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MOBILITY AND WORKER ADAPTATION TO ECONOMIC CHANGE IN THE UNITED STATES. MANPOWER RESEARCH BULLETIN NUMBER 1.

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PUB DATE JUL 63

EDRS PRICE MF-$0.50 HC-$3.24 79P.

DESCRIPTORS- *OCCUPATIONAL MOBILITY, EMPLOYMENT, *UNEMPLOYMENT, LABOR FORCE NONPARTICIPANTS, EDUCATIONAL BACKGROUND, *LABOR FORCE, *FEDERAL PROGRAMS, INDIVIDUAL CHARACTERISTICS, EMPLOYMENT SERVICES, CENSUS FIGURES, *VOCATIONAL EDUCATION, BUSINESS CYCLES, LABOR UNIONS, JOB PLACEMENT, INDUSTRY, MANPOWER DEVELOPMENT,

BACKGROUND INFORMATION FOR USE BY THE ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT IN ITS EXAMINATION OF MANPOWER PROBLEMS IN THE UNITED STATES IS PRESENTED. THE OBJECTIVE OF THE EXAMINATION WAS TO DETERMINE THE CONTRIBUTIONS WHICH POLICY, PROGRAMS, AND TECHNIQUES ON MANPOWER, EMPLOYMENT, AND SOCIAL AFFAIRS COULD MAKE FOR PROMOTING ECONOMIC GROWTH, REDUCING THE HUMAN AND SOCIAL COSTS OF CHANGE, AND MAXIMIZING THE PARTICIPATION OF HUMAN RESOURCES. THE SPECIFIC FOCUS IS ON MOBILITY AND WORKER ADAPTABILITY TO ECONOMIC CHANGE. IN A SOCIETY IN WHICH RAPID TECHNOLOGICAL CHANGE IS TAKING PLACE, INCREASED WORKER MOBILITY MAY BE A SIGNIFICANT FACTOR IN ACHIEVING FULL EMPLOYMENT, BUT IT WILL HAVE TO BE DIRECTED TO FILL MANPOWER REQUIREMENTS WITHOUT NEEDLESS LOSS OF WORKING TIME AND WITHOUT THE COMPULSIONS OF AN AUTHORITARIAN SOCIETY. CHAPTER TITLES ARE--(1) UNEMPLOYMENT, UNDEREMPLOYMENT, AND NONPARTICIPATION IN THE LABOR MARKET, (2) CURRENT LABOR MOBILITY, (3) EDUCATION AND TRAINING, (4) LABOR MARKET ORGANIZATION--THE EMPLOYMENT SERVICE, (5) LABOR-MANAGEMENT PROGRAMS FOR HANDLING CHANGES, AND (6) PROGRAMS UNDER CONSIDERATION. THE APPENDIX GIVES 16 TABLES OF DATA COVERING EMPLOYMENT AND UNEMPLOYMENT, BY AGE, SEX, COLOR, OCCUPATIONAL GROUP, AND TYPE OF INDUSTRY FOR THE PERIOD 1947 TO 1962. SOME EARLIER DATA ARE INCLUDED. A LABOR MOBILITY BIBLIOGRAPHY CONTAINS 55 ITEMS DATED FROM 1952 TO 1961. (EM)

MOBILITY and WORKER ADAPTATION to ECONOMIC CHANGE in the UNITED STATES

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Office of Manpower, Automation and Training

Revised July 1963

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PREFACE

In November 1961, the United States joined with 19 fellow members of the Organization for Economic Cooperation and Development in setting as a goal of the highest importance the achievement and maintenance of a high rate of economic growth. A specific target was established—to increase by 50 percent the combined output of the Atlantic Community between 1960 and 1970.

The accomplishment of this growth was not to be an end in itself, but a means for increasing the standard of living, for extending these gains to the whole population, for providing opportunities for gainful employment to the growing labor force, for reducing unemployment, and for maintaining the strength and vitality of the free world.

In accomplishing the objective of expanding the economic growth rate, it was recognized that there would be problems of workers adapting to the changing needs of production and to the technological improvement required for this growth.

In order to evaluate progress in the solution of these manpower problems and to encourage timely action to overcome difficulties in the path of expanding economic growth, the OECD adopted the procedure of periodic manpower examinations of member nations.

The following bulletin was prepared to provide the informational background for use by the OECD in its examination of the United States on the problems of manpower. The specific focus of this examination was on mobility and worker adaptability to economic change. The objective was to determine the contributions which policy, programs, and techniques on manpower, employment and social affairs could make for the promotion of economic growth, the acceptance of economic and social change, the reduction of the human and social costs of change, and the maximum participation of human resources.

The scope and sequence of the subject matter presented in this bulletin are in general designed to be responsive to the request of the OECD as detailed in

their comprehensive outline submitted to the Department of Labor in early November 1962. While directed toward meeting these specific informational needs, this bulletin also provides information of general interest which can contribute to a better understanding of the manpower problems and potentials of the United States.

This bulletin was prepared by Herman Travis under the general direction of Samuel Ganz, Assistant Director for Research of the Office of Manpower, Automation and Training. Important contributions were made by Robert Manifold, Florence Mishnun, and Richard Seefer. In addition, the Department of Labor's Bureau of Labor Statistics and Bureau of Employment Security provided data and analytical material.

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INTRODUCTION

Growth and change have been the keynotes of American manpower throughout its history. Vast increases in the population and labor force, and changes in their composition and capacity to produce, have in large measure provided the source of America's national strength and the basis for its cultural and material riches.

During the past half century, the American population has doubled. In the past 20 years alone, there has been a gain of nearly 50 million persons. Moreover, the character of economic life has changed radically. One of every three Americans lived on a farm a half-century ago; today, only 1 in 10 lives on a farm.

This growth and change continues. By the end of the present decade, the population may approach 210 million, a gain of 30 million over 1960. Continued large changes are expected in the character of the economy as agricultural employment declines further and as employment in other goods-producing industries assumes less relative importance to the total.

Growth and change in the United States have in the past raised the standard of living for increasingly larger numbers in the population, and brought preeminence to the Nation in world affairs, as well as obligations for defending the free world. The magnitude of future growth presents both a challenge and a promise. Large numbers of children born during the postwar period will be reaching working age during the next few years. During the 1960's approximately 26 million young workers will enter the labor force—40 percent more than during the 1950's. If America's economic growth matches its population growth, and if these youngsters are prepared to fill the jobs which will be open, then this Nation can look forward to the rising standards of living that accompany full employment and prosperity. However, if there are frequent economic downturns and feeble recoveries, if there is inadequate preparation of the young persons entering the labor force, and if there is not enough provision for helping large numbers in the labor force to adapt to the changing job demands, then America will face great difficulty both in meeting its domestic obligations and in maintaining its world leadership.

The American economy is vastly more complex today than it was a half-century ago. Industries and occupations unheard of only a few years ago are expanding rapidly while other industries and occupations are declining. Workers who have spent a large part of their working lives in an occupation have found themselves displaced and unable to qualify for the new jobs which are being created. Generally, the new jobs require higher levels of education and training so that workers face greater problems than in the past in adapting to the changing job demands.

Moreover, there are questions as to the adequacy of recent economic growth in the United States. Both output and employment growth have lagged

in the past 5 years, compared with the previous decade. From 1947 to 1957, gross national product (in constant dollars) rose at an annual rate of 3.8 percent, but since 1957 the annual growth has been 2.9 percent. Similarly, job growth has slackened, particularly in the private sector of the economy. An average of 700,000 jobs were added each year in private nonform industries between 1947 and 1957, but from 1957 to 1962 the annual increase was only 175,000 jobs.

As a result of the slackening of economic growth and the acceleration of shifts in the economic structure which have added to the reemployment difficulties of displaced workers, unemployment has persisted at disturbingly high levels in recent years, averaging about 6 percent in the 5-year period 1958–62. E en discounting some portion of this as representing unavoidable frictional unemployment, the rate of idleness is higher than many persons feel this Nation needs to acquiesce to. In the report which follows, background information is presented on the recent unemployment problems of the United States in a changing manpower situation, with a view towards delineating the areas where government can assist, with an active manpower policy conducted within the framework of a free and voluntaristic society, to find new jobs for idle workers and help them adapt to changing job requirements.

Chapter 1

UNEMPLOYMENT, UNDEREMPLOYMENT, AND NONPARTICIPATION IN THE LABOR MARKET

No single body of statistics seems to command as much public and professional interest as that on unemployment, perhaps because unemployment "touches our social conscience as well as our economic intelligence." Despite the special appeal of the subject, no single measure of unemployment is adequate to depict its nature.

Some unemployment—in the technical sense of job-searching—appears to be unavoidable in a free society. Some of it has even proved of ultimate benefit to the individual and the economy when it accompanied voluntary job changing and resulted in upgrading or a more favorable adaptation of the individual to his work career.

Besides such relatively desirable expressions of free choice and individual mobility, there are also other influences resulting in unemployment which in practice have been difficult to control, such as seasonal shifts in business activity; geographic movements of families and industries; periodic entry into and exit from the labor force; and even fortuitous events such as natural disasters. During the period in which the displaced worker attempts to accommodate to these events, and until he has regained or found new employment, he is counted among the unemployed; where job opportunities are ample and the individual prepared for the change, the unemployment may be brief and relatively free from major hardship.

Even when the initial cause of unemployment can be identified, its nature cannot always be distinguished with certainty, because its ultimate course may be affected by a myriad of influences. Unemployment resulting from seasonal effects, for example, may be prolonged by an economic downturn; during recovery, reemployment may be impeded by shifts in demand or by technological changes from which the worker is ill qualified to benefit.

Efforts to identify and measure the minimal types of unemployment in the United States have generally failed to yield precise results, for identification of the nature of unemployment is rendered difficult by the multiple influences of a complex economy.

In a study prepared for the Joint Economic Committee of Congress,[1] some rough measures

[1] "The Extent and Nature of Frictional Unemployment," Study Paper No. 6, prepared by the Bureau of Labor Statistics, U.S. Department of Labor, for the Joint Economic Committee of Congress, Washington, 1959.

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were developed relating to frictional unemployment during a period of relative prosperity. During the years 1955 to 1957, when unemployment was only slightly more than 4 percent of the civilian labor force, roughly 20 percent of the unemployed were jobless coincidentally with their entry or reentry into the labor market; this process of entry and reentry is large and continuous in the labor force of the United States. Another 10 percent of the unemployed during that period could be associated with voluntary shifting from one job to another, another characteristic of a portion of the American labor force which is highly mobile. Seasonal fluctuations in employment accounted for 25 percent or more of the unemployed.

These proportions, representing estimates based largely on circumstantial evidence, apply to a period of comparative prosperity and give no clue as to what their extent would be during periods of economic weakness. However, they do provide some perspective to the multiple faces of unemployment and point to the difficulties both in assessing the problems and developing the remedies.

Both popular and professional interest in unemployment has been stimulated by the problems which accompanied the four business recessions experienced by the United States in the past decade and a half, and from the nature of the subsequent recoveries which left the volume of unemployment higher in three of the four recovery periods than before the downturn had begun. This apparent tendency for unemployment to remain high, even when employment gains were large and the economy generally vigorous, has commanded increasing interest and concern and has led to a widespread consideration of programs to promote American economic growth as well as to assist the adaptive capabilities of the labor force during periods of great structural changes in the economy.

THE EXTENT OF UNEMPLOYMENT

Definitions

The definitions of unemployment and employment are to a large extent determined by the sources of data used in developing the measures.

There are two basic sources for statistics on current unemployment in the United States. One is the Current Population Survey, conducted by the U.S. Department of Commerce for the U.S. Department of Labor, based on a sample of approximately 35,000 households to determine the employment status of individuals in the population. The other source stems from the operations of the unemployment insurance system and relates to the administrative data on numbers of persons who claim and receive unemployment insurance benefits under the provisions of the unemployment insurance laws.

In the Current Population Survey, the employment status of persons 14 years of age and over is measured. Persons are counted as unemployed if they had no job and were looking for work during the specified week of each month which is surveyed. Certain special situations extend the comprehensiveness of this basic definition. For example, persons are also counted as unemployed if they did no work at all and (a) were waiting to be called back to a job from which they had been laid off; or (b) were waiting to report to a new job within 30 days and were not in school during the survey week. (Students waiting to report to a new job are counted as not in the labor force.) Also included in the count of the unemployed are persons who would have been looking for work except that they were temporarily ill or believed no work was available in their line of work or in the community.

The statistics from the Current Population Survey provide a basis for identifying in the Nation, as a whole, the personal characteristics (age, sex, marital status, color, etc.), and the occupational and other economic characteristics of both employed and unemployed persons in the population. References to unemployment in the following pages are based on the data provided from this household survey, unless otherwise noted. These are the figures most widely quoted in discussions of American unemployment. Recognition needs to be given to their inclusiveness, and to the fact that some persons not generally counted in the unemployment statistics of other countries, such as new entrants into the labor force, youngsters in school, and housewives seeking temporary work, are included in this measure of unemployment.

Data from the unemployment insurance system provide a measure of unemployed workers who are receiving compensation during their period of joblessness. Data on unemployment from this

source are published on a weekly basis for each of the States and on a monthly basis for each of the 150 major labor market areas. In addition, the Department of Labor publishes a monthly report presenting detailed information on personal and economic characteristics of the insured unemployed—sex, age, occupation, industry attachment, and duration of current spell of insured unemployment—by States. The information is obtained through the cooperation of the State and local offices of the State employment security agencies.

Figures on unemployment insurance do not include persons who have exhausted their benefit rights, new workers who have not had sufficient work experience to establish eligibility for unemployment insurance, and persons who worked in establishments not covered by unemployment insurance systems. About 80 percent of all nonfarm employees are covered by unemployment insurance systems. Excluded are mainly those workers in agriculture, State and local governments, domestic service, self-employment, and unpaid family work. Also excluded are some who work in nonprofit organizations and in certain small firms. On the other hand, some workers who receive benefits are partially employed and would not be counted as unemployed in the household survey.

This presents a statistical problem in that total unemployment figures for the labor force are collected for the Nation as a whole, but not for individual areas. In order to provide information on total unemployment in greater geographic detail, a method has been developed for estimating total unemployment for States and local labor market areas using insured unemployment and payroll employment figures as a base.[2] The national system of area classifications according to adequacy of labor supply is based primarily on these estimates. A total of 150 major labor market areas are classified on this basis for each month. There are six groupings representing a range of unemployment from less than 1.5 to 12 percent or more, as shown in the following tabulation.

Labor Supply Grouping	*Description*	*Usual Unemployment Rate*
A	Overall labor shortage	Less than 1.5%
B	Relatively low unemployment.	1.5 to 2.9%
C	Moderate unemployment.	3.0 to 5.9%
D	Relatively substantial unemployment.	6.0 to 8.9%
E		9.0 to 11.9%
F		12.0% or more

In addition to these data on 150 major labor market areas, similarly estimated unemployment data are used in the identification and classification of smaller areas with significant unemployment problems. Both the smaller and major areas with relatively substantial unemployment are eligible for special preference under various Federal Government programs to alleviate localized unemployment. Almost 600 smaller areas were so classified in the spring of 1963.

Information on industry employment also needs to be considered in any discussion of unemployment. These statistics are derived from a large sample survey of industrial establishments employing approximately 25 million workers. Monthly statistics from this source, based on payroll records, are available on the employment, hours, and earnings of workers by detailed industries and areas.

Recent Trends

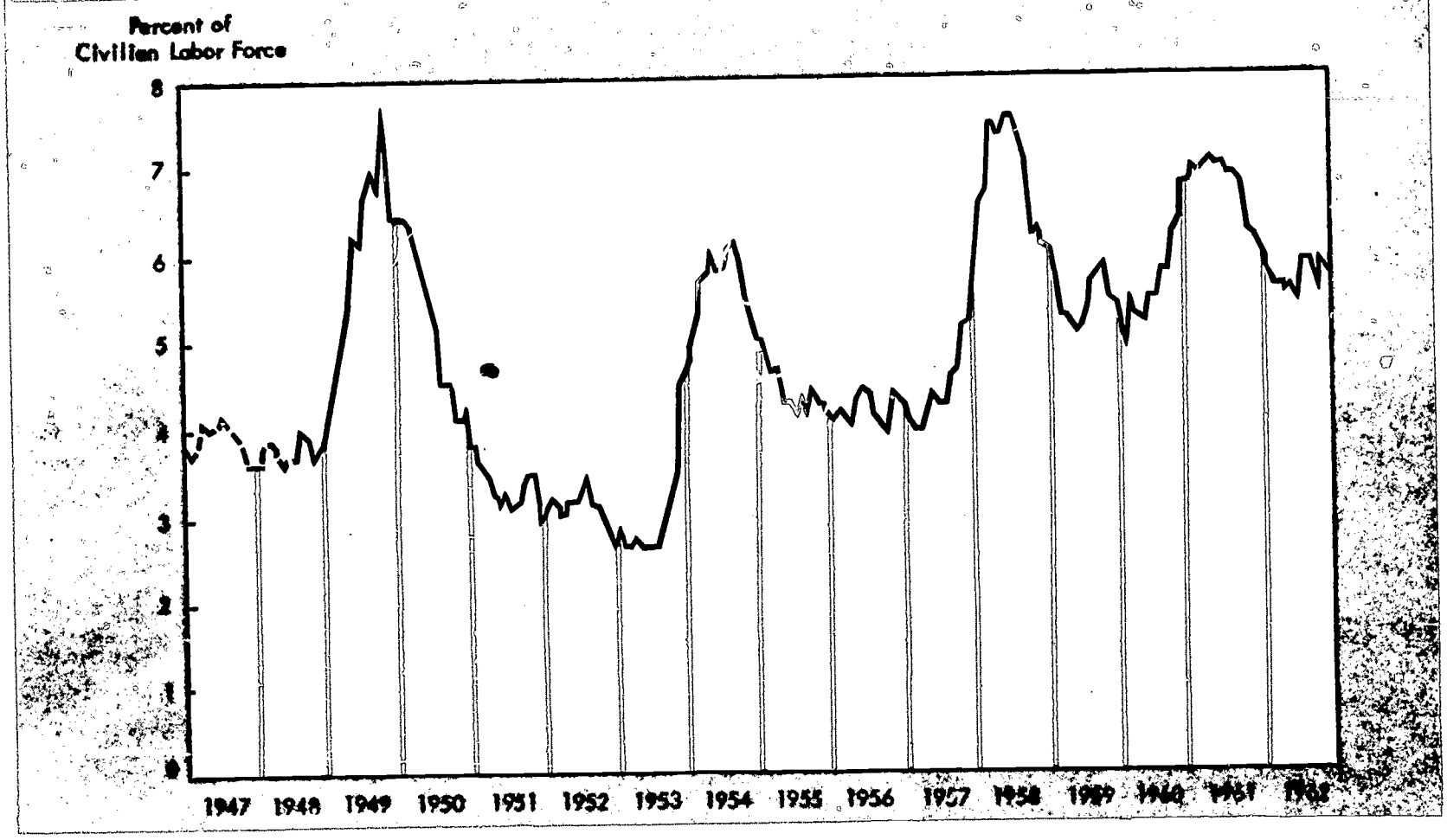
The number of unemployed in the United States averaged about 4 million in 1962 and represented about 5½ percent of the civilian labor force. During the recession of 1960–61, unemployment reached a high point of 7 percent of the labor force, seasonally adjusted. Unemployment remained at close to this level during the early months of recovery, subsequently showing a reduction to about 6 percent by the end of 1961, and to 5½ percent by March 1962. (See chart 1.) Throughout the remainder of 1962 and well into 1963, the unemployment rate clung to a plateau between 5½ and 6 percent even while general economic recovery and expansion was taking place.

In most other respects, the extent of this recent recovery has compared favorably with the recoveries from the four previous recessions which the United States has experienced since the end of World War II.

By mid-1963, about 3 million workers were added to the payrolls of American industrial concerns from the low point of the recession in the early part of 1961, about triple the job loss experienced during the decline. However, despite the magnitude of the recovery, it has not been translated fully into an equivalent decline in unemployment. From the viewpoint of both social and economic cost, the current rate of unemployment (about 5½ percent) is unsatisfactorily high.

[2] *Estimating Unemployment*, Bureau of Employment Security, BES No. R–185, March 1960.

Chart I **Seasonally Adjusted Unemployment Rate, 1947-62**



After expanding during the first half of 1962, employment in nonfarm industries leveled off during the latter half. Job gains which occurred in the service industry and in State and local governments offset in the aggregate by employment declines in manufacturing. Even with the recent expansion in factory jobs, unemployment has remained high.

This paradox of high unemployment persisting in a period of general recovery has renewed interest in and concern with the adequacy of overall economic growth, as well as with the need for promoting fluidity in the labor market and assisting workers to meet the challenge of changing job needs. These concerns have been expressed in legislation such as the Area Redevelopment Act and the Manpower Development and Training Act and have been responsible for renewed emphasis on the examination not only of industry's manpower requirements, but also of methods whereby frictions and obstacles between the available supply of workers and of jobs can be minimized.

As noted before, four general business recessions have taken place in the United States in the past decade and a half, that is, in the period since World War II. Only after the first of these recessions, in 1949, did the rate of unemployment subside to or below its pre-recession level, and this reflected abnormal circumstances. Before the end of the Korean hostilities in 1953, the rate of unemployment had dropped below 3 percent, reflecting the labor market demands of a quasi-war economy on which had been superimposed a high level of civilian demand. During the recovery and rapid expansion in the 1955–57 period, the unemployment rate failed to subside significantly below 4 percent.

Following the recession of 1958, the unemployment rate dropped only as low as 5 percent during limited periods in 1959–60; after the most recent recession, the rate settled down at about 5½ percent. These successively higher plateaus have resulted in unemployment as high during the recovery year of 1962 as during the recession year of 1954.

One of the disturbing features of the successive rises in the level of unemployment is that this unemployment has been accompanied by an even

greater rise, proportionately, in the number of long-term unemployed. While the total volume of unemployment rose by almost 40 percent from 1957 to 1962, the number of long-term unemployed (those jobless 15 weeks or longer) has doubled to a level of 1 million. The proportion of all unemployed workers jobless for 15 weeks or longer rose from about 20 percent in 1957 to about 30 percent in 1962. This is a very significant shift, considering that there were 1.1 million more unemployed in 1962. Increases in unemployment of very long duration (more than 6 months) were at an even faster rate, the number of workers in this category increasing by 2½ times over the 5-year period to an average level of about 600,000 in 1962. (See chart 2.)

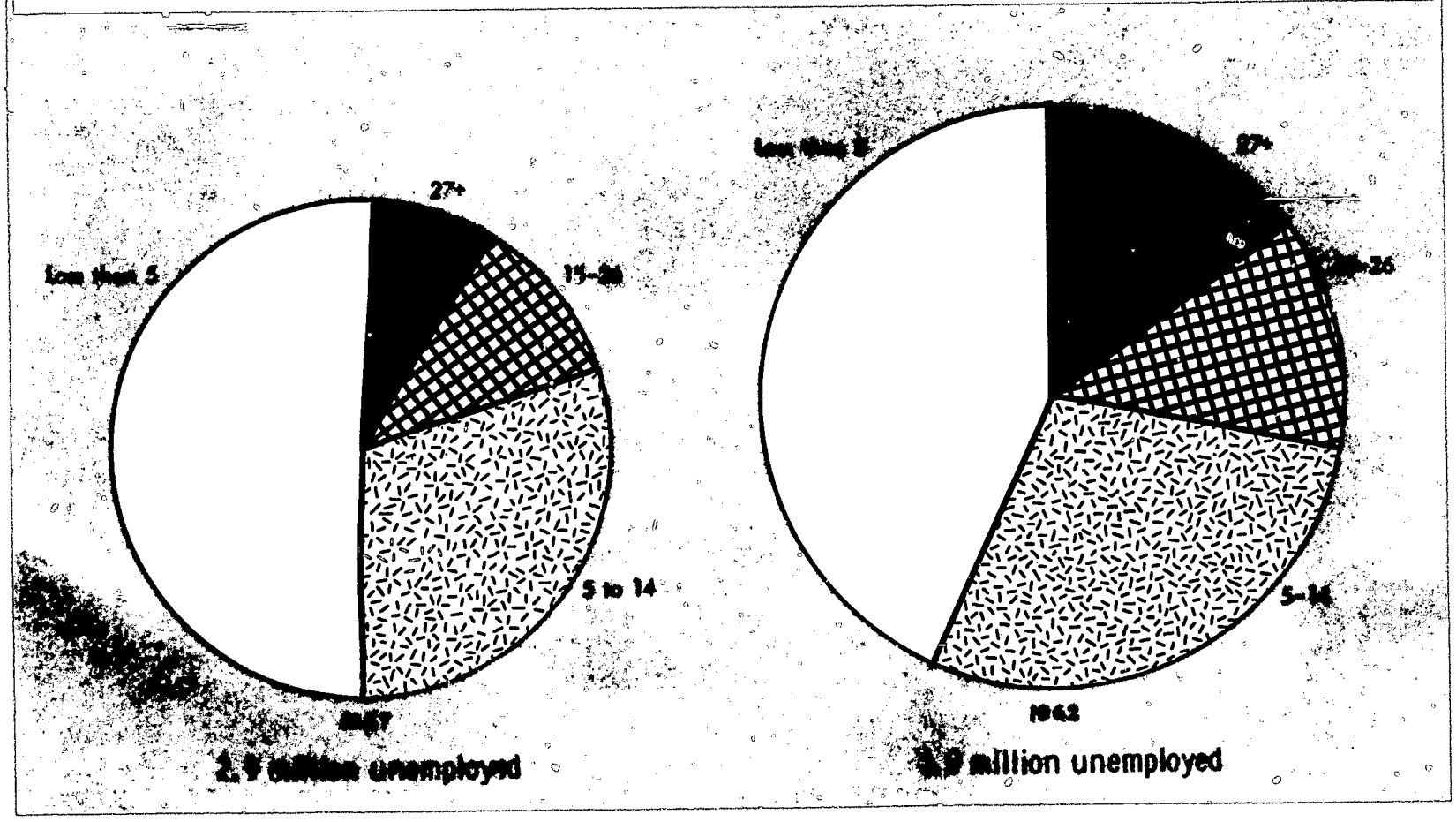
Notwithstanding the increases both in total volume and in the duration of unemployment, there continues to be a large turnover in the ranks of the unemployed. Fluidity and flexibility in response to changing labor market demands are basic features of the American labor force. In an average month 3 to 4 million persons enter the labor market, and only a slightly smaller number leave. Most of these persons—housewives and students—regard their callings as other than that of formal employment; they enter the labor market when their duties permit it and when there are job opportunities which fit their requirements. Many of them find work immediately; others spend some period of time locating a job. In 1957 approximately 20 percent of the unemployed were new entrants into the labor market. Of an average of 3.3 million persons entering the labor market each month in 1957, about 600,000 were counted as unemployed in a total volume of 2.9 million unemployed. In 1962 new workers accounted for about 15 percent of the total unemployed.

Some indication of the shifting composition of the unemployed is indicated by the following balance sheet, showing the change between August and September in 1962 and roughly representative of such changes in recent months.

Changes in Unemployment, August–September 1962
(In millions)

Total unemployed August 1962	3.9
Reductions during month:	
Found jobs	1.4
Left labor force	0.8
Additions during month:	
Lost jobs	1.0
Entered labor force	0.8
Total unemployed September 1962	3.5

Chart 2 **Distribution of Unemployment by Weeks of Duration, 1957 and 1962**



This large-scale movement into and out of the labor force, which seems to be unparalleled to anywhere near the same extent in other large countries, contributes not only to the volume of unemployment but also to the rapid turnover in the individuals included in the group counted as unemployed. Added to these influences for turnover are the general lack of constraint in this country (as compared with others) on job changing and on geographic mobility, and the magnitude of seasonal variations in employment. However, the cumulated effects of only small reductions in the extent of turnover among the unemployed can prolong the average duration of unemployment and increase the total volume of joblessness.

It is for this reason that there has been a growing recognition of the need not only to increase economic growth but also to reduce impediments to employment mobility and to assist directly, by programs of retraining and other measures, adaptation of workers to existing and projected job needs.

The Incidence of Unemployment

Certain groups in the population experience a disproportionate amount of unemployment. The greatest interest has centered on (1) young people, (2) older workers, (3) Negroes, (4) the relatively unskilled, (5) workers in industries which are declining or subject to relatively large instability in employment. These classifications of disadvantaged workers are not mutually exclusive, and the plight of the same workers is sometimes illustrated under different headings. These sometimes multiple classifications, however, serve to identify these workers and illuminate their problem more clearly.

Young People

Unemployment has always been much higher among young persons than among adults. In 1962, for example, the unemployment rate for boys 14 to 19 years of age averaged about 13 percent, and for those in their early twenties it averaged 9 percent, but for adult men 25 years and over it was only 4 percent. (See table 1.) Young persons under 25 represented a third of the unemployed but less than a fifth of the labor force.

There are a number of reasons for this pattern. Young persons are often new labor market entrants or frequent job changers, groups that experience a great deal of transitional unemployment. Moreover, young people starting out on their working careers tend to be more vulnerable to layoffs just because of their lack of seniority,

Table 1. Unemployed Persons, by Age and Sex, 1957 and 1962

Age and sex	Thousands of persons		Unemployment rate		Percent unemployed 15 weeks or longer	
	1957	1962	1957	1962	1957	1962
Total	2,936	4,007	4.3	5.6	19.1	27.9
Male	1,893	2,488	4.1	5.3	20.4	30.3
14 to 24 years	634	853	9.4	10.9	13.7	21.6
14 to 19 years	351	472	11.3	13.3	13.1	19.1
20 to 24 years	283	381	7.8	8.9	14.5	24.7
25 to 44 years	653	851	3.1	4.0	18.8	29.2
45 to 64 years	522	681	3.4	4.1	27.6	39.6
65 years and over	83	103	3.4	4.6	38.6	49.5
Female	1,043	1,519	4.7	6.2	16.7	24.0
14 to 24 years	369	599	8.0	11.3	11.4	17.0
14 to 19 years	222	344	10.1	13.2	10.8	16.0
20 to 24 years	147	255	6.0	9.1	12.2	18.4
25 to 44 years	419	550	4.5	5.8	17.7	26.3
45 to 64 years	226	334	3.1	3.9	23.0	31.1
65 years and over	28	37	3.4	4.1	[1]	[1]

[1] Percent not shown where base is less than 50,000.

their relative inexperience, and their very newness to the ways of the labor market.

Although unemployment rates have risen in all age groups since 1957, the rise was larger in absolute terms among young persons than among adults. On both a relative and absolute basis this was also true for young women as compared with adult women. (See chart 3.)

One somewhat surprising development among young men and women in their early twenties has been an increased rate of long-term unemployment. While the rate of long-term unemployment has moved up by almost 50 percent over the past 5 years for the labor force as a whole, this rate increased by 70 percent for 20- to 24-year-old men. In 1962 about 25 out of 100 jobless men in this age group had been seeking work 15 weeks or longer, not much below the proportion among 25- to 44-year-olds.

Although the rate of unemployment is high among all young people, it is far higher for the high school dropout than for the high school graduate or for those still enrolled in school.[3]

The latest available information on the employment status of school dropouts was collected in October 1962. That survey showed that about 300,000 young people between the ages of 16 and 24 left high school before graduation between January and October 1962. The composition of this group of dropouts was considerably different from that of the June graduates. Compared with the June graduates, the dropouts included greater proportions of men, of nonwhites, and of persons in farm areas. The dropouts were clustered in the 16- to 18-year age group and were on the average younger than the graduates, most of whom were 18 years or over.

In view of the young age of most school dropouts and their limited education and training, it may not be too surprising that an estimated 29 percent of all those who left school in 1962 were unemployed in October, compared with 14 percent for the high school graduates. Altogether, a total 430,000 dropouts 16 to 24 years old were unemployed in October 1962, accounting for about 13 percent of all unemployed persons. Among males, the 1962 school dropouts had an unemployment rate almost twice that of the June

[3] The latest information on these subjects relates to October 1962. It appears in Special Labor Force Reports No. 32, "Employment of High School Graduates and Dropouts in 1962," by Jacob Schiffman, reprinted from the July 1963 issue of the *Monthly Labor Review*.

graduates (27 versus 14 percent) despite the greater proportion of dropouts in farm areas, where unemployment is in general less prevalent.

Rates of unemployment decline for both dropouts and graduates as they grow older and obtain more job experience and responsibilities. However, school dropouts are apparently unable to overcome many of their disadvantages in the job market and continue to suffer from considerably more unemployment than graduates. For example, those who dropped out of school in 1960 had a rate of unemployment almost twice as high as that for graduates of that year.

Even when they find employment, school dropouts obtain much less desirable jobs than those held by high school graduates. These jobs have low skill levels, low income and prospect for advancement, and a high susceptibility to layoff.

School dropouts aged 16 to 24 in the civilian labor force in October 1962 had a rate of unemployment of 29 percent, or double that for high school graduates in the same age group. The very high rate of unemployment among school-leavers represents a serious economic loss not only to the individuals concerned but to society as well. One aspect of the loss is that school dropouts, many of whom have above average intelligence, fail to develop more fully their intellectual and skill potentialities.

The Older Worker

While the problem facing the younger worker is usually that of acquiring adequate skill, training, and experience to perform a job, the problem facing the older worker is often that of having accumulated skills, training, and experience no longer needed or useful in a rapidly changing economy. When an older worker loses his job, his problem is often complicated by a lack of mobility. Workers past 45 years of age do not readily move from one job or occupation to another, or from one community to another.

Although the older worker is better protected by seniority rights, the incidence of unemployment nevertheless is higher for those past age 55 than among younger men. In 1962, for example, men 55 to 69 years of age had an unemployment rate of 4.7 percent while men 30 to 54 years had a rate of 3.8 percent. This kind of differential also existed in 1957, with a rate of 3.5 percent recorded for the 55–69-year group compared with 3.2 percent for those in the central age groups.

With the onset of recession, men 55 years of age and over have generally shown less of an increase in unemployment than the labor force as a whole. Presumably, when business activity slackens, older men are better protected by seniority. Once they lose a job, however, they face more serious difficulties in finding another. In the 1961 recovery, the unemployment rate for men 55 to 64 actually continued to rise well after the bottom of the recession had been reached. Moreover, the rate of long-term unemployment rises steadily with advancing age. In 1962, among all unemployed men, about 3 out of 10 had been seeking work 15 weeks or longer. This ratio was as low as 2 out of 10 for teenagers, but as high as 4 out of 10 for men 45 to 64 years of age and 5 out of 10 for men 65 years and over.

The Negro Worker

Throughout the postwar period, the incidence of unemployment has been much heavier among Negro than among white workers. In 1962 nonwhites (the bulk of whom are Negro in the United States) made up 11 percent of the civilian labor force, but 22 percent of the unemployed. On the average, there were 900,000 nonwhite workers without jobs during 1962. The white-nonwhite differences were even more striking among adult men; in this group, the nonwhite worker's unemployment rate was 2½ times higher than that of the white worker, 9.4 versus 3.6 percent. (See table 2.)

Even though nonwhite workers have been moving increasingly into professional and clerical occupations and out of such unskilled work as domestic service and farm labor, the gap between white and nonwhite unemployment rates remains high. It has, in fact, been higher during the past decade than during the early postwar years. Thus, while the rate of unemployment among nonwhites was on the average 1.7 times higher than among white during 1948–53, it was 2.1 times higher during 1954–62. Despite occupational upgrading, nonwhite workers in 1962 were still concentrated to a much larger extent than white workers in relatively unskilled work—farm and nonfarm labor, domestic service—and in semiskilled production jobs. These are also the occupational groupings where unemployment rates are highest. (See table 2.) If the occupational distribution of whites and nonwhites in the labor force were identical, it has been estimated that the

Table 2. Unemployment Rates, by Color, Age, Sex, and by Selected Major Occupational Group, 1962

Characteristics	1962	
	White	Nonwhite
AGE AND SEX		
Total	4.9	11.0
Male	4.6	11.0
14 to 19 years	12.3	20.7
20 to 24 years	8.0	14.6
25 years and over	3.6	9.4
Female	5.5	11.1
14 to 19 years	11.5	28.2
20 to 24 years	7.7	18.2
25 years and over	4.3	4.8
SELECTED MAJOR OCCUPATIONAL GROUP		
Clerical workers	3.8	7.1
Craftsmen and foremen	4.8	9.7
Operatives	6.9	12.0
Nonfarm laborers	11.0	15.8
Private household workers	3.1	7.1
Service workers, except private household	5.3	10.8

difference in the overall rate of unemployment would be cut in half. The remaining difference would reflect the fact that nonwhite workers register higher unemployment rates than do white workers within each occupational group.

Similarly, in each industry group nonwhite workers have much higher unemployment rates than white workers. On the whole, the rates for nonwhite workers range between 1½ to 3 times as high as for white workers in the same industries. An especially high unemployment rate was recorded in 1962 among nonwhite workers whose last job was in construction (22 percent).

The Unskilled Worker

Virtually all of the data relating to employment and unemployment conditions point up the importance of skill, training, and education necessary to minimize the hazards of unemployment and meet the requirements of the future labor market. In the groups discussed so far—the young worker, the older worker, the nonwhite worker—the absence of highly developed skills is an important factor in their employment and re-employment difficulties. The highest unemployment rates among major nonfarm occupation groups in the postwar period have been recorded by nonfarm laborers, a basically unskilled group. The second highest rates of unemployment in most postwar years were recorded by operatives (largely semiskilled production workers in manufacturing and machine operators in other industries).

At the other end of the scale, unemployment rates are extremely low among professional and technical workers, and among managers, officials, and proprietors, although even these groups are not entirely free of unemployment. (In recent years unemployment for these groups has averaged between 1 and 2 percent.)

Additional data confirm more directly the strong relationship between education and unemployment. With each step up the educational ladder, the rate of unemployment shows a significant drop. The data on unemployment and education for March 1959 show that these rates ranged from 10 percent for those who did not complete their elementary school education to under 2 percent for college graduates.

As compared with 1957, the 1962 rates of unemployment were higher in every major occupation group. Relative either to the overall average or to the more skilled groups, there was no evidence of a worsening of the unemployment position of unskilled and semiskilled workers. At the same time, however, the semiskilled group has declined in employment by 600,000 since 1957, the only nonfarm occupation group to show a loss. And their share of the experienced civilian labor force declined from 19.8 percent in 1957 to 18.3 in 1962. Other blue-collar workers (craftsmen and laborers) showed no gain in employment since 1957 in sharp contrast to the sizable increases in just about every white-collar and service occupation group.

Industries of High Employment Volatility

Unemployment tends to be high among both skilled and unskilled workers in industries where employment is highly seasonal or irregular, in industries which are particularly subject to cyclical declines, and in others which are beset by secular declines in production and unemployment. Of course, within a given industry, the skilled worker

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is less susceptible to layoff than his less skilled colleague.

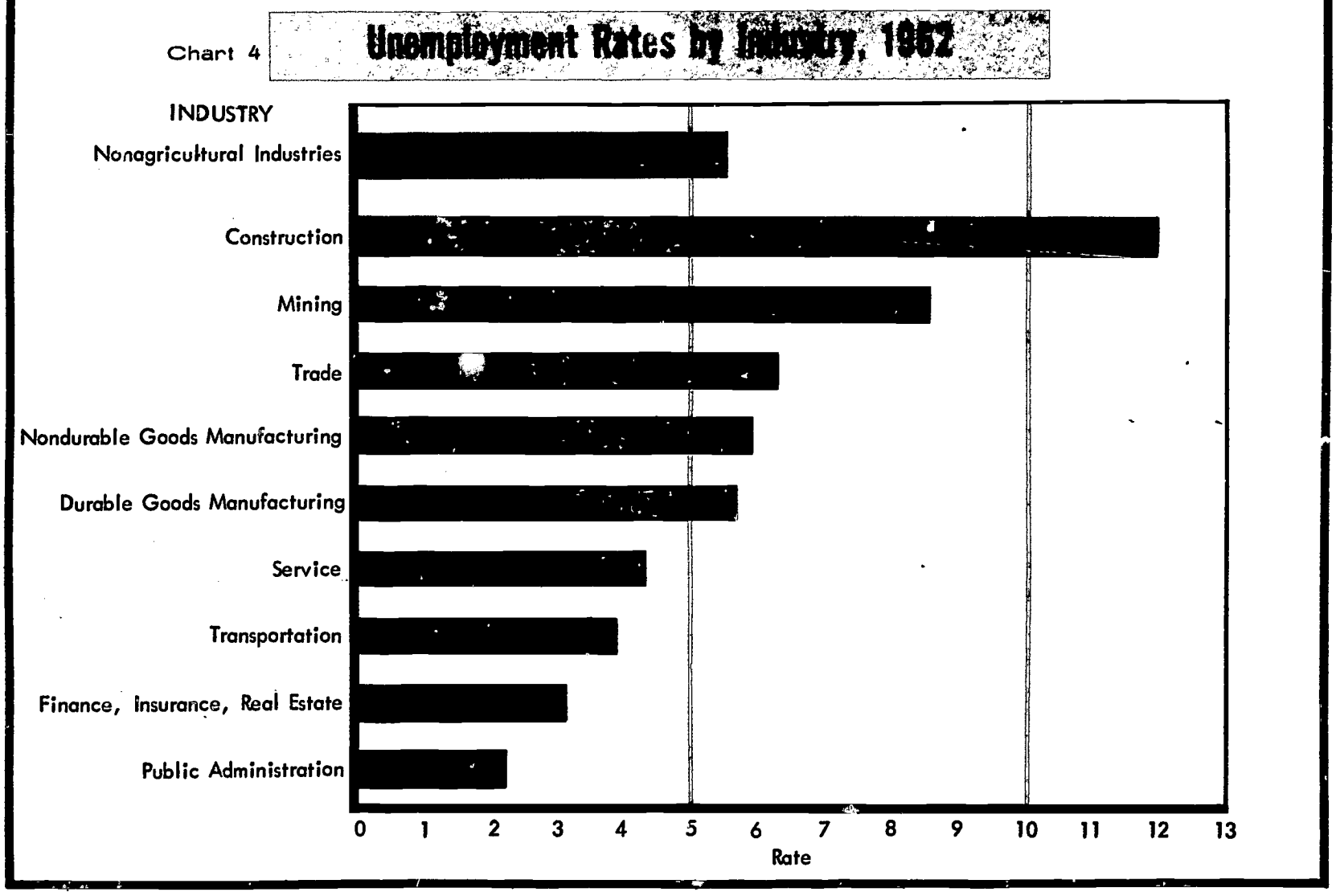
Construction has long been a prime example of an industry subject to a high risk of unemployment. In 1962 the rate was 12 percent, more than twice that for workers in all industries. (See chart 4.) Construction is subject to the sharp seasonal fluctuations associated with outdoor activities; it is also an activity characterized by short-term projects and relatively loose attachments between employers and employees. Employment in construction also varies sharply with the business cycle. Moreover, in recent years the construction industry has been providing proportionally fewer job opportunities in the economy.

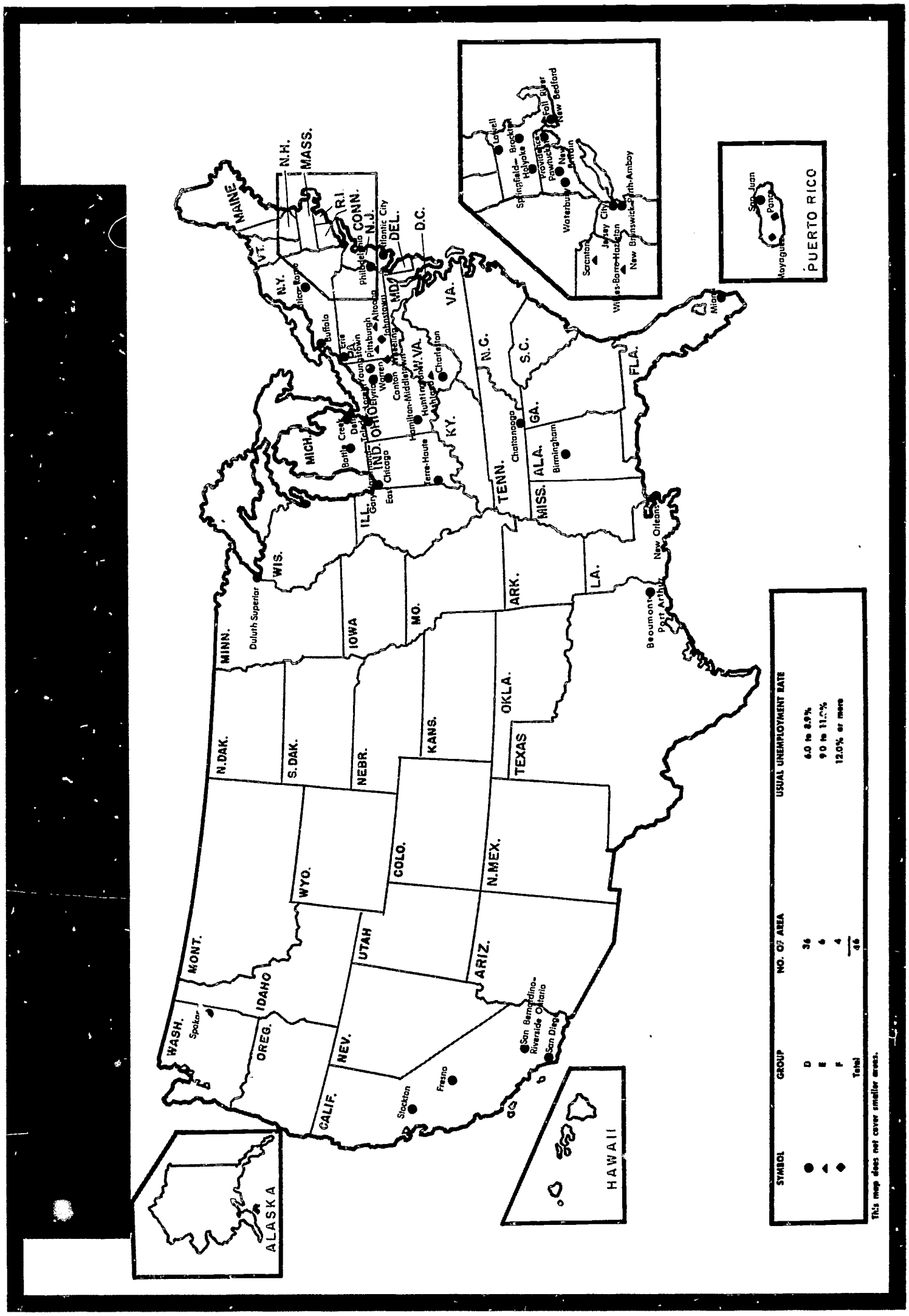
Unemployment also tends to run high among hired workers in agriculture. Seasonality and disruptions due to unusually bad weather and crop failures are the main factors involved here. Unemployment in agriculture is not much affected by the business cycle. However, employment opportunities in this sector have been declining over the long run, with the result that farm workers have migrated to cities and in some cases contributed to the unemployment problem there.

The rate of unemployment among mine workers has been higher than the overall average rate throughout the postwar period. The mining industry has also been subject to a long-term reduction in jobs because of mechanization and competition from other products. Business recessions have tended to accelerate the reduction in mining jobs. Long-term unemployment has always been especially high in the industry since mining communities tend to offer little in the way of alternative employment opportunities.

Within manufacturing, there is considerable variation in the extent of unemployment by industry and also from year to year. Probably the most important manufacturing industry with a high risk of unemployment is the automobile industry, which responds very sharply to declines in general business conditions, and also to fluctuations of its own. In 1958, unemployment averaged over 20 percent, going as high as 30 percent in some months. The industry is also subject to some seasonal unemployment. During August or Sep-

Chart 4

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WASH.
OREG.
CALIF.
ALASKA
HAWAII
PUERTO RICO
Lowell
Springfield—Holyoke
Brockton
Providence
Fall River
Pawtucket
New Bedford
Waterbury
Scranton
Jersey City
Wilkes-Barre-Hazleton
Perth Amboy
New Brunswick
San Juan
Ponce
Mayaguez
Miami
Buffalo
Erie
Pittsburgh
Altoona
Johnstown
Philadelphia
Atlantic City
Wheeling
Canton
Charleston
Huntington-W. VA.
Hamilton-Middletown
Akron
Toledo
Dayton
Battle Creek
Gary-
East Chicago
Terre Haute
Chicago
Chattanooga
Birmingham
New Orleans
Beaumont
Port Arthur
Duluth Superior
Spokane
San Bernardino-Riverside-Ontario
San Diego
Fresno
Stockton
SYMBOL
GROUP
NO. OF AREA
USUAL UNEMPLOYMENT RATE
D
36
6.0 to 8.9%
E
6
9.0 to 11.9%
F
4
12.0% or more
Total
46
This map does not cover smaller areas.

tember of each year, plants are invariably shut down for short periods for model changeover.

Geographic Differences in Unemployment

The incidence of unemployment is also heavier in some geographic regions or labor market areas than in other sections of the country. In 1962, for example, 46 of the 150 major labor market areas regularly classified by the Department of Labor were listed as having relatively substantial unemployment (chart 5). At the other end of the scale, 4 areas were listed as having a relatively low level of unemployment. Thus, the incidence of joblessness was significantly above or below the national totals in about one-third of the major labor market areas.

Many of the 46 major areas with substantial unemployment have had persistent unemployment problems for several years. In some instances, these areas have been characterized by high unemployment levels during most of the period since 1949, in both periods of overall national prosperity, as well as during the four postwar recessions.

Higher-than-average unemployment in these areas, as well as in smaller areas characterized by relatively chronic unemployment, is attributable to such factors as the shutdown of obsolete plants, the transfer of important local industries to other areas, changes in consumer demand, production technology or the competitive market position of certain products, depletion or exhaustion of natural resources, and lack of adequate industrialization. Local employment cutbacks arising out of these developments were particularly severe in coal mining, textile, steel, automobile and machinery centers.

A total of 18 major and some 500 smaller areas were classified as having "substantial and persistent unemployment" in December 1962. Together, these areas accounted for nearly one-fourth of the country's unemployed, but slightly less than one-eighth of the aggregate work force. These areas are eligible for programs of special assistance under the Area Redevelopment Act and receive certain preferences in the procurement of government supplies.

None of the 150 major labor market areas regularly classified by the United States Department of Labor was determined to have overall labor shortages on the average during 1962.

However, four major labor market areas were classified as having "relatively low unemployment" (1.5 to 2.9 percent of the work force unemployed), a situation where labor shortages in some lines might normally be expected. These areas in 1962 were: Washington, D.C.; Richmond, Va.; Cedar Rapids, Iowa; Madison, Wis.

Unemployment Classification of 150 Major Labor Market Areas, December of 1961–62

Labor Supply Classification	*Description*	*Usual Unemployment Rate*	*Dec. 1962*	*Dec. 1961*
Group A	Overall labor shortages	Less than 1.5%	0	0
Group B	Relatively low unemployment	1.5 to 2.9%	10	4
Group C	Moderate unemployment	3.0 to 5.9%	99	86
Group D	Relatively substantial unemployment	6.0 to 8.9%	31	48
Group E		9.0 to 11.9%	7	7
Group F		12.0% or more	3	5

MANPOWER SUPPLY SHORTAGES

Even with the persistence of comparatively high rates of unemployment, there are still occupations in which shortages of qualified manpower exist. The general import of occupational trends in the United States, as elsewhere, has been to create increasing demands for highly skilled and educated workers.

The occupations listed below are currently labeled as critical by the Department of Labor for purposes of draft deferment. These occupations generally require high levels of education and/or training, and in virtually each field the educational requirements are becoming greater. In some of these occupations, very special categories are re-

quired, with the specialties defined in detail in other lists.

Aircraft and engine mechanic
Astronomer*
Bacteriologist*
Biophysicist*
Chemist*
Clinical psychologist
Dentist
Die setter (forging)
Electronics mechanic
Engineering psychologist*
Engineer, professional
Geologist*
Geophysicist*
Glass blower, laboratory apparatus
Health physicist
Instrument repairman
Jig and template maker
Machinist
Mathematician*
Nurse, registered
Orthopedic appliance and limb technician
Osteopath
Parasitologist*
Patternmaker
Pharmacologist*
Physician and surgeon
Physicist*
Physiologist*
Structural linguist*
Teacher, college
Teachers, high school (Mathematics, physical and biological sciences, and modern foreign languages except French, German, Italian, or Spanish)
Teacher, technical institute
Teacher, vocational (critical occupations only)
Technician, engineering and physical sciences
Tool and die designer
Tool and die maker
Veterinarian

*Limited to those individuals who meet one of the following criteria: (1) have a graduate degree directly related to the occupational area concerned; (2) have equivalent experience, education, and training (generally considered to be not less than 1 year beyond bachelor degree level).

In order to provide a basis for anticipating the demand for and supply of workers in some critical occupations, projections were prepared on the number of entrants and withdrawals in these occupations under certain assumptions. An example of the shortage which might be expected under these assumptions is given by the projection prepared for engineers. The United States may fall short by almost a quarter of a million between 1960 and 1970 in meeting the total needs for engineers projected under the full employment and other conditions assumed unless strenuous efforts are made to increase personnel resources in the profession and to improve utilization of engineers. The situation will probably be most acute during the mid-1960's, when the needs generated by the space program and the expanding economy will reach new highs and the number of engineering graduates may be at their lowest point in recent history.

The balance sheet that follows compares the projected requirements for and supply of engineering personnel.

Requirements

Growth requirements:	
1970 projected employment	1,375,000
Deduct 1960 employment	—850,000
Net growth requirements, 1960–70	525,000
Replacement requirements (retirements, death, transfers, and other separations), 1960–70	165,000
Total requirements	690,000

Supply

Gross number of entrants with bachelor's degrees in engineering, 1960–70	347,000
Deduct persons with engineering degrees who are not in engineering positions	—64,000
Net supply of engineering graduates	283,000
Entrants with nonengineering degrees, 1960–70	71,000
Other entrants (persons without degrees and emigrants), 1960–70	97,000
Total supply	451,000

Deficit

Total requirements	690,000
Deduct total supply	—451,000
Total deficit	239,000

UNDEREMPLOYMENT

Although problems of underemployment are gravest in the emerging economies and receive the most attention there, similar problems exist in the United States, contributing to the impairment of incomes and levels of living and the retardation of economic growth.

Underemployment is difficult both to measure and to define. For practical purposes, the International Labor Office has distinguished three forms:

a. **Visible underemployment,** characterized by the unavailability of full-time and full-year work for those who want it.

b. **Disguised underemployment,** characterized by the use of workers at tasks below their highest level of skill or grossly underpaid in relation to their abilities.

c. **Potential underemployment,** where labor contributes less than its potential because of inefficient techniques or organization of production.

No comprehensive measures of underemployment in the United States exist. Although some work has been done in measuring some forms of potential underemployment in agriculture, using income standardization techniques for comparable demographic groups, the only applicable continuous measures of underemployment relate to part-time work of persons whose work schedules have been reduced for economic reasons, and of persons who would like to find full-time work but cannot.

Part-Time and Full-Time Employment

Of 62.8 million workers in total nonagricultural employment in May 1962 [4], 2.3 million were working part-time for economic reasons. Over the postwar period, there has been no significant trend in this proportion (3.7 percent in May 1962) aside from variations resulting from the business cycle. During recession years the May proportion has gone as high as 5.7 percent in 1958 and to at least 4.5 percent in 1949, 1954, and 1961. The low point was 3.0 percent in both 1951 and 1952. (See chart 6.)

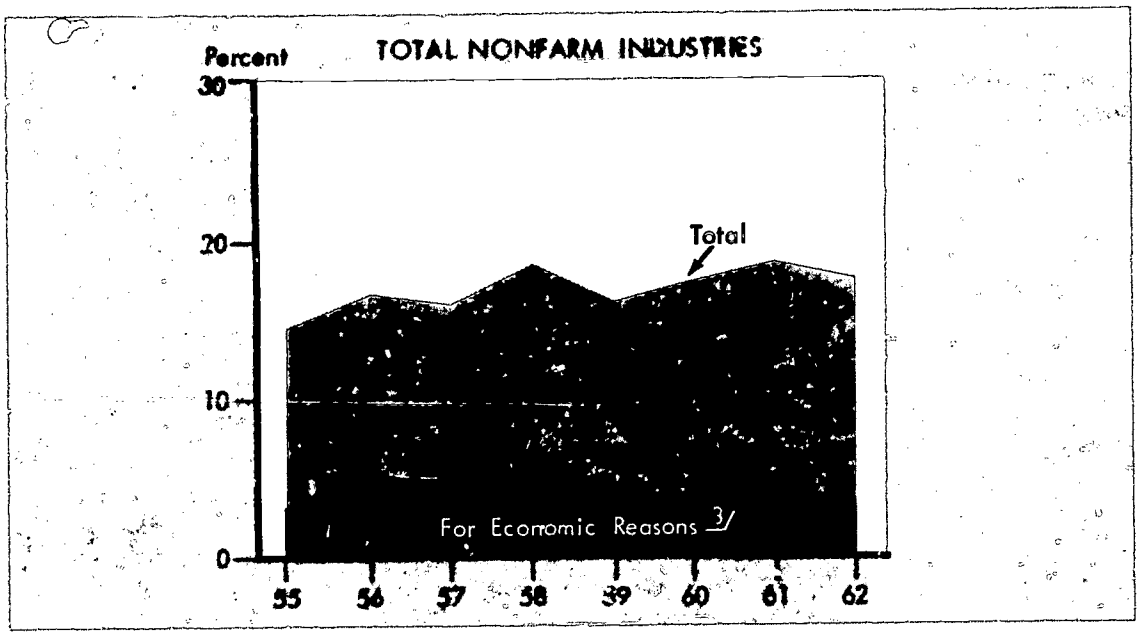
Included among these 2.3 million "involuntary" part-time workers in May 1962 (that is, those on part-time for such economic reasons as slack business and job turnover) were 1.1 million workers who usually worked full time but had their hours cut back, and 1.2 million workers who were regular part-time workers only because they could not find full-time jobs. Neither category has shown any long-term trend, but both have varied sharply with the business cycle.

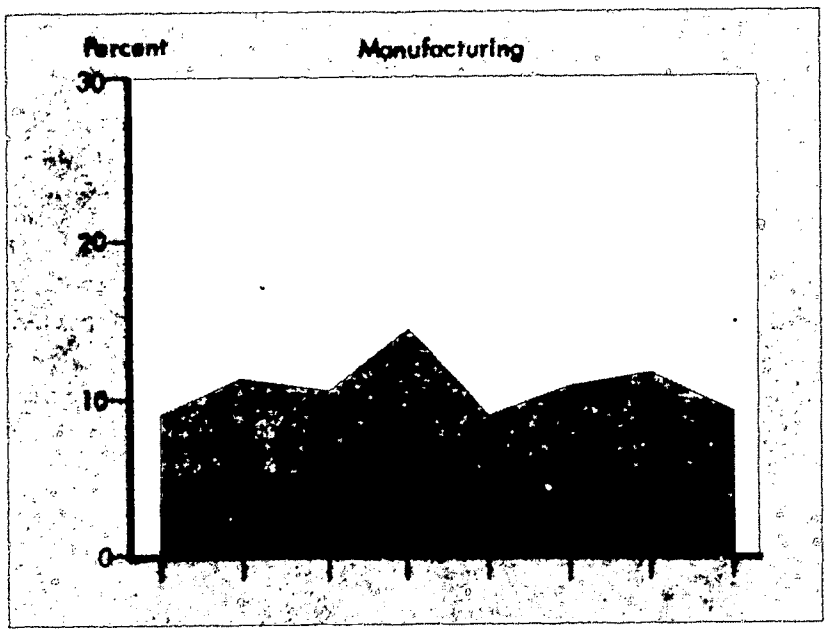
Other categories of part-time work, generally characterized as voluntary, have shown a disproportionate increase in comparison with the growth in total employment. The number of usual part-time workers on voluntary short schedules has risen from 3.7 million in 1949, to 5.7 million in 1957, and to 7.4 million in 1962 (all May data). These part-time workers represent for the respective years 7.5, 9.8, and 11.8 percent of total nonagricultural employment; their greater numbers constitute a significant proportion of the increase in the total number of jobs in the postwar period. While involuntary part-time work represents a loss to the economy in that there is a failure to utilize the available work time of individuals, the growth in voluntary part-time employment represents a gain in that the output of individuals is utilized which might not be available to the economy if special provision were not made for such work.

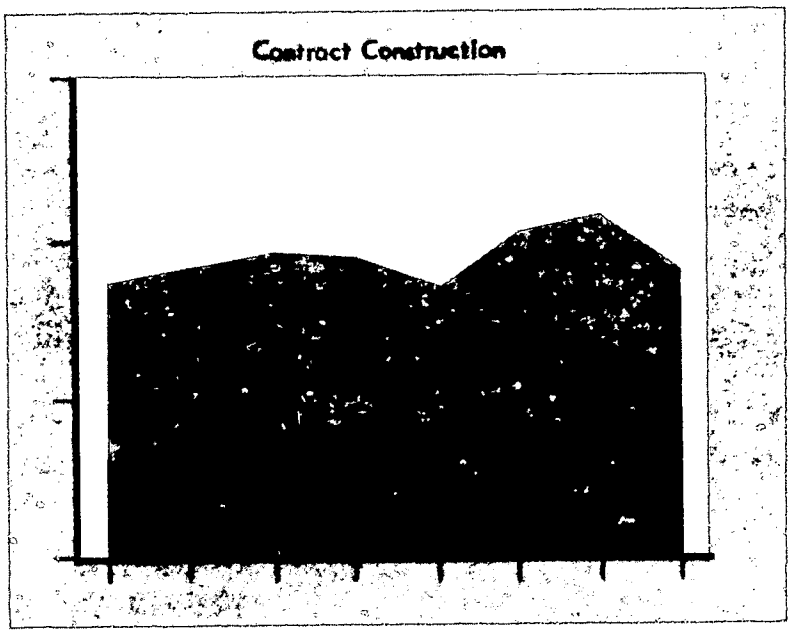
[4] May data are conventionally used in comparisons of part-time employment in order to avoid aberrations sometimes introduced by the uneven occurrence of holidays or of unusual weather in the survey weeks of other months.

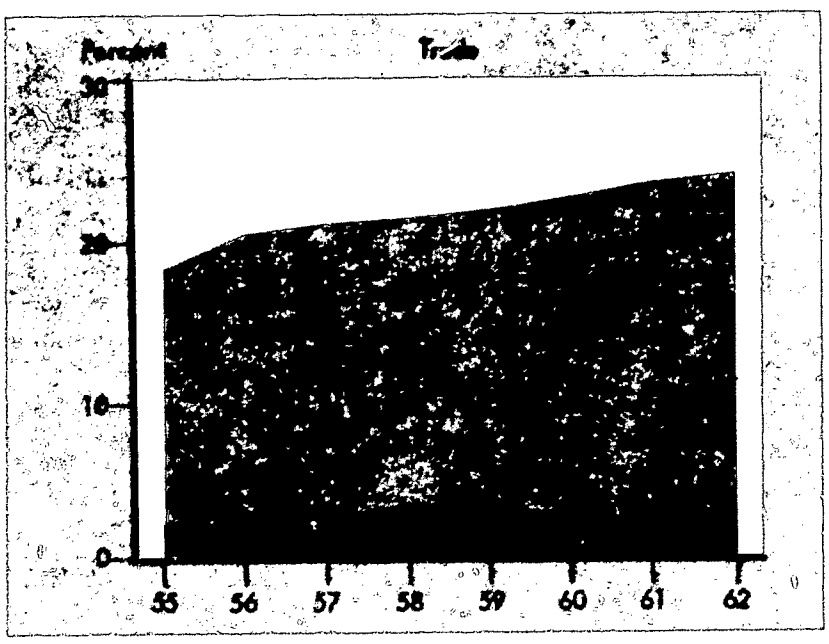
Chart 6

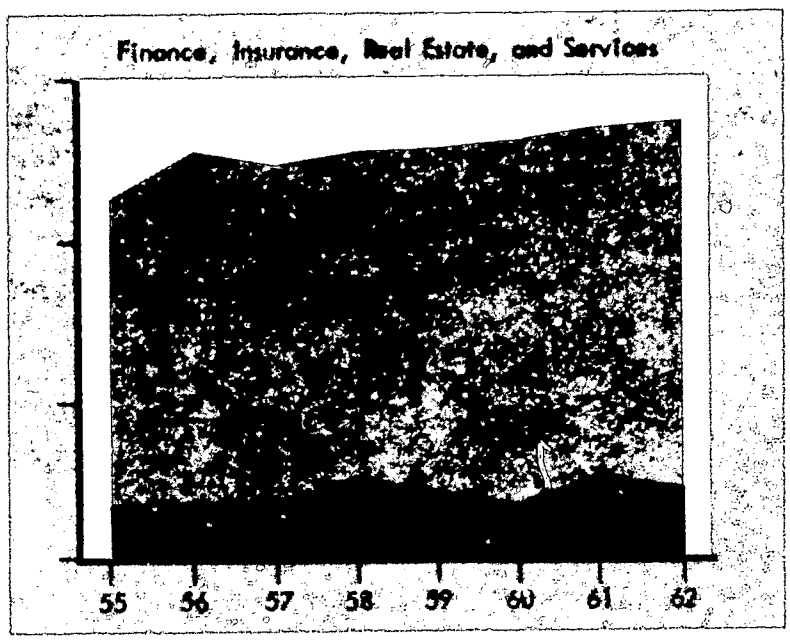
Percent Part Time of Employees at Work, for Selected Industries, 1955-62 1/











1/ For May of each year.

2/ Includes voluntary part time, and such temporary causes as bad weather, brief illness, strikes and vacation.

3/ For example, slack business, shortages of materials, and inability to find full-time work.

NONPARTICIPATION IN THE LABOR FORCE

Persons who are not in the labor force (that is, neither working nor looking for work) are those primarily keeping house, in school, unable to work because of long-term physical or mental illness, and retired persons and certain others. The primary importance of the data on persons not in the labor force indicates the extent of the manpower resources potentially available under certain conditions. Overall, the proportion of the population not in the labor force has ranged between 41 and 43 percent in the postwar period, without evidence of any significant trend. This lack of direction, however, disguises significant, offsetting trends for individual groups in the population—declining participation in the work force for youngsters and old persons, and a steady rise in participation among women.

1. *Young persons.* Worker rates for young persons have continued their long-term downward trend, reflecting the continuing shift of population from farm to city (where work activity by the young is not nearly so typical) and more years of schooling. Although school attendance does not preclude participation in the labor force, it does tend to limit it, and worker rates for students are far lower than for nonstudents of the same ages.

2. *Older persons.* The trend in recent years has been towards an accelerated decline in participation of men over 65, partly due to liberalized retirement provisions of the Social Security Act.

3. *Women.* The biggest factor in labor force growth in recent years has been the steady increase in participation of adult women. Women have accounted for two-thirds of the labor force growth in the postwar period, most of this from married women who have taken on part-time work.

A great deal of attention has been given in recent years—particularly in trade union circles—to the "disappearance" from the labor force of unemployed older workers who simply stop looking for work when jobs cannot be found after protracted search. Unfortunately, there is virtually no statistical evidence available on the subject. One finding of the President's Committee to Appraise Employment and Unemployment Statistics was "that the criteria now being used to draw the dividing line between those unemployed and those not in the labor force are, in general, soundly conceived. There is, however, considerable room for improvement in the way the definition of unemployment is applied in practice, and we believe that further experimentation and research can lead to measures of unemployment which are more reliable and easier to interpret than those that are now published." [5]

With the availability of a supplementary sample of households for obtaining additional information, so that the comparability of the current series of statistics are not prejudiced by the introduction of unusually probing questions, more information can now be obtained on the characteristics of those not in the labor force and some confirmation or disproof of this theory of discouragement as a factor in nonparticipation.

One of the problems in the past has been that it has been impossible to associate any overall movements in the labor force with economically depressed conditions. The labor force has, during different periods of recession, both expanded and contracted without relation to the trend of economic developments.

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[5] "Measuring Employment and Unemployment," President's Committee to Appraise Employment and Unemployment Statistics (Washington, D.C., Sept. 27, 1962), p. 49.

Chapter 2

CURRENT LABOR MOBILITY

GENERAL

One of the greatest resources contributing to economic growth in the United States is the facility of American workers to adjust to the changing demands of a highly dynamic system. This overall process of adaptation is even more remarkable considering that it occurs within an essentially voluntaristic society that recognizes individual freedom of choice as a fundamental tenet. The sum of individual workers' decisions to change their occupations and employers, to move from their homes and hometowns, has been a major factor in adjusting the Nation's labor supply to demand. This acceptance and adaptation to change has enabled the American economy to expand with a minimum of disruption. On the other hand, the unwillingness or inability to move on the part of some workers has been a barrier to reducing the pools of unemployment which have persisted even in the face of generally high levels of economic activity.

Among the factors which will influence and be influenced by mobility patterns is the impending large increase of young workers in the labor force. As a result of the sharp increase in birth rates after World War II, almost 40 percent more new young workers are expected to enter the labor force during the 1960's than in the 1950's. In the present decade, 26 million young persons will be entering a labor market which is rapidly being transformed by technological changes. A major challenge to the American economy will be providing jobs for this large number of new workers.

Moreover, there have been fundamental changes occurring in the economy which point to the prospect of large future changes in employment patterns. In recent years, the United States has become a Nation with more persons engaged in service-producing than in goods-producing industries. In 1949, for the first time in history, the number of workers in service industries (trade; business, professional and personal services; transportation and public utilities; finance, insurance, and real estate; and government) surpassed the number in the goods-producing industries (agriculture, manufacturing, construction, and mining). This differential has steadily widened until by 1962, 58 percent of all industrial employment was in the service industries and 42 percent in the goods-producing industries (including agriculture). All indications are that the differential will continue to widen in the future. A parallel reflection of this employment shift from goods to services is the occupational growth in white-collar jobs (professional, managerial, clerical, and sales) as compared with blue-collar employment (craftsmen, operatives, and laborers).

There are many other forces which bear importantly on the mobility of the United States labor force, ranging from the reduction in time and distance between places resulting from improvement in communications and transportation to the concentration of individual industries in certain areas.

The following section describes the response of

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the American population and the labor force to many of these forces in the recent past, showing patterns and trends in the amount of moving that takes place, who moves, where to, and how far. It also points up some of the factors that favor and impede this movement.

GEOGRAPHIC SHIFTS IN POPULATION AND THE LABOR FORCE

The volume and direction of the movements of workers from one geographic area to another may be gaged by the shifts in population that took place among the States between 1950 and 1960.

Recent population shifts have been toward the sections of the country enjoying rapid economic growth and these shifts in turn have further contributed to growth. Between 1950 and 1960, Florida and States in the West gained the most through these population transfers, which paralleled these States' gains in industrial, space research, and recreational facilities.

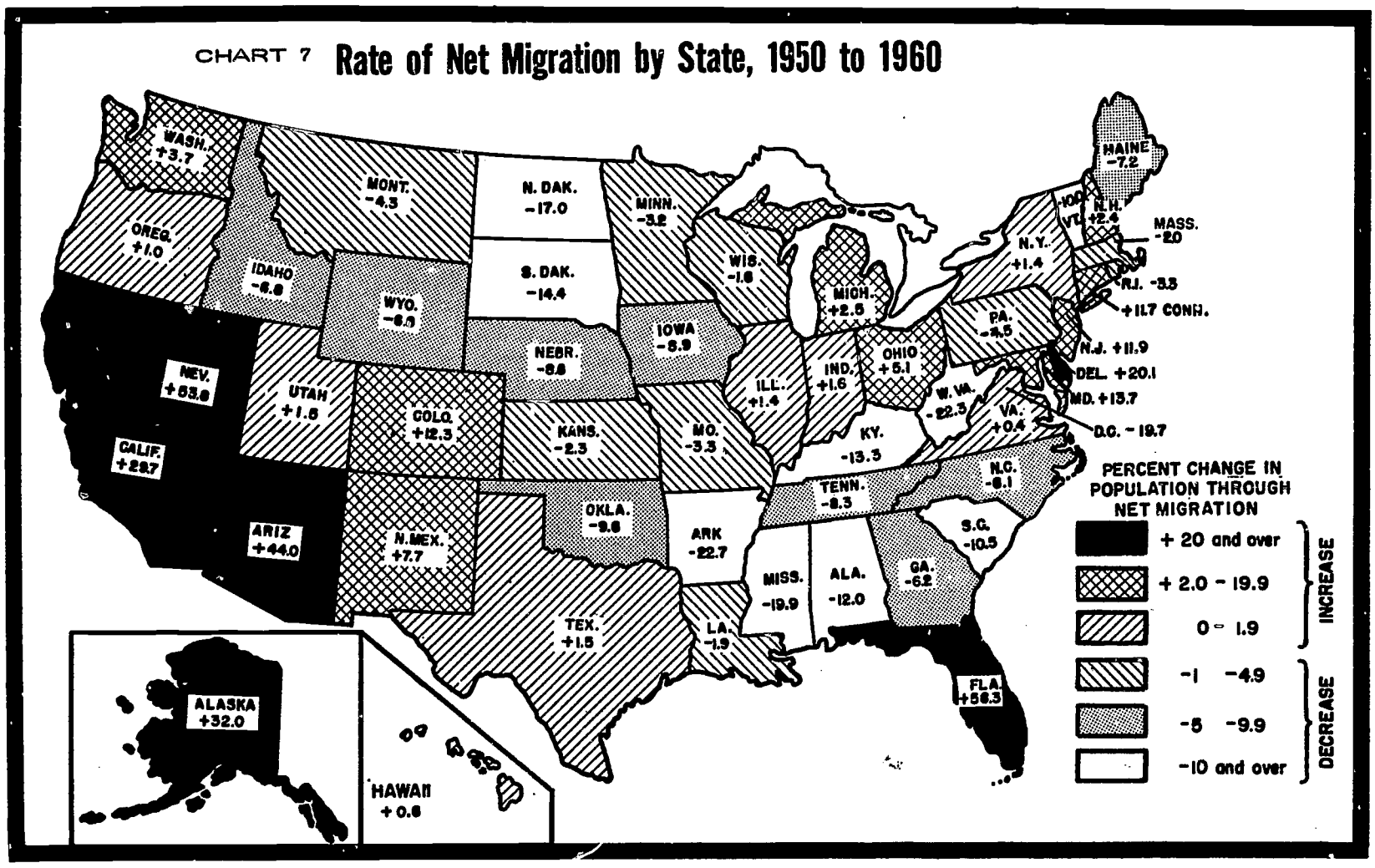
Altogether, 23 States had an excess of inmigration over outmigration during the 10-year period. (See chart 7.) In the other 27 States and the District of Columbia, there was a net outmigration. Every State, except Arkansas, West Virginia, Mississippi and the District of Columbia, had a rise in total population between 1950 and 1960.

Metropolitan areas, particularly the suburbs of large cities on the Eastern seaboard, grew rapidly through inmigration. These gains were highly concentrated in a relatively few counties; as many as four-fifths of all counties had a net migration loss during the decade.

Although the patterns of migration traced in the decade of World War II generally persisted during the sixties, for more than half of the States the rate of population gain or loss through migration was larger. Outstanding were Florida, New Jersey, Colorado, and Delaware, whose net gain from migration during the 1960's was about double the rate of the preceding decade, and West Virginia, whose net loss almost doubled.

The States that lost more population through migration than they gained were chiefly those in New England, in the North Central, and in the Southern regions of the country. The heaviest losers were Pennsylvania (with an estimated net outmigration of 475,00), West Virginia (447,-000), Mississippi (434,000), Arkansas (434,000), and Kentucky (390,000).

CHART 7 **Rate of Net Migration by State, 1950 to 1960**



Twenty-one States—mainly in the South—had a net outmigration of nonwhite residents. The net outmigration rate of nonwhites from the South was especially high for the younger age groups; rough estimates indicate that about a fifth of the group aged 5 to 24 in 1950 had left the South by 1960. In some States, notably Arkansas, Mississippi, and West Virginia, the loss was close to 50 percent.

The nonwhite population of the United States in the 1960–61 period continued to move somewhat more frequently than the white population (23 versus 20 percent). Nonwhites had a higher rate of intracounty movement (18 percent) than whites (13 percent), but whites had a higher rate of migration (7 percent) than nonwhites (4 percent).

Although nonwhites were less likely than whites to migrate from State to State within the South, census data on moves between 1955 and 1960 show that a substantial proportion did migrate to other southern States, primarily to Florida. Otherwise, the nonwhite migrants from the South moved chiefly to the industrial States of New York, California, Illinois, Ohio, New Jersey, Pennsylvania, and Michigan. Together, they accounted for almost half of the nonwhites who left Southern States between 1955 and 1960.

Data for the 5-year period also show that, in general, States with the greatest expansion in employment during recent years attracted the greatest number of migrants from other States. Comparison of the number of immigrants between 1955 and 1960 with the change in the number of jobs on nonfarm payrolls over the same period shows a close relationship between increasing employment and large immigration, for the major geographic regions. An exception was the East North Central Region (comprising Ohio, Indiana, Illinois, Michigan, and Wisconsin). This group of States was the destination of many migrants, particularly from the South and from abroad, between 1950 and 1960, even though it had the smallest increase in jobs, in both absolute and relative terms, recorded for any region of the country during this period. (See table 3.)

Even over the course of 1 year, the interregional migrations are sufficiently different to affect materially the size of the regional populations. A continued net inflow of people to the West occurred during 1960–61, with inmigrants exceeding outmigrants by 427,000. Net outflows of popula-

Table 3. Relation Between Growth in Employment and Interstate Migration, 1955 to 1960

[In thousands]

Geographic region	Increase in nonfarm payroll employment	Migrants[1] resident in region in 1960
Pacific	891	3,089
South Atlantic	824	3,244
Middle Atlantic	391	1,955
West South Central	370	1,417
Mountain	335	1,248
West North Central	266	1,195
East South Central	234	846
New England	158	840
East North Central	136	2,311

[1] 1960 residents of given region who lived in different State or abroad in 1955; includes persons moving from State to State within a region as well as those moving between regions.

Source: Nonfarm payroll employment, annual averages, Bureau of Labor Statistics; migration data, Bureau of the Census, U.S. Census of Population: 1960, *General Social and Economic Characteristics, United States Summary*, table 112.

tion were observed primarily from the North Central Region (317,000) and from the Northeast (91,000).

The practice of the American worker to change his residence apparently is strongly influenced and limited by the character of his income and employment status. As the following tabulation indicates, there is a noticeable association between increasing mobility of American males and diminishing income:

Total Money Income	*Overall Mobility Rate (Percent)*
No income	18.7
$1 to $999 or less	22.0
$1,000 to $1,999	30.5
$2,000 to $2,999	28.8
$3,000 to $3,999	25.5
$4,000 to $4,999	23.2
$5,000 to $5,999	18.5
$6,000 to $6,999	18.4
$7,000 to $9,999	15.6
$10,000 to $14,999	15.1
$15,000 and over	15.2
Income not reported	20.6

This same general pattern is observed both among household heads with wife present and among other men who worked in 1960.

Moreover, high mobility rates are also reflected in terms of underemployment and unemployment. As might be expected, unemployed men are more mobile than those employed. Over the year end-

ing March 1961, for example, almost 3 out of 10 of the unemployed moved, compared with almost 2 out of 10 employed men. This difference was observed in both intracounty mobility and intercounty migration rates.

From the standpoint of those men who worked during this period, an inverse relationship between number of weeks worked and the migration rate was observed. This pattern appears where the duration of employment is also classified by full- or part-time work, as follows:

Number of Weeks Worked	*Migration Rate (Percent)*		
	Total	*Full-Time*	*Part-Time*
50–52	4.3	4.2	4.9
27–49	9.9	10.2	7.4
26 or less	13.4	15.5	8.7

The American worker's propensity for movement is dramatically illustrated by annual studies conducted by the Census Bureau. In March 1961, 35.5 million persons (accounting for one out of five persons 1 year old and over living in the United States) had moved their place of residence at least once during the previous 12 months. Of those moving, more than two-thirds traveled relatively short distances, staying within the same county of a State. (See table 4.) The rest were equally divided between moves from one county to another (but within the same State) and migration among States. This overall mobility rate of 20 percent has remained relatively stable, ranging from 18.6 to 21 percent in the 14 successive Census surveys conducted since 1948. Rates of movement within counties and migration between counties show no marked trend over the 14-year period.

The typical pattern of mobility when related to age tends to reflect the family cycle. Mobility rates are higher at the ages in which young people leave home to find jobs, marry, and set up their own households. For married men 18 to 24 years of age living with their wives, the mobility rate was 63.3 percent compared with 19.6 percent for single men. These differences are related, of course, to the change of residence normally attending marriage. Moreover, a considerable amount of movement accompanies the raising of a family and the establishment of a career.

Over a lifetime, mobility rates for men and women average about the same (20 percent). Although the pattern of mobility between men and women differ appreciably at certain age groups, in general rates are highest and rise sharply for both sexes in the late teens to mid-twenties when most people get married. Between the ages of 18 and 21, young women are distinctly more mobile than men: 35 percent of the women age 18 and 19 move, compared with 20 percent of the men; and at 20 and 21 years, women still tend to be more mobile, 45 versus 37 percent for men. The higher mobility rates for young women in these age groups may in large part reflect their tendency to marry (and change residence) at younger ages than men. For both sexes in the 22- to 24-year age bracket, rates are about the same—45 percent—but at 25 to 29 years, when rates for both sexes decline, men are more mobile than women (38 versus 31 percent).

Just as family formation and growth affect United States mobility rates, so does family dissolution. Mobility rates for both men and women tend to run higher for those widowed, divorced, or separated.

According to the Census Bureau, the profound significance of the family cycle on mobility ". . . is so pervasive and persistent that it tends to obscure the differences which may exist among major segments of the population. Likewise, the effects on mobility of short-run economic changes, unless they are catastrophic, tend to be diluted in the mobility rates for the general population."

Table 4. Annual Geographic Mobility, by Type, in the United States, April 1948–March 1961

(Percent of the civilian population 1 year old and over)

Date	Total	Intra-county	Inter-county intra-state	Inter-state
April 1947–48	19.9	13.6	3.3	3.1
April 1948–49	18.8	13.0	2.8	3.0
March 1949–50	18.7	13.1	3.0	2.6
April 1950–51	21.0	13.9	3.6	3.5
April 1951–52	19.8	13.2	3.2	3.4
April 1952–53	20.1	13.5	3.0	3.6
April 1953–54	18.6	12.2	3.2	3.2
April 1954–55	19.9	13.3	3.5	3.1
March 1955–56	20.5	13.7	3.6	3.1
April 1956–57	19.4	13.1	3.2	3.1
March 1957–58	19.8	13.1	3.4	3.3
April 1958–59	19.2	13.1	3.2	3.0
March 1959–60	19.4	12.9	3.3	3.2
March 1960–61	20.0	13.7	3.1	3.2

Source: U.S. Department of Commerce, Bureau of the Census, "Mobility of the Population of the United States, March 1960 to March 1961," *Current Population Reports, Population Characteristics*, Series P-20, No. 118, August 1961.

JOB MOBILITY

The preceding discussion has focused on geographic mobility. Mobility also includes the movement by workers from one job to another, one of the major processes of adaptation by the individual to changes, not only in his own circumstances but in the structure of the economy as well. There are many factors which impede or facilitate the movement of workers from one job to another. The willingness and ability to move are affected by such personal characteristics as age, sex, race; by social factors such as level of education, marital status, or income level; by institutional and environmental factors such as employment practices, and home ownership; and by individual needs such as the desire for security and for advancement opportunities.

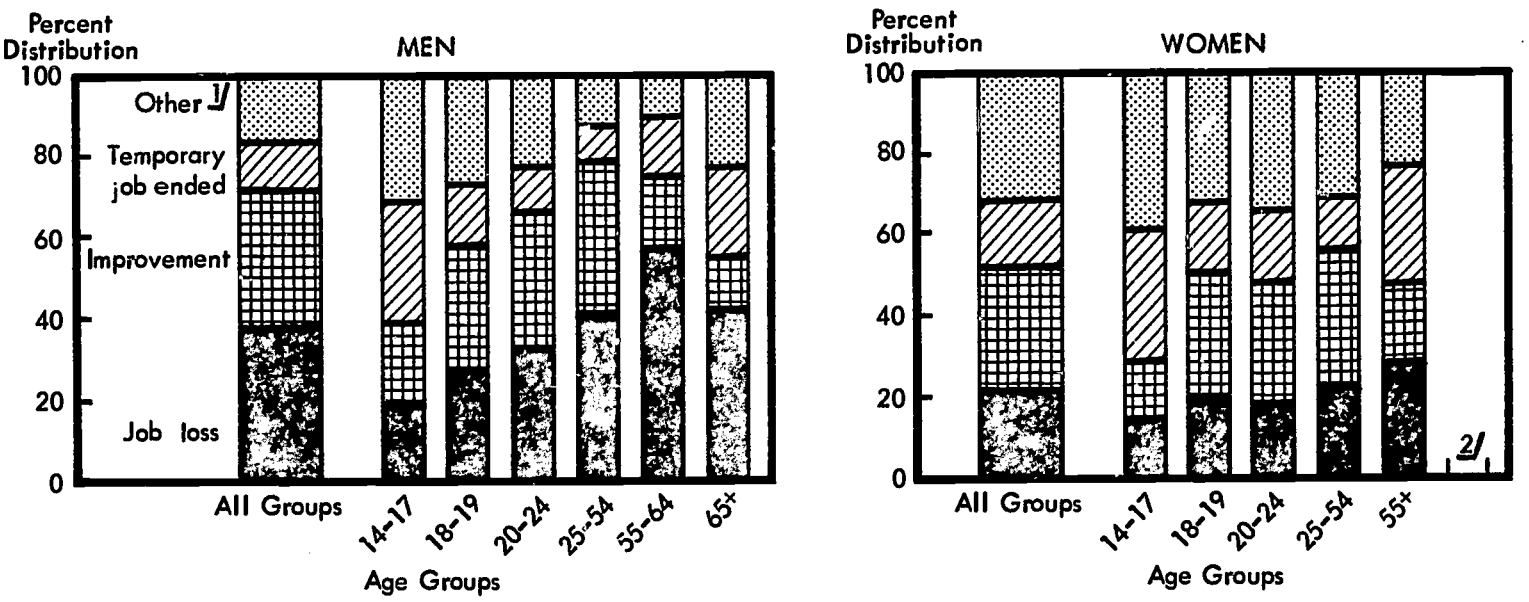
In 1961 approximately 8 million men and women changed jobs; some of these workers found better jobs and others had to accept less desirable ones. Some job changes were voluntary; others were not.

Job changing was more frequent for young persons than for older workers, and men changed jobs more often than women. Nonwhite men had a higher rate of job change than white men. But among women the pattern was reversed, and nonwhite women had a lower rate of job mobility than white ones. As might be expected, persons who made several job shifts during 1961 were more likely to have been unemployed between jobs than were those who made only one job shift.

Nearly one-half of all job shifts in 1961 reflected a major change in occupation and industry groups, although the pattern varied by occupation. The greatest amounts of interoccupational shifts were concentrated in unskilled work: more than half of the job shifts of nonfarm laborers were into a different occupation and industry. Conversely, only one-third of all job shifts of professional workers were outside the professional group; craftsmen showed a similar pattern.

The two main motives for job changes in 1961 were to improve status and the desire for reemployment after the loss of a job. (See chart 8.) About one-third of all job shifts were made to obtain more money, a more interesting job, or to escape certain undesirable circumstances in the prior position. The other major reason for job changing—reported by a third of the respondents—was economic, resulting from a layoff because of lack of work or a business failure. Another eighth gave as a reason for job changing the termination of a temporary job.

Chart 8 **Job Changes, by Reason for Change, 1961**



1/ Includes illness, household or school responsibilities, fired, retired, miscelloneous, ond reason not reported.

2/ Smoll number of job chonges by women over 65 included with oge group 55 ond over.

Workers in the construction industry had a higher rate of job change than those in any other industry group in 1961. About one out of every four male construction workers changed jobs during 1961. (See table 5.) About half of them made more than one job change during the year compared with a third of workers in all industries. Even though about two-thirds of all their changes resulted from job loss, most of the construction workers who changed jobs found new employment in that industry. This pattern of job changes is unique to the construction industry, where jobs are often of short duration, but where relatively high wage rates prevail, and the job changer is, on the average, older than the job changer in other industries.

Table 5. Employment Pattern of Job Changers, by Major Industry Group, Class of Worker, and Sex, 1961

Major industry group and sex	Persons who worked in 1961 (in thousands)	Persons who changed jobs in 1961	
		Number (in thousands)	Percent of persons who worked in 1961
Total	80, 287	8, 121	10. 1
MALE			
All industry groups	49, 854	5, 509	11. 0
Agriculture	5, 367	486	9. 1
Nonagriculture	44, 487	5, 023	11. 3
Total wage and salary	38, 821	4, 778	12. 3
Forestry, fisheries, and mining	724	115	15. 9
Construction	3, 893	972	25. 0
Manufacturing	13, 209	1, 280	9. 7
Transportation and public utilities	3, 578	293	8. 2
Trade	7, 267	1, 035	14. 2
Service	7, 528	910	12. 1
Public administration	2, 622	173	6. 6
Self-employed workers	5, 485	232	4. 2
Unpaid family workers	181	13	7. 2
FEMALE			
All industry groups	30, 433	2, 612	8. 6
Agriculture	2, 135	112	5. 2
Nonagriculture	28, 298	2, 500	8. 8
Total wage and salary	25, 713	2, 407	9. 4
Forestry, fisheries, and mining	56	6	(1)
Construction	203	30	14. 8
Manufacturing	5, 046	431	8. 5
Transportation and public utilities	940	85	9. 0
Trade	5, 766	688	11. 9
Service	12, 598	1, 092	8. 7
Public administration	1, 104	75	6. 8
Self-employed workers	1, 685	60	3. 6
Unpaid family workers	900	33	3. 7

[1] Percent not shown where base is less than 100,000.

In manufacturing about 1 out of 10 male workers changed jobs during 1961. Loss of a job was listed as the reason for some two-fifths of the job changes, a much higher rate than the rate for men in trade and the services. About half of the workers in manufacturing who changed jobs found work in other industries, possibly indicative of the declining position of production worker employment contrasted with employment in the other industries.

The rate of job change for men in wholesale and retail trade was 14 percent, one of the higher rates for men in a major industry group. Over 44 percent of all changes were made in order to get a better job.

The job-change rate for women employed in trade was 12 percent, the highest rate for women in any major industry group in which their employment was significant. Over half the changes made by these women were to jobs in the same industry, and the most common reason for the change was to improve status. The incidence of part-time work and of seasonal employment in retail trade, where most of these women were employed, may account for the high rate of job change.

Problems Related to Job Mobility

In a society in which rapid technological change is taking place, increased mobility of workers may be a significant factor in achieving our goal of full employment. However, it is essential that this mobility be given direction, operating toward filling manpower requirements without needless loss of working time nor with the compulsions of an authoritarian society.

In the decade of the 1960's, the proportion of young people, women and older workers in the work force will increase, and planning and programs will need to be geared to these developments and to the patterns of mobility shown for these workers.

The high rate of job changes among youth has brought recognition of the need for more realistic vocational and occupational guidance directly oriented toward the world of work. In a way in which the study of the humanities and the pursuit of pure scientific research is not prejudiced nor personal interests neglected, young persons also need to be given more specific knowledge of the training requirements for particular occupations.

There has been some conjecture of a decline in job mobility in the post-World War II period. Circumstantial evidence has been seen in the long-term decline in the quit rate of factory workers. There is also visible evidence of imperfect worker mobility in specific localities where raw material resources have been depleted (such as iron and other ore areas in Michigan), where the demand for a product has declined (as in the anthracite fields in Pennsylvania), or where industry has moved out of an area (as in the case of the textile industry in New England). While in theory a supply of available workers should attract new industry to an area, and the absence of sufficient jobs should induce workers to move into areas where jobs are available, many studies indicate the labor market operates very imperfectly in this capacity. Pockets of high unemployment have tended to persist in many areas in the face of national production highs.

A number of factors have been identified as important causes of diminishing worker mobility. These include increased home ownership, personnel hiring practices, seniority and pension practices, and other factors. In addition, there are some forces which so pervade the economy that their influence on worker mobility is overriding. These factors, at once the cause and consequence of change, are discussed in the following section along with some of the steps taken to increase worker mobility adjustment to these forces.

CURRENT ECONOMIC AND SOCIAL FACTORS AFFECTING MOBILITY

Automation, Technological Innovations, and New Management Techniques

The development of automation with its implications for changing labor requirements places new and substantial demands on the job mobility of the labor force. Mobility is also influenced by such factors as scientific and technical advances in the medical sciences, communications and transportation, national defense, and the major realignment in trade relations among nations that have occurred since the war.

Changes in technology are proceeding rapidly and can within a comparatively brief period materially increase the total output of our economy and make possible a higher standard of living for our people. They also inevitably involve problems, one of the most important of which is the adaptation of the labor force to the demands of this new technology. Many more of our workers than in the past must have, or develop, the mobility to shift from less skilled jobs to more complex control, service, distribution, and creative functions. Many may have to change their residence as well as their occupation and industry. This increased mobility may be required not only of blue-collar but also white-collar workers in diverse jobs ranging from unskilled file clerks to middle-management executives.

Reductions in personnel as a result of automation may involve whole or large segments of plants. Such drastic cutbacks tend to throw among the unemployed some of the least mobile workers—the older men and women whose jobs have been protected by seniority in ordinary situations. When the meatpacking firm of Armour and Company closed three of its obsolete plants, 53 percent of the released workers were over 45 years of age and had had long service with the company. Many of these older workers had limited skills with little application to other jobs.

Some companies have installed labor-saving automation equipment without any immediate discharges, but then have usually effected a more gradual reduction of personnel by not replacing employees separated from the company and by postponing permanent reductions until a general downturn in business. Even though workers are not laid off, the lack of job opportunities places demands on mobility as a process of economic adjustment.

While automation is a fundamental factor in the improvement of productivity, other manage-

ment techniques have also contributed. Improved systems and methods are constantly being introduced and the techniques of research are being applied by many companies to problems of management.

Some idea of the extent to which automation and other new management techniques result in disemployment can be seen from a comparison of certain industry production and employment figures. Between 1950 and 1961 the chemical industry's production more than doubled while the number of production workers rose only 10 percent. Although the auto industry is producing more motor vehicles, almost 170,000 jobs in that industry disappeared between 1950 and 1961. In 1937 the bituminous coal industry produced about 445 million tons of coal with 492,000 employees; in 1961, it produced 403 million tons with 151,000 or 70 percent fewer employees.

There are some steps that individual firms have taken to ease the problem of displaced workers. In the case of older workers, early retirement under existing pension plans has often provided economic independence enabling the displaced men to leave the labor force. Also some multiplant firms provide relocation allowances for workers transferring to units in other locations. Where layoffs do occur, many firms have set up severance pay plans, and in some cases supplementary unemployment benefits as a cushion which, with unemployment insurance, provide some economic flexibility for the former employee as he seeks a new job. However, these cushions are often inadequate to cover the entire period of resultant unemployment.

Recognizing this, some labor-management agreements have been made, as in the case of Armour and Company, for the establishment of special funds to study and make recommendations for the solution of this problem. Others, such as that between the Pacific Maritime Association and the International Longshoremen's and Warehousemen's Union, provide for a special fund for use as an earnings stabilizer to counterbalance the decline in available work.

However, because of the magnitude of the changes and the rapidity with which they are taking place throughout the economy, it is often not possible for company and union programs to meet adequately the situation.

The Federal Government has taken several steps to alleviate this situation. Chief among these are an executive order channeling defense contracts into areas of severe unemployment, the Area Redevelopment Act, and the Manpower Development and Training Act.

Concentration of Defense Contracts on Research and on Coastal Areas

Another current economic factor that has exercised a significant effect upon worker mobility, particularly geographic, is the changing pattern of Federal Government procurement, especially of goods and services for national defense.

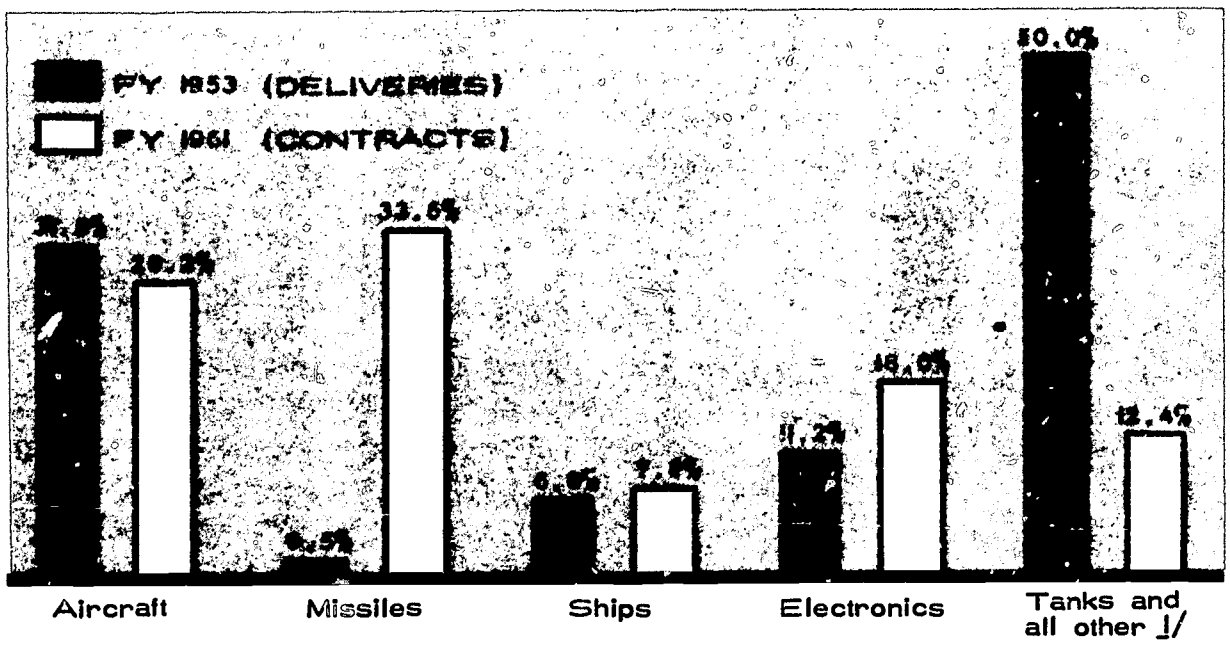
Annual expenditures for goods and services by the Federal Government in recent years have accounted for about 11 percent of gross national product. Over 85 percent of these purchases are for national defense. This bill came to about $50 billion in 1961, and over $30 billion were spent for goods and services purchased from industry. It is estimated that approximately 2.6 million persons—5 percent of nonagricultural employment—were employed directly or indirectly by private industry in supplying goods and services to Federal defense-related agencies in 1960. Including Armed Forces and persons working directly for the Federal defense agencies, over 6 million persons are estimated to be employed in Government and industrial defense-related activities.

A significant characteristic of defense spending in the United States is that it tends to be concentrated in certain industries and areas. Government purchases have a tremendous impact on the ordinance, aircraft, shipbuilding, and electrical equipment industries, which are in turn highly concentrated in certain localities. The military establishments and civilian Government employment connected with defense are also concentrated to a considerable degree. Thus, when there is a significant change in the amount or in the distribution of Government national defense spending, the resulting effect on civilian employment can be disproportionately large in some areas. Just such a shift in the pattern of defense spending has occurred in the past decade.

This shift has been the result of the revolutionary change in weapons systems. Tanks and other vehicles, weapons and ammunition, plus other hard goods and construction constituted half of the military hard goods delivered in fiscal year 1953, the last year of the Korean conflict. In fiscal year 1961, on the other hand, these constituted only 12 percent of total prime contract awards for hard goods. (See chart 9.) In 8 years the importance

Chart 9

Distribution of Military Hard Goods, by Type (Fiscal years 1953 and 1961)



1/ Includes other vehicles, weapons, and ammunition, production, construction, and other commercial types of equipment and hardware.

of these traditional weapons of war has dropped from one-half to one-eighth of the total.

Missiles, which accounted for only one-half of 1 percent of hard goods deliveries in fiscal year 1953, were one-third of the total contracts in 1961. Electronics deliveries totaled 11 percent in 1953; in 1961, they were 18 percent. Expenditures authorized for the space program, both military and nonmilitary, have tripled over the past 2 years to $5.5 billion in 1963. This rate of growth is expected to accelerate.

These changes have, of course, resulted in major geographic shifts in contract awards. The most dramatic changes of the past 8 years are found in the heavy losses of the East North Central and Middle Atlantic States, and the large net gains of the west coast and the Mountain States. (See chart 10.) During the Korean period, the East North Central area received 27 percent of total military prime contracts; in fiscal year 1961, this area received only 12 percent of a much smaller total. Contracts to the East North Central States went from $8.7 billion during Korea to $2.6 billion in 1961, a drop of over $6 billion.

Although the Middle Atlantic States also lost proportionately, the drop was not so great (from 25 percent to 20 percent) as electronics and missiles contracts partially offset losses in more traditional fields of procurement.

In contrast to these losses, the Mountain and Pacific States increased their share of prime contract awards from 19 percent during Korea to 33 percent in 1961.

In addition to a shift in products from traditional to new weapons, the concentration of contracts in different geographic areas also reflects a shift from goods production to research and development activity. Almost 60 percent of all missile contract awards and 25 percent of all electronics awards in fiscal year 1961 were for research, development, testing, and evaluation work. This has substantially increased the demand for engineers, physical scientists, and related technicians. These contracts have been placed largely in California, in the coastal strip from Boston to Washington, D.C., and in several Mountain and southern States. Moreover, a substantial proportion of contracts may continue to be placed in these areas because of the availability of facilities and scientific talent necessary for successful research. Although by no means the most important factor, the geographic shift in placement of defense contracts

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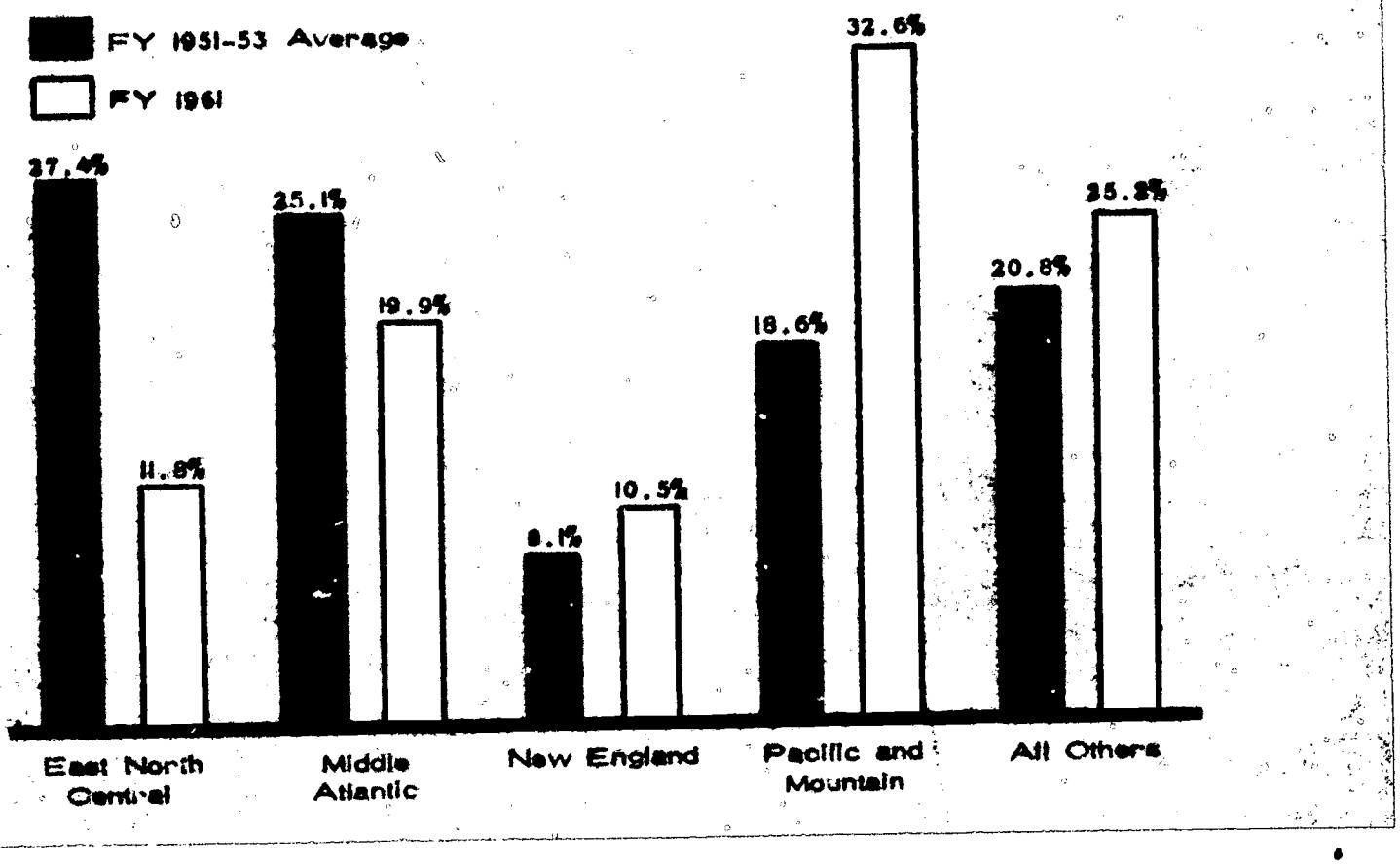
Chart 10

Regional Distribution of Military Prime Contracts: Fiscal Years, Korean Conflict and 1961.



has been significant to some extent in the redistribution of nonagricultural employment in the United States.

Foreign Trade

Changes in the pattern of U.S. foreign trade in recent years have had important effects on employment in certain industries with attendant problems of worker mobility. While new markets have in some cases been developed for U.S. products, there have also been new areas of competition for U.S. products both in this country and abroad.

It is very difficult to separate the employment consequences of changes in foreign trade from the consequences of such other factors as increased productivity, product changes, shifts in domestic demand, automation, etc. Nevertheless, the figures for certain industries indicate that the foreign trade factor may be particularly important for them.

On the import side, the sewing machine industry and the cutlery, silverware, and plated ware industries may be cited. In 1954 the monetary value of the total domestic shipments of sewing machines was $107,492,000. Imports amounted to 22 percent of this, or $23,498,000. In 1959 domestic shipments were valued at $126,227,000, and imports were equivalent to 35 percent or $44,146,000. During this period, employment within the industry dropped 21 percent from 12,414 to 9,771.

In 1954, domestic firms shipped $274,183,000 of cutlery, silverware, and plated ware while imports amounted to about 3 percent of this amount. In 1959, imports were equal to 7 percent of domestic shipments of $287,336,000. Employment declined during this same period by 18 percent from 32,447 to 26,489.

On the export side, the sewing machine and parts industry is again important for the types of products in this field where the U.S. continues to be an important international competitor. In 1960 we exported 28 percent of our entire production of sewing machines and parts (36 million dollars out of 130 million dollars—an increase of exports from 30 million dollars in 1959). For the construction and mining machinery industry, we exported 33 percent of our domestic production (830 million dollars out of 2,386 million dollars—imports in this field being negligible). In the oil

field machinery industry, we exported 32 percent of our domestic production (160 million dollars out of 507 million dollars, there being no imports). In the locomotive industry we exported 52 percent of our domestic production (85 million dollars out of 161 million dollars—there being no imports). Among other numerous examples are exports of 25 percent of the production of the synthetic rubber industry, and 35 percent of the production of the carbon black industry.

Similar relationships have been operating in other industries such as liquor, textile machinery, wine and leather. Congress recognized the advantages to overall domestic employment from expanding foreign trade and also the mobility problem created by the changing patterns of trade which must accompany such expansion when it passed the Trade Expansion Act of 1962. Having acted to promote the economic growth of the country through the maintenance and enlargement of foreign markets, Congress also recognized its obligations to protect the workers affected by this legislation. This recognition, unique in Federal legislation, took the form of providing a relocation allowance to help a displaced worker and his family to move to a new job area.

The act provides that an adversely affected head of a family who has been totally separated from his source of employment can apply for a relocation allowance if he meets certain requirements. These are (1) that he cannot reasonably expect to secure employment in the vicinity in which he resides, and (2) that he has a bona-fide offer of employment elsewhere having a reasonable expectation of duration. The act specifies that the allowance should cover "reasonable and necessary expenses incurred in transporting such worker and his family and their household effects and in addition a lump sum equal to two-and-one-half times the average weekly manufacturing wage." Based on 1961 earnings, this would be $230.85.

To those ineligible for relocation assistance, the act offers a readjustment allowance. Thus a worker, remaining within the area of his former employment, is eligible for a weekly insurance payment. Eligibility requirements for these payments are similar to unemployment compensation regulations.

MOBILITY AND CHANGING AGE DISTRIBUTION OF THE WORKING POPULATION

As noted before, the total labor force of 73.1 million in 1960 may reach 78.9 million by 1965 and 85.7 million by 1970. Significant increases in the age groups 14 to 24 and 45 to 64 will bring about important changes in the mobility patterns of the labor force and its mobility needs. (See table 6.)

The 13.7 million workers between the ages of 14 and 24 in 1960 are expected to increase to 19.9 million in 1970. This will account for nearly half of the growth in the labor force during the 1960's. Furthermore, where in 1960 there were 24.1 million workers in the 45 to 64 age group, there may be 29.1 million in 1970.

Despite the growth expected in the labor force, the number of unskilled labor jobs will remain about the same and the number of farm jobs is expected to continue its secular decline. With the sharp increase in the number of young jobseekers, those qualified *only* for unskilled jobs, and most particularly those who have not completed their high school course, will probably have considerable difficulty in finding employment and adjusting to changes in job requirements.

Remedial action will be necessary to aid in the adaptive process, particularly for the ill-educated young worker. There will also be need for reducing the number of school dropouts by programs designed to persuade youths of the value of completing their basic education. And for the youngster who has dropped out and is unsuccessfully looking for work, there will be a need for programs of training. To a limited degree, training for young workers is provided for by the Manpower Development and Training Act of 1962 and under some State programs. A more comprehensive program of training is envisaged under the proposed Youth Employment Act.

The increased number of workers aged 45 to 64 will be characterized generally by lower rates of mobility and reduced tendencies to move from one job, industry, or geographic location. Although these reduced tendencies in the past have

generally reflected a reduced need for job changing in the older age groups, the process of change taking place in the American economy may actually require that older workers be prepared for the prospect of job change by programs of retraining.

Older workers are more settled and because of home ownership, family ties, and other social factors are reluctant to make changes which might disrupt these ties or result in loss of builtup economic benefits. By the time a worker reaches middle age, he has found his long-term occupation. The older worker tends to have high seniority and to be better protected, comparatively, against layoffs, unless production cutbacks are severe. Thus, cyclical unemployment tends to hurt him less than the young workers. However, when unemployment does strike, the older worker has more serious problems than members of any other age group and tends to suffer severely when structural unemployment eliminates jobs completely.

The increasing demand for highly skilled workers, professional persons, managers, executives, clerical, sales, and other white-collar workers might seem to suggest that the employment opportunities of the older worker should increase precisely because of these already acquired skills. However, company hiring policies, especially for

Table 6. Changes in Total Labor Force, by Age and Sex, 1950 to 1970

(Numbers in thousands)

Age and sex	Actual		Projected, 1970	Change, 1950–60		Change, 1960–70	
	1950	[1] 1960		Number	Percent	Number	Percent
BOTH SEXES							
14 years and over	64, 749	73, 081	85, 703	8, 332	12. 9	12, 622	17. 3
14 to 24 years	13, 331	13, 697	19, 861	366	2. 7	6, 164	45. 0
25 to 44 years	29, 263	31, 878	33, 235	2, 615	8. 9	1, 357	4. 3
25 to 34 years	15, 145	15, 099	16, 709	−46	−. 3	1, 610	10. 7
35 to 44 years	14, 118	16, 779	16, 526	2, 661	18. 8	−253	−1. 5
45 years and over	22, 156	27, 506	32, 607	5, 350	24. 1	5, 101	18. 5
45 to 64 years	19, 119	24, 127	29, 128	5, 008	26. 2	5, 001	20. 7
65 years and over	3, 037	3, 379	3, 479	342	11. 3	100	3. 0
MALE							
14 years and over	46, 069	49, 563	56, 295	3, 494	7. 6	6, 732	13. 6
14 to 24 years	8, 668	8, 731	12, 594	63	. 7	3, 863	44. 2
25 to 44 years	20, 996	22, 394	23, 003	1, 398	6. 7	609	2. 7
25 to 34 years	11, 044	10, 940	11, 990	−104	−. 9	1, 050	9. 6
35 to 44 years	9, 952	11, 454	11, 013	1, 502	15. 1	−441	−3. 9
45 years and over	16, 405	18, 438	20, 698	2, 033	12. 4	2, 260	12. 3
45 to 64 years	13, 952	16, 013	18, 414	2, 061	14. 8	2, 401	15. 0
65 years and over	2, 453	2, 425	2, 284	−28	−1. 1	−141	−5. 8
FEMALE							
14 years and over	18, 680	23, 518	29, 408	4, 838	25. 9	5, 890	25. 0
14 to 24 years	4, 663	4, 966	7, 267	303	6. 5	2, 301	46. 3
25 to 44 years	8, 267	9, 484	10, 232	1, 217	14. 7	748	7. 9
25 to 34 years	4, 101	4, 159	4, 719	58	1. 4	560	13. 5
35 to 44 years	4, 166	5, 325	5, 513	1, 159	27. 8	188	3. 5
45 years and over	5, 751	9, 068	11, 909	3, 317	57. 7	2, 841	31. 3
45 to 64 years	5, 167	8, 114	10, 714	2, 947	57. 0	2, 600	32. 0
65 years and over	584	954	1, 195	370	63. 4	241	25. 3

[1] Alaska and Hawaii are included beginning with 1960. The 1960 estimates for the labor force differ slightly from those derived from the monthly labor force survey because they were adjusted to be consistent with the revised 1960 population published by the Bureau of the Census in Current Population Reports, Series P–25, No. 241.

Note: Individual items may not add to totals because of rounding.

the clerical, sales, professional, and managerial positions, have tended to exclude older workers from new employment.

The older worker often encounters the problem of educational inadequacy compared with a younger worker who typically has completed more formal education.

The older worker may find the skills he has acquired over long years of employment unmarketable as a result of automation, technological developments, and the abandonment of obsolete products and manufacturing methods. The obsolescence of old skills is being accompanied by the demand for new skills; to regain employment the worker must undergo costly training. It is this shift in occupational requirements that has brought about the recognition of the need for an active manpower policy as expressed in the Manpower Development and Training Act of 1962. This act provides for the identification of the current and incipient problems through research, an assessment of manpower requirements and resources, and direct assistance to displaced workers through retraining.

Chapter 3

EDUCATION AND TRAINING

GENERAL EDUCATION

The Young

The growing need for a well-trained, well-educated labor force, accompanied as it has been by a rising standard of living, has brought about a notable advance in the educational levels of persons in the labor force. Between 1940 and 1959, the median years of school completed for the labor force as a whole lengthened from 9 to 12 years. The percentage of workers who had graduated from high school rose from 32 to 51 percent and of those who had graduated from college from 5.7 to 9.7 percent. Some indication of the further increases in education which will be required in the expanding fields of employment is given in chart 11.

As might be expected where the length of schooling is steadily increasing, the educational attainment of the younger workers, those in the 18- to 34-year age group, is higher than that of the labor force as a whole. In 1959, 62 percent of the younger workers had graduated from high school and more than 10 percent from college. Among these younger workers, the educational level of white urban workers significantly exceeded those of the nonwhite and rural groups.

Despite the general improvement in the educational preparation of young workers, large numbers enter the labor force without having completed their high school education and without any of the requisite skills that are currently in demand and for which demand will grow in the future. In recent years a tenth of the pupils entering school left before finishing their 9th year. Almost a third of those reaching the 9th grade did not complete their high school education. Unless there is a dramatic reduction in school dropouts, at least 7.5 million young workers in the next decade will enter the labor market without completing high school and 2.5 million will have less than 8 years of school attendance.

The unemployment rate for high school dropouts is much higher (in October 1962, twice as high), their earnings lower and their opportunities much more limited than for young workers who have received their high school diplomas. Public attention has focused on the dropouts because the declining percentage of unskilled jobs available in the economy limits the employment opportunities for this group. They have also been forced to take jobs with low earnings and suffer frequent and long periods of unemployment.

Tests indicate that many of the dropouts have the capacity to complete their high school studies. American public policy is directed towards reducing the number of school dropouts and training those who have already left school. A major campaign has been initiated in the past few years by Governmental and private agencies for these purposes and various approaches are being explored to make the educational process meaningful and attractive to potential dropouts and to those who

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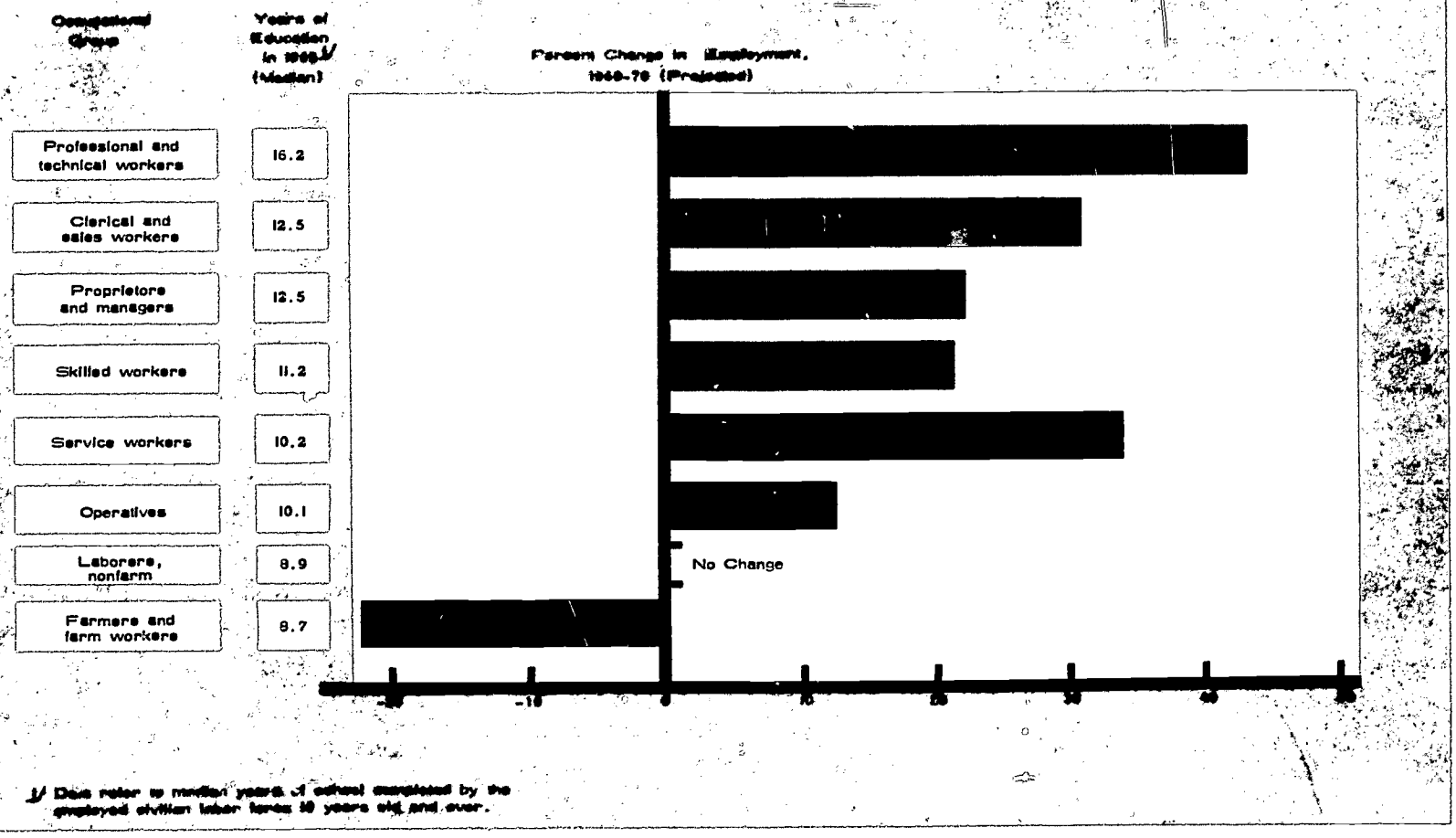
Chart II

Education by Occupation, 1962 and Percent Change in Employment 1960-70



1/ Data refer to median years of school completed by the employed civilian labor force 18 years old and over.

have already quit school, so that they will continue or resume their education.

In this connection, studies are being developed by the Department of Labor's Office of Manpower, Automation and Training of the factors contributing to school dropouts, and of the training required to qualify poorly educated workers for useful employment. Special attention will be given to rural youth, among whom school dropouts are relatively higher than in urban communities. The long-term decline in farm labor requirements results in these young workers seeking urban jobs which require skills for which they now have little or no preparation. Untrained rural migrants contribute heavily to the hard-core unemployed in industrial areas.

Some studies have indicated that, although economic considerations are a factor in school dropouts, basic psychological maladjustment, poor school attendance, school failures, a lack of cultural background, and a lack of counseling are also of major significance.

Notable among the recent projects designed to reduce the percentage of dropouts and to stimulate pupil interest in higher education is the "higher horizons program." Initiated in New York City, it is now in operation there in 65 schools with 45,000 participating pupils. The program is introduced in the third grade and extends through the ninth. The higher horizons program is designed for schools serving economically and culturally deprived students and provides for extensive remedial work, an enriched curriculum, a broadening of cultural interests through trips to industrial establishments, laboratories, theatres, concerts, and museums, and through career conferences. Informational meetings for parents and the involvement of parents in the project are part of the program. Adaptations of the higher horizons program are in use in a number of cities.

The results in New York City, based on the original demonstration project which started in a junior high school, show that 66 percent of the

group in the experiment graduated from senior high school, as compared with an average of 40 percent for previous groups.

Indications are that the higher horizons programs may yield the best results if initiated at a very early age. It is being tried on an experimental basis in Racine, Wisconsin, with a kindergarten group and in one New York City school with a prekindergarten group.

Work-study programs which combine paid employment with high school courses have been utilized in a number of school systems. While intended for high school students generally, and in practice made available to the better students, recent experimental projects have been directed to the use of such programs to induce potential dropouts to remain in school. Such an experiment was begun several years ago in St. Louis with students 16 to 20 years of age from culturally deprived families, who had poor scholarship and school attendance records. At the end of the first year, despite an inability to place all selected students in part-time jobs, only 22 percent of the special group left school as compared with 35 percent of the control group.

In Kansas City a 6-year controlled experiment with a work-study program is also in process, beginning with 13- and 14-year-olds who have been identified as potential dropouts. A student attends school half the day, works the other half at an industrial job, and during the sixth year will work full time.

New York State in the past year has initiated a work-study program on a statewide basis with projects in seven of its largest cities. Known as STEP, it provides junior high school students identified as potential dropouts with an opportunity to receive work training in public agencies for pay.

Variants of these programs providing either for unpaid work experience or for paid work of a community service character or in commercial and industrial establishments are to be found in a limited number of communities and are under consideration in others.

The programs for young persons who have already dropped out of school aim at supplementing their education and training so that they may get and hold jobs. A Federal program to provide young people with occupational training is included in the Manpower Development and Training Act of 1962. It provides for allowances "not exceeding $20 a week to youths more than 19 but under 22 years of age where such allowances are necessary to provide them occupational training." However, primary emphasis under this law is given to unemployed family heads with at least 3 years of previous work experience.

Experimental projects in the training of dropouts have consisted essentially of job-upgrading programs. One that is being followed in a number of localities is the Detroit Job-Upgrading Program, which is under the joint sponsorship of the public school system and the Detroit Youth Council. For an average of 14 weeks, dropouts, age 16 to 20, may attend daily training sessions which combine training in job deportment and special skills with closely supervised part-time work, for which students are paid from special funds. Eventually they are helped to find employment.

In Mercer County, West Virginia, a summer program initiated in 1962, unusual in that it was mandatory, required all 16- and 17-year-old unemployed male dropouts living in the county to attend training courses in such skills as those required for radio and television repair, welding, and building trades occupations. The objective was to give the dropout sufficient training to enable him to become gainfully employed.

In some localities, community facilities have been organized in cooperation with school authorities and the Employment Service for young persons, especially dropouts, seeking to enter employment. These programs are described variously as preemployment programs, job information workshops, and job conditioning courses. Their aim is to acquaint participants with the techniques of looking for and holding jobs. They emphasize individual and group counseling designed to deal with negative attitudes and personality problems, teach proper grooming, how to fill out job applications, how to behave at a job interview and other matters related to the world of work.

While all of these programs have had limited scope and application, the great interest of educational groups and of government agencies in them would imply continued and broader efforts to keep students in school at least through high school and to induce those who drop out of school to obtain vocational training which will lead to gainful employment.

The growing need for professional and college trained workers has directed attention also to the

factors limiting present and future college enrollment. While today there are almost 4 million students in college and one-half the high school graduates enter these institutions, a considerable number of high school graduates of college caliber do not obtain a higher education. The most common reason is a financial one and the financial problem may become even more acute with rising college costs.

To permit students to develop their potential through the college level, the need for a broader scholarship and loan program has been recognized. In the academic year 1961–62, more than $130 million was awarded in scholarship assistance by colleges, universities, foundations, fraternal organizations, labor unions, industrial groups, and others.

Additionally, more than $100 million in educational loans is made available to students annually, primarily through the National Defense Education Act of 1958. By July 1, 1962, 350,000 undergraduate and graduate students had received loans and $225 million had been lent to help finance their education. The program was developed to meet specific manpower needs in science, mathematics, engineering, and foreign languages. Preference is given to students in these fields.

It is estimated that $750 million in scholarships alone is required annually. If all students with college potential are to receive a college education, the gap between this sum and the sums presently available must be closed by public and private agencies, and by interested groups and individuals. The President has proposed that legislation be adopted authorizing 4-year scholarship aid for more than 200,000 capable students in need of financial assistance.

Adult Education

In the United States adult education courses are usually for the purpose of general knowledge or enrichment. Many of the large universities which offer adult education courses in a general education program have the objective of personal enrichment and not occupational improvement. In many cases evening secondary school courses in public school systems have the same objective. At the same time, of course, there are also a large number of offerings of vocational and technical subjects.

A large number of public and private facilities are available for adult education. In 1958–59, 4,800 school systems, chiefly the large ones, provided some type of instruction for the more than 3 million adults who were enrolled. The majority were taking trade, industrial and technical courses, homemaking and consumer education, business education and training in practical arts and crafts. On the other hand, there were many communities with no public school facilities available for adult education. Smaller systems, 10,300 of them, offered no courses for adults.

In addition, private schools, colleges and universities, industries, trade unions, and other voluntary organizations provide educational programs ranging from academic subjects to craft training. The Armed Forces also provide comprehensive systems for the continuing education of their personnel.

Major obstacles to employment among adult workers derive from a lack of adequate education, a lack of training and the obsolescense of acquired skills. It was estimated that 7.8 million persons, 25 years or older, were functionally illiterate in 1959, that is, they had less than 5 years of schooling. Basic education has become increasingly important in an economy in which the proportion of white-collar jobs are growing and whose changing demands require not only training but possibly retraining of skilled workers several times during their working lifetimes.

To attack on a broad front the problem of adult illiteracy, the Administration is urging favorable consideration of the Adult Literacy Bill which would permit Federal assistance to local communities to establish programs for the reduction and elimination of illiteracy among the adult population.

A recognition of the relationship between lack of education and unemployability is found in a recent amendment to the Social Security Act. Directed toward increasing the employability of members of families receiving aid to dependent children grants, it provides for a community work and training program for such persons through Federal assistance to the States. The program includes basic education where needed, training in skills and in trades for which the participants show aptitudes, and job training in all types of public agencies. These persons may not be employed in lieu of other workers but may supplement their activities. The work must be useful and the rate

of pay must be the prevailing rate for similar work in the community and in no case less than the minimum rate established by State law.

The Employment Service is expected to give special attention to the placement of participants in the program. Cooperative arrangements are also to be made to insure proper referral and acceptance of those who are qualified in training and retaining programs under the Manpower Development and Training Act.

OCCUPATIONAL TRAINING AND RETRAINING

Vocational Education and Training

Vocational education, as the term is used in the United States, describes the formal instruction intended to fit persons for work in a specific occupation or group of occupations. It does not include instruction leading to a baccalaureate or professional degree.

The Federal-State-local program of vocational and technical education was inaugurated in 1917 with the enactment of the Smith-Hughes Act. Subsequent legislation, including the George-Deen Act, the George-Barden Act, and the National Defense Education Act, expanded and extended the original program. All of the Federal legislation to assist vocational education (not including the recently enacted Area Redevelopment Act and the Manpower Development and Training Act, which are discussed later in this chapter) require that the States match Federal funds. All the States and Territories have programs utilizing the Federal funds which may be used for classroom and shop equipment and for partial reimbursement for teachers' salaries. More than $250 million was spent in 1961 on Federal-State-local vocational programs, with non-Federal funds far exceeding Federal contributions—$206 million contrasted with $48 million.

In 1960, 21 of every 1,000 persons in the United States were enrolled in a vocational educational program. The ratio varied strikingly by State, from a low of 8 per 1,000 to a high of 49. (See chart 12.)

The Federal role is to encourage the States to establish and expand needed vocational education programs; to provide guidance, assistance, research, and publications to help the States in developing programs; and to suggest desirable standards and policies for State acceptance. The States establish standards and policies based on their needs; provide State leadership, teacher training, and vocational guidance; and disburse State and Federal funds. Programs, which are administered locally, are based primarily on local needs with consideration for State and national goals.

Federally assisted vocational education under the Smith-Hughes Act and the subsequent legislation is limited to agriculture, distributive occupations, homemaking trades and industry, practical nursing and related health occupations, fishery industries, and technicians' training. Most of the training is provided through public high schools. For in-school students the curriculum combines general academic subjects with courses in the particular occupation or with job training. Those who have already left school generally attend courses at night.

The current enrollment of almost 4 million students in vocational schools is about equally divided between in-school youths and out-of-school youths and adults. The enrollees for 1960–61 were distributed as follows:

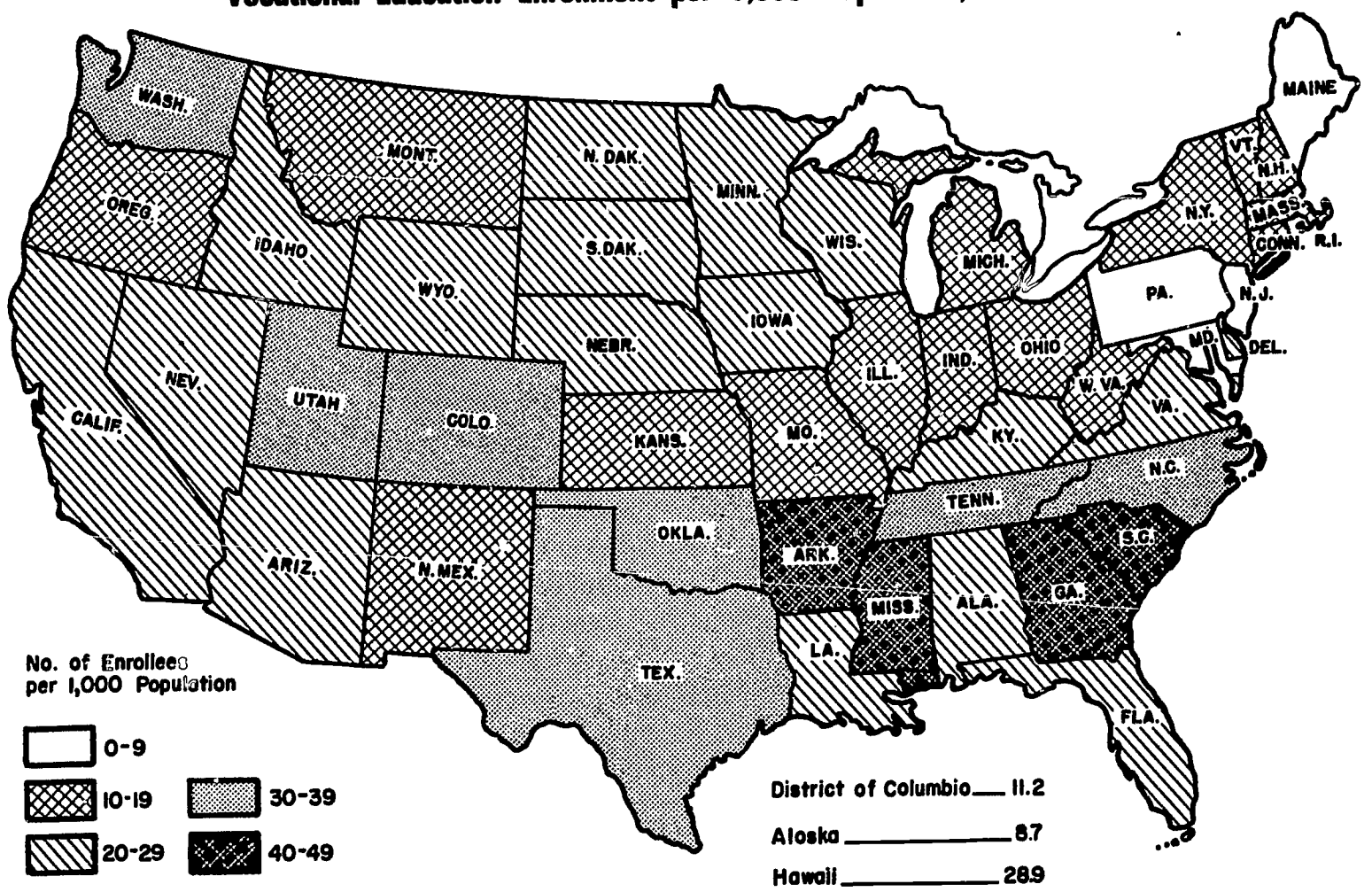
Course	*Number*
Agriculture	805,332
Distributive occupations	306,083
Homemaking	1,610,334
Trades and industry	963,609
Practical nursing	47,264
Technical training	122,952

There are two other types of programs found in public high schools which are of a vocational training character but which do not receive Federal subsidies. One is training for office and business occupations, offered in thousands of the public high schools, with one-third of all young persons in large cities taking such training. Another is training in the industrial arts, which is included in general education but which in some instances provides instruction that helps young people to find jobs in fields related to industrial arts shopwork.

At the request of the President, a President's Panel of Consultants on Vocational Education was appointed by the Secretary of Health, Education, and Welfare in 1961 to review and reevaluate the acts then in existence for vocational education.

Chart 12

Vocational Education Enrollment per 1,000 Population, Fiscal Year 1961



Source: U.S. Department of Health, Education, and Welfare.

The panel's report, recently released, urges that the Federal-State aid program be broadened, that more public high schools offer vocational courses, and that they offer them in more fields and occupations, particularly in office occupations.

Its recommendations are based on the premise that the program must be geared to offer training opportunities to the 21 million persons without college degrees who will enter the labor market in the 60's and that a combination of school training and work should become a pattern for workers throughout their working lifetimes.

Vocational training for all in-school youth under Federal-State-local programs in the distributive occupations is on a school-work basis. In trade and industrial occupations, some 6 percent are in such school-work programs.

Under the work-study programs, students spend half the day in school and half in paid employment in the occupations for which they are being trained. The programs in distribution are generally geared to specific types of merchandising industries.

Work-study programs are also found in the office and business courses offered by public high schools, without the aid of Federal funds. Students in these programs often enter employment in the firm in which they receive their training.

Training for Technical Occupations

The term "technical occupations," as used here, relates to technicians, that is, persons qualified to give direct or indirect assistance to professional engineers and scientists. Technical training is furnished by technical institutes and by a number of public vocational educational institutions in every State, including area vocational schools, community colleges and junior colleges. Most provide 2 years of technical training to students who have had 12 years of basic education.

Technological changes have occurred with such rapidity in recent years that the supply of techni-

cal manpower has failed to meet the need for it. At present, the number of technicians employed as supporting personnel is approximately three-fourths the number of engineers and scientists. It has been estimated that within a few years, an average of two to three technicians will be needed for each engineer. The Bureau of Labor Statistics estimates that 800,000 additional technicians will be needed by 1970, not including replacement requirements.

Under the National Defense Education Act of 1958, sums have been made available for the training of highly skilled technicians. As a result, enrollment in technical education programs more than doubled between 1959 and 1961, from 48,564 to 122,952. In addition to persons receiving initial training, there is opportunity for workers already employed in technical occupations to take short intensive courses to develop new skills or to keep up to date. The developments have been significant not only in terms of the numbers trained but in respect to the quality and range of training.

The technical training courses fall within the fields of electricity, electronics, mechanical design, mechanical production, civil and highway construction, industrial chemistry, aeronautics, instrumentation, business and scientific data processing, and forest products.

The Report of the Panel of Consultants on Vocational Education requested by the President recommends greatly expanded Federal aid for the education of technicians.

Skilled Workers

Skilled workers in some 300 occupations under 90 trade classifications are developed through apprenticeship training in the United States. Approximately 160,000 apprentices are in registered programs recognized by the Bureau of Apprenticeship and Training of the U.S. Department of Labor and by State apprenticeship agencies. In addition, there are at least 200,000 or more apprentices in unregistered programs.

Apprenticeship training periods vary by occupation from 3 to 5 years, with a few requiring only 2 years. The apprentice is not a student. He is an employed worker who is given instruction, both on and off the job in all the practical and theoretical aspects of the work in a skilled trade.

The need for a uniform national system of apprenticeship led to the National Apprenticeship Law adopted in 1937. Its administrative agency is the Bureau of Apprenticeship and Training in the U.S. Department of Labor. The Bureau carries out the objective of the law in conformance with the policies determined by the Federal Committee on Apprenticeship. The latter consists of equal numbers of representatives of employers and labor, in addition to a representative of the U.S. Office of Education. The Bureau cooperates closely with employers, labor, vocational schools, and other groups interested in apprenticeship programs. There are additionally 29 State agencies and agencies in the District of Columbia and Puerto Rico which work together with the Federal agencies on these programs. Programs, when established, are registered with the Bureau of Apprenticeship and Training. Employers and labor have cooperated in carrying out the Federal legislation. By 1962, 9,000 joint apprenticeship committees had been established.

In addition, national trade committees have been created with members appointed by the Secretary of Labor. They have formulated national standards of apprenticeship training for the guidance of local and employer groups in 17 trades, including: Auto glass installation; bricklaying; carpentry; cement masonry, asphalt and composition work; electrical work; glazing and glassworking; lathing; painting, decorating, and paperhanging; photoengraving (newspaper and commercial); plastering; plumbing; roofing; sheet metal work; stained glass; terrazzo; and tile setting.

The 1937 Act does not subsidize apprenticeship programs. They are paid for by management and unions. The theoretical training is usually taken in night classes at vocational schools supported from public funds.

The Federal Committee has recommended that all apprenticeship programs should contain the following provisions:

1. The starting age of an apprentice be not less than 16 years.

2. An established schedule of work processes in which the apprentice will receive instruction and experience on the job.

3. Organized instruction to provide the apprentice with knowledge in technical subjects related to his trade with 144 hours annually normally considered necessary.

4. A progressively increasing schedule of wages.

5. Proper supervision of on-the-job experience with adequate facilities to train apprentices.

6. Periodic evaluation of the apprentice's progress both in job performance and related knowledge, and the maintenance of appropriate records.

7. Employee-employer cooperation.

8. Recognition for successful completions.

9. Selection of men and women for apprenticeship training without regard to race, creed, color, national origin or physical handicap.

The need to expand the apprenticeship programs is recognized by the Department of Labor. There are today an insufficient number of apprentices for skilled occupations to fill vacancies resulting from death, retirement, quits, and transfers. A suggested remedy to increase interest in apprenticeship for both workers and employers is preapprenticeship or prejob training programs, to be furnished largely through the vocational schools. Some experimental projects in preapprenticeship training have been carried out in the construction industry.

The preapprenticeship program gives the trainee a working knowledge of the trade but does not replace apprenticeship. Such programs must be short, carefully planned and operated so that the trainee and employer will receive maximum benefits.

A national survey of training is now in preparation by the Bureau of Apprenticeship and Training which will be helpful in future planning.

Training by Industry

Training within industry is not a new development. A 1962 nationwide survey of industrial establishments, covering all industries whose employees come under the State Unemployment Compensation Programs, showed that 19 percent of them had definite plans or programs for employee training. Large firms were much more employee-training conscious than smaller ones. Seventy-six percent of those with 500 or more employees provided for such training. At the time of the survey, some 2.6 million employees were participating in training programs.

General Motors, for example, retrains 7,200 employees per year; Ford retrains 3,000 per year; and IBM each year retrains about 100,000 employees of its customers. Numerous companies have substantial apprenticeship programs in the skilled trades.

Training has been given new emphasis in recent years, moreover, as a possible means of avoiding displacement of employees or as a means of enabling them to find new jobs in other firms after displacement. A number of collective bargaining contracts have featured clauses that guarantee retraining opportunities for eligible permanent employees in the event of major technological changes.

Federal Training and Retraining Programs—ARA, MDTA

Federally assisted training and retraining for specific occupations were given major impetus by the Area Redevelopment Act of 1961 (ARA), which is administered by the Departments of Commerce and of Labor in cooperation with the Department of Health, Education and Welfare. This act was shortly followed by the Manpower Development and Training Act of 1962 (MDTA), administered by the Departments of Labor and Health, Education, and Welfare.

The ARA is designed to stimulate the expansion of employment opportunities *in economically distressed areas* through a variety of programs, in which one significant element is the training and retraining of unemployed and under-employed persons residing in those areas and the payment of weekly subsistence allowances to them during the training period. To be eligible for the program, an area must be designated by the Secretary of Commerce, according to certain standards, as a "redevelopment area." The Secretary designates them on the basis of information supplied by the Bureau of Employment Security and of an approved overall Economic Development Program, a plan of action developed by the locality for achieving economic improvement.

The Area Redevelopment Program is designed to furnish occupational training, retraining, and refresher courses to prepare unemployed workers for job opportunities presently existing or expected in the area in the near future. The training period is limited to 16 weeks.

In the first 14 months of operation under the act (through the end of 1962), training was au-

thorized for 14,185 persons in 40 States and American Samoa. Training was offered for 115 different occupations. Preliminary data for the initial period show that a majority of trainees completed their courses of training and were successfully placed in jobs.

Because of the urgency to train as large a number of the unemployed as possible, major emphasis was given to institutional type training where groups, generally of some 25 persons, could be accommodated in a single course, rather than on-the-job training where smaller groups are the general rule. On-the-job training will be given greater emphasis in the years ahead.

In view of the necessity for many applicants to make occupational changes, counseling and testing were used extensively to identify latent skills and abilities prior to selection.

The training consisted of refresher courses, training in semiskilled occupations, and preemployment training in skilled occupations. The largest concentration was in the metalworking occupations in which there were notable shortages of trained workers. Agricultural training was primarily in farm machinery operation and mechanics. Other areas were health and clerical occupations.

The Manpower Development and Training Act of 1962 provides for an occupational training program of much greater scope and magnitude than the Area Redevelopment Act. The legislation recognizes that if jobs and people are to be matched in a democracy, the methods to be used must be education, training, and retraining on a broad scale. One major objective of the legislation is to institute a program of evaluation, information, and research which will determine and disseminate data on manpower resources, requirements, utilization, and training.

Title II of the act contains the provisions for training and skill development programs under which the United States plans to train or retrain 400,000 persons in the next 3 years. The general objectives of the act relating to training are described as follows:

> In carrying out the purposes of this Act, the Secretary of Labor shall determine the skill requirements of the economy, develop policies for the adequate occupational development and maximum utilization of the skills of the Nation's workers, promote and encourage the development of broad and diversified training programs, including on-the-job training, designed to qualify for employment the many persons who cannot reasonably be expected to secure full-time employment without such training, and to equip the Nation's workers with the new and improved skills that are or will be required.

The principal provisions pertaining to occupational training are:

1. The act provides a program of occupational training with priority given to unemployed persons and to persons in farm families which net less than $1,200 per year. Courses of training will also be offered to employed persons in order to update and upgrade their skills. Training for unemployed persons is financed by 100 percent Federal support for the first 2 years. Thereafter, the program is to be financed by equal matching from State funds.

2. For unemployed persons receiving training, the act permits the payment of training allowances equal to average unemployment compensation benefits in the respective States. These training allowances are available primarily to heads of households with 3 years of working experience. Up to 5 percent of the total training allowances may also be paid to youths. The training allowances are also to be financed 100 percent by Federal support for the first 2 years and by 50–50 matching State funds thereafter.

3. Modest transportation and subsistence payments can be made to individuals receiving training away from home because of the unavailability of local training facilities.

4. The Labor Department provides a program to test and select those to be trained. It also provides placement services to trainees upon completion of their training program.

5. The total number approved for vocational training was estimated at 60,000 the first fiscal year, and increasing numbers in subsequent years. The length of the training period varies depending upon the occupations involved and the labor market needs.

6. Training is primarily carried out through the various existing State vocational agencies; if public institutions are not available, the State vocational agencies make arrangements with private training institutions.

7. The act provides for a stepped-up program of on-the-job training. Since a wage is paid by employers to on-the-job trainees, training allowances are reduced accordingly. The

number of persons receiving on-the-job training depends upon the extent to which employers find such training suitable.

8. The act contains safeguards to assure that States maintain existing levels of expenditure for vocational training from their own funds to encourage prospective trainees to accept training opportunities rather than remain on unemployment compensation, to avoid aid to "pirating" of industrial plants, to assure that training is related to job opportunities, and to prevent abuses of the program by trainees.

9. The act sets forth a formula for the equitable apportionment of Federal funds among the States based generally upon the size of the labor force, the level of unemployment insurance benefits, and the incidence of unemployment within each State.

September 1962 marked the beginning of training operations under the act. By June 1963, more than 60,000 workers had been committed to training, involving more than 250 occupations. They included all major occupational groups except farming. Training in clerical and sales occupations accounted for one-fifth of the trainees. Training for skilled industrial jobs was approved for one-third. Other training areas were health occupations ranging from surgical technician to orderly, professional, and managerial occupations.

Unlike the Area Redevelopment Program, the training allowances under the Manpower Development and Training Act need not be limited to 16 weeks, but may be as extensive as 52 weeks. Moreover, training programs are not restricted to depressed areas, although they do complement programs provided under the Area Redevelopment Act. Through October 31, 1962, more than 20 percent of the projects approved under the Manpower Act were in redevelopment areas.

Under the Manpower Act, it is stipulated that funds can be expended for such programs only where the training content is adequate and reasonable in length, and will qualify the trainee for employment. The physical facilities must be adequate and safe and the trainees compensated at rates including periodic increases which are deemed reasonable under regulations issued pursuant to the act.

In-shop training programs have been and are carried on also by industry and business to train workers, to improve workers' performance on the job, or to retrain them as production methods change.

The recently adopted Trade Expansion Act of 1962 makes broad provisions for the retraining of workers adversely affected by the reduction of foreign trade restrictions. It provides that such workers shall be afforded, where appropriate, the testing, counseling, training, and placement services available under any Federal law. Any such worker, who, without good cause, refuses to accept or to continue or who fails to make satisfactory progress in suitable training to which he has been referred will not be entitled to the trade adjustment allowances provided by the act. The act provides for supplemental assistance for transportation and subsistence when the training facilities are outside the communicating area. It also provides for relocation allowances where necessary.

Chapter 4

LABOR MARKET ORGANIZATION— THE EMPLOYMENT SERVICE

In the United States the labor market is "free," and the individual's choice of work is voluntary. There is no overall direction by a governmental agency of the matching of workers with jobs. Rather, there are numerous means by which employers find workers and workers find jobs, and in an economy with more than 70 million persons in the work force, there are inevitable inbalances in the functioning of the labor market. The Federal Government and the States have joined together in an attempt to smooth the operation of the labor market within the existing framework of our society. This discussion focuses on this aspect of the labor market.

ORIGIN AND STRUCTURE

The main government channel for facilitating the functioning of the labor market is the Federal-State employment service system, established under the Wagner-Peyser Act of 1933. From this beginning, the employment service system has grown to over 1,900 offices serving the manpower needs of communities throughout the Nation. The employment service is served by a staff of between 15 and 20 thousand personnel.

Within the boundaries of their jurisdiction, the individual States are responsible for employment services operations. The Bureau of Employment Security within the U.S. Department of Labor provides funds for the operation of these State agencies and sets basic policies and operating standards for the State agencies.

Far-reaching changes in labor markets and in the economy have in turn given rise to changes in the occupational needs of the country, to substantial and persistent pockets of unemployment as a result of technology and industrial mobility, to obsolescent skills, increased number of younger and older workers in the labor force, all of which call for action designed to develop and utilize more effectively our manpower resources.

While for many years efforts have been made to strengthen the employment service to cope with the emerging problems, not until 1961 were concrete steps taken to provide the needed additional resources. President Kennedy in his Economic Message to the Congress on February 2, 1961, directed the Secretary of Labor "to take necessary steps to provide better service for . . . job seekers registered with the United States Employment Service." Since that time, more action has been taken to strengthen and improve the employ-

ment service system than at any time since its beginning in 1933, except under national emergency conditions.

In February 1962, as part of the reorganization, the United States Employment Service was established as a clearly identifiable organization within the Bureau of Employment Security. Major steps have been taken to promote separate identity for the employment service in the State and local offices in order to dissociate the function of placement from whatever psychological deterrents may be associated with the apparatus administering a jobless benefits program. The United States Employment Service is now a coordinate service with the Unemployment Insurance Service under the Administrator of the Bureau of Employment Security. The USES Director has full responsibility for directing policy and administration of the Service, with a direct line of communication and authority to his representative in each regional office. The USES also has its own technical staff and related program research resources.

The first appreciable increase in employment service staff resources since 1947 occurred in May–June 1961, and fiscal year 1962. Since May 1961, the staff has been increased by 4,700, or about one-third, to implement the improvement of the employment service.

JOB PLACEMENT AND MANPOWER RESPONSIBILITIES

The USES is in process of strengthening its national and regional office technical staff resources so as to strengthen basic placement operations, counseling services, employer and union relations, youth services, professional placement services, and services to minority group applicants. Also, attempts are being made to analyze the immediate and long-range impact of unemployment resulting from automation and other technological changes in our modern society. Technical staff are implementing the employment service's role in area redevelopment assistance, manpower development and training, community employment development, and manpower program research.

At the time that efforts to strengthen the employment service were begun, it was recognized that the operations most in need of improvement were in the large metropolitan areas. The service had not kept up with the growth of the labor force and the complex problems of the changing labor market. It was obvious, too, that the amalgamation of employment service and unemployment insurance functions in local offices had created an image of an "unemployment office" rather than an "employment office."

Therefore since early 1962, the United States Employment Service and the affiliated State employment services have embarked on a program, primarily in the 55 largest metropolitan areas, to adapt local office organization to emerging labor market needs. The improvements include provision of additional staff to carry out an expanded employment service program, the separation of employment service and unemployment insurance activities, the organization of local offices along industrial-occupational lines, and the establishment of special purpose placement offices to serve professional, managerial and technical workers, and those in clerical, sales, service, and trade occupations. Wherever necessary, better locations and modern quarters are being obtained for these offices.

Expanded Program of Service to Youth

The USES and the affiliated State agencies have also embarked on a greatly expanded program of counseling, testing, and placement activity for young people who are out of school and unemployed. A national youth employment division has been created and a youth service specialist has been designated in each region.

Youth placement and counseling specialists have been provided in the larger local offices. As of October 1962, 20 metropolitan areas had specifically designated area youth coordinators or part-time and occasional youth specialists with primary duties elsewhere in the organization. In addition to these local areas specialists, 27 States had designated a State supervisor of youth services for overall guidance for the program in the State. Although this is a great step forward in providing specialized employment services to youth, the number of specialists does not yet adequately meet current needs and especially those of the ever-in-

creasing number of youth entering the labor market each year.

The services being provided to the young jobseekers include registration, counseling, testing, selective placement, group guidance, special job-finding efforts, regular placement services, research in youth occupations and related subjects, demonstration projects to find better employment methods for youth, and cooperative activities with various civic and educational groups and agencies.

Stepping Up Professional Placement

In keeping with occupational shifts in the Nation's work force, the employment service is giving more attention to the growing demands for professional, technical, and managerial personnel. Placements in professional, technical, and managerial occupations were up 24 percent for the Nation as a whole, and 28 percent in the 55 largest metropolitan areas from July 1961 through June 1962. Such increases were the result of redirected program emphasis, backed up with improved placement techniques, more attractive local office quarters and a strengthening of the professional office network. (See table 7.)

With increased staff resources, local offices have increased their employer visiting activities to acquaint employers with the services available through the employment service. In 1961, 906,200 nonagricultural establishments listed orders with the public employment offices. This represented an increase of 6.4 percent over 1960.

Other programs that were accelerated as part of the employment service improvement program include services to minority group workers and community employment development activities.

Table 7. Occupational Groups Among Nonfarm Placements, 1960–62

Occupational group	1960		1961		1962	
	Number (in thousands)	Percent	Number (in thousands)	Percent	Number (in thousands)	Percent
Total	5, 818	100. 0	5, 902	100. 0	6, 725	100. 0
Professional and managerial	172	3. 0	197	3. 3	238	3. 5
Clerical and sales	916	15. 7	935	15. 8	1, 090	16. 2
Service	1, 917	32. 9	1, 948	33. 0	2, 139	31. 8
Skilled	311	5. 3	351	5. 9	382	5. 7
Semiskilled	761	13. 1	769	13. 0	907	13. 5
Unskilled	1, 742	29. 9	1, 703	28. 9	1, 968	29. 3

Note: Individual items may not add to totals because of rounding.

THE EMPLOYMENT SERVICE AND MANPOWER DATA—ITS RELATION TO NATIONAL ECONOMIC POLICY AND STRATEGY

The United States Employment Service through its affiliated State agencies and their local offices throughout the country provides a network for information on current and emerging manpower problems in the local communities. The data collected are the basis for the classification of major and minor labor market areas according to labor supply. These classifications take into account the extent of the unemployment and the labor demand and supply relationships in the area. Currently a total of about 800 areas including 150 major labor market areas are so classified. The classification is used as a basis for designating areas eligible for such programs as area redevelopment (ARA), special defense procurement policies, and the Public Works Acceleration Act.

Labor Market Analysis and Information

A wide variety of other information is also developed, including data on employment and unemployment trends, demand and supply of labor by occupations, labor market outlook, wages, labor turnover, and related factors. Such information, compiled on an area, industry or occupational basis, is helpful to employers who are planning recruitment activities, expansion, training programs, or location of new plants and establishments.

In order to evaluate local economic conditions for determining employment service policies and operations, estimates of total unemployment are prepared for 150 major labor market areas and a number of smaller areas. Similarly, monthly data on employment and labor turnover of wage and salaried workers in nonagricultural activities are collected for States and many of the major areas.

The development of occupational labor market information is another important employment service program. It includes area skill surveys which are designed to provide comprehensive local information on the occupational composition of current employment, current vacancies and future manpower requirements (generally 2 and 5 years hence). Such information is essential to a community in its long-term manpower planning. More than 125 area skill survey reports have been completed in the past 5 years and another 40 are in progress in 43 States.

As a part of the occupational information program, the State employment services also prepare occupational guides which are designed for use in vocational guidance and employment counseling. These guides contain information about job duties, significant occupations in a community, and anticipated job opportunities, as well as related information on such items as training and experience requirements. These guides supplement the studies which provide information on a national basis which are found in the *Occupational Outlook Handbook*.[6]

Special emphasis has been given to an action program to minimize the adverse employment effects of automation and other technological changes. A number of demonstration projects and studies have been undertaken. These projects, operating through local employment service offices, were designed to discover the impact of technological change on employment in local labor markets, and the impact and nature of mass layoffs and persistent unemployment.

Services to affected workers include intensive interviewing, testing, counseling, placement efforts, and referral to training. These services are aimed at enhancing opportunity for continuous employment, and facilitating reemployment, or occupational reorientation where required, so as to minimize occupational dislocation and the impact on a community.

Testing, Guidance, and Counseling

Local offices provide counseling service for applicants who may need help in making a vocational choice, a vocational change, or adjustment to a job for which they have been trained. The need for counseling is most common with special worker groups such as youth, including recent graduates and dropouts, servicemen recently released from military service, housewives entering or reentering the labor market, older workers who have been laid off, displaced or retired, and handicapped applicants and minority group members.

Tests are frequently used in local offices to help determine the acquired skills or potential abilities of applicants. Aptitude tests have been developed for more than 400 specific occupations. More than 1,400 local employment offices are equipped with testing facilities. The types of tests administered include proficiency and trade tests to measure occupational skills already acquired as aids for the selection of qualified applicants for referral to jobs. For trainee-type jobs, specific aptitude test batteries are used in selecting applicants with the necessary potential abilities. For applicants who are uncertain about what they want to do and who need help in making a vocational choice, the Interest Check List and the General Aptitude Test Battery (GATB) are used. The Interest Check List serves to relate preferred activities to fields of work; the General Aptitude Test Battery provides the counselor with leads as to the fields of work in which an applicant is likely to be more successful.

The volume of counseling and testing activities performed by the employment service offices in recent years is as follows:

[6] Bureau of Labor Statistics Bulletin No. 1300, U.S. Government Printing Office, Washington D.C., 20401, 1961.

Activity	Fiscal Year 1961	Fiscal Year 1962
Specific test	648,000	847,000
Proficiency test	579,000	632,000
GATB	573,000	697,000
Counseling interviews	1,783,000	2,021,000

Programs for Unifying Labor Market Services

The United States Employment Service provides an interarea recruitment service which operates throughout the national, regional, State, and all local employment service offices as an integral part of the overall placement function. Although employers and applicants are served in a wide range of occupational categories, the majority of job orders extended through interarea recruitment, however, represent professional, technical, and skilled occupations.

Briefly, interarea recruitment operates in the following manner: If an employer places a job order in any local office of the employment service and it is found that no qualified applicants are available locally, interarea recruitment services may be utilized. Such an order is cleared first to "areas of direct clearance." These are usually offices only a short distance from the order-holding office either within the same State or in a different State. If it is found that qualified applicants are not available in these areas of direct clearance, the order is sent to the State office where it is reviewed in the light of all available labor market information. The State office may decide to refer the order to other selected offices within the State or it may extend the order to other States where applicants are most likely to be available. The order may also be included on the State Inventory of Job Openings which is distributed to all other States. Any office that has a qualified applicant for any order in clearance may then arrange for referral of that applicant with the office holding the order.

Over 160 local offices throughout the country have been designated as participants in a professional office network. These offices are concerned specifically with placement in the professional categories and a very close working relationship is maintained between them. Each of these offices receives, on a biweekly basis, listings of job openings in professional fields from each of the other specialized employment service offices throughout the country. Thus, if an applicant contacts any one of the professional offices in the network, he can learn of job openings in areas served by the other professional offices.

Induction and Placement Services for Special Employment Groups

Handicapped persons, older workers, and members of minority groups often have difficulty in getting jobs because of prejudices rather than because of lack of ability. Persons in these groups have a high incidence of joblessness, and frequently have skills that are obsolescent; often the prospect for their returning to jobs on the basis of their past experience and know-how is not good. They are much in need of special assistance in the labor market.

Service to these special applicant groups is provided by the employment service in three general program areas:

a. Direct service programs to provide placement, job counseling, and job development assistance.

b. Educational and information programs aimed at changing negative attitudes, correcting misconceptions, and eliminating bias in the employment of applicants in these groups.

c. Research studies to develop economic and social facts about the capabilities and characteristics of these special groups.

Placement Services for Agricultural Workers

Various programs are carried on to serve agricultural workers and employers:

a. The annual worker program provides for registration and orderly scheduling of migratory workers to successive job openings. Through this program, greater continuity of employment is assured to the migrant worker as he follows the crops.

b. The day-haul program takes advantage of services of available workers residing within commuting distance of farm job locations. Workers are "picked up" daily at designated gathering places in town, hauled to the farm job, and returned to town at the end of the day's work.

c. The youth program provides for enlistment of school authorities, parents' groups and other

local interested parties in soliciting services of youth for agricultural jobs. The program may involve day-haul, "live-in," or labor camp referrals. Cooperation with agricultural agencies and employers is encouraged.

d. The farm employment days program involves arranged meetings of farmers and workers for on-the-spot interview, referral, and placement.

e. The volunteer farm placement representative program, which helps both farm employers and workers, has volunteer representatives appointed in various areas to serve (without remuneration) in providing farm labor informational and placement services.

f. The pooled interview program is one in which employment service representatives from labor-demand States travel to labor-supply States, in advance of the season of need, for the purpose of interviewing crew leaders who are "called-in" to designated local offices. During these interviews successive seasonal job commitments are made in response to definite job orders carried by employment service representatives from the demand States.

g. The foreign-worker program provides for meeting labor shortages within an area by bringing in workers from Mexico, the British West Indies, Canada, or Japan. Mexico supplies most of these workers, who are selected at the U.S. border by employment service officials and hired by individual employers. This year some 200,000 Mexicans and about 20,000 other nationals will be employed.

In serving migrant workers, local offices cooperate with community groups that provide such workers with health, day-care, educational, and recreational facilities. To carry out compliance with standards governing recruitment of interstate workers, the employment service offices are concerned with inspection of housing furnished interstate farm workers, and with wage surveys to determine prevailing rates paid to farm workers.

In conducting the Mexican program, every attempt is made to protect the working conditions of the foreign workers themselves, and the domestic workers with whom they compete. Mexicans must be paid the prevailing wage for the activity in the area or a standard rate which will not adversely affect the wages of domestic workers. Employers are required by law to meet certain standards of housing, transportation, and other working conditions. A compliance program has been set up to assure that these standards are met. Similar programs protect working conditions for foreign workers of other nationalities.

The rural areas program is concentrated in rural, low-income areas which are now being served only partially and inadequately. The overall objective is to promote the economic adjustment of these areas and the occupational adjustment of their individual residents by providing employment counseling and placement assistance to individuals for nonagricultural jobs within or outside the area as well as related services.

Rehabilitation Services

An estimated 2,150,000 persons 14 years of age and over in the United States are sufficiently handicapped to need special help in order to do productive work. Major efforts to rehabilitate such persons through proper medical care, education, and training so that their earning potential may be developed and they may be placed in appropriate jobs, have been and are being made by voluntary and Government agencies.

Under a Federal-State program, the Office of Vocational Rehabilitation in the U.S. Department of Health, Education and Welfare, administers grants-in-aid to the States and provides technical assistance and leadership for the rehabilitation program. In addition, it makes grants to State and public and nonprofit organizations to defray part of the cost of projects for research, demonstration, training, and traineeship, and projects for the establishment of special facilities and services which promise to contribute to solving problems in vocational rehabilitation that are common to all or several States.

More than 90,000 handicapped persons were rehabilitated and placed in paid employment in fiscal year 1961. Their earnings were raised from $42.9 million to $185.4 million. Almost half of the persons rehabilitated in 1961 had one or more dependents, and over 11,000 of them are chiefly dependent on public assistance.

In connection with the rehabilitation program, there are about 400 sheltered workshops which permit the severely disabled who cannot be employed in other establishments to perform useful work. They also provide the means for evaluating, treating, and training the disabled who otherwise could not be effectively rehabilitated.

Chapter 5

LABOR MANAGEMENT PROGRAMS FOR HANDLING CHANGES[7]

Unions have understandably become more concerned with job security as the pace of technological change has quickened and as the general level of unemployment has crept upward. At the same time, employers have been increasingly concerned with the right to change or eliminate jobs or work assignments to improve efficiency. One major task of collective bargaining in recent years has been to find a mode of accommodation between the two goals where they are in conflict.

Accommodation is reached, of course, by means in addition to collective bargaining. Unemployment compensation—financed by a tax on the employer—is provided by Government; full-crew laws in many States regulate the manning of trains; building codes in many localities prescribe methods of work. Some job security measures may be prescribed by union constitutions or by-laws, as in printing and many entertainment fields. In most industries, however, the basic accommodation is the result of collective bargaining.

Attempts at accommodation between job security and management flexibility have resulted in, or prolonged, strikes in some industries in the recent past. In other industries, arduous bargaining has achieved some significant changes. In still others, procedures for seeking a peaceful modification of existing practices have been established. The paramount lesson that emerges is that the reshaping of a mode of accommodation can rarely be achieved easily or quickly.

The primary purpose of this chapter is to describe the principal recent developments in worker-management accommodation in several industries. The industries examined are not the only ones in which this kind of search has been going on, but they do provide examples of strikingly different accommodations and different methods of achieving change in them.

PROTECTIVE PROVISIONS IN SELECTED INDUSTRIES

Longshoring

One of the industries is West Coast longshoring. In this industry the old arrangement included an extremely elaborate set of restrictive work rules which limited the employers' flexibility in the assignment of longshoremen. Crew sizes were specified for almost all kinds of operations, the speed of work was closely regulated, unnecessary work was required, and resistance to the introduc-

[7] This chapter is based largely on appendix volume IV of the *Report of the Presidential Railroad Commission* (February 1962), pp. 197–227.

tion of new equipment was common and often effective.

In 1957, however, the union decided to change its approach to job security. Instead of resisting change in the work rules and opposing the introduction of new equipment and new methods, the union decided to offer the employers an opportunity to "buy out" the most restrictive work rules and the union's resistance to new machinery. After nearly 3 years of bargaining with the employers' association, an agreement was signed in October 1960 which fundamentally changed the industry's job security-management flexibility accommodation.

The agreement gave the employers a relatively free hand to revise obsolete and unreasonably restrictive work rules, provided that they created no unsafe conditions, no onerous workloads, and did not impose a "speedup" on the individual longshoreman. The employers also got a reaffirmation of their right to mechanize operations. In return, the employers agreed to pay into a trust fund a total of $29 million during the 5½-year life of the agreement. The money in the trust fund is to be used to finance two benefits for the "regular" (registered) work force of the industry. About 40 percent of the fund is to be used for a form of annual wage guarantee in the event that work opportunity for fully registered longshoremen falls below a certain level as a result of the mechanization and modernization agreement; the other 60 percent of the fund is to be used for early retirement, cash vesting, and death benefits.

Meatpacking

One experiment in dealing with change which has received a great deal of attention is the Armour Automation Committee.

The approach to employee displacement problems in the meatpacking industry differs in important respects from the approach in West Coast longshoring. Substantial displacement had already occurred in meatpacking before any relatively comprehensive program to cope with the problem was undertaken. From 1955 to 1959, total output of the industry changed very little, but production-worker employment declined by about 36,000—from 200,000 to 164,000. Some of the displacement was due to mechanization, but much resulted from the decisions of the large packing companies to close older, less efficient plants and to centralize production in newer facilities, thereby reducing excess capacity. Changes in seasonal patterns had reduced peakloads to such an extent that reduction of total capacity was possible without any reduction in total output. In 1959 alone, one of the largest companies—Armour—closed a total of 6 plants and terminated 5,000 employees. This was the immediate background for the Armour automation agreement of 1959. The general approach of this agreement called for establishment of a tripartite study commission with authority and funds to study, experiment, and submit nonbinding recommendations to the company and the unions for the handling of the displacement problem under the agreement.

The company contributed $500,000 to a fund to finance the work of the committee which was instructed to study the problems resulting from "modernization" and to consider such measures as training and retraining programs, transfer programs, and other methods of promoting employment opportunities for displaced employees.

The committee has made a number of studies in fields pertinent to its assignment; it conducted some experiments in retraining and transfers; and it formulated recommendations for the company and the unions to consider in their 1961 collective-bargaining negotiations. Initial attempts at retraining yielded disappointing results.

The Armour contracts negotiated in 1961 included a provision for a 90-day advance notice of shutdowns with guaranteed earnings during this period for affected employees and "technological adjustment pay" for those subsequently laid off. The latter benefit covers workers who have at least 5 years' seniority and who apply for a transfer to other plants. (Transfer application may be made, however, only on an intraunion basis.) Payments will be made until transfer is effected or the worker's eligibility for transfer expires, subject to limitations on weeks of benefits related to length of service. Employees who do not wish to transfer would get severance pay, the amount graduated according to years of service.

Steel

One of the major issues in the 1959 steel strike was the demand of the companies for modification or elimination of the "local working conditions" clause which is a part of all basic steel agreements. The companies contended that this clause kept un-

necessary men on the job and interfered with management flexibility in revising assignments and in changing obsolete and wasteful practices. The union contended that the companies wanted to eliminate 100,000 jobs in the industry and to change beneficial working conditions that the employees had enjoyed for years. The final settlement provided for no change in the local working conditions clauses, but the parties did agree to set up a committee to study the problem. This committee was continued under the most recent contracts (agreed to in the spring of 1962)[8] and is to study problems in the general area of employment stabilization, such as subcontracting, overtime scheduling, work assignments, and vacation scheduling. Under the supervision of the committee, a group of experts is to review and modernize the job classification system.

The 1962 steel contracts also featured further improvements in job and income security provisions. Included were liberalized vacation benefits, a new savings-vacation plan designed to spread work and encourage early retirement, changes in retirement benefits also designed to encourage retirement, a short workweek benefit provision, establishment of a moving allowance for long-service employees who accept job transfers under an interregional preferential hiring program, and liberalized supplementary unemployment benefits.

A guideline outlining minimum standards for improving mobility provisions under the seniority plan was also agreed to. It established seniority pools in each plant covering major operating units. A laid-off employee with at least 2 years' seniority would have the right to a job within his pool for which he is qualified when held by a worker with less plant service. The worker's senority rights would extend to any job in any seniority pool in the plant held by a worker with less continuous service in the plant if his layoff is due to a permanent plant shutdown or to one which is likely to last 2 or more years. Laid-off workers with at least 2 years' service, who exhaust employment rights at their own plants, would receive preference over new hires at other company plants within specified geographical areas, providing they are not eligible for an immediate pension or social security benefits. Workers with at least 10 years of service and under age 60, who are laid off for a period likely to last at least 2 years will have preferential rights to available jobs at company plants in other areas. These employees, upon accepting a job in a different geographical area, will be entitled to a moving allowance provided under the Supplemental Unemployment Benefits Plan.

[8] Because the 1963 settlement was concluded at press time, its new provisions are not covered here. For a summary of the major changes, see *Monthly Labor Review*, July 1963, pp. iii and iv.

Automobiles and Rubber

The automobile and rubber industries are examples of a mode of accommodation which is common in many mass production industries. Generally speaking, in these two industries there are few limitations on the right of management to combine, divide, change, or eliminate jobs or work assignments, and crew sizes are largely determined by management decision. (There are many more limitations to management flexibility in the skilled trades.) Since the automobile companies are multiplant operations, they have often been able to offer employment at other plants to employees who are displaced at one plant. When an operation is moved from one plant to another, under most circumstances the employees who were working on the operation have the right to move with the operation carrying their full seniority with them.

Nonetheless, as a result of the decentralization program of the large auto firms, and also of course, because of cyclical fluctuations in the industry, job security has been an increasingly important issue in collective bargaining in the industry and unions have sought job security through such devices as elaborate seniority systems, supplementary unemployment benefits, and severance pay. The 1961 contracts—in addition to liberalizing SUB and severance pay—established a short workweek benefit provision and provided moving allowances for employees moving 50 miles or more as a result of a transfer from one plant to another.

Conditions in the rubber industry have in practice resulted in two kinds of devices which often have been used to minimize displacement—informal limitation of output on incentive operations (which are common in rubber), and wildcat strikes and slowdowns. The wildcat strike problem has been especially severe in certain plants in the industry in the past, but the large companies appear to have brought the problem under reasonably good control at present.

The automobile industry is the largest single customer of the rubber industry, and in many respects collective bargaining in the latter has followed the patterns set in the former. Supplementary unemployment benefits were provided in rubber contracts soon after they were negotiated in the auto contracts. Severance pay is also a feature of the rubber contracts. Interplant transfer of employees who are laid off or affected by a permanent shutdown is much less common in rubber than in the automobile industry, probably because most plants of the major companies have been reducing their production worker employment rather than increasing it.

Other Industries

In some industries, the problem of "runaway shops" has figured importantly in union negotiations. Especially in the various branches of the clothing industry, unions have negotiated contracts—usually with employers' associations—which prohibit the relocation of a plant without union consent. The International Ladies' Garment Workers Union, the Amalgamated Clothing Workers Union, and the Hatters, Cap & Millinery Workers Union have negotiated a number of contracts with such clauses. In a number of cases, arbitrators have levied heavy penalties on firms that have been found to have violated such contract provisions.

More recently, collective bargaining has produced some examples of relatively unqualified guarantees of employment. Some companies, especially in the public utility field, have agreed to contract clauses which provide that for the life of the agreement the company will not lay off for lack of work any employee with a specified amount of service. The International Brotherhood of Electrical Workers, for example, has a contract with Central Hudson Gas & Electric Co., New York State, which prohibits any reduction of the pay of any employee with 3 or more years of service due to layoff or demotion because of lack of work; the company has the right to transfer such employees to other work. IBEW contracts with Niagara Mohawk and Pennsylvania Electric provide similar protection to employees with 5 years of service.

A great many collective-bargaining agreements require that employees be given advance notice of any layoff. Usually the required notice is a matter of a few days, although some companies have unilaterally adopted a practice of giving substantial advance notice of major displacements.

Advance notice, by itself, obviously does nothing to solve the problems of displacement. It merely provides a period during which those affected may make plans and take action. Unions have sought such notice in order to have an opportunity to negotiate such matters as assignments to new equipment, manning scales, transfer rights, and other benefits for displaced employees. Advance notice may provide affected employees with an opportunity to seek other work. For this reason some companies have been unwilling to give long periods of advance notice of displacement, for fear that their operations would be prematurely crippled by the mass exodus of employees; but the experience in a number of plant shutdown situations indicates that most employees can be held on the job by the desire to qualify for fringe benefits such as severance pay or the hope of transfer. While advance notice alone contributes nothing to the solution of displacement problems, it is generally a prerequisite for individual and collective planning to meet such problems.

SEVERANCE PAY

The most common benefit provided in collective bargaining agreements for displaced workers is severance pay, yet this benefit is far from universal. Perhaps the most striking aspect of severance pay plans is their diversity. Some provide benefits for virtually any employee who loses his job or is laid off, including one who is discharged for cause; others limit benefits to permanently displaced employees with many years of service. Some provide a flat benefit for all eligible employees, while others provide graduated benefits which increase with years of service. With such diversity, concise and accurate generalization is difficult.

Little is known about the efficacy of severance pay as a means to achieve the apparent purpose of most plans—to assist the displaced employee dur-

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ing his transition to other employment. To the young, well-qualified craftsman who is displaced when the demand for his specialty is brisk, the payment may simply be a windfall. To the middle-aged man with little skill who is displaced when general unemployment is high, the payment may be most inadequate. To the man who is displaced when he is within a year or two of retirement, the payment may be all-important. What little evidence is available suggests a guarded conclusion: that collectively bargained severance pay by itself cannot begin to solve the problems associated with employee displacement, but that, as one of a number of measures, severance pay may provide material assistance to a great many displaced employees and is at least better than nothing. Whether money is better spent on severance pay than on other kinds of assistance to displaced employees is a matter which has not been established.

Important aspects of the relationship between mobility and income maintenance programs are presently being explored by the President's Committee on Corporate Pension Funds and other Private Retirement Programs. Among the items included on the Committee's agenda are a review of the implications of the growing retirement funds for the financial structure of the economy, the role and character of the private and other retirement systems in the economic security system of the Nation, and consideration of how they may contribute more effectively to efficient manpower utilization and mobility.

Chapter 6

PROGRAMS UNDER CONSIDERATION

YOUTH

Young persons face special problems in adapting to a work career. It is virtually impossible to list all of the programs which are concerned with youth, because a wide range of programs, and the entire American educational system serve, directly and indirectly, to assist the young person in his preparation for a work career. Most recent programs, including the Manpower Development and Training Act, incorporate special provisions for youth, and there have been a number of study groups concerned with various aspects of the career problems of youth.

However, unless other, more direct measures are adopted, the incidence of youth unemployment will still remain disproportionately high. The President's Committee on Youth Employment, having studied these efforts and problems, has reported that the immediate need for additional youth employment opportunities is critical.

In this connection, the Department of Labor is undertaking study to develop methods for promoting the most effective utilization of the production potential of untrained and inexperienced youth; to determine the effectiveness of different types of programs for the training and useful employment of youth to meet current and future technological requirements of an expanding labor market; and thereby to provide the Nation with reliable and proven training and work experience programs for school dropouts and other youths.

One program, designed to meet this need, is the Youth Employment Bill. Two basic types of programs are proposed: employment in a Youth Conservation Corps and work in State and local community service activities, the latter either publicly owned and operated facilities or local projects sponsored by nonprofit agencies.

The programs for local area youth employment and training would develop ways to furnish a stimulus to employment and training for both young men and women between the ages of 16 and 21 to improve their employability and to enhance their chances of advancement after their entry into the labor market as adult workers. Adequate safeguards would be provided so that the programs will not result in the displacement of regular workers, that rates of pay and other conditions of employment are appropriate and reasonably consistent with the rates and conditions applicable with respect to comparable work in the locality, and that proper standards and procedures are included to discourage students from dropping out of school.

The Youth Conservation Corps program would take young men between the ages of 16 and 21 and develop ways to provide them with work training in a healthful outdoor environment, furnishing also the experience of camp community living and educational opportunities. It is envisioned that a variety of combinations of work

and training will be afforded. For example, camp-oriented conservation work not only provides a unique means for affording young men with constructive work and training, but it also results in a permanent contribution to the physical resources of the Nation.

THE NATIONAL SERVICE CORPS

A second important proposal would establish a National Service Corps, designed for citizens of every age, young and old, who wish to be of help—whose present skills, jobs or aptitudes enable them to serve their community in meeting its most critical needs. Inspired by the success of the Peace Corps, whose volunteers have given their skills and ideals to assist the needy in other lands, the National Service Corps would provide opportunities to help meet the problems of our own communities and citizens in distress. This is not only a constructive channel for youthful energy and idealism; many senior citizens have indicated their willingness to participate in this endeavor and they should be afforded the opportunity to do so. This Corps would consist of a small carefully selected volunteer of men and women of all ages working under local direction with professional personnel and part-time local volunteers to help provide urgently needed services in mental health centers and hospitals, on Indian reservations, to the families of migrant workers, and in the educational and social institutions of hard-hit slum or rural poverty areas.

A SYSTEM OF EARLY WARNING ON DEVELOPMENTS LEADING TO UNEMPLOYMENT

While recognizing the central importance of continued technological progress, the United States is concerned with preventing or mitigating the adverse effects on workers stemming from dislocations connected with such progress. Accordingly, a start has been made in developing an "early warning system" on impending technological changes and their probable effects on employment opportunities and training requirements in different industries and occupations. Studies of several major categories of automated equipment are now underway in the Department of Labor. The Department has also begun a new series of studies of technological innovations which are still in the development stage. By determining the nature and extent of the dislocations anticipated as a result of the rationalization of production methods and machinery, it will be possible to prepare in advance for the readjustment of workers affected with a minimum of hardship to the individuals and a minimum of loss to the economy.

In addition, the United States Employment Service has also taken the first steps in developing a local advance notice system, under which employers expecting to introduce major technological changes would report them in advance to the State employment service offices. These offices, then, would work with the employers, the workers, and their unions in planning and carrying out the steps needed to ease the changeover for everyone concerned.

Worker mobility is another area in which the Department of Labor is conducting and sponsoring research. The aim of this research is to increase understanding of the factors, both personal and environmental, which encourage and impede worker mobility, and to suggest measures that would be most effective in increasing the flexibility of the labor force.

In summary, the need to supplement general measures of economic stimulation with special measures designed to improve the functioning of the labor market and the qualifications of the work force is evident. The process by which workers are matched with jobs in this country are beset by barriers, inefficiencies, and inadequacies which will require great and specific efforts to overcome. And there is equally urgent need to strengthen and redirect the educational and training processes by which workers are prepared for employment.

Strengthening of education will be an essential foundation for a long-run solution to this coun-

try's training needs. It will make possible the training and employment of workers who are now, in effect, disqualified by illiteracy. Expansion and improvement of professional and vocational education programs will provide the training required in the professions and many other occupations. And through broadened educational preparation, workers at all levels will be provided with increased adaptability in order to meet our changing occupational and industrial requirements.

APPENDIX

LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT STATISTICS, 1947–62

The statistics presented in the following tables generally begin with the earliest date of their availability. The major employment status categories are shown beginning with 1929. (Statistics from 1940 forward are based on the regular monthly sample surveys of the labor force. Statistics for 1929 through 1939 are estimates reconstructed from other data.) The detailed series start with 1947 or 1948.

Three significant changes which occurred through the years affect to a minor degree the comparability of the trend data. (1) In 1953, material from the 1950 Decennial Census was introduced into the estimating procedure for the labor force sample survey. (Material from the 1960 Census was introduced in 1962.) (2) Some minor changes in the definition of employment and unemployment were adopted in January 1957. (3) Beginning in 1960, Alaska and Hawaii were included in the estimates. Explanations of these changes and their effect on the major labor force categories appear in the footnote to table A–1.

STATISTICAL TABLES

Table A–1. Employment Status of the Noninstitutional Population: Annual Averages, 1929–62

(Thousands of persons 14 years of age and over)

Year	Total noninstitutional population	Total labor force, including Armed Forces.		Civilian labor force						Not in labor force
		Number	Percent of noninstitutional population	Total	Employed [1]			Unemployed [1]		
					Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
1929	(2)	49,440	(2)	49,180	47,630	10,450	37,180	1,550	3.2	(2)
1930	(2)	50,080	(2)	49,820	45,480	10,340	35,140	4,340	8.7	(2)
1931	(2)	50,680	(2)	50,420	42,400	10,290	32,110	8,020	15.9	(2)
1932	(2)	51,250	(2)	51,000	38,940	10,170	28,770	12,060	23.6	(2)
1933	(2)	51,840	(2)	51,590	38,760	10,090	28,670	12,830	24.9	(2)
1934	(2)	52,490	(2)	52,230	40,890	9,900	30,990	11,340	21.7	(2)
1935	(2)	53,140	(2)	52,870	42,260	10,110	32,150	10,610	20.1	(2)
1936	(2)	53,740	(2)	53,440	44,410	10,000	34,410	9,030	16.9	(2)
1937	(2)	54,320	(2)	54,000	46,300	9,820	36,480	7,700	14.3	(2)
1938	(2)	54,950	(2)	54,610	44,220	9,690	34,530	10,390	19.0	(2)
1939	(2)	55,600	(2)	55,230	45,750	9,610	36,140	9,480	17.2	(2)
1940	100,380	56,180	56.0	55,640	47,520	9,540	37,980	8,120	14.6	44,200
1941	101,520	57,530	56.7	55,910	50,350	9,100	41,250	5,560	9.9	43,990
1942	102,610	60,380	58.8	56,410	53,750	9,250	44,500	2,660	4.7	42,230
1943	103,660	64,560	62.3	55,540	54,470	9,080	45,390	1,070	1.9	39,100
1944	104,630	66,040	63.1	54,630	53,960	8,950	45,010	670	1.2	38,590
1945	105,520	65,290	61.9	53,860	52,820	8,580	44,240	1,040	1.9	40,220
1946	106,520	60,970	57.2	57,520	55,250	8,320	46,930	2,270	3.9	45,550
1947	107,608	61,758	57.4	60,168	57,812	8,256	49,557	2,356	3.9	45,850
1948	108,632	62,898	57.9	61,442	59,117	7,960	51,156	2,325	3.8	45,733
1949	109,773	63,721	58.0	62,105	58,423	8,017	50,406	3,682	5.9	46,051
1950	110,929	64,749	58.4	63,099	59,748	7,497	52,251	3,351	5.3	46,181
1951	112,075	65,983	58.9	62,884	60,784	7,048	53,736	2,099	3.3	46,092
1952	113,270	66,560	58.8	62,966	61,035	6,792	54,243	1,932	3.1	46,710
1953 [3]	115,094	67,362	58.5	63,815	61,945	6,555	55,390	1,870	2.9	47,732
1954	116,219	67,818	58.4	64,468	60,890	6,495	54,395	3,578	5.6	48,401
1955	117,388	68,896	58.7	65,848	62,944	6,718	56,225	2,904	4.4	48,492
1956	118,734	70,387	59.3	67,530	64,708	6,572	58,135	2,822	4.2	48,348
1957	120,445	70,744	58.7	67,946	65,011	6,222	58,789	2,936	4.3	49,699
1958	121,950	71,284	58.5	68,647	63,966	5,844	58,122	4,681	6.8	50,666
1959	123,366	71,946	58.3	69,394	65,581	5,836	59,745	3,813	5.5	51,420
1960 [4]	125,368	73,126	58.3	70,612	66,681	5,723	60,958	3,931	5.6	52,242
1961	127,852	74,175	58.0	71,603	66,796	5,463	61,333	4,806	6.7	53,677
1962 [5]	130,081	74,681	57.4	71,854	67,846	5,190	62,657	4,007	5.6	55,400

[1] Data for 1947–56 adjusted to reflect changes in the definition of employment and unemployment adopted in January 1957. Two groups averaging about one-quarter million workers who were formerly classified as employed (with a job but not at work)—those on temporary layoff and those waiting to start new wage and salary jobs within 30 days—were assigned to different classifications, mostly to the unemployed.

[2] Not available.

[3] Beginning with 1953, labor force and employment figures are not strictly comparable with previous years as a result of the introduction of material from the 1950 Census into the estimating procedure. Population levels were raised by about 600,000; labor force, total employment, and agricultural employment by about 350,000.

[4] Beginning with 1960, data include Alaska and Hawaii and are therefore not strictly comparable with previous years. This inclusion has resulted in an increase of about half a million in the noninstitutional population 14 years of age and over, and about 300,000 in the labor force, four-fifths of this in nonagricultural employment. The levels of other labor force categories were not appreciably changed.

[5] Preliminary.

Table A–2. Employment Status of the Noninstitutional Population, by Sex: Annual Averages, 1940, 1944, and 1947–62

(Thousands of persons 14 years of age and over)

Sex and year	Total noninstitutional population	Total labor force, including Armed forces.		Civilian labor force						Not in labor force
		Number	Percent of noninstitutional population	Total	Employed [1]			Unemployed [1]		
					Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
MALE										
1940	50,080	42,020	83.9	41,480	35,550	8,450	27,100	5,930	14.3	8,060
1944	51,980	46,670	89.8	35,460	35,110	7,020	28,090	350	1.0	5,310
1947	53,085	44,844	84.5	43,272	41,677	6,953	34,725	1,595	3.7	8,242
1948	53,513	45,300	84.7	43,858	42,268	6,623	35,645	1,590	3.6	8,213
1949	54,028	45,674	84.5	44,075	41,473	6,629	34,844	2,602	5.9	8,354
1950	54,526	46,069	84.5	44,442	42,162	6,271	35,891	2,280	5.1	8,457
1951	54,996	46,674	84.9	43,612	42,362	5,791	36,571	1,250	2.9	8,322
1952	55,503	47,001	84.7	43,451	42,237	5,623	36,614	1,217	2.8	8,502
1953 [2]	56,534	47,692	84.4	44,194	42,966	5,496	37,470	1,228	2.8	8,840
1954	57,016	47,847	83.9	44,537	42,165	5,429	36,736	2,372	5.3	9,169
1955	57,484	48,054	83.6	45,041	43,152	5,479	37,673	1,889	4.2	9,430
1956	58,044	48,579	83.7	45,756	43,999	5,268	38,731	1,757	3.8	9,465
1957	58,813	48,649	82.7	45,882	43,990	5,037	38,952	1,893	4.1	10,164
1958	59,478	48,802	82.1	46,197	43,042	4,802	38,240	3,155	6.8	10,677
1959	60,100	49,081	81.7	46,562	44,089	4,749	39,340	2,473	5.3	11,019
1960 [3]	61,000	49,507	81.2	47,025	44,485	4,678	39,807	2,541	5.4	11,493
1961	62,147	49,918	80.3	47,378	44,318	4,508	39,811	3,060	6.5	12,229
1962	63,234	50,175	79.3	47,380	44,892	4,266	40,626	2,488	5.3	13,059
FEMALE										
1940	50,300	14,160	28.2	14,160	11,970	1,090	10,880	2,190	15.5	36,140
1944	52,650	19,370	36.8	19,170	18,850	1,930	16,920	320	1.7	33,280
1947	54,523	16,915	31.0	16,896	16,349	1,314	15,036	547	3.2	37,608
1948	55,118	17,599	31.9	17,853	16,848	1,338	15,510	735	4.1	37,520
1949	55,745	18,048	32.4	18,030	16,947	1,386	15,561	1,083	6.0	37,697
1950	56,404	18,680	33.1	18,657	17,584	1,226	16,358	1,073	5.8	37,724
1951	57,078	19,309	33.8	19,272	18,421	1,257	17,164	851	4.4	37,770
1952	57,766	19,558	33.9	19,513	18,798	1,170	17,628	715	3.7	38,208
1953 [2]	58,561	19,668	33.6	19,621	18,979	1,061	17,918	642	3.3	38,893
1954	59,203	19,971	33.7	19,931	18,724	1,057	17,657	1,207	6.1	39,232
1955	59,904	20,842	34.8	20,806	19,790	1,239	18,551	1,016	4.9	39,062
1956	60,690	21,808	35.9	21,774	20,707	1,306	19,401	1,067	4.9	38,883
1957	61,832	22,097	35.9	22,064	21,021	1,184	19,837	1,043	4.7	39,535
1958	62,472	22,482	36.0	22,451	20,924	1,042	19,882	1,526	6.8	39,990
1959	63,265	22,865	36.1	22,832	21,492	1,087	20,405	1,340	5.9	40,401
1960 [3]	64,368	23,619	36.7	23,587	22,196	1,045	21,151	1,390	5.9	40,794
1961	65,705	24,257	36.9	24,225	22,478	955	21,523	1,747	7.2	41,448
1962 [4]	66,848	24,507	36.7	24,474	22,954	924	22,031	1,519	6.2	42,341

[1] See footnote 1, table 1. [2] See footnote 3, table 1. [3] See footnote 4, table 1. [4] Preliminary.

Table A–3. Labor Force (Including Armed Forces) and Labor Force Participation Rates, by Age and Sex: Annual Averages, 1947–62

Age and sex	1962 [1]	1961	1960 [2]	1959	1958	1957	1956	1955	1954	1953 [3]	1952	1951	1950	1949	1948	1947
	Number in labor force (in thousands)															
Total	74,681	[illegible]75	73,126	71,946	71,284	70,746	70,387	68,896	67,818	67,362	66,410	65,832	64,599	63,571	62,749	61,608
Male	50,175	49,918	49,507	49,081	48,802	48,649	48,579	48,054	47,847	47,694	46,851	46,524	45,919	45,523	45,150	44,692
14 to 19 years	4,032	3,954	3,821	3,718	3,627	3,669	3,612	3,378	3,299	3,338	3,373	3,453	3,421	3,456	3,551	3,617
14 and 15 years	780	725	637	676	676	685	665	566	572	561	585	611	623	577	573	586
16 and 17 years	1,225	1,271	1,335	1,256	1,197	1,207	1,216	1,130	1,073	1,125	1,152	1,146	1,077	1,110	1,166	1,168
18 and 19 years	2,027	1,958	1,849	1,786	1,754	1,778	1,731	1,682	1,653	1,652	1,637	1,696	1,721	1,770	1,813	1,863
20 to 24 years	5,272	5,187	5,089	4,987	4,849	4,781	4,814	4,851	4,959	5,084	5,171	5,215	5,172	5,146	5,065	5,042
25 to 34 years	10,720	10,880	10,930	10,981	11,108	11,247	11,359	11,464	11,467	11,469	11,406	11,229	11,004	10,846	10,718	10,558
35 to 44 years	11,542	11,403	11,340	11,235	11,161	11,046	10,926	10,833	10,748	10,669	10,167	10,034	9,930	9,838	9,701	9,581
45 to 54 years	9,803	9,741	9,634	9,488	9,369	9,201	9,044	8,877	8,743	8,612	8,364	8,244	8,142	8,033	7,965	7,872
55 to 64 years	6,565	6,535	6,405	6,350	6,308	6,227	6,224	6,125	6,110	5,979	5,954	5,879	5,797	5,752	5,767	5,647
65 years and over	2,241	2,220	2,287	2,321	2,379	2,477	2,604	2,526	2,525	2,544	2,415	2,469	2,453	2,454	2,385	2,376
Female	24,507	24,257	23,619	22,865	22,482	22,097	21,808	20,842	19,971	19,668	19,558	19,309	18,680	18,048	17,599	16,916
14 to 19 years	2,613	2,567	2,408	2,251	2,171	2,198	2,182	1,987	1,941	1,952	2,002	2,018	1,982	2,054	2,083	2,067
14 and 15 years	460	419	347	349	333	332	313	258	253	239	244	255	238	242	248	232
16 and 17 years	741	774	805	765	685	716	736	641	620	656	706	663	611	648	671	643
18 and 19 years	1,411	1,374	1,257	1,137	1,153	1,150	1,132	1,088	1,068	1,057	1,052	1,100	1,103	1,165	1,164	1,192
20 to 24 years	2,814	2,708	2,590	2,484	2,510	2,453	2,467	2,458	2,441	2,447	2,519	2,670	2,681	2,662	2,721	2,725
25 to 34 years	4,111	4,151	4,140	4,096	4,201	4,269	4,285	4,261	4,224	4,175	4,335	4,305	4,101	4,006	3,940	3,750
35 to 44 years	5,479	5,394	5,308	5,232	5,190	5,121	5,036	4,808	4,715	4,668	4,444	4,307	4,166	3,993	3,804	3,676
45 to 54 years	5,383	5,405	5,280	5,083	4,862	4,618	4,407	4,155	3,824	3,682	3,637	3,535	3,328	3,100	2,973	2,730
55 to 64 years	3,198	3,105	2,986	2,883	2,727	2,631	2,610	2,391	2,164	2,048	2,032	1,923	1,839	1,678	1,565	1,522
65 years and over	911	926	907	836	822	813	821	780	666	693	590	551	584	556	514	445
	Labor force participation rate (Percent of noninstitutional population in labor force)															
Total	57.4	58.0	58.3	58.3	58.5	58.7	59.3	58.7	58.4	58.5	58.7	58.8	58.3	58.0	57.8	57.3
Male	79.3	80.3	81.2	81.7	82.1	82.7	83.7	83.6	83.9	84.4	84.6	84.8	84.4	84.5	84.6	84.4
14 to 19 years	43.6	44.6	46.5	47.2	47.4	49.7	51.4	49.5	49.3	50.9	51.9	53.7	53.2	53.6	54.3	54.2
14 and 15 years	21.6	21.8	22.3	24.2	23.8	25.1	26.6	24.0	24.7	24.6	25.9	27.7	28.7	27.4	27.6	27.7
16 and 17 years	43.5	45.4	46.8	46.0	47.9	51.1	52.6	49.5	48.3	51.7	53.1	54.5	52.0	52.5	53.4	52.2
18 and 19 years	71.9	71.3	73.6	75.5	75.7	77.7	77.9	77.1	76.5	78.5	78.9	80.2	78.8	79.3	79.8	80.3
20 to 24 years	89.1	89.8	90.2	90.1	89.5	89.8	90.8	90.8	91.5	92.2	92.0	91.0	89.0	87.7	85.6	84.8
25 to 34 years	97.4	97.6	97.7	97.5	97.3	97.3	97.4	97.7	97.5	97.6	97.7	97.1	96.2	95.9	96.0	95.8
35 to 44 years	97.7	97.7	97.7	97.8	98.0	97.9	98.0	98.1	98.1	98.2	97.9	97.6	97.6	98.0	98.0	98.0
45 to 54 years	95.6	95.6	95.8	96.0	96.3	96.4	96.6	96.5	96.5	96.6	96.2	96.0	95.8	95.6	95.8	95.5
55 to 64 years	86.2	87.3	86.8	87.4	87.8	87.5	88.5	87.9	88.7	87.9	87.5	87.2	87.0	87.5	89.5	89.6
65 years and over	30.3	31.7	33.1	34.2	35.6	37.5	40.0	39.6	40.5	41.6	42.6	44.9	45.8	46.9	46.8	47.8
Female	36.7	36.9	36.7	36.1	36.0	35.9	35.9	34.8	33.7	33.6	33.9	33.8	33.1	32.4	31.9	31.0
14 to 19 years	29.0	29.9	30.2	29.3	29.1	30.6	31.9	29.9	29.8	30.5	31.5	32.1	31.5	32.5	32.5	31.6
14 and 15 years	13.2	13.1	12.6	12.9	12.1	12.5	12.9	11.3	11.3	10.8	11.1	11.9	12.7	11.8	12.2	11.2
16 and 17 years	27.1	28.5	29.1	28.8	28.1	31.1	32.8	28.9	28.7	31.0	33.4	32.2	30.1	31.2	31.4	29.5
18 and 19 years	50.9	51.1	51.1	49.1	51.0	51.5	52.1	51.0	50.5	50.8	51.4	52.7	51.3	53.0	52.1	52.3
20 to 24 years	47.4	47.1	46.2	45.2	46.4	46.0	46.4	46.0	45.3	44.5	44.8	46.6	46.1	45.0	45.3	44.9
25 to 34 years	36.4	36.4	36.0	35.4	35.6	35.6	35.4	34.9	34.5	34.1	35.5	35.4	34.0	33.5	33.2	32.0
35 to 44 years	44.1	43.8	43.5	43.4	43.4	43.3	43.1	41.6	41.3	41.3	40.5	39.8	39.1	38.1	36.9	36.3
45 to 54 years	50.0	50.1	49.8	49.0	47.9	46.5	45.5	43.8	41.2	40.2	40.1	39.7	38.0	35.9	35.0	32.7
55 to 64 years	38.7	37.9	37.2	36.6	35.2	34.5	34.9	32.5	30.1	29.1	28.7	27.6	27.0	25.3	24.3	24.3
65 years and over	9.9	10.7	10.8	10.2	10.3	10.5	10.9	10.6	9.3	10.0	9.1	8.9	9.7	9.6	9.1	8.1

[1] Preliminary. [2] See footnote 4, table 1. [3] See footnote 3, table 1.

Table A–4. Civilian Labor Force and Civilian Labor Force Participation Rates by Age and Sex: Annual Averages, 1947–62

Age and sex	1962 [1]	19[illegible]	1960 [2]	1959	1958	1957	1956	1955	1954	1953 [3]	1952	1951	1950	1949	1948	1947
	Number in civilian labor force (in thousands)															
Total	71,854	71,603	70,612	69,394	68,647	67,946	67,530	65,847	64,468	63,815	62,966	62,884	63,099	62,105	61,442	60,168
Male	47,380	47,378	47,025	46,561	46,197	45,882	45,756	45,041	44,537	44,194	43,454	43,612	44,442	44,075	43,858	43,272
14 to 19 years	3,549	3,518	3,423	3,273	3,104	3,102	3,098	2,935	2,868	2,880	2,896	2,957	3,127	3,054	3,173	3,074
14 and 15 years	780	725	637	676	676	685	665	566	572	561	585	611	623	577	573	586
16 and 17 years	1,177	1,210	1,290	1,207	1,133	1,127	1,142	1,070	1,024	1,070	1,101	1,080	1,047	1,056	1,109	1,106
18 and 19 years	1,592	1,583	1,496	1,391	1,295	1,290	1,292	1,299	1,273	1,249	1,210	1,266	1,457	1,421	1,491	1,382
20 to 24 years	4,279	4,255	4,123	3,940	3,771	3,626	3,485	3,221	3,052	3,054	3,338	3,935	4,632	4,681	4,674	4,629
25 to 34 years	9,921	10,176	10,252	10,346	10,475	10,571	10,685	10,805	10,772	10,737	10,585	10,375	10,527	10,410	10,327	10,207
35 to 44 years	11,115	11,012	10,967	10,899	10,843	10,731	10,663	10,595	10,513	10,436	9,945	9,798	9,793	9,722	9,596	9,492
45 to 54 years	9,715	9,667	9,574	9,437	9,320	9,153	9,002	8,839	8,703	8,570	8,326	8,204	8,117	8,008	7,942	7,847
55 to 64 years	6,560	6,530	6,400	6,345	6,304	6,222	6,220	6,122	6,105	5,974	5,950	5,874	5,794	5,748	5,764	5,647
65 years and over	2,241	2,220	2,287	2,322	2,379	2,477	2,603	2,526	2,525	2,544	2,415	2,469	2,454	2,454	2,384	2,376
Female	24,474	24,225	23,587	22,833	22,451	22,064	21,774	20,806	19,931	19,621	19,513	19,272	18,657	18,030	17,583	16,896
14 to 19 years	2,606	2,560	2,402	2,244	2,165	2,192	2,176	1,982	1,933	1,945	1,996	2,013	1,980	2,053	2,083	2,067
14 and 15 years	460	419	347	349	333	332	313	258	253	239	244	256	268	242	248	232
16 and 17 years	742	774	805	765	685	716	736	641	620	656	706	662	611	648	671	642
18 and 19 years	1,405	1,368	1,250	1,131	1,147	1,144	1,127	1,083	1,062	1,050	1,046	1,095	1,101	1,163	1,164	1,192
20 to 24 years	2,802	2,697	2,580	2,473	2,500	2,442	2,455	2,445	2,424	2,428	2,502	2,659	2,675	2,659	2,719	2,716
25 to 34 years	4,103	4,143	4,131	4,089	4,193	4,255	4,276	4,251	4,212	4,162	4,320	4,292	4,092	3,997	3,932	3,740
35 to 44 years	5,474	5,389	5,303	5,227	5,185	5,117	5,031	4,805	4,709	4,662	4,438	4,301	4,161	3,989	3,800	3,676
45 to 54 years	5,381	5,403	5,278	5,081	4,859	4,615	4,405	4,154	3,822	3,680	3,636	3,534	3,327	3,099	2,972	2,731
55 to 64 years	3,198	3,105	2,986	2,883	2,727	2,631	2,610	2,391	2,164	2,048	2,032	1,923	1,839	1,678	1,565	1,522
65 years and over	911	926	907	836	822	813	821	780	666	693	590	551	584	556	514	445
	Labor force participation rate (Percent of civilian noninstitutional population in civilian labor force)															
Total	56.5	57.2	57.5	58.4	57.5	57.8	58.3	57.6	57.1	57.2	57.4	57.7	57.7	57.4	57.3	56.8
Male	78.4	79.5	80.4	80.9	81.2	81.9	82.9	82.7	82.9	83.3	83.6	84.0	84.0	84.1	84.2	84.0
14 to 19 years	40.5	41.7	43.8	44.0	43.5	45.5	47.5	46.0	45.8	47.2	48.1	49.9	51.0	50.5	51.6	50.1
14 and 15 years	21.6	21.8	22.3	24.3	23.8	25.1	26.6	24.0	24.7	24.6	25.9	27.7	28.7	27.4	27.6	27.7
16 and 17 years	42.6	44.1	46.0	45.0	46.5	49.3	51.0	48.1	47.1	50.4	51.9	53.0	51.3	51.2	52.1	50.8
18 and 19 years	66.7	66.8	69.3	70.6	69.7	71.7	72.5	72.2	71.5	73.4	73.5	75.0	75.9	75.4	76.4	75.1
20 to 24 years	86.9	87.8	88.1	88.8	86.9	87.0	87.8	86.8	87.0	87.7	88.1	88.4	87.9	86.6	84.6	83.6
25 to 34 years	97.2	97.5	97.5	97.4	97.1	97.1	97.3	97.6	97.3	97.4	97.5	96.9	96.0	95.8	95.9	95.6
35 to 44 years	97.6	97.6	97.7	98.8	97.9	97.9	97.9	98.1	98.1	98.2	97.8	97.5	97.6	97.9	97.9	98.0
45 to 54 years	95.6	95.6	95.7	98.0	96.3	96.3	96.5	96.5	96.5	96.5	96.2	95.9	95.8	95.6	95.8	95.5
55 to 64 years	86.2	87.3	86.8	87.4	87.8	87.5	88.5	88.0	88.7	87.9	87.5	87.2	86.9	87.5	89.5	89.6
65 years and over	30.3	31.7	33.1	34.2	35.6	37.5	40.0	39.6	40.5	41.6	42.6	44.9	45.8	47.0	46.8	47.8
Female	36.6	36.9	36.7	36.1	36.0	35.8	35.9	34.8	33.7	33.5	33.8	33.8	33.1	32.4	31.9	31.0
14 to 19 years	29.0	29.8	30.1	29.3	29.1	30.5	31.8	29.9	29.7	30.4	31.4	32.0	31.5	32.5	32.5	31.6
14 and 15 years	13.2	13.1	12.6	12.9	12.1	12.5	12.9	11.3	11.3	10.8	11.1	11.9	12.7	11.8	12.2	11.2
16 and 17 years	27.1	28.5	29.1	28.8	28.1	31.1	32.8	28.9	28.7	31.0	33.4	32.2	30.1	31.2	31.4	29.5
18 and 19 years	50.8	51.0	50.9	48.9	50.8	51.4	51.9	50.9	50.4	50.7	51.2	52.5	51.3	53.0	52.1	52.3
20 to 24 years	47.3	47.0	46.1	45.1	46.3	45.9	46.3	45.9	45.1	44.3	44.7	46.5	46.0	45.0	45.3	44.8
25 to 34 years	36.3	36.4	36.0	35.3	35.6	35.6	35.4	34.9	34.4	34.0	35.4	35.4	34.0	33.4	33.2	31.9
35 to 44 years	44.1	43.8	43.4	43.3	43.4	43.3	43.1	41.6	41.2	41.3	40.4	39.8	39.1	38.1	36.9	36.3
45 to 54 years	50.0	50.1	49.8	49.0	47.8	46.5	45.5	43.8	41.1	40.4	40.1	39.6	37.9	35.9	35.0	32.7
55 to 64 years	38.7	37.9	37.2	36.6	35.2	34.5	34.9	32.5	30.1	29.1	28.7	27.6	27.0	25.3	24.3	24.3
65 years and over	9.9	10.7	10.8	10.2	10.3	10.5	10.8	10.6	9.3	10.0	9.1	8.9	9.7	9.6	9.1	8.1

[1] Preliminary. [2] See footnote 4, table 1. [3] See footnote 3, table 1.

Table A–5. Civilian Labor Force Participation Rates [1] by Color, Sex, and Age: Annual Averages, 1948–62

Color, sex, and age	1962 [2]	1961	1960 [3]	1959	1958	1957	1956	1955	1954	1953 [4]	1952	1951	1950	1949	1948
WHITE															
Male	78.6	79.7	80.5	81.0	81.3	82.0	83.0	82.8	83.0	83.1	83.6	84.0	84.1	84.0	84.2
14 to 19 years	40.8	41.7	43.6	44.0	43.5	45.8	47.4	45.6	45.4	46.4	47.6	49.2	50.3	49.4	50.7
20 to 24 years	86.5	87.6	87.8	87.3	86.7	86.7	87.6	85.6	86.4	87.4	87.6	88.4	87.5	86.5	84.4
25 to 34 years	97.4	97.7	97.7	97.5	97.2	97.1	97.4	97.8	97.5	97.5	97.6	97.0	96.4	95.9	96.0
35 to 44 years	97.9	97.9	97.9	98.0	98.0	97.9	98.1	98.3	98.2	97.9	97.9	97.6	97.7	98.0	98.0
45 to 54 years	96.0	95.9	96.1	96.3	96.6	96.6	96.8	96.7	96.8	96.4	96.3	96.0	95.9	95.6	95.9
55 to 64 years	86.7	87.8	87.2	87.9	88.2	87.4	88.9	88.4	89.2	87.7	87.7	87.4	87.3	87.6	89.6
65 years and over	30.6	31.9	33.3	34.3	35.7	37.6	40.0	39.5	40.4	41.3	42.5	44.5	45.8	46.6	46.5
Female	35.6	35.8	35.5	35.0	34.8	34.7	34.8	33.7	32.5	32.0	32.7	32.6	31.8	31.0	30.6
14 to 19 years	29.7	30.6	30.7	30.2	29.7	31.3	32.3	30.5	30.3	30.5	31.7	32.5	31.6	32.4	32.8
20 to 24 years	47.1	46.9	45.7	44.5	46.1	45.9	46.5	45.8	44.4	44.1	44.8	46.7	45.9	44.4	45.1
25 to 34 years	34.1	34.3	34.1	33.4	33.6	33.5	33.2	32.8	32.5	31.7	33.8	33.6	32.1	31.7	31.3
35 to 44 years	42.2	41.8	41.5	41.4	41.4	41.4	41.5	39.9	39.4	38.8	38.9	38.0	37.2	36.1	35.1
45 to 54 years	48.9	48.9	48.6	47.8	46.5	45.4	44.4	42.7	39.8	38.7	38.8	38.0	36.3	34.3	33.3
55 to 64 years	38.0	37.2	36.2	35.7	34.5	33.7	34.0	31.8	29.1	28.5	27.6	26.5	26.0	24.2	23.3
65 years and over	9.8	10.5	10.6	10.0	10.1	10.3	10.6	10.5	9.1	9.4	8.7	8.5	9.2	9.1	8.6
NONWHITE															
Male	76.4	78.0	79.4	79.1	80.4	80.8	81.8	81.8	82.0	83.0	83.8	83.6	83.3	84.5	84.8
14 to 19 years	38.4	41.5	45.0	44.0	44.0	46.1	48.3	48.8	48.7	50.3	49.5	55.3	56.1	59.2	58.3
20 to 24 years	89.3	89.7	90.4	90.8	88.7	89.6	88.9	89.7	91.1	92.3	92.8	88.7	91.4	89.7	85.6
25 to 34 years	95.3	95.9	96.2	96.3	96.3	96.1	96.2	95.8	96.2	96.7	96.2	95.7	92.6	94.1	95.3
35 to 44 years	94.5	94.8	95.5	95.8	96.4	96.5	96.2	96.2	96.6	97.3	97.2	96.4	96.2	97.3	97.2
45 to 54 years	92.2	92.3	92.3	92.8	93.9	93.5	94.4	94.2	93.2	93.9	95.0	95.1	95.1	95.6	94.7
55 to 64 years	81.5	81.6	82.5	82.5	83.3	82.2	83.9	83.1	83.0	86.7	85.7	84.6	81.9	86.0	88.6
65 years and over	27.2	29.4	31.2	33.5	34.5	35.9	39.8	40.0	41.2	41.1	43.3	49.5	45.5	51.4	50.3
Female	45.6	46.2	46.3	45.8	46.2	45.5	45.6	44.4	44.7	42.3	44.2	44.9	45.7	45.8	44.4
14 to 19 years	24.0	24.6	25.8	22.7	24.8	25.8	28.6	25.3	25.7	25.4	28.3	28.9	31.0	32.8	30.5
20 to 24 years	48.6	47.7	48.8	48.8	48.3	46.7	44.9	46.7	49.6	45.1	43.9	45.4	46.9	49.8	47.1
25 to 34 years	52.0	51.2	49.7	50.0	50.8	50.5	52.1	51.3	49.7	48.1	50.1	51.1	51.6	50.9	50.6
35 to 44 years	59.7	60.5	59.8	60.0	60.8	58.8	57.0	56.0	57.5	54.9	54.0	55.8	55.7	56.1	53.3
45 to 54 years	60.5	61.1	60.5	60.0	59.8	56.9	55.3	54.8	53.4	51.0	52.7	55.5	54.3	52.7	51.1
55 to 64 years	46.1	45.2	47.3	46.4	42.8	44.3	44.5	40.7	41.2	35.9	42.3	39.8	40.9	39.6	37.6
65 years and over	12.2	13.1	12.8	12.6	13.3	13.3	14.5	12.1	12.2	11.4	14.3	14.0	16.5	15.6	17.5

[1] Percent of civilian noninstitutional population in civilian labor force.
[2] Preliminary.
[3] See footnote 4, table 1.
[4] See footnote 3, table 1.

Table A–6. Experienced Civilian Labor Force,[1] by Major Occupation Group and Sex: Annual Averages,[2] 1947–62

(Percent distribution)

Major occupation group and sex	1962 [3]	1961	1960 [4]	1959	1958	1957	1956	1955	1954	1953 [5]	1952	1951	1950	1949	1948	1947
BOTH SEXES																
Number (in thousands)	71,315	71,018	70,156	68,952	68,213	67,596	67,210	65,498	64,103	63,299	62,569	62,642	62,713	61,607	6,1163	59,903
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, and kindred workers	11.5	11.1	10.8	10.5	10.4	9.7	9.2	8.9	8.9	8.7	8.2	7.8	7.3	6.7	6.6	6.5
Farmers and farm managers	3.6	3.8	4.0	4.4	4.5	4.9	5.5	5.7	6.0	6.1	6.3	6.4	7.0	7.7	7.6	8.4
Managers, officials, and proprietors, except farm	10.5	10.2	10.2	10.2	10.1	10.0	9.8	10.0	9.8	10.2	9.9	10.0	10.4	10.6	10.5	9.8
Clerical and kindred workers	14.8	14.6	14.5	14.0	14.0	13.9	13.5	13.1	13.1	12.8	13.2	12.5	12.6	12.5	12.4	12.4
Sales workers	6.4	6.6	6.5	6.6	6.4	6.3	6.3	6.2	6.4	6.1	6.0	6.2	6.3	6.3	6.2	5.8
Craftsmen, foremen, and kindred workers	12.8	13.0	12.9	13.1	13.3	13.3	13.4	13.2	13.6	13.9	14.3	13.8	13.0	13.2	13.7	13.5
Operatives and kindred workers	18.3	18.3	18.6	18.6	18.8	19.8	20.2	20.7	20.7	20.8	20.5	21.0	20.8	20.8	21.1	21.6
Private household workers	3.5	3.5	3.3	3.3	3.4	3.2	3.3	3.1	2.9	3.0	3.0	3.1	3.2	3.0	3.0	3.0
Service workers, except private household	9.7	9.6	9.3	9.1	8.9	8.6	8.6	8.4	8.2	8.4	7.8	7.8	8.0	7.8	7.4	7.5
Farm laborers and foremen	3.3	3.7	3.9	3.9	3.9	4.2	4.5	4.4	4.1	3.9	4.4	4.7	5.1	5.3	5.4	5.4
Laborers, except farm and mine	5.7	5.7	6.0	6.2	6.2	6.0	5.9	6.3	6.3	6.1	6.3	6.7	6.4	6.3	6.1	6.4
MALE																
Number (in thousands)	47,098	47,065	46,765	46,315	45,951	45,689	45,622	44,897	44,426	43,739	43,355	43,533	44,330	43,889	43,768	43,100
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, and kindred workers	11.2	10.7	10.4	10.1	9.8	9.0	8.5	8.1	8.1	7.8	7.4	6.9	6.2	5.8	5.7	5.5
Farmers and farm managers	5.2	5.5	5.7	6.3	6.5	7.0	7.7	8.0	8.4	8.4	8.7	8.8	9.4	10.2	10.1	11.0
Managers, officials, and proprietors, except farm	13.5	13.0	12.7	12.5	12.7	12.6	12.2	12.3	12.0	12.5	12.0	12.0	12.5	12.7	12.6	11.8
Clerical and kindred workers	6.9	6.9	7.0	6.7	6.7	6.7	6.5	6.4	6.6	6.3	6.6	6.3	7.1	6.9	6.8	7.0
Sales workers	5.8	6.0	5.9	6.0	5.8	5.6	5.6	5.6	5.7	5.4	5.3	5.5	5.5	5.5	5.3	4.9
Craftsmen, foremen, and kindred workers	18.9	19.1	18.8	19.0	19.2	19.2	19.1	18.8	19.1	19.5	20.0	19.3	17.9	18.1	18.7	18.3
Operatives and kindred workers	19.7	19.6	19.9	19.9	20.0	20.9	21.3	21.7	21.4	21.1	20.8	21.3	21.2	20.9	21.2	21.7
Private household workers	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.3	.3	.4	.3
Service workers, except private household	6.8	6.7	6.5	6.4	6.4	6.3	6.3	6.2	6.1	6.5	6.0	6.1	6.2	6.2	5.9	5.9
Farm laborers and foremen	3.4	3.8	3.9	3.8	3.8	3.9	4.1	4.0	3.7	3.7	4.2	4.4	4.9	4.9	5.0	5.1
Laborers, except farm and mine	8.4	8.4	8.7	9.0	9.0	8.7	8.5	8.9	8.8	8.6	8.8	9.4	8.8	8.5	8.4	8.6
FEMALE																
Number (in thousands)	24,219	23,954	23,391	22,637	22,261	21,907	21,587	20,599	19,677	19,560	19,214	19,108	18,383	17,719	17,393	16,803
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, and kindred workers	12.0	11.7	11.8	11.5	11.7	11.1	10.5	10.7	10.6	10.5	10.0	9.7	10.0	8.9	8.9	9.0
Farmers and farm managers	.5	.5	.5	.5	.6	.7	.8	.7	.6	.9	1.0	1.1	1.3	1.4	1.5	1.7
Managers, officials, and proprietors, except farm	4.8	4.8	4.8	4.8	4.7	4.7	4.8	4.9	4.9	5.0	5.3	5.6	5.4	5.3	5.1	4.6
Clerical and kindred workers	30.0	29.5	29.5	29.1	29.1	29.0	28.2	27.8	27.9	27.4	28.2	26.7	25.8	26.7	26.6	26.2
Sales workers	7.4	7.6	7.6	7.8	7.5	7.6	7.8	7.4	7.9	7.7	7.6	7.7	8.3	8.2	8.3	8.2
Craftsmen, foremen, and kindred workers	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.3	1.4	1.4	1.3	1.1	1.0	1.1	1.2
Operatives and kindred workers	15.4	15.8	15.9	16.0	16.5	17.5	17.7	18.5	19.2	20.2	19.9	20.6	19.9	20.4	20.9	21.2
Private household workers	9.9	10.0	9.8	10.0	10.2	9.7	10.1	9.6	9.2	9.5	9.4	9.9	10.1	9.6	9.5	9.9
Service workers, except private household	15.3	15.3	14.8	14.5	13.9	13.4	13.3	13.2	12.9	12.6	11.8	11.7	12.2	11.8	11.1	11.5
Farm laborers and foremen	3.1	3.4	3.9	4.2	4.2	4.8	5.3	5.4	4.8	4.2	4.8	5.3	5.4	6.1	6.3	6.0
Laborers, except farm and mine	.4	.4	.4	.5	.5	.5	.4	.6	.6	.6	.6	.6	.6	.6	.5	.6

[1] Includes the employed, classified according to their current job, and the unemployed, classified according to their latest full-time civilian job; excludes unemployed persons who never held a full-time civilian job.

[2] Prior to 1958, averages are based on data for January, April, July, and October of each year.

[3] Preliminary.

[4] See footnote 4, table 1.

[5] See footnote 3, table 1.

Table A–7. Employed Persons, by Age and Sex: Annual Averages, 1947–62

(Thousands of persons 14 years of age and over)

Age and sex	1962 [1]	1961	1960 [2]	1959	1958	1957	1956 [3]	1955	1954	1953 [4]	1952	1951	1950	1949	1948	1947
Total	67,846	66,796	66,631	65,581	63,966	65,011	64,979	63,193	61,238	62,213	61,293	61,005	59,957	58,710	59,378	58,027
Male	44,892	44,318	44,485	44,089	43,042	43,990	44,148	43,290	42,377	43,125	42,391	42,490	42,287	41,660	42,428	41,677
14 to 19 years	3,077	2,976	2,941	2,821	2,631	2,750	2,802	2,642	2,550	2,686	2,674	2,753	2,787	2,687	2,911	2,795
14 and 15 years	715	662	581	623	619	633	621	532	547	537	555	584	585	549	543	559
16 and 17 years	990	989	1,089	1,015	948	987	1,016	941	885	981	991	985	914	916	1,006	999
18 and 19 years	1,372	1,325	1,271	1,183	1,064	1,130	1,165	1,169	1,118	1,168	1,128	1,184	1,288	1,222	1,362	1,237
20 to 24 years	3,898	3,798	3,754	3,597	3,293	3,343	3,266	2,997	2,752	2,922	3,204	3,797	4,274	4,222	4,380	4,262
25 to 34 years	9,475	9,591	9,759	9,863	9,790	10,222	10,371	10,476	10,303	10,535	10,390	10,166	10,092	9,918	10,068	9,881
35 to 44 years	10,711	10,505	10,551	10,492	10,291	10,427	10,414	10,295	10,123	10,258	9,778	9,631	9,467	9,343	9,393	9,266
45 to 54 years	9,333	9,194	9,182	9,048	8,828	8,851	8,755	8,576	8,366	8,403	8,172	8,033	7,804	7,691	7,761	7,659
55 to 64 years	6,260	6,156	6,106	6,058	5,954	6,002	6,020	5,872	5,861	5,830	5,822	5,724	5,521	5,465	5,604	5,499
65 years and over	2,137	2,098	2,191	2,210	2,254	2,394	2,519	2,430	2,422	2,492	2,351	2,387	2,341	2,335	2,312	2,316
Female	22,954	22,478	22,196	21,492	20,924	21,021	20,831	19,904	18,861	19,088	18,902	18,515	17,670	17,049	16,950	16,349
14 to 19 years	2,262	2,181	2,091	1,968	1,881	1,970	1,962	1,803	1,736	1,829	1,857	1,863	1,777	1,826	1,930	1,921
14 and 15 years	429	388	322	328	311	307	288	241	234	230	230	240	245	225	231	215
16 and 17 years	617	632	680	655	571	626	647	570	548	607	647	601	531	560	611	587
18 and 19 years	1,216	1,161	1,089	985	999	1,037	1,027	992	954	992	980	1,022	1,001	1,041	1,088	1,119
20 to 24 years	2,548	2,433	2,366	2,273	2,277	2,295	2,318	2,314	2,266	2,340	2,405	2,557	2,507	2,481	2,604	2,606
25 to 34 years	3,836	3,838	3,871	3,846	3,885	4,031	4,095	4,053	3,970	4,043	4,185	4,117	3,876	3,785	3,787	3,628
35 to 44 years	5,190	5,047	5,046	4,961	4,866	4,921	4,858	4,633	4,494	4,570	4,327	4,159	3,993	3,821	3,706	3,594
45 to 54 years	5,158	5,124	5,055	4,867	4,620	4,469	4,266	4,024	3,667	3,613	3,561	3,426	3,185	2,990	2,898	2,673
55 to 64 years	3,086	2,964	2,884	2,764	2,604	2,550	2,527	2,312	2,079	2,009	1,990	1,856	1,766	1,612	1,522	1,430
65 years and over	875	889	882	812	791	784	805	765	649	684	579	537	566	536	503	488

[1] Preliminary.
[2] See footnote 4, table 1.
[3] Data for 1947–56 have *not* been adjusted to reflect changes in the definition of employment and unemployment adopted in January 1957. On the average, total employment was lowered and unemployment raised by about one-quarter million as a result of the change. The change mainly affected nonagricultural industries, but its impact on any particular age-sex category would be relatively small.
[4] See footnote 3, table 1.

Table A–8. Employed Persons, by Type of Industry, Age, and Sex: Annual Averages, 1947–62

(Thousands of persons 14 years of age and over)

Type of industry, age and sex	1962 [1]	1961	1960 [2]	1959	1958	1957	1956 [3]	1955	1954	1953 [4]	1952	1951	1950	1949	1948	1947
NONAGRICULTURAL INDUSTRIES																
Total	62,657	61,333	60,958	59,745	58,122	58,789	58,394	56,464	54,734	55,651	54,488	53,951	52,450	50,634	51,405	49,761
Male	40,626	39,811	39,807	39,340	38,240	38,952	38,870	37,803	36,940	37,623	36,756	36,693	36,007	35,023	35,795	34,725
14 to 19 years	2,467	2,317	2,266	2,161	1,988	2,077	2,114	1,944	1,829	1,924	1,909	1,959	1,902	1,758	2,040	1,810
14 and 15 years	518	452	376	406	413	420	394	318	318	294	321	326	316	262	278	254
16 and 17 years	755	739	813	759	689	718	747	675	625	684	688	690	594	569	674	645
18 and 19 years	1,194	1,126	1,077	996	886	939	973	951	886	946	900	943	992	927	1,088	911
20 to 24 years	3,605	3,469	3,405	3,273	2,964	3,014	2,949	2,635	2,432	2,590	2,842	3,355	3,719	3,626	3,788	3,662
25 to 34 years	8,915	8,983	9,113	9,201	9,080	9,453	9,593	9,609	9,439	9,642	9,463	9,246	9,062	8,803	8,968	8,734
35 to 44 years	9,980	9,746	9,760	9,661	9,454	9,519	9,478	9,315	9,098	9,257	8,771	8,551	8,348	8,161	8,235	8,044
45 to 54 years	8,490	8,322	8,291	8,132	7,916	7,932	7,775	7,539	7,387	7,396	7,205	6,993	6,736	6,631	6,618	6,483
55 to 64 years	5,532	5,383	5,334	5,286	5,172	5,185	5,148	5,009	4,997	4,968	4,876	4,822	4,560	4,418	4,547	4,376
65 years and over	1,637	1,588	1,637	1,625	1,666	1,774	1,813	1,752	1,757	1,846	1,690	1,767	1,678	1,626	1,601	1,616
Female	22,031	21,523	21,151	20,405	19,882	19,837	19,524	18,661	17,794	18,028	17,732	17,258	16,443	15,661	15,610	15,036
14 to 19 years	2,143	2,049	1,937	1,828	1,757	1,826	1,807	1,652	1,581	1,674	1,693	1,695	1,619	1,629	1,732	1,744
14 years and 15 years	380	336	264	274	259	246	227	186	173	177	171	176	178	152	164	154
16 and 17 years	582	586	623	598	530	576	590	509	489	546	583	539	478	489	540	524
18 and 19 years	1,181	1,127	1,050	956	968	1,004	990	957	919	951	939	980	963	988	1,028	1,066
20 to 24 years	2,498	2,367	2,310	2,213	2,220	2,234	2,242	2,220	2,186	2,267	2,320	2,464	2,419	2,368	2,488	2,514
25 to 34 years	3,694	3,703	3,718	3,674	3,725	3,834	3,879	3,844	3,793	3,856	3,951	3,863	3,657	3,543	3,540	3,368
35 to 44 years	4,998	4,860	4,825	4,730	4,637	4,652	4,577	4,372	4,248	4,338	4,081	3,865	3,716	3,500	3,415	3,310
45 to 54 years	4,947	4,901	4,821	4,627	4,374	4,214	3,990	3,754	3,449	3,394	3,332	3,193	2,929	2,702	2,626	2,401
55 to 64 years	2,931	2,814	2,727	2,595	2,457	2,374	2,324	2,123	1,935	1,862	1,837	1,705	1,611	1,454	1,370	1,322
65 years and over	820	828	814	738	712	703	707	695	601	636	519	475	492	464	440	376
AGRICULTURE																
Total	5,190	5,463	5,723	5,836	5,844	6,222	6,585	6,730	6,504	6,562	6,805	7,054	7,507	8,026	7,973	8,266
Male	4,266	4,508	4,678	4,749	4,802	5,037	5,278	5,487	5,436	5,502	5,635	5,797	6,280	6,638	6,633	6,953
14 to 19 years	610	658	676	660	643	674	687	698	720	762	764	793	886	930	873	984
14 and 15 years	197	210	206	217	206	213	227	214	229	243	233	258	269	287	265	304
16 and 17 years	235	250	276	256	259	270	269	266	259	297	303	295	320	348	333	354
18 and 19 years	178	198	194	187	178	191	191	218	232	222	228	240	297	295	275	326
20 to 24 years	293	329	349	324	329	329	317	362	320	332	362	442	554	596	592	600
25 to 34 years	560	608	646	661	711	770	777	867	864	893	926	921	1,030	1,115	1,100	1,147
35 to 44 years	731	758	791	830	837	908	936	980	1,025	1,001	1,008	1,080	1,119	1,182	1,159	1,222
45 to 54 years	843	872	891	916	912	919	981	1,037	978	1,007	967	1,040	1,068	1,060	1,143	1,176
55 to 64 years	727	773	771	772	782	819	873	864	864	862	947	902	961	1,047	1,057	1,123
65 years and over	501	510	554	585	589	620	707	679	665	646	662	620	664	708	711	700
Female	924	955	1,045	1,087	1,042	1,184	1,307	1,243	1,068	1,060	1,170	1,257	1,227	1,388	1,340	1,314
14 to 19 years	119	132	154	140	124	144	156	151	154	155	163	168	158	195	198	176
14 and 15 years	49	53	59	54	52	61	61	55	61	53	58	64	67	72	67	61
16 and 17 years	35	46	57	57	41	50	58	61	58	61	64	62	53	71	71	62
18 and 19 years	35	33	38	29	31	33	37	35	35	41	41	42	38	52	60	53
20 to 24 years	50	65	55	60	57	61	76	94	79	73	85	93	88	113	116	92
25 to 34 years	142	136	153	173	160	197	216	209	176	187	233	254	219	241	248	260
35 to 44 years	193	187	221	233	228	270	281	260	246	232	246	295	277	321	291	284
45 to 54 years	211	223	236	239	247	255	277	270	218	219	230	233	256	288	272	272
55 to 64 years	156	150	157	169	147	177	204	189	145	147	153	152	155	158	152	167
65 years and over	56	61	68	74	79	81	93	71	48	48	60	62	73	72	64	62

[1] Preliminary. [2] See footnote 4, table 1. [3] See footnote 3, table 7. [4] See footnote 3, table 1.

Table A–9. Employed Persons, by Type of Industry, Class of Worker, and Sex: Annual Averages, 1947–62

(Thousands of persons 14 years of age and over)

Type of industry, class of worker, and sex	1962 [1]	1961	1960 [2]	1959	1958	1957	1956 [3]	1955	1954	1953 [4]	1952	1951	1950	1949	1948	1947
BOTH SEXES																
Total employed	67,846	66,796	66,681	65,581	63,966	65,011	64,979	63,193	61,238	62,213	61,293	61,005	59,957	58,710	59,378	58,027
Agriculture	5,190	5,463	5,723	5,836	5,844	6,222	6,585	6,730	6,504	6,562	6,805	7,054	7,507	8,026	7,973	8,266
Wage and salary workers	1,666	1,733	1,866	1,689	1,671	1,687	1,692	1,700	1,452	1,467	1,526	1,647	1,733	1,845	1,746	1,677
Self-employed workers	2,619	2,744	2,802	3,027	3,087	3,304	3,570	3,731	3,821	3,821	3,936	4,022	4,346	4,618	4,671	4,973
Unpaid family workers	905	985	1,054	1,121	1,086	1,231	1,323	1,299	1,230	1,273	1,342	1,386	1,427	1,563	1,556	1,616
Nonagricultural industries	62,657	61,333	60,958	59,745	58,122	58,789	58,394	56,464	54,733	55,651	54,488	53,951	52,450	50,684	51,405	49,761
Wage and salary workers	55,762	54,284	53,976	52,850	51,332	52,073	51,877	50,054	48,409	49,434	48,387	47,682	45,977	44,080	44,866	43,290
Private household workers	2,626	2,594	2,489	2,520	2,456	2,328	2,359	2,216	1,919	1,985	1,922	2,055	1,995	1,772	1,731	1,714
Government workers	8,703	8,186	7,943	7,695	7,481	7,185	6,934	6,838	6,643	6,572	6,493	6,089	5,817	5,440	5,288	5,041
Other wage and salary workers	44,433	43,505	43,544	42,636	41,394	42,559	42,584	40,999	39,847	40,877	39,971	39,538	38,165	36,869	37,847	36,534
Self-employed workers	6,271	6,388	6,367	6,298	6,185	6,089	5,936	5,886	5,880	5,794	5,670	5,869	6,069	6,208	6,139	6,045
Unpaid family workers	623	662	615	597	605	626	581	524	445	423	431	400	404	396	401	427
MALE																
Total employed	44,892	44,318	44,485	44,089	43,042	43,990	44,148	43,290	42,377	43,125	42,391	42,490	42,287	41,660	42,428	41,677
Agriculture	4,266	4,508	4,678	4,749	4,802	5,037	5,278	5,487	5,436	5,502	5,635	5,797	6,280	6,638	6,633	6,953
Wage and salary workers	1,395	1,455	1,558	1,398	1,395	1,409	1,394	1,415	1,218	1,269	1,316	1,412	1,504	1,578	1,519	1,477
Self-employed workers	2,483	2,611	2,687	2,898	2,958	3,141	3,391	3,582	3,693	3,655	3,740	3,818	4,115	4,381	4,401	4,688
Unpaid family workers	388	442	433	452	448	488	493	489	525	577	578	568	661	679	713	788
Nonagricultural industries	40,626	39,811	39,807	39,340	38,240	38,952	38,870	37,803	36,940	37,623	36,756	36,693	36,007	35,023	35,795	34,725
Wage and salary workers	35,648	34,724	34,689	34,234	33,166	33,905	33,934	32,934	32,035	32,871	32,120	31,945	31,049	30,008	30,775	29,738
Private household workers	337	325	288	349	318	290	302	254	205	231	208	265	238	219	215	204
Government workers	5,281	4,954	4,788	4,715	4,604	4,457	4,275	4,234	4,146	4,256	4,282	3,975	3,831	3,625	3,472	3,301
Other wage and salary workers	30,030	29,445	29,613	29,170	28,243	29,157	29,358	28,446	27,684	28,384	27,630	27,705	26,980	26,164	27,088	26,232
Self-employed workers	4,887	4,987	5,027	5,028	5,001	4,969	4,863	4,809	4,841	4,698	4,571	4,691	4,885	4,951	4,963	4,916
Unpaid family workers	90	99	91	77	73	78	73	60	65	54	66	56	74	64	57	71
FEMALE																
Total employed	22,954	22,478	22,196	21,492	20,924	21,021	20,831	19,904	18,861	19,088	18,902	18,515	17,670	17,049	16,950	16,349
Agriculture	924	955	1,045	1,087	1,042	1,185	1,307	1,243	1,068	1,060	1,170	1,257	1,227	1,388	1,340	1,314
Wage and salary workers	271	279	308	290	275	278	298	285	235	198	210	235	230	267	228	200
Self-employed workers	136	133	116	129	130	163	179	149	128	166	196	204	231	237	270	285
Unpaid family workers	517	543	621	669	637	743	830	810	705	696	764	818	766	884	842	828
Nonagricultural industries	22,031	21,523	21,151	20,405	19,882	19,837	19,524	18,661	17,793	18,028	17,732	17,258	16,443	15,661	15,610	15,036
Wage and salary workers	20,113	19,560	19,287	18,616	18,166	18,168	17,943	17,119	16,373	16,563	16,267	15,737	14,929	14,072	14,090	13,552
Private household workers	2,289	2,269	2,201	2,170	2,138	2,038	2,058	1,962	1,713	1,754	1,714	1,790	1,757	1,553	1,516	1,510
Government workers	3,422	3,231	3,155	2,980	2,877	2,728	2,659	2,604	2,498	2,316	2,211	2,114	1,986	1,814	1,815	1,740
Other wage and salary workers	14,402	14,059	13,931	13,465	13,151	13,402	13,226	12,554	12,162	12,493	12,341	11,833	11,185	10,705	10,759	10,302
Self-employed workers	1,385	1,401	1,340	1,270	1,184	1,120	1,073	1,077	1,040	1,096	1,099	1,177	1,184	1,257	1,176	1,129
Unpaid family workers	532	562	524	519	531	548	508	465	380	369	365	344	330	332	344	355

[1] Preliminary. [2] See footnote 4, table 1. [3] See footnote 3, table 7. [4] See footnote 3, table 1.

Table A–10. Employed Persons, by Major Occupation Group and Sex: Annual Averages,[1] 1947–62

(Thousands of persons 14 years of age and over)

Major occupation group and sex	1962[2]	1961	1960[3]	1959	1958	1957	1956[4]	1955	1954	1953[5]	1952	1951	1950	1949	1948	1947
BOTH SEXES																
Total employed	67,846	66,796	66,681	65,581	63,966	65,016	64,928	62,997	61,610	61,778	60,989	60,854	59,648	58,489	59,307	57,843
Professional, technical, and kindred workers	8,040	7,705	7,475	7,143	6,961	6,468	6,096	5,792	5,588	5,448	5,092	4,788	4,490	4,028	3,977	3,795
Farmers and farm managers	2,595	2,711	2,780	3,019	3,083	3,329	3,655	3,739	3,853	3,842	3,963	4,025	4,393	4,703	4,668	4,995
Managers, officials, and proprietors, except farm	7,408	7,119	7,067	6,935	6,785	6,703	6,552	6,450	6,201	6,396	6,182	6,220	6,429	6,433	6,344	5,795
Clerical and kindred workers	10,107	9,861	9,783	9,326	9,137	9,152	8,838	8,367	8,168	7,991	8,122	7,355	7,632	7,438	7,438	7,200
Sales workers	4,346	4,439	4,401	4,394	4,173	4,128	4,111	3,976	3,934	3,779	3,674	3,750	3,822	3,737	3,641	3,395
Craftsmen, foremen, and kindred workers	8,678	8,623	8,560	8,561	8,469	8,664	8,693	8,328	8,311	8,588	8,743	8,434	7,670	7,625	8,119	7,754
Operatives and kindred workers	12,041	11,762	11,986	11,858	11,441	12,530	12,816	12,762	12,253	12,747	12,352	12,623	12,146	11,780	12,396	12,274
Private household workers	2,341	2,317	2,216	2,197	2,204	2,098	2,124	1,946	1,760	1,850	1,805	1,869	1,883	1,757	1,754	1,731
Service workers, except private household	6,461	6,323	6,133	5,843	5,605	5,534	5,485	5,160	4,995	5,099	4,683	4,664	4,652	4,509	4,286	4,256
Farm laborers and foremen	2,271	2,459	2,615	2,563	2,508	2,730	2,889	2,798	2,495	2,382	2,669	2,875	3,015	3,116	3,213	3,125
Laborers, except farm and mine	3,559	3,477	3,635	3,743	3,600	3,680	3,670	3,681	3,603	3,656	3,707	3,952	3,520	3,365	3,473	3,526
MALE																
Total employed	44,892	44,318	44,485	44,089	43,042	44,013	44,157	43,191	42,420	42,684	42,334	42,431	42,156	41,615	42,457	41,535
Professional, technical, and kindred workers	5,175	4,955	4,768	4,583	4,420	4,080	3,859	3,608	3,546	3,409	3,187	2,979	2,696	2,480	2,465	2,321
Farmers and farm managers	2,463	2,581	2,670	2,899	2,960	3,177	3,478	3,591	3,730	3,667	3,771	3,824	4,154	4,459	4,404	4,713
Managers, officials, and proprietors, except farm	6,276	6,003	5,967	5,858	5,751	5,678	5,532	5,454	5,250	5,414	5,178	5,167	5,439	5,503	5,461	5,032
Clerical and kindred workers	3,144	3,120	3,154	2,994	2,919	2,973	2,898	2,792	2,830	2,732	2,808	2,673	3,035	2,979	2,911	2,903
Sales workers	2,646	2,737	2,707	2,719	2,580	2,531	2,486	2,451	2,455	2,316	2,271	2,348	2,379	2,351	2,254	2,044
Craftsmen, foremen, and kindred workers	8,455	8,407	8,338	8,349	8,244	8,432	8,457	8,114	8,073	8,325	8,480	8,193	7,482	7,453	7,934	7,565
Operatives and kindred workers	8,664	8,441	8,652	8,598	8,252	9,041	9,280	9,235	8,839	8,940	8,731	8,955	8,810	8,496	8,934	8,877
Private household workers	60	62	45	49	53	46	45	42	41	42	56	50	125	136	148	123
Service workers, except private household	2,999	2,930	2,873	2,763	2,737	2,769	2,765	2,615	2,597	2,717	2,503	2,533	2,560	2,542	2,440	2,402
Farm laborers and foremen	1,540	1,685	1,728	1,633	1,624	1,697	1,774	1,714	1,569	1,569	1,759	1,865	2,042	2,045	2,123	2,119
Laborers, except farm and mine	3,469	3,397	3,583	3,642	3,500	3,590	3,583	3,576	3,492	3,551	3,592	3,847	3,435	3,274	3,385	3,437
FEMALE																
Total employed	22,954	22,478	22,196	21,492	20,924	21,003	20,771	19,807	18,740	19,094	18,655	18,423	17,493	16,873	16,851	16,308
Professional, technical, and kindred workers	2,865	2,750	2,706	2,560	2,541	2,389	2,238	2,183	2,042	2,038	1,905	1,809	1,794	1,548	1,512	1,474
Farmers and farm managers	132	130	111	119	123	152	176	148	123	175	192	201	239	244	264	282
Managers, officials, and proprietors, except farm	1,132	1,116	1,099	1,077	1,034	1,025	1,020	997	951	982	1,004	1,053	990	930	883	763
Clerical and kindred workers	6,963	6,741	6,629	6,332	6,218	6,179	5,940	5,575	5,339	5,259	5,314	4,983	4,597	4,560	4,528	4,298
Sales workers	1,699	1,702	1,695	1,675	1,592	1,597	1,625	1,525	1,479	1,462	1,403	1,402	1,443	1,386	1,387	1,351
Craftsmen, foremen, and kindred workers	223	216	222	212	225	233	236	215	239	263	263	242	188	172	195	189
Operatives and kindred workers	3,377	3,322	3,333	3,260	3,189	3,490	3,536	3,527	3,415	3,807	3,621	3,668	3,336	3,284	3,452	3,398
Private household workers	2,281	2,255	2,171	2,147	2,151	2,052	2,080	1,904	1,718	1,808	1,749	1,820	1,758	1,622	1,606	1,607
Service workers, except private household	3,462	3,393	3,260	3,080	2,867	2,765	2,720	2,545	2,398	2,382	2,180	2,131	2,092	1,968	1,846	1,854
Farm laborers and foremen	731	774	887	930	884	1,023	1,115	1,085	926	813	910	1,010	973	1,071	1,090	1,005
Laborers, except farm and mine	90	80	82	101	100	90	87	105	112	106	115	106	84	91	89	89

[1] See footnote 2, table 6. [2] Preliminary. [3] See footnote 4, table 1. [4] See footnote 3, table 7. [5] See footnote 3, table 1.

Table A–11. Employed Persons With a Job But Not at Work, by Reason for Not Working: Annual Averages, 1947–62

(Thousands of persons 14 years of age and over)

Reason for not working	1962[1]	1961	1960[2]	1959	1958	1957	1956[3]	1955	1954	1953[4]	1952	1951	1950	1949	1948	1947
Total	3,281	3,146	3,231	3,161	3,076	3,017	2,889	2,682	2,688	2,530	2,555	2,460	2,440	2,244	2,489	2,259
Bad weather	160	143	168	115	182	139	109	103	73	96	68	111	151	110	197	211
Industrial dispute	33	56	40	160	59	45	76	61	53	73	164	57	85	79	97	95
Vacation	1,533	1,492	1,576	1,494	1,479	1,447	1,346	1,268	1,361	1,171	1,130	1,073	1,137	1,044	1,044	834
Illness	940	989	942	907	882	962	901	835	776	827	775	782	718	719	844	847
All other	615	556	505	484	474	425	456	416	425	362	418	436	349	291	308	273

[1] Preliminary. [2] See footnote 4, table 1. [3] See footnote 1, table 1. [4] See footnote 3, table 1.

Table A–12. Unemployed Persons, by Age and Sex: Annual Averages, 1947–62

Age and sex	1962 [1]	1961	1960 [2]	1959	1958	1957	1956 [3]	1955	1954	1953 [4]	1952	1951	1950	1949	1948	1947
NUMBER UNEMPLOYED (IN THOUSANDS)																
Total	4,007	4,806	3,931	3,813	4,681	2,936	2,551	2,654	3,230	1,602	1,673	1,879	3,142	3,395	2,064	2,142
Male	2,488	3,060	2,541	2,473	3,155	1,893	1,608	1,752	2,161	1,069	1,062	1,123	2,155	2,415	1,430	1,595
14 to 19 years	472	542	480	451	473	351	296	292	318	195	222	206	339	367	262	279
14 and 15 years	65	63	55	53	57	52	44	33	26	24	30	27	38	28	30	27
16 and 17 years	187	221	200	191	185	140	125	129	138	89	110	96	133	140	103	107
18 and 19 years	220	258	225	207	231	159	127	130	154	82	82	83	168	199	129	145
20 to 24 years	381	457	369	343	478	283	219	224	299	132	134	138	358	459	294	368
25 to 34 years	446	585	492	483	685	349	315	329	469	202	195	209	435	491	260	326
35 to 44 years	405	507	415	407	552	304	250	301	390	178	166	168	326	379	203	226
45 to 54 years	381	473	392	390	492	302	247	262	337	166	154	171	313	317	182	188
55 to 64 years	300	374	294	287	349	220	199	250	243	145	127	149	272	283	160	148
65 years and over	103	122	96	112	124	83	84	94	104	52	64	82	112	119	72	60
Female	1,519	1,747	1,390	1,340	1,526	1,043	943	903	1,069	533	611	756	987	981	633	547
14 to 19 years	344	379	310	276	284	222	214	179	197	117	140	150	204	228	153	146
14 and 15 years	31	30	24	20	22	25	25	17	18	10	15	16	23	17	17	17
16 and 17 years	124	142	124	110	114	90	89	71	72	49	59	61	81	88	60	57
18 and 19 years	189	207	162	146	148	107	100	91	107	58	66	73	100	123	76	72
20 to 24 years	255	265	214	200	223	147	137	131	159	89	97	102	168	178	115	109
25 to 34 years	267	304	260	242	308	224	181	199	243	119	135	176	216	213	144	112
35 to 44 years	283	342	256	266	319	195	173	172	215	92	112	141	168	168	94	82
45 to 54 years	223	278	222	214	239	146	139	129	155	67	74	109	141	109	74	58
55 to 64 years	111	141	101	119	122	80	83	79	84	40	42	67	73	65	43	33
65 years and over	37	36	25	23	31	28	17	14	17	9	11	14	18	20	10	8
UNEMPLOYMENT RATE																
Total	5.6	6.7	5.6	5.5	6.8	4.3	3.8	4.0	5.0	2.5	2.7	3.0	5.0	5.5	3.4	3.6
Male	5.3	6.5	5.4	5.3	6.8	4.1	3.5	3.9	4.9	2.4	2.4	2.6	4.9	5.5	3.3	3.7
14 to 19 years	13.3	15.4	14.0	13.8	15.2	11.3	9.6	9.9	11.2	6.8	7.6	7.0	11.0	11.9	8.3	9.1
14 and 15 years	8.3	8.7	8.6	7.8	8.4	7.6	6.6	5.8	4.5	4.3	5.1	4.4	6.1	4.9	5.2	4.6
16 and 17 years	15.9	18.3	15.5	15.8	16.3	12.4	10.9	12.1	13.5	8.3	10.0	8.9	12.7	13.3	9.3	9.7
18 and 19 years	13.8	16.3	15.0	14.9	17.8	12.3	9.8	10.0	12.1	6.6	6.8	6.6	11.5	14.0	8.7	10.5
20 to 24 years	8.9	10.7	8.9	8.7	12.7	7.8	6.3	7.0	9.8	4.3	4.0	3.5	7.7	9.9	6.3	7.9
25 to 34 years	4.5	5.7	4.8	4.7	6.5	3.3	2.9	3.0	4.4	1.9	1.8	2.0	4.2	4.7	2.5	3.2
35 to 44 years	3.6	4.6	3.8	3.7	5.1	2.8	2.3	2.8	3.7	1.7	1.7	1.7	3.3	3.8	2.1	2.4
45 to 54 years	3.9	4.9	4.1	4.1	5.3	3.3	2.7	3.0	3.9	1.9	1.8	2.1	3.9	3.9	2.3	2.4
55 to 64 years	4.6	5.7	4.6	4.5	5.5	3.5	3.2	4.1	4.9	2.4	2.1	2.5	4.7	4.9	2.8	2.6
65 years and over	4.6	5.5	4.2	4.8	5.2	3.4	3.3	3.7	4.2	2.0	2.7	3.3	4.6	4.9	3.0	2.5
Female	6.2	7.2	5.9	5.9	6.8	4.7	4.3	4.3	5.4	2.7	3.1	3.9	5.3	5.4	3.6	3.2
14 to 19 years	13.2	14.8	12.9	12.3	13.1	10.1	9.9	9.0	10.0	6.0	7.0	7.4	10.4	11.2	7.3	7.1
14 and 15 years	6.7	7.2	6.9	5.7	6.6	7.5	8.0	6.6	7.1	4.2	6.1	6.3	8.6	7.0	6.9	7.3
16 and 17 years	16.8	18.3	15.4	14.4	16.6	12.6	12.1	11.1	11.6	7.5	8.4	9.2	13.3	13.6	8.9	8.9
18 and 19 years	13.5	15.1	13.0	12.9	12.9	9.4	9.0	8.4	10.1	5.5	6.3	6.7	9.1	10.6	6.5	6.0
20 to 24 years	9.1	9.8	8.3	8.1	8.9	6.0	5.6	5.4	6.6	3.7	3.9	3.8	6.3	6.7	4.2	4.0
25 to 34 years	6.5	7.3	6.3	5.9	7.3	5.3	4.3	4.7	5.8	2.9	3.1	4.1	5.3	5.3	3.7	3.0
35 to 44 years	5.2	6.3	4.8	5.1	6.2	3.8	3.4	3.6	4.6	2.0	2.5	3.3	4.0	4.2	2.5	2.2
45 to 54 years	4.1	5.1	4.2	4.2	4.9	3.2	3.2	3.1	4.0	1.8	2.0	3.1	4.2	3.5	2.5	2.1
55 to 64 years	3.5	4.5	3.4	4.1	4.5	3.0	3.2	3.3	3.9	2.0	2.1	3.5	3.9	3.8	2.7	2.2
65 years and over	4.1	3.9	2.8	2.8	3.8	3.4	2.1	1.8	2.9	1.3	1.9	2.5	3.4	3.4	1.9	1.8

[1] Preliminary. [2] See footnote 4, table 1. [3] See footnote 3, table 7. [4] See footnote 3, table 1.

Table A–13. Unemployment Rates and Percent Distribution of the Unemployed, by Major Occupation Group: Annual Averages,[1] 1947–62

Major occupation group	1962 [2]	1961	1960 [3]	1959	1958	1957	1956 [4]	1955	1954	1953 [5]	1952	1951	1950	1949	1948	1947
UNEMPLOYMENT RATE																
Total	5.6	6.7	5.6	5.5	6.8	4.3	3.8	4.0	5.0	2.5	2.7	3.0	5.0	5.5	3.4	3.6
Professional, technical, and kindred workers	1.7	2.0	1.7	1.7	2.0	1.2	1.0	1.0	1.6	.9	1.0	1.5	2.2	1.9	1.7	1.9
Farmers and farm managers	.3	.4	.3	.3	.6	.3	.4	.4	.4	.2	.2	.3	.3	.2	.2	.2
Managers, officials, and proprietors, except farm	1.5	1.8	1.4	1.3	1.7	1.0	.8	.9	1.2	.9	.7	1.0	1.6	1.5	1.0	1.2
Clerical and kindred workers	3.9	4.6	3.8	3.7	4.4	2.8	2.4	2.6	3.1	1.7	1.8	2.1	3.4	3.8	2.3	2.9
Sales workers	4.1	4.7	3.7	3.7	4.0	2.6	2.7	2.4	3.7	2.1	2.5	2.8	4.0	3.5	3.4	2.6
Craftsmen, foremen, and kindred workers	5.1	6.3	5.3	5.3	6.8	3.8	3.2	4.0	4.9	2.6	2.4	2.6	5.6	5.9	2.9	3.8
Operative and kindred workers	7.5	9.6	8.0	7.6	10.9	6.3	5.4	5.7	7.6	3.2	3.9	4.3	6.8	8.0	4.1	5.1
Private household workers	4.9	5.9	4.9	4.8	5.2	3.7	4.2	4.1	5.0	2.5	3.2	3.8	5.6	5.2	3.2	3.4
Service workers, except private household	6.4	7.4	6.0	6.4	7.4	5.1	4.8	5.8	5.2	3.6	3.7	4.3	6.8	6.1	4.8	4.7
Farm laborers and foremen	4.3	5.7	5.2	5.1	6.2	3.7	3.7	3.7	4.2	2.5	2.3	2.1	5.0	3.9	2.3	2.7
Laborers, except farm and mine	12.4	14.5	12.5	12.4	14.9	9.4	8.2	10.2	10.7	6.1	5.7	5.6	11.7	12.9	7.5	7.5
PERCENT DISTRIBUTION																
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, and kindred workers	3.5	3.3	3.4	3.2	2.9	2.7	2.4	2.2	2.8	3.0	3.1	3.8	3.1	2.3	3.4	3.2
Farmers and farm managers	.2	.2	.2	.2	.4	.3	.5	.5	.5	.6	.5	.6	.5	.3	.4	.4
Managers, officials, and proprietors, except farm	2.8	2.8	2.5	2.4	2.6	2.3	2.0	2.2	2.5	3.8	2.4	3.2	3.2	2.9	3.3	3.1
Clerical and kindred workers	10.4	9.9	9.8	9.3	9.0	9.2	8.6	8.0	8.2	8.5	8.5	8.7	8.2	8.8	8.6	9.5
Sales workers	4.7	4.6	4.2	4.4	3.7	3.8	4.5	3.6	4.8	5.2	5.4	5.7	4.9	4.0	6.3	4.0
Craftsmen, foremen, and kindred workers	11.5	12.1	12.1	12.5	13.2	12.0	11.3	12.8	13.5	14.5	12.5	11.5	13.8	14.4	12.0	13.5
Operatives and kindred workers	24.3	26.0	26.5	25.5	30.0	29.4	28.5	28.2	32.1	26.5	28.8	29.1	26.9	30.5	26.0	28.9
Private household workers	3.0	3.0	2.9	2.9	2.6	2.8	3.6	3.1	2.9	3.0	3.4	3.8	3.4	2.9	2.9	2.6
Service workers, except private household	11.1	10.5	9.9	10.5	9.5	10.2	10.9	11.7	8.7	12.0	10.4	10.9	10.3	8.8	10.7	9.1
Farm laborers and foremen	2.6	3.1	3.6	3.6	3.5	3.7	4.4	4.0	3.4	3.8	3.6	3.2	4.8	3.8	3.8	3.8
Laborers, except farm and mine	12.5	12.2	13.3	13.9	13.5	13.3	12.8	15.3	13.7	14.8	13.1	12.2	14.2	14.6	14.0	12.5
No previous work experience	13.4	12.2	11.6	11.6	9.3	10.3	10.4	8.4	7.0	4.4	8.3	7.3	6.8	6.6	8.8	9.4

[1] Preliminary. [2] See footnote 2, table 6. [3] See footnote 4, table 1. [4] See footnote 3, table 7. [5] See footnote 3, table 1.

Table A–14. Unemployment Rates, by Color and Sex: Annual Averages, 1948–62

Year	White			Nonwhite		
	Both sexes	Male	Female	Both sexes	Male	Female
1948 [1]	3.2	3.1	3.4	5.2	5.1	5.2
1949	5.2	5.2	5.2	8.2	8.8	7.2
1950	4.6	4.5	4.9	8.5	8.9	7.8
1951	2.8	2.4	3.7	4.8	4.4	5.4
1952	2.4	2.2	2.9	4.6	4.5	4.8
1953 [2]	2.3	2.2	2.6	4.1	4.4	3.7
1954	4.5	4.4	4.9	8.9	9.2	8.2
1955	4.0	4.8	4.3	10.1	11.3	8.1
1956	3.3	3.1	3.8	7.5	7.3	8.0
1957	3.9	3.7	4.3	8.0	8.4	7.4
1958	6.1	6.1	6.2	12.6	13.7	10.8
1959	4.9	4.6	5.3	10.7	11.5	9.5
1960 [3]	5.0	4.8	5.3	10.2	10.7	9.5
1961	6.0	5.7	6.5	12.5	12.9	11.9
1962 [4]	4.9	4.6	5.5	11.0	11.0	11.1

[1] See footnote 3, table 7.
[2] See footnote 3, table 1.
[3] See footnote 4, table 1.
[4] Preliminary.

Table A–15. Unemployed Persons, by Duration of Unemployment: Annual Averages, 1947–62

(Thousands of persons 14 years of age and over)

Year	Total	Less than 5 weeks	5 and 6 weeks	7 to 10 weeks	11 to 14 weeks	15 to 26 weeks	27 weeks and longer	Average (mean) duration
1947 [1]	2,356	1,255	203	308	193	234	164	9.8
1948	2,325	1,349	208	297	164	193	116	8.6
1949	3,682	1,804	309	555	331	427	256	10.0
1950	3,351	1,515	275	479	301	425	357	12.1
1951	2,099	1,223	169	252	153	166	137	9.7
1952	1,931	1,183	168	223	126	148	84	8.3
1953 [2]	1,870	1,178	149	209	124	132	79	8.1
1954	3,578	1,651	306	504	305	495	317	11.7
1955	2,903	1,387	230	368	217	367	336	13.2
1956	2,822	1,485	234	360	211	301	232	11.3
1957	2,936	1,485	258	392	240	321	239	10.4
1958	4,681	1,833	363	596	438	785	667	13.8
1959	3,813	1,658	304	474	335	469	571	14.5
1960 [3]	3,931	1,798	324	499	353	502	454	12.8
1961	4,806	1,897	377	587	411	728	804	15.5
1962 [4]	4,007	1,754	334	478	323	534	585	14.7

[1] See footnote 1, table 1.
[2] See footnote 3, table 1.
[3] See footnote 4, table 1.
[4] Preliminary.

Table A–16. Unemployment Rates and Percent Distribution of the Unemployed, by Major Industry Group: Annual Averages, 1948–62

Major industry group	1962 [1]	1961	1960 [2]	1959	1958	1957	1956 [3]	1955	1954	1953 [4]	1952	1951	1950	1949	1948
UNEMPLOYMENT RATE															
Total [5]	5.6	6.7	5.6	5.5	6.8	4.3	3.8	4.0	5.0	2.5	2.7	3.0	5.0	5.5	3.4
Experienced wage and salary workers	5.5	6.8	5.7	5.6	7.2	4.5	3.9	4.3	5.5	2.7	2.9	3.2	5.6	6.2	3.7
Agriculture	7.3	9.3	8.0	8.7	9.9	6.7	6.5	6.4	8.0	4.7	3.9	3.9	8.2	6.5	4.7
Nonagricultural industries	5.5	6.7	5.6	5.5	7.1	4.5	3.8	4.2	5.4	2.6	2.8	3.2	5.4	6.2	3.7
Mining, forestry, fisheries	8.6	11.6	9.5	9.7	10.6	6.3	6.4	8.2	12.3	4.9	3.4	3.8	6.6	8.5	2.9
Construction	12.0	14.1	12.2	12.0	13.7	9.8	8.3	9.2	10.5	6.1	5.5	6.0	10.7	11.9	7.6
Manufacturing	5.8	7.7	6.2	6.0	9.2	5.0	4.2	4.2	6.1	2.5	2.8	3.3	5.6	7.2	3.5
Durable goods	5.7	8.4	6.3	6.1	10.5	4.9	4.0	4.0	6.5	2.0	2.4	2.6	5.2	7.4	3.4
Nondurable goods	5.9	6.7	6.0	5.9	7.6	5.3	4.4	4.4	5.7	3.1	3.3	4.0	6.0	6.9	3.6
Transportation and public utilities	3.9	5.1	4.3	4.2	5.6	3.1	2.4	3.5	4.8	1.8	1.9	1.9	4.1	5.2	3.0
Wholesale and retail trade	6.3	7.2	5.9	5.8	6.7	4.5	4.1	4.3	5.2	3.0	3.1	3.7	5.8	5.8	4.3
Finance, insurance, and real estate	3.1	3.3	2.4	2.6	2.9	1.8	1.4	2.1	2.0	1.6	1.5	1.3	2.0	1.8	1.6
Service industries	4.3	4.9	4.1	4.3	4.6	3.4	3.2	3.8	4.0	2.4	2.6	3.1	5.0	5.1	3.5
Public administration	2.2	2.7	2.6	2.3	3.0	2.0	1.6	1.8	2.0	1.2	1.1	1.6	2.8	2.9	2.0
PERCENT DISTRIBUTION															
Total [4]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Experienced wage and salary workers	83.9	84.9	85.3	85.6	87.8	87.2	85.8	88.0	89.8	88.6	87.7	87.8	89.1	89.6	87.7
Agriculture	3.3	3.7	4.1	4.2	3.9	4.2	4.6	4.4	3.9	4.5	3.7	3.6	4.9	3.7	4.2
Nonagricultural industries	80.6	81.2	81.2	81.4	83.9	83.0	81.2	83.6	85.9	84.1	84.0	84.3	84.2	85.9	83.5
Mining, forestry, fisheries	1.4	1.6	1.7	1.8	1.7	1.7	2.1	2.5	3.1	2.7	2.0	2.0	2.0	2.2	1.4
Construction	12.1	11.7	12.3	12.6	11.6	12.5	11.8	12.5	11.4	12.9	12.1	10.8	11.0	10.9	10.7
Manufacturing	26.2	28.8	28.2	27.3	34.4	30.8	29.0	27.5	33.3	27.0	28.3	29.3	28.8	33.3	28.0
Durable goods	14.4	17.5	16.0	16.1	22.2	17.2	16.1	15.0	20.0	13.1	13.3	12.5	13.9	17.8	14.3
Nondurable goods	11.8	11.3	12.2	11.6	12.2	13.6	12.9	12.5	13.3	13.9	15.1	16.8	14.9	15.4	13.6
Transportation and public utilities	4.4	4.9	5.2	5.0	5.4	5.0	4.5	6.0	6.7	5.3	5.3	4.7	5.9	7.2	6.8
Wholesale and retail trade	17.1	16.4	16.3	16.3	15.2	15.9	16.6	16.3	16.0	17.9	18.0	13.6	17.9	16.2	18.8
Finance, insurance, and real estate	2.1	1.9	1.7	1.7	1.5	1.5	1.2	1.7	1.2	1.9	1.7	1.3	1.1	.9	1.3
Service industries	15.3	13.9	13.6	14.3	12.1	13.6	14.2	15.0	12.4	14.1	14.5	15.1	14.9	12.9	13.9
Public administration	1.9	1.9	2.2	1.9	2.0	2.1	1.9	2.0	1.8	2.2	2.1	2.4	2.6	2.4	2.7

[1] Preliminary.
[2] See footnote 4, table 1.
[3] See footnote 3, table 7.
[4] See footnote 3, table 1.
[5] Includes other experienced unemployed (self-employed and unpaid family workers); excludes those with no previous work experience.

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U.S. GOVERNMENT PRINTING OFFICE : 1963 O—710-856