a person is able to work it is necessary to remember that there are many kinds of jobs and that many of them require little physical or mental effort. Write 'Yes' if the individual is neither too young nor too old to be capable of some kind of regular employment and has no mental or physical disability which makes it impossible for him to work. It is not necessary that he be capable of heavy labor or that he be able to continue in his regular trade or occupation. Write 'No' for those of advanced age, for the mentally weak, for those unable to work because of ill health, and for those temporarily or permanently disabled by accidents."

obtain the information, or because there was some doubt as to the proper entry. The majority of the omissions were due to carelessness or to the enumerator's inability to get the information. It is believed, however, that there were, in addition, a large number of young workers for whom occupations were not reported in the 1930 census because they had not worked long enough at any job to acquire a definite occupational attachment. Estimates of the adjustments for each of these two types of omissions, by age and sex, are given in table 17, and the methods used to derive the estimates for each type are explained below.

Entries omitted through carelessness or lack of information.—It is not possible to obtain from the 1930 census any indication of the number of persons for whom occupations were omitted through carelessness or lack of information, because such persons cannot be distinguished on the census schedules from those who had no occupation. It was necessary, therefore, to estimate the frequency of such omissions by means of 1940 census data showing the proportion of the persons in the labor force for whom neither occupation nor industry was reported. Such persons represented less than 1 percent of the employed workers and 9 percent of the experienced workers seeking work in 1940. The proportion of omitted occupations in the 1930 census was probably much smaller, inasmuch as the available evidence indicates that the frequency with which data of various types were omitted from the schedules was generally about twice as great in 1940 as in 1930.²³

It was assumed, therefore, that of all persons who were actually gainful workers in 1930, the proportion for whom occupational entries were omitted through carelessness or lack of information was approximately one-half as great as the proportion of persons in the labor force for whom neither occupation nor industry was reported in 1940. This procedure yielded an estimate of 300,000 persons whose occupations were not reported in 1930, through carelessness or for lack of information.²⁴ The age distribution of this group was assumed to be proportional to the distribution of persons for whom occupation and industry were not reported in the 1940 census.²⁵

Entries omitted for young persons without definite occupational attachments.—Evidence that occupational entries were omitted in the 1930 census for a considerable number of young persons, in addition to the omissions due to carelessness and lack of information, is shown by a comparison of the 1930 and 1940 census figures for young persons classified as neither in school nor in the labor force. In 1930, 578,000 boys 14 to 19 years old were classified as not in school and not gainful workers. This group represented 8.3 percent of the male population 14 to 19 years old. In 1940, on the other hand, less

²³In 1940 the number of persons for whom age was not reported represented 0.16 percent of the population, whereas in 1930 the corresponding percentage was 0.08. Foreign-born whites for whom citizenship status was not reported represented 7.2 percent of the foreign-born white population in 1940 and only 3.5 percent in 1930. Among all owner-occupied nonfarm homes, the proportion for which value of home was not reported was 3.4 percent in 1940 and only 2.0 percent in 1930.

²⁴Calculations were made separately for employed and unemployed workers, by sex. For the purpose of this estimate, the sum of Unemployment Classes A and B was used to represent unemployed workers in 1930, and the balance of gainful workers was treated as employed. The resulting estimate is substantiated by the results of an independent estimate made in the following manner: There were 20,000 persons for whom unemployment schedules were rejected in the 1930 census tabulations because no gainful occupation was returned on the population schedule. These rejected cases represented one-half of 1 percent of the total number of persons entered on the unemployment schedules. If it is assumed that for one-half of 1 percent of all persons who were actually gainful workers occupational entries were omitted through carelessness or for lack of information, the total number of such omissions may be estimated at about 250,000. The difference between this estimate and the total of 300,000 presented in table 17 may be attributed to the fact that, if occupational entries were omitted for an individual, the entries on the unemployment schedules were likely to be omitted also.

²⁵The age distribution was calculated separately for male and female workers in each of the two employment status categories. Since 1940 statistics for persons reporting neither occupation nor industry were not available by age, the age distribution used was that of the combined groups of persons not reporting occupation and persons not reporting industry.

than 5 percent of the boys in this age class were neither in the labor force nor in school.²⁶

There was probably not much change during the decade in the actual number of boys 14 to 19 years old who were unable to work, confined to institutions, or idle for "other" reasons, and not attending school. It may be assumed that the difference between the figures from the two censuses resulted mainly from differences in definitions and procedures and in the interpretation of the questions. If the percentage of boys 14 to 19 years old who were neither in the labor force nor in school had been the same in 1930 as in 1940, the number of such boys in 1930 would have been about 313,000, or 265,000 less than the figure obtained in the 1930 census. Of this 265,000 difference, 34,000 is accounted for by the adjustment discussed above for occupational entries omitted through carelessness, etc., and 104,000 is accounted for by the adjustment for male new workers 14 to 19 years old who were not classified as gainful workers. It was estimated that 60,000 of the difference represented working youths who would have been reported as in the labor force if 1940 methods had been used, but were not regarded as having occupations in 1930, either because they had not been employed long enough at any job to acquire a definite occupational attachment, or because they were engaged only in unpaid family work, or for other reasons. The remainder of the difference represents the net effect of miscellaneous changes in the definitions used in the two censuses, and changes in the actual activities of young people.

TABLE 17.—ESTIMATED NUMBER OF PERSONS ACTUALLY GAINFULLY OCCUPIED FOR WHOM OCCUPATION WAS NOT REPORTED, BY AGE AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands)

AGE	TOTAL OMITTED OCCUPATION ENTRIES			REASON FOR OMISSION			
	Total	Male	Female	Carelessness or lack of information		No definite occupational attachment	
				Male	Female	Male	Female
Total, 14 years and over..	422	280	142	208	92	72	50
14 to 19 years.....	156	84	62	34	19	60	43
20 to 24 years.....	81	53	28	41	21	12	7
25 to 44 years.....	109	75	34	75	34	-	-
45 to 64 years.....	63	48	15	48	15	-	-
65 years and over.....	13	10	3	10	3	-	-

Corresponding adjustments on a smaller scale were made for females 14 to 19 years old, and for males and females 20 to 24 years old, as shown in table 17. For these sex and age groups, however, the adjustment could not be estimated by the methods used for males 14 to 19 years old, because in the case of females and of males 20 to 24 years old extraneous factors disturb the comparison of 1930 and 1940 proportions reported as not working and not attending school. It was assumed, therefore, that the adjustment for omitted occupational entries of this type was the same, in proportion to the adjustment for new workers, for females 14 to 19 and 20 to 24, and for males 20 to 24, as for males 14 to 19 years old. The total adjustment for occupational entries omitted for young persons without definite occupational attachment, obtained in this manner, was an addition of 122,000 to the 1930 figures for gainful workers.

²⁶There were 311,000 males 14 to 19 years old reported in the 1940 census as engaged in home housework, unable to work, in institutions, or not in the labor force for "other" reasons (excluding those classified as in school). In addition, it was estimated that 20,000 of the 367,000 boys in this age class for whom employment status was not reported were actually not in the labor force and not in school.

CHAPTER IV: METHODS OF ESTIMATING EMPLOYMENT STATUS OF THE 1930 LABOR FORCE

The estimates of employment status of the labor force in 1930 presented here were made by reclassifying each of the 1930 census categories according to the 1940 employment status classification. The numbers of males and females 14 years old and over in each of the employment status categories that can

be obtained from the 1930 census tabulations, and the estimated distribution by employment status which would have been obtained for each category if the 1940 census classification had been used, are shown in table 18.¹ The methods of making the estimates are described in the following paragraphs.

TABLE 18.—SUMMARY OF ESTIMATED DISTRIBUTION OF PERSONS 14 YEARS OLD AND OVER, BY EMPLOYMENT STATUS AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution according to 1940 census classification)

1930 CENSUS CLASSIFICATION AND SEX	Total 14 yrs. and over	EMPLOYMENT STATUS					Total 14 yrs. and over	EMPLOYMENT STATUS					
		In labor force				Not in labor force		In labor force				Not in labor force	
		Total	Em- ployed	Seeking work				Total	Em- ployed	Seeking work			
			Experi- enced workers	New work- ers				Experi- enced workers	New work- ers				
MALE						FEMALE							
Total.....	45,088	37,008	34,997	1,885	125	8,080	Total.....	44,013	10,396	9,956	353	87	33,617
Not gainful workers ¹	7,172	405	264	16	125	6,767	Not gainful workers ¹	33,334	228	186	6	86	33,106
Gainful workers.....	37,916	36,603	34,733	1,869	1	1,813	Gainful workers.....	10,679	10,168	9,620	347	1	511
At work last working day ²	34,589	33,971	33,971	-	-	618	At work last working day ²	9,977	9,612	9,612	-	-	365
Not at work last working day.....	3,327	2,632	762	1,869	1	635	Not at work last working day.....	702	556	208	347	1	146
Unemployment classes.....	3,219	2,561	739	1,822	-	658	Unemployment classes.....	668	535	199	336	-	133
Rejected cases ³	108	71	23	47	1	37	Rejected cases ³	34	21	9	11	1	13
Unemployment Classes							Unemployment Classes						
Total.....	3,219	2,561	739	1,822	-	658	Total.....	668	535	199	336	-	133
Class A (Persons out of a job, able to work, and looking for a job).....	2,058	1,753	50	1,703	-	305	Class A (Persons out of a job, able to work, and looking for a job).....	370	326	12	314	-	44
Class B (Persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle).....	527	527	413	114	-	100	Class B (Persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle).....	131	112	93	19	-	19
Class C (Persons out of a job and unable to work).....	141	-	-	-	-	141	Class C (Persons out of a job and unable to work).....	32	-	-	-	-	32
Class D (Persons having jobs but idle on account of sickness or disability).....	208	170	170	-	-	38	Class D (Persons having jobs but idle on account of sickness or disability).....	65	57	57	-	-	8
Class E (Persons out of a job and not looking for work).....	61	5	-	5	-	56	Class E (Persons out of a job and not looking for work).....	27	3	-	3	-	24
Class F (Persons having jobs but voluntarily idle, without pay).....	60	52	52	-	-	8	Class F (Persons having jobs but voluntarily idle, without pay).....	24	20	20	-	-	4
Class G (Persons having jobs and drawing pay though not at work).....	64	54	54	-	-	10	Class G (Persons having jobs and drawing pay though not at work).....	19	17	17	-	-	2

¹ Including persons for whom unemployment schedules were returned but for whom no occupation was reported.

² Including persons for whom the question as to whether they were at work was not answered.

³ Retired and disabled workers, students, unpaid family workers, etc., for whom unemployment schedules were rejected, and those reported as not at work for whom unemployment schedules were not returned.

TABLE 19.—ESTIMATED DISTRIBUTION OF PERSONS AT WORK ON LAST REGULAR WORKING DAY, BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution is according to the 1940 census classification. Figures include persons of unknown age, distributed in proportion to the age distribution of persons reported as 14 years old and over)

AGE AND SEX	Total ¹	EMPLOYMENT STATUS				
		Em- ployed	Not in labor force			
			Total	Seasonal workers	Retired and disabled	Inmates of insti- tutions
Male, 14 and over.....	34,589	33,971	618	368	78	172
14 to 19 years.....	2,584	2,422	162	151	-	11
20 to 24 years.....	4,333	4,253	80	52	-	28
25 to 44 years.....	16,408	16,236	172	56	23	93
45 to 64 years.....	9,544	9,397	157	88	33	36
65 years and over.....	1,720	1,673	47	21	22	4
Female, 14 and over....	9,977	9,612	365	319	22	24
14 to 19 years.....	1,465	1,349	116	114	-	2
20 to 24 years.....	2,214	2,153	61	56	-	5
25 to 44 years.....	4,254	4,141	113	104	9	10
45 to 64 years.....	1,791	1,735	55	42	7	6
65 years and over.....	243	233	10	8	5	1

¹ Including persons not reporting whether they were at work on last regular working day.

PERSONS AT WORK ON LAST REGULAR WORKING DAY

The figures for this group were obtained by deducting the number of persons enumerated on the unemployment schedules (including rejected cases) from the 1930 census totals for gainful workers by age and sex. The figures obtained in this manner include persons who were reported as at work on the last regular working day, and those for whom the question on this subject was not answered. It was assumed that nearly all of those for whom this question was not answered had actually been at work on the last regular working day.

Most of the persons in this group would have been classified as employed if the 1940 employment status classification had been applied. The group includes, however, some seasonal workers, retired and disabled persons, and inmates of institutions, who would have been classified as not in the labor force by 1940 census methods. The estimated numbers who would have been classified by 1940 census methods as employed and as not in the labor force are shown, by age and sex, in table 19.

¹ The figures shown in the 1930 census reports for the unemployment classes and for rejected cases refer to persons 10 years old and over. It was estimated on the basis of data on ages of persons in Classes A and B that the total number of persons 10 to 13 years old in all of the unemployment categories was no more than 2,000.

According to these estimates, there were 687,000 seasonal workers classified in the 1930 census as at work on the last regular working day who would have been classified as not in the labor force if 1940 methods had been used.² Some of these seasonal workers were reported as at work because of misunderstandings on the part of enumerators. The group also includes seasonal workers for whom the question "Was this person at work yesterday?" was not answered, because the enumerator was in doubt as to the correct answer, or for other reasons.

As explained in Chapter III, it was estimated that 100,000 of the persons in the group at work on the last regular working day would have been excluded from the labor force because of retirement or disability if the 1940 census methods had been used.³ Many of these persons were probably ex-farmers and other persons formerly self-employed, who were no longer active in the operation of their farms or business enterprises, but who were reported by enumerators as at work because they still participated to some extent in the management of the farm or business.

The estimate of 196,000 inmates of institutions at work on the last working day, who would have been excluded from the labor force by 1940 census methods, represents the entire estimated number of institutional inmates reported as gainful workers in 1930.⁴ Enumerators were instructed in the 1930 census not to return unemployment schedules for inmates, even if they were not at work on the last regular working day.

The estimate of 43,683,000 persons classified in 1930 as at work on the last working day who would have been classified as employed by 1940 methods was obtained by subtracting from the total of the group the numbers estimated to be seasonal workers, retired and disabled workers, and inmates of institutions. This remainder probably included a considerable number of gainful workers for whom the question on work status was not answered, some of whom might have been actually seeking work rather than employed. Investigation indicates, however, that the number seeking work was very small, and would be difficult to estimate accurately by age and sex. It was assumed, therefore, that this remainder comprised entirely persons who would have been classified as employed according to the 1940 classification.

UNEMPLOYMENT CLASS A

This category in the 1930 classification consists of gainful workers not at work on the last regular working day who were reported as out of a job, able to work, and looking for work. Most of these persons would have been classified in 1940 as experienced workers seeking work, but some would have been classified as employed, and many would have been excluded from the labor force if the 1940 census methods had been used. The estimated distribution of Unemployment Class A by employment status according to the 1940 census classification, for males and females in each age group, is shown in table 20.

The inclusion in Class A of some persons who would have been counted as employed in the 1940 census results from the difference in time reference of the questions on employment status in the two censuses. The 1930 question as to whether the person was at work referred to activity on a single day, whereas the corresponding question in the 1940 census referred to activity during an entire week. Persons who were not at work on the last regular working day before the enumerator's visit in 1930, but who had worked at some time in the preceding week, would have been classified as employed by 1940 census methods. There were 62,000 such persons in Unemployment Class A, according to the data on period of idleness shown in the 1930 unemployment census reports.

² The figures for seasonal workers, by age and sex, shown in table 19 were obtained by subtracting from the total seasonal worker adjustment (described in Chapter III) the sum of the estimates discussed below for seasonal workers in Unemployment Classes A, B, F, and G, and in the groups rejected from the unemployment census tabulations.

³ The remainder of the total adjustment for retired and disabled workers reported as gainful workers in 1930 is accounted for in the estimates discussed below for persons in Unemployment Classes A, C, D, and E, and in the groups rejected from the unemployment tabulations, who would not have been included in the labor force by 1940 methods. The age and sex distribution of the retired and disabled workers, at work on the last working day, was assumed to be the same as that of the entire adjustment for retired and disabled workers reported as gainful workers, which was estimated by the method described in Chapter III.

⁴ The methods used to derive this estimate, by age and sex, are described in Chapter III.

TABLE 20.—ESTIMATED DISTRIBUTION OF UNEMPLOYMENT CLASS A (PERSONS OUT OF A JOB, ABLE TO WORK, AND LOOKING FOR A JOB), BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution is according to the 1940 census classification. Figures include persons of unknown age, distributed in proportion to the age distribution of persons reported as 14 years old and over)

AGE AND SEX	Total	EMPLOYMENT STATUS				
		Em- ployed	Seeking work, experi- enced	Not in labor force		
				Total	Sea- sonal workers	Retired and disabled
Male, 14 years and over...	2,058	50	1,705	305	266	39
14 to 19 years.....	193	5	99	89	89	-
20 to 24 years.....	332	9	288	35	35	-
25 to 44 years.....	857	20	767	70	60	10
45 to 64 years.....	577	14	479	84	67	17
65 years and over.....	99	2	70	27	15	12
Female, 14 years and over...	370	12	314	44	33	11
14 to 19 years.....	76	2	62	12	12	-
20 to 24 years.....	83	3	74	6	6	-
25 to 44 years.....	145	5	124	16	11	5
45 to 64 years.....	59	2	50	7	3	4
65 years and over.....	7	-	4	3	1	2

Evidence that Unemployment Class A included many seasonal workers who would have been excluded from the labor force by 1940 census methods appears in the data on reasons for idleness which were obtained for this class in the 1930 unemployment census. There were 368,000 persons in Class A who gave "Off season" or some other reference to seasonality as the reason for their unemployment. Nearly half of these persons had been idle for more than 3 months. To be sure, some of them were undoubtedly actually seeking work and would have been reported as such in the 1940 census, but in most areas where seasonal work is common there is very little work to be had for such workers during the off season, and in many cases it is useless for them to seek work at such times, though they may want work. Those who were merely waiting for the work season to begin would have been classified for the most part as not in the labor force by 1940 census methods. The estimates shown in table 20 were made by assuming that one-half of the persons in Unemployment Class A who were idle because of seasonality would have been classified as seeking work, and one-half would have been excluded from the labor force, if the 1940 classification had been used.⁵

Although Unemployment Class A was limited by definition to persons able to work, it actually included a considerable number of persons who had been out of work for long periods on account of sickness or disability, and who would probably have been classified as unable to work or otherwise not in the labor force by 1940 methods. As explained in Chapter III, it was estimated that Unemployment Class A included 50,000 such persons.⁶

UNEMPLOYMENT CLASS B

This category in the 1930 unemployment tabulations, consisting of persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle, is heterogeneous with respect to the 1940 census classification. The majority of these persons would have been classified as employed if the 1940 census methods had been used, since they all reported that they had jobs, and a large proportion of them had worked during the week before the enumeration. On the other hand, because of the comparatively broad definition of "having a job"

⁵ In addition, an allowance was made for persons who did not report the reason for idleness, or who gave indefinite reasons such as "laid off." It was assumed that among the latter groups the proportion who were actually idle because of seasonality was the same as the proportion of persons giving seasonal reasons for idleness among the persons for whom specific reasons for idleness were given. It was assumed that the seasonal workers in Class A who would not have been included in the 1940 labor force were distributed by age in proportion to the estimated age distribution of all seasonal workers counted as gainful workers who would not have been included in the 1940 labor force (obtained by the methods described in Chapter III).

⁶ The age distribution of this group, shown in table 20, was assumed to be proportional to the distribution of all retired and disabled persons reported as gainful workers (estimated by the methods described in Chapter III).

which was used in the 1930 unemployment census, Class B included a large number of workers who were on extended or indefinite lay-off, and who would have been classified as seeking work if the 1940 census methods had been used. In addition, this class included many seasonal workers who probably would have been excluded from the 1940 labor force.

The estimated distribution of Unemployment Class B according to the 1940 census classification of employment status, by age and sex, is shown in table 21.

TABLE 21.—ESTIMATED DISTRIBUTION OF UNEMPLOYMENT CLASS B (PERSONS HAVING JOBS BUT ON LAY-OFF WITHOUT PAY, EXCLUDING THOSE SICK OR VOLUNTARILY IDLE), BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution is according to the 1940 census classification. Figures include persons of unknown age, distributed in proportion to the age distribution of persons reported as 14 years old and over)

AGE AND SEX	Total	EMPLOYMENT STATUS		
		Employed	Seeking work, experienced	Not in labor force (seasonal workers)
Male, 14 years and over.....	627	415	114	100
14 to 19 years.....	51	35	9	7
20 to 24 years.....	92	63	17	12
25 to 44 years.....	289	193	50	46
45 to 64 years.....	169	107	32	30
65 years and over.....	26	15	6	5
Female, 14 years and over.....	151	95	19	19
14 to 19 years.....	27	20	4	3
20 to 24 years.....	28	19	4	5
25 to 44 years.....	53	38	8	7
45 to 64 years.....	21	14	3	4
65 years and over.....	2	2	-	-

Persons in Unemployment Class B were first divided into two groups: (a) those who had worked during the week preceding the enumeration and thus would have been reported as at work if 1940 census methods had been used; and (b) those who had not worked during that week. This classification was made by means of data on the number of days worked during the week preceding the enumerator's visit, which showed that 383,000, or about one-half of the persons in Class B, had worked one day or more.⁷ Data on period of idleness, which were also available for this unemployment class, were not used for the purpose of this classification, because the question on period of idleness, for persons reported as with a job, called for the length of time since the person had worked on that job, rather than the length of time since he had done any work. According to the data on period of idleness, only about one-third of the persons in Class B had been idle for less than one week.⁸

Of the persons in Class B who had not worked during the week preceding the enumeration, some would have been returned in 1940 as having jobs but not at work, some would have been returned as seeking work, and some would have been excluded from the 1940 labor force. The proportions that would have been classified in each of these three categories were estimated on the basis of data for persons in Class B by period of idleness and reason for idleness. For each of the three employment status categories, certain combinations of reason for idleness and period of idleness were identified, which would probably have caused the individuals exhibiting that combination to be reported as having a job, seeking work, or not in the labor force, respectively, if the 1940 census methods had been used. The relative numbers of persons having these combinations of reason for idleness and period of idleness reported were used to calculate a percentage distribution, which was applied to the total of persons in Class B who had not

⁷ This figure includes an allowance for those who did not report the number of days worked, based on the assumption that the proportion working one or more days was the same in the group not reporting as in the group that reported on days worked.

⁸ The data on period of idleness, which were tabulated by age, were used to estimate the age distribution of the persons who had worked one or more days during the preceding week, on the assumption that the latter group was distributed by age in proportion to the group reported as having been absent from their jobs for less than one week.

worked during the week preceding the enumeration. The combinations of reason for idleness and length of idleness that were used for this purpose are discussed below.

For persons in Class B who had been idle for considerable periods of time for reasons suggesting a long or indefinite lay-off, the most probable return in the 1940 census procedure would have been "seeking work," rather than "with a job." The instructions to enumerators in 1930 indicated that persons were to be reported as having jobs if they expected to return to their former work, without reference to the length or cause of their idleness. In the 1940 census, on the other hand, persons were to be returned as having jobs only if their absence from work was due to vacation, temporary illness, industrial dispute, or lay-off not exceeding four weeks, with definite instructions to return to work on a specific date. Moreover, the 1940 census schedule was so arranged as to exclude from the group having a job those persons who reported that they were seeking work.

Most of the persons in Class B who had been idle for one week or more because of weather conditions, labor disputes, or "family reasons" would probably have been reported in the 1940 census as having jobs and thus included in the category "employed." In addition, most of those who had been idle for only one or two weeks for reasons of economic conditions, industrial policy, dissatisfaction, or breakdown of plant or equipment, also would probably have been returned as having jobs by 1940 census methods.⁹ On the other hand, for persons who had been idle three weeks or more for reasons of the latter type, the most probable 1940 classification was "seeking work."

In the case of persons in Class B who had been idle for one or more weeks because of seasonality of employment, the most probable classification according to the 1940 census procedures would have been "not in the labor force." The fact that these persons regarded themselves as having jobs indicates that most of them were probably not seeking work at the time of the census.

Thus the numbers who would have been reported in 1940 as employed, seeking work, and not in the labor force, respectively, out of the total for persons in Unemployment Class B who had not worked during the week preceding the enumerator's visit, were assumed to be proportional to the numbers of persons in Class B reporting the following combinations of period of idleness and reason for idleness:

(a) Employed—idle for one week or more because of weather conditions, family reasons, or labor disputes, or idle for one or two weeks because of economic conditions, industrial policy, dissatisfaction, or breakdown.

(b) Seeking work—idle for three weeks or more because of economic conditions, industrial policy, dissatisfaction, or breakdown.

(c) Not in labor force—idle for one week or more because of seasonality of employment.

The age distribution of the groups that would have been included in each of the 1940 employment status categories was estimated on the basis of data on period of idleness for persons in Class B by age groups.¹⁰

UNEMPLOYMENT CLASSES C AND D

These two categories in the 1930 census classification comprise gainful workers who were reported on the unemployment schedules as sick or unable to work. Class C represents those who were out of a job and unable to work, and Class D represents those who had jobs from which they were absent because

⁹ Some persons idle for these reasons, who had been out of work as long as four weeks, might properly have been included in the 1940 category "with a job." On the other hand, the group idle one or two weeks undoubtedly included many who had been laid off indefinitely and who were looking for another job at the time of the census. It was assumed that a reasonable approximation to the number of laid-off workers who had definite instructions to return to work within four weeks could be obtained by including all the group reporting the reasons for idleness stated above who had been out of work for one or two weeks, and none of those who had been out of work three weeks or more at the time of the enumeration.

¹⁰ The age distribution of the group who would have been classified as employed in 1940 was assumed to be proportional to that of persons in Class B who had been idle 1 or 2 weeks, and the distribution of those who would have been classified as seeking work was assumed to be proportional to that of persons who had been idle 3 weeks or more. The age distribution of the seasonal workers who would have been excluded from the 1940 labor force was estimated by subtracting the estimates for the other employment status categories, in each age group, from the total for Unemployment Class B in that age group.

of sickness or disability. Estimated distributions of these two classes by employment status according to the 1940 census classification, by age and sex, are given in table 22. For the purposes of these estimates it was assumed that those persons in Class D who had been idle less than 14 weeks would have been included in the 1940 category "employed."¹¹ All of Class C and the group in Class D who had been idle 14 weeks or more, would probably have been reported in the 1940 census as unable to work and not in the labor force.¹²

TABLE 22.—ESTIMATED DISTRIBUTION OF UNEMPLOYMENT CLASS C (PERSONS OUT OF A JOB AND UNABLE TO WORK) AND UNEMPLOYMENT CLASS D (PERSONS HAVING JOBS BUT IDLE ON ACCOUNT OF SICKNESS OR DISABILITY), BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution according to 1940 census classification)

AGE AND SEX	Class C (Not in labor force—retired and disabled)	CLASS D		
		Total	Employed	Not in labor force (retired and disabled)
Male, 14 years and over.....	141	208	170	38
14 to 19 years.....	-	12	12	-
20 to 24 years.....	-	19	19	-
25 to 44 years.....	39	83	72	11
45 to 64 years.....	61	72	56	16
65 years and over.....	41	22	11	11
Female, 14 years and over.....	32	65	57	8
14 to 19 years.....	-	7	7	-
20 to 24 years.....	-	10	10	-
25 to 44 years.....	15	30	25	4
45 to 64 years.....	11	16	13	3
65 years and over.....	6	2	1	1

UNEMPLOYMENT CLASS E

This category in the 1930 classification, consisting of gainful workers reported as out of a job and not looking for work, was probably made up for the most part of retired and disabled persons who would have been excluded from the labor force in the 1940 census. The group probably included also a few unemployed persons who were not looking for work because they believed that no work was to be had, such as persons in communities having only one dominant industry in which the local plants had shut down. For such persons, enumerators were instructed in the 1940 census to report "seeking work" even though they were not actively seeking work during the census week.

The only available data showing the characteristics of persons in Class E are classifications by sex and industry. An examination of the industrial distribution of these persons indicates that only a small number of them were in industries, such as mining and paper manufacturing, which are commonly carried on in small towns where they dominate the economic life of the community.¹³ Accordingly, it was estimated that

¹¹The limit for period of idleness was placed higher for Class D than for Class B because in the 1940 census there was no particular limitation on the duration of idleness for persons to be reported as having a job who were idle on account of temporary illness.

¹²Allowances for persons not reporting period of idleness were made on the assumption that they were distributed by period of idleness in proportion to the persons for whom period of idleness was reported. Since the number of persons in Class C who had been idle less than one week was negligible, it was assumed that this entire class would have been reported in the 1940 census as unable to work and not in the labor force. The age distribution of persons in Class D who had been idle less than one week was estimated on the assumption that it was proportional to the distribution of persons in Unemployment Class B who had been idle less than one week. This assumption may have led to an underestimate of the average age of this group, but in view of the small numbers involved it is believed that any error resulting from this underestimate is of negligible importance. The age distribution of persons in Class D who had been idle from 1 to 13 weeks was assumed to be proportional to that of persons reported in the 1940 census as with a job but not at work. The age distribution of Class C and of persons in Class D idle 14 weeks or more was assumed to be proportional to that of all retired and disabled persons reported as gainful workers who would not have been included in the 1940 labor force (estimated by the methods explained in Chapter III).

¹³Only about 17,000 persons in Class E, or less than one-fifth of the total, were in the following industry groups: extraction of minerals; chemical and allied industries; cigar and tobacco factories; clay, glass, and stone industries; metal industries; shoe factories; other leather industries; saw and planing mills; other woodworking and furniture industries; paper and allied industries; textile industries; and electrical machinery and supply factories. It was assumed that about half of the persons in Class E in these industry groups would have been reported as seeking work in 1940.

only 8,000 of the 88,000 persons in Class E would have been reported as seeking work if the 1940 classification system had been used. The remaining 80,000 were allocated to the 1940 classification "not in the labor force."

The estimated distribution of Class E by employment status according to the 1940 census classification, by age and sex, is shown in table 23.¹⁴

TABLE 23.—ESTIMATED DISTRIBUTION OF UNEMPLOYMENT CLASS E (PERSONS OUT OF A JOB AND NOT LOOKING FOR WORK), BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution according to 1940 census classification)

AGE AND SEX	Total	EMPLOYMENT STATUS	
		Seeking work, experienced	Not in labor force (retired and disabled) ¹
Male, 14 years and over.....	61	5	56
14 to 19 years.....	-	-	-
20 to 24 years.....	1	1	-
25 to 44 years.....	16	2	16
45 to 64 years.....	26	2	24
65 years and over.....	16	-	16
Female, 14 years and over.....	27	3	24
14 to 19 years.....	-	-	-
20 to 24 years.....	1	1	-
25 to 44 years.....	18	2	11
45 to 64 years.....	8	-	8
65 years and over.....	5	-	5

¹This group may have included some seasonal workers, but for convenience is considered to be entirely retired and disabled. See note on table 24.

UNEMPLOYMENT CLASSES F AND G

These two categories were composed for the most part of persons who were reported in the 1930 unemployment census as having jobs but voluntarily idle. Class F represents persons who were voluntarily absent from their jobs without pay. Class G comprises those who had jobs and were drawing pay though not at work (principally persons on vacation).

Most of the persons in both of these unemployment classes would have been classified as employed by 1940 census methods. Each class included a few persons, however, who had been idle so long that they would probably have been excluded from the 1940 labor force. It was assumed that those who had been idle for more than two months would probably not have been reported as in the labor force in 1940. The latter group included 12,000 persons in Class F and 12,000 in Class G, most of whom were probably seasonal workers neither working nor seeking work at the time of the census.

To be sure, persons in Class G reported that they did not lose pay because they were not at work, but it is extremely unlikely that any considerable number of those who had been idle for more than two months were actually drawing pay. This group was probably made up mainly of persons such as unpaid family workers and own-account workers, who lost no pay because they did not normally work for pay.

The estimated distribution of Classes F and G by employment status according to the 1940 classification, by age and sex, is presented in table 24.¹⁵

¹⁴The age distribution of the estimate for persons who would have been classified as seeking work was assumed to be proportional to that of persons in Unemployment Class A who would have been classified as seeking work in 1940. The age distribution of the group not in the labor force was assumed to be proportional to that of retired and disabled workers reported as gainful workers in 1930 (estimated by the methods described in Chapter III).

¹⁵Allowances for persons not reporting period of idleness were made by assuming that such persons were distributed by period of idleness in proportion to those who reported. The age distribution of the persons in these classes who had been idle less than one week was assumed to be proportional to that of persons in Unemployment Class B who had been idle less than one week. The age distribution of those idle 1 to 8 weeks was assumed to be proportional to that of persons classified as with a job but not at work in the 1940 census. The groups that would have been excluded from the labor force were assumed to have an age distribution proportional to that of seasonal workers reported as gainful workers in 1930 who would have been excluded from the labor force in 1940 (estimated by the methods described in Chapter III).

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TABLE 24.—ESTIMATED DISTRIBUTION OF UNEMPLOYMENT CLASS F (PERSONS HAVING JOBS BUT VOLUNTARILY IDLE, WITHOUT PAY) AND UNEMPLOYMENT CLASS G (PERSONS HAVING JOBS AND DRAWING PAY, THOUGH NOT AT WORK), BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution according to 1940 census classification)

AGE AND SEX	CLASS F			CLASS G		
	Total	Employed	Not in labor force (seasonal workers) ¹	Total	Employed	Not in labor force (seasonal workers) ²
Male, 14 and over..	60	52	8	64	54	10
14 to 19 years.....	7	4	3	7	4	3
20 to 24 years.....	8	7	1	7	6	1
25 to 44 years.....	26	24	2	27	25	2
45 to 64 years.....	16	14	2	19	16	3
65 years and over.....	3	3	-	4	3	1
Female, 14 and over	24	20	4	19	17	2
14 to 19 years.....	5	3	2	4	3	1
20 to 24 years.....	5	4	1	3	3	-
25 to 44 years.....	11	10	1	9	8	1
45 to 64 years.....	3	3	-	3	3	-
65 years and over.....	-	-	-	-	-	-

¹ These groups may have included some retired and disabled persons, but for convenience are considered to be made up entirely of seasonal workers. Any error arising from this assumption will tend to be compensated for by the error in the opposite direction resulting from the assumption that the group not in the labor force in Class E was made up entirely of retired and disabled persons.

REJECTED CASES

There were 142,000 cases of gainful workers reported as not at work on the last regular working day, but rejected from the 1930 unemployment census tabulations (excluding 20,000 cases rejected because the persons were not enumerated as gainful workers on the population schedules). In many of these cases the reason for rejection indicates the classification which would have been made in the 1940 census.

There were 8,000 cases rejected because the persons were either definitely returned as retired or were over 70 years old and had been idle for a period of several years. In addition 15,000 cases were rejected because there was some entry indicating permanent disability or because the persons were sick or injured and had been idle for several years. These two groups would have been classified as unable to work and not in the labor force by 1940 census methods. The distribution of these persons by age and sex was assumed to be proportional to that of retired and disabled persons reported as gainful workers in 1930 who would not have been included in the 1940 labor force (estimated by the methods described in Chapter III).

There were 6,000 cases rejected because the persons had been working for members of their own families without money compensation. These persons would have been classified as employed in the 1940 census. Their distribution by age and sex was assumed to be proportional to that of unpaid family laborers, as shown by the 1930 census reports on occupation.

Unemployment schedules were rejected for 2,000 persons who were erroneously reported as not at work because a legal holiday or other "rest day" occurred on the day before the enumerator called. This group would have been classified as employed by 1940 methods. The age and sex distribution of this group was assumed to be proportional to that of gainful workers reported as working on the last regular working day.

There were 2,000 cases rejected because the persons were seeking their first jobs. These would have been classified as new workers in 1940. The age and sex distribution of this group was assumed to be proportional to that of new workers not reported as gainful workers in 1930 (estimated by the methods described in Chapter III).

In 4,000 cases the unemployment schedules were rejected because the persons had left work in order to go to school. These persons were probably mostly seasonal workers and would have been classified as not in the labor force by 1940 census

TABLE 25.—ESTIMATED DISTRIBUTION OF CASES REJECTED FROM 1930 UNEMPLOYMENT TABULATIONS, BY EMPLOYMENT STATUS, AND REASON FOR REJECTION, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution is according to the 1940 census classification)

REASON FOR REJECTION	Total	EMPLOYMENT STATUS			
		Em- ployed	Seeking work		Not in labor force
			Experi- enced workers	New workers	
Total ¹	142	32	58	2	50
Retired.....	8	-	-	-	8
Permanently disabled.....	15	-	-	-	15
Unpaid family worker.....	6	6	-	-	-
Legal holiday or rest day.....	2	2	-	-	-
Seeking first job.....	2	-	-	2	-
Attending school.....	4	-	-	-	4
Omitted entries.....	100	23	55	-	22
Other reasons.....	5	1	3	-	1

¹ Excluding 20,000 cases rejected because they were not enumerated as gainful workers on the main schedule.

methods. The distribution of this group by age and sex was assumed to be proportional to that of persons 14 years old and over attending school in 1930.

The largest group of rejected cases was that of persons reported on the population schedule as not at work on the last regular working day but with no entry whatever on the unemployment schedule. There were 100,000 cases rejected for this reason. In addition there were 5,000 cases rejected for miscellaneous other reasons. The distributions of these groups by employment status according to the 1940 census classification, and by age and sex, were assumed to be proportional to those for all persons in Unemployment Classes A to G. It was estimated that 82,000 of these 105,000 would have been classified as in the labor force, including 24,000 employed and 58,000 seeking work. The remaining 23,000 were assumed to be seasonal workers, although they included also a few retired and disabled persons.

The estimated distribution by employment status according to the 1940 classification for each type of rejected cases is shown in table 25, and the estimated distribution of the total group of rejected cases by age, sex, and employment status appears in table 26.

TABLE 26.—ESTIMATED DISTRIBUTION OF CASES REJECTED FROM 1930 UNEMPLOYMENT TABULATIONS, BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution is according to the 1940 census classification)

AGE AND SEX	Total	EMPLOYMENT STATUS					
		Em- ployed	Seeking work		Not in labor force		
			Experi- enced workers	New work- ers	Total	Seasonal workers	Retired and disabled
Male, 14 and over..	108	28	47	1	37	19	18
14 to 19 years.....	11	8	3	1	4	4	-
20 to 24 years.....	11	8	7	-	1	1	-
25 to 44 years.....	45	11	23	-	11	6	5
45 to 64 years.....	32	6	12	-	14	6	8
65 years and over.....	9	-	2	-	7	2	5
Female, 14 and over	34	9	11	1	18	8	5
14 to 19 years.....	8	2	2	1	3	3	-
20 to 24 years.....	6	3	2	-	1	1	-
25 to 44 years.....	12	3	5	-	4	2	2
45 to 64 years.....	6	1	2	-	3	1	2
65 years and over.....	2	-	-	-	2	1	1

ESTIMATES OF LABOR FORCE: 1940 AND 1930

PERSONS NOT REPORTED AS GAINFUL WORKERS

It was estimated, as explained in Chapter III, that there were 633,000 persons not reported as gainful workers in the 1930 census who would have been included in the labor force if the 1940 census methods had been used. This group included 211,000 persons who would have been classified as new workers in 1940, and 422,000 persons who were actually gainfully occupied but not counted as gainful workers because their occupations were omitted from the 1930 census schedules through carelessness or for other reasons. The distribution by employment status according to the 1940 classification for the group not counted as gainful workers because of omitted occupational entries was estimated by assuming that they would have been distributed in the same manner as the persons reported as gainful workers. The resulting estimates of the employment status distribution of persons not reported as gainful workers, by age and sex, are presented in table 27.

TABLE 27.—ESTIMATED DISTRIBUTION OF PERSONS NOT REPORTED AS GAINFUL WORKERS IN 1930, BY EMPLOYMENT STATUS, AGE, AND SEX, FOR THE UNITED STATES: 1930

(Figures in thousands. Employment status distribution is according to the 1940 census classification. Figures include persons of unknown age, distributed in proportion to the age distribution of persons reported as 14 years old and over)

AGE AND SEX	Total	EMPLOYMENT STATUS			Not in labor force
		Em- ployed	Seeking work		
			Experienced workers	New workers	
Male, 14 years and over.....	7,172	254	16	125	6,787
14 to 19 years.....	4,107	90	4	104	3,909
20 to 24 years.....	540	49	4	21	465
25 to 44 years.....	488	71	4	-	395
45 to 64 years.....	668	45	3	-	620
65 years and over.....	1,389	9	1	-	1,379
Female, 14 years and over....	33,354	136	6	88	33,105
14 to 19 years.....	5,385	59	3	74	5,249
20 to 24 years.....	3,189	27	1	12	3,149
25 to 44 years.....	13,379	33	1	-	13,345
45 to 64 years.....	8,336	14	1	-	8,321
65 years and over.....	3,045	3	-	-	3,042