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EMPLOYMENT AND UNEMPLOYMENT STATISTICS

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ECONOMIC STATISTICS

OF THE

JOINT COMMITTEE ON THE ECONOMIC REPORT

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EMPLOYMENT AND UNEMPLOYMENT STATISTICS

MONDAY, NOVEMBER 7, 1955

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC STATISTICS OF THE
JOINT COMMITTEE ON THE ECONOMIC REPORT,
Washington, D. C.

The subcommittee met at 10 a. m., Hon. Richard Bolling (chairman of the subcommittee) presiding.

Also present: Grover W. Ensley, staff director, and John Lehman, clerk of the committee.

Mr. BOLLING. The subcommittee will be in order.

This morning we are beginning 2 days of hearings to discuss the development and adequacy of the current programs in the field of employment and unemployment statistics, with the heads of the Government departments charged with collecting and processing such statistics.

The efforts that have recently been made by these agencies to improve the quality of their statistics will be reviewed and the need for additional data or improvements in techniques examined in light of the Joint Economic Committee's use of such data.

The Joint Committee on the Economic Report, which is charged with advising the Congress on policies necessary to maintain maximum employment, production, and purchasing power has a continuing interest in the adequacy of all economic statistics. There are few, if any, statistical series which are studied and analyzed with more care and interest than those dealing with employment and unemployment.

Consequently, it is imperative that these series be not only as sound as possible but also that there be a maximum of confidence in their reliability. In the full committee's report on the 1954 Economic Report of the President we emphasized the need for a better understanding of how the various employment and unemployment series fit together and as a first step in meeting this objective the Census Bureau, the Bureau of Labor Statistics, and the Bureau of Employment Security now issue monthly a combined report releasing all the related series at the same time.

This Subcommittee on Economic Statistics held a series of general hearings on steps needed to improve economic statistics on July 12 and 13, 1954, outlining the improvements to be made in several major areas, including employment and unemployment.

Requests for improving a number of statistical series were included in the President's budget for fiscal year 1956 and many of these requests were granted. I am sure the representatives of the various

agencies who will be appearing before us today and tomorrow will want to discuss their plans and programs for carrying out those improvements.

Important studies dealing with the problem of the concepts, definitions, and comparability of data from different sources have been conducted by the Subcommittee on Review of Concepts of the Interagency Committee on Labor Supply, Employment, and Unemployment Statistics. I understand that the Subcommittee on Review of Concepts and the interagency committee itself have been working under forced draft to give us the benefit of their findings in these hearings. We deeply appreciate the work of these technicians who know so well not only the problem of concepts and definitions but the everyday problems of collection and presentation of their data.

Our first witness will be Mr. Raymond T. Bowman, Assistant Director for the Office of Statistical Standards of the Bureau of the Budget, to whom the Interagency Committee on Labor Supply, Employment, and Unemployment Statistics made their report.

Before Mr. Bowman proceeds, I would like to call attention to the plan announced in the subcommittee's press release of November 6 for soliciting written comments, on the materials presented at these hearings, from a selected group of interested organizations and individuals. Persons or organizations wishing to be considered for inclusion in this list are asked to present their names to the subcommittee by November 14.

Mr. Bowman, you may proceed in your own way. I understand you have a prepared statement which you may read in full or summarize. In the latter case your full statement will, of course, appear in the record also.

Mr. BOWMAN. Thank you, Mr. Chairman.

STATEMENT OF RAYMOND T. BOWMAN, ASSISTANT DIRECTOR FOR STATISTICAL STANDARDS, BUREAU OF THE BUDGET

Mr. BOWMAN. This subcommittee is, I believe, well acquainted with two of the functions that the Office of Statistical Standards performs in connection with the statistical program of the Federal Government. One is that of budgeting. This involves not merely trying to get more product for less money, but also the exercise of many choices in attempting to maintain a balanced statistical program for the Government as a whole.

I know that this subcommittee has watched our efforts in this direction with considerable attention. Your recommendation that a section on economic statistics be included in the President's annual budget was adopted last year, resulting in "Special analysis I" which has been very well received. We now expect this special analysis to be included each year in the budget document.

The second function of the Office which is familiar to many is that of forms review. Before most Government agencies can query 10 or more respondents with identical questions, they must, in accordance with the Federal Reports Act of 1942, obtain the approval of the Bureau of the Budget through its Office of Statistical Standards. This responsibility reflects in part a desire to reduce the paperwork burden of

the Government's statistical system. But the watchdog function is only a part of the story, and sometimes a minor part, at that.

In reviewing requests for approval of report forms as well as in analyzing and integrating the budgets for statistical activities, the Office of Statistical Standards is afforded an opportunity for putting into effect broader programs of statistical improvement and coordination.

The Office's responsibilities for leadership, balance, coordination, and economical progress are exercised in a variety of ways other than these two better-known functions of budgeting and forms review. Establishment of governmentwide specifications or standards is one such way; another is the technical work of improvement and coordination carried on by interagency committees, sponsored by us, whose accomplishments rely so heavily on the contributions of staff of the statistical agencies.

As you know, we constantly strive to assess the value of statistical series by obtaining comments and suggestions from users. Finally, we occasionally engage in joint analytical work with other agencies. The opportunity to do this in the past has been all too rare. I hope that we may do more in the future.

With this brief introduction on the way in which we operate, let me review for you the major steps we have taken with regard to employment and unemployment statistics since the hearings of this subcommittee in July of 1954.

At that time Mr. Belcher announced that coordinated release of employment and unemployment statistics by the Commerce and Labor Departments had been arranged. Monthly release of these series in one press release is accomplished by a small editorial committee, headed by a member of my staff.

This monthly brief analysis of what the figures mean has reduced public confusion and dismay over the fact that there is more than 1 series which throws light on the employment situation; it has materially assisted the staff of the 3 bureaus which contribute information to the release to understand the advantages as well as the limitations of each of the series. And the process of joint analysis has raised questions of divergencies or inconsistencies which need further research or improvements in the individual series.

But I would not have you believe that a combined release solves all of the problems of comparability which I shall discuss a little later.

It may hightlight problem areas, it may point the finger toward conceptual differences which need explanation or toward areas of uncertainty which need exploration, but it cannot, under the heavy time pressures of a press release, resolve such issues. These must be left to more fundamental, long-term work.

One step the Budget Bureau has taken this year is to organize a very small interagency committee to advise it with regard to policy issues affecting the current population survey conducted by the Census Bureau. This survey is so fundamental to all analysis of what is happening to the labor force that it, more than any other statistical survey I know, poses questions of governmentwide, rather than individual agency, interests.

The departments primarily concerned are Labor, Commerce, and Agriculture. Therefore, this committee, of which I am chairman, has

as members Mr. Burgess, Mr. Clague, and Mr. Wells. We had our first meeting in August and have had time so far only to discuss plans for the expansion of the current population survey sample, which Mr. Burgess will describe to you later in this hearing.

The establishment of the Policy Committee on the Current Population Survey reflects closer Budget Bureau control over the survey and more responsible interagency review of major issues without interfering with our customary interagency review of technical questions with much broader interagency participation.

While I am on the subject of the current population survey I might mention that the Budget Bureau requested the Census Bureau to change the date of the survey from the week including the 8th to the week ending nearest the 15th, a standard reference period which the Budget Bureau had promulgated in 1945 for obtaining reports from establishments.

Mr. Burgess agreed with the objective of this request, that of making easier the use of the census series in conjunction with series based on establishment reports, and the change was made in July of this year.

I have a small staff. The Office of Statistical Standards could not fulfill its obligations of leadership, coordination, and balance without the active participation and support of other agencies of Government, both those who produce and those who use the statistics. In this connection, interagency committees of technical experts can play an important role.

The outstanding example of such a committee, one which has been in existence since 1942, and which has performed many important and useful services during this long life, is the Committee on Labor Supply, Employment, and Unemployment Statistics, sometimes merely called the Palmer committee for short.

Representing a wide range of governmental producers and users of such statistics, working quietly in an advisory capacity to the Office of Statistical Standards, it has provided a forum in which plans for new surveys have been presented for comment, proposals for improvements in existing surveys have been discussed, differences in concepts have been debated and problems of reconciliation explored.

The ideas which have led to many of the basic improvements in employment and unemployment statistics during the past dozen years have germinated or been nurtured in this atmosphere of interagency contact, stimulation, and frank discussion and criticism.

Illustrative of the wide scope of the committee's activities is the list of the agenda items which have been discussed at the six meetings held since the summer of 1954:

1. A report from the Bureau of Labor Statistics on their survey of payroll reporting practices (later published under the title "Pay Period Practices of American Industry");

2. A report on the quality control program being developed by the Census Bureau for the current population survey;

3. A report on the Eighth International Conference of Labor Statisticians by the United States delegate, Mr. Clague;

4. A report from the Subcommittee on Seasonal Adjustment of Labor Force Statistics (this report reviewed and recommended the publication of the seasonally adjusted index of unemployment, devel-

oped by the Census Bureau and now in use in the current population survey);

5. A description of the revisions made and planned in the current population survey data for 1953 (described in the annual report for 1954);

6. Progress reports from, and later, the review and adoption of the interim report of, the Review of Concepts Subcommittee (altogether, three meetings);

7. The Labor Department's plans for a national sample of unemployment insurance claimants, to develop information on claimant characteristcs.

In addition, either the main committee or subcommittees have discussed a number of items related to the current population survey, such as changes in wording or proposals for supplementary inquiries; an ad hoc group assisted in the preparation of the United States position paper on employment and unemployment statistics for the United States delegate to the Eighth International Conference of Labor Statisticians, sponsored by the ILO; and the statement prepared by the Bureau of the Budget on full-time equivalent unemployment at the request of the chairman, Mr. Bolling, was circulated for the comment of the Review of Concepts Subcommittee and later distributed for the information of the full committee.

(See appendix, p. 162.)

Most of these subjects represent what might be considered the normal workload for the committee. Different in this respect has been the activity of the Review of Concepts Subcommittee. This group has had to devote considerable time and great care and attention to the problems set it by the Budget Bureau in the spring of 1954.

It was asked to "make an extensive exploration and review of the concepts of the labor force, employment and unemployment used in population surveys, establishment reporting and administrative records * * * from the point of the appropriateness of the concepts for analysis of current economic developments, taking due account of technical limitations inherent in the sources of data."

In its review of concepts, the subcommittee has made every effort to obtain the views of users of the data outside the Federal Government, and as a result, many persons have made comments and suggestions—representing business, labor, State agencies, research organizations and individual experts.

Personal meetings have supplemented written comments, and in July the subcommittee met with a number of persons of varying viewpoints to discuss specifically a number of proposals it had under consideration.

The subcommittee has not completed its work. Before making final recommendations on a tentative revision in the labor force classification scheme used in the current population survey, it feels that a program of testing and research must be undertaken.

Such a program will take time. Furthermore, it will not be possible to engage in extensive research until the sample-expansion program now under way has been completed. The subcommittee has, however, recently submitted to the Committee on Labor Supply, Employment and Unemployment Statistics an interim report which incorporates such recommendations as the subcommittee feels could be adopted prior to the completion of the testing program.

This interim report was reviewed, discussed and approved by the parent committee, which has submitted it to me. I have, within the past few days, referred it to the heads of the bureaus whose statistical series are surveyed in this technical document, and to other agencies who have interests in the problem, in order to obtain their views as to whether the recommendations should be put into practice, and if so, how soon they think this would be feasible.

There has not been time for me to receive replies incorporating such official views, but it occurs to me that the Subcommittee on Economic Statistics may be interested in what is being considered. With the understanding that the recommendations are those of a technical interagency advisory committee and not those officially accepted by the executive branch, I shall be glad to submit this interim report as an appendix to my remarks.

Mr. BOLLING. That will be made part of the record.

(The document above referred to is as follows:)

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington 25, D. C., November 4, 1955.

Hon. RICHARD BOLLING,
Chairman, Subcommittee on Economic Statistics,
Joint Committee on the Economic Report,
House of Representatives, Washington 25, D. C.

MY DEAR MR. CHAIRMAN: I am enclosing a copy of the Interim Report of the Review of Concepts Subcommittee to the Committee on Labor Supply, Employment, and Unemployment Statistics. I have referred this interim report to the heads of the bureaus whose statistical series are surveyed in the document and to some of the agencies who are major users of the data, in order to obtain their views as to whether the recommendations should be adopted and, if so, how soon this would be feasible.

Such agency comments have not yet been received. The interim report is submitted to you for your general information concerning the status of the work on review of concepts which the Office of Statistical Standards has sponsored, with the understanding that the recommendations are those of an interagency advisory committee and are still under review within the executive branch.

Sincerely yours,

RAYMOND T. BOWMAN,
Assistant Director for Statistical Standards.

INTERIM REPORT OF THE REVIEW OF CONCEPTS SUBCOMMITTEE TO THE COMMITTEE ON LABOR SUPPLY, EMPLOYMENT, AND UNEMPLOYMENT STATISTICS

Charles Stewart (chairman), Gertrude Bancroft, V. D. Chavrid, Louis Ducoff, Margaret Martin, Gladys Palmer (ex officio), George Shultz, Paul Stanchfield, Emmett Welch, Murray Wernick

INTRODUCTION

The Review of Concepts Subcommittee[1] was established by the Assistant Director of the Bureau of the Budget for Statistical Standards in March 1954. In that period of recession there was growing public interest in the data on employment, unemployment, and the labor force published by the Federal Government. There had been an expression of dissatisfaction by some users of the data with the definition of unemployment used in the Census Bureau series and with lack of comparability in concepts and definitions as between the various measures of employment and unemployment.

[1] In addition to members who signed this report, Albert Rees served on the subcommittee until July 1955, when he left the staff of the Council of Economic Advisers to return to the University of Chicago.

In 1948 a similar subcommittee had been established to review the concepts underlying the Census Bureau's current labor-force survey, but at no time has there been a simultaneous review of the four major series. In the meantime, as for many years before, the Committee on Labor Supply, Employment, and Unemployment Statistics has served as the focal committee for interagency collaboration on a technical basis for improvement in the Federal Government's statistical program in this area.

In inviting members to serve on this subcommittee the Assistant Director for Statistical Standards described its functions in the following terms:

"The Subcommittee on Review of Concepts will be a working group which will make an extensive exploration and review of the concepts of the labor force, employment, and unemployment used in population surveys, establishment reporting, and administrative records. It will not be limited to MRLF (Census) concepts, as was the earlier subcommittee chaired by Mr. Stewart in 1948. The subcommittee's survey will be undertaken from the point of the appropriateness of the concepts for analysis of current economic developments, taking due account of technical limitations inherent in the sources of data. It will look toward obtaining consistency as well as maximum usefulness for economic and social analysis."

The subcommittee thus was asked to examine these series from the point of view of how well the various types of measurement serve the needs of the public and the Government for current information on employment and unemployment. Are the concepts appropriate? Do we measure what we ought to? No limitations were placed on the subcommittee with respect to recommendations for improvements, but it was not intended that the subcommittee would undertake a review of statistical validity. One exception to this may be noted: The subcommittee would necessarily take into account the feasibility of measurement in considering what ought to be measured and what data would best serve public needs for useful data.

In the present review this subcommittee has had the benefit of comments and suggestions contained in replies to its inquiry to a broad range of users representing business, labor, State agencies, research organizations, as well as individual experts in universities and elsewhere. Their comments and advice have been carefully studied by the subcommittee over the course of many months. In addition, the subcommittee has sought the advice of such persons through personal meetings and, in July, met with such a group to discuss specifically the tentative proposals which the subcommittee had under consideration.

Beginning late in 1954, after a general review of our problems, the subcommittee has met regularly once a week. Task groups have brought in special reports, such as on problems of reconciliation and suggestions for research studies for appraising conceptual questions or for filling existing gaps in factual information. Draft reports on the four major series were prepared for subcommittee discussion, and technical staff from the interested agencies were invited to participate at various stages of the subcommittee's discussion.

The subcommittee has found it useful to keep in mind a number of considerations or criteria. Some of these are conflicting; sometimes more weight, sometimes less, has been given to one or another.

Throughout the review, the subcommittee has kept in mind the desirability of furthering comparability and facilitating reconciliation of the various series. At the same time the subcommittee has had to acknowledge the limitations, deriving from the nature of the sources of data, in pursuing comparability and reconciliation. It has appeared to the subcommittee on balance that it is often more important to exploit the advantages of household, establishment, or administrative reports, in the interests of the diverse data obtainable, rather than to make comparability an overriding objective. It has not appeared that any one series can serve all needs.

Four specific considerations or problems which we have tried to keep in mind may be noted:

(1) What are the technical limitations of measurement which have to be considered in determining what ought to be measured—in rejecting present definitions or classifications or in proposing new ones?

(2) How should the conflict between preserving historical continuity and introducing improvements which change the series be resolved?

(3) Should definitions and classifications in a current sample series be such as to be practicable in a general census, benchmark, or area enumeration?

(4) What data should be sought through special inquiries rather than through the basic current survey, which may easily become overloaded—which merges

into our general problem of how and what employment and unemployment statistics best serve public needs if the usual limitation of resources exist?

It perhaps should be noted that the subcommittee has given its major attention to the Census Bureau's current population survey, but we trust not to the neglect of others. This reflects the comments we have received in our correspondence. It reflects also the fact that this is our overall labor-force series. More so than in the case of the establishment or administrative data series, the household type of survey is plastic and can be somewhat shaped to our desires, although it has very definite limitations too.

For such considerations, the subcommittee felt it would be desirable to consider separately, subject to overall review, each of the four major series with which we are concerned—the Census Bureau's current population survey, the Bureau of Labor Statistics' current employment statistics series, the Bureau of Employment Security's insured unemployment data, the Agricultural Marketing Service's farm employment series.

The subcommittee's recommendations with respect to each of the 4 series under review are contained in the following 4 sections of the report.

Proposed Recommendations Concerning the Census Bureau's Current Population Survey

Introductory note

This part of the subcommittee's report differs from the sections dealing with the BLS, BES, and AMS series in that the subcommittee has not at this time completed work on certain aspects of its review of the Census Bureau's current population survey. Further field tests and study of the results are necessary before final recommendations can be properly made on a number of matters. The subcommittee has been informed that it is inadvisable to introduce changes in the CPS or to undertake major field tests of new proposals which would complicate the transition to the new sample design, especially where changes would impair appraisal of the effects of the sample expansion. Thus, there will be a delay for a year or longer in the completion of the tests which this subcommittee deems necessary for final consideration of its recommendations.

In this report, however, the subcommittee puts forward in specific form the recommendations that can be made at this time and indicates the general nature of the further proposals which it has under further review.

Part I. Conclusions and Recommendations

Background

In its review of Federal statistics on employment and unemployment, the subcommittee has given the major part of its attention to the current population survey. For it is the sole source of current factual data on the American labor force as a whole—on the total number and the characteristics of persons employed and unemployed. Thus the CPS provides the framework within which the other sources of employment and unemployment statistics contribute partial and detailed supplementary information. Moreover, the total figure on unemployment is of especial public interest and plays an exceptionally significant role in public evaluation of economic development and economic policy needs. As such the CPS has been under almost continuous scrutiny, criticism, and demands for modifications of many kinds from various sectors of the public.

The basic concepts, definitions, and classification scheme have remained unchanged since the survey's inception in 1940, although there have been changes in sample design and procedures. A subcommittee of the Interagency Committee on Labor Supply, Employment, and Unemployment Statistics reviewed the need for revisions in 1948. That committee found the CPS to provide an internally consistent and logical basis for classification of the population according to relationship to the labor force, in terms of competition for available jobs and pressure on the labor market. No changes were recommended at that time. There was, however, strong sentiment for shifting certain groups from the employed to the unemployed category in the interest of a definition more in conformity with current activity status and ordinary public conceptions of unemployment. Otherwise there was little disagreement as to the usefulness or adequacy of the CPS concepts as the basis for labor force measurement under widely varying conditions of depression, war, and postwar prosperity.

Concepts

The general objective of the current population survey is to provide a measure of the labor market attachments of the population, in a time series, at current points in time. Derived from household surveys, it is possible (unlike in establishment reports) to obtain an unduplicated count of persons, classified according to significant categories of labor force attachment, with relevant cross classifications, including economic, social, and demographic characteristics. The intention is, on the basis of meaningful criteria, to identify persons who are employed or unemployed and to distinguish them from the remainder of the population—those not in the labor force.

In the CPS it is sought, so far as possible, to provide an enumeratively feasible and objective basis for measuring current labor market attachment by reference to activity, principally working or looking for work, in a specific time period—the week to which the survey refers. Those in the labor force are thus distinguished from those outside the labor force by their current activity. Exceptions to this general criterion are made for special cases where current activity is an inadequate basis for reporting labor market attachments—ranging from cases of persons with a job and not at work to persons who would have been looking for work except temporarily ill in the survey week.

The intent, however, is clear: It is to provide a measure of persons currently in the labor force and not the total number of persons in the potential labor supply.

In practice, the labor force is not measured independently, but is obtained by adding together the numbers of persons found to be employed and unemployed. The employed are those working or absent from their jobs or businesses) and not looking for other jobs; the unemployed are those who are not working but are looking for work. Thus the unemployed are distinguished from the employed in that they are jobless (or in the case where they have some kind of relationship to a job it is an uncertain or unsatisfactory attachment which they have abandoned temporarily at least in search for another).

The major problem of classification arises in trying to distinguish between persons who are unemployed and those who, during the survey week, are not in the labor force. The subcommittee recognizes that for many situations there are no inherently correct definitions and, given a set of definitions, there may be differences of opinion in their application to specific cases. Even more troublesome are the problems of enumeration because the gradations in attachment to the labor force reflect subjective factors in a variety of individual environmental situations.

There are few, however, who would urge the abandonment of a current labor force for a potential labor-supply concept for the reason that there is quite common agreement that the purpose of current measurement is to provide time-series data on the level and changes in the volume of employment and unemployment that reflect changes in current economic conditions. Important as information on potential labor supply may be for some economic-policy purposes, it is not a primary objective of current measurement, because potential labor supply is a slowly changing quantity and one not readily susceptible to definition or enumeration.

There is some disagreement as to the usefulness of the present distinction between the employed and unemployed. The continuing controversy on this has been softened somewhat by the fact that certain borderline groups, which some regard as unemployed rather than employed, are shown separately, and the totals can be added up on one basis or the other. Nevertheless, important as the distinction between persons with a job and persons without jobs may be, controversy continues whether this is an adequate conceptual basis for the unemployment count.

What the intent of measurement is cannot be separate, for practical purposes, from the question of the success of measurement. The subcommittee has, therefore, been equally concerned with the question of how well the CPS measures what it purports to measure and, apart from question of sampling, statistical validity, etc., whether the objective of measurement can be more closely attained and thus more adequately serve the economic and social uses to which CPS data are put.

General conclusions

The conclusions of the subcommitee may be summarized as follows:

1. The present labor force concepts according to which the population is classified into employed, unemployed, and not in the labor force on the basis of cur-

rent activity and job or labor-market attachment are generally satisfactory as an approach to labor-force measurement, and should be retained.

Except for borderline and complex situations, they appear to have met the needs fairly well for (1) an economic indicator, (2) analysis of manpower utilization in broad terms, and (3) general descriptive data on the economic activity of the population. Although measurement of the broad classes identified by the application of these concepts does not by any means furnish answers to all possible questions, such as need for income or adequacy of labor supply in qualitative as well as quantitative terms, it provides a logical framework for further, detailed classifications.

2. The subcommittee notes the continuing criticism of inclusion within the employed category those persons who are on temporary layoff from jobs and persons not at work who are waiting to report to a job. It is the subcommittee's conclusion that in these respects the present definition of unemployment does not conform to general public or economic conceptions of unemployment. This view is strengthened by current tendencies with respect to emyployers' layoff practices and workers' attitudes toward jobs from which they have been laid off which may result in a deterioration of the present measurment of unemployment—in that certain fluctuations in economic activity will not be reflected to the same extent as in the past in the count of unemployment.

The numbers on temporary layoff have appeared to increase at the onset of a period of rising unemployment, sometimes in advance of permanent layoffs. During recent years, there has been a tendency on the part of management to adopt various procedures to hold on to the work force even when work is slackening. Temporary layoffs, forced vacations, staggered workweeks, and other methods have been used in place of outright reductions in personnel. On the worker's side, it is believed that the worker's sense of attachment to his job has also become stronger because of union agreements, pension plans, etc., and that there is less reason than formerly for him to seek another job when work becomes slack in his place of employment. As a result, some of the fluctuations in economic activity, formerly reflected in unemployment, may now be reflected in temporary layoffs.

3. The subcommittee concludes that the employed group ought to consist of those at work and those absent from their jobs for reasons which do not reflect business conditions. These reasons include illness, bad weather, vacation, labor dispute at place of work, and taking time off. In the subcommittee's view, this is a generally more useful classification than the present one. Included with the employed would be the small number of persons waiting to start a business or to start operating a farm within 30 days. The subcommittee believes that such persons should be classified as "at work," if they spent any time in completing their arrangements; otherwise, they should be classified as "taking time off." In reveiewing the categories of persons classified as "with a job but not at work" at the present time, the subcommittee noted that certain persons not working at their wage or salary jobs because of slack work, lack of orders, inventory taking, or similar reasons, do not always consider that they have been laid off, and now report themselves as not at work for various reasons which lead them to be classified in the "other-with-a-job" group. Specific instructions should be given to report them as unemployed. The "other" group could then be limited to persons taking time off from their jobs or businesses.

4. The subcommittee concludes that certain proposed changes in concept should be rejected. These proposals included the classification of the underemployed or the partially employed into a third major group in the labor force; the limitation of the "with-a-job-but-not-at-work" category to those paid while absent from work; the classification of persons potentially available for work as unemployed. Instead, information desired about such groups should be obtained within the present framework and supplementary to the present major classes.

5. The subcommittee concludes also that additional study needs to be given to the question of whether, under the present concept of unemployment and the current activity approach to measurement, the CPS succeeds in fact in measuring all persons who are trying to find jobs.

The subcommittee is considering, in addition to certain changes in classification, including those mentioned in 2 and 3 above, some changes in definition and procedure which would be aimed at making as objective and reliable as possible the reporting of unemployment. Final recommendations depend on careful field tests to assess their practicability and to measure the impact of the changes on the current levels of employment and unemployment.

Recommendations

With the reservation noted in the introduction as to the need for additional study before final recommendations on the proposals still under review can be made, the subcommittee submits for immediate consideration (together with its recommendations on the employment and unemployment series of other agencies) the following recommendations with respect to the Current Population Survey:

1. That the concepts according to which the employed and unemployed are distinguished from the remainder of the population be on the basis of current activity and job or labor market attachment. These are the basic concepts presently in use.

2. That persons on temporary layoff with definite instructions to return to work within 30 days of layoff be shifted from the employed to the unemployed categories.

3. That persons waiting to start a new wage and salary job within 30 days (except those currently attending school as a major activity) be shifted from the employed to the unemployed categories. Those currently attending school would be shifted out of the labor force.

4. That persons waiting to start a business or to start operating a farm within 30 days be shifted from "with a job but not at work" to "at work," if they spent any time at all in completing their arrangements. Otherwise they should be classified as "with a job—taking time off."

The subcommittee proposes that the second, third, and fourth recommendations be incorporated in the CPS as soon as it is operationally feasible and, further, that provision be made to distinguish in the published statistics between unemployed persons who were looking for work and those waiting to be called back to a job or to start a new job. The subcommittee recognizes that these proposals raise problems of schedule design and revision of procedures which may take some time for solution, but puts the recommendations forward independent of other possible classification changes which the subcommittee has under further consideration. (See exhibit A for a summary of the effect of these recommendations.)

5. That concepts and measurement be implemented more effectively by specific instructions to enumerators to classify persons who report they were not working at wage or salary jobs because of slack work, lack of orders, inventory taking, or similar reasons, as on layoff. (Such persons do not always consider that they have been laid off and are therefore sometimes found in the "other—with a job" group.)

6. That, as soon as feasible, the Bureau of the Census should obtain each month information on whether or not wage and salary workers with a job but not at work are being paid, in order to permit further analysis of certain groups and to provide data for use in reconciliation with other series.

7. That the Bureau of the Census should undertake, as soon as it is feasible, a series of tests and experiments relative to the proposals still under review outlined in part II, proposals upon which the subcommittee will subsequently report.

8. That occasional surveys and research studies should be undertaken to provide data which are not recommended as part of the regular monthly survey which have substantive value on their own account or are useful for improving understanding of the reasons for differences among the various Federal employment and unemployment series. Such studies would include:

(*a*) Potential workers who would be in the labor force and looking for work under specified conditions, with special attention to persons who have dropped out of the labor force because of discouragement, illness, etc.

(*b*) Multiple job holders who hold two or more jobs concurrently, and those who, within the survey week, are in two or more jobs because of job changes. (See also sections on AMS and BLS series.)

(*c*) Children under 14 in the labor force, with particular emphasis on the activity of those in agriculture. (See also section on AMS series.)

(*d*) Detailed characteristics of unemployed persons including their family employment status and income, their job-seeking and job-holding history, present job aspirations, and factors bearing on suitability for employment.

Exhibit A.—Comparative summary of present labor force classification and classification incorporating recommended changes

Present classification	*Classification with recommended changes*
EMPLOYED	EMPLOYED
At work All persons who did any work for pay or profit, or at least 15 hours of unpaid family work during the week.	*At work* All persons who did any work for pay or profit, or at least 15 hours of unpaid family work during the week (including persons waiting to start a business or to start operating a farm within 30 days, if they spent any time at all in completing their arrangements—recommendation 4).
With a job but not at work All persons not at work and not looking for other work, but absent from their jobs or businesses for the following reasons: Illness. Vacation. Bad weather. Labor dispute. Temporary layoff with definite instructions to return in 30 days of layoff. Waiting to start new job or business within 30 days. Other (including taking time off).	*With a job but not at work* All wage and salary workers not looking for other work but absent from their jobs for the following reasons: Illness. Vacation. Bad weather. Labor dispute. Taking time off. All self-employed workers not at work and not looking for other work, but absent from their businesses for any reason.
UNEMPLOYED	UNEMPLOYED
Looking All persons not at work who were looking for work during the survey week or waiting to hear the results of efforts made within 60 days.	*Looking* All persons not at work who were looking for work during the survey week or waiting to hear the results of efforts made within 60 days.
Not looking All persons not at work who would have been looking for work except for: (*a*) Temporary illness. (*b*) Belief no work is available in their line of work or in the community. (*c*) Waiting to be called back to a job from which they had been laid off for an indefinite period.	*Not looking* All persons not at work who would have been looking for work except for: (*a*) Temporary illness. (*b*) Belief no work is available in their line of work or in the community. (*c*) Waiting to be called back to a job from which they had been laid off for an indefinite period. Wage and salary workers on temporary layoff with definite instructions to return to work within 30 days of layoff (recommendation 2). Persons waiting to start a new wage and salary job within 30 days, except those currently attending school as a major activity (recommendation 3).
NOT IN LABOR FORCE	NOT IN LABOR FORCE
All other persons.	All other persons (including persons with major activity in school who were waiting to start a new wage or salary job within 30 days—recommendation 3).

PART II—REMAINING PROBLEMS OF DEFINITION AND MEASUREMENT FOR FURTHER CONSIDERATION BY THE SUBCOMMITTEE

The major remaining problem to which the subcommittee believes further study needs to be given, with reference to which specific recommendations for immediate action are not now feasible, is whether there are any changes in definitions or enumerative procedures which would lead to more effective measurement of what is intended to be measured under present labor force concepts. In reviewing certain suggestions which gave promise of making the measurement of unmployment somewhat more objective, the subcommittee developed a tentative proposal for the classification of persons in the labor force (see exhibit B). The subcommittee is not ready at this time to recommend the adoption of this classification. Parts of it have been included in the subcommittee's recommendations outlined in part I, but the effectiveness and reliability of the remainder need to be tested through extensive field trials. A small amount of such testing has been started, but the major portion of the program for testing must be deferred until after the sample expansion has been completed.

Current activity during a specified week is the touchstone for inclusion in the labor force under the present concept. Is overt activity of some kind in the week of survey reference the ultimate test in all cases whether persons currently have real attachment to the labor market? Exceptions have always been recognized in CPS definitions and procedures, particularly with regard to unemployment. These generally have given rise to difficulties and inadequacies of enumeration. Is it possible to overcome these difficulties without creating new ones?

In its tentative classification scheme, the subcommittee attempted to cut across a number of difficulties raised by present procedures by redefining the unemployed to include:

(1) Persons who were looking for work, including those who want to work and have looked for work within 2 months.

(2) Persons who have not looked for work but were waiting to be called back to a job from which they were laid off less than 2 months prior to the survey week.

(3) Persons who were not looking for work but had definite arrangements to start or return to a wage or salary ob within 30 days following the survey week (except persons currently in school).

Under this scheme, two groups now classified as unemployed, those not looking because of temporary illness or belief no work available, would be classified as unemployed only if they meet the looking-within-2-month test and wanted to work as of the survey week. For persons on indefinite layoff, the new definition is more restrictive because it imposes a time limit of 2 months. Any person who has not tested the job market for 2 months, it is believed, is not a current job applicant.

The major hypothesis that the subcommittee desires to test is that a person who was looking for work during the survey week and a person who wanted work as of the survey week and had recently taken steps to find work are equally unemployed. There may be a variety of reasons why an unemployed person may not have looked continuously every week, or in a particular survey week, other than those reasons now taken account of—awaiting results of previous job-seeking efforts, temporary illness, indefinite layoff, and belief no work available.

The question of how recent (within 2 months?) the looking ought to have taken place is crucial. The tentative 2-month rule was suggested largely because of apparent consistency with present practice in the case of waiting recall or waiting reply to a job inquiry, and because it did not seem too long to cover the legitimate cases now covered by the open-end believe-no-job-available exception. The subcommittee recognizes that this proposal represents a relaxation of the current-actiivity criterion, believes it more susceptible for reporting than the present exceptions for inactive unemployed but urges that such a proposal be tested before adoption.

Historical continuity

The effect of the changes in definition proposed at this time and those to be tested can only be estimated. The classification of persons on temporary layoff as unemployed would currently add to the unemployed an average of 150,000, and persons waiting to start a new job, another 75,000 (exluding persons in school). Perhaps 75,000 in the with-a-job group, not working for other reasons would shift to the unemployed, because they were in fact on

layoff. No data are available on the number of persons not looking for work because of illness or belief no work is available who are now reported as unemployed, but the number is probably small and not likely to offset completely the estimated 300,000 average additions from the with-a-job group. The only other change that would have descernible results is the classification of young persons in school who had made arrangements to start jobs within 30 days as not in the labor force. In certain months of the year, up to 100,000 persons might be called not in the labor force instead of employed as at present.

The effect of adopting a 2-month rule and of other steps to make more specific and uniform the procedure for reporting looking for work activities may be considerably greater than the effects of changes in classification or definition. It should be recognized, however, that it is likely that the continuity of the unemployment series would be broken. It would be possible to add the temporary layoff and new job categories to the unemployed for the period since World War II, but there would be no valid way of revising the old series to take account of the remaining tentative changes.

The subcommittee notes that the tentative classification scheme would not be suited, without substantial simplification, to a decennial census or any other single-time or large-scale operation for which adequate training of enumerators would be prohibitively expensive.

EXHIBIT B.—*Tentative labor force classification scheme*

Even though this classification scheme is not proposed for adoption now, the subcommittee believes that there will be interest in seeing what has been developed. The whole classification, including both those parts now being recommended for adoption, and those parts still subject to test, is outlined below.

EMPLOYED

At work

All persons who did any work for pay or profit, or at least 15 hours of unpaid family work during the week.

With a job but not at work

All wage or salary workers not looking for other work but absent from their jobs for the following reasons:

Illness
Vacation
Bad weather
Labor dispute
Taking time off

All self-employed workers not at work and not looking for other work, but absent from their businesses for any reason.

UNEMPLOYED

Looking

All persons not at work during the survey week who were looking for work, including those who want to work and who have looked for work within 2 months.

Not looking

All persons not at work during the survey week and not looking for work but waiting to be called back to a job from which they were laid off less than 2 months prior to survey week.

All persons not at work during the survey week and not looking for work but with definite instructions to start or return to a wage or salary job within 30 days following the survey week (except persons currently attending school as a major activity).

NOT IN LABOR FORCE

All other persons (including persons with major activity in school who have made arrangements to start a new job within 30 days).

PROPOSED RECOMMENDATIONS CONCERNING THE BUREAU OF LABOR STATISTICS CURRENT EMPLOYMENT STATISTICS SERIES

General concepts

The BLS employment series seeks to measure the level of and trend in the number of paid wage and salary jobs held in the nonagricultural sector of the

economy (excluding private households). This series provides employment data consistent with related data on hours and earnings; it also provides industry detail on employment. BLS obtains its information from payroll records of private establishments and Government agencies. The objective of the BLS employment series differs from that of the nonagricultural employment series of the Current Population Survey in that CPS measures the number of persons having primarily nonagricultural employment. Thus the 2 series differ, among other reasons, because of individuals who hold more than 1 job at a time. The CPS counts such individuals once; BLS counts them once in each job.

Although the objective of the BLS series is measurement of the number of jobs held, the data actually obtained are counts of the total number of names on payrolls of reporting units in particular payroll periods—the number of instances in which a job is held by any individual, regardless of the number of hours worked. If because of turnover, a job is held by more than one individual during a payroll period, each such individual will be counted. This multiple counting because of job turnover, unlike the multiple counting of persons who hold more than one job simultaneously, cannot be considered an objective of measurement. Rather, it is a difference between objective and practice. Owing to the way in which the data are obtained, this difference is unavoidable.

The BLS series on hours and earnings measure the level of and trend in average gross weekly earnings, average weekly hours paid for, and average earnings per hour paid for. The last two series are generally referred to simply as average weekly hours and average weekly earnings, and the terms "work-week" and "hours of work" are commonly used in referring to the average weekly hours series.

Recommendations

1. The subcommittee believes that the quite distinct BLS and the CPS employment concepts each serve a useful purpose and should be maintained. However, more information should be obtained on the nature of the differences between the series created by the difference in concepts. The subcommittee recommends specifically that the Bureau of the Census and the Bureau of Labor Statistics undertake new studies on the number of multiple jobholders and the kinds of jobs they hold (by industry and time worked) under varying business conditions. Similarly, the subcommittee recommends that the BLS undertake studies of the effect of turnover on the employment estimates under varying business conditions, with special reference to payroll periods longer than 1 week.

2. Under the subcommittee's proposals for CPS, persons will be counted as employed who had a job from which they were absent for the following reasons: Illness, bad weather, vacation, labor dispute at place of work, taking time off. Persons in these categories are not counted as employed by BLS unless they are receiving pay (for example, persons on paid vacation or paid sick leave). The subcommittee feels that this difference remains appropriate in view of the basic concepts of each series, and recommends no further change in either. However, to assist those interested in comparisons between the two series, it has been recommended earlier that CPS provide data on the pay status of persons with a job but not at work. It is recommended also that BLS study the extent to which persons receiving pay and not working are included in its estimates. This is a special case of the problem of hours paid for and not worked discussed below.

3. The subcommittee does not propose any change in the concept of hours paid for in connection with the BLS hours and earnings series. It recommends, however, that the attention of general users be called more prominently to the fact that various categories of hours paid for and not worked enter into these series. The subcommittee recommends specifically that the BLS develop as rapidly as practicable measures of man-hours worked. Such data should be available to those who believe that their use is appropriate in the measurement of productivity. The use of hours worked as a divisor for weekly earnings to yield average earnings per hour worked may also be appropriate in efforts to obtain average hourly earnings on a consistent basis over long periods of time. It would also be desirable to have data on the nature of time paid for and not worked (whether it is call-in time, vacation, holiday, sick leave, etc.).

4. The status of teachers during the summer vacation presents a difficult problem in the measurement of employment. Some teachers who work 9 or 10 months have their pay spread over 12 months; others who work the same

length of time at the same annual salary may be paid in 9 or 10 installments. To avoid making arbitrary distinctions between these groups, the BLS estimates the number of regular full-time teachers employed in May and carries this number as employed in each of the succeeding 3 months. Although this procedure has a good deal to recommend it, it creates certain problems. It results in double counting of teachers, who obtain summer work and in counting, as employed, teachers who have left the labor market or who do not have a contract to return in the fall.

The subcommittee knows of no treatment of this problem that is not in some respects arbitrary and anomalous. The intent of the present BLS practice is to minimize the sharp drop in employment at the beginning of the vacation period and the sharp rise at the end of summer. However, the subcommittee believes that estimated adjustments of the type used by BLS for the summer employment of teachers should be made only if they clearly improve the usefulness of the series. Work is now in progress that promises to provide a better basis for the estimating procedure. The subcommittee hesitates to endorse the present practice or to recommend an alternative until the results of the present work are available; it recommends, accordingly, that the problem of measuring the employment of teachers in the BLS series be reviewed at a later date.

5. The subcommittee has received numerous suggestions that BLS classify Government employment by industry. It seems highly desirable to permit the computation of complete industry totals for industries in which there is Government employment, provided that the publication of data by industry is in addition to and not a substitute for the publication of Government employment totals by type of government. However, it is realized that there are at present serious obstacles to the industrial classification of all Government establishments. The subcommittee recommends publication of a total Government employment series, as at present, but, in addition, the presentation of such employment by type of industrial activity, and to this end recommends the development of a definitive classification for all Government activities and the reporting of employment by Government agencies on this basis.

6. The BLS series refers to the payroll period ending nearest the 15th of the month, which is the standard reference period for establishment employment data determined by the Bureau of the Budget. The subcommittee welcomes the useful study Pay Period Practices of American Industry, which showed what pay periods are used by employers in the BLS sample. This report showed in addition that there is some misunderstanding by employers of the reference period for which data are requested, and this point has also been made by at least one State employment security agency in a letter to the subcommittee. The subcommittee therefore recommends that BLS continue its efforts to improve employer understanding of its reference period and to encourage employers to report on a weekly basis wherever possible. It is further recommended that the Bureau of Labor Statistics and the Bureau of the Budget work with the agencies responsible for collecting reports of Federal employment and railroad employment to get such data reported for the standard reference period.

7. The subcommittee takes notice of continuing work by the BLS, including its new quality control program, for technical improvement of its employment, hours, and earnings series. In this connection, the subcommittee recommends:

(*a*) Strengthening of the monthly sample, especially for trade and service industries, to permit publication of more industrial detail and to permit replacement of extrapolated series by direct reports; testing to determine how adequately seasonal employers are represented in the sample and in the benchmark;

(*b*) Continued attention to industrial classification problems in the sample and the benchmarks; adoption of the standard industrial classification for nonmanufacturing industries as soon as the current revision of this classification is completed;

(*c*) Further experimentation with the use of probability samples; if found practicable, development of employment trends by size of firm;

(*d*) Continuing investigation of employer recordkeeping and reporting practices, to obtain information on source and causes of errors in response, and suggest ways of reducing such errors.

8. The subcommittee recommends that the BLS study the feasibility of providing occasional information on hours and earnings of nonproduction workers and on scheduled part-time work. Occasional data on the hours and earnings of nonproduction workers would be helpful in improving estimates of produc-

tivity and national income, in addition to other uses. In industries where scheduled part-time work is common, as in retailing, the separation of regular part-time employees from full-time employees would permit the computation of average weekly hours and average weekly earnings of full-time employees. For many purposes, these would be more meaningful than the data presently available in trade and certain services.

9. The subcommittee has considered a number of areas in which expansion of the BLS statistical program in the field of employment, hours, and earnings may be desirable. The subcommittee notes that operations have already started for the separate collection, beginning in 1956, of data on overtime hours, and also that the Bureau has under active consideration experimental work looking toward reporting of job vacancies, possibly in connection with the new Department of Labor program for a Federal-State system of turnover reporting for manufacturing industries.

In addition, subcommittee suggestions include occasional publication of data of a kind the BLS has undertaken in the past. These suggestions include distributions of establishments by average hours worked, which do not involve the collection of additional information, and data on employment by shifts similar to those collected in the past.

10. The subcommittee has received comments indicating the difficulty faced by users in obtaining such State and local data as are published by State agencies in the current employment-statistics program. The suggestion is made that arrangements be made to facilitate users in obtaining such data from a central Washington source, together with periodic publication of as much industry detail by States as is possible.

Proposed Recommendations With Regard to the BES Series Based on Unemployment Insurance Claims

General concepts and scope of series

The Bureau of Employment Security publishes two principal statistical series, both available weekly, by State, or unemployed workers. They are based on the administrative operations of the State and Federal unemployment insurance programs. The series on initial claims—notices of the beginning of a period of unemployment for which benefits may be claimed—provides a measure of the volume of new unemployment among workers covered by the State unemployment insurance (UI) programs and by the Federal programs providing unemployment compensation for Federal employees (UCFE) and for Korean veterans (UCV). The series on insured unemployment is a measure of the number of persons who were totally or partially unemployed during a given week for which they have filed unemployment insurance claims. The national totals for this series include claimants under the unemployment insurance program for railroad workers, administered by the Railroad Retirement Board, in addition to the other programs mentioned above.

Unlike the other major series reviewed by the subcommittee, the two BES series are based not on a sample of households or establishments, but on a complete count of claims-taking transactions in the State and Federal unemployment insurance programs. Essentially both series represent an adaptation of operating statistics, with relatively minor adjustments. Being derived from administrative records, the series have certain unique advantages and certain inherent limitations as compared to unemployment estimates based on household surveys.

The advantages stem from the fact that, for that important segment of the unemployed who are currently filing unemployment insurance claims, the data are complete. With the extension of coverage of State UI laws to all employers of four or more (starting January 1956) the Federal-State programs will cover over 80 percent of all wage and salary workers in nonagricultural industries, both private and public, with coverage increased to 83 percent if the unemployment insurance program for railroad workers is included. Data can be provided in any desired degree of geographical detail and are available weekly. Currently, national and State totals are published each week, and data for major local areas within the States (covering only the State UI programs) are published for 1 week each month. Data on insured unemployment can be related to information on covered employment, by State or area, and "insured unemployment rates" are available weekly for State UI programs.

The limitations of the BES series as a source of economic trend data are mainly related to the use of administrative records, and the scope of the unemployment insurance programs. As a result of these limitations, as well as the failure of

some eligible workers to file claims for various reasons, the BES series do not provide a complete count of persons seeking work. On the other hand, certain claimants who were at work during a week are included in the insured unemployment count.[2]

(*a*) *Statutory limitations of coverage.*—Self-employed persons, unpaid family workers, and persons employed in certain industries are excluded—the most important of these being agriculture, domestic service, nonprofit organizations, and most State and local governments. In addition, employees of firms below a specified size even in "covered" industries are excluded in many States.

(*b*) *Prior earnings requirements.*—Benefits are payable only to persons who have earned a specified amount of wages or worked a specified length of time in covered employment or both, during a prescribed "base period" or "base year." New entrants and most reentrants into the labor force are therefore excluded from the BES series.

(*c*) *Disqualification.*—For various reasons—such as voluntary quitting without cause, discharge for misconduct, or refusal of suitable work—persons may become ineligible for benefits or have their benefits postponed.

(*d*) *Exhaustion of benefit rights.*—An individual is excluded from the insured unemployment count after the period to which he is eligible to receive benefit payments.

(*e*) *Variation between State laws.*—State laws differ with respect to coverage, earnings requirements, maximum duration and other important features. In effect, the definition of an "initial claim," "week of unemployment" or period of compensable unemployment in each State and each Federal program is controlled by a different law.

Despite these limitations, the BES series have been very useful as current economic indicators, and as a tool for interpreting labor market trends and conditions. They provide a valuable measure of the trend, and geographical distribution of unemployment among a significant group of workers—wage and salary workers with a substantial recent attachment to jobs in nonagricultural industries.

Conclusions and recommendations

In its review of basic concepts and coverage of the BES series, the subcommittee has been mainly concerned with the value of these data as indicators of national, State, and area labor market developments and trends, and possible ways of increasing this value. It has concluded that, for these purposes a weekly series measuring unemployment insurance claimants nationally and in the individual States is extremely useful.

The subcommittee believes that a number of steps can be taken to increase the value of the present series. Some problems in interpretation and use of the present data could be largely overcome by changes in the method of collecting, compiling, and presenting the BES series, so as to provide (1) separate figures on weeks of total unemployment and weeks of partial unemployment; (2) more meaningful weekly data which exclude or adjust for special administrative or seasonal factors in claims-taking; and (3) desirable research that should develop additional information both nationally and by State. These include studies to: (*a*) Measure and evaluate the effect of limitations of coverage, benefit exhaustions, disqualifications, and differing State laws; (*b*) develop more detailed information on characteristics and unemployment patterns of the insured unemployed; and (*c*) determine the feasibility of measuring in each State the volume and rate of unemployment among persons who have been employed in covered industries regardless of their current benefit status.

1. *Separate data on total and partial unemployment.*—The present data on insured unemployment are based on the number of weeks for which continued claims are filed. These totals include not only weeks of total unemployment, but also weeks of partial unemployment. Both types of claims are significant in relation to employment and unemployment trends, but they reflect somewhat different conditions. Claims for total unemployment conceptually represent persons included in the CPS unemployed, while claims for partial unemployment

[2] Weeks of partial and part-total unemployment are included in the insured unemployment count. Partial unemployment is a week in which a claimant worked less than full hours for his regular employer and in which limited earnings reduced his weekly benefit payment below the full weekly benefit amount. Part-time unemployment refers to the same situation as above except that the claimant was engaged in odd jobs or other subsidiary employment rather than at work with his regular employer. In this report such claims are referred to as weeks of partial unemployment.

represent persons who would generally be classified in CPS as "at work," but working less than full time for economic reasons.

The subcommittee recommends that the BES compile and publish a separate series each week on weeks of total unemployment as well as a combined total for insured unemployment.

2. *Adjustments to permit more valid time-period comparisons.*—As economic indicators, the value of the BES series depends on their effectiveness in measuring the change in the volume of new unemployment (initial claims) and the number of persons unemployed and eligible for benefits (insured unemployment) from week to week, and by State. While some adjustments are now made in the raw count of claims-taking transactions, the present weekly series tend to be influenced in certain weeks of the year by special administrative and other factors which distort week to week changes, and make it difficult to state the significance of trends for these weeks.

Trends in insured unemployment are disturbed by new benefit years, rescheduling in the filing of claims because of holidays, filing of claims for more than 1 week of unemployment in some States, and other administrative arrangements which permit delayed filing. Holiday rescheduling, in particular, may distort week-to-week and State-to-State comparisons of insured unemployment for as much as 3 consecutive weeks. While adjustments to eliminate the arbitrary effects of holidays (or other large-scale rescheduling) would require additional reporting, the required data to make estimates could be obtained at the local and State office level. The subcommittee recommends that reporting procedures be adjusted so that data on insured unemployment measure (as nearly as possible) the volume of such unemployment during the week of reference, rather than the volume of claims filed during the following week, as is the current practice.

The present data on initial claims, similarly, are disturbed by the piling up of new claims which do not represent new periods of unemployment, at the time when a new benefit year begins under the applicable State law. This distortion—especially marked in States with a uniform benefit year—results from the filing of initial claims by persons who have previously exhausted benefits or though currently unemployed have been unable to claim benefits until the start of the new benefit period. The subcommittee recommends that reporting procedures and definitions be adjusted so far as possible, to eliminate (or report separately) those initial claims which actually represent new benefit years for persons previously unemployed, rather than a real increase in new unemployment.

Where the filing of an initial claim has been delayed for personal reasons, in contrast to delays due to administrative practices, it appears desirable to count such claims at the time filed. The current claim does in fact represent the beginning of a series of claim transactions instituted by an individual's action in contrast to the arbitrary timing of new benefit years.

Analysis of trends could be improved by the publication of seasonally adjusted series and the presentation of weekly data in ways which would permit more meaningful comparisons. This seems advisable because many of the factors which make for apparent discontinuity in weekly trends are in fact repetitive from year to year. The Bureau of Employment Security has developed a monthly seasonal index, for the national insured unemployment total, based on average weekly claims during the month and is providing assistance to the States in developing similar indexes on a State basis. The subcommittee considers it desirable, as soon as the necessary developmental work can be completed, to publish seasonally adjusted monthly data both for the Nation and for individual States. A seasonally adjusted weekly index would also appear to be desirable. Methods, it is realized, would have to be developed to take into account adequately differences caused by the timing of holidays or other factors in any given week in any year as compared to earlier years. Similar adjusted indexes for initial claims, though they present additional problems, also are desirable. Work on seasonal adjustments should be carried on concurrently with efforts to eliminate distortions introduced by administrative factors. Seasonal factors for any series would have to be changed as adjustments are made for benefit years, holidays, etc.

Publication of more extensive comparisons of the current volume and trend in claims with previous years is another approach which would increase the usefulness of the claims data. For example, each week the major national totals for the preceding 3 to 4 weeks along with the comparable weeks last year and 2 years ago could be presented in summary form. Aggregate and percentage changes from similar weeks in earlier years would afford a better basis for taking into

account repetitive movements and their approximate magnitude each year. While such data are already available, comparisons are made difficult because data for earlier years are not easily accessible in published form.

3. *Current and future research recommendations—(a) Measure and evaluate the effect of coverage limitations, benefit exhaustions, disqualifications, and differing State laws, etc.*—Funds for studies of these factors have been requested by BES and limited funds have been provided in the Bureau's budget for the current fiscal year. The subcommittee believes that such studies will be of great value in interpreting the BES series and their relationship to current population survey data on unemployment. The subcommittee suggests that special emphasis be given to studies of the effect of benefit exhaustions. Because the relative and absolute importance of the above factors vary greatly from State to State, there is a need for quantitative evaluation of State differences so that more meaningful analysis can be made of the level and changes in insured unemployment.

(*b*) *Develop more detailed information on characteristics of the insured unemployed.*—The subcommittee concurs with the comments and suggestions it has received relating to the need for more detailed information on the characteristics of the unemployed—their occupation, industrial attachments—and their pattern of employment and unemployment as indicated by the length or frequency of spells of employment and unemployment over time.

The CPS provides fairly extensive information on the characteristics of the unemployed for the Nation as a whole, but for some important characteristics such as occupation and industry attachment results have been limited because of the sample size. For a large and important segment of the unemployed, significant additional data could be provided by regular studies of a sample of the insured unemployed. BES has initiated, for the country as a whole, a study of unemployed claimant characteristics using a 1-percent sample of all claimants. The subcommittee believes that this project should be pushed ahead, not merely as a source of information on the characteristics of the unemployed, but also as a research tool for evaluation and interpretation of methodology. This type of survey should also be extended to provide information for the individual States.

(*c*) *Determine the feasibility of measuring in each State the volume and rate of unemployment among persons who have been employed in covered industries regardless of current benefit status.*—BES publishes weekly the rate of insured unemployment to covered employment for each State and the Nation as a whole. These data are the only source providing comparative statistics on the incidence of unemployment in all States. The number of insured unemployed in the ratio is for the latest week available; while the base, covered employment, is a monthly average for the latest 12-month period for which data are available from employer quarterly contribution reports. Covered employment lags the insured unemployment data by 6 to 9 months.

Differences in State laws and procedures, and other limitations (as described above) make insured unemployment rates among the States especially difficult to analyze. An estimate in each State of all unemployed persons who have previously been employed in covered industry regardless of current benefit status would present a broader and a more realistic measure of covered unemployment and provide meaningful rates for interstate comparisons. The feasibility of providing such estimates, however, is still uncertain because of the difficulty of determining accurately unemployment among persons not receiving unemployment benefits. Since there is an unquestioned need for more complete and comparable data and rates for each State, the subcommittee recommends that research to determine the possibility of making reliable estimates of unemployed nonbenefit recipients previously employed in covered industries be pursued with greater resources.

The subcommittee also suggests that BES reexamine and reevaluate the calculation and definition of covered employment as used in obtaining rates of unemployment. An estimate of covered employment for a time period closer to the one used for insured unemployment may provide better rates than available by current procedures. If, as has been suggested, a broader measure of unemployment from covered industries can be developed for each State, then the appropriate base for determining rates of unemployment would be a total of covered employment and the estimate of unemployment from covered industries.

Summary of subcommittee recommendations

1. The subcommittee recommends that the BES compile and publish a separate series each week on weeks of total unemployment (excluding weeks of partial unemployment) as well as a combined total for insured unemployment. The additional series would provide a measure unaffected by persons who worked part of the week.

2. The subcommittee recommends that, insofar as possible, procedures be adjusted to permit more valid time-period comparisons, in particular to eliminate disturbances caused by holidays in delaying the filing of claims, and the effects of new benefit years in causing the piling up of claims which do not represent new unemployment. The subcommittee also considers it desirable, as soon as the necessary developmental work can be completed, to publish seasonally adjusted monthly data both for the Nation and for individual States. Publication of more extensive time-period comparisons in current reports is also suggested.

3. The subcommittee recommends current and future research in order to—

(*a*) Measure and evaluate the effect of coverage limitations, benefit exhaustions, disqualifications, and differing State laws, etc.;

(*b*) Develop more detailed information on characteristics of the insured unemployed;

(*c*) Determine the feasibility of measuring in each State the volume and rate of unemployment among persons who have been employed in covered industries regardless of current benefit status.

Proposed Recommendations for the AMS Farm Employment Series

Concepts

As with the nonagricultural employment series, agricultural employment estimates are obtained through the establishment approach in which farms are the reporting units, and the population survey approach in which the person is the reporting unit. The Agricultural Marketing Service utilizes the establishment reporting approach while the CPS uses the household survey technique. The CPS series on agricultural employment is available only for the United States as a whole. The AMS series is available for nine geographic divisions of the country, as well as for the United States as a whole, and for a much longer period for historical analysis.

The AMS series on farm employment is intended to measure the number of farm jobs held by workers doing a specified minimum amount of farmwork, paid or unpaid, during the last week of each month. For hired workers, this minimum is 1 hour and for farm operators it is any work performed on one or more days of the week. Unpaid members of the operator's family must put in at least 15 hours of work to be counted. There is no age limitation.

In conformance with this concept, the AMS series has the usual double counting of persons associated with establishment-type reports. It is intended that persons working for more than one farm operator during the survey week would be counted on each farm on which they worked. In addition, some persons counted as working on a farm may also have worked more hours at a nonfarm job during the same week. Conceptually, any comparison with population-type estimates should show a difference in the level of agricultural employment. In practice, there is a further cause of difference, that is, the double counting on payroll reports associated with employee turnover during the survey week.

Multiple jobholders are especially significant in agriculture. It is not uncommon for seasonal workers employed in crews to work for several farm employers during the week and they may even work on more than one farm in a single day. The other type of multiple employment in which one job is agricultural and the other nonagricultural has been increasing in importance in recent years. There has been an upward trend in the number of persons with nonagricultural jobs who live on farms. A large number of these persons spend most of their time on the nonagricultural job. The subcommittee recommends that efforts should be made to develop periodic measures of the amount of multiple jobholding by farmworkers and of the number of farmworkers whose chief current activity is nonfarmwork, by means of supplementary CPS inquiries.

Since children under 14 play an important part in certain types of agricultural operations, a count of this group should be continued. Separate estimates of children under 14 would be desirable but under present AMS operating conditions such estimates are impracticable. There are no benchmark data available

in the census or elsewhere covering each month of the year. One proposal is that a question be added to the present schedule to separate children under 14 and that children under 14 as a percentage of total family workers be computed. Such a procedure would be of doubtful value since most reports for large southern plantations are made by plantation operators, and it is doubtful that information on age of children of sharecroppers could be reported. This group is quite important. The more practical alternative is for the CPS to obtain periodically information on farmwork of children under 14—or possibly of children 10 to 14 years of age—to be used in work on reconciliation of the 2 series.

Comparability

The publication of different official estimates of farm employment, namely the CPS and AMS series, leads to many questions of comparability. It is difficult to explain to the public two estimates which differ widely in level even though they measure somewhat different things and may each serve better some special purposes. This problem would be less serious if sufficient data were available to explain and reconcile the differences.

The subcommittee has given consideration to a proposal that the AMS use the CPS national total and publish regional and State estimates adjusted to that total. The problem of adjusting the AMS total to the CPS total would require measurement of the differences between the series at frequent intervals, perhaps even monthly for 1 year and less frequently thereafter. The highly seasonal character of agricultural employment would make this necessary. The proposal would almost certainly require expansion of the CPS sample to include additional agricultural areas to reduce sampling errors.

Even after adjustments were available on a national or regional basis, the adjustment of State totals would still be involved. A national or even a regional adjustment would not be directly applicable to individual States. The necessary adjustment ratios are likely to differ sharply from State to State in many instances. Thus it appears to the subcommittee that the technical problems of adjusting regional or State farm employment estimates based on establishment reports to the census series at the United States level make this proposal not now feasible.

Timing

The AMS series is tied to a week just before the end of the month in contrast with the CPS and BLS employment reports which use a period at approximately the middle of the month. Since the data are collected on a schedule which is primarily used for other purposes, it is not feasible at present to change the timing of the collection of data. It would be possible to change the wording on the schedule to ask for employment earlier in the month. Such a change might introduce bias either through faulty memory or a tendency of the respondents to disregard the specified period and report for the most recent week. The subcommittee recommends that a test be made of the significance of these two possible sources of bias, before a change in the wording is suggested. The subcommittee further recommends that if AMS data are ever collected on a separate schedule the reporting period be changed to correspond with the standard midmonth period established by the Budget Bureau.

State estimates

There is at present a strong demand for State estimates of farm employment and this is likely to become greater. Letters received by the subcommittee underscore this need. As part of its procedure for estimating employment for major geographic divisions, AMS now prepares State estimates on the basis of its present sample which it releases on request to Federal and State government agencies for administrative use only. In furnishing the State data for administrative use to a requesting agency, the AMS explains the limitations of these estimates. The deficiencies of the data are such that AMS does not approve public release of its State estimates.

The need for State data on agricultural employment trends is great. Under the existing and immediately foreseeable situation there is no practical alternative to obtaining such data through the establishment reporting techniques used by the AMS. It is recommended that AMS request funds to develop further its work on agricultural employment statistics so as to permit the regular publication of State estimates, at least for important agricultural States.

Censuses of agriculture

The subcommittee wishes to call attention to the collection of farm employment information on the schedule of the Censuses of Agriculture. These censuses provide necessary benchmark data for the AMS employment series and provide to State agencies data needed for analysis and estimates for areas at and below the State level. Also, it is only through such census operations that it is possible to cross-relate farm employment data with various characteristics of the farms (such as type, size, tenure, value of sales, etc.) and with wage rates paid by States and economic areas within States. In such census operations the full advantages are possible of cross-relating the establishment reported employment with other important factors and of having the information in great geographic detail. While agricultural employment data are obtained in the decennial population census through the household approach in the same geographic detail as in the approach of the agricultural census, the population census data do not permit the cross-classification with farm characteristics. The subcommittee, therefore, recommends that the agricultural censuses continue to obtain information on farm employment and farm wage rates.

Conclusion

The subcommittee in its recommendations recognizes that the present AMS series on farm employment represents about all that can be done with the current facilities. As employment data are now collected on a schedule which is used mainly for other purposes, there is little possibility of any substantial change. Timing and space for questions hinge upon demands for items other than farm employment.

In addition to data on farm employment, agricultural economists have indicated their needs for information on labor input, which would require information on hours worked. Along with information on farm employment and hours worked, it would be desirable to secure at the United States and major region level certain information on type and size and other characteristics of the farm so as to enable tabulations and analysis for "industrial" subgroupings in agriculture. (This was done in the enumerative survey program on farm employment and wages conducted by the BAE in 1945–48.)

An agricultural employment series based on the concept of number of farm jobs, but limited in scope (not differentiated by type of farm nor estimated separately by States) does not provide much information not available from other sources. The advantages of the establishment approach cannot be realized if a few overall employment totals are the only result. Development of farm employment estimates—by State and area, by type of farm, by size of undertaking, etc.—and supplementation with other items of information, such as hours worked, provide the principal advantages of the establishment approach. The establishment report technique is capable of meeting such data needs, on a current basis, relatively inexpensively. Securing such information requires an expanded survey program designed primarily for this purpose rather than utilizing a few questions in a schedule designed primarily for other purposes.

Because of the importance of information on employment trends in agriculture and on conditions within agriculture associated with these trends, the subcommittee believes that the Department of Agriculture should seek more resources to improve its sample and expand its work in this field in order to develop State estimates of farm employment and to provide information by type of farm. The Department might start by providing estimates on this basis for selected important agricultural States. In addition to more resources, a separate questionnaire specifically designed to obtain employment and related information will probably be required.

Summary of subcommittee recommendations

1. AMS should request funds to develop further its work on agricultural employment statistics so as to permit the regular publication of State estimates to obtain information on labor input, to permit subgroupings by type of farm and other pertinent characteristics. An expanded sample and probably a separate questionnaire specifically designed to obtain employment and related information will be required.

2. Efforts should be made to develop periodic measures of the amount of multiple jobholding by farmworkers and of the number of farmworkers whose chief current activity is nonfarmwork, by means of supplementary CPS inquiries. Such information would throw light on employment practices in agriculture as well as provide a measure of some of the difference between the AMS and CPS series.

3. Periodic information should be obtained by CPS on farmwork of children under 14 years of age to provide information of interest on its own account and to be used in explaining differences in level between the AMS and CPS series.
4. Consideration has been given to a proposal that AMS adjust to the CPS national level and publish State and regional estimates adjusted to that level. Because of the technical problems involved, the subcommittee regards this proposal as not now feasible.
5. AMS should explore the feasibility of changing its reporting week to correspond with the standard midmonth week established by the Bureau of the Budget to improve comparability with other series.
6. In order to provide benchmarks for the recommended employment statistics program, agricultural censuses should continue to obtain information on farm employment and farm wage rates.

Mr. BOWMAN. I cannot do justice to the complexity of the subject in a few sentences, but I will highlight the principal recommendations:

With regard to the Current Population Survey, the interim report includes a proposal that, as soon as feasible, persons on temporary layoff and persons waiting to start a new job be counted as unemployed, rather than as "with a job but not at work" within the employed category, as at present.

A series of tests and experiments of other changes in classification still under consideration is recommended, together with a number of proposals for the collection of additional information and for special surveys and research which would improve our understanding of the workings of the labor market and of the relations among the various employment and unemployment series.

Most of the recommendations concerning the Current Employment Statistics series issued by the BLS involve recommendations for additional information or improvements, such as the recommendation for a series on man-hours worked in addition to the present series on man-hours paid for; and the recommendation that Government employment—National, State, and local—be subclassified by industrial activity.

Recommendations with regard to unemployment-insurance statistics deal with various aspects of the problem of shaping administrative by-product statistics to reflect current economic conditions as well as possible.

Finally, with regard to the Farm Employment series prepared by the Agricultural Marketing Service, the interim report recommends considerable strengthening of this activity to permit State estimates of farm employment and some information by type of farm. The report recognizes that this recommendation would require that considerably more funds be devoted to this purpose.

I would prefer, in the rest of my remarks, to deal, not with the sspecific recommendations made in the interim report but rather with a more fundamental issue which appears to me to be basic in considering the whole range of recommendations. That is the question of why we have and need more than one series on employment and unemployment statistics.

In the United States the public relies on statistics to a much greater degree than in any other country in the world. This public interest in statistics is valuable for it leads to forthright criticisms and demands for improvement that may be temporarily embarrassing, but account in the long run, I believe, for our preeminence in this field.

We would not wish, nor would it be tolerated by the users of statistics, simply to add a footnote to our current statistics, stating with

frank brevity, "All these figures do not agree." The American people want to know why the figures do not agree, and by how much they do not agree, and why can't they agree. It seems to me that some forthright discussion of these issues might be helpful.

To open the subject from the viewpoint of employment and unemployment statistics, I should like to quote one paragraph from the introduction to the interim report of the Review of Concepts Subcommittee:

> Throughout the review the subcommittee has kept in mind the desirability of furthering comparability and facilitating reconciliation of the various series. At the same time, the subcommittee has had to acknowledge the limitations, deriving from the nature of the sources of data, in pursuing comparability and reconciliation. It has appeared to the subcommittee on balance that it is often more important to exploit the advantage of household, establishment, or administrative reports, in the interests of the diverse data obtainable, rather than to make comparability an overriding objective. It has not appeared that any one series can serve all needs.

This viewpoint is also held by some users of the statistics, as illustrated in the following quotation from an editorial in the Journal of Commerce, August 25, 1955.:

> Any attempt to correct the discrepancies between the series by forcing them too far into the same conceptual mold would appear unwise, as it would sacrifice valuable information available through the differing concepts of the separate series.

Uses of various series on employment and unemployment statistics: What are these needs that require more than one series? Let me summarize them briefly. For a more detailed description of the series, their uses and limitations, I refer you to the joint committee's own publication, Descriptive and Historical Supplement to Economic Indicators, which we have recently helped the committee to bring up to date.

Information on the employment-unemployment situation is used in four principal ways:

1. As current economic indicators: This is the use of primary concern to this subcommittee, I believe. The series are also used as a general indicator of current economic conditions by the Council of Economic Advisers, other governmental bodies, and many groups and individuals among the general public.

2. In general manpower analysis: As a guide to "manpower" policy in combating unemployment, in determining military manpower policies, in developing additional sources of labor during emergency periods, and in gaging the role of self-employment in the economy, labor-force information is used by the Labor Department, Selective Service, the Defense Department, the Office of Defense Mobilization, the Agriculture Department, citizen groups advising these agencies, various academic and private research groups.

3. In industry plans and operations: Employment and related hours and earnings information is used in the analysis of business conditions in particular industries for business planning, for collective-bargaining purposes, for measuring productivity, to study labor utilization, and for mobilization planning. Government statistical agencies use detailed employment, hours and earnings estimates in preparing other current indicators—two-fifths of the monthly Federal Reserve Board indexes of production make use of BLS man-hour

series and most of the current trend in the wages and salaries component of the national income estimates comes from the same source.

4. In unemployment insurance and employment service administration: Employment and unemployment information is used in connection with the operation of the State employment security agencies by indicating the scope of the programs, in administrative planning, in determining workloads and measuring performance.

Sources of current statistics: These needs can be met most efficiently and at lowest cost by making use of a variety of sources. Such a diverse system of employment intelligence serves more uses than any single source of information could possibly do and accomplishes this objective at a much lower overall cost than would be possible if reliance were placed on only one—greatly expanded—source.

Historically, the first kind of employment information to be developed was that which relies on reports prepared from the payroll records of establishments.

The Bureau of Labor Statistics first started regular monthly collection of information on employment, hours, and earnings in 1915, and has since expanded the Current Employment Statistics estimates to cover all nonagricultural employment.

The farm-employment series of the Agricultural Marketing Service is similar, conceptually. Employment estimates based on payroll reports are a major source of current economic indicators, the primary source for meeting information required in planning and operating business enterprises, and useful in meeting some of the needs of the State employment security agencies for information.

Obtaining reports directly from business establishments is the only effective way to obtain consistent monthly estimates for particular industries on employment, hours, and earnings. This is also an economical system for obtaining information on employment trends within each State or for metropolitan areas on a current basis. Employment, hours, and earnings data, all coming from payroll records, are consistent with each other and averages can be computed. Accurate information on industrial activity is easily available, permitting a large number of detailed estimates for many different industries to be computed.

Note that these series cannot meet all the needs for labor-force analysis nor all the demands for current economic unemployed indicators because no count of the unemployed is obtained; coverage of employment is restricted to establishment payrolls, so that the self-employed, domestic servants, and unpaid family workers are excluded; and, finally, it is not practicable to expect employers to report on the personal characteristics of their workers.

A second source was developed during the great depression when it became obvious that a count of jobs held, as reflected in payroll records, could not meet all the demands for employment information. Of paramount importance, a count of the unemployed was wanted, and a comparable employment count which could be added to unemployment to give the total number of persons in the labor force.

The monthly Current Population Survey, now taken by the Census Bureau, was developed to meet these needs. This survey, based on a relatively small sample of households, is used as a major source for

current economic indicators, is the primary source of information in analyzing the labor force, and is useful in evaluating unemployment insurance coverage, the last use mentioned above.

Given the limited coverage of the present unemployment insurance system, direct questioning of the population is the only effective way to obtain information on total unemployment and on fluctuations in the size and composition of the total labor force. All segments of the labor force are represented in the sample. Each person is counted only once—classified by his most important activity.

Before this source of information was developed, unemployment estimates were obtained by subtraction of payroll employment figures from a "guesstimated" work force, leading to a variety of unemployment estimates that differed by millions and proved acutely embarrassing to the Federal Government.

Additional information on personal characteristics—such items as age, sex, color, marital status, number of children in the home, school attendance—are easily obtained in household interviews. Knowledge of these classifications in relation to employment status is especially important for analyzing the labor force.

Note that a household sample does not meet industry's need for detailed information in planning and operating business enterprises. Two reasons account for this: It is not feasible to collect detailed industry or earnings information from housewives—who as a rule do not have sufficiently precise information—and a sample large enough to provide estimates for a large number of industries and areas would be prohibitively expensive.

The unemployment insurance records themselves provide the third and last source of current statistics I wish to mention. These are, of course, the primary source for meeting the fourth need I described, the administration of the unemployment insurance programs, but they are also useful as current economic indicators.

Insured unemployment figures, although covering only part of the unemployed, are useful because they are timely, being collected on a weekly basis, and because they provide information on changes in unemployment in States and local areas for important sectors of the economy.

Their usefulness as economic indicators is limited by coverage and administrative factors, in accordance with the terms of the individual State laws. However, the published figures are practically free of cost since most of the data are compiled for administrative purposes anyway.

CONCEPTS

It is evident from this brief description that the concepts on which each series is based vary, primarily reflecting the differing sources of the data. Such differences in concept not only cause differences in the level of the estimates at any particular time, they also may cause differences in seasonal changes or in the extent of cyclical fluctuations.

Even were the concepts to be identical, anyone familiar with the problems of measurement would be greatly surprised if information collected from such widely differing sources, by such different methods and with such dissimilar ends in view should not differ considerably upon occasion. Because of the interest in the reasons for these differ-

ences, I am submitting a statement, "Differences in Concepts and Measurement Procedures and How They Affect Current Series of Employment and Unemployment Statistics."

(The above-entitled statement is as follows:)

DIFFERENCES IN CONCEPTS AND MEASUREMENT PROCEDURES AND HOW THEY AFFECT CURRENT SERIES OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS

Statement prepared by the Office of Statistical Standards, Bureau of the Budget, with the advice and assistance of the Agricultural Marketing Service, the Bureau of the Census, the Bureau of Employment Security and the Bureau of Labor Statistics, for the Hearings on Employment and Unemployment Statistics before the Subcommittee on Economic Statistics, Joint Committee on the Economic Report, November 1955

Differences in the statistics on employment and unemployment are related, in part at least, to differences in concepts. Such conceptual differences may affect the general level of the series, the month-to-month change, or both. The monthly changes may differ in accordance with some discernible differences in seasonal pattern, repeated year after year, or they may be affected by cyclical changes in economic activity as these are related to conceptual differences.

Other differences in the statistics may be caused by estimating and measurement procedures and problems. Such differences may be consistent over time, or they may be erratic, such as the chance fluctuations due to sampling variability.

The following statement attempts to summarize the leading causes of difference, both conceptual and procedural; to indicate orders of magnitude where enough is known to permit such indications; to relate these conceptual differences to known patterns of the statistics; and, clearly labeling them as conjectural, to offer some additional speculations on possible reasons for differences.

The present programs for expansion and improvement of employment and unemployment statistics now underway at the Bureau of the Census, the Bureau of Employment Security and the Bureau of Labor Statistics give promise of casting additional light on these differences, and, hopefully, of eliminating some of them in the future.

I. Differences Between the BLS and CPS Employment Estimates

A. COVERAGE

The Census Bureau's current population survey includes the self-employed, domestics, and unpaid workers in family operated enterprises, none of whom are covered by the Bureau of Labor Statistics series on employees in nonagricultural establishments. When these groups, which total about 8.5 million at the present time, are subtracted from the CPS estimate of nonagricultural employment, an estimate of wage and salary employees of generally comparable coverage to the BLS series (except for age) is obtained. The CPS series covers workers 14 years of age and over; the BLS series has no age cutoff. Possibly one-quarter to one-half million children ages 10–13 work in nonagricultural employment at different seasons of the year.

B. CONCEPTS

1. Individuals versus jobs

The CPS counts each worker once, and classifies him in accordance with his major activity, whether farm or nonfarm; the BLS reports are essentially a count of the number of different nonagricultural jobs held, based on the payroll records of nonfarm employers. This conceptual difference leads to the following differences in the series:

(*a*) *Difference in level.*—Insofar as 1 person holds more than 1 nonagricultural job during the same pay period, either simultaneously or consecutively, the BLS level will be higher; insofar as 1 person holds an agricultural job and a nonagricultural job at the same time and the CPS classifies him in agriculture as his major activity, the BLS level will be higher.

The Bureau of the Census has conducted occasional studies in the past, attempting to measure multiple jobholding, but they have not been completely satis-

factory. They have indicated that the number of persons with 2 or more jobs during a reporting period has ranged between 1½ and 2 million. Possibly three-fourths of a million to a million of these might be persons holding two or more nonagricultural wage and salary jobs. (A more recent and more intensive experimental study specifically directed to farmwork and using a more elaborate approach implied a considerably higher rate of multiple jobholding.)

(*b*) *Difference in seasonal movement.*—Insofar as multiple jobholding is more frequent at certain seasons of the year than at other times, differences in month-to-month changes will occur. This is the explanation usually given for the fact that the BLS series typically rises sharply in December and falls by a large amount in January, whereas the CPS changes, although in the same direction, are much smaller. The taking of additional jobs at Christmastime by persons who are already employed, would be reflected in the one series, but not in the other. During the past 4 years, the November to December increase has averaged nearly 700,000 in the BLS series and about 250,000 in the CPS; the decline in the following month has on the average been about a million greater in the BLS series. Similarly, there may be seasonal fluctuations, possibly amounting to several hundred thousand workers, as persons who normally hold both agricultural and nonagriculaural jobs spend more time at one type of work one month, and the other type of work the following month, depending on the demands of the harvesting season. BLS would count such workers in their nonagricultural jobs each month, but CPS would classify them as nonagricultural workers one month, as farmworkers the next, or vice versa. This is frequently advanced as part of the explanation of why the census nonagricultural series declines relative to the BLS between August and September.

(*c*) *Differences in cyclical pattern.*—Insofar as there are cyclical changes in the amount of multiple jobholding, either simultaneously or as a result of increased job turnover during a pay period, it is possible that this difference in concept may give rise to somewhat different cyclical patterns in the figures. Evidence on this point is almost nonexistent. The amount of multiple jobholding has not been measured frequently enough to provide any cyclical data; the BLS turnover figures, although they cast some light on part of this problem, are confined primarily to manufacturing and mining, about one-third of all nonagricultural employment.

2. Treatment of persons on vacation

The BLS includes persons on paid vacation in its employment estimates; the CPS includes in its employed total persons on vacation from their jobs, whether paid or unpaid, so long as they are not looking for work, and classifies such persons as "with a job, but not at work." This difference is of importance primarily during the summer vacation period, affecting principally the month-to-month movements in the series:

(*a*) *Difference in seasonal movements.*—Insofar as persons on unpaid vacation are reported as "with a job" in the CPS but are not included in the BLS payroll series, the movement in the two series would differ during the summer months, when vacations are important. The BLS series would tend to drop by the amount of unpaid vacation whereas the CPS series would show no change on this account. In making comparisons of employment changes from winter lows to summer highs, this factor must be kept in mind. The amount of unpaid vacation, though it is diminishing, is still considerable. Census estimates put the number of employed persons on vacation at close to 5 million in mid-July and past studies indicate that possibly as many as a million of these persons would not receive pay for the time away from the job. Many persons take vacations though they are not eligible for vacation pay, particularly when whole establishments close down for a vacation period; some extend their vacations beyond the period for which they are paid; and others (for example, married women) take unpaid time off to accompany the family head during his scheduled vacation period.

(*b*) *The special case of schoolteachers.*—Conceptually, in the CPS schoolteachers who have contracts to return to work in the fall should be reported as "with a job but not at work" (on vacation) unless they were working at or looking for other jobs. In the BLS series, because some schoolteachers are paid throughout the year, but others are not reported on payrolls during the summer months, although they are presumably on paid vacation, estimates of the number of "regular" schoolteachers are added to the reported employment figures during the summer months. The effect of these conceptual differences is uncertain, although presumably the BLS series should be higher than the CPS on this account during the summer months.

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(c) *Differences in cyclical movement.*—The effects of different treatment of unpaid vacations must be highly speculative. The relative amount of paid vacations may change during the course of the cycle, but whatever significantly or not, is not known.

3. Other "with a job but not at work" groups

In addition to persons on vacation, there are, at some seasons of the year, as many as 1.5 million persons not looking for work who report that they had jobs but did not work during the survey week: persons whom Census classifies in the "with a job but not at work" group. BLS would count such persons as employed if they were being paid for the time off, but otherwise would exclude them:

(a) *Differences in level.*—The BLS series would be lower than the CPS series insofar as such persons were not paid for the time off.

(b) *Differences in seasonal movement.*—Absences from work because of illness and bad weather increases in the wintertime; temporary layoffs with definite instructions to return within 30 days show little seasonal variations; persons waiting to start new jobs within 30 days increase toward the close of the school year. Estimates of totals for these groups, both paid and unpaid, are presented each month in the Monthly Report on the Labor Force; estimates of the number of workers on unpaid vacation have been made most recently in July 1951 when it was estimated that about one-third of the nonagricultural wage and salary workers not at work on account of illness were on paid leave; almost none of the remaining groups received pay while not at work.

(c) *Occasional differences.*—Important major strikes are reflected by differences in the series. Strikes show up as declines in the BLS series, since the strikers would not be on established payrolls; such persons would be reported as "with a job but not at work" under the employed category of CPS unless they were seeking other work. This factor, for example, accounts for a large part of the difference in the two series in July 1952, at the time of the strike in the steel industry.

4. Difference in the timing of the survey week

The BLS series specifies that reports from employers should cover the pay period ending nearest the 15th of the month; the CPS, until July 1955, covered labor force activity during the week including the 8th of the month. Sometimes these periods were approximately the same, sometimes they differed. Since July, CPS has surveyed the week ending nearest the 15th. These differences in timing have been important in the past primarily at times of sudden changes in employment levels, particularly those associated with holiday changes, when one series might precede, the other follow, the holiday. Although seasonal adjustment of the series may take account of some of this, Easter is a particularly difficult period since it cannot be satisfactorily adjusted for, coming as it does at different periods from year to year.

C. ESTIMATING PROCEDURES AND MEASUREMENT PROBLEMS

1. Sampling and estimating procedures

The CPS estimates are obtained through personal interviews with a sample of households, selected in accordance with a probability design. The sample returns are used to determine the distribution of the population by employment status within given age, sex, and color groups. As an early step in the estimating procedure, these distributions are then applied to independent estimates of the population for the current month, by age, sex, and color groups. These population estimates are built up from data from the latest decennial population census, projected forward by statistics on births, deaths, and migration since the census date.

In the CPS series, the relative sampling error for the estimate of nonagricultural wage and salary workers is about 0.6 percent, or about 300,000 persons at present levels. This means that the changes are about 2 out of 3 that an estimate from the sample would differ from a complete census by less than this amount. This estimate of sampling error would be 600,000 persons if a confidence level of 19 out of 20 times is wanted. These estimates, of course, give only the possible range of sampling deviations from the true level; the precise amount of deviation at any given time is never actually known. Errors arising from the estimation of the current independent population control totals appear insignificant for the nonagricultural employment total. When the independent population estimates were projected from the 1950 rather than from the 1940 census

data, the estimate for total nonagricultural employment was raised by 150,000 or about 0.3 percent.

The BLS employment statistics are based on reports from a sample of establishments among which large establishments predominate. Changes from one month to the next in the employment reported by the sample respondents are applied to benchmark totals based primarily upon tax returns made by employers under the State unemployment insurance systems supplemented by data from the Federal old-age and survivors insurance program. These data represent nearly complete enumerations of employment in most industrial categories. Estimates for the remaining segments are obtained from the best available sources.

Although the BLS sample design does not permit the computation of sampling error in accordance with probability formulas, it does provide for a check of the possible discrepancy between the current estimates and the benchmarks obtained from tax records, including discrepancies arising for other reasons than sampling. This check is now made annually. Since 1947, when the present procedure was adopted, the average discrepancy, thus measured, has been 0.6 of 1 percent. These checks have been based on comparisons made for the first quarter of each year, when the social-security benchmark information is most complete.[1]

Note that in comparing the overall levels of two series prepared on such dissimilar bases as the CPS and BLS estimates, that the possibility of error in the population census or the social-security benchmarks cannot be disregarded. The sampling error noted above for the CPS is a measure of the sampling variability as compared with a complete census count, using the same schedule, instructions, and interviewers. The BLS checks for discrepancies are against the benchmark which the sample is trying to estimate. There is no true total against which the accuracy of either can be measured. The tax data and the population totals are among the best statistical measures known, but they, too, are not perfect. Probably in either series the error caused by faulty totals is only a fraction of 1 percent. This figure is speculative, however; there is some conjecture that uncertainties in these totals could lead at times to differences several times larger between the BLS and CPS series.

2. Revisions

The CPS estimates for 1953 were revised, after the new sample went into effect in 1954. The unemployment figures were revised by wedging back the January 1954, difference between the new and the old samples through September 1953. The employment figures were revised by using the new estimating technique of averaging the independent month's estimate with an estimate derived by applying the month-to-month change in that part of the sample which was surveyed in both months, to the final figure for the previous month. In general, CPS procedures call for no revisions after first publication. The BLS series are revised periodically to benchmarks. In recent years, this has been done annually, and, as a rule, differences between sample and benchmarks, after careful scrutiny of benchmarks for comparability in industrial classifications and other possible causes of inconsistency, are wedged backward to the time of the preceding benchmark.

3. Response and reporting errors

There are many possibilities for nonsampling errors which may arise in the measurement process. These are coming to be known as "errors of response" or "enumerative errors" in surveys based on personal visit, and are frequently called reporting errors in surveys based on mail canvass. The source of such errors may arise because of respondent inability or unwillingness to reply correctly, because of enumerator error or bias, or because of many possible sources of error in the questionnaire design, coding, and compilation process. Relatively little is known about such errors, but both BLS and Census are actively studying the major sources of such errors in their respective series, and are trying to control, and, if possible, measure the magnitude of such errors.

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[1] In a few industrial sectors, month-to-month movements of current estimates are, for budgetary reasons, not yet obtained by direct current reports from a sample of establishments. Monthly changes in these sectors have been based on trends from past data. Necessary adjustments are made at the time of adjustment to new benchmarks. This procedure can conceivably result in substantial error for a few individual industries, over a short interval, but has relatively little effect on the much larger nonfarm total.

4. Seasonal adjustments

Many of the differences in the estimates, and particularly in the movements, can be eliminated by studying the seasonally adjusted series. However, two notes of warning:

(1) Seasonal adjustments are approximations, must be interpreted cautionsly, particularly with regard to annual events which do not come at exactly the same time each year, such as Easter, and auto model changeover periods, and with regard to erratic events, such as strikes, floods, etc., which may blur the seasonal analysis;

(2) Seasonal adjustments do not eliminate fluctuations caused by sampling variability or other procedural, response or reporting problems of measurement.

Seasonal adjustments have not been published for CPS total employment figures because with the expansion to 230 sample areas in 1954, the seasonal pattern in the agricultural employment estimates appears to have changed, and it seemed better to wait a year to confirm the new pattern. The CPS seasonal adjustment for its unemployment figures (published) and its employment figures (unpublished) are still considered to be experimental. BLS is reviewing the seasonal factors developed by the Federal Reserve Board which it has adopted.

Conclusion

From the above, it is obvious that there are dangers in picking 1 or 2 isolated months to compare differences in movement between the 2 series. For many conceptual and measurement reasons, the amount of change, as well as the level of the figures, may differ; for these reasons, the 2 series may react to economic conditions with varying time lags. It is always possible to show disparities, by picking certain months; it is possible to show almost complete unanimity by picking other months. In general, the series reflect the same economic conditions, and therefore move together. A better comparison, perhaps, can be made by taking quarterly or annual averages.

It is obvious that neither series is as accurate or as consistent with our purposes, as at times we would like to have it, and further work needs to be done on both. Such work is now under way. To enable analysts to make comparisons more easily, the attached charts 1 and 2 show the series both seasonally adjusted and unadjusted, for the period 1947 to date. Table A presents annual averages from 1947 through 1954 and shows the seasonally adjusted monthly data for 1954 through September 1955.

TABLE A.—*Employment of nonagricultural wage and salary workers, Bureau of the Census and Bureau of Labor Statistics: 1947–55*

[Numbers in millions]

Date	Bureau of the Census (excluding domestics)	Bureau of Labor Statistics	Excess of BLS over CPS [1]	
			Amount	Percent
Annual average:				
1947	41.6	43.5	1.9	4.6
1948	43.1	44.4	1.3	3.0
1949	42.3	43.3	1.0	2.4
1950	44.0	44.7	.7	1.6
1951	45.6	47.3	1.7	3.7
1952	46.5	48.3	1.8	3.9
1953	[2] 47.5	49.7	2.2	4.6
1954	46.5	48.3	1.8	3.9
9-month average:				
1954	46.5	48.3	1.8	3.9
1955	47.6	49.1	1.5	3.2
Monthly data (seasonally adjusted):				
1954—January	46.9	48.8	1.9	4.1
February	46.8	48.6	1.8	3.8
March	46.5	48.5	2.0	4.3
April [3]	46.8	48.3	1.5	3.2
May	46.5	48.2	1.7	3.7
June	46.5	48.2	1.7	3.7
July	46.3	48.0	1.7	3.7
August	46.2	48.0	1.8	3.9
September	46.3	48.0	1.7	3.7
October	46.3	48.1	1.8	3.9
November	46.6	48.4	1.8	3.9
December	46.4	48.4	2.0	4.3
1955—January	46.6	48.4	1.8	3.9
February	46.8	48.4	1.6	3.4
March	46.7	48.8	2.1	4.5
April [3]	47.5	48.9	1.4	2.9
May	47.4	49.2	1.8	3.8
June	48.0	49.5	1.5	3.1
July	48.5	49.6	1.2	2.5
August	48.4	[4] 49.8	1.4	2.9
September	48.3	[4] 49.8	1.5	3.0

[1] See text for discussion of reasons for this difference.
[2] Tentative revision.
[3] See text for effect of Easter holiday.
[4] Preliminary.

II. DIFFERENCES BETWEEN THE INSURED UNEMPLOYMENT SERIES (BES) AND THE TOTAL UNEMPLOYMENT SERIES (CPS)

A. COVERAGE

The CPS estimates of total unemployment include all civilians 14 years of age and older who did not work for pay or profit during the week but who were reported as looking for work. Persons who report that they would have been looking for work except that they were temporarily ill, they were waiting to be called back to a job from which they had been laid off for an indefinite period, or they believed that no work was available in their community or in their line of work, are also classified as unemployed.

The Bureau of Employment Security publishes each week, figures on insured unemployment, compiled from the operating statistics of the State unemployment insurance systems, including the Federal programs for unemployment compensation for veterans and Federal civilian workers, and the railroad unemployment compensation for veterans and Federal civilian workers, and the railroad unemployment insurance program administered by the Railroad Retirement Board. These figures indicate the number of persons claiming benefits under those programs for unemployment during the specified calendar week. In addition to the completely unemployed, they include persons claiming partial or part-total benefits for part-time work or earnings below a given minimum.

Differences between the CPS data on total unemployment and the BES data on insured unemployment can be largely attributed to these differences in coverave. The BES series does not cover new entrants and many reentrants to the labor market, workers in certain industries or in some States in small firms.

The insured unemployment statistics also may exclude some jobless persons who are not receiving benefits because of insufficient wage credits, exhaustion of benefits, disqualifications, or because they have not yet applied. On the grounds of concepts, some differences arise because certain workers classified by CPS as employed—such as those on temporary (less than 30 days) layoff or those with below-minimum earnings—may be eligible to draw unemployment insurance benefits and would appear in the BES insured unemployment series.

B. OTHER DIFFERENCES

The BES series is derived from administrative reports and, therefore, changes from week to week may reflect factors other than changes in economic conditions—occurrence of new benefit years or quarters, rescheduling of claims because of holidays, and the like. On the other hand, they are based on complete counts of persons filing claims and are not subject to sampling variability. Small month-to-month changes in the CPS estimates cannot be interpreted because the indicated changes are within sampling variability which approximates 4 percent at a confidence level of 2 out of 3 times or 80,000 at present levels (160,000 persons at a 19 out of 20 confidence level). More subtle differences also may arise because the BES reports are based on administrative determinations of eligibility, while the census data are derived from interviews between a census employee and the worker or a responsible member of his household.

C. CHANGES IN INSURED AND TOTAL UNEMPLOYMENT

Over the years, the two series have tended to move with substantially the same pattern (see charts 3 and 4 showing both seasonally adjusted and unadjusted data). Some of the differences are eliminated when rough adjustments for comparability are made. These adjustments subtract from the CPS figures persons without work experience or whose last job was in a type of industry not covered by unemployment insurance, and add persons on temporary (less than 30 days) layoff, many of whom are eligible for benefits. From the insured unemployment total, the estimated numbers drawing partial or part-total benefits have been subtracted, in order to exclude persons doing any work during the week. No adjustments can be made for the other sources of difference (persons not eligible for benefits though previously employed in a covered industry, disqualifications, etc.).

The adjusted figures in table B bring up to date the material originally furnished to the committee for its February 1954 hearings. It may be noted that the difference between the series is smaller in years of declining job opportunities than in years of rapid recovery (1949 versus 1950; 1954 versus 1955). In less prosperous years, a relatively large part of the jobless group consists of workers laid off from industries, such as manufacturing and transportation, which are in the main covered by unemployment insurance. In periods of expanding job opportunities, on the other hand, an increasing proportion of those seeking work are women and others who have recently entered the labor market and are not eligible for benefits but are included in the CPS unemployment figures. Moreover, in the aftermath of a downturn, many jobless-covered workers have exhausted their benefit rights or have not built up sufficient wage credits in the previous year to qualify for unemployment insurance.

TABLE B.—*Total unemployment (CPS) and insured unemployment (BES), original data and data roughly adjusted for comparability: 1947–55*

[Numbers in thousands]

Date	Original data			Data adjusted for comparability [1]		
	Total unemployment (CPS)	Insured unemployment (PES) [2]	Insured as a percent of total	Total unemployment (CPS)	Insured unemployment (PES) [2]	Insured as a percent of total
Annual average:						
1947	2,142	1,823	85.1	1,672	1,764	105.5
1948	2,064	1,480	71.7	1,684	1,419	84.2
1949	3,395	2,656	78.2	2,818	2,355	83.6
1950	3,142	1,631	51.9	2,441	1,539	63.0
1951	1,879	1,010	53.8	1,513	929	61.4
1952	1,673	1,083	64.7	1,391	995	71.5
1953 [3]	1,602	1,060	66.2	1,367	955	69.9
1954	3,230	2,048	63.4	2,735	1,915	70.0
9-month average:						
1954	3,366	2,167	64.4	2,872	2,031	70.7
1955	2,766	1,556	56.3	2,283	[4] 1,447	63.4
Monthly data (CPS week):						
1954—January	3,087	2,109	68.3	2,766	1,943	70.2
February	3,670	2,371	64.6	3,016	2,231	74.0
March	3,724	2,395	64.3	3,164	2,275	71.9
April	3,465	2,365	68.3	3,077	2,232	72.5
May	3,305	2,315	70.0	2,948	2,162	73.3
June	3,347	2,151	64.3	2,791	2,004	71.8
July	3,347	2,083	62.2	2,790	1,949	69.9
August	3,245	1,899	58.5	2,644	1,786	67.5
September	3,100	1,814	58.5	2,652	1,693	63.8
October	2,741	1,621	59.1	2,295	1,501	65.4
November	2,892	1,662	57.4	2,346	1,541	65.7
December	2,838	1,785	62.9	2,328	1,660	71.3
1955—January	3,347	2,179	65.1	2,980	2,034	68.3
February	3,383	2,152	63.6	2,895	2,030	70.1
March	3,176	1,940	61.1	2,676	1,837	68.6
April	2,962	1,706	57.6	2,637	1,586	60.1
May	2,489	1,450	58.3	2,100	1,333	63.5
June	2,679	1,273	47.5	1,992	1,163	58.4
July	2,471	1,255	50.8	1,855	1,159	62.5
August	2,237	1,081	48.3	1,726	996	57.7
September	2,349	964	44.9	1,683	[4] 881	52.3

[1] Adjustments in CPS unemployment estimates consist of subtracting unemployed persons without previous working experience and those whose last job was in industry groups not covered by unemployment insurance, and of adding employed persons on temporary (less than 30-day) layoff, most of whom presumably are eligible for unemployment benefits. Adjustment in PES series consists of subtracting those receiving partial or part-total benefits, who presumably are reported as working part time in the CPS series.

[2] 1947 figures include new entrants to the labor force as a result of the servicemen's readjustment allowance program. Data for 1955 include Federal civilian employees filing for benefits under new program.

[3] CPS estimates revised.

[4] September 1955 estimate is preliminary.

III. DIFFERENCES BETWEEN THE AMS AND CPS ESTIMATES OF FARM EMPLOYMENT

A. COVERAGE

The Agricultural Marketing Service's estimates of farm employment include farm operators and unpaid family workers (combined as "family labor") and hired workers. These, with minor deviations regarding coverage of persons in certain nonfarm occupations who are working on farms, are the same groups covered as agricultural workers in the CPS. The CPS has an age cutoff in the regular enumeration, covering only persons 14 years and over. AMS includes workers regardless of age. In agriculture, this difference is important, particularly during cultivating and harvesting seasons. Occasional CPS surveys of children aged 6 to 13 indicate that nearly a million may be working on farms (including unpaid family work of 15 hours or more a week) at certain seasons of the year.

B. CONCEPTS

The AMS series is similar to the BLS nonagricultural employment series in that it is based on the concept of jobs reported by establishments, in this case, farms. Differences between the count of individuals and the count of jobs as described in the section comparing the BLS and the CPS are thus also of impor-

tance here, and in fact, some of them, because of the nature of agricultural employment, are proportionately more significant. It is estimated, for example, that at least a quarter of a million persons, and, probably many more, at certain seasons of the year, hold more than one agricultural job during the same week, and thus would be included more than once in the AMS estimates. Persons who work in both agricultural and nonagricultural employment and worked more hours during the week at nonfarm work are classified in the CPS as working in nonagricultural employment, but by the AMS as working on a farm. The size of this group may range from one-half million to a million at different seasons of the year.

The AMS specifies that the number of workers should be reported for the last complete calendar week of the month, not including the week which includes the last day of the month. The CPS in the past has covered the week including the 8th, and now refers to the week including the 15th. For a sector of the economy with such important seasonal changes as agriculture, this difference in timing can be very important. Furthermore, temporary weather conditions can affect the level of one series, but their effects may have been dissipated by the date of reference of the other series.

C. ESTIMATING PROCEDURES AND MEASUREMENT PROBLEMS

The AMS estimates are obtained from reports made by a sample of farm operators, about 15,000 to 20,000 each month. The estimates are subject to bias since the mailing list is not a cross-section sample, and differential response of certain types of farm operators and undercoverage of curtain types of farms lead to biased results. AMS has computed adjustment factors to correct for these biases from benchmark data obtained from censuses of agriculture supplemented by data obtained from six enumerative surveys conducted during 1945–48.

Change in employment per farm is computed from the sample reports, and after adjustment, is then expanded to total employment estimates, by means of annual estimates of the number of farms in each State. Estimates are provided for the Nation and for nine regions. This procedure does not lend itself to measures of sampling variability.

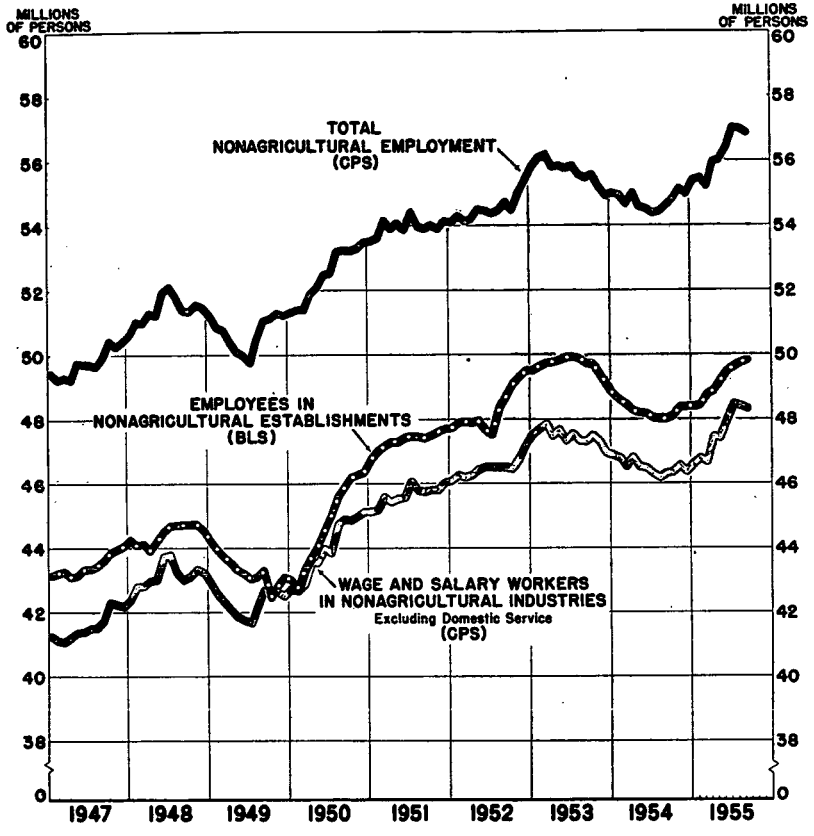
The adjustment factors and the estimates of the number of farms in each State are revised periodically as new benchmarks are obtained and will be next revised when the results of the 1954 Census of Agriculture becomes available. The absence of more frequent benchmarks is a serious shortcoming of the AMS estimating procedure.

The sampling variability of the CPS agricultural employment estimates amounts to about 4 percent, or about 300,000 at a confidence level of 2 out of 3, or 600,000 at a confidence level of 19 out of 20. The expanded CPS sample, by spreading into more areas, and including more households, will reduce the sampling error to about 3.2 percent (2 out of 3 times).

With these differences in concepts and sample design, with the sampling variability of the CPS estimates and the unknown biases which may be present in the AMS series, together with the effects of the timing differences described above, it is obviously difficult to draw conclusions from comparison of changes, either month-to-month or year-to-year, between the AMS and CPS series. Nevertheless, it does appear that the seasonal movements shown by the two series are somewhat closer together since the expansion of the CPS sample in 1954 from the old 68-area design to 230 areas.

CHART 1

NONAGRICULTURAL EMPLOYMENT
SEASONALLY ADJUSTED
1947-1955

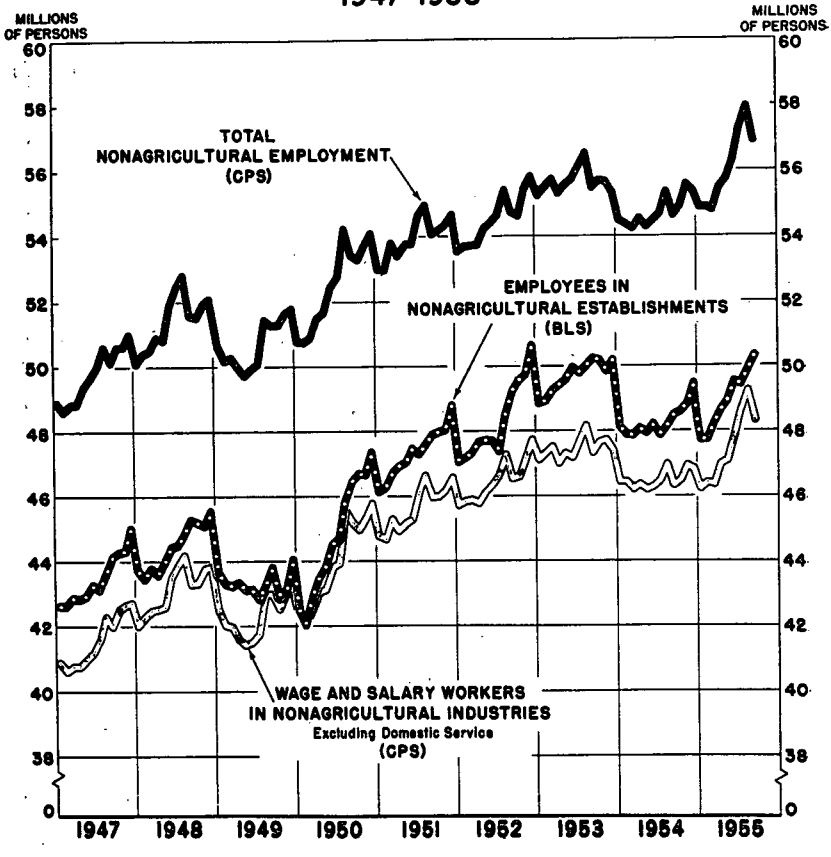


UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Source: Bureau of the Census and Bureau of Labor Statistics

CHART 2

NONAGRICULTURAL EMPLOYMENT
NOT ADJUSTED FOR SEASONAL VARIATION
1947-1955

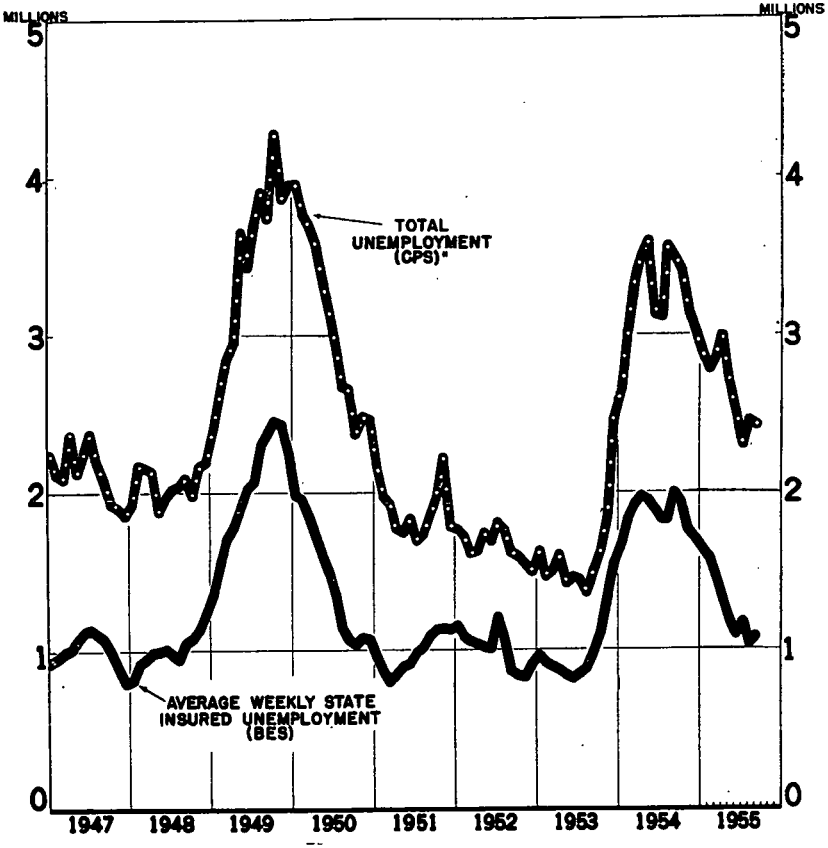


UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Source: Bureau of the Census and Bureau of Labor Statistics.

CHART 3

TOTAL AND INSURED UNEMPLOYMENT
SEASONALLY ADJUSTED
1947-1955



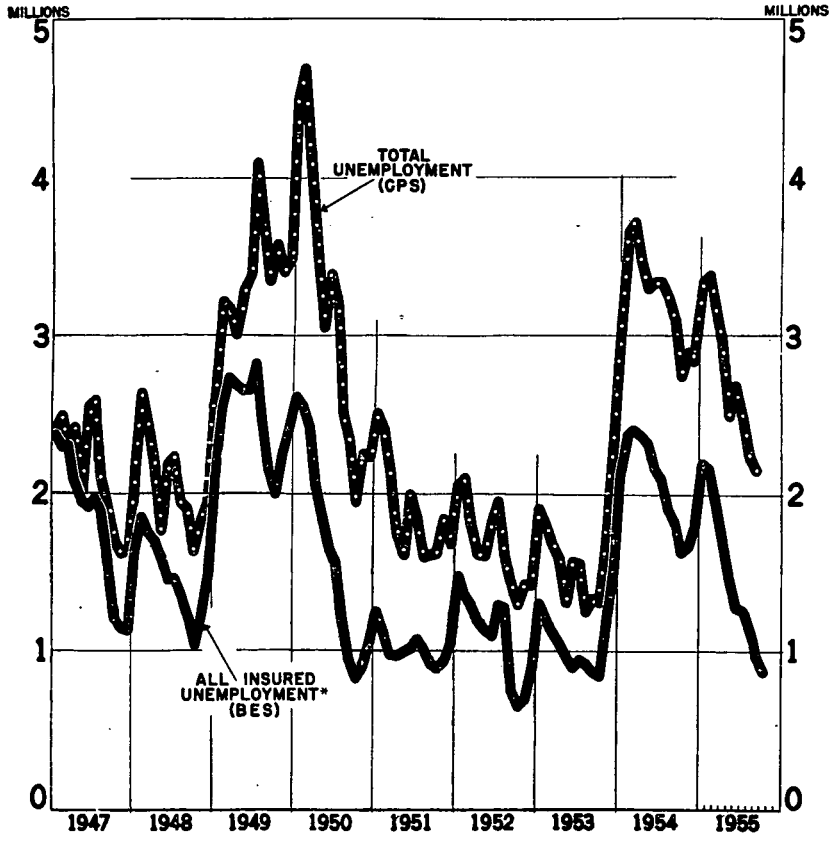
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Source: Bureau of Employment Security and Bureau of the Census.

* CPS data for January 1947 to June 1955 refer to the week including the 6th of the month, thereafter to the week including the 12th.

CHART 4

TOTAL AND INSURED UNEMPLOYMENT
NOT ADJUSTED FOR SEASONAL VARIATION
1947-1955



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Data for January 1947 to June 1955 refer to the week including the 8th of the month, thereafter to the week including the 12th.

Source: Bureau of the Census and Bureau of Employment Security

*Includes Veterans, Federal Employees, Railroad Retirement and State Programs.

Mr. BOWMAN. This statement not only outlines some of the major causes of difference, both those founded on concepts and those arising from the basically unlike measurement techniques, but also tries to indicate, wherever possible, some of the possible magnitudes involved. Considering the possible causes of discrepancies in the series, it is not the occasional differences, but rather the general consistency over the years which is noteworthy. For easy comparison, the statement includes charts and tables of some of the overall totals from 1947 to date, some of them adjusted for seasonal variation.

Further progress in comparability: All these series are designed, among other purposes, to throw light on the general employment-unemployment situation, and in spite of occasional discrepancies, that is what they do. This is not to say that further work is not needed to attain even greater comparability, and to make the public more generally aware of the reasons for and magnitudes of apparent inconsistencies, insofar as these are based on real differences in concept.

Further progress can be made primarily along three lines:

1. By improving the individual series by more research and experimental work; enlarging the samples to reduce the effect of random fluctuations or to strengthen coverage in industries now inadequately covered; working to increase knowledge of response and reporting errors and improving controls over such errors.

2. By developing techniques and special surveys which would quantify and explain some of the major differences among the series, and through more detailed analysis of the data contribute to better understanding of those conceptual differences it is felt desirable to maintain.

3. By full discussion and continuing analysis of the meaning of the data, to persuade users and the public generally that reasonable differences among the series are to be expected and are acceptable.

The Congress granted funds to start work on much of this program this fiscal year. The results, of course, are not yet available, but in what Mr. Burgess, Mr. Clague, and Mr. Goodwin will have to tell you about their present and future programs, you will get a picture of the progress which can be expected within a relatively short time.

Still further suggestions for improvement and further research and experimental work will be found among some of the recommendations of the review of concepts subcommittee in their interim report.

Costs of improved accuracy: How far should we go? This is always a problem which faces the Office of Statistical Standards in an acute form at this time of the year, just as it has faced the agency heads earlier, and will shortly face the Congress. The question is not only—is it worthwhile to spend more money to obtain a hoped-for increase in accuracy? but also—is it more worthwhile to spend our limited funds making further improvements in employment and unemployment statistics, or to start or improve some other series?

As you well know, there are no automatic guideposts or standards for such decisions. We have these questions ever before us, and one of the most fruitful ways of working toward the answers is to discover in as much detail as we can just who uses the figures, for what purposes, and with what degree of accuracy in mind.

Of course, uses vary, and the needs for accuracy vary widely, not only among the users, but also from time to time. At an expected turning point in economic affairs, attention is directed to these fig-

ures far more than at other time; a white light of public attention beats down upon them, and some of the resulting expectations of accuracy seem fantastic to the technical statistician.

At other times, relatively little attention may be paid to them. In resolving such conflicting needs, the Office of Statistical Standards finds it most helpful to have the frank expression of opinion of the major users of the data, and that is why we welcome this subcommittee's views on the necessary improvements which it wishes to see.

It is unfortunately true that not only do further improvements cost money, but after a certain stage is reached, additional improvements cost a considerable amount of money.

For example, doubling the size and hence the cost of a probability sample does not result in proportionate gains in reliability; the sampling error is reduced by around 30 percent. Moreover, unless sufficient resources are also provided to assure effective control over the quality of expanded sample enumerations, the reductions in sampling error may be offset by increases in response errors.

Even a camplete enumeration can sometimes provide less reliable results than a closely controlled sample survey. Expansions in the size of household or establishment samples may also reduce the speed with which current results are tabulated and released. Both accuracy and speed are important considerations, but how do we resolve the conflict that may arise between attainment of these separate objectives? Another type of improvement frequently demanded, that of increased detail, particularly geographic detail, may involve both increases in cost and in the time required to make the survey results public.

I do not wish to leave with you the impression that I am satisfied with the present level of accuracy and amount of detail provided in the employment and unemployment statistics now available. Not only would additional characteristics of both employed and unemployed be extremely useful for many types of economic analysis, not only do additional types of information give promise of adding to our store of economic indicators, not only is there desire for greater detail or additional cross-classification as analytic tools, but there are areas in which the general aggregates now available are weak and thus at times inconsistent.

In addition to the considerable program now under way for improving and increasing our employment and unemployment statistics, there will be further improvements and strengthening of individual series which I shall wish to recommend in the future.

Such improvements must be planned and introduced with caution. To have a balanced program of statistics covering employment and unemployment we must give full consideration to alternative uses and sources; we must plant to obtain the maximum coordination of results consonant with exploiting the unique advantages of each source. This is not merely a matter of funds, but also a question of planning a well-articulated system of statistical intelligence.

Thank you, Mr. Chairman.

Mr. BOLLING. Thank you, Mr. Bowman for a very informative and comprehensive statement.

As I said at the beginning, I will have some questions on it, but I will reserve them, I think, until tomorrow afternoon.

Thank you very much.

The next witness is Mr. Robert W. Burgess, Director, Bureau of the Census.

Mr. BURGESS. Mr. Chairman, I would like to introduce Mr. Conrad Taeuber, Assistant Director for Demographic Field, Bureau of the Census, and Mr. Morris H. Hansen, Assistant Director for Statistical Standards, Bureau of the Census.

Mr. BOLLING. You may proceed as you wish, Mr. Burgess.

STATEMENT OF ROBERT W. BURGESS, DIRECTOR, BUREAU OF THE CENSUS

Mr. BURGESS. In response to the subcommittee's request, we are submitting a description of the Census Bureau's current program of employment and unemployment statistics, an outline and a summary of some of the statistical results secured, and a statement on recent and forthcoming improvements in that program.

I. DESCRIPTION OF CURRENT PROGRAM AND OUTLINE OF STATISTICAL RESULTS

The current population survey of the Bureau of the Census was inaugurated primarily to secure a reliable general answer as to the extent of national employment, including self-employment, and of national unemployment. Since 1946 it has been recognized that some of these statistics would be helpful in implementing the Full Employment Act of 1946. Another overlapping aim of the survey has been to keep up to date the types of information collected every 10 years in the population and housing censuses—family statistics, personal and family income, migration, number of available vacant dwelling units, occupational characteristics of the population, and school enrollment and education, among others.

The procedure used is to make a survey of a representative cross section of all households in the United States. This cross section of about 21,000 households in 3,500 clusters or segments is selected by scientific sampling methods. The basic method is to select a representative sample of counties and of small areas within the selected counties, and to canvass these small areas each month. This approach provides an up-to-date sample that reflects any movements or shifts of the population as they take place.

The strong points and the limitations of the results of the survey arise pretty directly from the nature of the procedures used. On the one hand, since the survey is based on representation of the entire noninstitutional population aged 14 years and over, it covers agriculture and nonagricultural occupations, wage and salary workers as well as self-employed and unpaid family workers, and various types of communities.

Since the basic data for individual persons are collected by interviewers paid by the Bureau and under its direct supervision and control, and are compiled by the Bureau headquarters, results are on a consistent basis over the country, except for the residuum of inevitable errors. Results are also consistent over the years, except for occasional minor modifications of concept or procedure, of which careful record is maintained and which are noted in published reports.

Each individual is counted only once, in the activity at which he spent most time in the survey week. The resulting statistics on employment, unemployment, and not-in-the-labor force reflect the established definitions and operating techniques, rather than vague or "commonsense" interpretations of these terms. For example, it is not correct to quote the figure for agriculture employment as giving the number of farmhands, since it includes the farmers.

A retired statistician may refer to himself as "unemployed," but he is not so classified in these reports unless he is currently seeking work. Our definition of "unemployed" takes in all not working but seeking work, and therefore the census total unemployed should not be quoted as a measure of those "able and willing to work."

The preceding comments indicate some of the strong points of the survey. On the other hand, certain limitations should be noted. As compared with a complete enumeration, the survey, since it is based on only a sample, is subject to sampling variation. Moreover, with a few exceptions, the present sample is not large enough to produce reliable results for cities or States; in fact, we have only recently become satisfied that results for the four major regions of the country are acceptable.

Another limitation is that the industrial classification of individuals depends, in most cases, on the knowledge of the member of the family interviewed, and therefore, is probably subject to a considerable likelihood of response error.

The Bureau has attempted to meet a variety of needs within the realm of its labor force statistics. Perhaps the major orientation of the data is to provide current measures of level and of significant changes in the employment situation, and no doubt this is the principal interest of the committee at this time. The data have also been used widely, during periods of large-scale defense effort or of actual mobilization, as a basis for estimating manpower potentials under various assumptions.

A third important use has been to give current information on some of the longer run socioeconomic developments—changes in age of entrance of young persons into the labor force, the degree to which the rate of labor-force participation at older ages is changing, and trends in the participation of married women in the labor force in relation to the number of young children in their family.

Finally, the labor force series is the only comprehensive source of information on groups of workers to whom special attention is directed from time to time—veterans, the self-employed, older workers, children who drop out of school, domestics, and numerous others.

A number of detailed tables are presented in appendix A of this document, summarizing the data available from the current population survey on matters of most immediate concern to the committee. Various summary tables are included on trends in labor-force participation and in employment and unemployment to illustrate the types of data available. Emphasis has been given to those subjects in which the committee has expressed particular interest, namely, data on the changing incidence of unemployment and underemployment and on the characteristics of persons who are unemployed or partially employed during periods of different intensities of industrial activity.

A careful and detailed perusal of these tables will show that a large amount of significant statistical information has already been accumulated on these topics.

Many of the tables are assemblies or summaries of monthly items appearing regularly or occasionally in the "Monthly Report on the Labor Force." Other tables incorporate material available in the worksheets but seldom or never published because the monthly figures were of questionable significance because of large sampling variation.

The quarterly or annual totals or averages have greater reliability and are useful. Since the present 230-area sample was introduced in early 1954, the information is statistically sounder.

The following types of information are included:

1. Labor-force participation, distributed by age, sex, color, type of area of residence.
2. Employment distributed by class of worker, age, sex, color, hours of work per week, and agricultural and nonagricultural classification.
3. Part-time employment, with analysis of the extent to which it is due to worker preference or to economic factors, and of the characteristics of various groups of part-time workers.
4. Distribution of the unemployed by age, sex, color, marital status, period unemployed, and previous occupational and industrial attachment (with separate statistics for the long-term unemployed, those seeking work for 15 weeks or longer).
5. Changes in these characteristics:
   (*a*) Over the long term.
   (*b*) Over the business cycle.
   (*c*) Seasonally.

For purposes of illustration, attention is called to a few highlight items drawn from the tables. It is not feasible or appropriate at this time, of course, to include a full analysis of this material:

A. LABOR FORCE PARTICIPATION AND AGE

Referring to table 1, the proportion of all males 14 years and over in the labor force (that is, either employed—including self-employed—or unemployed, or in the Armed Forces) has averaged 83 percent or more in each year since the survey was started in 1940. For the groups aged 25 to 54, the annual labor-force participation rate has never been under 94 percent. The overall rate was brought down by the 14- to 19-year age group for whom the rate ran 50 percent and the age 65 and over group now running about 40 percent. These figures of course are for males.

Additional light from a little different point of view is thrown on the relation of age to labor-force participation by a Census bulletin on employment based on the 1950 census. This bulletin shows that labor-force participation rates for white males exceeded 90 percent for urban residents aged 27 to 54, for rural nonfarm residents aged 27 to 49, and for rural farm residents aged 20 to 59 years.

B. UNEMPLOYMENT AND AGE

The quarterly unemployment rates for men fluctuated in the period 1948 through the third quarter of 1955 between about 2 percent in the

fourth quarter of 1952 and 7.5 percent in the first quarter of 1950 (table 11). Typically, the rates for the 14- to 19-year-old group are the highest, with the 20- to 24-year-old group next.

The rates found for the 65 years-plus group tend to be a little higher than to 24-to-44 and 45-to-64 group, but not as high as the rates for the younger groups. Rates for women follow a somewhat similar pattern at a lower level except that the unemployment rates for the group 65 and older are very low. That is to say, at those ages if women do not have jobs, they do not look for them.

C. RECENT LABOR FORCE CHANGES

Labor force growth has slowed perceptibly in recent years, but the total labor force has increased by the unusual margin of 1½ million between the third quarters of 1954 and 1955 (table 1). Women have accounted for most of this increase.

D. UNEMPLOYMENT AND INDUSTRIAL DISTRIBUTION

Construction workers and farm wage workers characteristically show the highest unemployment rates of the major industrial categories, a reflection of the long seasonal layoffs and relatively unstable job attachments in those fields (table 14). During the 1949 and 1954 downturns, however, workers in manufacturing and closely allied industries such as mining and transportation experienced the sharpest increases in unemployment rates.

E. PART-TIME WORK

Throughout the postwar period the majority of persons working part time have not been those affected by hours reductions but rather those who wanted only part-time work or who could not have worked longer hours because of personal or other noneconomic reasons (table 9).

F. LONG-TERM JOBLESS

A relatively large proportion of the long-term unemployed are men past middle age and persons previously employed in the mining and transportation fields, sectors of which have experienced long-term employment declines (tables 29 and 31).

II. Recent Improvements in Census Labor Force Statistics

The major improvements in the Census labor-force statistics since the July 1954 hearings of the Subcommittee on Economic Statistics are described below:

NEW DATA

1. Monthly statistics on part-time workers: From time to time, the Census Bureau has collected information on part-time workers and their reasons for working less than full time, in order to distinguish between those who have suffered a reduction in hours of work as a result of business conditions and those working part time for other reasons.

These surveys, which are conducted in conjunction with the Monthly Current Population Survey, were carried out on a quarterly basis

when need for such information was pressing. During 1954, the Bureau recognized that statistics on partial employment would have great usefulness on a current, monthly basis, and undertook to develop procedures for integrating the additional questions into the basic set of questions. Beginning in May 1955, information on part-time workers has been collected every month. It is published in the regular current monthly report, the Monthly Report on the Labor Force, Current Population Reports, Series P–57.

As a result of this change, the monthly report provides a count of the number of persons who usually work full time but who did not do so during the survey week for economic reasons, or for personal or other reasons, such as illness, vacation, et cetera. Also available now are currrent monthly data on the number of persons who usually work part time divided between those who prefer to do so and those unable to find full-time work.

The distribution of these various groups of part-time workers by major industry group is also shown in this report. Special reports from time to time present other data on their personal characteristics, such as age, sex, color, and the specific reasons why they are not working full time.

2. Employment status of married workers: Regular publication on a monthly basis of the marital status of employed and unemployed persons was introduced in November 1954 in response to demands for further information on the characteristics of the unemployed. This information was formerly provided only once a year in connection with the detailed study of family characteristics and income, conducted every April. It is now possible to examine currently the incidence of unemployment for married men and women as compared with single persons, and to estimate the impact of employment cutbacks on persons with family responsibilities.

3. Regional data: With the introduction of the present 230-area sample in February 1954, it became possible to make employment and unemployment estimates for the four major regions in the United States. These data have not been published regularly pending further evaluation of their reliability. On the basis of the experience since early 1954, it appears that the present regional estimates are suitable for publication and that they will form a useful series with the data that will become available from the forthcoming expanded sample (described later).

Another area of improvement is timing of survey: In order to reduce the effect of difference in timing as a factor in differences between population survey data from the Bureau of the Census and establishment statistics from the Department of Labor, the reference period for the census survey was shifted to the calendar week ending nearest the 15th day of the month because this is more comparable to the reference date for the Bureau of Labor Statistics series on employment in nonagricultural establishments; that is, the payroll period ending nearest the 15th. One result of this change is the removal from the census survey week of the Fourth of July and Labor Day, two major legal holidays that affected the data on hours worked during the week, as reported in the survey.

Despite the fact that this means in some months that the survey is conducted a week later than formerly, the processing and analysis

have been so speeded up that there is no delay in publication. The complete data are released in the first week or 10 days of the following month, at the time of the joint press statement issued by the Secretaries of Commerce and Labor.

In order to do this, 4 to 5 days have been cut out of the schedule formerly required.

SEASONAL INDEXES

Sharp seasonal changes in employment and unemployment, associated with bad midwinter weather, the Christmas and Easter holidays, the beginning and end of the school year, and the agricultural crop season have long been familiar to users of the monthly data. The development of seasonal adjustment factors has been undertaken in the past by the Census Bureau, the Bureau of Labor Statistics, the National Bureau of Economic Research, and other users of the data, but no method was ever agreed upon for official publication because of the methodological problems and lack of agreement on techniques. Prompted by the need for seasonal adjustment expressed by the Council of Economic Advisers and other important users the Census Bureau has taken advantage of its high speed electronic computer to devise seasonal adjustments for the unemployment series that have been approved by an interagency technical committee sponsored by the Bureau of the Budget.

Beginning in January 1955 the monthly report has contained a chart showing monthly figures for the unemployed together with a seasonally adjusted series. In addition an index of unemployment, seasonally adjusted (with 1947–49 as a base) is included in the first table of the report. (See P–50, No. 59, Annual Report on the Labor Force, 1954, for an explanation of the derivation of the index.)

Seasonal adjustment is, of course, only an approximation, and the resultant figures, like the original ones, are subject to sampling variability and to response errors. The chances are rughly 1 in 3 that changes of 5 to 6 points or more in the unemployment index from month to month could arise from sampling variability along.

Moreover, a substantial departure from the average seasonal pattern in a given month could cause a sharp change in the index even where there has been no basic change in the employment situation.

Seasonal factors have also been computed for the other components of the labor force, but are not yet being issued for public use pending study of experience with the present sample design. There is some reason to believe, for example, that the 68-area sample—which was the source of the information until 1954—was not sufficiently widespread to reflect adequately the seasonal pattern in agricultural employment, and more data are needed from the present sample before a reliable set of seasonal adjustments can be provided for current use. The same problem exists for total labor force and total employment, since seasonal movements in those aggregates are strongly influenced by the agricultural sector.

A description of the seasonal adjustment method which has been used by the Bureau of the Census is given in appendix C. Some refinements in the method are now being tested and may be incorporated within a few months.

QUALITY CONTROL PROGRAM

Beginning with the introduction of the present sample, in early 1954, the Census Bureau instituted a regular program of quality control on all aspects of the work of the field interviewers. Prior to that time, some systematic training and checking were a part of the supervisory responsibilities but they had not been developed to the extent that now is specified. In connection with the quality control program, research has also been undertaken on problems of measurement techniques, leading toward greater reliability in the original reports.

New interviewers who have qualified on the basis of objective written selection tests are given intensive initial indoctrination and training prior to assignment to the survey. The initial training program consists of 2 days of instruction and practice work in the interviewer's own area, followed by some home study, prior to actual work in the going program. The first month that he works on the survey, he receives another day of training on the job. Thereafter, if he qualifies, he receives the standard training course of experienced interviewers described below.

For experienced enumerators, the present quality control program consists of (1) check by supervisor on about one-third of an interviewer' work, three times a year, (2) observation of his performance in the actual conduct of the survey twice a year, (3) group training of the classroom type immediately prior to the monthly survey, four times a year, and (4) home study assignments in advance of each monthly survey.

Interviewers who do not meet standards but who are considered worth retraining are given more frequent attention by their supervisors. These various controls are discussed in greater detail below:

1. At present, the program of field checking carried out by the supervisor consists of recanvassing a portion of the area assigned to the interviewer, to determine whether he is carefully identifying and covering all the living quarters there, and reinterviewing a subsample of his assignment, to check on the completeness of coverage of population and the accuracy of reporting characteristics and employment status. Interviewers who are found to have made more than a specified number of errors of coverage or content are given special further training, or in extreme cases are dismissed.

The reinterview procedure furnishes a check on whether the interviewer has carried out his instructions but is not conclusive evidence of the actual validity of his reports. Differences between the original and the check interview may arise because different members of the household supplied the information in the two interviews, failure to understand questions, lapse of memory, et cetera, which do not reflect errors in the original interview.

Moreover, some of the concepts and definitions involved are difficult to apply objectively. For example, the basic determinant of unemployment, the question of looking for work, may in some situations be subject to varying interpretations depending on attitudes, hiring procedures in specific occupations or industries, the status of the job market, and so forth.

Nevertheless, the rechecks have given encouraging evidence that, on the whole, the prescribed procedures are being followed by the field

staff and that there is consistency in reporting for the very large majority of persons. On the average, the estimates of employment derived from the check interviews have been about 1 percent higher and the estimates of unemployment 3 to 4 percent higher than those obtained originally.

Since the reinterviewing procedure is still experimental and based on relatively small subsamples, these figures should not be construed as anything near precise measures of the average effect of response errors in the survey. Recently, a small part of the rechecking has been assigned to a higher level of supervision—the five Census regional offices—as a means of reviewing periodically the adequacy of the control work of the immediate field supervisory staff.

2. Observation of the interviewer while he is performing his job permits his supervisor to appraise his methods and the care with which he applies the rules. It still does not make possible in every case a judgment on the correctness of the information given, or the ability or willingness of the respondent to give a correct answer.

3. Classroom training sessions conducted once every 4 months have served 2 major functions—to provide refresher training for maintenance of a quality performance of the basic interviewing job and to convey special instructions on new or supplementary inquiries. Special surveys such as the annual survey of consumer income, which require the interviewer to master a number of new instructions and concepts, are generally preceded by a classroom session.

4. Home study assignments made each month consist of reading materials and test exercises on basic concepts and procedures as well as on supplementary inquiries added to the survey. Errors and misunderstandings found by the supervisor in reviewing the completed test exercises are discussed or otherwise brought to the attention of the interviewers prior to the start of the survey.

Experimentation with interviewing techniques: During the past year some experimental work has been undertaken to develop interview forms and other devices for obtaining more accurate information about the employment status of the population. This work was done initially in connection with the rechecking program, and was aimed not so much at testing whether prescribed procedures were followed by the interviewers, but at producing more valid reports. These experiments have generally taken the form of a detailed interview with the use of checklists. For example, a housewife who says she has not done any work during the preceding week, may report that she in fact worked several hours a day at farm chores or did some dressmaking for pay after she has read over a list in which such activities are spelled out. Since she has not considered herself as "working," she did not report this type of activity.

Similar experiences occur with activities that may be defined as looking for work. These limited and as yet inconclusive experiments have raised many questions for which answers will be sought in the work that lies ahead.

As might be expected, they indicate that the areas of greatest unreliability are found among persons with irregular attachments to the labor market and whose interest in and availability for jobs fluctuate a good deal from month to month. For the great majority of persons interviewed the present techniques are sufficiently reliable.

ESTIMATES OF SAMPLING ERROR

Although measurement of errors arising from the interaction of respondents and interviewers is still in the developmental stage, much progress has been made in the theory and procedure for computing sampling errors—the chance variations that occur because only a sample of the population is included in the survey.

The magnitude of sampling errors is largely dependent on the dispersion and size of the sample. The larger the size of the sample, and the more widely dispersed, the more likely are results from the same to be closer on the average to results obtained by enumerating the entire population. From another point of view, for a fixed size of sample, the larger the number of sample counties and the greater the dispersion of household within sample counties, the better is the likelihood of reflecting all types of activities and situations in their proper proportions.

The computed sampling error for any item can perhaps be described as the amount of variation (with specified probabilities) that could occur by chance between the results from the sample and those that would have been obtained from a complete census, using the same enumeration procedures and caliber of interviewers. Only the probable range of sampling variability can be specified, not the precise amount of sampling error in a given item at any time.

Advances have been made in the past year in the reliability with which the sampling errors of the results of the current population survey can be measured. These advances have come about through the redesign of the sample itself, completed in early 1954, and through the utilization of the Bureau's high-speed electronic computer which has made possible the use of a new approach to the estimation of sampling variability.

This new approach, using the 230-area sample, makes it possible to reflect all of the procedures utilized in the estimation of results from the current population survey. Monthly computations of sampling variability are not available at the same time as the monthly statistics, but average estimates of the variability for a recent period are reasonably applicable for the current publication.

Estimates of the sampling variability of the major estimates will be publised, at an early date, in the Monthly Report on the Labor Force, together with estimates of the variability of changes from month to month. Measurement of the sampling variability of the estimates of month-to-month change directly from the survey results represents a major step forward in this field.

The following table shows average estimates of sampling variability for the major employment status categories. The chances are about 68 out of 100 that the sample estimate would differ from a complete count by less than the standard error, and 95 out of 100 that the difference would be less than twice the standard error.

For example, for the civilian labor force, the chances are about 68 out of 100 that the September estimate of 66.9 million was within 300,000 of the figure that would have been obtained from a complete enumeration of the population, and it would be unlikely that a fluctuation of more than 200,000 from month to month could arise because of sampling variability.

The table is printed out here. I won't attempt to read it all. I call attention to the fact that there are 2 columns of standard errors, 1 for the standard error of the level of estimates, and another for the standard error of the month-to-month change in estimates, which is roughly two-thirds of the other; and separate figures for the civilian labor force, the total civilian employment, divided between agriculture and nonagricultural industries, and the unemployed.

(The table referred to is as follows:)

Item	Level of estimates in September 1955	Standard error of level of estimates	Standard error of month-to-month change in estimates
Civilian labor force	66,882,000	300,000	200,000
Total civilian employment	64,733,000	300,000	250,000
Employed in agriculture	7,875,000	300,000	160,000
Employed in nonagricultural industries	56,858,000	340,000	230,000
Unemployed	2,149,000	85,000	85,000

Mr. BURGESS. In addition to being a general indication of the degree of reliability of the statistics, sampling errors are intended as a guide to users of the data in interpreting the validity of the magnitude of the estimates and changes from one period to the next, differences in pattern among various groups in the population, and the like.

In its publications, the Bureau has attempted to point out particularly whether changes in the major employment status estimates from month to month or over the year are significant from a sampling standpoint, that is, whether the changes exceed a reasonable allowance for sampling variability.

Users have also been urged to evaluate the data in the light of these possible sampling errors. Unfortunately, in spite of these cautions, newspapers and many other users frequently disregard sampling errors and cite and interpret small changes and small differences as significant without due regard to the trend over a period of months. It is hoped that improved methods of presentation as well as more detail on sampling errors may eventually lead to a better understanding of the limitations of the data.

III. PLANNED IMPROVEMENTS

The most important items in the Census Bureau's program for improvement in its employment and unemployment statistics are described below:

EXPANSION OF SAMPLE

The major improvement planned for this fiscal year is an expansion of the survey sample to increase the reliability of existing data and to permit the publication of more information than is possible with the present 230-area sample. The Census Bureau requested $560,000 for increasing the sample size and for improvements in quality, in response to the representation of the Council of Economic Advisers, the Special Advisory Committee on Employment Statistics headed by Prof. Frederick F. Stephan, and many other groups, some of whom

testified at the July 1954 hearings of the Subcommittee on Economic Statistics of the Joint Committee on the Economic Report.

It is noted that members of the joint committee strongly supported improvements in this program in its report on the January 1955 Economic Report of the President. The funds eventually provided by the Congress for expanding and improving the program for the current population survey amounted to $450,000.

With the funds allocated for this fiscal year and the estimated amounts required to continue the expanded operation in the next fiscal year, it is feasible to expand the sample by about two-thirds: from 21,000 interviewed households up to 35,000 households and from 230 to 330 sample areas.

The present sample in 230 areas comprises some 3,500 small clusters of households in 453 counties and independent cities in 46 States. The expanded sample will consist of some 6,000 small clusters of households in 638 counties and independent cities, in all 48 States. Thus, the survey will be conducted each month in 1 out of every 5 counties in the United States. (A summary description of the sample design is presented in appendix B.)

Some of the gains from the enlarged sample are obvious and possible to predict; others will depend on experience with the actual operation of the survey. The reliability of the published key figures on the labor force, employment and unemployment for the Nation as a whole will, of course, be strengthened; the standard error of these statistics may be expected to be reduced by about 20 percent.

A significant amount of data for the 4 major regions (Northeast, North Central, South, and West) will be reliable enough for regular publication, and summary statistics, such as unemployment rates and labor force participation rates, will be available for most of the 9 geographic divisions used by the Census Bureau (New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific). It is also possible that some limited data can be provided for a few large States—New York, California, Pennsylvania, and perhaps a few others—on a quarterly or semiannual basis.

In addition 118 standard metropolitan areas are in the new sample. Although in nearly all cases, the number of households regularly interviewed will be too small to permit separate estimates for local areas, the established sample in the larger areas can be easily supplemented to provide an adequate basis for local estimates if funds become available.

For statistics for the United States as a whole, gains can be expected in the reliability of the detailed cross classifications, now available but published only as annual or monthly averages, or in the form of percentage distributions.

For example, data on the long-term unemployed and their characteristics will be somewhat more reliable since the inclusion of more areas and a large number of households increases the probability of covering a wider variety of special situations such as pockets of unemployment in stranded areas. It is also expected that statistics on the occupational distribution of the employed and unemployed, now limited to the dozen major groups, can be expanded to show somewhat greater occupational detail and more cross-classifications between occupa-

tion and other characteristics—age, color, duration of unemployment, hours worked, et cetera.

Another important gain will be the improvement in the reliability of the estimates of sampling error from the survey results themselves. Gains already achieved have been mentioned earlier.

Program for expansion: The Census Bureau, in drawing up plans for instituting the expanded sample, has been mindful of the difficulties that arose in the change from the 68-area to the 230-area sample, early in 1954. At that time, the field operations required to make ready the new sample areas and to recruit and train the new interviewers within a period of a few months were so heavy that the amount of supervision over the going operation was reduced.

In addition, some of the 68-area design interviewers became aware that the sample would shortly be discontinued in their areas. This was just at a time of developing unemployment when particular attention was needed to insure that concepts and definitions be interpreted as carefully as possible. These various circumstances apparently led to a reduction in the quality of enumeration in the old areas, and the differences in the estimates of unemployment from the old and the new samples were beyond what might have been expected from the sampling changes alone.

In the proposed expansion, the present 230-area sample is being maintained; areas are being added, and households are being added in many of the existing areas. Therefore, the differences between the 230- and 330-area estimates that arise because of expansion alone should be quite small. Moreover, strong measures are being taken to avoid a recurrence of the enumeration difficulties that accompanied the previous sample change.

The expanded parts of the sample will be integrated into the official statistics next spring. Training of new interviewers and practice enumerations of the expanded parts of the sample will be launched several months before the information is used in the published statistics. The need for adequate training and experience for new interviewers is easily understood. What is not as well known is that "seasoning" of the survey households is also an important consideration.

For reasons which are not yet fully understood, the information obtained from households in their first month in the survey tends to differ in some respects from that obtained from households which have been interviewed previously. Accordingly, steps are being taken to insure, insofar as possible, the proper proportions of new and previously interviewed households in the expanded parts of the sample by the time of the scheduled integration into the statistics. In the great majority of cases, integration will be achieved in the fourth month after training of new interviewers and practice enumerations have been instituted in a particular set of areas.

Training and other preparatory work for the expanded parts of the sample have been scheduled so as not to interfere with the necessary supervisory activities required for the going operation. The various systematic programs of refresher training, observation, and reinterviewing described earlier will continue at the normal rate in the present 230-area operation throughout the transition period, so that the quality of enumeration should be unaffected. Another important safeguard is that none of the present interviewers will be terminated solely because of the sample expansion. During the 1954 changeover,

the knowledge of some of the interviewers in the old 68-area design that their jobs would shortly expire probably resulted in some impairment of performance in their concluding months on the survey.

NEW DATA

1. Income and employment history: The Joint Committee on the Economic Report and the Council of Economic Advisers have repeatedly emphasized the need for information on the factors underlying low family incomes in a period of prosperity. Annual cross-section studies of the distribution of income among families and persons, as conducted by the Bureau of the Census, have provided estimates of the number and characteristics of low-income units but have gone only part way in revealing the possible causes of low incomes. It has never been possible to determine to what extent these are chronically low-income recipients (except for those who are elderly and may be expected to continue at a low level). As part of a joint survey with the Bureau of Labor Statistics, focused on examining employment and unemployment patterns over the year 1955, information will be obtained in January 1956 for correlation with the income data collected in March of 1956.

Questions will be asked to trace periods of employment, unemployment, illness and disability, and so forth, during the year. On the basis of these facts, it can be determined in what proportion of families unemployment or persistent ill health is the factor accounting for low incomes of persons in the labor force, or to what degree low incomes are due to substandard wages, in unskilled or marginal occupations, even where steady work is available.

The joint survey on labor force experience over the year should throw considerable light on the question of the identity of the unemployed in a period of prosperity, and the extent to which those persons who were jobless in 1955 were chronically out of work because of lack of skill, age, physical disabilities, and other factors.

This survey will also furnish hitherto unavailable data on job mobility during the course of a year and serve to initiate a series of annual measures of changes in the amount of mobility in the American labor force, which are of particular interest at the present time because of the accelerated development of pension plans and guaranteed annual wage plans.

2. Multiple employment: Plans are being made to undertake a special survey of persons holding more than one nonfarm job, or working in both agricultural and nonagricultural industries, in order to provide current data for reconciliation with establishment employment series from the Bureau of Labor Statistics and the Agricultural Marketing Service. Such a survey cannot be undertaken until after the completion of the transition to the enlarged sample, and may not be carried out until July 1956 or a little later.

RESEARCH PROGRAM

As already noted, it is believed that much of the difficulty encountered in the changeover to the 230-area sample in 1954 resulted from enumeration and response problems. Accuracy of enumeration is not improved by increasing the size of sample, but only by an improved

understanding of the way in which errors may occur in connection with the interviewing and response process and how better to control the possible sources of error. Considerable attention has been given to this problem in the past, but much more work is needed and is made possible by the increased appropriation this year. This work takes the form of an expanded program of research. The research program now under consideration may be summarized briefly under the following headings.

1. Concepts and measurement: Experimental work will be undertaken when the expansion of the sample has been completed to test various proposals for changes in concepts currently being considered by the Review of Concepts Subcommittee.[1] Attempts will be made to evaluate the validity of specific approaches, as well as their effect on the major labor-force categories at different times of the year.

2. Interviewing techniques: Some progress has been made in developing procedures for eliminating or preventing response errors in household surveys, but much more research is needed in this field. Various techniques will be tested, some of which involve a more detailed set of questions and a lengthened interview. In developing feasible procedures for the CPS the added accuracy that might be achieved by more elaborate, detailed procedures must be weighed against the added cost and a possible loss of speed in meeting the tight time schedule.

3. Research on methods of field control and supervision: Work will continue on the problems of training methods, quality control, and other forms of field supervision in order to insure the standard of operation of the new expanded survey.

4. Research on relationship with other series: Cooperative work with the Bureaus of Labor Statistics and Employment Security will be continued, leading toward a better understanding of the relationship between the current measures of employment and unemployment of the various agencies. Limited and experimental tests in this field have already been initiated.

I include appendixes that I have already referred to. Appendix A presents tables which are drawn from our existing survey; appendix B giving details of the design of the expanded sample for CPS; and the third, appendix C, on the description of the seasonal adjustment method used by the Bureau of the Census.

Mr. BOLLING. Thank you Mr. Burgess. The appendixes will be included.

[1] A subcommittee of the Budget Bureau Interagency Committee on Labor Supply, Unemployment, and Unemployment Statistics established in March 1954 to review concepts of the labor force, employment, and unemployment used in population surveys, establishment reporting, and administrative records.

(The appendixes referred to above are as follows:)

APPENDIX A

DETAILED TABLES ON LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

TABLE 1.—*Total labor force by sex, and total labor force participation rates by age and sex: Annual averages, 1940 and 1944–54, and quarterly averages, 1954–55*

[Persons 14 years of age and over]

Age and sex	Annual average											
	1940	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953 [1]	1954
TOTAL LABOR FORCE (In thousands)												
Both sexes	56,030	65,896	65,152	60,832	61,608	62,749	63,571	64,599	65,832	66,410	67,362	67,819
Male	41,870	46,517	45,874	43,976	44,692	45,150	45,523	45,919	46,524	46,851	47,694	47,848
Female	14,160	19,378	19,277	16,856	16,916	17,599	18,048	18,680	19,309	19,558	19,668	19,972
TOTAL LABOR FORCE RATES [2]												
Both sexes	55.9	63.1	61.8	57.2	57.3	57.8	58.0	58.3	58.8	58.7	58.5	58.4
Male	83.9	89.7	88.0	83.7	84.4	84.6	84.5	84.4	84.8	84.6	84.4	83.9
14 to 19 years	44.2	70.0	64.9	53.7	54.2	54.3	53.6	53.2	53.7	51.9	50.9	49.3
20 to 24 years	96.1	98.5	95.5	82.3	84.8	85.6	87.7	89.0	91.0	92.0	92.2	91.5
25 to 34 years	98.1	99.0	97.0	94.2	95.8	96.0	95.9	96.2	97.1	97.7	97.6	97.5
35 to 44 years	98.5	99.0	98.2	97.3	98.0	98.0	98.0	97.6	97.6	97.9	98.2	98.1
45 to 54 years	95.5	97.1	96.6	96.1	95.5	95.8	95.6	95.8	96.0	96.2	96.6	96.5
55 to 64 years	87.2	92.1	91.4	89.6	89.6	89.5	87.5	87.0	87.2	87.5	87.9	88.7
65 years and over	45.0	52.2	52.1	48.5	47.8	46.8	46.9	45.8	44.9	42.6	41.6	40.5
Female	28.2	36.8	36.2	31.3	31.0	31.9	32.4	33.1	33.8	33.9	33.6	33.7
14 to 19 years	23.3	42.0	40.0	32.3	31.6	32.5	32.5	31.5	32.1	31.5	30.5	29.8
20 to 24 years	49.5	55.0	54.1	46.3	44.9	45.3	45.0	46.1	46.6	44.8	44.5	45.3
25 to 34 years	35.2	39.0	38.9	32.9	32.0	33.2	33.5	34.0	35.4	35.5	34.1	34.5
35 to 44 years	28.8	40.5	39.8	36.2	36.3	36.9	38.1	39.1	39.8	40.5	41.3	41.3
45 to 54 years	24.3	35.8	35.2	31.5	32.7	35.0	35.9	38.0	39.7	40.1	40.4	41.2
55 to 64 years	18.7	25.4	26.5	23.6	24.3	24.3	25.3	27.0	27.6	28.7	29.1	30.1
65 years and over	7.4	9.8	9.6	8.4	8.1	9.1	9.6	9.7	8.9	9.1	10.0	9.3

See footnotes at end of table.

TABLE 1.—*Total labor force by sex, and total labor force participation rates by age and sex: Annal averages, 1940 and 1944–54, and quarterly averages, 1954–55*—Continued

[Persons 14 years of age and over]

Age and sex	Quarterly average						
	1954				1955		
	First	Second	Third	Fourth	First	Second	Third
TOTAL LABOR FORCE (In thousands)							
Both sexes	66,883	68,004	68,749	67,637	66,697	68,577	70,326
Male	47,384	48,027	48,639	47,339	47,064	48,079	48,906
Female	19,500	19,977	20,112	20,298	19,632	20,496	21,419
TOTAL LABOR FORCE RATES [2]							
Both sexes	57.7	58.6	59.1	58.0	57.0	58.5	59.8
Male	83.3	84.3	85.3	82.8	82.1	83.7	85.0
14 to 19 years	45.8	50.6	57.5	43.1	40.6	50.5	58.4
20 to 24 years	91.1	92.4	93.9	88.7	89.3	90.4	93.6
25 to 34 years	97.4	97.8	97.8	97.0	97.6	97.8	98.0
35 to 44 years	98.0	98.3	98.2	98.1	97.9	98.1	98.1
45 to 54 years	96.2	96.7	96.6	96.6	96.4	96.8	96.3
55 to 64 years	88.5	88.6	88.8	88.8	87.2	88.0	88.3
65 years and over	40.1	40.8	40.9	40.1	38.1	39.4	40.2
Female	33.1	33.8	33.9	34.1	32.9	34.3	35.7
14 to 19 years	27.7	29.7	34.1	27.7	23.8	27.9	35.9
20 to 24 years	42.6	44.7	46.4	47.3	44.7	44.8	46.2
25 to 34 years	35.4	35.1	33.6	33.8	34.0	35.1	35.1
35 to 44 years	40.9	40.8	40.9	42.5	40.2	41.1	41.9
45 to 54 years	40.5	41.3	40.5	42.3	41.8	43.0	44.7
55 to 64 years	28.7	30.6	29.6	31.3	30.7	32.6	33.2
65 years and over	8.8	9.1	9.5	9.9	10.1	10.6	10.1

[1] Revised.
[2] Total labor force as percentage of total noninstitutional population inage-sex group.

NOTE.—Because of changes in estimating procedure, introduced in January 1953, the 1952–53 labor force increase for total and males, as shown in the above table, is overstated by roughly one-half million. The trend in total employment over this period, as shown in table 4, would be similarly affected, but to a lesser degree. The labor force and employment estimates for females, and the labor force participation rates were not affected by the estimating changes. See The Monthly Report on the Labor Force: March 1953, Current Population Reports, series P–57, No. 129, Bureau of the Census, for an explanation of these procedural changes.

Source: Current Population Survey, Bureau of the Census.

TABLE 2.—*Labor force status of married women, by age and presence of children: 1940, 1944, and 1947–55*

Month and year	Total, married women	Married, husband living in household [1]						
		Total	Age of wife			Presence or absence of children		
			Under 35 years	35 to 64 years	65 years and over	Children under 6	Children 6 to 17 years, none under 6	No children under 18
NUMBER IN LABOR FORCE (In thousands)								
March 1940	5,040	4,200	2,110	2,030	60	(2)	(2)	(2)
April 1944	8,433	6,226	2,187	3,966	73	(2)	(2)	(2)
April 1947	7,545	6,676	2,637	3,964	75	(2)	(2)	(2)
April 1948	8,281	7,553	3,229	4,212	112	1,222	1,929	4,394
April 1949	8,739	7,959	3,267	4,586	106	1,285	2,130	4,544
March 1950	9,273	8,550	3,618	4,799	133	1,399	2,205	4,946
April 1951	10,182	9,086	3,682	5,262	142	1,670	2,400	5,016
April 1952	10,350	9,222	3,592	5,494	136	1,688	2,492	5,042
April 1953	10,908	9,763	3,663	5,947	153	1,884	2,749	5,130
April 1954	11,209	9,923	3,614	6,169	140	1,808	3,019	5,096
April 1955	11,839	10,423	3,714	6,517	192	2,012	3,183	5,227
PERCENT OF POPULATION IN LABOR FORCE								
March 1940	16.7	14.7	18.4	13.0	4.1	(2)	(2)	(2)
April 1944	25.6	21.7	21.5	23.6	4.4	(2)	(2)	(2)
April 1947	21.4	20.0	19.7	21.7	4.1	(2)	(2)	(2)
April 1948	23.1	22.0	22.9	23.0	6.1	10.7	26.0	28.4
April 1949	23.6	22.5	22.9	24.1	5.2	11.0	27.3	28.7
March 1950	24.8	23.8	25.0	24.8	6.4	11.9	28.3	30.3
April 1951	26.7	25.2	26.1	26.7	6.5	14.0	30.3	31.0
April 1952	26.8	25.3	25.3	27.4	5.9	13.9	31.1	30.9
April 1953	27.7	26.3	25.7	29.3	6.0	15.5	32.2	31.2
April 1954	28.1	26.6	25.9	29.4	5.4	14.9	33.2	31.6
April 1955	29.4	27.7	26.5	31.1	7.5	16.2	34.7	32.7

[1] Data on labor force participation of married women by age and presence of children are available only for those living in same households as their husbands; in the postwar period, the large majority fall in this group, but during World War II a considerable proportion were separated from their husbands because the latter were in the Armed Forces. In making direct comparisons between wartime and postwar data, therefore, the statistics for total married women rather than those for women living with their husbands should be used.

[2] Not available.

Source: Current Population Survey, Bureau of the Census.

TABLE 3.—*Labor force status by school enrollment, age, and sex: 1940 and 1944–54*

[Persons 14 to 19 years old]

Month and year	Number in labor force (in thousands)						Percent of population in labor force					
	Enrolled in school			Not enrolled in school			Enrolled in school			Not enrolled in school		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
April 1940	600	410	190	3,660	2,390	1,270	6.6	8.8	4.2	66.1	87.9	45.0
April 1944	2,722	1,883	839	3,508	1,617	1,891	34.0	49.5	19.9	79.4	95.5	69.4
October 1945	1,442	888	554	3,418	1,512	1,906	18.9	24.2	14.0	76.3	90.3	68.0
October 1946 [1]	1,295	841	454	3,234	1,603	1,631	[2] 16.6	[2] 21.5	[2] 11.7	[2] 67.3	[2] 78.2	[2] 59.2
October 1947 [1]	1,330	865	465	3,325	1,829	1,496	[2] 17.2	[2] 21.9	[2] 12.3	[2] 68.1	[2] 83.8	[2] 55.3
October 1948	1,566	1,023	543	3,390	1,928	1,462	19.7	24.8	14.1	73.8	93.4	57.8
October 1949	1,547	938	608	3,300	1,839	1,461	19.8	23.2	16.1	72.4	91.3	57.4
October 1950	2,069	1,309	758	3,109	1,750	1,359	25.3	30.8	19.2	73.5	92.9	57.9
October 1951	1,966	1,184	782	2,850	1,570	1,280	24.0	28.5	19.3	71.3	90.1	56.8
October 1952	1,726	1,138	588	2,836	1,526	1,310	20.3	26.0	14.2	72.4	91.2	58.4
October 1953	1,631	1,061	570	2,788	1,519	1,269	[2] 18.7	[2] 23.7	[2] 13.5	[2] 72.6	[2] 92.2	[2] 57.9
October 1954	1,949	1,231	718	2,576	1,362	1,214	21.5	26.0	16.6	67.8	86.5	54.6

[1] Includes employed persons only; data on labor force not available in this detail for these 2 dates but number of unemployed workers is relatively small for this age group.
[2] Employed as percent of population.

Source: Current Population Survey, Bureau of the Census.

TABLE 4.—*Total, agricultural, and nonagricultural employment, by sex, for the United States: Annual averages, 1948–54, and quarterly averages, 1954–55*

[Thousands of persons 14 years of age and over]

Year and type of average	Total civilian employment			Agricultural employment			Nonagricultural employment		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
ANNUAL AVERAGE									
1948	59,378	42,428	16,950	7,973	6,633	1,340	51,405	35,795	15,610
1949	58,710	41,660	17,049	8,026	6,638	1,388	50,684	35,023	15,661
1950	59,957	42,287	17,670	7,507	6,280	1,227	52,450	36,007	16,443
1951	61,005	42,490	18,515	7,054	5,797	1,257	53,951	36,693	17,258
1952	61,293	42,391	18,902	6,805	5,635	1,170	54,488	36,756	17,732
1953 [1]	62,213	43,125	19,088	6,562	5,502	1,060	55,651	37,623	18,028
1954	61,238	42,377	18,861	6,504	5,436	1,068	54,733	36,940	17,794
QUARTERLY AVERAGE									
1954: 1st quarter	59,968	41,620	18,349	5,621	4,980	641	54,348	36,640	17,708
2d quarter	61,272	42,463	18,809	6,842	5,649	1,193	54,430	36,814	17,616
3d quarter	62,190	43,227	18,963	7,314	5,879	1,435	54,875	37,348	17,528
4th quarter	61,250	42,197	19,324	6,239	5,236	1,003	55,281	36,960	18,321
1955: 1st quarter	60,188	41,526	18,662	5,358	4,799	559	54,831	36,728	18,103
2d quarter	62,804	43,231	19,573	6,954	5,630	1,323	55,849	37,600	18,251
3d quarter	65,072	44,575	20,496	7,705	6,009	1,696	57,367	38,567	18,800

[1] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 5.—*Persons employed in agriculture and in nonagricultural industries, by class of worker: Annual averages, 1948–54, and quarterly averages, 1954–55*

[Thousands of persons 14 years of age and over]

Year and type of average	Agriculture				Nonagricultural industries			
	Total	Wage and salary workers	Self-employed workers	Unpaid family workers	Total	Wage and salary workers	Self-employed workers	Unpaid family workers
ANNUAL AVERAGE								
1948	7,973	1,746	4,671	1,556	51,405	44,866	6,139	401
1949	8,026	1,845	4,618	1,563	50,684	44,080	6,208	396
1950	7,507	1,733	4,346	1,427	52,450	45,977	6,069	404
1951	7,054	1,647	4,022	1,386	53,951	47,682	5,869	400
1952	6,805	1,526	3,936	1,342	54,488	48,387	5,670	431
1953 [1]	6,562	1,467	3,821	1,273	55,651	49,434	5,794	423
1954	6,504	1,452	3,821	1,230	54,733	48,409	5,880	445
QUARTERLY AVERAGE								
1954: 1st quarter	5,621	1,199	3,660	762	54,348	48,178	5,789	382
2d quarter	6,842	1,388	4,016	1,438	54,430	48,213	5,754	464
3d quarter	7,314	1,730	3,935	1,647	54,875	48,470	5,948	458
4th quarter	6,239	1,492	3,674	1,074	55,281	48,774	6,031	477
1955: 1st quarter	5,358	1,122	3,530	706	54,831	48,346	5,988	497
2d quarter	6,954	1,561	3,888	1,505	55,849	49,511	5,815	523
3d quarter	7,705	2,185	3,845	1,675	57,367	50,969	5,852	546

[1] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 6.—*Employed persons with a job but not at work, by reason for not working: Annual averages, 1948–54, and quarterly averages, 1954–55*

[Thousands of persons 14 years of age and over]

Year and type of average	Total	Reason for not working						
		Temporary layoff [1]	New job or business [2]	Bad weather	Industrial dispute	Vacation	Illness	All other
ANNUAL AVERAGE								
1948	2,751	141	121	197	97	1,044	844	308
1949	2,530	185	101	110	79	1,044	719	291
1950	2,648	92	116	151	85	1,137	718	349
1951	2,680	117	103	111	57	1,073	782	436
1952	2,814	142	117	68	164	1,130	775	418
1953 [3]	2,798	167	101	96	73	1,171	827	362
1954	3,036	221	127	73	53	1,361	776	425
QUARTERLY AVERAGE								
1954: 1st quarter	2,289	293	93	144	45	297	927	489
2d quarter	2,463	246	169	55	44	725	841	382
3d quarter	5,580	213	152	21	82	3,980	675	458
4th quarter	1,815	131	94	73	42	443	661	371
1955: 1st quarter	2,111	157	76	195	20	284	896	482
2d quarter	2,321	116	146	87	81	819	726	346
3d quarter	5,203	149	150	65	73	3,474	800	491

[1] Includes persons who had been temporarily laid off from their jobs with definite instructions to return to work within 30 days of layoff.
[2] Includes persons who had a new job or business to which they were scheduled to report within the following 30 days.
[3] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 7.—*Persons at work in agriculture and in nonagricultural industries, by average number of hours worked during the survey week: Annual averages, 1948–54, and quarterly averages, 1954–55*

Year and type of average	Average hours worked [1]			Year and type of average	Average hours worked [1]		
	All industries	Agriculture	Nonagricultural industries		All industries	Agriculture	Nonagricultural industries
ANNUAL AVERAGE				QUARTERLY AVERAGE			
1948 [2]	42.8	50.3	41.6	1954: 1st quarter	41.1	45.5	40.6
1949 [2]	42.1	49.4	40.9	2d quarter	41.8	50.4	40.7
1950 [2]	41.7	48.7	40.7	3d quarter	39.5	50.1	38.0
1951 [2]	42.2	49.2	41.3	4th quarter	41.1	46.8	40.5
1952	42.4	48.7	41.6	1955: 1st quarter	41.0	44.7	40.7
1953 [4]	41.9	49.3	41.1	2d quarter	41.6	48.7	40.7
1954 [2]	40.9	48.4	40.0	3d quarter	42.6	50.3	41.5

[1] The average is an arithmetic mean computed from monthly distributions of single hours worked. Persons with a job but not at work during the survey week are excluded from the computations.
[2] Survey week in July, September, and November contained legal holiday.
[3] Survey week in September contained legal holiday.
[4] Survey week in September and November contained legal holiday.

Source: Current Population Survey, Bureau of the Census.

TABLE 8.—*Hours worked during survey week by wage and salary workers in nonagricultural industries, by major industry group: Annual averages, 1948–54, and quarterly averages, 1954 and 1955*

[Percent distribution]

Year and type of average	Nonagricultural industries, total [1]				Construction				Manufacturing			
	Total	1 to 34 hours	35 to 40 hours	41 or more	Total	1 to 34 hours	35 to 40 hours	41 or more	Total	1 to 34 hours	35 to 40 hours	41 or more
ANNUAL AVERAGE												
1948 [2]	100.0	17.3	46.4	36.3	100.0	22.4	46.7	30.9	100.0	15.3	59.7	25.1
1949 [2]	100.0	20.6	47.0	32.5	100.0	25.9	47.9	26.3	100.0	20.1	60.8	19.1
1950 [3]	100.0	20.4	48.2	31.3	100.0	28.0	48.1	23.9	100.0	18.5	59.2	22.4
1951 [3]	100.0	17.0	48.7	34.3	100.0	20.5	50.3	29.2	100.0	13.8	58.2	28.0
1952	100.0	13.6	52.3	34.1	100.0	15.0	52.0	33.0	100.0	9.5	63.7	26.8
1953 [4]	100.0	16.0	53.6	30.5	100.0	18.8	53.2	28.0	100.0	11.7	64.6	23.7
1954 [2]	100.0	23.4	50.4	26.3	100.0	27.7	50.9	21.4	100.0	21.5	60.9	17.6
QUARTERLY AVERAGE												
1954: 1st quarter	100.0	16.5	55.6	27.9	100.0	19.6	57.7	22.7	100.0	12.6	68.4	18.9
2d quarter	100.0	16.2	56.2	27.6	100.0	17.7	58.5	23.7	100.0	12.9	68.7	18.4
3d quarter	100.0	42.7	36.3	21.1	100.0	47.6	35.4	17.1	100.0	49.0	38.6	12.4
4th quarter	100.0	19.4	52.4	28.2	100.0	23.2	54.2	22.7	100.0	14.1	65.7	20.2
1955: 1st quarter	100.0	15.5	56.3	28.2	100.0	23.2	56.8	20.1	100.0	10.2	68.9	20.8
2d quarter	100.0	15.8	55.3	28.9	100.0	18.5	59.0	22.4	100.0	10.8	66.4	22.8
3d quarter	100.0	13.5	55.0	31.5	100.0	15.3	57.4	27.3	100.0	8.8	65.4	25.8

	Transportation, communication, and other public utilities				Wholesale and retail trade				Service industries			
ANNUAL AVERAGE												
1948 [2]	100.0	8.8	40.5	50.7	100.0	17.3	32.1	50.6	100.0	24.5	37.6	37.9
1949 [2]	100.0	10.8	46.3	42.9	100.0	18.1	32.4	49.6	100.0	26.3	38.0	35.7
1950 [3]	100.0	12.7	56.4	30.9	100.0	18.6	33.9	47.4	100.0	26.9	38.7	34.4
1951 [3]	100.0	9.3	57.5	33.1	100.0	17.1	33.5	49.4	100.0	25.5	39.9	34.5
1952	100.0	6.2	61.3	32.4	100.0	15.9	34.2	49.9	100.0	22.1	43.0	34.9
1953 [4]	100.0	8.7	62.3	29.1	100.0	17.7	36.0	46.3	100.0	23.6	44.6	31.7
1954 [2]	100.0	15.7	60.4	24.0	100.0	22.4	36.6	41.0	100.0	28.8	41.1	30.1
QUARTERLY AVERAGE												
1954: 1st quarter	100.0	8.3	67.5	24.2	100.0	19.1	38.1	42.8	100.0	23.7	43.5	32.8
2d quarter	100.0	7.7	66.5	25.7	100.0	18.7	38.2	43.1	100.0	23.1	45.6	31.2
3d quarter	100.0	35.2	43.7	21.1	100.0	32.6	33.1	34.2	100.0	43.3	32.3	24.4
4th quarter	100.0	11.9	63.4	24.7	100.0	19.6	36.9	43.5	100.0	26.8	42.1	31.1
1955: 1st quarter	100.0	8.6	67.7	23.8	100.0	18.5	39.2	42.3	100.0	22.4	45.7	32.0
2d quarter	100.0	8.2	66.0	25.8	100.0	18.1	39.6	42.3	100.0	24.4	44.7	30.9
3d quarter	100.0	5.8	65.4	28.8	100.0	15.6	38.6	45.8	100.0	22.5	46.1	31.5

[1] Includes forestry and fisheries, mining, and public administration, not shown separately.
[2] Survey week in July, September, and November contained legal holidays.
[3] Survey week in September contained legal holiday.
[4] Survey week in September and November contained legal holidays.

Source: Current Population Survey, Bureau of the Census.

TABLE 9.—*Persons at work in agriculture and in nonagricultural industries who worked 1 to 34 hours during survey week, by usual status and reason working part time: Selected months, 1949–55*

[Percent distribution]

Month and year	At work in agriculture					At work in nonagricultural industries				
	Total, 1 to 34 hours	Usually work full time		Usually work part time [1]		Total, 1 to 34 hours	Usually work full time		Usually work part time [1]	
		Worked part time for economic reasons	Worked part time for other reasons	Worked part time for economic reasons	Worked part time for other reasons		Worked part time for economic reasons	Worked part time for other reasons	Worked part time for economic reasons	Worked part time for other reasons
May 1949	100.0	2.4	11.1	5.9	80.6	100.0	22.3	12.2	11.5	54.0
August 1949	100.0	18.1	14.8	8.3	58.7	100.0	17.5	22.6	14.1	45.7
November 1949 [2]	100.0	9.5	25.8	6.8	57.9	100.0	9.2	53.3	6.5	31.0
February 1950	100.0	6.4	41.1	5.0	47.4	100.0	13.5	21.4	12.4	52.8
May 1950	100.0	2.9	26.6	5.4	65.1	100.0	14.5	18.4	13.6	53.4
August 1950	100.0	18.6	13.0	7.4	60.9	100.0	14.9	17.9	16.0	51.1
November 1950 [2]	100.0	6.9	25.4	3.5	64.3	100.0	9.8	31.5	8.6	50.1
February 1951	100.0	5.0	49.3	2.3	43.3	100.0	12.9	29.1	10.0	48.1
May 1951	100.0	3.9	12.9	8.1	75.0	100.0	13.1	17.9	9.9	59.1
May 1952	100.0	3.9	8.1	4.6	83.3	100.0	13.9	18.1	9.3	58.6
November 1952 [2]	100.0	8.8	14.2	5.7	71.4	100.0	8.9	29.1	6.2	55.8
December 1953	100.0	21.0	24.9	3.8	50.4	100.0	18.1	17.8	6.7	57.4
March 1954	100.0	11.8	24.8	6.0	57.5	100.0	21.0	14.9	9.7	54.4
May 1954	100.0	5.6	28.1	4.8	61.5	100.0	18.5	17.0	10.4	54.0
August 1954	100.0	26.6	17.6	8.2	47.6	100.0	19.4	19.1	14.2	47.4
November 1954 [2]	100.0	15.9	13.9	10.0	60.2	100.0	9.5	48.9	6.9	34.7
February 1955	100.0	13.9	40.7	6.7	38.7	100.0	14.0	23.3	9.9	52.8
May 1955	100.0	5.5	22.1	8.6	63.7	100.0	11.6	18.9	10.9	58.7
June 1955	100.0	3.9	31.8	10.6	53.8	100.0	13.5	23.4	12.3	50.7
July 1955	100.0	7.8	24.3	11.0	56.9	100.0	12.6	20.6	16.5	50.3
August 1955	100.0	12.5	22.6	11.2	53.6	100.0	11.9	24.0	17.5	46.6
September 1955	100.0	7.5	18.1	3.8	70.7	100.0	11.0	20.5	11.6	56.8

[1] Prior to May 1955, usual part-time workers were classified as follows: (1) Those who preferred and could accept full-time work, and (2) those who did not prefer or could not accept full-time work. Experimental studies have indicated that the size and composition of these groups are reasonably comparable to the current classification into "economic reasons" and "other reasons," respectively.

[2] Survey week contained legal holiday.

NOTE.—"Economic reasons" include slack work, material shortages, repairs to plant or equipment, start or termination of job during the week, and inability to find full-time work. "Other reasons" include labor dispute, bad weather, own illness, vacation, demands of home housework, school, etc., no desire for full-time work, worked full time only during peak season, legal or religious holiday, and other such reasons.

Source: Current Population Survey, Bureau of the Census.

TABLE 10.—*Unemployed persons and unemployment rates, by sex: Annual and quarterly averages, 1948–54; quarterly and monthly data, 1954–55*

[Thousands of persons 14 years of age and over]

Year and type of average	Both sexes	Male	Female		Unemployment rate [1]		
			Number	Percent of total	Both sexes	Male	Female
1948: Annual average	2,064	1,430	633	30.7	3.4	3.3	3.6
1st quarter	2,381	1,743	639	26.8	4.0	4.1	3.8
2d quarter	2,046	1,394	652	31.9	3.3	3.2	3.7
3d quarter	2,022	1,342	681	33.7	3.2	3.0	3.7
4th quarter	1,805	1,243	561	31.1	2.9	2.8	3.1
1949: Annual average	3,395	2,415	981	28.9	5.5	5.5	5.4
1st quarter	3,017	2,287	730	24.2	5.0	5.3	4.3
3d quarter	3,361	2,390	971	28.9	5.4	5.4	5.4
3d quarter	3,712	2,532	1,179	31.8	5.9	5.6	6.4
4th quarter	3,491	2,450	1,041	29.8	5.6	5.6	5.6
1950: Annual average	3,142	2,155	987	31.4	5.0	4.9	5.3
1st quarter	4,429	3,230	1,199	27.1	7.2	7.4	6.7
2d quarter	3,319	2,319	999	30.1	5.2	5.2	5.4
3d quarter	2,685	1,757	927	34.5	4.2	3.9	4.9
4th quarter	2,136	1,313	823	38.5	3.4	3.0	4.3
1951: Annual average	1,879	1,123	756	40.2	3.0	2.6	3.9
1st quarter	2,352	1,510	842	35.8	3.8	3.5	4.5
2d quarter	1,778	1,048	729	41.0	2.8	2.4	3.8
3d quarter	1,680	965	715	42.6	2.6	2.2	3.6
4th quarter	1,706	967	739	43.3	2.7	2.2	3.7
1952: Annual average	1,673	1,062	611	36.5	2.7	2.4	3.1
1st quarter	1,981	1,328	653	33.0	3.2	3.1	3.5
2d quarter	1,677	1,053	625	37.3	2.7	2.4	3.2
3d quarter	1,661	1,037	624	37.6	2.6	2.3	3.2
4th quarter	1,371	831	540	39.4	2.2	1.9	2.7
1953: Annual average [2]	1,602	1,069	533	33.3	2.5	2.4	2.7
1st quarter	1,784	1,237	547	30.7	2.8	2.8	2.8
2d quarter	1,483	1,009	475	32.0	2.3	2.3	2.4
3d quarter	1,370	882	488	35.6	2.1	2.0	2.5
4th quarter [2]	1,771	1,150	621	35.1	2.8	2.6	3.1
1954: Annual average	3,230	2,161	1,071	33.2	5.0	4.9	5.4
1st quarter	3,494	2,385	1,109	31.7	5.5	5.4	5.7
January	3,087	2,061	1,026	33.2	4.9	4.7	5.4
February	3,670	2,542	1,128	30.7	5.8	5.8	5.8
March	3,724	2,552	1,172	31.5	5.8	5.8	5.9
2d quarter	3,372	2,245	1,127	33.4	5.2	5.0	5.7
April	3,465	2,343	1,121	32.4	5.4	5.3	5.7
May	3,305	2,197	1,108	33.5	5.1	4.9	5.6
June	3,347	2,194	1,513	34.4	5.1	4.8	5.7
3d quarter	3,231	2,124	1,107	34.3	4.9	4.7	5.5
July	3,347	2,226	1,121	33.5	5.1	4.9	5.7
August	3,245	2,152	1,093	33.7	5.0	4.7	5.5
September	3,100	1,993	1,106	35.7	4.8	4.5	5.4
4th quarter	2,824	1,889	935	33.1	4.4	4.3	4.6
October	2,741	1,796	946	34.5	4.2	4.1	4.6
November	2,893	1,875	1,018	35.2	4.5	4.2	5.0
December	2,838	1,996	841	29.6	4.5	4.6	4.3
1955: 1st quarter	3,302	2,370	932	28.2	5.2	5.4	4.8
January	3,347	2,395	952	28.4	5.3	5.5	4.9
February	3,383	2,431	952	28.1	5.3	5.6	4.9
March	3,176	2,283	893	28.1	5.0	5.2	4.6
2d quarter	2,710	1,823	887	32.7	4.1	4.0	4.3
April	2,962	2,093	869	29.3	4.6	4.7	4.3
May	2,489	1,624	865	34.8	3.8	3.6	4.2
June	2,679	1,753	926	34.6	4.0	3.8	4.5
3d quarter	2,286	1,397	889	38.9	3.4	3.0	4.2
July	2,471	1,603	868	35.1	3.7	3.5	4.1
August	2,237	1,387	850	38.0	3.3	3.0	4.0
September	2,149	1,201	948	44.1	3.2	2.7	4.4

[1] Unemployed as percent of civilian labor force.
[2] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 11.—*Unemployment rates by age and sex: Annual and quarterly averages, 1948–54; quarterly and monthly data, 1954–55*

[The unemployment rate represents the proportion of all civilian workers in a given group who were unemployed]

Year and type of average	Both sexes, 14 years, old and over	Male						Female					
		Total	14 to 19 years	20 to 24 years	25 to 44 years	45 to 64 years	65 and over	Total	14 to 19 years	20 to 24 years	25 to 44 years	45 to 64 years	65 and over
1948: Annual average	3.4	3.3	8.3	6.3	2.3	2.5	3.0	3.6	7.3	4.2	3.1	2.6	1.9
1st quarter	4.0	4.1	10.8	8.7	2.9	3.0	3.7	3.8	7.2	4.5	3.4	3.0	2.3
2d quarter	3.3	3.2	8.3	6.7	2.2	2.2	2.7	3.7	9.2	4.1	2.9	2.5	1.1
3d quarter	3.2	3.0	7.7	5.0	2.1	2.3	2.5	3.7	7.6	4.3	3.2	2.4	2.0
4th quarter	2.9	2.8	6.5	4.8	2.0	2.5	3.1	3.1	5.2	4.0	2.9	2.3	2.8
1949: Annual average	5.5	5.5	12.0	9.8	4.3	4.4	4.8	5.4	11.1	6.7	4.8	3.6	3.6
1st quarter	5.0	5.3	11.3	9.6	4.1	4.4	5.3	4.3	9.0	5.2	3.7	3.1	2.0
2d quarter	5.4	5.4	13.3	9.8	4.1	4.1	5.2	5.4	12.1	6.2	4.8	3.5	2.8
3d quarter	5.9	5.6	11.5	10.6	4.4	4.3	4.7	6.4	12.7	7.9	5.5	4.1	4.9
4th quarter	5.6	5.6	11.9	9.2	4.7	4.6	4.3	5.6	10.1	7.3	5.1	3.9	4.3
1950: Annual average	5.0	4.9	10.8	7.7	3.7	4.2	4.6	5.3	10.3	6.3	4.7	4.1	3.1
1st quarter	7.2	7.4	16.2	12.5	5.8	6.5	6.1	6.7	11.8	8.3	6.1	5.6	3.6
2d quarter	5.2	5.2	12.6	7.8	3.9	4.6	4.5	5.4	11.5	6.7	4.6	3.9	3.0
3d quarter	4.2	3.9	8.6	6.5	2.9	3.1	3.8	4.9	10.6	5.8	4.2	3.5	2.5
4th quarter	3.4	3.0	6.8	4.0	2.3	2.7	3.8	4.3	7.6	4.5	3.9	3.6	3.2
1951: Annual average	3.0	2.6	7.0	3.5	1.9	2.3	3.3	3.9	7.4	3.8	3.7	3.2	2.5
1st quarter	3.8	3.5	8.5	4.4	2.7	3.2	5.6	4.5	7.6	4.6	4.5	3.7	2.8
2d quarter	2.8	2.4	7.6	3.3	1.5	2.2	3.1	3.8	8.2	3.4	3.5	3.0	2.5
3d quarter	2.6	2.2	5.8	2.8	1.6	1.9	2.0	3.6	7.6	3.9	3.2	2.8	1.3
4th quarter	2.7	2.2	6.2	3.4	1.7	1.9	2.7	3.7	6.3	3.3	3.6	3.3	3.2
1952: Annual average	2.7	2.4	7.6	4.0	1.8	2.0	2.7	3.1	7.0	3.9	2.8	2.0	1.9
1st quarter	3.2	3.1	9.4	4.4	2.3	2.7	3.2	3.5	6.7	4.7	3.3	2.3	2.1
2d quarter	2.7	2.4	8.4	3.8	1.6	1.9	2.9	3.2	8.1	3.9	2.7	2.0	2.3
3d quarter	2.6	2.3	6.9	4.2	1.7	1.7	2.5	3.2	7.3	3.6	2.8	2.0	2.2
4th quarter	2.2	1.9	6.1	3.6	1.4	1.5	2.0	2.7	5.8	3.3	2.6	1.8	1.0
1953: Annual average [1]	2.5	2.4	6.8	4.3	1.8	2.1	2.0	2.7	6.0	3.7	2.4	1.9	1.3
1st quarter	2.8	2.8	7.0	4.8	2.1	2.8	3.0	2.8	5.5	3.5	2.7	2.1	1.6
2d quarter	2.3	2.3	6.8	3.9	1.8	1.9	1.6	2.4	6.7	3.1	1.9	1.5	1.3
3d quarter	2.1	2.0	5.7	3.0	1.4	1.7	1.4	2.5	5.1	3.9	2.1	1.6	1.0
4th quarter [1]	2.8	2.6	7.8	5.6	1.9	2.2	2.1	3.1	7.0	4.1	2.8	2.2	1.6
1954: Annual average	5.0	4.9	11.2	9.8	4.0	3.9	4.2	5.4	10.0	6.6	5.1	4.0	2.9
1st quarter	5.5	5.4	12.4	11.7	4.4	4.5	4.4	5.7	10.1	7.6	5.3	4.5	3.3
January	4.9	4.7	11.0	10.2	3.6	4.1	4.1	5.4	10.5	7.5	4.9	4.0	3.0
February	5.8	5.8	13.5	12.2	4.7	4.9	4.2	5.8	10.5	8.2	5.5	4.1	2.6
March	5.8	5.8	12.6	12.8	4.9	4.6	4.9	5.9	9.3	7.1	5.5	5.2	4.2
2d quarter	5.2	5.0	11.5	9.8	4.2	4.1	4.0	5.7	11.9	7.0	5.1	4.4	2.6
April	5.4	5.3	10.7	9.9	4.5	4.6	4.9	5.7	10.5	8.2	4.8	4.9	2.8
May	5.1	4.9	11.6	9.6	4.3	3.9	3.7	5.6	11.4	8.3	5.2	4.3	3.2
June	5.1	4.8	12.1	9.8	3.8	3.8	3.4	5.7	13.4	6.4	5.1	3.9	1.9
3d quarter	4.9	4.7	10.6	8.6	4.0	3.5	3.9	5.5	10.7	6.3	5.5	3.9	2.0
July	5.1	4.9	11.6	8.9	4.0	3.6	4.2	5.7	12.1	6.2	5.1	4.1	1.1
August	5.0	4.7	9.8	8.3	4.1	3.5	4.5	5.5	9.8	5.5	5.8	3.8	2.6
September	4.8	4.5	10.1	8.7	4.0	3.5	3.0	5.4	10.0	7.1	5.6	3.2	2.3
4th quarter	4.4	4.3	10.0	9.2	3.5	3.6	4.2	4.6	7.9	5.4	4.7	3.5	2.2
October	4.2	4.1	8.0	8.0	3.6	3.2	3.9	4.6	8.8	5.3	4.8	3.0	2.0
November	4.5	4.2	10.1	9.3	3.3	3.5	4.6	5.0	7.1	6.6	4.9	4.0	2.8
December	4.5	4.6	12.0	10.2	3.5	3.9	4.0	4.3	7.8	4.3	4.3	3.5	2.0
1955: 1st quarter	5.2	5.4	12.4	9.6	4.6	4.6	5.1	4.8	8.4	6.1	4.6	3.7	3.3
January	5.3	5.5	13.4	10.7	4.4	4.6	5.9	4.9	7.7	6.1	4.6	4.3	3.1
February	5.3	5.6	12.8	9.4	4.8	4.9	4.7	4.9	8.8	6.7	4.7	3.6	3.4
March	5.0	5.2	11.1	8.9	4.6	4.4	4.6	4.6	8.8	5.2	4.7	3.2	3.2
2d quarter	4.1	4.0	10.4	7.6	3.0	3.6	3.1	4.3	11.0	5.1	4.0	3.0	1.7
April	4.6	4.7	8.6	8.3	4.0	4.5	3.5	4.3	8.8	4.7	4.5	3.1	1.6
May	3.8	3.6	8.7	7.1	2.8	3.3	3.1	4.2	10.9	4.9	3.9	3.0	1.4
June	4.0	3.8	12.9	7.5	2.3	3.1	2.6	4.5	12.5	5.6	3.6	2.8	2.0
3d quarter	3.4	3.0	8.9	6.1	2.0	2.5	2.7	4.2	8.4	5.1	3.8	3.1	1.3
July	3.7	3.5	10.3	8.1	2.1	2.7	2.2	4.1	9.2	3.8	3.7	3.2	1.7
August	3.3	3.0	8.2	5.5	2.0	2.6	2.7	4.0	8.1	4.4	3.7	3.0	1.1
September	3.2	2.7	7.9	4.5	2.0	2.1	3.1	4.4	7.9	6.9	4.0	3.3	1.5

[1] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 12.—*Unemployment rates by marital status and sex: March 1940 and 1950, and April 1948–49 and 1951–55*

[The unemployment rate represents the proportion of all civilian workers in a given group who were unemployed]

Month and year	Male					Female				
	Total	Married, spouse present	Married, spouse absent	Widowed or divorced	Never married	Total	Married, spouse present	Married, spouse absent	Widowed or divorced	Never married
March 1940	15.9	12.0	21.2	19.9	23.9	13.9	7.1	19.0	16.3	16.7
April 1948	3.6	2.3	9.2	3.6	7.7	3.7	2.4	8.2	4.6	4.2
April 1949	5.0	3.4	12.4	7.4	9.6	4.7	4.0	11.2	4.2	5.1
March 1950	6.8	4.6	8.0	13.7	13.4	6.3	6.0	7.7	7.0	6.2
April 1951	2.3	1.5	4.8	4.2	5.3	3.8	3.7	5.3	3.9	3.7
April 1952	2.4	1.4	5.5	5.5	5.8	3.0	2.9	4.4	2.7	3.0
April 1953	2.5	1.7	9.7	2.4	5.0	2.5	2.4	3.5	2.3	2.5
April 1954	5.3	4.0	11.5	9.6	8.9	5.7	5.4	8.6	5.2	5.9
April 1955	4.7	3.5	9.2	9.0	8.0	4.3	3.9	6.4	4.8	4.4

Source: Current Population Survey, Bureau of the Census.

TABLE 13.—*Unemployment rates by color and sex: Annual and quarterly averages, 1948–54; quarterly and monthly data, 1954–55*

[The unemployment rate represents the proportion of all civilian workers in a given group who were unemployed]

Year and type of average	White			Nonwhite		
	Both sexes	Male	Female	Both sexes	Male	Female
1948: Annual average	3.2	3.1	3.4	5.2	5.1	5.2
1st quarter	3.8	3.9	3.5	5.9	5.9	6.0
2d quarter	3.1	3.0	3.5	5.3	5.2	5.3
3d quarter	3.0	2.8	3.5	5.3	5.1	5.6
3th quarter	2.8	2.7	3.0	4.4	4.4	4.2
1949: Annual average	5.2	5.2	5.2	8.2	8.8	7.2
1st quarter	4.8	5.0	4.1	7.0	7.8	5.7
2d quarter	5.1	5.1	5.2	7.9	8.5	7.0
3d quarter	5.5	5.3	6.1	8.9	9.3	8.1
4th quarter	5.2	5.2	5.3	9.0	9.6	7.9
1950: Annual average	4.6	4.5	4.9	8.5	8.9	7.8
1st quarter	6.7	6.8	6.2	12.2	13.2	10.6
2d quarter	4.9	4.9	5.0	8.0	8.4	7.4
3d quarter	3.8	3.5	4.6	7.9	8.3	7.1
4th quarter	3.1	2.7	3.9	6.1	5.8	6.6
1951: Annual average	2.8	2.4	3.7	4.8	4.4	5.4
1st quarter	3.5	3.2	4.2	6.9	6.8	7.1
2d quarter	2.7	2.3	3.7	4.0	3.5	4.9
3d quarter	2.4	2.0	3.4	4.4	3.8	5.4
4th quarter	2.6	2.2	3.7	4.0	3.7	4.3
1952: Annual average	2.4	2.2	2.9	4.6	4.5	4.8
1st quarter	2.9	2.8	3.1	6.0	5.9	6.1
2d quarter	2.5	2.3	3.0	4.2	3.9	4.8
3d quarter	2.3	2.1	2.9	4.9	4.8	5.0
4th quarter	2.0	1.8	2.6	3.5	3.5	3.5
1953: Annual average [1]	2.3	2.2	2.6	4.1	4.4	3.7
1st quarter	2.6	2.6	2.6	5.0	5.2	4.6
2d quarter	2.1	2.1	2.3	4.4	4.9	3.5
3d quarter	2.0	1.8	2.3	3.0	3.1	2.9
4th quarter [1]	2.6	2.4	3.0	4.3	4.6	3.9
1954: Annual average	4.5	4.4	4.9	8.9	9.2	8.2
1st quarter	5.0	4.9	5.3	9.5	10.3	8.3
January	4.6	4.3	5.1	7.9	8.2	7.3
February	5.2	5.1	5.5	10.2	11.5	8.0
March	5.3	5.2	5.4	10.5	11.1	9.6
2d quarter	4.8	4.6	5.3	8.6	9.2	7.8
April	5.1	5.0	5.4	8.1	8.3	7.9
May	4.7	4.5	5.2	8.8	9.4	7.9
June	4.6	4.3	5.4	8.9	9.8	7.5
3d quarter	4.5	4.2	5.0	8.7	8.9	8.5
July	4.6	4.3	5.3	9.4	10.4	7.7
August	4.5	4.3	4.9	9.1	8.9	9.3
September	4.4	4.1	4.9	7.7	7.3	8.4
4th quarter	3.9	3.8	4.0	8.6	8.7	8.4
October	3.8	3.7	4.1	7.7	7.8	7.6
November	3.9	3.7	4.4	9.0	9.1	8.9
December	3.9	4.1	3.6	9.1	9.4	8.7
1955: 1st quarter	4.6	4.8	4.3	10.1	11.3	8.1
January	4.8	4.9	4.5	9.5	10.8	7.4
February	4.6	4.8	4.2	11.5	12.8	9.3
March	4.5	4.6	4.2	9.3	10.3	7.5
2d quarter	3.7	3.6	4.0	7.6	8.0	6.8
April	4.1	4.3	3.8	8.4	8.8	7.9
May	3.4	3.2	3.8	7.4	7.5	7.2
June	3.7	3.4	4.3	7.0	7.9	5.5
3d quarter	2.9	2.6	3.7	7.1	7.0	7.2
July	3.3	3.0	3.7	7.1	7.3	6.9
August	2.8	2.5	3.3	7.8	7.4	8.6
September	2.8	2.3	4.1	6.3	6.3	6.4

[1] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 14.—*Unemployment rates by major industry group and class of worker: Annual and quarterly averages, 1948–54; quarterly averages, 1955*

[The unemployment rate represents the proportion of all civilian workers in a given group who were unemployed. For the employed, industry and class of worker relate to current job; for the unemployed, to the last full-time job. Rate not shown where less than 0.1]

Year and type of average	All industries, total	Agriculture				Nonagricultural industries														
							Wage and salary workers													Self-employed and unpaid family workers
										Manufacturing			Transportation, communication, and other public utilities	Wholesale and retail trade	Service				Public administration	
		Total	Wage and salary workers	Self-employed workers	Unpaid family workers	Total[1]	Total[1]	Mining	Construction	Total	Durable goods	Nondurable goods			Total	Private households	Professional services	Other services		
1948: Annual average	3.1	1.3	4.7	0.2	0.3	3.4	3.7	2.3	7.6	3.5	3.4	3.6	3.0	4.3	3.2	4.0	1.8	3.9	2.0	1.0
1st quarter	3.8	2.4	8.9	.4	.8	3.9	4.3	2.6	11.6	3.9	3.7	4.1	3.4	5.1	3.3	4.6	1.4	4.3	2.7	1.1
2d quarter	2.9	.9	3.3	.2	.2	3.3	3.6	1.3	6.5	3.7	3.6	3.9	3.3	4.1	2.9	3.3	1.6	3.6	1.9	.9
3d quarter	2.9	.8	3.0	.1	.2	3.2	3.5	2.7	5.4	3.3	3.4	3.2	2.7	4.2	3.4	4.1	2.2	3.9	2.2	.8
4th quarter	2.8	1.2	4.5	.2	.1	3.0	3.3	2.6	6.5	3.1	3.0	3.1	2.7	3.8	3.0	4.0	1.8	3.7	1.3	1.1
1949: Annual average	5.1	1.8	6.5	.2	.4	5.6	6.2	8.0	11.9	7.2	7.4	6.9	5.2	5.8	4.6	6.7	2.5	5.5	2.9	1.5
1st quarter	4.8	2.4	9.6	.3	.3	5.1	5.6	3.1	15.8	5.9	6.2	5.7	4.3	5.2	4.0	5.5	1.9	4.9	3.2	1.7
2d quarter	5.0	1.4	5.6	.2	.4	5.6	6.2	5.3	11.1	7.5	7.6	7.4	5.2	5.6	4.5	5.9	2.7	5.3	2.5	1.3
3d quarter	5.4	1.6	5.3	.2	.4	6.0	6.6	6.3	10.3	8.1	8.7	7.5	5.5	6.2	4.9	7.7	3.0	5.2	2.9	1.5
4th quarter	5.3	1.7	6.0	.2	.2	5.8	6.4	17.4	10.9	7.1	7.2	7.0	5.9	5.9	4.9	7.5	2.3	6.2	3.0	1.6
1950: Annual average	4.7	2.3	8.2	.3	.4	5.0	5.4	6.2	10.7	5.6	5.2	6.0	4.1	5.8	4.5	6.4	2.6	5.4	2.8	1.5
1st quarter	7.0	4.7	19.5	.4	.8	7.2	7.9	7.9	20.0	8.1	8.0	8.2	7.1	8.0	5.5	7.6	2.9	7.0	3.7	2.7
2d quarter	4.8	1.7	6.9	.3	.2	5.3	5.8	6.6	10.2	6.4	5.9	6.9	4.1	6.4	4.6	5.8	2.8	5.7	2.9	1.7
3d quarter	3.8	1.5	5.1	.3	.2	4.1	4.5	5.5	7.1	4.6	4.3	4.9	3.0	4.5	4.4	6.6	2.8	4.8	2.8	1.6
4th quarter	3.2	1.6	4.6	.4	.3	3.4	3.7	4.9	6.3	3.5	2.9	4.1	2.2	4.2	3.5	5.6	2.0	4.0	1.9	1.2
1951: Annual average	2.8	1.2	3.9	.2	.2	3.0	3.2	3.3	6.0	3.3	2.6	4.0	1.9	3.7	2.8	4.4	1.5	3.3	1.6	1.1
1st quarter	3.6	2.2	8.0	.4	.3	3.8	4.1	5.5	10.9	3.5	2.8	4.3	2.8	4.8	3.2	4.7	1.7	3.9	1.9	1.6
2d quarter	2.5	.9	3.1	.2	.2	2.8	3.0	3.8	4.5	3.3	2.5	4.1	1.7	3.4	2.8	4.1	1.5	3.4	1.2	.7
3d quarter	2.4	.7	2.3	.2	.2	2.6	2.8	2.5	4.1	2.9	2.5	3.3	1.5	3.3	2.7	4.4	1.6	2.8	1.4	1.0
4th quarter	2.6	1.0	3.1	.2	.2	2.8	3.0	1.5	5.0	3.4	2.5	4.5	1.7	3.2	2.6	4.3	1.2	3.1	1.7	1.0
1952: Annual average	2.4	1.0	3.9	.2	.1	2.6	2.8	3.1	5.5	2.8	2.4	3.3	1.9	3.1	2.4	3.7	1.3	3.0	1.1	.9
1st quarter	3.1	1.8	6.8	.3	.1	3.2	3.4	3.9	9.5	3.4	2.8	4.2	2.4	3.4	2.5	4.1	1.1	3.1	1.6	1.2
2d quarter	2.4	1.0	3.3	.2	.2	2.6	2.8	3.0	5.1	3.0	3.0	3.5	1.6	3.3	2.5	3.6	1.5	2.9	.8	.6
3d quarter	2.3	.8	2.9	.1	.2	2.5	2.7	3.5	3.8	2.8	2.8	2.8	2.0	3.0	2.5	3.8	1.4	2.9	.9	.8
4th quarter	2.0	.9	2.8	.2	.1	2.1	2.3	2.2	3.9	2.1	1.6	2.8	1.7	2.9	2.2	3.3	1.1	2.8	1.1	.7

See footnotes at end of table.

TABLE 14.—*Unemployment rates by major industry group and class of worker: Annual and quarterly averages, 1948–54; quarterly averages, 1955*—Continued

[The unemployment rate represents the proportion of all civilian workers in a given group who were unemployed. For the employed, industry and class of worker relate to current job; for the unemployed, to the last full-time job. Rate not shown where less than 0.1]

Year and type of average	All industries, total	Agriculture				Nonagricultural industries													
							Wage and salary workers												Self-employed and unpaid family workers
										Manufacturing			Transportation, communication, and other public utilities	Wholesale and retail trade	Service				Public administration	
		Total	Wage and salary workers	Self-employed workers	Unpaid family workers	Total[1]	Total[1]	Mining	Construction	Total	Durable goods	Nondurable goods			Total	Private households	Professional services	Other services		
1953: Annual average[2]	2.3	1.3	4.7	.2	.4	2.5	2.6	3.9	6.1	2.5	2.0	3.1	1.8	3.0	2.2	2.9	1.2	2.8	1.2	.8
1st quarter	2.7	1.8	6.5	.3	.9	2.8	3.0	4.2	8.3	2.8	2.2	3.4	2.3	3.2	2.2	3.7	1.2	2.7	1.3	1.1
2d quarter	2.1	.9	2.9	.1	.2	2.3	2.5	5.6	5.0	2.1	1.7	2.7	1.7	3.0	2.1	2.0	1.3	2.9	1.1	.9
3d quarter	1.9	1.0	4.0	.1	.1	2.1	2.2	3.0	4.4	1.9	1.6	2.3	1.1	3.1	2.3	2.8	1.2	2.9	1.2	.7
4th quarter[2]	2.6	1.8	5.5	.4	.6	2.7	2.9	2.4	5.8	3.0	2.8	3.4	2.4	2.1	2.4	3.0	1.0	2.6	1.2	.8
1954: Annual average	4.7	2.2	8.0	.3	.6	5.0	5.4	13.0	10.5	6.1	6.5	5.7	4.8	5.2	3.7	5.6	2.2	4.4	2.0	1.4
1st quarter	5.2	3.6	13.0	.5	2.1	5.4	5.9	10.8	14.5	6.2	6.3	6.0	6.0	5.5	3.7	6.3	2.2	4.1	2.6	1.7
2d quarter	4.9	1.7	6.5	.3	.6	5.2	5.7	14.2	10.8	6.9	7.2	6.6	4.9	5.3	3.6	4.8	2.0	4.6	2.1	1.3
3d quarter	4.5	1.6	5.9	.2	.3	4.9	5.3	14.1	7.8	6.1	6.7	5.4	4.4	5.5	3.9	5.9	2.6	4.3	2.2	1.3
4th quarter	4.1	2.1	7.5	.4	-------	4.3	4.8	12.7	9.5	5.2	5.6	4.8	3.6	4.6	3.6	5.6	2.1	4.5	1.5	1.1
1955: 1st quarter	5.0	3.2	11.6	.7	.6	5.2	5.6	10.7	15.1	5.7	5.4	6.0	5.5	5.6	3.6	5.0	1.6	5.3	2.5	1.2
2d quarter	3.8	1.4	5.9	.2	-------	4.0	4.4	10.1	8.6	4.3	4.3	4.5	3.9	4.4	3.7	3.9	2.2	5.1	1.7	1.3
3d quarter	2.9	1.5	4.7	.2	-------	3.1	3.4	6.6	5.7	3.3	3.4	3.2	2.2	3.6	3.4	4.5	1.9	4.2	1.5	.8

[1] Includes forestry and fisheries not shown separately.

[2] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 15.—*Unemployment rates by major occupation group and sex: Annual and quarterly averages, 1948–54; quarterly averages, 1955*

[The unemployment rate represents the proportion of all civilian workers with a given occupation who were unemployed. For the employed, occupation relates to current job; for the unemployed, to the last full-time job. Rate not shown where less than 0.1]

Year and type of average	Total	Professional, technical, and kindred workers	Farmers and farm managers	Managers, officials, and proprietors, except farm	Clerical and kindred workers	Sales workers	Craftsmen, foremen, and kindred workers	Operatives and kindred workers	Private household workers	Service workers, except private household	Farm laborers and foremen	Laborers, except farm and mine
BOTH SEXES												
1948: Annual average	3.0	1.7	0.2	1.0	2.3	3.4	2.9	4.1	3.2	4.8	2.3	7.5
1st quarter	3.4	1.6	.2	1.1	2.4	3.9	3.7	4.0	2.6	4.3	5.6	9.2
2d quarter	3.4	1.5	.2	.9	2.3	3.3	3.3	5.2	2.5	5.3	2.4	9.0
3d quarter	2.9	2.2	.1	.8	2.6	3.8	2.4	3.8	3.9	5.1	1.2	7.2
4th quarter	2.5	1.6	.2	1.4	1.9	2.6	2.2	3.3	3.7	4.6	1.3	4.9
1949: Annual average	5.1	1.9	.2	1.5	3.8	3.5	5.9	8.0	5.2	6.1	3.9	12.9
1st quarter	4.2	1.4	.3	1.2	2.7	3.3	5.5	5.5	3.8	5.1	7.1	11.9
2d quarter	4.8	1.3	.2	1.4	3.5	3.4	5.9	7.5	4.4	5.6	3.4	12.6
3d quarter	5.7	2.7	.3	1.8	4.7	4.0	6.1	9.7	6.8	6.6	2.8	13.7
4th quarter	5.5	2.1	.1	1.6	4.3	3.2	6.2	9.2	5.9	7.1	3.5	12.4
1950: Annual average	4.9	2.2	.3	1.6	3.4	4.0	5.6	6.8	5.6	6.8	5.0	11.7
1st quarter	7.1	2.7	.6	2.2	4.4	5.6	9.3	8.8	6.7	7.6	14.9	19.9
2d quarter	5.4	2.2	.3	1.7	3.5	4.0	6.9	7.8	4.7	7.1	5.4	14.3
3d quarter	4.4	2.5	.3	1.3	3.4	3.9	4.0	6.6	6.4	7.4	2.8	8.1
4th quarter	2.8	1.5	.2	1.3	2.4	2.7	2.6	3.9	4.4	4.8	1.8	5.4
1951: Annual average	2.9	1.5	.3	1.0	2.1	2.8	2.6	4.3	3.8	4.3	2.1	5.6
1st quarter	3.9	1.8	.3	1.6	2.5	3.5	3.6	5.4	3.4	5.2	5.2	9.6
2d quarter	2.7	1.4	.5	.7	1.9	2.9	2.2	4.2	3.5	4.6	1.8	4.8
3d quarter	2.5	1.6	.2	.7	2.1	2.4	2.5	3.5	4.8	4.2	1.3	4.2
4th quarter	2.4	1.2	.1	.9	2.1	2.7	2.1	4.0	3.6	3.2	1.2	4.0
1952: Annual average	2.5	1.0	.2	.7	1.8	2.5	2.4	3.9	3.2	3.7	2.3	5.7
1st quarter	3.2	1.1	.4	.8	1.6	3.1	3.9	5.0	2.3	3.8	3.7	8.1
2d quarter	2.5	.7	.2	.4	1.6	1.7	2.7	3.9	3.0	3.6	3.3	5.8
3d quarter	2.6	1.1	.1	.7	1.7	3.3	1.9	3.9	4.4	4.3	2.0	5.2
4th quarter	1.9	1.2	.1	.7	2.2	1.9	1.2	2.6	2.7	3.0	.8	3.8
1953:[1] Annual average [2]	2.4	.9	.2	.9	1.7	2.1	2.6	3.2	2.5	3.6	2.5	6.1
1st quarter	2.9	1.0	.4	1.2	1.6	1.7	3.5	3.9	2.8	3.8	4.8	8.6
2d quarter	2.5	.8	.1	1.0	1.7	2.9	2.7	3.1	2.3	3.9	2.2	5.3
4th quarter [3]	1.9	.8	.3	.7	1.8	1.8	1.7	2.6	2.3	3.2	1.3	4.4
1954: Annual average	4.9	1.6	.4	1.2	3.1	3.7	4.9	7.6	5.0	5.2	4.2	10.7
1st quarter	4.7	1.7	.9	1.1	3.0	3.6	4.7	7.1	4.8	4.4	9.4	12.1
2d quarter	5.2	1.3	.2	1.5	3.2	4.1	6.1	9.0	4.0	5.6	4.8	12.2
3d quarter	4.5	1.5	.2	1.1	2.9	3.7	4.1	7.8	5.8	6.3	3.1	10.2
4th quarter	4.2	1.7	.2	1.3	3.3	3.4	4.6	6.6	5.4	4.5	2.1	8.4
1955: 1st quarter	5.1	1.1	1.0	1.2	3.2	3.5	5.7	7.9	4.5	5.8	9.0	14.5
2d quarter	4.3	1.1	.3	1.3	2.6	2.2	5.3	6.4	3.3	6.2	4.6	11.4
3d quarter	3.1	.9	.1	.6	1.9	2.4	2.6	4.7	5.6	4.9	2.5	7.6

See footnotes at end of table.

TABLE 15.—*Unemployment rates by major occupation group and sex: Annual and quarterly averages, 1948–54; quarterly averages, 1955*—Con.

Year and type of average	Total	Professional, technical, and kindred workers	Farmers and farm managers	Managers, officials, and proprietors, except farm	Clerical and kindred workers	Sales workers	Craftsmen, foremen, and kindred workers	Operatives and kindred workers	Private household workers	Service workers, except private household	Farm laborers and foremen	Laborers, except farm and mine
MALE												
1948: Annual average	3.0	1.5	.2	1.1	2.6	3.0	2.9	3.6	4.4	5.0	3.2	7.6
1st quarter	3.5	1.5	.2	1.1	3.5	3.2	3.7	3.6	9.7	4.7	7.1	9.4
2d quarter	3.4	1.3	.2	.9	2.5	3.1	3.4	4.6	2.2	5.9	2.8	9.1
3d quarter	2.7	1.8	.1	.8	2.6	2.9	2.4	3.3	3.4	5.2	1.6	7.2
4th quarter	2.4	1.2	.2	1.4	1.9	2.6	2.2	3.1	3.4	4.2	2.0	4.9
1949: Annual average	5.2	1.8	.2	1.6	4.3	3.1	5.9	7.5	11.6	6.3	5.0	12.6
1st quarter	4.5	1.4	.3	1.3	3.4	2.9	5.6	5.1	16.5	5.0	8.7	11.9
2d quarter	4.9	1.2	.2	1.6	4.5	3.5	5.9	6.7	3.2	5.8	4.2	12.4
3d quarter	5.7	2.3	.3	1.8	5.3	3.0	6.1	8.4	17.4	7.4	3.9	13.8
4th quarter	5.6	2.1	.1	1.7	3.9	2.9	6.2	9.8	9.0	6.8	4.3	12.1
1950: Annual average	4.9	2.1	.4	1.7	4.0	3.2	5.6	6.0	12.0	6.7	6.6	11.4
1st quarter	7.3	2.4	.6	2.4	5.0	3.8	9.3	7.9	19.1	7.0	17.4	19.4
2d quarter	5.7	2.7	.3	1.9	4.4	3.5	7.0	7.1	12.1	7.9	6.7	13.9
3d quarter	4.2	2.0	.3	1.3	4.5	3.6	3.9	5.8	7.1	8.1	3.5	8.1
4th quarter	2.5	1.3	.3	1.3	2.1	1.9	2.5	3.2	9.5	3.6	2.6	5.4
1951: Annual average	2.5	1.3	.3	1.0	2.0	2.0	2.5	3.3	3.9	4.0	2.9	5.6
1st quarter	3.7	1.6	.4	1.5	2.1	2.2	3.6	4.7		5.2	6.2	9.4
2d quarter	2.3	1.3	.5	.8	2.0	2.0	2.1	2.9	7.5	4.2	2.1	4.8
3d quarter	2.2	1.1	.2	.7	1.6	1.6	2.4	2.9	3.6	4.0	1.8	4.1
4th quarter	2.0	1.1	.1	.8	2.2	2.3	2.1	2.5		2.6	2.0	3.8
1952: Annual average	2.4	1.0	.2	.6	1.8	1.9	2.3	3.2	1.8	3.3	3.1	5.8
1st quarter	3.1	1.0	.4	1.0	2.0	2.0	3.8	4.1	5.6	2.5	4.7	8.1
2d quarter	2.3	.8	.2	.4	1.3	1.6	2.7	3.0	5.0	3.6	4.4	5.7
3d quarter	2.4	1.0	.1	.5	2.1	2.6	1.9	3.6		4.2	2.7	5.3
4th quarter	1.5	1.2	.1	.6	1.8	1.5	1.1	2.0		2.9	1.2	3.9
1953:[1] Annual average [2]	2.4	.7	.2	1.0	1.5	1.6	2.6	3.0	6.7	3.8	3.4	6.0
1st quarter	3.0	.9	.4	1.4	1.5	1.2	3.5	3.4	9.1	4.0	5.9	8.6
2d quarter	2.4	.6	.1	1.0	1.8	2.4	2.7	3.0	7.1	4.5	2.7	5.2
4th quarter [2]	1.8	.6	.3	.8	1.3	1.2	1.6	2.5		2.7	1.9	4.5
1954: Annual average	4.7	1.5	.4	1.2	3.6	2.9	4.8	6.8	6.8	4.7	5.3	10.7
1st quarter	4.7	1.4	.9	1.1	2.9	2.7	4.6	6.3		3.9	9.6	12.3
2d quarter	5.1	1.2	.2	1.5	3.9	2.8	6.1	7.7	3.3	5.2	6.1	12.2
3d quarter	4.4	1.5	.2	1.1	3.3	3.3	4.1	7.3	6.0	5.6	4.2	10.0
4th quarter	4.1	1.8	.2	1.1	4.1	2.8	4.5	6.0	19.2	4.0	2.4	8.5
1955: 1st quarter	5.5	1.0	1.0	1.2	3.9	2.4	5.7	7.3	18.6	5.9	9.8	14.7
2d quarter	4.7	.9	.3	1.4	3.0	1.9	5.3	5.7	5.6	6.0	6.2	11.5
3d quarter	2.9	.8	.1	.7	2.1	1.9	2.7	4.1	7.7	4.7	3.4	7.7

FEMALE												
1948: Annual average	3.1	2.1	----------	.9	2.1	4.1	2.1	5.2	3.1	4.6	.6	5.3
1st quarter	2.9	1.7	----------	.9	1.7	4.9	3.5	4.9	2.1	3.7	.8	3.4
2d quarter	3.4	1.9	----------	1.3	2.2	3.5	----------	6.8	2.5	4.5	1.3	3.7
3d quarter	3.5	2.9	----------	.3	2.6	5.1	3.6	5.2	4.0	4.9	.6	8.9
4th quarter	2.7	2.2	----------	1.1	1.9	2.7	1.4	4.0	3.8	5.1	.3	4.8
1949: Annual average	4.8	2.1	----------	.9	3.5	4.1	5.4	9.2	4.6	5.9	1.7	15.2
1st quarter	3.6	1.5	----------	.6	2.2	3.9	1.5	6.6	2.8	5.2	2.5	13.8
2d quarter	4.5	1.5	----------	.3	2.9	3.3	6.8	9.5	4.5	5.4	1.2	19.0
3d quarter	5.8	3.3	----------	1.4	4.3	5.6	9.4	12.9	5.7	5.4	1.2	8.1
4th quarter	5.0	2.1	----------	1.1	4.6	3.6	4.6	7.8	5.6	7.6	2.3	18.2
1950: Annual average	4.8	2.4	.4	1.0	3.0	5.4	4.6	8.7	5.1	6.9	1.5	21.5
1st quarter	6.6	3.2	1.1	1.1	4.0	8.5	5.4	11.2	5.8	8.3	5.5	35.4
2d quarter	4.6	1.4	----------	.8	2.8	4.7	1.1	9.4	4.0	6.2	1.6	30.6
3d quarter	4.7	3.3	----------	1.0	2.7	4.4	6.0	8.8	6.3	6.7	1.3	7.0
4th quarter	3.6	1.8	----------	1.1	2.6	4.0	4.6	5.5	4.3	6.4	.6	7.1
1951: Annual average	3.6	1.9	.5	1.1	2.2	4.2	3.6	6.6	3.9	4.7	.5	8.6
1st quarter	4.2	2.1	----------	2.1	2.7	5.4	5.8	7.1	3.5	5.3	1.3	15.5
2d quarter	3.5	1.6	----------	.2	1.9	4.5	2.8	7.0	3.4	5.1	1.0	3.8
3d quarter	3.2	2.4	----------	.7	2.3	3.7	3.8	4.9	4.8	4.4	.4	4.8
4th quarter	3.4	1.5	1.0	1.6	2.0	3.4	2.2	7.6	3.6	3.9	.1	11.3
1952: Annual average	2.9	1.1	----------	.8	1.8	3.4	4.4	5.5	3.2	4.1	.7	5.7
1st quarter	3.4	1.4	----------	----------	1.4	5.0	6.5	7.2	2.3	5.3	1.2	10.6
2d quarter	2.8	.6	----------	.4	1.7	1.9	2.4	6.2	3.0	3.6	.3	8.6
3d quarter	2.9	1.3	----------	1.4	1.5	4.2	3.4	4.7	4.6	4.5	.8	1.4
4th quarter	2.5	1.4	----------	1.3	2.3	2.5	4.3	3.9	2.7	3.2	.3	1.8
1953:[1] Annual average [2]	2.4	1.1	----------	.5	1.7	3.1	3.7	3.7	2.4	3.4	.9	7.0
1st quarter	2.6	1.1	----------	.2	1.6	2.6	3.8	4.9	2.6	3.5	1.6	10.3
2d quarter	2.3	1.1	----------	1.1	1.6	3.7	2.2	3.4	2.2	3.1	1.0	6.9
4th quarter [2]	2.2	1.1	----------	.2	2.0	2.7	4.9	2.9	2.3	3.6	.5	3.7
1954: Annual average	5.4	1.7	.8	1.5	2.8	4.9	6.3	9.7	5.0	5.8	2.3	9.7
1st quarter	5.4	2.4	1.5	1.0	3.0	5.0	7.9	9.1	4.9	5.0	8.8	4.3
2d quarter	5.3	1.4	----------	1.4	2.8	6.2	5.6	12.1	4.0	6.1	1.8	11.6
3d quarter	4.6	1.4	----------	1.3	2.6	4.3	3.0	9.3	5.8	7.0	1.4	17.1
4th quarter	4.6	1.6	----------	2.1	2.8	4.3	7.6	8.0	5.2	5.0	1.5	6.3
1955: 1st quarter	4.9	1.3	----------	1.3	2.9	5.2	4.1	9.4	4.2	5.7	6.3	5.7
2d quarter	4.3	1.4	----------	.4	2.4	2.6	3.2	8.1	3.3	6.4	1.6	7.1
3d quarter	3.4	1.1	----------	.4	1.8	3.2	2.4	6.4	5.6	5.2	1.1	3.9

[1] Data for 3d quarter 1953 not available; annual average based on 3 quarterly months only.

[2] Revised.

NOTE.—Occupational data tabulated only for 1st month o each quarter: January, April, July, and October.

Source: Current Population Survey, Bureau of the Census.

TABLE 16.—*Duration of unemployment: Annual and quarterly averages, 1948-54; quarterly and monthly data, 1954 and 1955*

Year and type of average	Total unemployed persons	Duration of unemployment			Percent distribution				Average duration of unemployment [1] (weeks)
		Under 5 weeks	5 to 14 weeks	15 and over	Total unemployed persons	Duration of unemployment			
						Under 5 weeks	5 to 14 weeks	15 and over	
1948: Annual average	2,064,000	1,087,000	669,000	309,000	100.0	52.7	32.4	15.0	8.6
1st quarter	2,381,000	1,137,000	911,000	333,000	100.0	47.8	38.3	14.0	8.7
2d quarter	2,046,000	1,065,000	603,000	379,000	100.0	52.1	29.5	18.5	9.2
3d quarter	2,022,000	1,146,000	602,000	277,000	100.0	56.7	29.8	13.7	8.4
4th quarter	1,805,000	1,001,000	560,000	245,000	100.0	55.5	31.0	13.6	8.1
1949: Annual average	3,395,000	1,517,000	1,195,000	683,000	100.0	44.7	35.2	20.1	10.0
1st quarter	3,017,000	1,409,000	1,188,000	421,000	100.0	46.7	39.4	14.0	8.4
2d quarter	3,361,000	1,529,000	1,142,000	689,000	100.0	45.5	34.0	20.5	9.7
3d quarter	3,712,000	1,559,000	1,340,000	814,000	100.0	42.0	36.1	21.9	10.8
4th quarter	3,491,000	1,574,000	1,107,000	811,000	100.0	45.1	31.7	23.2	11.1
1950: Annual average	3,142,000	1,307,000	1,055,000	782,000	100.0	41.6	33.6	24.9	12.1
1st quarter	4,429,000	1,589,000	1,772,000	1,069,000	100.0	35.9	40.0	24.1	12.0
2d quarter	3,319,000	1,296,000	979,000	1,044,000	100.0	39.0	29.5	31.5	13.4
3d quarter	2,685,000	1,224,000	856,000	606,000	100.0	45.6	31.9	22.6	11.8
4th quarter	2,136,000	1,116,000	612,000	410,000	100.0	52.2	28.7	19.2	10.9
1951: Annual average	1,879,000	1,003,000	574,000	303,000	100.0	53.4	30.5	16.1	9.7
1st quarter	2,352,000	1,065,000	840,000	449,000	100.0	45.3	35.7	19.1	10.7
2d quarter	1,778,000	968,000	490,000	321,000	100.0	54.4	27.6	18.1	10.1
3d quarter	1,680,000	999,000	467,000	215,000	100.0	59.5	27.8	12.8	8.7
4th quarter	1,706,000	979,000	501,000	227,000	100.0	57.4	29.4	13.3	9.0
1952: Annual average	1,673,000	925,000	517,000	232,000	100.0	55.3	30.9	13.9	8.3
1st quarter	1,981,000	977,000	713,000	292,000	100.0	49.3	36.0	14.7	9.0
2d quarter	1,677,000	970,000	443,000	264,000	100.0	57.8	26.4	15.7	8.4
3d quarter	1,661,000	959,000	513,000	189,000	100.0	57.7	30.9	11.4	7.3
4th quarter	1,371,000	793,000	395,000	183,000	100.0	57.8	28.8	13.3	8.9
1953: Annual average [2]	1,602,000	910,000	482,000	211,000	100.0	56.8	30.1	13.2	8.1
1st quarter	1,785,000	920,000	600,000	265,000	100.0	51.5	33.6	14.8	9.0
2d quarter	1,483,000	839,000	424,000	221,000	100.0	56.6	28.6	14.9	8.3
3d quarter	1,370,000	834,000	385,000	150,000	100.0	60.9	28.1	10.9	7.3
4th quarter [2]	1,771,000	1,049,000	519,000	203,000	100.0	59.2	29.3	11.5	7.5
1954: Annual average	3,230,000	1,303,000	1,115,000	812,000	100.0	40.3	34.5	25.1	11.7
1st quarter	3,494,000	1,396,000	1,429,000	670,000	100.0	40.0	40.9	19.2	10.0
January	3,087,000	1,452,000	1,264,000	371,000	100.0	47.0	40.9	12.0	8.4
February	3,670,000	1,434,000	1,606,000	630,000	100.0	39.1	43.8	17.2	9.6
March	3,724,000	1,301,000	1,416,000	1,008,000	100.0	34.9	38.0	27.1	11.8
2d quarter	3,372,000	1,315,000	1,072,000	984,000	100.0	39.0	31.8	29.2	12.0
April	3,465,000	1,160,000	1,257,000	1,047,000	100.0	33.5	36.3	30.2	12.4
May	3,305,000	1,157,000	1,100,000	1,047,000	100.0	35.0	33.3	31.7	12.8
June	3,347,000	1,628,000	859,000	859,000	100.0	48.6	25.7	25.7	10.9
3d quarter	3,231,000	1,313,000	1,071,000	847,000	100.0	40.6	33.1	26.2	12.2
July	3,347,000	1,394,000	1,103,000	849,000	100.0	41.6	33.0	25.4	11.4
August	3,245,000	1,260,000	1,127,000	858,000	100.0	38.8	34.7	26.4	12.5
September	3,100,000	1,284,000	983,000	834,000	100.0	41.4	31.7	26.9	12.6
4th quarter	2,824,000	1,189,000	890,000	745,000	100.0	42.1	31.5	26.4	12.9
October	2,741,000	1,129,000	816,000	797,000	100.0	41.2	29.8	29.1	13.2
November	2,893,000	1,274,000	888,000	731,000	100.0	44.0	30.7	25.3	12.3
December	2,838,000	1,164,000	967,000	707,000	100.0	41.0	34.1	24.9	13.3
1955: 1st quarter	3,302,000	1,144,000	1,188,000	970,000	100.0	34.6	36.0	29.4	14.1
January	3,347,000	1,329,000	1,144,000	874,000	100.0	39.7	34.2	26.1	12.9
February	3,383,000	1,138,000	1,270,000	974,000	100.0	33.6	37.5	28.8	14.3
March	3,176,000	964,000	1,151,000	1,062,000	100.0	30.4	36.2	33.4	15.0
2d quarter	2,710,000	1,129,000	702,000	879,000	100.0	41.7	25.9	32.4	14.7
April	2,962,000	958,000	893,000	1,111,000	100.0	32.3	30.1	37.5	16.2
May	2,489,000	996,000	614,000	879,000	100.0	40.0	24.7	35.3	15.8
June	2,679,000	1,433,000	599,000	648,000	100.0	53.5	22.4	24.2	11.9
3d quarter	2,286,000	1,116,000	668,000	501,000	100.0	48.8	29.2	21.9	12.1
July	2,471,000	1,160,000	725,000	586,000	100.0	46.9	29.3	23.7	12.7
August	2,237,000	1,060,000	717,000	460,000	100.0	47.4	32.1	20.6	12.1
September	2,149,000	1,128,000	562,000	458,000	100.0	52.5	26.2	21.3	11.4

[1] The average is an arithmetic mean computed from a distribution of single weeks of unemployment.
[2] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 17.—*Percent of unemployed persons seeking part-time jobs, by sex: Selected months, 1949–55*

Month and year	Both sexes		Male		Female	
	Total unemployed	Percent looking for part-time jobs	Total unemployed	Percent looking for part-time jobs	Total unemployed	Percent looking for part-time jobs
1949: May	3,289,000	7.0	2,366,000	4.9	923,000	12.1
August	3,689,000	8.1	2,519,000	6.8	1,170,000	10.9
November	3,409,000	10.4	2,316,000	8.0	1,093,000	15.3
1950: February	4,684,000	7.9	3,426,000	5.6	1,258,000	14.1
May	3,057,000	5.4	2,130,000	3.6	927,000	15.0
August	2,501,000	9.2	1,665,000	8.3	836,000	10.9
November	2,240,000	11.1	1,309,000	8.1	931,000	15.5
1951: February	2,407,000	10.8	1,594,000	8.7	813,000	9.6
May	1,609,000	7.1	950,000	5.8	659,000	9.0
1952: May	1,602,000	11.5	972,000	8.4	630,000	16.2
November	1,418,000	11.4	814,000	7.4	604,000	16.9
1953: December [1]	2,313,000	9.5	1,574,000	7.6	738,000	14.4
1954: March	3,725,000	8.1	2,552,000	5.3	1,173,000	14.1
May	3,305,000	7.7	2,197,000	5.6	1,108,000	11.6
August	3,245,000	7.6	2,152,000	4.8	1,093,000	13.0
November	2,893,000	11.7	1,875,000	9.0	1,018,000	16.7
1955: February	3,383,000	9.4	2,431,000	6.2	952,000	17.5
May	2,490,000	8.8	1,624,000	5.8	866,000	14.3
August	2,237,000	11.4	1,387,000	9.3	850,000	14.6

[1] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 18.—*Distribution of persons at work, classified by full-time or part-time status, by class of worker and major industry group: May–September average, 1955*

[Percent not shown where less than 0.1]

Class of worker and major industry group	Worked full time during survey week (35 hours or more)	Worked part time during survey week (1–34 hours) [1]			
		Usually work full time		Usually work part time	
		Worked part time because of economic factors	Worked part time for other reasons	Worked part time because of economic factors	Worked part time for other reasons
Number of persons at work	51,054,000	1,036,000	2,027,000	1,181,000	4,998,000
Percent	100.0	100.0	100.0	100.0	100.0
Agriculture	11.0	12.2	20.7	13.4	20.8
Wage and salary workers	2.7	5.0	6.2	10.4	4.4
Self-employed workers	6.4	5.5	10.7	1.1	4.4
Unpaid family workers	1.9	1.6	3.7	1.9	11.9
Nonagricultural industries	89.0	87.8	79.3	86.5	79.2
Wage and salary workers	79.1	78.3	70.1	80.7	67.1
Construction	5.5	12.1	13.0	6.1	1.7
Manufacturing	28.1	37.1	25.3	11.6	8.0
Durable goods	16.4	16.4	16.1	4.1	2.0
Nondurable goods	11.7	20.7	9.2	7.5	6.0
Transportation communication and other public utilities	7.5	4.4	4.7	3.8	1.5
Wholesale and retail trade	15.0	8.4	8.6	18.5	20.4
Service industries	17.0	11.3	12.4	38.2	33.8
Private households	1.9	4.3	2.3	26.1	15.7
Educational services	2.6	.6	2.4	1.5	3.9
Other service industries	12.5	6.5	7.7	10.7	14.1
Other industries	6.1	5.1	6.1	2.5	1.6
Self-employed and unpaid family workers	9.9	9.5	9.2	5.9	12.1

[1] See note table 9.

Source: Current Population Survey Bureau of the Census.

TABLE 19.—*Persons at work in agriculture and in nonagricultural industries, classified by full-time or part-time status, by average hours worked during survey week: May–September average, 1955*

Full-time or part-time status	Average hours [1]	
	At work in agriculture	At work in nonagricultural industries
Worked 35 hours or more during survey week	58.7	45.0
Worked 1 to 34 hours [2] during suvrey week	20.8	19.8
Usually work full time	21.6	23.9
Worked part time for economic reasons	20.8	23.2
Worked part time for other reasons	21.8	24.3
Usually work part time	20.4	17.7
Worked part time for economic reasons	17.6	18.1
Worked part time for other reasons	20.8	17.6

[1] The average is an arithmetic mean computed from a distribution of single hours worked. Persons with a job but not at work during the survey week are excluded from the computations.
[2] See note, table 9.

Source: Current Population Survey, Bureau of the Census.

TABLE 20.—*Distribution of persons at work in nonagricultural industries, classified by full-time or part-time status, by age and sex: May–September average, 1955*

Age and sex	Worked full time during survey week (35 hours or more)	Worked part time during survey week (1–34 hours) [1]			
		Usually work full time		Usually work part time	
		Worked part time because of economic factors	Worked part time for other reasons	Worked part time because of economic factors	Worked part time for other reasons
Number of persons at work in nonagricultural industries	45,432,000	910,000	1,608,000	1,022,000	3,959,000
Percent	100.0	100.0	100.0	100.0	100.0
Male: 14 years and over	71.3	64.4	70.5	46.6	34.6
14 to 17 years	.9	2.2	1.7	11.1	13.5
18 and 19 years	1.7	3.8	2.9	3.8	2.7
20 to 24 years	5.1	5.2	5.0	3.7	2.1
25 to 34 years	19.0	13.5	18.0	5.3	2.2
35 to 44 years	18.2	14.9	17.7	6.6	1.6
45 to 54 years	14.6	13.4	12.4	5.8	2.6
55 to 64 years	9.2	8.7	9.6	6.8	3.2
65 years and over	2.7	2.7	3.2	3.5	6.6
Female: 14 years and over	28.7	35.6	29.5	53.4	65.4
14 to 17 years	.6	1.2	.9	8.4	9.4
18 and 19 years	1.6	1.6	1.6	3.6	2.4
20 to 24 years	3.8	3.7	3.7	3.6	4.2
25 to 34 years	6.1	6.8	6.9	7.7	11.5
35 to 44 years	6.7	10.5	7.6	10.6	14.2
45 to 54 years	5.8	6.5	5.0	10.4	11.6
55 to 64 years	3.2	4.4	3.1	6.9	7.6
65 years and over	.8	.9	.7	2.1	4.5

[1] See note, table 9.

Source: Current Population Survey, Bureau of the Census.

TABLE 21.—*Distribution of persons at work in nonagricultural industries, classified by full-time or part-time status, by marital status and sex: May–September average, 1955*

Martial status and sex	Worked full time during survey week (35 hours or more)	Worked part time during survey week (1–34 hours) [1]			
		Usually work full time		Usually work part time	
		Worked part time because of economic factors	Worked part time for other reasons	Worked part time because of economic factors	Worked part time for other reasons
Number of persons at work in nonagricultural industries	45,432,000	910,000	1,608,000	1,022,000	3,959,000
Percent	100.0	100.0	100.0	100.0	100.0
Male	71.3	64.4	70.5	46.6	34.6
Married, spouse present	57.6	43.5	55.3	21.6	12.8
Married, spouse absent	1.4	1.8	1.6	1.5	.5
Widowed or divorced	2.4	3.3	2.3	2.1	1.6
Never married	9.9	15.9	11.3	21.5	19.7
Female	28.7	35.6	29.5	53.4	65.4
Married, spouse present	13.9	18.7	16.4	21.8	38.2
Married, spouse absent	1.8	3.1	1.7	4.3	2.4
Widowed or divorced	4.6	6.7	4.4	11.7	8.9
Never married	8.4	7.1	7.0	15.5	15.8

[1] See note, table 9.

Source: Current Population Survey, Bureau of the Census.

TABLE 22.—*Distribution of persons at work in nonagricultural industries, classified by full-time or part-time status, by color and sex: May–September average, 1955*

Color and sex	Worked full time during survey week (35 hours or more)	Worked part time during survey week (1–34 hours) [1]			
		Usually work full time		Usually work part time	
		Worked part time because of economic factors	Worked part time for other reasons	Worked part time because of economic factors	Worked part time for other reasons
Number of persons at work in nonagricultural industries	45,432,000	910,000	1,608,000	1,022,000	3,959,000
Percent	100.0	100.0	100.0	100.0	100.0
Male	71.3	64.4	70.5	46.6	34.6
White	65.5	53.9	60.2	34.8	31.3
Nonwhite	5.8	10.5	10.3	11.8	3.3
Female	28.7	35.6	29.5	53.4	65.4
White	25.8	28.8	26.4	33.6	55.7
Nonwhite	2.8	6.7	3.1	19.7	9.7

[1] See note, table 9.

Source: Current Population Survey, Bureau of the Census.

TABLE 23.—*Distribution of the unemployed and unemployment rates, by age and sex: April-September average, 1944 and 1955*

Age and sex	1954	1955	Unemployment rate [1]	
			1954	1955
Number of unemployed persons	3,301,000	2,498,000	5.1	3.8
Percent	100.0	100.0		
Male, 14 and over	66.2	64.5	4.9	3.5
14 to 19 years	10.7	12.6	11.0	9.6
14 and 15 years	1.1	1.8	5.0	6.3
16 and 17 years	4.6	5.8	13.3	12.1
18 and 19 years	5.1	5.0	12.2	9.1
20 to 24 years	8.7	9.0	9.2	6.8
25 years and over	46.7	42.9	4.0	2.8
25 to 34 years	14.6	11.2	4.5	2.6
35 to 44 years	12.0	10.6	3.8	2.5
45 to 54 years	10.1	9.0	3.8	2.6
55 to 59 years	4.0	4.8	3.8	3.4
60 to 64 years	3.0	4.4	3.8	4.2
65 to 69 years	2.1	1.9	4.8	3.4
70 and over	.9	1.0	2.9	2.2
Female, 14 and over	33.8	35.5	5.6	4.2
14 to 19 years	7.1	8.0	11.2	9.5
14 and 15 years	.8	.8	9.1	6.6
16 and 17 years	2.6	3.5	12.7	12.1
18 and 19 years	3.6	3.8	11.0	8.6
20 to 24 years	4.9	4.9	6.6	5.1
25 years and over	21.9	22.6	4.7	3.4
25 to 34 years	7.4	8.0	5.8	4.7
35 to 44 years	6.8	6.1	4.8	3.2
45 to 54 years	4.9	5.1	4.2	3.1
55 to 59 years	1.4	1.9	3.5	3.3
60 to 64 years	1.0	1.0	3.8	2.7
65 to 69 years	.3	.4	2.7	2.0
70 and over	.1	.1	1.6	.8

[1] Unemployed as percent of civilian labor force.

Source: Current Population Survey, Bureau of the Census.

TABLE 24.—*Distribution of the unemployed and unemployment rates, by marital status, age, and sex: April–September average, 1955*

Marital status, age, and sex	Percent distribution	Unemployment rate [1]	Marital status, age, and sex	Percent distribution	Unemployment rate [1]
Total unemployed	100.0	3.8	Female	35.5	4.2
Male	64.5	3.5	Married, spouse present	14.7	3.4
Married, spouse present	30.7	2.2	14 to 24 years	2.5	5.3
14 to 24 years	2.2	3.1	25 to 44 years	8.2	3.5
25 to 44 years	13.7	1.9	45 years and over	4.1	2.8
45 years and over	14.9	2.5	Married, spouse absent	2.8	5.8
Married, spouse absent	2.9	7.3	Widowed or divorced	5.4	4.2
Widowed or divorced	4.2	6.3	Never married	12.5	5.5
Never married	26.7	8.1	14 to 24 years	9.6	7.7
14 to 24 years	19.0	10.0	25 to 44 years	1.9	3.0
25 to 44 years	5.6	5.6	45 years and over	1.1	2.7
45 years and over	2.1	4.9			

[1] Unemployed as percent of labor force.

Source: Current Population Survey, Bureau of the Census.

TABLE 25.—*Distribution of the unemployed and unemployment rates, by color and sex: April–September average, 1954 and 1955*

Color and sex	1954	1955	Unemployment rate [1]	
			1954	1955
Total unemployed	100.0	100.0	5.1	3.8
White	81.4	79.1	4.6	3.3
Male	54.3	51.3	4.4	3.1
Female	27.1	27.8	5.2	3.8
Nonwhite	18.6	20.9	8.7	7.3
Male	11.9	13.2	9.0	7.5
Female	6.8	7.7	8.1	7.1

[1] Unemployed as percent of civilian labor force.

Source: Current Population Survey, Bureau of the Census.

TABLE 26.—*Distribution of the unemployed and unemployment rates, by region: April–September average, 1954 and 1955*

Region [1]	1954	1955	Unemployment rate [2]	
			1954	1955
United States	100.0	100.0	5.1	3.8
Northeast	30.4	31.5	5.5	4.4
North Central	27.0	25.1	4.5	3.1
South	28.1	29.0	5.0	3.8
West	14.5	14.5	5.6	3.9

[1] The regions shown are comprised of contiguous States, as follows:
Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.
North Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.
South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Mississippi, Maryland, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia.
West: Arizona, Colorado, California, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, Wyoming, Utah.
[2] Unemployed as percent of civilian labor force.

Source: Current Population Survey, Bureau of the Census.

TABLE 27.—*Distribution of the unemployed and unemployment rates, by major occupation group and sex: April 1954 and 1955*

[Percent or rate not shown where less than 0.1]

Major occupation group and sex	1954	1955	Unemployment rate [1]	
			1954	1955
Total unemployed	100.0	100.0	5.4	4.6
Male	67.6	70.7	5.3	4.7
Professional, technical, and kindred workers	1.2	1.1	1.2	.9
Farmers and farm managers	.3	.4	.2	.3
Managers, officials, and proprietors, except farm	2.2	2.6	1.5	1.4
Clerical and kindred workers	3.3	2.8	3.9	3.0
Sales workers	2.0	1.7	2.8	1.9
Craftsmen, foremen, and kindred workers	15.1	15.3	6.1	5.3
Operatives and kindred workers	21.4	18.8	7.7	5.7
Private household workers	.1	.1	3.3	5.6
Service workers, except private household	4.3	5.7	5.2	6.0
Farm laborers and foremen	2.6	3.2	6.1	6.2
Laborers, except farm and mine	13.3	15.8	12.2	11.5
Never held a full-time job	1.8	3.3		
Female	32.4	29.3	5.7	4.3
Professional, technical, and kindred workers	.9	1.0	1.4	1.4
Farmers and farm managers	.4	.1	1.4	.4
Managers, officials, and proprietors, except farm	4.2	4.6	2.8	2.4
Clerical and kindred workers	2.8	1.4	6.2	2.6
Sales workers	.5	.3	5.6	3.2
Craftsmen, foremen, and kindred workers	13.8	10.8	12.1	8.1
Operatives and kindred workers	2.1	2.1	4.0	3.3
Private household workers	4.7	5.9	6.1	6.4
Service workers, except private household	.3	.4	1.8	1.6
Farm laborers and foremen	.4	.3	11.6	7.1
Laborers, except farm and mine	2.1	2.4		
Never held a full-time job				

[1] Unemployed as percent of experienced civilian labor force (excludes persons who never held a full-time civilian job).

Source: Current Population Survey, Bureau of the Census.

TABLE 28.—*Distribution of the unemployed and unemployment rates, by major industry group and class of worker: April–September average, 1954 and 1955*

[Percent or rate not shown where less than 0.1]

Major industry group and class of worker	1954	1955	Unemployment rate [1]	
			1954	1955
Total unemployed	100.0	100.0	5.1	3.8
Agriculture	3.6	4.3	1.7	1.5
Wage and salary workers	3.1	4.1	6.2	5.2
Self-employed workers	.3	.3	.3	.2
Unpaid family workers	.2		.4	
Nonagricultural industries [2]	88.3	84.4	5.1	3.6
Wage and salary workers [2]	85.8	81.7	5.5	3.9
Mining	3.1	2.5	14.1	8.4
Construction	10.0	10.5	9.2	7.1
Manufacturing	35.0	27.0	6.5	3.8
Durable goods	21.2	15.5	6.9	3.8
Nondurable goods	13.8	11.6	6.0	3.8
Transportation communication and other public utilities	6.5	5.5	4.7	3.0
Wholesale and retail trade	16.0	16.0	5.4	4.0
Service industries	13.4	18.1	3.7	3.6
Private households	3.3	4.4	5.3	4.7
Professional services	3.4	4.2	2.3	2.1
Other service industries	6.7	9.4	4.4	4.5
Public administration	1.8	1.9	2.0	1.6
Self-employed workers	2.5	2.7	1.3	1.1
Unpaid family workers			.2	.1
Never held a full-time job	8.1	11.2		

[1] Unemployed as percent of experienced civilian labor force (excludes persons who never held a full-time civilian job).

[2] Includes forestry and fisheries not shown separately.

Source: Current Population Survey, Bureau of the Census.

TABLE 29.—*Distribution of the long-term unemployed and the rate of long-term unemployment, by age and sex: April–September average, 1954 and 1955*

Age and sex	1954	1955	Long-term unemployed as percent of total unemployed in age-sex group	
			1954	1955
Total long-term unemployed [1]	100.0	100.0	27.7	27.6
Male, 14 years and over	70.4	69.4	29.5	29.7
14 to 17 years	2.5	3.3	12.3	12.0
18 and 19 years	4.6	3.7	25.0	20.3
20 to 24 years	8.3	7.2	26.4	22.3
25 to 44 years	29.3	21.4	30.6	27.3
45 to 64 years	22.1	29.9	35.8	45.2
65 years and over	3.6	3.9	32.9	36.6
Female, 14 years and over	29.6	30.7	24.2	23.8
14 to 17 years	1.3	1.1	10.1	7.0
18 and 19 years	2.1	3.4	15.9	24.6
20 to 24 years	4.1	2.9	23.4	16.4
25 to 44 years	14.0	13.5	27.5	26.6
45 to 64 years	7.5	9.3	28.6	31.8
65 years and over	.6	.6	37.0	36.6

[1] Unemployed 15 weeks or longer.

Source: Current Population Survey, Bureau of the Census.

TABLE 30.—*Distribution of the long-term unemployed and the rate of long-term unemployment, by color and sex: April–September average, 1954 and 1955*

Color and sex	1954	1955	Long-term unemployed as percent of total unemployed in color-sex group	
			1954	1955
Total long-term unemployed [1]	100.0	100.0	27.7	27.6
White	79.8	80.2	27.2	28.0
Male	56.4	56.3	28.8	30.4
Female	23.3	23.9	23.9	23.8
Nonwhite	20.2	19.7	30.1	26.1
Male	14.0	13.1	32.8	27.5
Female	6.1	6.8	25.2	24.3

[1] Unemployed 15 weeks or longer.

Source: Current Population Survey, Bureau of the Census.

TABLE 31.—*Distribution of the long-term unemployed and the rate of long-term unemployment, by major industry group and class of worker: April–September average, 1954 and 1955*

[Percent or rate not shown where less than 0.1]

Major industry group and class of worker	1954	1955	Long-term unemployed as percent of total unemployed in each industry group	
			1954	1955
Total long-term unemployed [1]	100.0	100.0	27.7	27.6
Agriculture	2.5	2.5	18.9	15.8
Wage and salary workers	2.2	2.5	19.7	16.7
Self-employed workers	.3	.1		
Unpaid family workers				
Nonagricultural industries [2]	93.6	91.2	29.4	29.9
Wage and salary workers [2]	90.7	88.4	29.3	29.9
Mining	5.2	4.9	45.6	54.6
Construction	10.6	12.4	29.5	32.6
Manufacturing	39.3	30.0	31.2	30.6
Durable goods	26.1	18.7	34.2	33.3
Nondurable goods	13.2	11.4	26.5	27.2
Transportation, communication, and other public utilities	8.1	8.0	34.7	40.1
Wholesale and retail trade	13.4	14.4	23.3	24.8
Service industries	11.7	15.9	24.2	24.3
Private households	2.6	2.6	21.8	16.4
Educational services	1.1	.6		
Other service industries	8.1	12.9	24.7	28.7
Public administration	2.6	3.0	39.9	43.6
Self-employed workers	2.8	2.9	31.8	30.2
Unpaid family workers		.1		
Never held a full-time job	4.1	6.3	14.0	15.4

[1] Unemployed 15 weeks or longer.
[2] Includes forestry and fisheries not shown separately.

Source: Current Population Survey, Bureau of the Census.

TABLE 32.—*Distribution of the long-term unemployed, by major occupation group and sex: April 1954 and 1955*

[Percent not shown where less than 0.1]

Major occupation group and sex	1954	1955
Total long-term unemployed [1]	100.0	100.0
Male	69.2	72.1
Professional, technical, and kindred workers	.9	1.7
Farmers and farm managers	.5	
Managers, officials, and proprietors, except farm	1.3	2.8
Clerical and kindred workers	3.6	3.6
Sales workers	1.1	.7
Craftsmen, foremen, and kindred workers	14.2	15.4
Operatives and kindred workers	24.7	21.7
Private household workers		
Service workers, except private household	5.5	4.5
Farm laborers and foremen	2.5	2.9
Laborers, except farm and mine	12.6	15.6
Never held a full-time job	2.1	4.6
Female	30.8	27.9
Professional, technical, and kindred workers	.6	.3
Farmers and farm managers		
Managers, officials, and proprietors, except farm	.6	
Clerical and kindred workers	4.1	3.9
Sales workers	1.9	.6
Craftsmen, foremen, and kindred workers	.1	.2
Operatives and kindred workers	15.0	12.2
Private household workers	1.5	1.3
Service workers, except private household	4.0	5.8
Farm laborers and foremen	.1	.4
Laborers, except farm and mine	.5	.4
Never held a full-time job	2.5	2.1

[1] Unemployed 15 weeks or longer.

Source: Current Population Survey, Bureau of the Census.

TABLE 33.—*Rate of long-term unemployment, by major occupation group: April 1954 and 1955*

Major occupation group	Rate of long-term unemployment [1]	
	1954	1955
Total unemployed	30.2	37.5
Professional, managers, and kindred workers	21.2	37.1
Clerical, sales, and kindred workers	26.3	30.8
Craftsmen, foremen, and kindred workers	27.9	37.6
Operatives and kindred workers	34.1	43.0
Service workers	29.9	31.4
Farmers and farm laborers	28.8	31.4
Laborers, except farm and mine	28.9	37.3
Never held a full-time job	35.0	43.5

[1] Long-term unemployment (those persons unemployed 15 weeks or longer) as percent of total unemployment in occupation group.

Source: Current Population Survey, Bureau of the Census.

TABLE 34.—*Monthly turnover (gross changes) in unemployment by type of change and sex: January–October 1955*

Months and sex	Accessions [1] to unemployment					Reductions [2] from unemployment				
	Total accessions to unemployment as a percent of the unemployed level at the end of the period [1]	Percent distribution of accessions by status before change				Total reductions in unemployment as a percent of the unemployed level at the beginning of the period [2]	Percent distribution of reductions in unemployment by status after change			
		Total accessions	In agriculture	In nonagricultural industries	Not in the labor force		Total reductions	In agriculture	In nonagricultural industries	Not in the labor force
Both sexes:										
January–February	45.5	100.0	4.9	60.0	35.1	44.6	100.0	4.4	64.4	31.2
February–March	35.8	100.0	3.4	60.5	36.1	42.5	100.0	7.1	64.4	28.6
March–April	42.6	100.0	3.3	58.6	38.1	48.0	100.0	4.9	66.5	28.6
April–May	49.2	100.0	3.0	56.1	41.0	56.4	100.0	6.7	61.5	31.7
May–June	59.1	100.0	2.9	47.4	49.5	55.4	100.0	6.4	62.5	30.9
June–July	57.1	100.0	3.7	49.0	47.3	61.8	100.0	5.0	60.1	35.0
July–August	55.1	100.0	7.2	45.1	47.7	62.0	100.0	5.8	55.8	38.5
August–September	64.2	100.0	3.0	52.0	45.0	66.2	100.0	10.2	56.6	33.3
September–October	52.9	100.0	4.5	55.1	40.5	57.2	100.0	3.9	66.7	29.3
Male:										
January–February	42.3	100.0	7.3	70.5	22.3	40.1	100.0	6.8	76.7	16.4
February–March	33.7	100.0	5.0	68.6	26.4	40.7	100.0	9.5	72.6	17.9
March–April	39.1	100.0	5.1	70.5	24.5	45.3	100.0	7.3	74.7	18.1
April–May	43.1	100.0	5.4	63.3	31.3	54.3	100.0	9.7	72.3	17.9
May–June	56.5	100.0	4.7	54.3	40.9	50.9	100.0	9.5	72.0	18.4
June–July	54.1	100.0	5.6	54.3	40.1	59.0	100.0	6.4	64.3	29.3
July–August	51.5	100.0	10.2	58.0	31.8	60.7	100.0	7.4	62.8	29.8
August–September	60.0	100.0	3.8	64.5	31.7	63.9	100.0	11.2	63.6	25.1
September–October	52.0	100.0	4.1	66.4	29.4	53.6	100.0	5.7	74.4	19.9
Female:										
January–February	54.4	100.0	----------	37.6	62.4	56.0	100.0	----------	42.0	58.0
February–March	41.0	100.0	----------	44.0	56.0	47.1	100.0	1.9	46.7	51.4
March–April	51.1	100.0	----------	36.0	64.0	55.0	100.0	----------	49.6	50.4
April–May	60.0	100.0	----------	46.9	53.1	60.8	100.0	1.1	40.9	57.9
May–June	64.0	100.0	----------	35.8	64.2	63.2	100.0	2.1	49.4	48.3
June–July	62.8	100.0	.6	40.6	58.8	66.9	100.0	2.7	53.3	44.2
July–August	60.6	100.0	3.3	28.7	68.0	64.4	100.0	3.3	44.7	52.0
August–September	69.5	100.0	2.1	38.4	59.6	69.5	100.0	8.9	47.5	43.9
September–October	54.3	100.0	5.2	38.9	56.0	61.8	100.0	1.9	58.1	39.8

[1] An accession represents a person who was not unemployed (that is, was either employed or not in the labor force) in the survey week of the first of a pair of months and who was unemployed in the second of the pair of months.

[2] A reduction represents a person who was unemployed in the survey week in the first of a pair of months and who was not unemployed (that is, was either employed or not in the labor force) in the survey week of the second of a pair of months.

NOTE.—These data are based on reports from identical persons for 2 successive months.

Source: Current Population Survey, Bureau of the Census.

APPENDIX B

DESIGN OF EXPANDED SAMPLE FOR CENSUS BUREAU'S CURRENT POPULATION SURVEY

A multistage sampling design will be used, identical in principle with the present 230-area design, but with the selection of 100 additional sample areas. The 35,000 sample households will be distributed over all types of areas, that is the same expected proportion of sample households as in the present sample will be selected in each type of area—standard metropolitan areas, small urban areas, and rural areas.

Selection of sample areas.—The present 230-area design was selected on the basis of the following principles: The entire area of the United States consisting of about 3,000 counties was divided into about 2,000 primary sampling units. With some minor exceptions, a primary sampling unit (PSU) consists of a county or a number of contiguous counties. Each standard metropolitan area (SMA) constituted a separate PSU. In combining counties to form PSU's each PSU was defined so as to be as heterogeneous as possible. Greater heterogeneity could be accomplished by including more counties. However, another important consideration was to have the PSU sufficiently compact in area so that a small sample spread throughout it could be efficiently canvassed without undue travel cost. A typical primary unit, for example, included both urban and rural residents of both high and low economic levels and provided, to the extent feasible, diverse occupations and industries.

The PSU's were then grouped into 230 strata. The 44 largest standard metropolitan areas and certain other SMA's were strata by themselves. In general, however, a stratum consisted of a set of PSU's as much alike as possible in various characteristics such as geographic region, population density, rate of growth in the 1940–50 decade, percentage nonwhite, principal industry, type of agriculture, and so on. Except for the 44 largest SMA's and the 16 other areas, each of which is a complete stratum, the strata were established so that their sizes in terms of 1950 population were approximately equal. Where a PSU was a stratum by itself, it automatically fell in the sample. From each of the other strata, one PSU was selected in a random manner for inclusion in the sample, the selection having been made in such a manner that the probability of the selection of any one unit was proportionate to its 1950 population. For example, within a stratum the chance that a PSU with a population of 50,000 would be selected was twice that for a unit with a population of 25,000.

Expansion to 330 areas.—In expanding the sample from 230 to 330 areas, one of the objectives was to retain the present 230 areas intact, and as unbiased, representative samples of the strata in which they occur. The 96 largest nonself-representing strata were subdivided into 196 strata, without regard to the location of the present sample areas. These continued to represent the strata in which they fell after subdivision. One hundred new sample areas were selected from the 100 new strata, on the same principles as were originally usd for selection of the 230 areas. (See above.) Thus, the existing 230 areas and 100 new areas constitute the new 330-area sample.

Selection of sample households.—Within each of the 330 sample areas, sampling rates have been determined so that the sample is self-weighting. For the selection of the specific sample households, area sampling methods, indentical with those currently in use, will be continued. For each stratum an overall sampling ratio of about 1 in 1,350 is to be used. The sampling ratio used in each particular sample area (sample PSU) depends on the proportion that the sample area population (at the time of the 1950 census) was of the stratum population. Thus, in a sample area which was one-tenth of the stratum, the within-PSU sampling ratio which results is 1 in 135, achieving the desired ratio of 1 in 1,350 for the stratum.

Within each of the PSU's, area sampling methods are used in the selection of specific households. In each PSU, the number of households to be enumerated each month is determined by the application of the within-PSU sampling ratio rather than through the assignment of a fixed quota. This procedure makes it possible for the sample to reflect any shifts in population. For example, if on the basis of the 1950 census a sample ratio of 1 in every 135 is used in a sample area, the number of households expected in the sample will be larger than that obtained by a fixed quota in areas where the number of households has increased since the census. In areas where the number of households has declined, the expected number of sample households will be smaller. In this way the sample properly reflects the changing distribution of the population and avoids the distortion

which would result from the application of fixed quotas of households, or persons, based on the population at an earlier date.

In the application of area sampling methods, several stages of sampling are used within each selected PSU. First, a sample of administrative units used for the 1950 censuses of population and housing (enumeration districts) are selected, with the probability of selection of any one of these proportionate to its 1950 population. These selected enumeration districts are then subdivided into segments, that is, small land areas with well-defined boundaries having in general an expected size of about six dwelling units or other living quarters. Where roads, streams, and other terrain features that can be used to subdivide an enumeration district are insufficient, some of the resultant segments are several times the desired average size of six households. For each subdivided enumeration district, one segment is designated for the sample, with the probability of selection proportionate to the estimated size of the segment. Where available advance information indicates that the segment contains about six households, all units within the segment boundaries are to be included in the sample. In cases where the advance information indicates a segment size of several times six units, a field listing is to be made of all living quarters in the segment and a systematic subsample drawn so as to achieve the equivalent of a segment which is canvassed completely.

In subdividing enumeration districts into segments and in determining in advance the approximate size of each segment, use is made of various materials. In the larger urban places, information concerning the number of units in each block is obtained from block statistics bulletins published from results of the 1950 censuses of population and housing for 209 of the cities of 50,000 inhabitants or more. In conjunction with these bulletins, considerable use is made of large-scale Sanborn maps, which are available commercially and relatively up-to-date for most medium-size and large urban centers and show the general outline of each structure within blocks. Where such data are not available, the location and number of dwelling units in small geographic areas bounded by roads, streams, etc., are obtained either from maps used by interviewers in the 1950 censuses of population and housing or from special field visits. Enumeration districts in urban centers, where mapping materials are generally more precise are more readily subdivided into compact segments (averaging six units) than are those in rural areas; but a substantial proportion of the resultant rural segments are of this size also. Some variation in actual segment size arises also where the mapping materials, although sufficiently detailed, are out of date because of substantial new construction or because they contained errors. Since the number of households is being increased to 35,000, the sample take within some of the areas will be increased. In 134 areas of the present 230, the sample size will increase by two-thirds, to provide their contribution to the total expansion.

Rotation of sample.—Part of the sample is changed each month. A primary reason for rotating the sample is to avoid the problems of lack of cooperation which arise when a constant panel is interviewed indefinitely. To accomplish this rotation of the sample on a gradual basis, mapping and other materials for several samples are prepared simultaneously. For each sample, eight systematic subsamples (rotation groups) of segments are identified. A given rotation group is interviewed for a total of 8 months, divided into 2 equal periods. It is in the sample for 4 consecutive months 1 year, leaves the sample during the following 8 months, and then returns for the same 4 calendar months of the next year. In any one month, one-eight of the sample segments are in their first month of enumeration, another eighth are in their second month, and so on, with the last eighth in for the eighth time (the fourth month of the second period of enumeration). Under this system 75 percent of the sample segments are common from month to month and 50 percent from year to year. This procedure provides a substantial amount of month-to-month and year-to-year overlap in the panel (thus reducing discontinuities in the series of data) without burdening any specific group of households with an unduly long period of inquiry.

APPENDIX C

DESCRIPTION OF SEASONAL ADJUSTMENT METHOD USED BY THE BUREAU OF THE CENSUS

A method has been developed by the Bureau of the Census for computing seasonal adjustments rapidly and inexpensively through the use of high-speed electronic equipment. The use of electronic equipment has eliminated the very burdensome and costly clerical work formerly required for seasonal adjustments, and has made it feasible to introduce refinements in the method and to keep computations up to date.

The present seasonal method is an adaption and elaboration of the standard ratio-to-moving average method and yields moving seasonal factors. Under this method, the original observations are viewed as a composite comprised of trend, cyclical, seasonal, and irregular components. A series reflecting the trend-cycle components is estimated by a 12-month moving average, and divided into the original observations to obtain a series reflecting the seasonal and irregular components. Moving average curves are then fitted to the seasonal-irregular component for each month in successive years to represent the seasonal factors alone.

An iterative procedure is used: A preliminary seasonally adjusted series is first obtained to provide a series representing the trend-cycle-irregular components, with perhaps a trace of the seasonal. This series is, in turn, smoothed by a 5-month moving average to provide a more flexible trend-cycle curve than the 12-month moving average. The sequence of computations first made on the 12-month moving average is then repeated on the 5-month average to yield the final seasonally adjusted series.

Altogether, the method yields 19 tables which show the successive stages of the computations from the original observations to the final seasonally adjusted series. Included are 5 different moving averages, 2 sets of ratios to moving averages, 2 centered and 2 uncentered sets of moving seasonal factors, 2 seasonally adjusted series, and 5 tests of the work. For a 10-year monthly series, the electronic computer performs the computations in about 1 minute and at low cost.

A description of all the steps, with brief explanatory comments, follows:

ROUND I—COMPUTATION OF PRELIMINARY SEASONALLY ADJUSTED SERIES

1. Compute the ratios of the original observations for each month to the average of the original observations for the preceding and following months. This is a test for the existence of seasonality in the observations. For each month a random series of variations about 1.00 would be expected in series from which the seasonal had been completely extracted. Values above or below 1.00 for a number of consecutive years indicate the existence, but not the shape, of a seasonal pattern in the series.

2. Compute a 12-month moving average of the original series. This curve provides a measure of the trend-cycle component of the series. A 12-month moving average (or a multiple of 12 months) is necessary because only 12-month aggregates suppress the seasonal component of the series. A 12-month moving average is, however, a defective measure because it does not reach up into cyclical peaks nor down into cylical troughs. Also, the turns are not coincident with those in the underlying cyclical surve—for example, the 12-month moving average turns too quickly before a relatively rapid rise, and too slowly after a relatively mild rise.

3. Center this moving average: That is, compute a 2-month moving average of the 12-month moving average. This operation places the moving average values at midmonths. The first value of the centered moving average is placed at the seventh month of the original series.

4. Compute ratios of the original data to the centered 12-month moving average. This computation results in a series which contains primarily the seasonal and erratic components of the original series.

5. Compute a positional mean of each successive 5-term group of ratios for each of the months, omitting the highest and the lowest ratio from the computation of the mean in each case. Thus, each mean will be an average of the 3 central ratios for each successive 5-term combination for each month. The values of this moving average will be the "uncentered" seasonal factors. The first factor available will be for the third January. This value should also be

used as the factor for the first two Januaries. Similarly, the last value available will be that for January of the third from last year, and should also be used for January in the last 2 years. The same for February and all other months.

This step provides a 5-term moving average of the ratios, with the largest and the smallest extreme items omitted. The omission of the extreme items appears necessary to avoid the distortion of the seasonal factors for a given month for 5 years by a single extreme ratio. On the other hand, the omission of 2 out of 5 items from each average tends to produce a somewhat erratic curve.

The resulting seasonal factors are moving for the intermediate years and stable for the first 3 and the last 3 years. While it has been general practice in constructing seasonal factors manually to level off the factors for current years, careful professional review of the fitted curve in relation to the ratios to moving average, and occasional modification of the moving curves, are desirable. In the chain of computations comprising the method, this step is probably the link that most needs strengthening, particularly in short series.

6. Center the ratios for each year about 1.00: that is, divide the 12 positional means for each year by their arithmetic mean. These uncentered ratios are the preliminary seasonal factors.

7. Divide these seasonal factors into the corresponding figures of the original series, month by month: i. e., divide the seasonal factor for January 1947 into the original observation for January 1947; divide the factor for January 1948 into the original observation for January 1948. Similarly, divide the factor for February 1947 into the original observation for February 1947; the factor for February 1948 into the original observation for February 1948, and so on. This yields the preliminary seasonally adjusted series. (As already noted, the factor computed for the third January is also used for the first 2 Januarys in the series, and the factor for January of the third from the most recent year is also used for the 2 most recent Januarys; the same procedure is followed for other months of the year).

8. Compute the ratios of the preliminary seasonally adjusted series to the averages of the preliminary seasonally adjusted series for the preceding and the following months. This is a test for residual seasonality, similar to that made on the original observations and described in 1, above.

9. Compute ratios of the uncentered 12-month moving average of the preliminary seasonally adjusted series to the uncentered 12-month moving average of the original series. This is a test of the effect of the adjustment on the level of the series, showing whether the adjustment has resulted in significant differences between the level of the adjusted and the unadjusted series for any 12-month period.

ROUND II—COMPUTATION OF FINAL SEASONALLY ADJUSTED SERIES

(NOTE.—Steps 11 to 16 are identical to steps 4 to 9, and the comments made under the first group of steps are generally applicable to the corresponding items in the second group.)

10. Compute a 5-month moving average of the preliminary seasonally adjusted series. The preliminary seasonally adjusted series contains the cyclical, trend, and irregular components of the series with only a trace of the seasonal component. A short-term moving average of this series can be used, rather than a 12-month moving average, because there generally is no significant seasonal factor to suppress. The 5-month moving average is more flexible than the 12-month moving average and, for this reason, will usually provide a better measure of the cycle-trend component. For certain kinds of series the 5-month moving average does not adequately smooth out the irregular fluctuations. For this and related reasons, careful review of the 5-month moving average curve in relation to the original observations and the seasonally adjusted series is desirable.

11. Compute ratios of the original figures to the 5-month moving average. This yields a purer measure of the seasonable and irregular components of the series than does the ratio of the original observations to the 12-month moving average.

12. Compute a positional mean of each successive 5-term group of ratios for each of the months, omitting the highest and the lowest ratio from the computation of the mean in each case. Thus, each mean will be an average of the 3 central ratios for each successive 5-term combination for each month. The values of this moving average will be the "uncentered" seasonal factors. The first factor available will be for the third January, and this value should

also be used for the first two Januaries. Similarly, the last value available will be that for January of the third from last year, and this value should also be used for January in the last 2 years. The same for February and all other months. This yields the uncentered moving seasonal factors.

13. The seasonal factors so obtained should, for each year, be centered so that their average is equal to 1. This is accomplished by dividing the 12 positional means for each year by their arithmetic mean. This yields the final moving seasonal factors.

14. Divide the final seasonal factors into the corresponding figures of the original series, month by month, i. e., divide the seasonal factor for January 1947 into the original observation for January 1947; divide the factor for January 1948 into the original observation for January 1948. Similarly, divide the factor for February 1947 into the original observation for February 1947, the factor for February 1948 into the original observation for February 1948, and so on. This yields the final seasonally adjusted series.

15. Compute the ratios of the final seasonally adjusted series to the averages of the final seasonally adjusted series for the preceding and following months. This is a test for residual seasonality in the final series, similar to that made on the original observations and described in 1, above.

16. Compute the ratios of the uncentered 12-month moving average of the final seasonally adjusted series to the uncentered 12-month moving average of the original series. This is a final test to determine whether the adjustment has resulted in any significant differences between the sums of the adjusted and unadjusted figures for any 12-month period.

Seasonal adjustments for unemployment

Seasonal adjustment factors currently in use for the unemployment series and the seasonally adjusted index of unemployment (1947–49=100) are presented in the following tables:

TABLE 1.—*Seasonal adjustment factors for unemployment: 1947 to date*

Month	1947	1948	1949	1950	1951	1952 to date
January	107.0	106.9	110.3	113.1	116.0	116.1
February	117.6	121.5	122.0	124.0	122.0	121.6
March	111.4	112.9	111.4	111.3	111.0	111.6
April	102.2	102.8	102.1	97.9	98.1	98.7
May	92.1	93.5	89.9	91.8	92.0	91.9
June	113.2	110.4	110.1	108.2	107.7	106.9
July	108.6	110.4	110.4	110.2	109.3	107.3
August	95.3	95.2	94.3	93.4	91.0	91.0
September	92.2	90.7	89.5	87.8	86.5	88.5
October	87.2	82.8	83.4	81.7	81.8	80.3
November	84.8	84.7	88.1	90.2	90.3	91.9
December	88.4	88.3	88.2	90.5	94.2	94.1

NOTE.—The adjustment factors for the years 1947–51 have not yet been thoroughly evaluated and should, therefore, still be regarded as tentative.

TABLE 2.—*Deseasonalized unemployment index: January 1947 to date*

[1947–49=100]

Month	1947	1948	1949	1950	1951	1952	1953	1954	1955
January	89	76	95	156	85	70	64	105	114
February	84	86	104	149	78	68	58	119	110
March	83	85	112	146	76	64	59	132	112
April	93	84	117	142	70	64	63	139	118
May	84	74	144	131	69	69	56	142	107
June	89	78	135	123	73	67	58	124	99
July	94	80	146	115	67	71	57	123	91
August	87	81	154	106	68	70	54	141	97
September	82	83	148	105	73	64	59	138	96
October	76	78	169	94	78	63	64	135	.....
November	76	85	153	98	80	61	73	124	.....
December	73	87	156	97	70	59	97	119	.....

Source: Current Population Survey, Bureau of the Census.

Mr. BOLLING. I want to express to you our pleasure at hearing the type of statement you have made. I have been very much impressed by the frankness with which both you and Mr. Bowman have described not only your accomplishments but your difficulties. It is of great help to the committee. This session this morning demonstrates that we will have a productive pair of days of hearings.

As I said earlier, I intend to reserve my questions until tomorrow afternoon. The committee will recess until 2 o'clock this afternoon when the witness will be Ewan Clague, the Commissioner of the Bureau of Labor Statistics.

(Whereupon, at 11:40 a. m., the subcommittee recessed, to reconvene at 2 p. m., same day.)

AFTERNOON SESSION

The subcommittee met at 2 p. m., the Honorable Richard Bolling (chairman of the subcommittee) presiding.

Also present: Grover W. Ensley, staff director; and John Lehman, clerk of the committee.

Mr. BOLLING. The subcommittee will be in order.

The witness this afternoon is Ewan Clague, Commissioner of the Bureau of Labor Statistics.

I understand you have a formal statement you wish to file for the record, and you wish to proceed extemporaneously; is that correct?

Mr. CLAGUE. Yes, sir.

Mr. BOLLING. The statement will be included in the record.

(The complete statement of Mr. Ewan Clague appears at the end of his testimony.)

Mr. BOLLING. You may proceed as you wish, sir.

STATEMENT OF EWAN CLAGUE, COMMISSIONER OF LABOR STATISTICS, UNITED STATES DEPARTMENT OF LABOR

Mr. CLAGUE. Mr. Chairman, I think perhaps the easiest way to proceed in connection with this is to start with the first chart I have there, which shows essentially what the Bureau of Labor Statistics does in this field. The Census Bureau reports about 65 million people employed.

We in the Bureau of Labor Statistics have a total of about 50 million. That figure comes from our reports on the employment, hours, and earnings of employees. These reports come from employers and from Government agencies.

The missing 15 million are (1) the farmers and farm workers, which are included in the census reports and not in ours; (2) the self-employed in the cities; and (3) domestic servants. The remainder is the 50 million which is shown on that chart. (The charts referred to appear on pp. 99–100.)

We gather reports from about 155,000 employers every month. We have national figures, which you see on the chart, for all States, 114 local areas, and we process data for about 220 industries.

Each month we issue about 2,400 separate series, which will give an indication of the volume of this activity. The chart shows the major industry groups into which we divide the industries of the country—manufacturing, wholesale and retail trade, Government, and so forth.

I would like to stress the improvements we are endeavoring to make in these data. The first is speeding up the time of compiling and publishing. These reports refer to the middle of the month; we get them in here and processed by about the 4th or 5th of the month, and we are able to issue them as early as the 7th of the month. As you know, those figures came out this morning showing the data for the Census Bureau and for ourselves in this joint release. The figures on the chart show the data up to the middle of October.

The second improvement we are trying to make is in the quality of the reports. You can see the importance of having accurate data, especially when we divide these into 200 industries, and by various States and localities.

First of all, for 20 years we have had what we call a shuttle schedule. That is to say, it is a form which contains the 12 months of the year listed. When we send the report to the employer, he fills it out, it comes back to the State, it is sent here to us, we take off the data, and then it goes back again through the same channels. So the employer sees month after month what he has reported, and we are able to at a glance see whether he seems to be reporting the same information.

That we have done, as I have said, for more than 20 years. However, this year we are initiating a quality control program to check more closely. We propose to take a sample of employers. We will visit them to find out how they are interpreting the definitions which we have on our forms, and how they are compiling the data, what in actual fact they are supplying in answer to our question. Out of this we hope to impove still further the accuracy of the data presented.

The third thing we are doing in connection with this is adding additional data. For example, the Council on Economic Advisers is interested in overtime hours beyond the scheduled week. These are hours for which the employer is paying premium time for overtime. There is a feeling that this is perhaps a good indication of the intensity of the demand for labor, that its disappearance is an indication of a slackening in demand. Likewise, when the employees are working less than scheduled hours per week, this may indicate a decline in business long before any unemployment actually appears. So, beginning in January 1956, for manufacturing only, we are going to be asking employers for information on the overtime hours beyond the normal work schedule during the week.

The second set of data being expanded is labor turnover. For about a quarter of a century the BLS has produced data on labor turnover, that is to say, the number of quits, number of layoffs by employer, number of discharges, or leaving for other reasons; and, of course, the number of hires that the employer has. These are reported by the month. This program is now being extended to the States and localities in this country, through cooperative arrangement between our Bureau and the Bureau of Employment Security in the Department of Labor.

The proposal this year is to pick up about half the States, and a considerable number of areas within those States, in producing labor turnover series comparable to the national BLS series.

The third set of additional data that we hope to get is by adding more local areas into the present employment statistics that you see on the chart. We have a little more than a hundred local areas at

the present time. We would like to extend that by about 40 or more so as to reach all the major local areas in the country. Also, we are now getting State and local government figures on a more comprehensive basis. The Bureau of the Census turned over to us a year ago the responsibility for collecting employment of State and local governments. This is a difficult problem, and one to which we have had to devote considerable attention. However, we are getting better reports from them, and we hope to improve the Government series thereby.

Finally, of course, we are making somewhat more analyses of the figures. These aren't exactly new data, but more analytical data.

May I see the next chart?

I would like to show you one kind of analysis that results from studying these data more closely. This is a chart which goes back to 1910 and carries forward to 1955. It shows just two lines: For the entire country, employment engaged in the production of goods, as against employment in the production of services. In the production of goods, of course, we have manufacturing, mining, and agriculture which is producing farm products. In the other group we have services, which would be service industries, public utilities, transportation, wholesale and retail trade, which is one of the largest—all types of service industries. You will notice that over the period of nearly half a century there has been some growth in the production of goods, and in the people employed in the production of goods, but not an astonishing amount. In fact, it was over 25 millions in 1910, and it is still only about 27 millions in 1955. On the other hand, you will see that employment in the services has grown from something like 14 million to about 30 million—doubled in the intervening period. This is characteristic of the growth of the Nation's economy and standard of living over the last 50 years.

I cite this as an example of the kind of analyses that we can make when we have more detailed data.

The fourth thing we are doing in connection with improvements is interpreting the data.

May I see the next chart?

We are interpreting the data in order to help make better economic analyses. One of the interpretations, of course, is to make seasonal adjustments. We have illustrated, for example, in wholesale and retail trade, the actual employment, month by month, during several past years. The chart doesn't have a zero base and the figures should be read in the light of that fact. However, you will see the great rise in employment every Christmas. The other line shows those employment figures seasonally adjusted. In other words, taking account of this pattern, year after year after year, and devising what seems to be a normal seasonal adjustment, we then apply that adjustment to the actual figures. You will note the rather sharp rise in 1955 which is brought out by the adjusted figures.

This is a type of adjustment which we would like to make for not only trade as a whole, but also for some of the smaller industry groups, to find seasonality factors that are causing changes in employment.

We are planning also to test the seasonality of the total man-hours of work. Employment figures show the persons on the payroll. There could be a sharper seasonal variation in the man-hours of work, such as overtime at one period and short time at another.

Finally, the last chart shows net spendable earnings—the actual weekly earnings of the average worker in manufacturing industries. That is the heavy black line that starts at the lower left-hand corner of the chart and goes up to the upper right. That is the gross earnings that the worker has in his pay envelope. But there may be changes from time to time in withholding taxes, and in social-security taxes. So we subtract those taxes from the earnings and get a net figure of take-home pay. Then, finally, we correct that, or adjust it by the Consumers Price Index for changes in the cost of living. The result gives the net purchasing power of the wage earner's weekly wage. This chart illustrates another type of analysis that has value for interpreting the current economic situation.

I would like to say just a few words on the uses of these employment, hours and earnings data. I don't know of any statistic in the world that has more useful data flowing from a comparatively simple report. What we ask of the employer is the number of people on the payroll, the total hours that they work in a given week, and the total dollars paid the workers in that week. From those figures we can derive these numerous series that I mentioned earlier.

These employment satatistics are used by the Federal Reserve Board in developing their index of industrial production; they are used by the Department of Commerce in the national income figure. They are used widely in escalation contracts between Government and private businesses, and among private businesses themselves; the average hourly earnings, for example, in certain industries are used widely in escalation. The data are used, of course, in collective bargaining between management and labor, in Government policy determinations by the Council of Economic Advisers, and, of course, by your own Joint Committee on the Economic Report.

As far as future programs are concerned, I might mention three. There has been some suggestion that we ought to know about employment more frequently than once a month. I indicated to you earlier that figures for the middle of the month become available now about the end of the first week in the following month. We possibly could take a small sample of firms and get some figures for the first of the month instead of the 15th; in other words, take a sounding midway between these middle-of-the-month figures. This would not be done on a comprehensive basis, with all this detail, but we might succeed in getting a single national figure for employment only that would be an indicator every 2 weeks how employment was going.

At the other extreme, we need more industry detail. The Bureau of Employment Security and the State employment security agencies furnish what we call the benchmarks for this information. That is, they get the total count of employees covered by unemployment insurance. They tabulate those data and we use them to correct our sample from year to year. If our sample, which includes about 40 percent of this employment, wanders at all from the total count, then we can correct it subsequently.

Now, the Bureau of Employment Security this next January is going to give us detailed counts for all 4-digit manufacturing industries, which means quite a detailed industry breakdown. That will enable us in turn to have our reports of industries each month show more industries than we now do. In other words, machine tools can

be picked out each month and shown as a separate industry, which is not now possible.

Finally, we expect next year, and in subsequent years, to extend this labor turnover that I mentioned to the remainder of the States, and to all the localities where we are working with employment statistics. So figures showing volume of employment and showing turnover in employment would be available for all States and all localities equally.

Now, let me turn briefly to unemployment. This is the area in which it is evident that a great deal more work could and should be done. The Department of Labor has just instituted a study, or a series really, on what we call the characteristics of the unemployment compensation claimants. This is a cooperative venture with the Bureau of Employment Security, and the Bureau of Labor Statistics. Mr. Goodwin will describe that more tomorrow, so I won't spend much time on it now. I shall simply indicate that we are following the census technique of taking a small sample, a 1-percent continuous sample, of the workers who are drawing unemployment compensation benefits in the States. They are all, of course, unemployed, so that gives us a picture of the characteristics of that large group of unemployed. Normally they run about 60 percent, even sometimes as high as 75 percent, of total unemployment in the country. So, while this sample doesn't cover all the unemployed it will give a good picture of a very important part of them, particularly those who have been previously at work, as certified by their eligibility for benefits.

The Department of Labor is also starting a study of the causes of unemployment. For example we would like to make more analyses of the seasonality of individual firms. You noted the figures on the seasonality of retail trade as a whole. But we know some firms in an industry have much less seasonality than others. What is the variation within the industry? What are the possibilities of stability for those firms that are now fluctuating quite widely in employment from one season to another?

Also, as I believe was mentioned by Mr. Burgess this morning, we are endeavoring to work with the Census Bureau to see if there is some way of picking up some information on the recent work history of people who are unemployed, their spells of employment and unemployment.

Another project is a survey of the unemployed in various localities. For example, we want to take a local area that has had long-term unemployment and make quite an intensive study as to who is still unemployed after a long period of time, what kind of occupations are represented among them, how many and what kind of people left the labor market—an intensive pilot study of a distressed area, which would give some picture of the causes of unemployment there.

We also are making a survey of a plant shutdown in a small community. There are many advantages, from a businessman's point of view, in locating in a small town. But if the plant closes down it often leaves the town in a bad situation. So we have found a place in which a fairly large plant closed down and left the community. We are studying what happened to those unemployed, where they got jobs, how many are still out of work, etc.

We are teaming up with another community to study the new entrants into the labor market from the schools. This is a cooperative venture with school authorities to see what happens to school graduates, what job experience they have had, and so forth.

These are the results we hope to get from these studies of unemployment: First, a great deal more knowledge about the characteristics of the major groups of unemployed, the big segments of the unemployed groups; second, getting improved methods of measuring unemployment; third, recommendations for any new studies that might flow from some of these pilot studies that we are now doing on such a small scale; and, then, finally, of course, suggestions for action. It is always a question as to what can best be done in a distressed area in the way of Government assistance. For example, there is no use in putting in a public works program if most of the unemployed in a local area are women. They are unemployable on public works. The problem of tailoring the action to the situation necessarily needs to be solved through a careful analysis of the characteristics of the unemployed in a given community.

Another study that the Department has inaugurated this past year is on the older worker. Several bureaus of the Department are participating in that. Mr. Goodwin will undoubtedly talk some more about that tomorrow. I will mention that in the BLS we are doing two things this year. First, we are making a pilot study of the job performance of older people in comparison to younger people. In other words, how about the productivity of the older worker as a worker in a given job situation? We are trying to find firms that have had some comparative data on the output of workers by age. By studying those we hope to lay a foundation for some knowledge of the occupations in which older workers decline rapidly in their ability to produce, of the industries in which they continue to be able to work far into old age.

The other one is a study of labor-management agreements from our files of collective bargaining agreements. This will be a study to find out in what way the unions and managements have made any agreements with respect to the handling of older workers. For example, it may be an agreement that they stay on working beyond retirement age. We hope to make a good sample study of the extent to which the problem of the older worker has found its way into labor-management collective bargaining contracts.

Another area is the field of automation. Secretary Mitchell testified before your joint committee 2 weeks ago in connection with our productivity data, and the automation studies which the BLS is conducting. We have done two studies so far, copies of which we have turned over to the joint committee. We are planning to make some additional studies in other plants. These are studies of individual firms, in which some significant new mechanism, or machine, or process, has been instituted. We then follow up to find out what happened as a result—the occupations that were affected, the transfers of personnel that were made, and the economic consequences within that firm of the introduction of the automatic machinery or other automatic processes. We plan to continue that study during the present year, and hopefully into subsequent years.

The main point that I would like to emphasize is that, in general, automation is not causing overall unemployment any more than it has in the past. It will not precipitate us into a depression, with heavy volumes of unemployment. What it does cause is turnover. It causes the obsolescence of certain occupations. Some of them disappear entirely. Individuals may be affected by it and lose out in their job and their occupation. It is a problem of turnover and of transfers, rather than of the volume of unemployment. So our automation studies are directed toward the effects of automation in producing labor displacement on the one hand and creating job opportunities at the same time.

This line of thought leads to our studies in occupational outlook—the outlook for occupations. The Department of Labor has set in motion this year a program on the skills of the work force. Out of such information as we now have available there is every indication that there will be a shortage of skills in the future, particularly higher skills. New skills are developing for which we do not have the personnel trained at present.

Now, the BLS publishes an Occupational Outlook Handbook. The last edition was issued in 1951. We have funds this year to start the revision of that handbook and bring it up to date. About 26 major industries, and about 500 occupations, are covered. This, of course, affects the young people entering the occupation. These handbooks are widely used in the schools as guides to young people selecting an occupation. They show the earnings, the prospects, the conditions of work, and so forth, in these various occupations.

Our last edition sold over 40,000 copies, so you can see that it is widely used. The Veterans' Administration, the schools, the employment services, and many other groups use this type of information. This revised handbook will be ready in the summer of 1957, but in the meantime we will be issuing some individual occupational analyses from time to time.

So, in conclusion, Mr. Chairman, I would just say that manpower is certainly going to be one of the Nation's most crucial problems in the years that lie ahead. Public policy will be and is being determined on the basis of manpower requirements and manpower problems. We need to know more about it. I have tried to sketch for you today the contribution we think we in the Department of Labor, and in the BLS, are making toward this end.

Thank you.

Mr. BOLLING. Thank you, Mr. Clague.

(The complete statement of Mr. Ewan Clague is as follows:)

STATEMENT ON PROGRAMS AND PROGRESS IN MANPOWER AND EMPLOYMENT STATISTICS BY EWAN CLAGUE, COMMISSIONER OF LABOR STATISTICS, UNITED STATES DEPARTMENT OF LABOR

In the past year, as the Nation moved to new highs in employment and economic activity, the significance and accuracy of the various measures of economic health have received an unprecedented degree of attention. The Government agencies responsible for these measurements, working with the Bureau of the Budget and Congress, concentrated their attention on improving these data in various ways—by speeding up their compilation and publication, by increasing their accuracy, by increasing the number of sectors of our economy that are measured, and by developing better means of presenting to the public an integrated interpretation of what the data mean.

In the Bureau of Labor Statistics we have made advances in all four of these areas. I should like to describe the steps we have taken to this committee today, beginning first with our work in the field of employment.

I. SPEEDING UP THE DATA

The Bureau of Labor Statistics each month prepares estimates of employment, hours, and earnings in the nonagricultural sector of the economy, with detailed information on some 220 industries. Because these data are regarded as key indicators of the economic health of the Nation, there has always been considerable pressure on the Bureau to produce these statistics in the shortest possible time. In recent months we have made very considerable progress in this direction. We now make available information which refers to the middle of the month in time for analysis on the 4th or 5th of the following month. This represents a reduction of approximately 40 percent from the time previously required for this operation.

To give you an idea of the magnitude of this accomplishment, I remind you that our reports are received from 155,000 employers in the country and that we literally publish each month a total of 2,400 separate statistical series on employment, hours, and earnings by industry. Moreover, from the same brief report form that we use, additional employment data are also compiled for every one of the States and for more than 100 separate areas. It is interesting to note in these days of much talk of automation that mechanization of our clerical operations was mainly responsible for this speedup in data processing. Many of the operations that were once done by hand are now done by machine, and we are continuing to seek new ways both to speed up the processing of the data and to provide additional detail for which we have a heavy demand.

II. MAINTAINING THE ACCURACY OF DATA

Because of the importance of the information we provide—and especially because of the tight deadlines we have to meet—we have paid careful attention to the quality and accuracy of our estimates. In addition to our regular operating controls and our day-to-day field contacts which go a long way toward insuring accurate reports, the BLS has used for more than 25 years a shuttle schedule designed to assist firms to report consistently, accurately, and with a minimum of cost. Our questionnaire provides space for the employers to report each month of the calendar year on the same sheet of paper. The employer uses the same schedule for an entire year, enabling him and the Bureau of Labor Statistics to check for consistency and accuracy.

This year, we are also undertaking with funds appropriated by Congress a program of quality control which calls for making a detailed analysis of the responses to our monthly employment questionnaire. We want to find out how employers are answering the questions they are asked regularly on employment, hours of work, and earnings. We plan to interview a representative sample of our respondents to find out from them how they compile their employment and payroll data, and particularly how they interpret the definitions of terms we use. When this work has been completed this spring, we will have added not only to our knowledge of the statistical validity of our data, but we will also be in a position to make further improvements and refinements which will enable employers to provide us with the most accurate data obtainable.

III. ADDING DATA ON EMPLOYMENT

1. In addition to speeding up the production and analysis and improving the accuracy of the data, the Bureau is doing considerable work in expanding its coverage of employment and related information. One of the most important programs in this area is our project for producing statistics on overtime hours. For some time, there has been considerable interest, particularly at the Council of Economic Advisers, in the extent to which industry is working more or less than the regularly scheduled workweek. We think that this may be an important clue to the developing employment situation, and may provide a sensitive indicator of changes in the economic health of the Nation. When employers wish to adjust their production operations to changes in the orders they are receiving, often the quickest way of doing so is by adjusting hours of work rather than laying off or hiring workers. To develop current information on this key indicator, we are going to ask employers in manufacturing industries to report separately on hours worked in excess of the regularly scheduled hours beginning

in January 1956. This information will become a continuing part of our regular monthly report on hours and earnings.

2. A second important part of the program to provide a wider coverage of labor statistics is the extension of our labor turnover reporting system. We have been collecting labor turnover data now for more than a quarter of a century, and we have found that the information on how many people are being hired, how many are being laid off, and how many are quitting their jobs is not only valuable for an understanding of what is happening to employment currently, but very frequently gives us clues on what may be in store for the future. Thus, our labor turnover series was one of the first economic indicators to herald the upturn in employment last year. With funds appropriated for this purpose by Congress, we are now not only expanding our national sample in this field, but are also joining with the Bureau of Employment Security of the Department of Labor and the cooperating State agencies in developing similar data for States and areas.

3. I have already mentioned the fact that we get a considerable demand for more information coming out of our regular monthly report on employment, hours, and earnings. It is, of course, impossible to meet all of these demands with our available resources, but we are proceeding this year to move ahead along the following three lines:

(*a*) As we indicated in our last employment report, our September 1955 nonfarm job total reached an alltime record for the month, exceeding the previous September high reached in 1953. The surpassing of the September 1953 level, we found, was almost entirely attributable to the growth in industries furnishing services rather than goods. Trade, service, finance, and State and local government employment led the increase, while such sectors as manufacturing and mining were still below the 1953 levels. Even over the longer run, such fields as service and trade have provided the major part of our employment growth (chart 1).

Although our employment estimates for the broad groups such as trade, service, finance, etc., have proved to be very accurate as we check them each year with our benchmarks, our resources have not permitted the preparation and publications of any significant amount of industry detail within these broad categories. To be able to do so requires the development of adequate samples of firms in these industries and the provision of enough time and technical staff to prepare valid estimates. With funds provided this fiscal year, we can begin to make some progress in this whole area and we expect to come out with new industry information for these important segments of the economy.

(*b*) This year we are also taking on responsibility for collecting and publishing information on employment and payrolls for State and local governments. This is a field, too, where employment has been expanding significantly. Thus, in the past 2 years, more than a third of a million workers were added to State and local payrolls to provide such services as police and fire protection, teachers, etc. This will be the first year for which our Bureau will have responsibility in this field. Until now the Bureau of the Census provided the information, but by agreement with them and the Bureau of the Budget we have taken over that job.

(*c*) Finally, it is our intention to expand the number of areas for which employment, hours, and earnings information is available. By the end of this fiscal year we expect to have developed statistical series comparable to what we have nationally for the major areas in a number of large States.

IV. INTERPRETING THE DATA

Finally, the Bureau of Labor Statistics is also making progress in its employment statistics program by improving the interpretation and analysis of the available data.

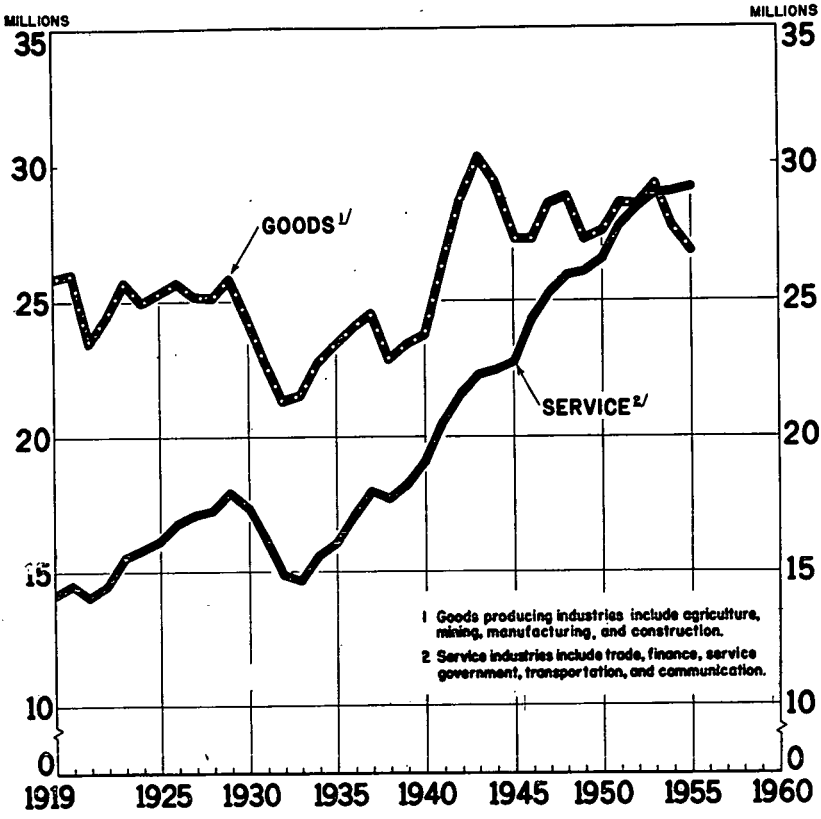
1. One of the most important tools for analysis is adjustment for seasonal fluctuations in employment and hours of work. Until this year, the Federal Reserve Board's seasonal indexes were used to adjust the Bureau's employment series. We have now been given the responsibility for maintaining these indexes, and we are now engaged in reviewing them in preparation for revisions as new data are accumulated (chart 2).

In addition to the seasonal indexes in broad industry groupings, which are all that is currently available, we are also studying seasonal movements in smaller industry groups. A thoroughgoing study of the seasonal patterns of

CHART 1

EMPLOYMENT IN GOODS PRODUCING INDUSTRIES COMPARED WITH EMPLOYMENT IN SERVICE INDUSTRIES

ANNUAL AVERAGES, 1919-1955



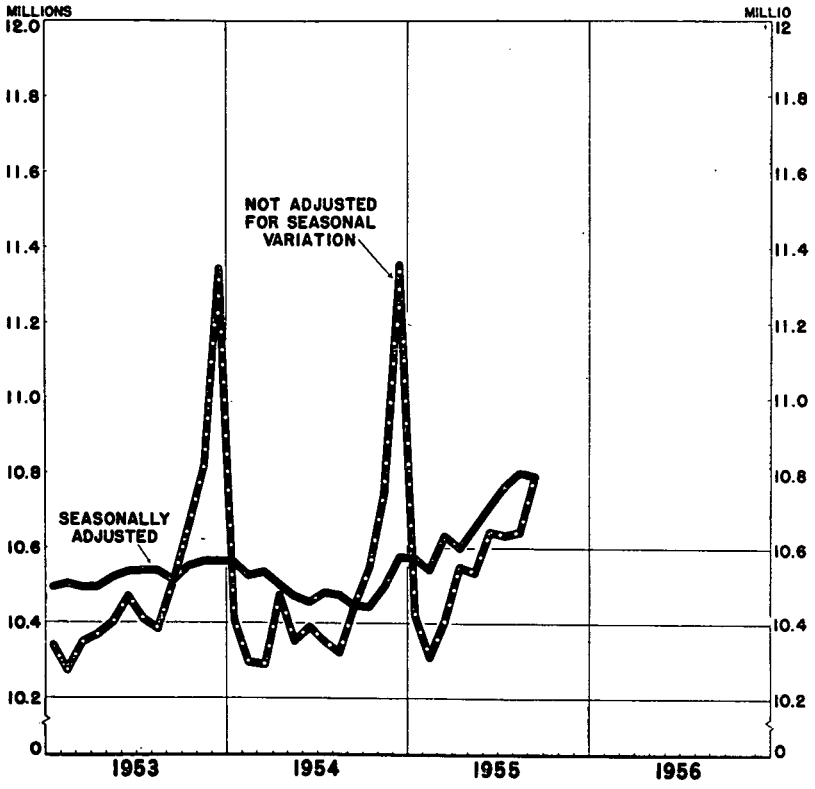
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Source: Nonfarm wage and salary employment from the U.S. Bureau of Labor Statistics. Agricultural employment including proprietors, family workers, and hired workers from the Bureau of Agricultural Economics, U.S. Department of Agriculture.

CHART 2

EMPLOYMENT IN WHOLESALE AND RETAIL TRADE

1953-1955



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Source: Bureau of Labor Statistics

these smaller industries should give us better insight into the seasonal patterns of American industry and will enable us to provide better interpretations of fluctuations in employment.

2. We have also expanded our research on seasonal fluctuations into the area of hours of work. This research will yield a series on hours of work adjusted for seasonal variations comparable to the adjustments in the employment data. These seasonal adjustments will not only aid in interpreting month-to-month changes in weekly hours of work but will also be used in conjunction with the seasonally adjusted employment data to provide seasonally adjusted indexes of man-hours.

3. During this past year, the Bureau has added another news release to its regular program of providing public information on employment, hours, and earnings. The new release is entitled "Net Spendable Earnings" and it is issued in conjunction with our regular monthly release on the consumer price index. The purpose of the net spendables release is to show how factory workers' average weekly earnings are affected by changes in consumer prices and income and social-security taxes, and keeps the public informed on the real earnings of factory workers (chart 3).

As you can see, the Bureau of Labor Statistics' program on employment statistics this fiscal year calls for a number of important additions and improvements. Further requests for even more and quicker results, however, are still being made to us. Basically, I think that these continuing demands upon us for more and more data stem from the fact that our manpower and employment statistics program is one of the really great sources of factual information on the level and tempo of our economy's operations. As I have already said, we supply the only current indicators of employment, hours of work, and earnings by industry—nationally, by State, and by area. Many of the other major economic indicators in the United States could not be constructed without this information, e. g., the Federal Reserve Board's index of industrial production or the Department of Commerce national income series. Our earnings data are used to escalate hundreds of millions of dollars of public and private contracts for labor cost, and the basic employment and earnings information supply the facts in hundreds of collective bargaining situations.

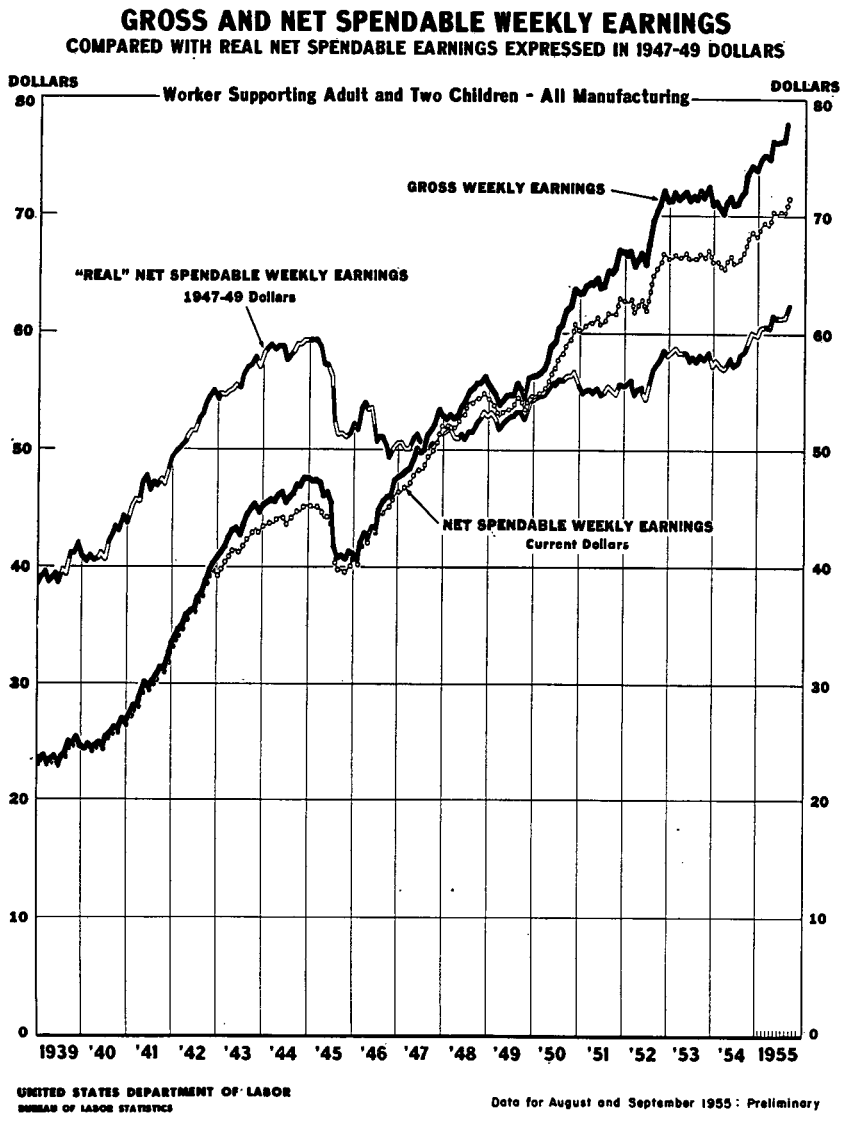
I am not going to spell out in detail all of the various requests and demands to us for additional data. Instead, I will mention three specific programs which, because of their importance and the possibility of action in the near future, may warrant your attention:

1. Even though we have had considerable success in speeding up our processing and publication, we are still facing demands for more up-to-the-minute employment information. At this time, and at the request of the Bureau of the Budget and the Council of Economic Advisers, we are considering the feasibility of providing information on the trend of employment at more frequent intervals than our regular monthly reports. Specifically, we are looking into the possibility of getting a panel of important and large manufacturing firms which report to us in our regular monthly program to cooperate in giving us a quick report for another point of time during the month. Our regular reports call for information as of the middle of the month; we are examining the possibility of getting another report for about the beginning of the month. This, of course, would have the advantage of making available for one critical sector of the economy (manufacturing) a more current indication of how employment is moving.

2. Much of the action which takes place on the basis of our employment information (e. g., collective bargaining or contract escalation) occurs within very detailed industries—what the technician calls four-digit industries. Thus, people are interested not only in knowing what is happening in industrial organic chemicals, but more specifically what the situation is in such four-digit industries within this group as plastics or synthetic rubber. Similarly, while we provide data on the metalworking machinery group, there is a very substantial interest in knowing about trends in some of the four-digit industries in this group like machine tools.

While we can obtain good samples of firms in these detailed industries, we have not been able to publish our data because we have lacked benchmarks (i. e., total counts) against which we could make periodic checks—as we do with the rest of our information. However, the Bureau of Employment Security has issued instructions to all States requesting them to tabulate employment data for the more detailed groupings beginning with reports for the first quarter of 1956. This is going to enable us to publish current monthly estimates of employment for many four-digit industries.

CHART 3



3. Finally, I want to mention briefly the new labor turnover program to which I referred a little while ago. With funds provided for this fiscal year, we expect to initiate labor turnover series in cooperation with the Bureau of Employment Security in a number of States and metropolitan areas. I simply wish to indicate at this time that we expect to move into additional States and areas next year and eventually to have a labor turnover statistics program nationally, for all States and for more than 100 major areas as we do now in our employment statistics program.

Unemployment

One of the hallmarks of the recent upturn in economic activity in this country has been the significant and substantial decline in the number of unemployed workers. Thus, between September 1954 and September 1955, unemployment

fell by one-third—from 3.1 to 2.1 millions. Within this general framework, however, there still remain a number of very significant questions and problems concerning the unemployed. One of the most important relates to the so-called "chronic labor surplus areas" concerning which a new program of action has recently been announced by Dr. Arthur Burns after conferring with the President at Denver. Another relates to the questions: Who are these unemployed? What are the characteristics of persons who remain unemployed in periods of high levels of employment and economic activity?

The Bureau of Labor Statistics is giving considerable attention this year to an analysis of some of these and other problems concerning the unemployed which I would now like to describe briefly to you.

1. The Labor Department, through both the Bureau of Labor Statistics and the Bureau of Employment Security, is undertaking a broad new program for providing detailed information on the characteristics of unemployment insurance claimants. Mr. Goodwin will describe this particular program in greater detail, but I just want to note here that is calls for a 1 percent sample survey of persons receiving unemployment compensation in the United States. This survey will yield monthly information never before available on the occupational, industrial, and personal characteristics of claimants for unemployment compensation and should go a long way toward answering some of the major questions on who are the unemployed in this country.

2. In addition to this major statistical undertaking, we are going to pursue a number of different lines of inquiry, all focused on this general principle: we would like to establish how much of the total volume of joblessness is attributable to each of a number of different causes. We know that some unemployment is relatively short term and arises out of voluntary job shifting by workers; some unemployment arises out of periods of job seeking by youngsters or other new entrants into the labor market; some stems from seasonal fluctuations in employment or intermittent or casual employment characteristic of different occupations and industries; and some arises out of severe long-term unemployment in an area or industry. We feel that an appropriate program for action to alleviate or prevent unemployment has to be based on knowledge of these various causes and of the relative importance of each factor in the total picture.

With this general perspective in mind, we intend to proceed as follows:

(*a*) First, we are going to exploit to the greatest possible extent information which is already being collected here in our own Bureau and Department as well as other Government agencies. Thus, for example, we are going to examine our Breau records of employers in various industries which have wide seasonal swings in employment. We want to discover to what extent there may be variations in seasonal patterns within industry: Are large fluctuations common to all plants or do they take place in a relatively small number of firms? This may open the way to further investigation of the question why some plants in a seasonal industry are able to maintain more stable employment than others. This type of investigation should also throw additional light on the extent to which seasonal fluctuations in important industries contribute to the level of unemployment in the United States.

At the same time, we are asking the Bureau of the Census to use its regular monthly report on the labor force survey to gather some additional data on employment and unemployment patterns in this country. With our financial help, the Census Bureau will be asking additional questions in its work experience survey to be taken at the beginning of next year which will give us information on the work histories, spells of unemployment, changes in labor market status of persons during 1955. From this survey we also will be getting information on the characteristics of some of the major contributors to unemployment—especially the youngsters, the older workers and women.

(*b*) Second—and in addition to the studies I have just described which make use of already existing programs—we are undertaking this year a series of specific new surveys for studying and analyzing the unemployed. These include:

(1) A study of the characteristics of unemployed workers in an area which has been experiencing severe long-term unemployment. We want to determine to what extent workers tend to leave these areas when they become unemployed or when they have exhausted their unemployment benefits; we also plan to study the age, skill level, work experience and mobility of those who do get jobs again after having been unemployed for relatively short periods of time as compared with those who are unemployed for a long time.

(2) We will be making a study of a small town where a substantial group of workers lost their jobs when a major plant shut down. The economic and personal characteristics of those who were able to find jobs shortly after the shutdown will be compared with similar characteristics of those who had long terms of unemployment following the shutdown.

(3) One of the major groups for which we need more information is the new entrant into the labor force. How long does it take for the young person to find suitable employment? What differentiates those who make a successful entry into the American labor force from those youngsters who have major difficulties in securing employment? We will conduct a number of surveys in cooperation with city-school systems this year aimed at answering these questions.

As you can see, we are starting modestly in a number of different studies of the characteristics of the unemployed—in 1 or 2 areas, with a few school systems and on the basis of already existing statistical programs. These pilot studies, however, should result in (1) significant information on the characteristics of some of the major unemployed groups, (2) suggestions for improvement in some of our more comprehensive measures of unemployment, (3) recommendations for new or further areas for study, and (4) suggested types of programs for action to reduce or alleviate unemployment.

The older worker

I have been referring to the importance of knowing more about the employment and unemployment experience of a number of specific groups in our population. At this juncture I would like to say just a few words about some special studies we plan to do this year on one of these groups—the older worker.

As part of a Departmentwide program, we are going to conduct a few specific pilot studies aimed at seeing whether we can answer such questions as these: Given the same occupation or plant operation, how do older workers compare with their younger colleagues in terms of their work performance, productivity, industrial injury experience, absenteeism, etc.? In other words, what are the real facts concerning the older workers' job performance? This year we will concentrate, as I have said, on a few pilot case studies in this field, mainly to judge the feasibility of getting factual answers to these questions. If our tests show the practibility of successful results, we intend to go on to more complete studies in this field during the next fiscal year.

At the same time, we are going through our files of labor-management agreements, studying provisions regarding the older worker as they now prevail in this country. We plan to publish this material for the information of all persons interested in the current status of industrial relations practices regarding the older worker.

Occupational outlook

Finally, I want to say a few words about our role in the Department's program in the field of skills of the work force. In recent months the Labor Department has concerned itself increasingly with what it can do to help develop American workers' skills. We in the Bureau of Labor Statistics have been providing estimates of the Nation's prospective needs for trained workers in each occupation and publishing this information for general use; the Bureau of Employment Security, in cooperation with the State employment services, is providing counseling in local employment offices; and the Bureau of Apprenticeship of the Department of Labor, working with employers, unions, and State apprenticeship councils, has been promoting apprenticeship programs.

At this moment in history, however, the Secretary of Labor has decided that we need to take a new, long, and hard look at the future skill requirements for the Nation's workers. As a result of the high birth rates of the postwar years, enrollments in secondary schools and colleges will boom toward the end of this decade and in the early sixties, and the number of new entrants to our labor force will increase enormously. Now is the time when we need to give thought to the expansion of training and education programs and school and college facilities to take care of these people. Reports of shortages of trained workers in many different fields—ranging from office occupations through skilled craftsmen, to engineering, scientific, and other professional workers—emphasize the need to assess the Nation's prospective requirements for each type of trained worker. Schools and industry need this information in establishing or expanding training programs and in counseling individuals so that they can make occupational choices in line with industry's needs.

With funds provided by the last session of the Congress, the Bureau of Labor Statistics is making major additions to its occupational outlook research program. Our first step will be to revise our Occupational Outlook Handbook, the major official Government publication which informs young people, veterans, and others concerned with the choice of a career about the employment outlook in various industries and occupations. It is widely used in schools, colleges, the Veterans' Administration, vocational rehabilitation activities, and local offices of the State employment services. More than 40,000 copies of the last edition have been sold by the Government Printing Office over the past 4 years.

In revising and bringing up to date the Occupational Outlook Handbook the Bureau will make studies over the next 18 months of employment trends and outlook in about 500 occupations and 26 major industries. Our studies have begun with an examination of the economic projections made by various agencies and organizations. In the course of our work, we will be discussing the employment outlook with officials of hundreds of industrial firms, educational institutions, unions, and professional societies. We will also make use of our own studies and records, going back many years, of employment trends, industry by industry, the changing occupational composition of industries, technological developments, trends in productivity, and occupational mobility and changing patterns of working life.

This research program will yield not only a comprehensive revision of the Occupational Outlook Handbook for the use of the public, the schools, and the other Government agencies, but also a series of studies and reports on the Nation's future needs in major skilled and professional occupations.

One of the major forces which will affect the outlook in many occupations and industries is technological change. Because of the recent and dramatic innovations in technology, we have begun a series of specific and concrete case studies of the impact of automation on employment. Secretary of Labor Mitchell reported on two of these case studies in his recent testimony before the Joint Committee on the Economic Report on automation and technological change.

We hope to move ahead during the remainder of this fiscal year and next toward additional surveys which will get us the facts on what the effects of automation are, not only on employment in general, but on the occupational distribution and skill level of workers in the United States.

As you look over the programs I have just described, I think you will see that we have made and are taking some major steps which are resulting in more information of higher quality on a wide range of facts concerning employment and unemployment in the United States. There are still gaps in information, and additional programs to follow, as I have indicated above. But, the progress we've made and are making this year puts us much further along the way toward a complete and rounded program of activities in this field.

Mr. BOLLING. There being no further business before the subcommittee at this time, the subcommittee will now adjourn until 10 a. m. tomorrow in this same room, when Mr. Robert C. Goodwin, Director of the Bureau of Employment Security, will be the first witness.

The committee stands adjourned.

(Whereupon, at 2:30 p. m., the subcommittee adjourned until Tuesday, November 8, 1955, at 10 a. m.)

EMPLOYMENT AND UNEMPLOYMENT STATISTICS

TUESDAY, NOVEMBER 8, 1955

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC STATISTICS OF THE
JOINT COMMITTEE ON THE ECONOMIC REPORT,
Washington, D. C.

The subcommittee met at 10 a. m., Hon. Richard Bolling (chairman of the subcommittee) presiding.

Also present: Grover W. Ensley, staff director, and John Lehman, clerk of the committee.

Mr. BOLLING. The subcommittee will be in order.

The first witness this morning is Mr. Robert C. Goodwin, Director of the Bureau of Employment Security.

Mr. Goodwin, yesterday I stated that at the first three sessions, including this morning's session, we would just hear the testimony of the witnesses, and we will ask questions this afternoon.

So you may proceed as you wish.

STATEMENT OF ROBERT C. GOODWIN, DIRECTOR, BUREAU OF EMPLOYMENT SECURITY, UNITED STATES DEPARTMENT OF LABOR

Mr. GOODWIN. Thank you very much, Mr. Congressman.

I have a statement here which I would like to read, if it is satisfactory with you.

Mr. BOLLING. That will be fine.

Mr. GOODWIN. I appreciate this opportunity to appear before your subcommittee to discuss the employment, unemployment, and other labor-market data derived from the operations of the Federal-State employment security system.

In the administration of both of our two basic programs, the public employment service and unemployment insurance, we deal directly with employment and unemployment problems every day. The 1,700 local employment offices throughout the country represent our primary source of labor-market information. They constitute an especially valuable source because they operate in local labor markets and are consequently the first to feel the impact of changes in the labor market. Data reflecting the differences in economic conditions among the States and local areas are especially important because of the variations in industrial composition and concentrations. This kind of knowledge is readily provided as a byproduct of the administration of the employment-security system because the data are developed in the first instance in individual local and State employment offices.

We agree with the views expressed by your subcommittee in its progress report of July 30, 1954, that administrative agencies produce

important statistics as a byproduct of their operations. The Federal-State employment security system is carrying out your recommendation that agencies such as ours should "recognize their obligations to the statistical system."

We in the employment-security program are interested in economic statistics, including data provided by other agencies as well as by the employment-security system, for two reasons. First, we need this kind of information in order to plan and operate our own programs effectively; second, we fully recognize that many other public and private activities which have an important bearing on employment and unemployment conditions, including actions of the Congress and State legislatures, can only be guided properly if adequate economic intelligence is available.

With this in mind, we have been pleased to note the growing interest in the improvement of economic statistics. I believe it is fortunate that we are attempting to make improvements in the statistics in the midst of the current high levels of economic activity. I hope that the better economic guideposts that are sure to result will prove their value by helping us to maintain the vigor and strength of our present economy as a whole.

As a result of the intensified interest and the funds which the Congress has appropriated for improving and expanding economically significant statistics, we have initiated a number of steps which I think will greatly improve the usefulness as economic indicators of the data developed in the employment security system.

I should like to comment briefly on the major types of economic information available from employment security resources and on various efforts to improve them.

INSURED EMPLOYMENT AND WAGES

One of the major types of economic information provided by the employment security system is obtained as a part of the collection of unemployment insurances taxes by State employment security agencies. Data on employment and wages of covered workers are included on the quarterly tax returns of the 1,600,000 employers subject to State unemployment insurance laws. In 1954, monthly average insured employment was over 35 million and total wages amounted to about $137 billion.

On the basis of detailed tabulations submitted by the State agencies, the Bureau of Employment Security of the Department of Labor summarizes and publishes this information by State and industry every quarter. The employment figures from this source comprise the major part of the "benchmark" used to check nad correct all current nonfarm employment estimates based on establishment reports, including the national figures published by the Bureau of Labor Statistics of the Department of Labor and the State and local figures prepared by State agencies. The information on wages is also a major component in the national income estimates prepared by the Department of Commerce. Both the employment and wages data are also widely used by other Government agencies and private organizations.

A major improvement in this basic information on employment and wages in the United States will result from the action taken by Con-

gress last year to extend the coverage of unemployment insurance. The extension of coverage to employers with 4 or more workers enacted by Congress last year, together with the subsequent changes by State legislatures, will add nearly 1,700,000 workers to the coverage of State unemployment insurance systems and raise the proportion of estimated total nonagricultural private employment of wage and salary workers covered by our reports of employment and wages from 84 percent to 88 percent.

The Congress also expanded the coverage of these data when it provided unemployment insurance protection to 2.4 million Federal civilian employees. Following this legislation, the Bureau has succeeded in making arrangements with all Federal agencies under which they will report their insured employment and wages to State employment security agencies on much the same basis as private employers. The first reports under this new system are being obtained for the current calendar quarter and will be available next year to fill the significant gaps which have heretofore existed in information about Federal Government employment and wages, particularly as to their distribution by State and area.

Mr. Clague has already mentioned that current employment estimates will become available in 1956 in greater industry detail than at present. This expansion in the current employment estimates will be made possible by the arrangements which we have made for the reporting of insured employment and wages on the basis of a more detailed 4-digit industrial classification for manufacturing, in place of the present 3-digit breaks. Reporting instructions have already been issued to all States requesting them to tabulate their employment and wages reports on this more detailed basis for one quarter each year, beginning with the reports for the first quarter of 1956. In addition to providing the more specific industry information which has been requested by industry groups, labor organizations, and other users of the information, the additional detail will enable some improvements in the "benchmark" uses of the data.

Another forward step taken the last year should result in improved industrial classification for both insured employment and wages data and the current employment estimates. In cooperation with the Bureau of Labor Statistics and our affiliated State employment security agencies, a new system was installed for improving the coordination of the industrial codes assigned to individual establishments in both of these statistical programs.

INSURED UNEMPLOYMENT

Probably the best known measure of economic developments that is derived from employment security operations is the count of insured unemployed workers. In fact, this count has been included in the monthly publication, Economic Indicators, issued by the Joint Committee on the Economic Report, since March 1954. Insured unemployment is the number of benefit claimants who have completed a week of total or partial unemployment. The figures that we release every week are not estimates based on a sample but represent actual counts of the unemployment insurance claims taken by public employment offices. Our weekly release contains both national and indi-

vidual State totals, together with the rates of insured unemployment—the ratio to the covered employment base. Your release on Economic Indicators started showing this rate for the Nation as a whole last July. The insured unemployment data represent the most current information available on unemployment trends throughout the country and provide the only current information on unemployment trends by State. Another significant economic indicator included in our weekly release is the count of what we call initial claimants. These are notices of the beginning of a spell of unemployment and are especially valuable as a measure of the new or emerging unemployment in various locations and industries. Data on both initial claims and insured unemployment are included in the joint release on employment and unemployment now issued each month by the Departments of Labor and Commerce.

The extension of unemployment insurance coverage which I mentioned earlier in connection with our employment and wages information will, of course, also expand the coverage and the economic significance of data based on unemployment insurance claims. This is certainly the most important way in which insured unemployment statistics can be improved.

Within the legislative framework provided by the Congress we have, however, undertaken a number of specific steps designed to enhance the value of insured unemployment data as a measure of economic developments. For example, we have succeeded in stepping up our processing schedule so that the figures submitted to us by the State employment security agencies, together with an analysis of the reasons for changes in claims volume, are regularly released within 1 week after the week in which the claims were filed in local employment offices. Since the subcommittee hearings last year we have also initiated publication of insured unemployment data for 1 week each month for the Nation's major metropolitan areas.

Seasonal changes often conceal more long-run economic developments. For this reason we have developed a procedure for seasonally adjusting insured unemployment data. National seasonal indexes have been prepared and we are encouraging the State agencies to prepare similar indexes. After we acquire additional experience with the seasonal indexes we plan to publish a seasonally adjusted series relating to insured unemployment.

Since these data are derived as byproducts of the operations of the unemployment compensation program, they are in certain instances affected by so-called administrative factors which do not have economic significance or which tend to distort interstate comparisons. The more important of these are rescheduling of claim-filing dates because of holidays, "new benefit years," administrative factors which permit delayed filing of claims, and disqualifications. The Bureau is working with the State agencies on a series of studies to be undertaken during the current fiscal year to assist in measuring and making necessary adjustments for these factors.

The magnitude and trend of the insured unemployment data are also influenced by unemployment benefit exhaustions. Exhaustion of benefit rights occurs when a claimant has received the full amount of benefit payments to which he is entitled according to the State law. When this happens he no longer appears in the insured unemployment count,

although he may continue to be unemployed. In a period when unemployment is rising and workers are staying unemployed longer, the volume of exhaustions can seriously affect the level and trend of insured unemployment statistics. This was the reason that in the spring of 1954 we instituted weekly reporting of exhaustions by the 8 largest States, which together usually account for about 50 percent of the national total. All States report exhaustions on a monthly basis.

A more illuminating approach is to obtain information on what happens to claimants after they exhaust their benefit rights. Since they are no longer required to report to the local employment offices, this information cannot be obtained as a simple byproduct of regular operations. Instead, it requires special contacts with the former claimants to determine their current labor force status. A number of State agencies have undertaken such studies independently in the past, especially during the 1949–50 recession. During the current fiscal year, however, the Bureau is promoting a series of postexhaustion studies by several State employment security agencies which we expect to throw additional light on this important question. Of course, the study results will be valuable not only for the economic analysis purposes but also in evaluating the benefit provisions of unemployment insurance laws. To help assure greater consistency and comparability of the data among the States and areas in which the studies are being conducted, a detailed guide has been prepared by the Bureau for use by the State agencies in conducting their postexhaustion studies.

In addition to these field projects, we have been working on the development of national total estimates of the number of exhaustees who are still unemployed, using data on duration of unemployment from the Bureau of the Census as well as from our own records. We have not yet completed this work but we believe it will provide the basis for at least a rough estimate of the national total and consequently add to our understanding of trends in unemployment among workers covered by unemployment insurance.

This understanding has benefited particularly in the past year by the work of the Review of Concepts Subcommittee, whose interim report Mr. Bowman has submitted to you. We were happy to participate in the work of this group. A number of its recommendations concerned with the improvement of insured unemployment statistics as economic indicators coincide with the steps we have taken or are planning in this field. We are giving careful consideration to all of the subcommittee's recommendations.

I should also like to refer briefly to the materials submitted by Mr. Bowman comparing the census series on total unemployment and our insured unemployment series. This material includes a table comparing these series which carries forward the data furnished the committee by the Census Bureau and the BES at its February 1954 hearings. In addition to adjustments for some of the differences in coverage, the table makes adjustments for certain conceptual differences. One of the more important of these results from the fact that the census at present includes as employed some persons who were on temporary layoff or were not at work and waiting to report to a job within 30 days. The concepts subcommittee has recommended that such workers be included with the unemployed rather than with the employed. This

proposed changes would make an important contribution toward increasing the comparability of the two series.

This brief discussion of insured unemployment has touched on a considerable variety of steps which have already been taken or are planned that should improve the economic indicator value of unemployment insurance data. We appreciate the actions by Congress and other agencies which are contributing to these efforts on our part. I trust that the committee will join with me in the belief that the various approaches to this problem which are being taken will yield useful results.

CHARACTERISTICS OF INSURED UNEMPLOYED WORKERS

Mr. Clague has already referred briefly to the new sample survey of the characteristics of unemployment insurance claimants which the Department of Labor has recently launched. This new program, under which information on the personal and economic characteristics of claimants is being obtained for the first time, recognizes that we need to know not only how many people are unemployed but who they are. The insured unemployment data now available provide information on where the unemployed are located; this new program will answer such questions about unemployment insurance claimants as their sex, age, marital status, industry, and occupation. The new report will also identify exhaustees and provide information on the duration of insured unemployment. Through voluntary reporting in a number of States we are also experimenting with the collection in this program of data on the number of persons in the claimant's family, the number who are working, and whether the claimant is normally the principal or secondary wage earner. The optional items may be required in all States at a later date, depending upon the experience of the States which are now collecting them.

The information provided by this new reporting system is designed primarily to aid in the development of national policies and programs for dealing with unemployment. Only with this kind of information can programs be tailor made to fit the characteristics of unemployed workers. The survey will provide the detailed facts needed for such measures as promoting suitable employment opportunities, helping to guide Federal economic policies, encouraging necessary training programs, analyzing the causes of unemployment, and developing recommendations for improving unemployment insurance. A basic purpose of the information is to enhance public understanding of the nature and significance of current unemployment problems. In addition, it is expected that the data from the survey will permit various byproduct analyses leading to some refinement in the overall statistics on insured unemployment which are now regularly released by the BES.

As Mr. Clague has mentioned, this program is based on a nationwide sample of 1 percent of all unemployment insurance claimants, including those covered by State unemployment insurance laws and the two Federal programs of unemployment compensation for veterans and Federal employees.

The data for the reports of claimant characteristics are collected by State and local employment offices every week, but will flow to the Bureau of Employment Security on a monthly basis. The first reports, covering the 5 weeks ending September 17, have been received

and are now in process of tabulation by the Bureau of Labor Statistics. We do not plan to publish the results, however, until after we have had experience with more than one reporting period, and have had an opportunity to apply statistical tests of validity.

We are looking forward to the information to be derived from this source as a major contribution to our knowledge about the problems of unemployment and, consequently, to our ability to cope with these problems.

AREA LABOR MARKET INFORMATION

In the administration and operation of the employment security system, data on local area unemployment information on a regular and current basis are of particular importance. Census data by area are usually only available at the time of the decennial censuses, although national unemployment data are provided on a monthly basis by the census' current population survey. National figures on unemployment, though important in providing a general indication of the state of the economy, do not provide any indication of the differences in unemployment conditions among areas. The area insured unemployment data alone are not sufficient for the purpose of interarea comparisons because of differences in State coverage, eligibility requirements under the unemployment insurance laws, and industrial composition of the areas. It has been necessary, therefore, for the State employment security agencies to undertake the development of total unemployment estimates by local area to meet their own operating needs, as well as those of other governmental groups, private organizations, and the general public. The BES has developed procedures for use by the State agencies in preparing such unemployment estimates. Many of the States publish these data regularly.

The method for estimating total area unemployment developed in the employment security system uses the count of the unempoyed workers covered by the unemployment insurance program as the base figures and then provide for derived estimates for the segments of unemployed not covered by these programs. The obtaining of area unemployment estimates from a household sampling procedure on a regular basis is not feasible because of the prohibitive cost of such a program. The current estimating techniques have certain limitations, primarily because it is necessary to assume that national experience for certain segments of the work force is applicable to local conditions. The Bureau has been constantly working with the State agencies to improve these estimates. Further improvements are anticipated as a result of the special studies which I mentioned previously.

AREA CLASSIFICATIONS

The Bureau does not publish local area total unemployment estimates, but they are an important factor in the classification of labor market areas according to adequacy of labor supply. These classifications are published and are intended to provide a quick, convenient tool to measure comparative differences in the availability of labor in the Nation's major production and employment centers.

Effective with the May 1955 area classification, new classification criteria were introduced which group the areas into six major labor supply categories. This revision was undertaken in part in order to

permit a finer distinction between labor surplus areas. In the previous system all areas with significant labor surpluses were placed into a single group, whereas they are now divided into three groups. In addition, the new criteria are so designated that it is expected only minor revisions, if any, will be necessary as economic conditions change.

LABOR TURNOVER STATISTICS

As Mr. Clague has stated to you, some funds are available in the current fiscal year's appropriations of this Bureau and the BLS for some expansion of labor turnover statistics program of the Department of Labor. The BLS and the BES are presently developing plans for this expansion which is designed to utilize the resources of the two bureaus and those of our affiliate State employment security agencies so that labor turnover statistics can be provided for more industries and with some geographic detail.

The expanded program will provide for the State employment security agencies to collect and process labor turnover information schedules from all establishments with employment of 20 or more workers in manufacturing and mining industries that are now included in the 2 samples. This will allow these agencies to compile and publish labor turnover rates for the States and important local areas. The expanded sample will also allow the BLS to publish national rates for more industries than is possible with the present sample. The program will be introduced in a number of States in the current fiscal year and will be extended to the remaining States and major areas as soon as possible. It is hoped that this program will eventually yield labor turnover statistics on a comparable basis for all States, standard metropolitan areas, and the Nation for the entire range of nonagricultural industries.

SPECIAL LABOR MARKET STUDIES

The various manpower and related programs undertaken in the employment security system frequently give rise to information of general economic significance. Such information will become available through the Department of Labor's overall survey relating to the problems of the older worker in the labor market. As a part of this survey, the Federal-State employment security system will undertake studies in a number of labor market areas to determine the employment patterns, policies, and practices affecting older workers. The data will permit a comparison of older employed and unemployed workers, their work patterns, and other factors which influence a worker's ability to obtain employment. Similarly, special studies of unemployment insurance beneficiaries to determine the adequacy of unemployment benefits will also yield some economically useful information.

Occupational labor market information is required for effective local employment office operations, and also to assist employers, workers, schools, and other community groups. Although the local employment offices in all States already have a considerable amount of occupational labor market and related information as a result of their day-to-day operations, further developmental and organizational work is required. The Bureau is working on projects in the current fiscal

year which it is hoped will result in the development by more State agencies of systematic labor market information by occupation. It is expected that this will be done through the preparation of local or State occupational guides for major types of worker groups, industries, or occupational fields.

In the field of agricultural labor market information, the State employment security agencies compile current reports on the number of seasonal hired workers in agriculture. Designed mainly for operating uses, the reports are helpful in organizing programs for the utilization of both migrant and local farmworkers. At present, the collection of labor market information on the farm sector of the economy requires considerable expansion and technical development in order to fully meet current needs. We are working with the State agencies and the Department of Agriculture in order to achieve needed improvements, particularly in the preparation of estimates of farm labor demand and supply.

I am supplying the subcommittee with a more detailed discussion of the Bureau's program for improvement of the economic statistics resulting from the employment security system.

Thank you very much.

Mr. BOLLING. Thank you, Mr. Goodwin.

The additional material will be included in the hearings.

(The material referred to is as follows:)

TECHNICAL SUPPLEMENT: LABOR-MARKET INFORMATION FROM EMPLOYMENT SECURITY OPERATIONS

This supplement provides background materials on the various labor-market data available through the operation of the Federal-State employment-security system. The materials cover the following subjects:

1. Unemployment statistics based on unemployment-compensation claims
2. Report on characteristics of unemployment-insurance claimants
3. Area unemployment estimates
4. Labor-market-area classifications
5. Special studies of older workers in the labor market
6. Occupational job-opportunity information
7. Labor-turnover statistics
8. Insured employment and wage statistics
9. Agricultural labor-market information

Source: U. S. Department of Labor, Bureau of Employment Security, Office of Program Review and Analysis, Washington 25, D. C., November 3, 1955.

1. Unemployment statistics based on unemployment-compensation claims

Weekly and monthly data.—The Bureau of Employment Security publishes weekly and monthly statistics on new and continued unemployment of workers covered by the State unemployment-compensation (UI) program, the unemployment-compensation program for civilian Federal employees (UCFE), and the unemployment-compensation program for Korean veterans (UCV). These data are available on a State and local area as well as national basis. The national figures also include insured unemployment covered by the Railroad Retirement Board. New or emerging unemployment of covered workers is shown by initial claims filed. These are notices to the State agencies of the beginning of a period of unemployment for which benefits are claimed. The continued unemployment of covered workers is shown in the insured unemployment statistics, which are a measure of the number of persons who were totally or partially unemployed during a given week for which they have filed unemployment-insurance claims.

The initial claims and insured unemployment data have widespread use as indicators of economic developments and trends in the Nation, States, and local labor-market areas. The Bureau during the year has taken a number of steps and is planning others to improve the significance and usefulness of these data for economic analysis and to expand the detail provided.

In order to provide data to facilitate the comparisons of economic conditions between major labor-market areas, the information published in the Bureau's weekly release, Unemployment Insurance Claims (see attached copy) has been expanded to include an insured unemployment series for these areas. The area data are shown for the week nearest the 15th of each month.

Seasonal adjustments.—To improve the use of the insured unemployment data as indicators of economic change, a procedure has been developed for seasonally adjusting these data. National indexes have been prepared and a procedure has been provided the State agencies for preparation of similar indexes for the State data. It is planned to publish a national seasonally adjusted series as soon as further testing of the method has been completed.

Adjustments for administrative factors.—Since the insured unemployment data are derived from employment security operations, the weekly trend of these data may be disturbed by special administrative or operational factors such as holidays, "new benefit years," administrative factors which permit delayed filing of claims, and disqualifications. Similarly, the initial claims data, as measures of new unemployment, are influenced at certain times of the year by a piling up of "new claims" when new benefit years begin according to the applicable State law. At these times, initial claims will be filed by unemployed persons who were not eligible for benefits when their current spell of unemployment began because they may not have had sufficient wage credits or had exhausted benefit rights.

The Bureau is planning a series of studies in cooperation with the State agencies designed to measure the effects of such factors. The discussion that follows of the holiday problem provides an example of the effects that "noneconomic" factors may have on the insured unemployment data and of the nature of studies planned. Because of fewer workdays in the holiday week, it is often necessary for the local office to reschedule the filing dates of some claimants for another week. Such rescheduling may distort the relationship of the insured unemployment data between the holiday week and the weeks preceding and following this week. The national weekly insured unemployment figures are affected by such rescheduling of claimants primarily when the eight national holidays occur. Although the State figures may also be affected by State holidays, they usually do not significantly influence the national figures. Adjustments for the effects of holidays can only be made on a reasonably sound basis through additional reporting in order to provide data on the extent of rescheduling of claimants from one week to another. The studies planned will develop information on the extent of rescheduling of claimants as a result of holidays. They will also assist in determining the appropriate method for reporting this information so as to show claims filed in other weeks because of rescheduling in the insured unemployment data for the week of unemployment to which they properly relate.

Postexhaustion unemployment studies.—The insured unemployment statistics may be affected by exhaustions also. Exhaustion of a claimant's benefit rights occurs when he has drawn the final benefit payment to which he is entitled in a given year under the provisions of the State unemployment insurance laws. Once an individual has exhausted benefits, he is dropped from the insured unemployment count, although he may continue to be unemployed. In a period when unemployment is substantial and of long duration, the volume of exhaustions may have an important bearing on the magnitude and trend of insured unemployment statistics. Exhaustion of benefits reflects both economic conditions and duration provisions of various State unemployment insurance laws.

In the past year, several States have completed postexhaustion studies. These provide information on the labor market status of unemployment insurance claimants after exhaustion of benefits and other data about exhaustees needed in the operations of the State unemployment insurance program. For purposes of insuring greater consistency and comparability of data on persons who have exhausted benefits, a guide has been prepared by the Bureau for use by the States in conducting postexhaustion studies.

It is expected that postexhaustion studies will be conducted in about 15 States and in at least one major labor market area in each of these States in the current fiscal year. These studies make valuable contributions to available knowledge about unemployment insurance and the labor market status of exhaustees. For example, such studies are useful in connection with proposed changes in the maximum allowed duration of unemployment insurance benefits. They provide important information on: why claimants exhaust, what are the characteristics of claimants that exhaust (age, sex, occupation, and industry of attachment), how long claimants remain unemployed after exhaustion, to what extent they drop out of the labor market, and how much it would cost to extend the potential

duration of benefits. Postexhaustion studies also provide data which are needed for improving the unemployment estimates being prepared by the States. Since comparable methodology and procedures, based on the above-mentioned guide, will be used by each State undertaking these studies insofar as possible, it will be possible to compare the data for different States.

2. Report on characteristics of unemployment-insurance claimants

The Department of Labor has initiated a program for obtaining information through the facilities of the Federal-State employment security system on the personal and economic characteristics of unemployment-insurance claimants. This report is based on a nationwide sample of 1 percent of the claimants in each local office of the State employment security agency. Claimants under the three unemployment-insurance programs operated by the State employment-security agencies are covered: State unemployment insurance, unemployment compensation for Federal employees, and unemployment compensation for veterans. Data will be collected for every week but will flow to the BES on a monthly basis—a 4- or 5-week period ending with the week containing the 12th of the month. The first reports covering the weeks ending August 20 through September 17 have been received by the national office of the BES and are now being tabulated by the BLS. To allow for a test period to check the operations of the sample and of the reporting procedures, we do not plan to publish the material from this new program until after data for more than one report period are available. This Bureau is working with the BLS in the development of quality controls and publication plans.

The information obtained from this reporting program will aid in the development of national policies and programs dealing with unemployment. It will provide the factual information for such measures as promoting suitable employment opportunities, helping to guide Federal economic policies, encouraging necessary training programs, analysis of the causes of unemployment, and developing recommendations for improving unemployment insurance. The basic purpose of the information is to enhance public understanding of the nature and significance of current unemployment problems. In addition, it is expected that the data from the survey will permit various byproduct analyses leading to some refinement in the overall statistics on insured unemployment which are now regularly released by the BES.

The 1-percent sample of claimants included in the reporting program is being selected on the basis of the last two digits of the social-security account number. The end digits selected will permit a 20-percent tie-in with the continuous work history sample of the Bureau of Old-Age and Survivors Insurance. On the basis of the current volume of unemployment-insurance claims this fiscal year, the 1-percent sample will cover about 75,000 different individuals during the year and the size of the sample will approximate 18,000 for any 1 week and 28,000 per month. Existing regular reports provide universal data on such items as initial claims and insured unemployment which will be used to check the completeness of reporting of the 1-percent sample. Information on the extent of sampling variability will be included in publications containing the estimates derived from this program. State and local estimates will not be possible on the basis of this report except to the extent that State agencies expand the size of sample for their own use.

Each claimant to be included in the sample will be identified when he files a new claim for benefits at any of the 1,700 local employment offices. The line entry will also identify each subsequent week during the reporting period for which a week of unemployment was claimed and will indicate whether it was for total or partial unemployment. Similarly, line entries on reports for subsequent months will record all additional claims filed. Benefit exhaustions, disqualifications, and other terminations of claims series will also be reported as they occur.

The following items of information will be reported on personal and economic characteristics of claimants in the sample with most of the data obtained when the new claim is filed:

1. Social-security number and name (identification).
2. Sex and veteran status.
3. Age.
4. Marital status.
5. Occupation (3 digits).
6. Industry (3 digits for manufacturing; 2 for nonmanufacturing).
7. Base-period wages.

8. Weekly benefit amount.
9. Potential duration (weeks) of benefit payments.
10. Duration of insured unemployment (weeks since initial claim filed).
11. Number of persons in claimant's family (optional).
12. Number of persons in family who are working (optional).
13. Is claimant normally principal or secondary wage earner (optional)?

Examination of the type of information to be collected as listed above indicates the extensive possibility of current analysis and special studies on the basis of this new reporting program. Analyses will be made by occupation, industry, age, sex, duration of unemployment, and marital status, as well as by cross-classifications of these characteristics. In presenting the data on characteristics on a current basis, attention will be given primarily to initial claims (representing new spells of unemployment); insured unemployment for the week, including the 12th (for comparability with census data); and termination of claims series (exhaustions, disqualifications, and voluntary dropouts). If adequate information is provided on the several optional items, additional analysis will be made by size of family and the number of wage earners in the family. Plans are also being developed for special tabulations and studies such as analyses of the composition of the claim load over a longer period of time, the detailed characteristics of persons exhausting benefits, older worker problems, and employment data from BOASI records in relation to insured unemployment experience.

The report of claimant characteristics, by virtue of its tie-in with employment security operations, will provide information about the characteristics of insured unemployed workers on a relatively economical basis. Virtually all of the information to be reported is regularly obtained for administrative purposes by State and local employment security offices. In fact, some State employment security agencies have conducted such surveys in the past and others have obtained similar data on a regular basis. The reporting program of the BES has, in the past, provided information on claims filed by type of claim (i. e., initial, continued) and sex and on payments made for total unemployment classified by amount and by industry, but the new program represents the first attempt to obtain comprehensive and detailed information nationwide on the personal and economic characteristics of the insured unemployed.

Although the claimant characteristics report will necessarily be limited to unemployed persons covered by the three unemployment insurance programs cited above, these claimants account for a major proportion of all unemployed workers and are a particularly significant segment of the unemployed because of their prior employment experience and the industrial coverage of the unemployment-insurance program. Employment covered by the Federal employees and State unemployment-insurance programs account for about 80 percent of all employees in nonagricultural establishments. This percentage will be further increased next year as a result of the recent Federal and State laws extending coverage to employees of smaller firms, effective January 1, 1956.

Preparation of the plans and procedures for this new reporting program included extensive consultations between the BES and State employment security agencies, the BLS, other Federal agencies (including BOASI, Bureau of the Census, and the Office of Statistical Standards of the Budget Bureau), and various interested groups.

3. Area unemployment estimates

Unemployment—its level, trend, and composition—is one of the major indicators of the state of economic well-being for local areas, as well as for the Nation as a whole. In the administration and the operation of the employment security system, area unemployment data on a regular and current basis are of particular importance. Census data on unemployment by area are usually only available at 10-year intervals, although national unemployment data are provided on a monthly basis by the Census' Current Population Survey. However, national figures on the unemployed, though important in providing a general indication of the state of the economy, do not provide any indications of the differences in unemployment conditions between areas.

Although insured unemployment data provide valuable indicators of economic conditions in an area, they cannot be a complete substitute for knowledge of total unemployment. Moreover, interarea comparisons based on insured unemployment data alone are not entirely satisfactory because of differences in industrial composition and the extent of exhaustions by State and area, as well as differences in the State laws with respect to coverage and eligibility requirements.

Therefore, it has been necessary for the State employment security agencies to undertake the development of total unemployment estimates by area to meet the operating needs for its information, as well as the needs of other governmental groups, private organizations, and the general public. As a result, the BES has developed procedures for use by the State agencies in preparing total unemployment estimates by area. Many of the States publish these data regularly. Although the BES at present does not release the area unemployment estimates as a separate series, they are used in arriving at the area classifications according to relative labor supply which are published by the Bureau.

The area unemployment estimating techniques developed in the employment security system start with a count of the unemployed workers covered by the unemployment-insurance programs and then derive estimates for the segments of the unemployed not covered by these programs. The development of area unemployment estimates from a household-sampling procedure was not feasible because of the prohibitive costs of such a program. The description of the technique which follows is divided into the following parts: (1) Unemployment related to employment covered by unemployment-insurance laws; (2) unemployment related to noncovered employment; (3) unemployed new entrants and reentrants to the labor force. The relative importance of these groups in the total estimate of unemployment in an average industrial area would be approximately as follows: The first group will account for about 65 to 75 percent; the second for about 10 to 15 percent; and the third for 15 to 20 percent, depending upon the time of the year for which the estimate is prepared.

Unemployment related to unemployment insurance covered employment is obtained from the UI claims-taking operations. Four groups need to be taken into account to obtain data on the total number of unemployed in this segment. The first group consists of the number of covered workers claiming UI benefits who were totally unemployed in a given week—the insured unemployment. Added to this figure are data provided by the Railroad Retirement Board on the number of unemployed railroad workers.

The second group is comprised of covered workers who were unemployed for a full week or more before filing an initial claim. Not all such claims can be properly counted in the unemployment figure, according to the present census and BES definition of unemployment, for the week in which the initial claim was filed because many of these persons would not have completed a full week of unemployment at the time of filing these claims. The first full week of unemployment for such persons will be counted when they file continued claims for benefits—these are included in the insured unemployment count. Some of the initial claims, however, should properly be included in the unemployment figure. These are persons who do have a full week of unemployment prior to the filing of the initial claim.

The third group of unemployed related to the UI program, but not included in the insured unemployment figures, are individuals who continue to be unemployed after exhausting their unemployment benefits. Accordingly, an estimate is made of the number of exhaustees still looking for work.

The fourth and final unemployed group from covered establishments consists of persons who are disqualified from receiving UI benefits, workers in covered employment who do not earn sufficient wage credits, or have not been employed in such employment for a sufficient length of time to become eligible to receive benefits, and unemployed covered workers eligible for benefits who for some reason failed to apply for them.

Unemployment related to noncovered employment consists of unemployed persons from covered industries but in noncovered (small) establishments and from noncovered industries, such as domestic workers, State and local government workers, workers from nonprofit institutions, agricultural workers, and self-employed and unpaid family workers. The estimates of the unemployed from these groups are based on unemployment rates for workers from covered establishments in the localities and on national data from the census' current population survey.

The final segments for which estimates are developed are those for unemployed new entrants and reentrants, i. e., individuals whose present spell of unemployment has not been immediately preceded by employment. This is probably the most difficult group for which an estimate must be developed. Since there is little information available for this group on a local basis, it is necessary to use the national data provided by the census' current population survey to develop techniques for estimating the total number of unemployed entrants in a given area. A study of these data shows that there is a close relationship be-

tween unemployed entrants and the level of the civilian labor force and of unemployment. An examination of the monthly labor force data since 1948 indicates that after adjusting for seasonal factors, unemployed entrants for any month of the year are: on the average, equal to 0.7 percent of the civilian labor force (excluding unemployed entrants) plus about 11 percent of the unemployed (excluding unemployed entrants). The Bureau has plans for testing the appropriateness of these relationships for local area estimates and for studies of administrative statistics to determine possible new sources of information in this field.

The technique described above for estimating total area unemployment has certain limitations, primarily because in some phases of the estimating procedure, it is necessary to use national relationships which may not in all cases appropriately reflect local conditions. Fortunately, however, the largest and most volatile segment of the unemployed is covered by local data available from the employment security system. The proposed studies for improving the insured unemployment statistics described previously in the section on that subject and the studies mentioned above relating to new entrants and reentrants should provide information on the basis of which it will be possible to test the national relationships and in some instances, to replace them.

Up to the present time, tests of the estimates appear to show that the techniques as used currently yield reasonable and useful local unemployment estimates. Moreover, the procedures have a number of advantages in that they are inexpensive, require relatively little time and use data provided and needed in the employment security system. After the data from the new special studies become available and are analyzed, consideration will be given to the regular publication by this Bureau of area total unemployment estimates.

It might be considered that the ideal procedure for obtaining the local unemployment estimates would be through household surveys based on a scientifically selected sample. These surveys would also have errors though more easily susceptible to measurement than in the present procedure. Household surveys, however, are expensive. The cost of a one-time survey of the 1949 major labor market areas currently classified by the BES according to adequacy of labor supply would involve the expenditure of several million dollars. Of course, such surveys would also provide data on the characteristics of the total labor force in addition to unemployment figures. Occasional area surveys of this type could be valuable as a device for checking and improving current estimates prepared primarily from employment security data.

4. Labor market area classification

Although the area unemployment estimates are not published by the Bureau, they are a major factor in the area classifications which are published. (A copy of this publication is attached.) The program of classifying areas according to adequacy of labor supply, introduced during World War II, is designed to permit general comparisons of labor market conditions among areas which are not feasible through the use of a single statistic. The area classifications are intended to provide a quick, convenient tool to measure comparative differences in the availability of labor in the Nation's major production and employment centers. They represent a synthesis of a number of key elements which reflect the nature and the character of an area's present labor market such as data on current unemployment, employment and unemployment outlook, comparison of labor demand with available supply of labor, and seasonal patterns of local employment and unemployment fluctuations.

Effective with the May 1955 area classifications, new criteria were introduced which grouped the areas into six major labor supply categories. The revised classification groupings are designated by the letters A through F with group A reflecting the relatively tightest labor supply group and group F the relatively greatest labor surplus. The revised classification system permits a finer distinction between labor surplus areas. In the previous system, all areas with significant labor surpluses were placed into a single group, whereas, they are now divided into three groups. In addition, the new criteria are designed to reflect area differences under a variety of economic conditions so that the area classification system will require minimum revisions, if any, as a result of changing economic conditions.

5. Older worker special labor market studies

Older workers constitute a large and necessary segment of our population and are an important source of labor supply. The Department of Labor's concern with the effective utilization of the older worker has not only the

humanitarian motive of improving the employment situation for this group, but also the objective of advancing the strength of our economy and increasing its productive potential. It is necessary to assure that the potential productive capacity of men and women who now encounter limitations on their employment opportunities, based solely on their age, is not lost through ignorance, neglect, or indifference. To get at the facts with respect to the ability of older workers to do a job and to determine the specific nature of the obstacles to the employment of older workers, the Department of Labor is undertaking a number of studies. Through these studies, information will be obtained on such subjects as the work quality of older workers in terms of their productivity and related factors; effect of pension plans on hiring of older workers; collective bargaining contracts which deal with the subject of aging employees; use of older women in special job fields; employment patterns, policies, and practices regarding older workers; and individualized placement service for older workers through the State employment security system.

Within the Department of Labor, the specific responsibility for carrying out the studies with respect to employment patterns, policies, and practices, and the expansion of individualized placement service to older workers has been assigned to the BES. To carry out this responsibility, the Bureau in cooperation with the State employment security agencies, will undertake special studies in a number of local labor market areas. These studies are planned so as to provide both statistical and qualitative data on the employment and unemployment patterns of older workers and to obtain information on how best to expand the services provided older workers by the employment offices of the State employment security agencies.

In order to pretest the forms, procedures and methods to be used in these studies, a pilot study has been run by the Minnesota State agency in the Minneapolis-St. Paul area in cooperation with the University of Minnesota. Results of this study, which are now being analyzed, will provide the basis for establishing the final procedure to be used in other areas.

The studies have been divided into three parts. The first will deal with the collection and analysis of the data on employment patterns and hiring practices of employers. To accomplish this, a sample of representative employers will be selected and information will be obtained on employment patterns, hires, and separations. These data will be obtained by age, sex, occupation, industry, and size of establishment. In addition, information will be obtained from employers on policies and practices affecting the hiring and utilization of older workers. The results of this study, with appropriate analysis, will also provide information by industry and occupation on outstanding examples of employer policies and practices with regard to the hiring and employment of older workers.

The second part of the study will be concerned with the characteristics of the unemployed older workers—sex, occupation, industry of attachment, and duration of unemployment. The analysis will be based on the study of workers filing unemployment insurance claims and nonclaimants who register for work with the employment service. In addition, work histories will be obtained from a sample of employed and unemployed persons 45 years of age and over to secure data on the basis of which comparisons of patterns of employment "progression and/or regression" will be made.

The third phase of the study will involve an overall appraisal of local employment offices' policies and procedures relating to services to older workers. Studies will be made of counseling and individualized placement services to older workers designed to appraise the effectiveness of the various methods and techniques, and costs of such services in behalf of the older worker.

Every effort will be made to obtain community participation in these studies. Support and cooperation will be sought of employers, local community groups, such as chambers of commerce, manufacturers associations, labor unions, and other groups. These groups can provide assistance in the collection of the necessary information and in the carrying out of programs that may be developed as a result of these studies.

6. Occupational job opportunity information

Occupational labor market information is required for effective local employment office operations and also to assist employers, workers, schools, and other community groups. Job applicants need such information in order to know what occupational fields consistent with their interests and training offer good job prospects, while employers need to be informed on the adequacy and the skills of their labor supply. Similarly, school officials in discharging their

obligations to students and the community require such information in order to be able to offer appropriate training. In addition, the local offices use this information in order to do the best possible job in matching workers and openings, in counseling young people, and others needing vocational orientation, in job-development work and in the general dissemination of labor-market information.

Although the local employment offices in all State already have a considerable amount of occupational labor market and related information as a result of their day-to-day operations, further developmental and organizational work in required. The Bureau is working on projects in the current fiscal year, which it is hoped will result in the development by more State agencies of systematic labor-market information by occupation. It is expected that this will be done through the preparation of local or State occupational guides for major types of worker groups, industries, or occupational fields. In certain cases the States may also undertake the development of materials for use in national job guides as, for example, guides for agricultural occupations, summer jobs for youth, or reentrants into the labor market.

7. Labor turnover statistics

Information an labor turnover is essential to the proper analysis and interpretation of labor-market developments, including labor force and employment changes. It has long been recognized that information on the number of persons employed, at specific points in time, does not give a complete picture of activity within the labor market. Such counts record only the net changes in employment in the interval between the reports without regard to the gross volume of changes occurring within the intervals. Labor turnover rates are also useful in measuring manpower requirements and planning and evaluation of job-placement programs. Individual establishments data are needed for job-promotion activities and are used in providing other employment security program services to employers. Information on labor-turnover rates is also used by employers in measuring plant performance and evaluating personnel policies.

The BLS and the BES are presently developing plans designed to utilize the resources of the two Bureaus and the State employment security agencies in the field of labor-turnover statistics in developing an improved and expanded joint program in this field.

Currently, the BLS is collecting and publishing monthly turnover rates for manufacturing and mining, based on reports from a sample of approximately 10,000 establishments. The State employment security agencies collect labor-turnover information from an estimated 50,000 establishments in both manufacturing and nonmanufacturing which are included in the "major market" of the local employment offices. (Employers with most of the hiring potential in the community.) Turnover data are essential in the management and evaluation of local office placement services.

The expanded program will provide for the State employment security agencies to collect and process labcr turnover information schedules from all establishments with employment of 20 or more workers in manufacturing and mining industries that are now included in the 2 current programs. This will allow State agencies to compile and publish labor turnover rates for the State and important local areas. The schedules will then be forwarded to the BLS in Washington, where national turnover rates will be computed and published. The expanded sample will permit the BLS to publish rates for more industries than is possible with the present sample. It is planned to introduce the program in a number of States and major labor-market areas this fiscal year and to extend it to include all States and major areas as soon as possible. Arrangements for introducing the program will be made on a State-by-State basis, starting as soon as the instructions for the program, which are now in the final developmental stage, are released.

Although the present program is planned to cover mining and manufacturing industries only, it is hoped to provide eventually labor-turnover statistics on a comparable basis for all States, standard metropolitan areas, and the Nation for the entire range of nonagricultural industries.

8. Insured employment and wage statistics

As a byproduct of its operations, the Federal-State employment security system provides information at quarterly intervals on employment and wages of covered workers. These data are obtained from contribution reports filed by 1,600,000 employers, subject to State unemployment insurance laws. In 1954 the program covered an average of 35 million workers and over $137 billion

in total wages. The State agencies tabulate these data according to the 3-digit industry in which the workers are employed and by some geographic subdivisions. Prepared on a uniform basis by the individual States, the tabulations are combined in the Bureau to provide national totals of covered employment by month and wages for the quarter.

The national summary is a comprehensive report of nonagricultural employment and wages produced on a regular recurring basis. It provides the major basis for the benchmarks for the national current employment estimates published by the Bureau of Labor Statistics. Current State and local employment estimates prepared by the State agencies are also tied to UI covered employment data. The information is used by the Department of Commerce as the basis for estimating by industry wages and salaries and certain other national income components, as well as by many other Government and private organizations.

These data would be strengthened both for benchmark and other uses, if greater industry detail could be made available, particularly for the manufacturing industries. Steps have recently been taken to provide this additional detail. The 20 State agencies which had less industry detail in their basic records are now in the process of assigning 4-digit standard industrial classification codes to all manufacturing establishments. Instructions have been issued to all State agencies to provide 4-digit industry detail for manufacturing industries in the employment and wage report for the first quarter of 1956.

The recent extension of coverage, to include firms with from 4 to 7 workers in all States, beginning in January 1956, will appreciably increase the extent of employment covered by the unemployment-insurance program and thus reduce the amount of estimating needed for the noncovered segment. Similarly, the extension of the unemployment-insurance program, in January 1955, to employees of the Federal Government will enable a tabulation of Federal employment by State, local area, and by type of activity, beginning with reports for the current quarter. As a result of these changes, about 1.4 million private wage and salary workers and 2.4 million Government workers will be added to the covered employment figures and thus increases the percentage of all nonagricultural wage and salary employment which is covered by the program from 72 to 81 percent. In the private sector of the economy, the coverage of the unemployment-insurance program will rise from 84 to 88 percent.

The States are investigating the possibility of including State and local government employees in the unemployment-insurance program. In the current year, 4 States passed legislation touching on this subject, bringing to 16 the number of States which include some State or local government employees in the program. As this aspect of the program is further extended, comprehensive employment and wage data will be made available for State and local government which, up to now, have been obtainable only through a complete census at infrequent intervals.

To insure high technical standards, a new system for coordinating the industry codes in the records of both the State employment security agency programs and the current employment statistics program was installed in the past year with the cooperation of the BLS. This system assures comparability by industry of the current and "benchmark" employment statistics produced for the Nation, States, and local labor market areas.

9. Agricultural labor market information

The State employment security agencies also compile current reports of the number of seasonal hired workers employed in agriculture during the active growing season which, in most States, is from May through November.

Included in the reports for major farm employment areas of the State are distributions of seasonal farm employment by origin of the workers (local, intrastate, interstate, offshore, and foreign) and by crop activity. In localities where Mexican national workers are employed, the prevailing wages for domestic workers for specific activities (vining peas, picking tomatoes, pulling cotton, etc.) are also included.

Designed mainly for operating and administrative use, the reports have important uses for other purposes. The information is helpful in planning drives for the recruitment of workers, in providing other employment-service facilities, and in organizing programs for the utilization of migrant and local farmworkers. The State agencies publish the information in bulletins and labor-market newsletters for the guidance of workers and farmers to facilitate the recruitment and placement of needed workers.

The Bureau reviews and summarizes these reports each month for administrative review of overall program developments and for carrying out its responsibilities under Public Law 78 and other laws governing the importation of workers from foreign countries to meet temporary farm-labor shortages.

In summarizing the reports for release in the publication Farm Labor Market Developments, the Bureau provides the only source in Government of estimates of employment migratory farmworkers by area of employment and by month. Similarly, the area employment information is consolidated into major agricultural regions and distributed by crop activity within the region.

This Bureau is working with the State agencies and the Department of Agriculture in attempting to improve our agricultural labor-market information, including particularly estimates of seasonal farm labor demand and supply.

[Vol. 11, No. 18, week ended October 29, 1955]

UNEMPLOYMENT INSURANCE CLAIMS

This report supplements the combined employment and unemployment release issued jointly today by the Departments of Labor and Commerce. The joint press statement summarizes the data from the Bureau of Employment Security's unemployment insurance claims, presented here in full detail.

Attached to this week's issue is a table showing the volume of insured unemployment in the major labor market areas of the Nation. This table appears as an attachment once each month.

Initial claims for State unemployment insurance showed little change during the week ended October 29, 1955, edging down 5,400 to 174,500 with 24 States reporting reductions. With the exception of Connecticut's sharp drop, changes in the individual States were small. The apparel, textile, leather, food processing, construction, lumber, and trade industries were among the chief sources of new unemployment. A number of States reported that increased layoffs in one area were often offset by reduced layoffs elsewhere, frequently in the same industry. Initial claims filed under the program of unemployment compensation for veterans totaled 4,700, the same number as a week ago. The number filed under the program of unemployment compensation for Federal employees, however, edged up 100 to 2,100.

State insured unemployment moved down by 8,000 to 781,200 during the week ended October 22. Recalls in auto plants where model changes were completed, chiefly in Michigan, and a continuance of seasonal activities decreased the loads in some States. In other States the volumes were up as a result of recent layoffs in apparel, food processing, construction, and resort industries. Insured unemployment under the UCV program declined 800 to 34,400. The volume under the UCFE program moved down 200 to 16,400.

The largest reduction in initial claims—5,700 in Connecticut—followed last week's rise due to claims filed by workers temporarily idled by recent floods. Connecticut, however, reported new layoffs in transportation equipment, apparel, textile, and leather industries. In all of the other States the changes were relatively small. In Michigan, the volume was down 800, while Arkansas, Maryland, Massachusetts, and New York showed reductions of 400 to 500. On the other hand, California attributed its increase of 800 to seasonal curtailments in food processing and construction activities, and to the secondary effects of a labor dispute affecting the latter industry. The rise of 500 in Indiana stemmed in part to model-change layoffs in a large household appliance plant. The increases in 2 Pacific Coast States—Washington (500) and Oregon (400)—were due chiefly to heavy rains which curtailed most outdoor activities.

Among the 27 States showing a decrease in insured unemployment, Michigan's reduction of 9,700 was the largest. Recalls of auto workers after the completion of model-change shutdowns were responsible for most of Michigan's drop, and for part of the reductions of 2,100 in California and 1,000 in Indiana. The resumption of fish-processing activities and the settlement of a trade dispute also helped reduce California's load. The largest increases in insured unemployment occurred in Connecticut (4,000), New York (2,700), New Jersey (1,700), and Pennsylvania (1,200). The rise in the first two States followed sharp increases in initial claims last week—in Connecticut due to the effects of the recent flood, and in New York to layoffs in the needle trades industries. Connecticut, however, estimated 3,800 flood-displaced workers were recalled this week.

The number of persons exhausting their benefit rights in 8 large States reporting such data weekly decreased 1,000 to 6,600. Except for Pennsylvania's reduction of 500, the changes in the individual States were small. Exhaustions amounted to as much as 1,000 in only 3 States—New York (1,300), Pennsylvania (1,200), and Illinois (1,100).

Item	Latest week		Preceding week	Year ago
	Ended	Number		
Initial claims	Oct. 29	181,276	186,578	262,294
State	do	174,456	179,807	255,547
Veteran [1]	do	4,699	4,728	6,747
UCFE [2]	do	2,121	2,043	
Insured unemployment:				
State	Oct. 22	781,172	789,155	1,469,441
Veteran [1]	do	34,439	35,211	64,724
UCFE [2]	do	16,393	16,606	

[1] Data relate to the program under provisions of the Veterans Readjustment Assistance Act of 1952; data are excluded for veterans who are filing under both the veterans' and either State, UCFE, or railroad programs.

[2] Data relate to the program of unemployment compensation for Federal employees which became effective Jan. 1, 1955; data exclude claims filed by unemployed workers who had both Federal and State wage credits.

Source: Office of Program Review and Analysis, Nov. 4, 1955.

Initial claims filed during week ended Oct. 29, 1955, and insured unemployment for week ended Oct. 22, 1955, continental United States

Region and State	Initial claims				Insured unemployment				
	State programs		Veteran program [1]	Total, including UCFE [2] program	State programs			Veteran program [1]	All programs [4] including UCFE [2]
	Number	Change from previous week			Number	Change from previous week	Percent of covered employment [3]		
Total	174,456	−5,351	4,699	181,276	781,172	−7,983	2.2	34,439	861,004
Region I:									
Connecticut	2,722	−5,676	15	2,743	17,807	+4,013	2.6	185	18,065
Maine	1,552	+250	50	1,609	6,321	+287	3.7	177	6,560
Massachusetts	6,559	−372	122	6,739	29,137	−778	2.0	691	30,372
New Hampshire	845	−155	21	870	5,038	+94	3.8	51	5,162
Rhode Island	1,506	−28	33	1,543	7,594	−462	3.4	179	7,832
Vermont	257	−56	8	266	1,476	+4	2.4	26	1,520
Region II:									
New Jersey	11,081	−47	130	11,283	49,390	+1,688	3.5	829	50,869
New York	38,207	−472	507	38,868	118,754	+2,651	2.7	1,827	121,828
Region III:									
Delware	212	+1	7	221	1,102	−241	1.0	28	1,143
District of Columbia	444	−47	35	562	2,353	−98	1.1	254	3,463
Maryland	1,688	−373	88	1,798	7,872	−446	1.3	376	8,524
North Carolina	3,393	+200	126	3,553	16,048	−582	2.2	1,029	17,461
Pennsylvania	19,690	+233	278	20,047	99,438	+1,228	3.3	3,330	103,847
Virginia	1,386	+101	99	1,519	6,104	−62	1.1	1,002	7,364
West Virginia	1,231	+109	121	1,364	8,333	−163	2.7	1,542	9,963
Region IV:									
Alabama	2,034	+125	101	2,213	10,888	−80	2.5	1,967	13,289
Florida	2,270	−222	95	2,386	17,734	−208	3.3	704	18,658
Georgia	2,329	+200	106	2,497	14,188	+297	2.4	1,204	16,160
Mississippi	1,029	+53	78	1,126	5,880	−184	2.9	790	6,832
South Carolina	1,523	+191	128	1,666	8,040	−227	2.3	1,132	9,300
Tennessee	2,495	−362	161	2,766	23,511	−591	4.3	2,486	27,016
Region V:									
Kentucky	2,084	−178	125	2,235	18,685	−171	4.6	1,794	20,954
Michigan	5,252	−793	123	5,401	37,671	−9,658	2.2	1,128	39,213
Ohio	6,053	+130	156	6,239	25,491	−334	1.1	1,013	26,833
Region VI:									
Illinois	8,437	−153	212	8,940	45,717	+799	1.9	1,135	47,607
Indiana	4,109	+507	151	4,305	16,961	−1,007	1.8	709	18,040
Minnesota	1,693	+174	85	1,795	7,840	−155	1.3	424	8,394
Wisconsin	2,334	+385	51	2,455	11,904	−2,262	1.6	326	12,475
Region VII:									
Iowa	857	−31	13	871	3,338	+112	.9	103	3,475
Kansas	1,006	−14	39	1,061	5,588	−104	1.8	248	6,158
Missouri	4,434	−328	63	4,517	21,296	−1,024	2.5	1,094	22,628
Nebraska	437	−94	37	506	1,694	−117	.9	132	1,989
North Dakota	126	+39	19	147	350	+37	.7	22	394
South Dakota	149	+14	32	189	418	+57	.8	71	523
Region VIII:									
Arkansas	1,121	−532	77	1,215	6,501	+358	2.8	623	7,274
Loiusiana	1,786	+61	76	1,882	8,388	+155	1.7	680	9,172
Oklahoma	1,266	−72	63	1,386	6,664	−14	2.1	570	7,693
Texas	2,777	+179	259	3,084	14,840	−99	1.0	2,071	17,475
Region IX:									
Colorado	531	+82	38	597	1,501	+38	.6	147	1,792
Montana	353	+63	11	369	1,022	+108	1.0	20	1,063
New Mexico	464	−33	46	526	1,623	−112	1.4	185	1,895
Utah	371	+1	19	410	1,469	+86	1.0	53	1,706
Wyoming	109	−1	5	120	374	+10	.6	16	402
Region X:									
Arizona	703	+12	31	762	2,825	−187	1.9	148	3,131
California	17,218	+792	334	17,727	52,028	−2,056	1.7	1,063	54,530
Nevada	454	−43	9	471	1,575	+132	2.6	16	1,653
Region XI:									
Idaho	291	−2	8	307	1,151	+15	1.2	20	1,211
Oregon	2,839	+379	125	3,005	8,720	+638	2.7	237	9,091
Washington	4,749	+452	183	5,115	18,530	+632	3.4	402	20,005

[1] Data relate to the program under provisions of the Veterans Readjustment Assistance Act of 1952; data are excluded for veterans who are filing under both the veterans' and either State, UCFE, or railroad programs.

[2] Data relate to the program of unemployment compensation for Federal employees which became effective Jan. 1, 1955; data exclude claims filed to supplement benefits under State programs.

[3] Average monthly covered employment for 12-month period ended Sept. 30, 1954.

[4] National total includes but State figures exclude an estimate of 53,800 covered by railroad program.

Source: Railroad Retirement Board.

State insured unemployment in 145 major labor market areas[1] for week ending nearest the 15th of the month

State and area	October 1955	September 1955
Alabama:		
Birmingham	2,500	2,800
Mobile	1,300	1,200
Arizona: Phoenix	1,700	1,800
Arkansas: Little Rock-North Little Rock	700	900
California:		
Fresno	800	1,000
Los Angeles	23,800	24,600
Sacramento	600	800
San Bernardino-Riverside	5,100	2,300
San Diego	4,200	3,600
San Francisco-Oakland	12,400	11,700
San Jose	1,200	900
Stockton	500	600
Colorado: Denver	800	800
Connecticut:		
Bridgeport	1,700	1,900
Hartford	2,400	2,900
New Britain	400	600
New Haven	1,200	1,300
Stamford-Norwalk	1,000	1,200
Waterbury	1,500	5,200
Delaware: Wilmington	1,100	900
District of Columbia: Washington	2,700	2,800
Florida:		
Jacksonville	800	800
Miami	4,200	4,300
Tampa-St. Petersburg	3,100	3,300
Georgia:		
Atlanta	3,700	3,000
Columbus	700	700
Macon	500	500
Savannah	700	700
Illinois:		
Aurora	200	200
Chicago	27,000	28,900
Davenport-Rock Island-Moline	1,100	1,200
Joliet	500	600
Peoria	800	1,100
Rockford	600	600
Indiana:		
Evansville	2,000	5,200
Fort Wayne	700	700
Indianapolis	1,500	1,700
South Bend	4,900	1,300
Terre Haute	500	600
Iowa:		
Cedar Rapids	50	50
Des Moines	400	500
Kansas: Wichita	1,500	1,700
Kentucky: Louisville	3,800	4,300
Louisiana:		
Baton Rouge	500	600
New Orleans	3,300	3,400
Shreveport	500	500
Maine: Portland	800	1,100
Maryland: Baltimore	5,800	6,000
Massachusetts:		
Boston	11,500	11,900
Brockton	1,300	1,000
Fall River	1,700	1,300
Lawrence	1,500	1,700
Lowell	1,600	1,700
New Bedford	1,500	1,600
Springfield-Holyoke	2,400	2,700
Worcester	800	1,500
Michigan:		
Battle Creek	700	600
Detroit	21,400	65,500
Flint	7,900	1,800
Grand Rapids	1,200	1,800
Kalamazoo	500	400
Lansing	3,400	700
Muskegon	1,400	1,200
Saginaw	400	300
Minnesota:		
Duluth-Superior	500	600
Minneapolis-St. Paul	4,500	5,300
Mississippi: Jackson	500	500
Missouri:		
Kansas City	5,700	4,800
St. Louis	12,500	12,300
Nebraska: Omaha	700	600
New Hampshire: Manchester	1,700	1,900
New Jersey:		
Atlantic City	2,400	1,600
Newark	17,600	17,900
Paterson	10,500	11,300
Perth Amboy	2,500	3,100
Trenton	2,600	3,100
New Mexico: Albuquerque	700	600
New York:		
Albany-Schenectady-Troy	3,300	3,500
Binghamton	1,300	1,200
Buffalo	6,500	6,500
New York	86,700	86,700
Rochester	1,900	2,000
Syracuse	1,300	1,400
Utica-Rome	2,900	2,900
North Carolina:		
Asheville	700	700
Charlotte	900	1,200
Durham	400	500
Greensboro-High Point	600	900
Winston-Salem	400	600
Ohio:		
Akron	1,400	1,500
Canton	800	800
Cincinnati	3,600	3,600
Cleveland	5,800	6,300
Columbus	800	900
Dayton	1,100	1,300
Hamilton-Middletown	600	600
Lorain-Elyria	300	400
Toledo	1,700	2,500
Youngstown	1,900	1,400
Oklahoma:		
Oklahoma City	1,300	1,300
Tulsa	1,000	1,000
Oregon: Portland	4,200	3,600
Pennsylvania:		
Allentown-Bethlehem	2,300	2,500
Altoona	800	800
Erie	2,900	3,200
Harrisburg	1,200	1,500
Johnstown	2,800	3,000
Lancaster	900	900
Philadelphia	34,800	36,300
Pittsburgh	17,500	17,700
Reading	2,200	2,700
Scranton	5,800	6,600
Wilkes-Barre-Hazleton	9,600	9,200
York	2,000	2,100
Rhode Island: Providence	7,900	8,200
South Carolina:		
Aiken-Augusta	1,200	1,100
Charleston	600	800
Greenville	900	800
Tennessee:		
Chattanooga	2,200	2,200
Knoxville	3,200	3,600
Memphis	3,100	3,300
Nashville	1,600	2,000
Texas:		
Austin	200	200
Beaumont-Port Arthur	1,300	1,400
Corpus Christi	400	400
Dallas	1,300	1,300
El Paso	300	300
Fort Worth	1,000	1,000
Houston	1,600	1,600
San Antonio	700	800
Utah: Salt Lake City	600	800

[1] Continental United States only, omits Honolulu, Mayaguez, Ponce, and San Juan. Each area consists of a principal city or cities and the surrounding area within a reasonable commuting distance.

State insured unemployment in 145 major labor market areas for week ending nearest the 15th of the month—Continued

State and area	October 1955	September 1955	State and area	October 1955	September 1955
Virginia:			West Virginia:		
Hampton-Newport News-Warwick	700	800	Charleston	1,900	2,100
Norfolk-Portsmouth	800	900	Huntington-Ashland	1,600	1,500
Richmond	500	600	Wheeling-Steubenville	1,300	1,500
Roanoke	400	500	Wisconsin:		
Washington:			Kenosha	3,000	3,000
Seattle	6,700	5,700	Madison	300	300
Spokane	1,400	1,200	Milwaukee	3,600	4,500
Tacoma	1,700	1,600	Racine	900	1,000

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF EMPLOYMENT SECURITY,
Washington 25, D. C., September 30, 1955.

CLASSIFICATION OF LABOR MARKET AREAS ACCORDING TO RELATIVE ADEQUACY OF LABOR SUPPLY

(Advance release from the Bimonthly Summary of Labor Market Developments in Major Areas, September 1955)

The following listing indicates the September 1955 classification of labor-market areas according to relative adequacy of labor supply. These classifications cover the 149 major labor-market areas and are effective as of September 30, 1955.

Major areas classified in groups D, E, and F and smaller areas listed on pages 6 and 7 of this release meet the criteria established for the designation of "areas of substantial labor surplus" or "areas of substantial unemployment" within the meaning of Defense Manpower Policy No. 4, the policy on accelerated tax amortization for labor-surplus areas and Executive Order 10582, implementing the Buy American Act.

This listing supersedes the listing published in the July 1955 issue of the Bimonthly Summary of Labor Market Developments in Major Areas, or in previous issues of that bulletin. Geographical boundaries of the areas listed, as well as a listing of individual communities included within each area, may be found in the Directory of Important Labor Market Areas, fourth edition, July 1954, plus the supplements thereto.

A summary of the September 1955 classifications for the 149 major areas, along with comparable classifications for July is shown below:

Labor supply group	Number of major areas	
	September 1955	July 1955
Total, all groups	149	149
Group A	0	0
Group B	40	29
Group C	83	89
Group D	16	19
Group E	4	5
Group F	6	7

Classifications of the following major areas have been revised between July and September:

C to B:
- Fresno, Calif.
- Los Angeles,Calif.
- Sacramento, Calif.
- Aurora, Ill.
- Joliet, Ill.
- Fort Wayne, Ind.
- Indianapolis, Ind.
- Canton, Ohio
- Oklahoma City, Okla.
- Allentown-Bethlehem, Pa.
- Richmond, Va.

D to C:
- San Diego, Calif.
- Paterson, N. J.
- Portland, Oreg.
- Reading, Pa.
- Huntington, W. Va.-Ashland, Ky.

E to D:
- Lowell, Mass.
- New Bedford, Mass.

F to E:
- Charleston, W. Va.
- Altoona, Pa.

E to F:
- Ponce, P. R.

SMALLER AREA CHANGES, JULY-SEPTEMBER

Classified as "Substantial surplus":
- Lexington, Ky.
- Mount Airy, N. C.

Removed from "Surplus" list:
- Talladega, Ala.
- Auburn, N. Y.
- Olean-Salamanca, N. Y.
- Oswego-Fulton, N. Y.
- New Philadelphia-Dover, Ohio.
- Springfield, Ohio
- Zanesville, Ohio
- Newport, Tenn.
- La Crosse, Wis.

AREA CLASSIFICATIONS, SEPTEMBER 1955

Region I

Group A: None
Group B: Hartford, Conn.; New Haven, Conn.
Group C: Bridgeport, Conn.; New Britain, Conn; Stamford-Norwalk, Conn.; Waterbury, Conn.; Portland, Maine; Boston, Mass.; Brockton, Mass.; Springfield-Holyoke, Mass.; Worcester, Mass.; Manchester, N. H.
Group D: Fall River, Mass.; Lowell, Mass.; New Bedford, Mass.; Providence, R. I.
Group E: None
Group F: Lawrence, Mass.

Region II

Group A: None
Group B: Rochester, N. Y.
Group C: Newark, N. J.; Paterson, N. J.; Perth Amboy, N. J.; Trenton, N. J.; Albany-Schenectady-Troy, N. Y.; Binghamton, N. Y.; Buffalo, N. Y.; New York, N. Y.; Syracuse, N. Y.
Group D: Atlantic City, N. J.; Utica-Rome, N. Y.; San Juan, P. R.
Group E: None
Group F: Mayaguez, P. R.; Ponce, P. R.

Region III

Group A: None
Group B: Wilmington, Del.; Washington, D. C.; Allentown-Bethlehem, Pa.; Lancaster, Pa.; Richmond, Va.
Group C: Baltimore, Md.; Charlotte, N. C.; Greensboro-High Point, N. C.; Winston-Salem, N. C.; Harrisburg, Pa.; Reading, Pa.; York, Pa.; Hampton-Newport News-Warwick, Va.; Norfolk-Portsmouth, Va.; Roanoke, Va.; Huntington, W. Va.-Ashland, Ky.; Wheeling, W. Va.-Steubenville, Ohio
Group D: Asheville, N. C.; Durham, N. C.; Philadelphia, Pa.; Pittsburgh, Pa.
Group E: Altoona, Pa.; Erie, Pa.; Charleston, W. Va.
Group F: Johnstown, Pa.; Scranton, Pa.; Wilkes-Barre-Hazleton, Pa.

Region IV

Group A: None
Group B: Jacksonville, Fla.; Atlanta, Ga.
Group C: Birmingham, Ala.; Mobile, Ala.; Miami, Fla.; Tampa-St. Petersburg, Fla.; Columbus, Ga.; Macon, Ga.; Savannah, Ga.; Jackson, Miss.; Aiken, S. C.-

Augusta, Ga.; Charleston, S. C.; Greenville, S. C.; Memphis, Tenn.; Nashville, Tenn.
Group D: Chattanooga, Tenn.; Knoxville, Tenn.
Group E: None
Group F: None

Region V

Group A: None
Group B: Flint, Mich.; Grand Rapids, Mich.; Kalamazoo, Mich.; Lansing, Mich.; Saginaw, Mich.; Canton, Ohio; Cleveland, Ohio; Columbus, Ohio; Dayton, Ohio; Hamilton-Middletown, Ohio; Lorain-Elyria, Ohio; Youngstown, Ohio
Group C: Louisville, Ky.; Battle Creek, Mich.; Detroit, Mich.; Muskegon, Mich.; Akron, Ohio; Cincinnati, Ohio; Toledo, Ohio
Group D: None
Group E: None
Group F: None

Region VI

Group A: None
Group B: Aurora, Ill.; Joliet, Ill.; Rockford, Ill.; Fort Wayne, Ind.; Indianapolis, Ind.; Madison, Wis.
Group C: Chicago, Ill.; Davenport, Iowa-Rock Island-Moline, Ill.; Peoria, Ill.; Evansville, Ind.; Minneapolis-St. Paul, Minn.; Kenosha, Wis.; Milwaukee, Wis.; Racine, Wis.
Group D: South Bend, Ind.; Duluth, Minn.-Superior, Wis.
Group E: Terre Haute, Ind.
Group F: None

Region VII

Group A: None
Group B: Cedar Rapids, Iowa; Des Moines, Iowa; Omaha, Neb.
Group C: Wichita, Kans.; Kansas City, Mo.; St. Louis, Mo.
Group D: None
Group E: None
Group F: None

Region VIII

Group A: None
Group B: Oklahoma City, Okla.; Tulsa, Okla.; Dallas, Tex.
Group C: Little Rock-North Little Rock, Ark.; Baton Rouge, La.; New Orleans, La.; Shreveport, La.; Austin, Tex.; Beaumont-Port Arthur, Tex.; Corpus Christi, Tex.; El Paso, Tex.; Fort Worth, Tex.; Houston, Tex.; San Antonio, Tex.
Group D: None
Group E: None
Group F: None

Region IX

Group A: None
Group B: Denver, Colo.; Salt Lake City, Utah
Group C: Albuquerque, N. Mex.
Group D: None
Group E: None
Group F: None

Region X

Group A: None
Group B: Fresno, Calif.; Los Angeles, Calif.; Sacramento, Calif.
Group C: Phoenix, Ariz.; San Bernardino-Riverside, Calif.; San Diego, Calif.; San Francisco-Oakland, Calif.; San Jose, Calif.; Stockton, Calif.; Honolulu, T. H.
Group D: None
Group E: None
Group F: None

Region XI

Group A: None
Group B: Seattle, Wash.
Group C: Portland, Oreg.; Spokane, Wash.
Group D: Tacoma, Wash.
Group E: None.
Group F: None

AREAS OF "SUBSTANTIAL LABOR SURPLUS"

Major areas

Indiana: South Bend, Terre Haute
Massachusetts: Fall River, Lawrence, Lowell, New Bedford
Minnesota: Duluth-Superior
New Jersey: Atlantic City
New York: Utica-Rome
North Carolina: Asheville, Durham
Pennsylvania: Altoona, Erie, Johnstown, Philadelphia, Pittsburgh, Scranton, Wilkes-Barre—Hazleton
Puerto Rico: Mayaguez, Ponce, and San Juan
Rhode Island: Providence
Tennessee: Chattanooga, Knoxville
Washington: Tacoma
West Virginia: Charleston

Smaller areas[1]

Alabama: Alexander City, Anniston, Decatur, Florence-Sheffield, Jasper
Arkansas: Fort Smith
Connecticut: Bristol, Danielson, Torrington
Georgia: Cedartown-Rockmart, Cordele
Illinois: Harrisburg, Herrin-Murphysboro-West Frankfort, Litchfield, Mount Carmel-Olney, Mount Vernon
Indiana: Michigan City-LaPorte, Muncie, Vincennes
Iowa: Burlington
Kansas: Pittsburg
Kentucky: Corbin, Frankfort, Hazard, Henderson, Lexington, Madisonville, Middlesboro-Harlan, Morehead-Grayson, Owensboro, Paintsville-Prestonsburg, Pikeville-Williamson
Maine: Biddeford-Sanford
Maryland: Cumberland
Massachusetts: Fitchburg, Milford, Southbridge-Webster
Michigan: Escanaba, Iron Mountain, Marquette
Mississippi: Greenville
Missouri: Joplin
New Jersey: Bridgeton, Long Branch
New York: Amsterdam, Gloversville, Hudson
North Carolina: Fayetteville, Kinston, Mount Airy, Rocky Mount, Shelby-Kings Mountain, Waynesville
Ohio: Athens-Logan-Nelsonville, Cambridge, Marietta
Oklahoma: McAlester, Muskogee
Pennsylvania: Berwick-Bloomsburg, Butler, Clearfield-DuBois, Indiana, Kittanning-Ford City, Lewistown, Lock Haven, Meadville, New Castle, Oil City-Franklin-Titusville, Pottsville, St. Marys, Sunbury-Shamokin-Mount Carmel, Uniontown-Connellsville, Williamsport
South Carolina: Marion-Dillon, Walterboro
Tennessee: Bristol-Johnson City-Kingsport, LaFollette-Jellico-Tazewell
Texas: Texarkana
Vermont: Burlington, Springfield
Virginia: Big Stone Gap-Appalachia, Covington-Clifton Forge, Radford-Pulaski, Richlands-Bluefield
West Virginia: Beckley, Bluefield, Clarksburg, Fairmont, Logan, Morgantown, Parkersburg, Point Pleasant-Gallipolis, Ronceverte-White Sulphur Springs, Welch

[1] These areas are not part of the regular area labor market reporting and area classification program of the Bureau of Employment Security and its affiliated State employment security agencies.

GEOGRAPHICAL BOUNDARIES OF NEW SMALLER LABOR SURPLUS AREAS

(Not previously listed in Directory of Important Labor Market Areas)

Name of area	*Area definition*
Mount Airy, N. C.	All of Surry County, N. C.

ADMINISTRATIVE REGIONS OF THE BUREAU OF EMPLOYMENT SECURITY

Region I:
- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island
- Vermont

Region II:
- New Jersey
- New York
- Puerto Rico

Region III:
- Delaware
- District of Columbia
- Maryland
- North Carolina
- Pennsylvania
- Virginia
- West Virginia

Region IV:
- Alabama
- Florida

Region IV—Continued
- Georgia
- Mississippi
- South Carolina
- Tennessee

Region V:
- Kentucky
- Michigan
- Ohio

Region VI:
- Illinois
- Indiana
- Minnesota
- Wisconsin

Region VII:
- Iowa
- Kansas
- Missouri
- Nebraska
- North Dakota
- South Dakota

Region VIII:
- Arkansas
- Louisiana
- Oklahoma
- Texas

Region IX:
- Colorado
- Montana
- New Mexico
- Utah
- Wyoming

Region X:
- Arizona
- California
- Nevada
- Hawaii

Region XI:
- Idaho
- Oregon
- Washington
- Alaska

EXPLANATION OF AREA CLASSIFICATIONS

One of the six overall objectives of the Federal-State employment security program is "to develop and disseminate employment, unemployment, and labor market information in order to assist in achieving economic stabilization and growth, and to meet the informational needs of labor, management, and the public." Among the major measures established to carry out this objective is the Bureau of Employment Security program of classifying areas according to relative adequacy of labor supply. These area classifications are intended to provide a quick, convenient tool to measure comparative differences in the availability of labor in the Nation's major production and employment centers. These condensed, summary indicators of area labor market conditions have been widely used by Government agencies and private organizations in the planning, administration, and evaluation of manpower programs and policies ever since the area classification program was first initiated in the early days of World War II.

Area classifications represent a synthesis of a number of key elements which reflect the nature and the character of an area's present labor market. The area classification for each area blends together pertinent data on the current level of unemployment in relation to the size of its labor force, on changes in employment and unemployment in comparison with several recent periods, on the area's employment and unemployment outlook, as reflected by employer estimates of their manpower requirements, on the size of the area's labor demand in comparison with available labor supply, and on the seasonal pattern of local employment and unemployment fluctuations, into a single symbol which characterizes the status of that area's labor market in comparison with those of other areas throughout the country. Area classifications thus permit general comparisons to be made between areas, comparisons which are not feasible through the use of any other single statistic.

The classification criteria, which became effective with the May 1955 classifications, group the areas into six major labor supply categories. Classification

groupings are designated by letters ranging from A to F, with group A reflecting the relatively tightest labor supply and group F the relatively greatest labor surplus.

Areas classified in categories D, E, F under the revised classification system are regarded as meeting the requirements for designation as areas of substantial labor surplus, or areas of substantial unemployment for the purposes of Defense Manpower Policy No. 4, the policy on accelerated tax amortization for labor surplus areas and Executive Order 10582, implementing the Buy American Act.

A summary of the criteria used for each of the individual classification groups under the new system is listed below. Classifications made under these criteria are not comparable with the classification ratings assigned under previous systems.

Revised classification criteria

Group A	Group B	Group C	Group D	Group E	Group F
1. Current labor supply-demand situation					
Current critical labor shortage; expected to continue at least through next 4 months.	Job opportunities for local workers slightly in excess of job seekers; this situation expected to continue over next 4 months.	Job seekers slightly in excess of job openings; this situation expected to continue over next 4 months.	Job seekers in excess of job openings; this situation expected to continue over next 4 months.	Job seekers considerably in excess of job openings; this situation expected to continue over next 4 months.	Job seekers substantially in excess of job openings; this situation expected to continue over next 4 months.
2. Ratio of unemployment to total labor force					
Less than 1.5 percent	1.5 to 2.9 percent	3 to 5.9 percent	6 to 8.9 percent	9 to 11.9 percent	12 percent or more.
3. Net nonagricultural labor requirements for 2 and 4 months hence indicate—					
Sizable employment gains.	Some increases in employment.	No significant increases in employment.	Declining employment levels or no significant increase.	Declining employment levels or no significant labor requirements.	Declining employment levels or no significant labor requirements.
4. Effects of seasonal or temporary factors					
The current and anticipated labor shortage not primarily due to seasonal or temporary factors.	Reflects significant seasonal fluctuations in employment and unemployment.	Reflects significant seasonal fluctuations in employment and unemployment.	The current or anticipated labor surplus not due primarily to seasonal or temporary factors.	The current or anticipated labor surplus not due primarily to seasonal or temporary factors.	The current or anticipated substantial labor surplus not due primarily to seasonal or temporary factors.

NOTE.—Areas may also shift between groups D, E, and F in response to significant seasonal changes in employment and unemployment, but will not be moved in or out of group A or between groups C and D as a result of primarily seasonal or temporary fluctuations.

Area classifications under the revised system are assigned only to the 149 major areas which are surveyed at bimonthly intervals and make up the Bureau of Employment Security's regular area labor market reporting program. Smaller areas meeting the criteria for designation as "areas of substantial labor surplus" are identified separately in a special listing, but are not placed in a specific classification category.

Area classifications are issued at bimonthly intervals (in odd-numbered months) by the Bureau of Employment Security of the Department of Labor. A total of 149 of the Nation's major labor markets are regularly classified into several labor supply groupings. The classifications are assigned on a labor market area rather than an individual community basis. A labor market area consists of a central city or cities and the surrounding territory within a reasonable commuting distance. It may be thought of as an economically and socially integrated, primarily urban, geographical unit within which workers may readily change their jobs without changing their places of residence.

A labor market area takes its name from the central city or cities, but may have many other communities within its boundaries. Each major labor market area has at least one central city with a population of 50,000 or more, according to the 1950 census. In most instances, boundaries of major labor market areas coincide with those of standard metropolitan areas, as determined by a Federal interagency committee chaired by the Bureau of the Budget.

Definitions of all classified areas are listed in a Bureau of Employment Security publication entitled "Directory of Important Labor Market Areas." This publication also lists all major communities located within the boundaries of the defined labor market areas.

The 149 major labor market areas regularly classified by the Bureau of Employment Security according to relative adequacy of labor supply account for about 33 million nonagricultural wage and salaried workers. This represents nearly 70 percent of the Nation's total.

The area classifications are assigned according to uniformly applied criteria. They are based on labor market information, both narrative and statistical, submitted to the Bureau of Employment Security by affiliated State employment security agencies under a regular labor market reporting program. These reports are prepared locally, drawing on the vast amount of information available in local public employment offices, according to standard outlines, methods, and techniques. The usefulness of the area classifications is thus enhanced by their comparability and uniformity.

The extent of unemployment in a particular area is, of course, a key factor in determining the appropriate area classification assigned to each locality. It is not the sole criterion used in classification, however. Consideration is also given to the area's employment outlook, as reflected by local employer estimates of their manpower requirements; to the significance of essential activities; to the relationship between labor supply and demand; to the seasonal pattern of employment and unemployment fluctuations; and to several other factors.

Mr. BOLLING. The next witness is Mr. Omer W. Herrmann, Deputy Administrator, Agricultural Marketing Service.

Mr. HERRMANN. Mr. Chairman, I have with me Mr. Ducoff who specializes in this field.

Mr. BOLLING. Mr. Herrmann, you may proceed as you wish.

STATEMENT OF OMER W. HERRMANN, DEPUTY ADMINISTRATOR, AGRICULTURAL MARKETING SERVICE

Mr. HERRMANN. Thank you, Mr. Chairman.

I am glad to have this opportunity to discuss with you the farm employment and related statistics program of the Agricultural Marketing Service of the Department of Agriculture. Mr. Oris V. Wells, Administrator of the Agricultural Marketing Service, has asked me to express his regrets at not being able to appear before you personally, but he is out of the country at this time attending the Conference of the Food and Agriculture Organization in Rome.

The Agricultural Marketing Service has for many years maintained statistical series on farm employment, farm population, and on migration to and from farms. This statement discusses the nature and uses of these data and how the quality of these statistics may be improved. It also touches on closely related studies in the field of farm manpower.

I. FARM EMPLOYMENT SERIES

The Department of Agriculture has been collecting information regularly from farmers on the number of persons working on farms since October 1923. The early data were published as averages per 100-crop-reported farmers. Estimates of total numbers of persons working on farms were not published until 1938. These estimates were the outgrowth of a Works Progress Administration study. The report from this study, Trends in Employment in Agriculture, 1909–36, presented farm employment estimates by type-of-farming areas for the period 1909–36. The Department has continued this service with some modifications, publishing estimates for grouping of States into nine geographic divisions and into type-of-farming areas.

Description of the series: The present published series is the result of a complete revision finished in 1953 of the entire series back to 1910. The series consists of annual average estimates of total farm employment from 1910 to date and monthly estimates from 1940 to date for the United States and for each of the nine major geographic divisions of the country.

The monthly estimates of the number of family and hired workers employed on farms during the survey week are presented separately. Family workers include farm operators who worked on 1 or more days during the survey week at farm work chores or in the transaction of farm business, and members of their families who did unpaid farm work or chores for 15 hours or more during the survey week. All persons working 1 hour or more during the survey week for pay at farm work or chores are classified as hired farm workers. Members of the operator's family receiving wages for work on their farms are counted as hired workers. Sharecroppers are considered family workers when working on their own crops but are classified as hired workers when doing farm work for pay off their tracts. The survey week used in the series is the last complete calendar week in the month except when that week includes the last day of the month; in the latter case the survey week is the next to the last full calendar week.

Except when supplemented by occasional enumerative sample surveys, the AMS maintains the continuity of its monthly estimates of farm employment by means of a mailed questionnaire to a sample of crop reporters. Mailed questionnaires are received every month from 15,000 to 20,000 farmers who report the number of persons working on their farms.

Use of the series: The estimates of persons working on farms are used for a variety of purposes by Federal and State agencies directly or indirectly concerned with agricultural manpower problems, as well as by farmers' organizations and other private agencies. Within the Department of Agriculture both action and research programs require information on the trend in the size and composition of the farm working force for the United States as a whole and in as much

geographic detail as it is possible to supply. One important use in the Department of the hired farm employment series is for weighting State average farm wage rates to obtain the United States wage-rate index to be included in the official parity index for price-support computations. Farm-employment statistics provide some measures of the effects of war and postwar conditions of high employment in the economy on the size and composition of the farm labor supply and on the number of persons at work on farms. Similarly mechanization of farming operations and other technological advances reduce farm labor requirements and are reflected in the statistics on the farm working force.

Federal, regional, and State agencies with responsibilities in administering programs of farm labor recruitment and placement utilize these regional and national estimates of farm employment in their program planning and in their evaluation of the effectiveness of existing programs with a view to progressive improvement in the services offered to farmers and farm workers. Agricultural policy and program development required information on the farm manpower situation for use by administrators and by congressional committees and Members of Congress. These regional and national estimates of current and historical changes in the size and composition of the farm working force form an integral part in analyses of the current and prospective developments in the farm manpower situation. Such analyses often permit appraisal of prospective developments which have important application to the Department's activities in helping and guiding farmers to meet manpower problems through the adoption of labor-saving machinery or other practices.

Data and methods used: The series is currently maintained by returns from a monthly mailed questionnaire which carries questions on farm employment. These data are collected on the monthly general schedule, which is used primarily to obtain information on crop conditions and yields and milk and egg production. The data are subject to bias both because the mailing list is not a cross section sample of all farms and because there is a tendency for a differential response of operators which varies by type and size of farm. The average employment per farm computed from the mailed returns is usually higher than would be obtained from a complete enumeration of all farms, since the farms reporting use more labor than the average farm. In addition, the seasonal pattern differs from that of all farms in showing less marked seasonal variations. This is due to the fact that farms with high peak labor requirements are underrepresented and farms with fairly steady labor requirements such as dairy farms and general farms are overrepresented. It is therefore necessary to make corrections for bias before the data can be used to prepare estimates for all farms.

Adjustments of current data obtained from crop reporters are based on benchmark estimates derived from the most recent census of agriculture. Since census data on farm employment relate to only 1 week in the year, other information is utilized to establish a seasonal pattern of monthly farm employment for the benchmark year. The additional data on seasonality of farm employment by major regions of the United States includes information from six national enumerative surveys. These surveys cover designated weeks in the period from 1945 to 1948. Also supplementary information on the monthly dis-

tribution of man-hour labor requirements for farm work have been utilized. By means of this seasonal index estimates of farm employment are derived for each of the other months of the benchmark year.

After the monthly estimates have been prepared for the benchmark year, adjustment factors are computed by months from the relationship of the average employment per farm, as estimated for the benchmark year to the corresponding averages derived from crop reporter returns. In subsequent years the average employment per farm derived from the crop reporter returns is corrected by these adjustment factors. These corrected averages are then multiplied by an estimate of the number of farms to obtain current monthly estimates of total farm employment.

The 1954 census of agriculture, results of which are now becoming available, will provide new benchmarks for the AMS farm-employment series. Revisions in the series for the period 1950 to date will be made to reflect both these new benchmarks as well as revisions in the estimates of number of farms used to expand the intercensal estimates of average employment per farm.

Relationship to other employment estimates: As with the nonagricultural employment series, agricultural employment estimates are obtained both through the establishment approach in which farms are the reporting unit and the population approach in which the person is the reporting unit. The Agricultural Marketing Service utilizes the establishment reporting approach while the Current Population Survey of the Bureau of the Census uses the population survey technique. The Current Population Survey series on agricultural employment has been available so far only for the United States as a whole. The Agricultural Marketing Service series is available for the nine major geographic divisions as well as for the country as a whole and for a much longer period for historical analysis.

The differences in level of employment between the AMS and CPS series are attributed mainly to differences in method and concept. The establishment-type approach results in duplication in the count of persons working on more than one farm during the survey week. Double counting also arises from turnover in the establishment's payroll report of employment. In the population survey technique each person is counted only once. Counting a person only once by CPS means that a person with both a farm job and a nonfarm job in the same week will be counted as employed at the job he spent the longest time during the survey week. The AMS series would count such a person as employed in agriculture if he met the minimum hours required without regard to the time spent on the nonfarm job. Other differences between the two series result from the inclusion of children under 14 doing farmwork by AMS and their exclusion by CPS, differences in timing of the survey weeks and some differences in coverage and classification. These two different approaches to estimates of farm employment each have distinct advantages and disadvantages even though the use of the two techniques means differing official estimates of agricultural employment and leads to questions of comparability. Establishment data are usually collected by a mail questionnaire so that data can be collected from a fairly large sample at a relatively low cost. A large sample would make possible farm-employment estimates for individual States as well as estimates by type and size of farm or by other important agricultural classifications.

The population survey approach yields an unduplicated estimate of agricultural employment, which can be added to similarly derived estimates of nonagricultural employment and of unemployment to obtain total employment and total labor-force figures. The population survey approach, however, usually requires a questionnaire which can be satisfactorily filled out only by well-trained enumerators through personal interview. Collection of data by personal interview is expensive and the expense consideration sets definite limits to the size of the sample. On the other hand, representativeness of the sample can be achieved and maintained much more effectively in an enumerative survey operation than in a mail questionnaire survey.

In general, the employment statistics developed from population surveys have advantages in labor-force analyses in which unduplicated estimates are needed for the total labor force and its components and in which there is the need for information on the population characteristics of the employed and the unemployed. On the other hand, establishment statistics are generally preferred in economic analyses of specific industries where attention is often focused on relationships of employment to trends in production, payrolls, man-hours, and other types of information concerning particular industries.

Improvements and expansion needed: Limitations of the present AMS form-employment series arising from inadequate representation of the crop reporter returns and from conceptual limitations of establishment reporting have been indicated above. The series represents, however, about all that can be done with present facilities. As employment data are now collected on a questionnaire which is used mainly for other purposes, there is little possibility of any substantial change. The sample, timing, and space for questions hinge upon demands for items other than farm employment. At present, the primary use of data on the questionnaire is for the crop forecasting work of the Agriculture Estimates Division which has much higher priority than the work on farm employment.

The Subcommittee on Review of Labor Force Concepts appointed by the Bureau of the Budget has solicited the views and recommendations on the AMS farm-employment series from various organizations and individuals, including farm organizations, agricultural economists, State governmental agencies, and other users of the data. In the replies, there was a good deal of emphasis on the unmet need of farm-employment estimates by States and by type of farm. There was also interest in supplementing the farm-employment estimates with information on hours worked so as to obtain better measures of labor input in agriculture.

The establishment type approach to employment estimates lends itself well to the development of estimates by States and by type of farm when supplemented by benchmark data from censuses of agriculture. The AMS operations could well be expanded to yield such estimates. In addition, other types of information such as hours worked could also be collected.

An expansion of the AMS series would require a considerable change in operating procedures. A separate sample and a separate questionnaire devoted exclusively to farm labor would be required. This would, of course, mean an increase in expenditures for farm-employment estimates.

II. SPECIAL SERIES ON THE HIRED FARM WORKING FORCE

There has been over the years a persistently strong demand for information on the annual work experience and earnings of hired farmworkers generally and of migratory farmworkers particularly. The information on the amount of employment and wage income received by these workers in the course of a year can be furnished only by the workers themselves or members of their households, since a farm employer cannot be expected to have this information for workers' employment elsewhere than on his farm. Therefore, the AMS since 1945 has used the CPS of the Bureau of the Census to obtain the desired information on farm wage workers.

Once a year, along with the regular monthly questions, special questions are asked for each person 14 years old and over in the sample households in both urban and rural areas. In general, the special questions asked are similar from one survey to another and provide information on the number, characteristics, length of employment at farm and nonfarm work, and annual earnings of persons who did any work on farms for wages during the year. From time to time 1 or 2 new questions have been added. In 1948, special questions were asked relating to the amount of wagework done in each quarter of the year; beginning in 1949, questions identifying migratory workers were included, and in 1954, migrant farmworkers were asked the number of children under 18 in their families and the number of children under 14 who accompanied their parents during migration. The need for information on migratory farmworkers has been highlighted by the establishment of the President's Cabinet-level Committee on Migratory Labor.

These surveys are the only sources of information on the number and population characteristics of migratory and nonmigratory farm wage workers and on their annual employment and earnings experience. The surveys also have made possible identification and measurement of other important categories of farm laborers, such as those whose chief activity during the year is farm wage work, nonfarm work and not in the labor force (housewives, students, etc.). The Social Security Administration has at times collaborated with us on these surveys to obtain special information relevant to the coverage of farmworkers under the old-age and survivors insurance program.

Nothwithstanding the utility of information obtained in the hired farm working force surveys, the smallness of the sample and consequent instability of the year-to-year changes raise problems of interpretations. The recent expansion in number of areas covered in the CPS sample and further expansion of the sample now underway will improve the reliability of the estimates.

III. SPECIAL STUDIES ON UNDEREMPLOYMENT

Agriculture has long been characterized by a substantial proportion of farm-operator families whose farming operations are on too small a scale to provide adequate employment and income. The usual measures of employment and unemployment cannot adequately reflect the manpower utilization picture in this sector of agriculture, since what is involved is the problem of underemployment or under-

utilization of human resources. The recent report prepared for the Secretary of Agriculture, the Development of Agriculture's Human Resources, focuses attention on the 1.5 million farm-operator families whose income from all sources is less than $1,000 a year and carries recommendations for studies and programs to achieve better utilization of underemployed rural manpower.

A few small-scale studies in low-income farming areas have been undertaken by the AMS in cooperation with the Kentucky and Oklahoma Agricultural Experiment Stations and in other areas with the Department of Labor and the Agricultural Research Service. These studies provided some insights into the extent of underemployment and some of the obstacles to achieving fuller employment for these people. The Department last spring requested additional funds necessary to implement recommendations of the President and the Secretary of Agriculture with respect to the rural development program. This program included provision for studies in low-income farming areas, including manpower inventories with assessment of occupational skills, availability for employment within or outside of the area, impediments to mobility, and availability of vocational training for agricultural and nonagricultural occupations, to provide guides for education, extension, and placement programs.

IV. FARM POPULATION SERIES

Great changes have occurred in the farm population in the last 15 years. Since 1940 the farm population has declined from 30,500,000 to 22,200,000. These and prospective changes have important implications for agricultural policy through their direct and indirect effects on the manpower situation in agriculture and in industry, on trends in per capita farm income, and on economic interrelationships between the farm and nonfarm sectors of the economy. The maintenance of up-to-date inventories on population living on farms, the number of people who move from farms to cities each year, and the age, sex, and the farm and nonfarm occupations of those who remain on farms is needed for a proper appraisal of farm-nonfarm economic developments.

The Agricultural Marketing Service in cooperation with the Bureau of the Census, issues annually an estimate of the national farm population, including age, sex, and labor force status. The Agricultural Marketing Service issues annual geographic region and division estimates of the farm population together with estimates of births and deaths and movement to and from farms. Retrospective intercensal annual estimates for States are published by the Agricultural Marketing Service.

Since the farm population estimates for the United States are obtained from a sample survey they are subject to sampling variability. The Bureau of the Census is in process of enlarging its sample, which will reduce the sampling error of the estimate of the farm population. However, substantial improvement in the series will not be achieved until the sample of farm households on which the United States estimate is based is greatly enlarged.

The annual farm population survey of the Agricultural Marketing Service has serious deficiencies, many of which are directly related

to its being a mail survey rather than an enumerative survey. Within the past few years several steps have been taken in an attempt to improve the survey. The sample has been increased in a number of States and a question relating to size of farm was added in 2 years so that an indication of sample bias could be obtained. It is thought that this survey cannot be measurably improved in its present form. Hope for improvement of estimates for geographic subdivisions would seem to rest on an enlargement of the enumerative sample of the Bureau of the Census to the point where reliable major regional estimates could be obtained from it, and on associated analytical work, including collation of data from a matched sample of returns from the censuses of population and agriculture.

Mr. BOLLING. Thank you, Mr. Herrmann.

The subcommittee will now adjourn until 2 o'clock this afternoon in this same room when there will be a summary panel discussion by witnesses heretofore heard.

(Whereupon, at 11 a. m., a recess was taken until 2 p. m., of the same day.)

AFTERNOON SESSION

The subcommittee met at 2 p. m., Hon. Richard Bolling (chairman of the subcommittee) presiding.

Also present: Grover W. Ensley, staff director, and John Lehman, clerk of the committee.

Mr. BOLLING. The subcommittee will be in order.

We have with us this afternoon, in panel discussion, the witnesses who have testified in the last 2 days. I understand that Mr. Bowman, Assistant Director of the Office of Statistical Standards of the Bureau of the Budget, has some general observations which he would like to make which are somewhat in summary of what has come before.

I will call on him first, and then proceed to call on the other gentlemen here to see if they have similar comments which they would like to make.

Mr. Bowman.

Mr. BOWMAN. Thank you, Mr. Chairman.

The general remark that I would like to make really relates to, and is illustrated by these charts which are before the committee. (See pp. 37–40.) We have been discussing the fact that our employment series and our unemployment series are not identical. We have indicated that we still would like to know why some of the changes from month to month take place in somewhat different ways in the several series, but I would like to call your attention to the fact that these series nevertheless tell the same story in the large. If we look at the two charts on the left, which deal with employment, you will see that one of them is marked "Not adjusted for seasonal variation." The lower blue line is the current population survey figures on nonagricultural wage and salary workers, excluding domestic service, and the red line, with the dots, is the nearest approximation which we can make to the CPS blue line from the BLS series.

The top line is the CPS nonagricultural employment total and overall employment is not shown on the chart at all. In other words agricultural employment is not included.

You will notice by examining the red line and the light-blue line that the series tell the same story generally, but there are times when

they move in somewhat different ways. But the cycle, the recession in 1949, is clearly shown by both series, the recession in 1954 is clearly shown by both series, even though they are complicated by different seasonal variations.

You see the picture much better, and you see the advantages of adjustment for seasonal variation when you look at the chart which says "seasonally adjusted." There you get (I am looking now particularly at the red and the light blue) a good clear picture of the fact that both series tell you about the fall in employment in 1949 and in 1954. The differences in the two series we will talk about probably as the questions develop, so I wanted to merely emphasize that, irrespective of their differences, the series tell the same story.

We look at the unemployment, and I think we get a confirmation of this in terms of the two series there depicted. The one on the right is before seasonal adjustment, and the black line on the right is not strictly comparable with the black line on the left, because the black line on the right includes all insured unemployment. That is, veterans, railroad retirement, and BES, but we had no seasonal adjustments for the first two elements I mentioned, so the black line on the left is merely the BES insured unemployment, on a monthly average basis. But I think, Mr. Chairman, that the fact that these two series tell about the same thing is clearly depicted by that chart, or those charts, and the advantages of correcting them for seasonal variations is brought out rather strikingly in that left-hand chart on total and insured unemployment.

That was the general comment I wanted to make. Thank you.

Mr. BOLLING. Are there others who would like to comment in summary or who have general comments in addition to those which they made in their testimony?

Mr. Burgess?

Mr. BURGESS. There is one point about the comparison, let us say, on employment that was brought out in Mr. Bowman's testimony, his original testimony, that might be emphasized again here: that the Bureau of Labor Statistics' series for wage and salary workers in establishments counts each individual in principle each time he occurs on a payroll, and it is recognized that a number of people appear on two payrolls for a given pay period. I think the figure is in the order of somewhere between 500,000 and 1,000,000. We have made studies from the census point of view of the number, which varies with the season of the year, so that we need to know more about that, and I think the BLS are planning to make some inquiries from their point of view, finding how that occurs. That is, there are two kinds of double employment: People definitely at the same time holding 2 jobs, and those that hold, for instance, 1 job in the first couple of days in the week and another job in the last 2 days.

Then there is another thing which might be thought of as a peculiarity, at least, in the Census series, which I realized myself only recently, that when you determine employment, counting each individual only once, as the Census does, you get a figure for total employment. Then you break it down by assigning each individual to the area in which he had the most employment. You understate the number of people who have jobs in nonagricultural employment because of the fact that some of the people put more time in agricul-

tural employment than in nonagricultural employment in a particular week, and so will not get into the Census series for nonagricultural employment. That is to say, a number of persons with a secondary kind of employment in nonagricultural industries might well be added on to the Census series to get a result more comparable with the BLS series. Some figures we have suggest that the difference might be something in the order of 300,000, but that also would vary from time to time.

Other differences that come in are associated to some extent with the seasonal fluctuations in the summer and along in the fall of the year when double employment occurs; it is particularly prominent in retail trade. There seem to be differences between the two series that need further exploration to understand just what is involved. On the whole, of course, I agree with Dr. Bowman's remarks that the two series are valuable, and it seems more profitable to put in efforts to improve the series in various ways that we know about than it would to try to get in a particular month just what the explanation of the difference happens to be.

I think I might put in a personal comment here that the BLS series, wage and salary workers in establishments, is known to me as having been responsible for the contribution by the Western Electric Co. to those figures. In the company I was responsible for seeing about those reports for some 20 years. We sent in reports not only for the factories but also for the sales branches, so I know some of the facts of that series. It contributes, in addition to the actual number employed, the hours worked and the total earnings, so that there can be no question that that series should be maintained. It will be valuable information aside from the questions we are concentrating on here.

Mr. BOLLING. Thank you.

Are there other comments?

Mr. CLAGUE. I might make just one, Mr. Chairman. I agree with what Mr. Burgess has said. I think he accounts for the major factors of difference. There happens to be one factor that shows up in that left-hand chart which he did not mention, and which I will.

In 1952 you will see a sharp drop in the BLS line in the summertime. That was the steel strike. In other words, the payroll of the employer does not contain the people who have gone out on strike, so our series will show a dip whenever there is a major strike large enough to affect the industry.

Mr. Burgess' staff, on the other hand, would classify those individuals as being "with a job" because they are striking and, therefore, are out of work on their own initiative. They would be recorded as having a job, which they do. As you see, his series does not dip at that point in the middle of 1952, whereas ours does.

Mr. BOLLING. Are there other comments of a general nature or summary nature, not necessarily dealing with this specific subject, that any of you wish to make?

Well, one of the things that sort of interests me on those charts—and I think that certainly support the views that you stated, but one of the things that interests me very much, and I am not too good in reading charts—is that despite all, last points on both those charts show a startling dissimilarity, if I can read the chart effec-

tively or correctly. It is the biggest dissimilarity that exists on the whole chart—just the last two points of the red line and the blue line, and even when seasonally adjusted, I believe, as I look at those hastily, it seems to me that is the biggest discrepancy that exists in the whole plotting of the two charts.

Mr. BOWMAN. May I ask you, Mr. Chairman, to look at the seasonally adjusted chart. I believe you are looking at the chart which is not seasonally adjusted.

I am not saying that your generalization doesn't follow from the other, but remember these series have different seasonal movements. They are corrected by independent seasonal adjustments, which take out some of the seasonal movement. If you look at the blue line and the red line after seasonal adjustment what you say appears to be true. You have got to be careful when you interpret charts not to let the apparent drawing together of the lines fool you a little bit because as the lines go up you have always got to examine the vertical distances between the two charts.

However, the vertical distance between the two lines does seem to have narrowed during the summer, then widened again in September, but now the last month, October, not plotted, the blue line (CPS) is going up, and the red line (BLS) is going up a little bit. Now, notice the month from August to September, was the last thing that is portrayed there—the blue line (CPS) that goes down a little bit. That is really an opposite direction to what happened in the BLS series. In other words, the two series moved for that month after seasonal adjustment in opposite directions. They did do that. Before seasonal adjustment they did the same thing. Now, this month, that is, the month from September to October, they are moving in the same direction, both before seasonal and after seasonal.

The thing I would like to call your attention to, and one that has attracted some attention, is if you look at the peak in 1953 of the BLS series, the red line, thus far it has not been reached in 1955, so it would look as if employment in 1955 has never been quite as good as employment in 1953. If you look at the blue line, the peak employment in 1953 has been exceeded by the employment in 1955.

Now, there are just enough conceptual differences between these two series that I don't believe anyone could honestly say that either one of them are incorrect; one or the other or both might be somewhat incorrect, but they both could be right because the red line (BLS) is measuring number of jobs, and duplication can creep in there. The blue line (CPS) is measuring number of people with jobs, either working or, if not working, having a job and being away from it for a variety of reasons.

We prepared these charts, even though they show some things which indicate different movements. Notice that this is true in the trough in 1949. The Census blue line reaches a trough in 1949 which is higher than the lowest figure shown for 1947, but the lowest figure shown by the BLS in 1949 is lower than any figure they show for 1947.

As an economist, I am very much interested in that, but I don't have any cut and dried explanation for it. There it is.

Mr. BOLLING. Would any of the rest of you like to comment on that particular subject?

Mr. CLAGUE. I think Mr. Burgess might also wish to comment on this: In the last September–October period, that downturn may in-

volve a factor which is missing in that chart, namely agriculture. If that was added to the others you would find that very likely Mr. Burgess' earlier explanation might account in part for the divergence. There was a drop, as is shown on the chart, of nearly a million between August and September in the Census figure for nonagricultural workers, but there was a rise of 350,000 in agriculture. It could be that some people, who were employed in both months had more agricultural employment in September, and consequently were classified in agriculture rather than in industry.

I think this is something that could occur, particularly since we know that in September there is a rise in some kinds of agricultural employment, such as fruit-picking, harvesting, and so forth. This would result in a person, who previously was recorded as being industrially employed, now being classified in agriculture. All of this is conjecture because until we have studied all of this in detail we cannot furnish a final answer to that question.

Mr. BURGESS. I think that is part of it. There is another part there: The students who have been employed, but are going back to school, account for a large swing in the census figures, and somehow the BLS series doesn't catch them to the same extent.

Mr. CLAGUE. That is right.

Mr. BURGESS. One would need to look more closely than I have in mind at the moment at the differentiation between men and women. That is, the women account for the increase in agricultural employment. At the harvest time a large number are added, so one has to look at the details rather closely to get what seems a reasonable explanation.

The details we have aren't quite enough, unfortunately, to be sure of just what it is.

Mr. BOWMAN. I cannot forbear one other remark: I agree with what is said, but I would like to make a technical point: If the seasonal indexes were perfect, and they are not, then if the seasonal movements between agricultural and nonagricultural employment had been regular from one year, to another, then the seasonal index should have corrected it so far as the CPS series is concerned. It might not, because seasonal indexes are apt to be not perfect, and seasonal movements are somewhat irregular, and the only thing we can do is to do the best we can with the data that we have.

You see the discrepancy there, and you see it even before seasonal adjustment, but that is not so important. You see the blue line (CPS) going down quite a lot, that last line, and the red line (BLS) going up; you see the black line above going down. I don't know what the overall line (including agriculture) would have shown for that month, but if our seasonal indexes were perfect, then we should have gotten this all right.

I am going to point out they are not perfect. However, they do help.

Mr. BOLLING. If that is all on this particular subject, I have an area that is even vague in my own mind on which I am interested in having you comment. I have the feeling that there has been a substantial change in the pattern of employment of people in this country in the last 15 years. I have the suspicion, which I cannot prove, that during the war and postwar periods the pattern of employment by

members of the same family has shifted from that of one wage earner in the family to a situation where there are now customarily more than one in many families, particularly in lower or middle income groups. If this be correct—and I assume there are studies that would prove it in error or not—it would have tremendous importance in the approach that we take to what the labor force is, and who is and who is not seeking work.

If, for example, a working family maintains a relatively high standard of living by the employment of the man, the woman, and perhaps another member of the family, the changes that go on in the labor force might have a very substantially greater social, not economic, but social significance than we have been recognizing.

I won't try to quote specifications because I don't remember the figures or the months, but it seems to me that in the last few years there have been occasions on which, if the labor force, or our concept of the labor forces, had moved with anything like consistency, the figures on unemployment would have given us a somewhat different picture.

What I am basically concerned about is, are we doing an effective job of determining who wants to work?

Do I make myself clear, or does what I say have no validity?

Mr. BURGESS. Partly it does, Mr. Chairman, and table No. 1 that we submitted will show, for instance, the average annual labor force participation by age and sex. The participation rate for males in 1940 was 83.9, and in 1954 it was also 83.9. There is no change on the average. For women, the participation rate in 1940 was 28.2 percent; in 1954, 33.7 percent.

During the war years, and 1944 still has that in the rate for women, it had risen to 36.8. For women 35 to 44 years old, it was 28.8 percent in 1940, as compared to 40.5 in 1940 and 41.3 in 1954. It has also gone up in the 45 to 54-year-old group.

We sometimes referred to that group as the grandmother brigade; in factories that had war work. You will find that they did draw on the middle-aged women, the women whose children had left home, or were able to take care of themselves, and while that faded away after 1945 it didn't go back all the way, and you will find in 1954 for the 35 to 44-year group the rate was up to 41.3 percent as compared with 28.8 percent in 1940.

There is something in what was said. If I may comment, I think you may have overstated a little to make your point about the shift, because the families in 1940 also had other members than the man working, but the extent to which that happened I think has shifted, most notably as respects these middle-aged women and somewhat as respects others. As I remember the difficulties I had in getting jobs when I was a college student during the summer; I think it is much easier for an older high school or a college student to find something that pays cash money in the summer than it used to be.

Mr. GOODWIN. I might say on this subject, Mr. Chairman, that we expect to throw some light on it, approaching it from the other side. That is, approaching it from the standjoint of unemployment in the studies that are now under way on the characteristics of the unemployed. The problem has real significance, of course, in the administration of unemployment insurance. We have bits of information here and there gathered in the administration of unemployment insurance, but we do not have nearly as much information as we feel we need.

There is a general assumption on the part of a lot of people that where you have more than one wage earner in a family, or at least when you get certain combinations of wage earners in the family, you increase the problem of incentive to work.

This has significance in programs dealing with fraud.

My personal observation is that some of these conclusions that have been drawn about incentive to work overstate the problem, and that the great majority of the labor force are willing to work, and that it is a comparatively small group with whom there is a problem.

We do have a problem with a small group.

Mr. BOLLING. I think Mr. Burgess stated there was an increase in the labor force of a million and a half between the third quarter of 1954 and the third quarter of 1955. Earlier—I don't remember the exact dates, but I suppose some time in 1953 and early in 1954—there were many complaints, and I think perhaps I complained myself, that we weren't getting a full picture of what was going on because the labor force seemed to be stagnating at that point.

This again raises the question of the whole concept of what is and what is not a labor force.

I wonder if we don't need more depth or greater sensitivity? How do you explain this relative stability and then the sudden surge, and at the same time justify the concept as wholly adequate?

Mr. BURGESS. There is, Mr. Chairman, a little divergence of view as to whether the concept of labor force, as we have it, tells all the story that some people would like to have it tell. That is, our civilian labor force is obtained by adding up the employment—those actually at work, those with a job but not at work, and the unemployed. The unemployed are those who do not have a job, and are doing something definite seeking work.

There are other people in the population that are not taking any steps to seek work because they do not think it is worthwhile, who might under a little more stimulus go out and look for a job. Of course, they got that stimulus in the war years, or the Korean emergency.

Now, as a practical matter, sifting out those people who might be persuaded to take a job or might with a little different atmosphere take a job—sifting those from what we call not in the labor force is a psychological problem, if you will. It is hard to draw any lines there. We could modify our idea of labor force to take in what is sometimes referred to as the inactive labor force, people that are not doing anything specifically about holding a job or actually looking for a job.

Now, our figures are based on the concept of some pretty definite action in looking for work, although we have in the requirements for being classified as unemployed, as one case that the person would have been looking for work except that he or she believes there is no work available of his type or in the community. That is in our specifications, but we have grave doubts about that being enforced or enough questions being applied uniformly so as to get all the people that might come under that head.

Mr. BOWMAN. May I comment on this, Mr. Chairman?

Mr. BOLLING. Mr. Bowman.

Mr. BOWMAN. I think you put your finger on a very important point, but I would also like to call your attention to the fact that the concept

of labor force, as we now use it, is a much more flexible notion than was true as we go back over the years. In other words, the technique when I first started in this field in the great depression was to project the normal labor force by assuming a growth in the labor force of so many hundred thousand each year. Therefore, it was a very steady, smooth line. Then you took the estimate of employment. You subtracted it from the estimate of what in those days was called gainful workers, and the difference was unemployment, and you had different estimators disagree by anywhere from 1 million to 5 million on how many people were unemployed.

The concept of labor force today is one that is very flexible, although people still accuse it of not being flexible enough, but it includes in the labor force anyone, whether he ever worked or not, who says that he is looking for work and is not working, and that means that next month some people may be in the labor force who weren't employed this month, and who weren't unemployed this month. Next month they may be in either as employed or as unemployed, because they have now joined the labor force, and some people will say to us, "That is too flexible. It is too flexible because you have now said that someone is unemployed who in all of his past history has never been employed before, so how can he be unemployed?" The answer is he is unemployed because for the first time he is looking for a job, and he hasn't found it. Even in the short period, as shown in the current population survey release, from January 1954 to August 1955, and just taking the total civilian labor force, there is a variation from somewhere in the neighborhood of 62,840,000 to 67,726,000.

Now, the period of time is so short there couldn't have been such a large change in the population. It is a change in the number of people that are now saying they either have a job, or that they don't have a job and are seeking one, that gives us some of these difficulties, because unemployment may go up without employment going down. On the other hand, unemployment may go down without employment going up, and some of these factors are seasonal, and some of them are cyclical, and it is very difficult to separate them and come to a very definite conclusion as to which is which. We can do reasonably well in identifying the seasonal changes. We haven't been able to do very much yet with so-called cyclical aspects of these variations.

Mr. BOLLING. From a point of view which perhaps puts too much emphasis on the social aspects as opposed to the economic, but from a point of view of getting a clear picture of how full employment is, how would you feel about a concept of labor force that included or left out the word "seeking" and spoke of "able and willing"—What would be the disadvantages of that?

Mr. BURGESS. There are some people here that have been on that particular phase of it, giving intensive attention to that longer than I have. I know, in general, that the difficulty is of finding any method of questioning that would draw a line that can be used to make that distinction. This is what we call the inactive unemployed. There are unemployed that aren't doing anything about it but could be persuaded to take a job, but your line gets to be a very shadowy one.

Mr. BOLLING. If there is another answer to that, doesn't it carry us into another cloudy area? Let us say you have the area of chronic unemployment. Is the coal miner in the area where the coal mines

have been shut down going to say he is seeking work if he knows there is no work available?

Mr. BURGESS. We recognize that class in our instructions to the enumerators. They are supposed to count those people as unemployed. As I said before, however, it is difficult to be sure that any such instructions are carried out because the individual, as I get it, when he is asked if he is seeking work, doesn't like to say, "Yes, I have been seeking work but I can't find it." To repeat that month after month seems to reflect on him that he hasn't got normal ability.

Mr. BOLLING. Doesn't this, then, mean that you have the same difficulty in the present standard which you would have in the other standard? You would have difficulty getting answers precise and accurate to communicate the real fact?

Mr. BURGESS. We have difficulty. Our approach tries to have a uniform standard, the same enumerators working under the same instructions, so our figures will be comparable from month to month and to some extent to year to year.

Mr. LEVINE. I think the magnitude of the problem is considerably different if you were to stop at the point of "able and willing," and not get into "seeking." Willingness to work, as we discover in employment office operations every single day, is a state of mind which is related to the kind of work available, the situation at home, and a thousand other things. At any given moment, a person may not be interested in work, but if I had a job around the corner, says the woman, between 2 and 4 o'clock, I would be willing to work.

The relative magnitude of error due to a seeking-work question is probably less than "able and willing" would bring even when you happen to lose those people in the chronic unemployment situations. We have that problem in unemployment insurance, as well, where exhaustees no longer file claims. We don't have them in the unemployment insurance count even though they may still be unemployed. We can make estimates, and can do better with special field studies, but I think the likelihood of error is far less when you have the test of some effort being made in addition to the state of mind of "Yes, I would be willing."

Mr. BOLLING. Does the seeking-work test mean the same woman is willing to go or she may say she is seeking work, but only if she is able to. I am not trying to be cute about it, but the same quantitative problem remains.

Mr. LEVINE. That is true.

Mr. GOODWIN. You bring in the problem of what is reasonable. You have to have that in the administration of unemployment insurance. The local office has to make that decision all the time as to whether efforts are reasonable.

Mr. BOLLING. In any event, what this amounts to is that the series which have been used—and this is besides the one that I am particularly interested in—have a different level of precision at different times in their ability to demonstrate the fullness of employment.

Mr. BOWMAN. May I comment on that? I would like to make a point, if I can.

I think when you spoke about a flexible labor force, definitely that is an important point, and I would say our concept of labor force today is flexible. The question is, how flexible? Now, if you want

to measure potential labor availability then our labor force concept today is not flexible enough. That is, if you were thinking of what you could do in a great emergency to get everybody working, that is not what we are trying to measure as labor force today because we are in a free economy. We are leaving it up to people to decide whether they want to seek work, or don't want to seek work.

Under another circumstance, we might want to say that every able-bodied person over a certain age able to work shall work. In that case, we would stress a potential labor supply.

What we are trying to measure now is, people who are either working or have a job and, therefore, aren't looking for one, or would like to have a job and are seeking to get one, and we are saying those people are all in the labor force. We might have another person who says if you asked them "Wouldn't you work?" He would say, "Why, sure. You find me that job that has all the perquisites that I can think of and then I would like to work," but the truth of the matter is you might offer that person 10 or 15 jobs and he might say no to all 10 or 15. In that sense we are saying that such a person is not unemployed because he is not looking for work. The present concepts do provide for a person who isn't looking for a job but is sick (he is unemployed if he normally would be looking for a job) or for a person who isn't looking for a job because there is clear evidence that there aren't any jobs to be found in that particular area. They are counted under the present concept, although we have to rely upon enumerators to sort of sense that. They are counted as being unemployed.

The rigid definition was followed by Great Britain during the great depression in which no person was thought of as being eligible for benefits unless he had first of all gone to a factory and asked for a job, and he brought a little signed certificate back saying "This gentleman asked for a job." They found that that was extremely foolish because people were just going in, and these are the words that have been quoted in one of the great studies in saying "I know you haven't got a job for me. I know that, but will you kindly sign this statement so I can get my dole," and so be forced into an activity that was a foolish activity.

Mr. BOLLING. I would like to restate what I said a little earlier just before your last response. Would I be correct in saying, "You agree that the present concepts of labor force result in a tendency to understate unemployment in periods of recession"?

Mr. BOWMAN. I would disagree with that statement.

Mr. BURGESS. I don't know. I would be willing to say that before one passed judgment on that it would be well to look at the details.

For instance, the classification of labor force participation by age and sex. That is, we find that if we took the measure of labor force participation or even employment of men 25 to 54, inclusive, we find now that 98 percent of those are either employed or recorded as seeking work. The percentage runs off a little in different years according to business activity, but looking at that, and related details from our studies, you could come to a judgment, and even that could be put in the form of an index. In fact, exploratory analyses have been made, either taking the ages where employment is usually greatest and seeing what happens there, or seeing where men are heads of

families—and that is the most serious unemployment, of course, when it happens—and by taking those figures altogether we can get a broader picture than by just going by these summary figures.

Mr. BOLLING. I don't want to belabor that point too much. I would like to point out for whatever it is worth that the Employment Act itself speaks in terms of those able, willing, and seeking to work.

Mr. BOWMAN. Just on your point, if I may, Mr. Chairman, there is an old theory somewhat discredited but not completely disproven that the opposite of what you say with regard to the flexibility of the labor force is true in a recession. It used to be we believed it more than we do now. It works something like this: As you move into a recession or the depths of a depression, you may have a family in which only one person normally works but when that person becomes unemployed he and his wife are both seeking work. If one of them gets it the other drops out, so that in a recession unemployment is overstated in the sense of how much employment it would take to eliminate the unemployment.

At the peak of prosperity the other might be true, in the sense that you might have a situation which is quite different, and some people have withdrawn from the labor market, which will only come about when earnings and other factors are adequate so far as the primary breadwinner is concerned.

I think that Mr. Stewart's book and some others discredits this idea a little bit, and doesn't find that there is very much empirical support of this idea of an anticyclical movement in the flexibility of the labor force, the way I described it.

Mr. BOLLING. I have some fairly specific questions now. The first one is to Mr. Bowman:

In your final recapitulation of funds appropriated for economic statistics which you sent to the subcommittee August 12, you indicated an increase in appropriations for employment and unemployment statistics of $1,165,000 for 1955. As you know, I expressed my gratification at this action, and we have heard today and yesterday about the many improvements underway. Are there especially significant areas which you are other members of the panel can point out at this time for which you will be seeking funds in your 1957 budget?

Mr. BOWMAN. It is not possible for me to disclose what we will be seeking funds for in the 1957 budget before the decision is made by the Presidennt as to budget he wants to provide.

Mr. BOLLING. I have no intention of embarrassing you. Don't answer the question if there is any embarrassment involved.

Mr. BOWMAN. I believe that the emphasis that we will want to put in the next budget go-round will not be so much in the area of employment and unemployment data, as was true of the previous request, but there are still large amounts that still remain to be done in this area.

Mr. BOLLING. Mr. Burgess and Mr. Clague mentioned the quality-control programs which have been instituted to assist in maintaining and perhaps improving the accuracy of the data they collect. My question has two parts:

Do the Bureau of Employment Security and the Agricultural Marketing Service have similar programs? And by what standards do you judge whether accuracy is being maintained? On the latter point, for example, Mr. Burgess mentions in his prepared statement improved

interview techniques for preventing response errors and suggests a lengthened interview, but how can you be sure this interview obtains a right answer any more than a short one?

But the first question first, do BES and AMS have quality-control programs?

Mr. GOODWIN. I think Mr. Levine can speak to that, Mr. Chairman.

Mr. LEVINE. I think we should recognize that most of the economic data which are derived out of employment-security operations are based on direct counts of the "universe" so that quality control from a sampling standpoint isn't a problem. Sound administrative operations also provide a built-in quality control. We do have a problem constantly of training and getting proper interpretations of reporting instructions by the States so that the counts will be correct and comparable as far as possible under varying State laws and procedures.

However, when we get to the estimate of total unemployment, there is the problem of how to fill the gap between insured unemployment and total unemployment. The gap is being narrowed by the extension of unemployment insurance, but some gap remains, and the way we bring about quality improvement in that sense of the word is through special studies.

For example, we need to know what is the duration of unemployment for those who have exhausted unemployment benefits so that they can be counted as a part of the unemployed to be added to the insured unemployed. On that score we are making a number of special studies with State employment security agencies.

Similarly, we are concerned about the problems of new entrants into of labor force, particularly at given months. These are people who usually have no unemployment insurance eligibility, and don't show up as claimants. But when school closes, for example, these people show up in large numbers. Some of them also come in every month by way of dropouts from school, and so forth. Here we have only the alternative of using national relationships available from the Bureau of the Census. We realize that these national factors applied to specific local labor markets will have serious limitations because labor markets do differ from one another. As a consequence, we are asking States to undertake various studies in different localities to see how local variations would affect their estimates.

Those are the kind of quality controls that we are introducing to supplement the insured unemployed data.

Mr. HERRMANN. I believe Mr. Ducoff wants to say something, Mr. Chairman, for AMS.

Mr. DUCOFF. As far as AMS is concerned, in certain cooperative work that we have with the Bureau of the Census, particularly with respect to the cooperative estimate of the size of the farm population, the improved and enlarged sample of the current population survey will provide better estimates of the size and the change in the farm population than is true under the present situation. To that extent we share in the improvement that will be possible through the quality-control program and the enlarged sample of the Bureau of the Census.

As Dr. Herrmann indicated in his testimony, we should like that to be even better than it is. We think that the level of reliability of the estimate of farm population needs further improvement, particularly to enable us to produce the estimates for areas smaller than the United

States as a whole, that is for the major regions and geographic divisions.

Likewise, certain other work that we have in the farm labor field, where we utilize the facilities of the Bureau of the Census for an annual survey of the hired farm working force, will show some improvement from the expansion in the census sample now under way.

With respect to our own farm-employment estimates, as was indicated in Dr. Herrmann's testimony, under present conditions, with present facilities, with present funds, we have no reason to expect any improvement over the situation that we now have.

Mr. BOLLING. Thank you.

Any other comments?

Mr. BURGESS. I was just going to support what has been said about the cooperation with the Bureau of the Census, in connection with the insurance angle of it. That is, the problems are somewhat different of making a tie-in between the two approaches to unemployment, because we don't want to be in the guise of policemen, going around and asking people "Are you receiving unemployment insurance benefits?" and we have to watch that angle of it.

We talked with the people in agriculture about making our improved expanded survey serve their purposes as well as ours. I think we can do that.

If I can turn to the other question you had about how do we know if we check that we are really getting what is right rather than just another view: I would like to call, if I may, on Mr. Hansen, who is assistant director for statistical standards, and I know has been watching that point, to comment or talk on that.

Mr. HANSEN. I wasn't sure I heard exactly what you said.

Mr. BURGESS. He raises the question when we make these checks on quality do we know we are getting at the truth.

Mr. HANSEN. The question of doing a reinterview, as you pointed out, with longer questionnaires, spending more time in getting the information, doesn't necessarily provide a more accurate answer at all. But it gives a strong presumption that we can get a better answer, if by getting more information we get more details, more facts on the basis of which to evaluate a response.

For example, one can ask a simple set of questions and depend upon the question itself to communicate to the respondent exactly what is wanted. On the other hand, a series of questions can bring out additional information—remind the respondent of types of things that might be overlooked, and the consequence can be, with a properly directed, more intensive interview, to elicit more accurate information. It certainly doesn't follow necessarily, but usually in our experience where we have done more intensive interviews, and are able to evaluate some of the results against independent sources of information sometimes available to us, we find that we do, in fact, succeed in doing a better job.

Mr. BOLLING. By what standards do you judge whether accuracy is being maintained? What is the method of check back?

Mr. HANSEN. The check back that we do on our survey is accomplished by the supervisor in the field, or a chief interviewer, going back and asking again the questions that were asked initially by the original interviewer. These responses are obtained without referring to the original responses, the reinterview is done independently.

After getting these responses the results of the reinterview are compared with the results of the original interview, which have not been available to the reinterviewer or have not been used by him during his initial work of checking.

For any discrepancies between them, then, further probing is done to bring out the reasons for discrepancies. Sometimes it is found that the original response is more accurate, sometimes it is found that it isn't, but that additional probing, plus the fact that the reinterviewer is supposed to be a more skilled person provides the basis for our evaluation. It does insure, among other things, that the original interviewer went to the right places, interviewed at the right households, and brings out, in particular, any gross discrepancies. Some of the finer points are sometimes rather difficult to establish clearly, as for example, the correctness of an answer, as to whether a person is seeking work or not.

Mr. BOLLING. Thank you.

Mr. BOWMAN. May I comment on this?

Mr. BOLLING. Certainly.

Mr. BOWMAN. There are some things that I would like to disagree with a little bit here.

First of all, the words "quality control" ought to be used very carefully with regard to these different programs, because it is a quite different problem in the CPS, in the BES, and BLS. In other words, the BES quality control—let me make this point first: Quality control should be an attempt to find out whether what you sought to measure you measured accurately. It may be what you sought to measure in one case is quite different from what you sought to measure in another. You want to find out whether you measured it accurately. When you have an administrative program like BES, the quality checks, therefore, are largely administrative quality checks. Did they get the figures right? Did they get them all in on time? Did somebody leave out a county? Did somebody leave out an office? Theses things can happen, but really that kind of checking with reasonable care and administrative handling that should be taken for granted almost—maybe not quite that much.

On the other hand, suppose they measure what they set out to measure. They know how many people they paid unemployment compensation to, to the last man, in such and such a month. For economic purposes that data may be worthless. I am not saying it is, I am saying it may be. They may have put in a new low which did something in that particular month. They may have had a benefit year start; they may have had a benefit year end. For economic purposes, we have to take that series and readjust it, not because it is in error, but because there is something wrong with the series when interpreted for economic analysis.

In the BLS series, the employers may report every individual to whom they paid a check, and everybody may be exactly accurate on the payroll. I am not saying that is true. It might be true. But, remember, they paid some people this month for working last month. They paid some people this month who were away on vacation or who are sick. Furthermore, you all know that some employers have practices in which a man starts working one week and works a week without pay, or at least 3 days. At the end of the second week he gets

paid and he always has 3 days held back. Now, if you had a large turnover in a particular month you might get the payroll showing it in a somewhat different period than it really occurred. But the point I am trying to make is that quality control in that case is really whether or not the employers reported accurately the number of people they paid.

When you come to the CPS, this is where I think you have a little different problem. You have a set of concepts. You send out a group of people to ask questions of individuals in such a way that you may classify those individuals into categories. Now, if every person you sent to such an individual, every person who asked the questions, came up with a different classification, then you could throw the data away. It wouldn't have any objective reality at all.

Now, I think the quality check there is to determine whether or not—when people are well trained, when the questions are well framed, when they are asked of an individual at a particular time by individuals well trained—you get, not exactly the same answers, but substantially the same answers.

That kind of quality control program is a very important part of the program itself, and that is why I would like to stress that this is the area in which a considerable amount of emphasis has been given, must be given, but we still cannot be 100 percent certain that there cannot be a respondent biased to a particular interviewer, an interviewer biased to a particular respondent, but certainly the work that we have done to date indicates there can be a high degree of reliability to this technique, if the people are well trained, and if they enmuerate the people they are told to enumerate, and not somebody else. That is, if they really go to the sample selected.

Now, that is why I don't believe you can compare the quality contrals in the CPS area exactly with the quality controls in the other areas.

Mr. BOLLING. Thank you.

This goes to an entirely different field:

How many unemployed in the national total could be accounted for by unemployed persons living in so-called distressed or depressed industrial areas? What proportion of these are found in the chronic depressed areas?

Mr. GOODWIN. I don't know whether we have the answer to that or not. I didn't know we were supposed to have it.

Would you like to comment on the question?

Mr. BOLLING. If you don't have the data to answer it now you can submit it for the record.

Mr. LEVINE. I think, Mr. Chairman, it would be preferable to do that. We have from time to time made rough estimates of what that would be. You see, we have estimates for the major labor markets at regular 2-month intervals. In addition to that, we have to take account of small labor surplus areas where special surveys are undertaken and the estimates for them change in accordance with when the surveys are made.

As a result, I would rather submit the information.

Mr. BOLLING. If you could submit that for the record we would appreciate it.

(The information referred to is as follows:)

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF EMPLOYMENT SECURITY,
Washington 25, D. C., November 16, 1955.

Hon. RICHARD BOLLING,
Chairman, Subcommittee on Economic Statistics,
Joint Committee on the Economic Report,
Washington, D. C.

DEAR CONGRESSMAN BOLLING: In accordance with our previous arrangement, I am submitting for the record the figures on unemployment in labor surplus areas that you requested during the recent hearings on employment and unemployment before the Subcommittee on Economic Statistics.

Our data indicate that there were approximately 314,100 unemployed workers in the 26 major areas classified by this Bureau as areas of substantial labor surplus in September. This total represented about 15 percent of the 2,149,000 listed as unemployed during the month by the Bureau of the Census. Actually, this proportion may be somewhat high, since our area figures include persons on temporary layoff of less than 30 days as unemployed, while Census does not. This difference could be of some importance during September when many automobile manufacturing workers were idled during the model changeover period.

There were also 94 smaller areas listed as areas of substantial labor surplus by this Bureau in September. Our latest figures indicate that unemployment in these areas totaled 238,800.

If I can be of further assistance in this or other matters please let me know.

Sincerely yours,

ROBERT C. GOODWIN, *Director.*

Mr. BOLLING. There is another one which is even narrower: Who makes the final determination whether a labor market area which may be on the borderline is tipped over into group D and thereby meets the criteria established for "areas of substantial labor surplus" or "areas of substantial employment" or stays in group C and is not eligible for benefits available for groups D, E, or F?

I would like you to trace the process from the locality to the final decision.

Mr. GOODWIN. The answer to the narrower question is that the decision is made in the Bureau of Employment Security in Mr. Levine's part of the organization, and I will ask him to trace the steps that are taken from the beginning to the end.

Mr. LEVINE. Well, starting at the beginning, the report originates in the locality where as a rule a local labor market analyst is assembling information on employment, unemployment, changes in hiring specifications, registrations in the local office, job openings known to the local office, etc.—all the bits and fragments of information that relate to that area. That information is then assembled in both a narrative section and a series of statistical tables. It is sent to the State office, where there is a staff of economists—in every State, the employment security agency has economists and statisticians in the central office—who review the reports, make such changes or raise questions if they want to with the local analyst, and then submit the report to the Bureau of Employment Security. These surveys are made at 2-month intervals.

They generally come in between the 15th and 25th of the month. They are staggered by different States and localities. They reach the Bureau of Employment Security where we have a staff of analysts who follow the same groups of areas all the time, and are pretty

thoroughly acquainted with the characteristics, composition of the areas, kinds of industries, major employers there, and so forth.

These are reviewed and various data are then set up on quite large and complex worksheets, where it is possible to make comparisons between both the current report and previous reports, for preceding periods, and the same periods in the preceding year, so that you can get at questions of seasonality and unusual variations, and so forth. Where the report clearly shows the area falls within the criteria that have been established for classification of the area, no problem exists. Our problem exists where there are borderline situations. Even there, it is not serious unless it begins getting over into the D category, because that has some program implications. Otherwise it would be an exercise in labor-market analysis, the distinction in degree of unemployment.

Mr. BOLLING. Before you go on would you expand a little on that? How much consideration is given to program implications?

Mr. LEVINE. When an area, let us say, has been running for the several last bimonthly periods as a class C area, and by reason of the most current report there is an indication of a very considerable rise in the insured unemployment, in their estimate of total unemployment, in the number of new applications for work in the local office, an indication from employers that the outlook is pretty uncertain in terms of their hiring plans, or even some rather gloomy ones at times, this area, taking those data, relating them to the criteria for C and D, becomes, let us say, borderline. It is uncertain as a judgment factor.

Mr. BOLLING. Where does the judgment come in?

Mr. LEVINE. That comes in terms of how much weight you are going to apply to the current situation, in terms of the volume of unemployment and the percent of the work force unemployed, as related to the outlook which may be somewhat better than the current situation is; and even with respect to the current situation how much of it is of a purely transitory character.

Let us say you know that in the case of South Bend, just to take as an illustration, one major employer may dominate the whole situation in that area, and that major employer may be on a 2-week shutdown for remodeling, or inventory checkup. We don't classify differently from one 2-month period to the next on purely transitory, fleeting kinds of situations. Obviously, you wouldn't weight that kind of a situation as having a bearing on the ratio of the unemployment over the next 2 months.

Where the problem becomes really pretty difficult, the analyst, who has no ax to grind but is looking at the data, sits down with the supervisor, who is in charge of the area analysis work. There are instances where that in turn comes to myself. I am asked to sit in on the conference and go through the data with them. There have been a few occasions where I have gone to Mr. Goodwin and on 1 or 2 occasions we have gone to the Under Secretary to lay all of the data before him and give him the implications. It is done with a considerable amount of care, as to what the current situation shows, what past situations have been for this same locality, how much is transitory, and how much of it has implications that will carry over.

Mr. BOLLING. How much weight is given to the views of the people in the locality, in the State? Do they make the recommendations?

Mr. LEVINE. Because the classification system is really one of relative adequacy of labor supply and requirements and employment and unemployment in different areas, the final decision is made here. However, States are instructed that they may, if they wish—and they frequently do—initiate recommendations in the first instance. In those instances we have the recommendations. In instances where we do not have their recommendations we initiate the classification, but before that classification goes into effect, and before we really have gone into any discussion with Mr. Goodwin, or anybody else, on the borderline cases, our tentative classification is wired back to the regional office and to the State agency, and the State agency is asked to review that and to confirm or disagree, and if they disagree, to indicate what changes or conditions have developed that would modify that tentative classification.

You must remember that in addition to that, during the period we were processing these reports for the classifications, we are receiving each week reports on insured unemployment. A wire report comes in each week, and where there are significant changes reflected in claims in an area they are supposed to call that to our attention.

Mr. BOLLING. Are there many cases where the local area's recommendations over a period of more than a couple of months have disagreed with the ultimate decision that you can thing of?

Mr. LEVINE. No. Generally, we are very, very close, because over a period of time these same people are using the same criteria as we have. They come pretty well out to the same conclusions. There have been a few instances where the area is undergoing a change. It might hit precisely at the time the classification is on. There is a little uncertainty in our minds and in the minds of the State agency people as to whether that should be held for another 2-month period to confirm that that trend that seems to be emerging is actually under way or not. In those cases we will generally agree between ourselves as a whole or shift over.

Mr. BOLLING. Thank you.

Mr. GOODWIN. I think, Mr. Chairman, this discussion has tended to emphasize the unusual type of situation, and the borderline type of situation. Most of these areas are pretty clearcut, and also I think it should be pointed out that the basic elements going into the classification are good, sound, objective data. Our employment and unemployment series, and various other data available to the local office, are good, sound, objective data on which you can thoroughly rely, and it is only the occasional case, where you get into borderline situations, where the judgmental factors that Mr. Levine pointed out are important.

Mr. BOLLING. This is entirely a new subject.

In response to a request from this subcommittee, the executive branch has instituted a combined employment release each month, summarizing and explaining the data from the various agencies on employment. The releases of the individual agencies, however, are still published separately in addition. What would be the reaction of the panel to the suggestion that the releases be completely integrated into one combined report? Would this achieve some reduction in duplication of text and tables and thus some cost savings?

Along this same line, why does the Combined Employment Release now fail to carry any reference to the area data and classification of the Bureau of Employment Security?

Mr. BOWMAN. Is that addressed to me?

Mr. BOLLING. You may start.

Mr. BOWMAN. I think the joint release is a good idea. I really haven't thought very much about what would be gained by having one combined release showing all of the details, that the separate releases now show.

My first reaction, I react ordinarily rather quickly to some things, but my first reaction would be to say I think there is a considerable amount of advantage to the separate detailed releases, although there is major advantage to having the first release of the overall figures come out in a combined release.

Mr. BOLLING. Would anybody else like to comment? Mr. Clague?

Mr. CLAGUE. I would like to, because I think we would be concerned about this in a very considerable degree.

You will see that our BLS release contains a great deal of information on individual industries; it contains the man-hours data and the earnings data for those industries. If you combine too much in one release, what happens is that the press cannot handle it. The effect I think would be to snuff out of publication entirely some of these details. I think that is what would give us some concern, if that happened.

Our data are used in detail. That is their advantage, and I would hate to see these base tables at the end of our release lose out because the combined release was too long. That would be my reaction.

I would like to mention one other point: The main objective, I think, of the combined release in the first instance was for the purpose of showing the interrelationship between these figures, and I think we do achieve that now in the combination which we have.

Mr. GOODWIN. The last part of your question had to do with the area data, and I think the answer there is really the one Mr. Clague mentioned, that the idea behind the combined release was the interrelationship of the data and with the area data, you don't have the same problem there as with the other series, so we would have that reason for not combining it. I don't know of any other reason.

Mr. BOLLING. My last question is: Have you considered publishing in the Combined Employment Release each month these charts you have used to explain the data at these hearings?

Mr. LEVINE. This, I think, is directed to the entire group; is it not?

Mr. BOLLING. That is right.

Mr. LEVINE. I think it is correct to say, if I may make a comment, I think it might come more appropriately from the Bureau of the Budget, but we do have in each of our own publications, and we also have as a technical supplement in the Economic Indicators that your committee turns out, a good deal of explanation of the interrelationship of these various series, and where the concepts differ, and why, so that I believe that once that material is out, it is of primary interest to students to the problem, and to do it on a recurring, each-month basis I suspect would detract very seriously from the real value of the current information.

Mr. BOWMAN. I think, Mr. Chairman, that there are a lot of problems. I don't like to respond to a new idea by saying no, but I think this would require a lot of very deep thought, because, for instance, this is a very small number of pages, putting the entire emphasis on what happened between the 2 months. If you put a lot of charts of that sort in there, without explanation, and you only want to put the emphasis on what happens in that last little dip, I think your charts are lost.

Furthermore, I am not sure it would be economical. There are a lot of people that want this. There are a lot of people that just want this, and there are a lot of people who just want this [indicating].

Now, if you put them all together and make a major job out of it, and try to put it out every month, then anybody who wants any piece of it has got to take the whole thing, and he has a lot of things in there he is not particularly concerned about.

Furthermore, if you were really doing that a considerable amount of what might be called interagency attention would have to be given to the overall analysis—all aspects of it. I would much rather see some time in the future, if we could possibly manage it, to have a joint publication reviewing as we are doing today these various aspects in which we evaluated the seasonal movements, the trend aspect, the cyclical aspects, the individual industry aspects, the overall aggregate aspects, but not one grand overall publication every month.

Mr. BOLLING. I don't believe what I had in mind was one overall publication which was mentioned would happen, but I do think we have to recognize that this combined employment release hits a wider area, perhaps, than the more specialized and more detailed documents, and the thought in mind was whether we could make some further step in the direction of making clear and more unified, if that is the right word, the one document that gets an enormous amount—not of specialist attention—but of general public attention. That was the kind of questioning, the kind of thought I had in mind, because I think we can generate a good deal of confusion sometimes by the failure to understand that one document, perhaps, is the one that really hits the public, whereas the more detailed documents go to the specialists and do not have to be educated as to what the significant limitations of those figures and facts are. I think that would be more the thought I had in mind.

Do any of you gentlemen have any further comments you would like to make on any subject proper to this hearing?

If not, I would like to thank you all for your participation and contributions. The subcommittee is now adjourned.

(Whereupon, at 3:25 p. m., the subcommittee adjourned.)

APPENDIX

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington 25, D. C.

Hon. RICHARD BOLLING,
Chairman, Subcommittee on Economic Statistics,
Joint Committee on the Economic Report,
House of Representatives, Washington 25, D. C.

MY DEAR MR. CHAIRMAN: The enclosed statement on full-time equivalent unemployment was prepared in answer to your request that the Office of Statistical Standards review this matter with the agencies involved in the collection and processing of unemployment or related series. This statement has been sent for comment to the Bureau of Employment Security, the Bureau of Labor Statistics, and the Bureau of the Census and the conclusions have been agreed to by these agencies.

In general, the position of the Bureau of the Budget may be briefly stated as follows:

1. More complete and more frequent information on involuntary part-time employment (or partial unemployment as it is sometimes called) than has been available in the past is very desirable, and to this end questions on this subject are now being asked monthly by the Census Bureau in the Current Population Survey.

2. The development of estimates of full-time equivalent unemployment, while useful for analytical purposes, requires the use of a large number of assumptions which, no matter how reasonable and conservative, render the official publication of such a series on a current monthly basis inappropriate as a statistical measure of current economic conditions.

3. If, for particular analytical purposes, such estimates seem desirable from time to time, the raw materials are made available by the Bureau of the Census and the analyst may make such assumptions as are most appropriate for his immediate purposes.

4. Further work on the direct measurement of different aspects of unemployment, the characteristics of the unemployed and the partially unemployed, and reasons for withdrawal from the labor force should prove more fruitful than work on overall synthetic estimates which tend to obscure meaningful changes in components of the labor force.

In closing, I should like to point out that the increased appropriations to the Bureau of the Census and the Department of Labor for fiscal 1956 will not only permit a significant increase in the sample for the Current Population Survey, strengthening the reliability of the estimates, but also permit additional research on many aspects of employment and unemployment conditions.

Sincerely yours,

RAYMOND T. BOWMAN,
Assistant Director, Office of Statistical Standards.

FULL-TIME EQUIVALENT UNEMPLOYMENT

The Budget Bureau has been asked by Congressman Bolling, chairman of the Subcommittee on Economic Statistics, to consolidate the opinions of the agencies concerned with labor force data on the question of the "feasibility of producing useful information" on "full-time equivalent unemployment." This is the concept used by the staff of the Joint Committee on the Economic Report in appendix A of the committee's annual report for 1955. It is calculated from data provided by the Census Bureau's Current Population Survey by taking the number of unemployed, adding the number of persons on temporary layoff, and then adding an allowance for the time lost by two groups of part-time workers (after converting this time into full-time equivalents by dividing the hours not worked by the estimated length of the full-time workweek). The two groups

of part-time workers are: (1) Persons who usually work full time at their present jobs, but who worked part time during the survey week because of economic factors, such as slack work or material shortages; and (2) persons usually working part time who prefer and could accept full-time work. The resulting estimate of full-time equivalent unemployment is perhaps more accurately described as the number of full-time workweeks lost on account of economic factors." Not included in the concept is time lost because of vacations, holidays, illness, bad weather, strikes, or other reasons not clearly the result of economic conditions.

The concept thus includes persons not now included in the unemployment count—those on temporary layoff and those working part time on account of economic conditions. There is, of course, considerable interest in changes in the size of these two groups. Reflecting this interest, the Census Bureau has published separate monthly estimates of the number of persons on temporary layoff and has made occasional estimates of the number of economic part-time workers since 1949. Beginning in May of this year, the number of persons working part time for economic reasons is being obtained each month, and in the future, average hours worked by this group will be calculated. Thus all the basic components needed for the full-time equivalent unemployment computations are now measured directly on a current basis.

TECHNICAL CONSIDERATIONS

It is certainly possible to develop current estimates of full-time equivalent unemployment similar to those included in the appendix of the committee's annual report. While some refinements might be introduced, these would not change the nature of the estimates in any fundamental way.

Technically, the method involves a number of assumptions, the importance of which may change with economic conditions, and which therefore introduce inaccuracies:

(1) All unemployed persons are assumed to be seeking full-time work.
(From time to time in the past the Census Bureau has asked the unemployed whether they want full-time or part-time work. Approximately 10 percent want part-time work as a rule. This question could be asked monthly, but only at the expense of other information now requested, since space and time in the survey are limited. It would then be necessary to estimate the average hours sought by unemployed persons seeking part-time work.)

(2) All those on temporary layoff are assumed to want full-time work.
(There is no information on the number laid off from and only wanting part-time jobs, but presumably it is a small percentage of all temporary layoffs.)

(3) The length of the full-time workweek must be assumed.
(The arbitrary assumption of 37.5 hours used in the committee's report is a conservative one. A more refined estimate—possibly of the normal full-time workweek by industry, were sufficient data available—would raise this estimate under present conditions and thus increase the amount of full-time equivalent unemployment. It may be noted that the practices with regard to work sharing differ widely from industry to industry and thus affect the numbers on layoffs and the hours reported in a given week.)

(4) The Census Bureau draws an arbitrary distinction, at 35 hours a week, between part-time and full-time workers; man-hours lost by those working more than 35 hours a week are thus not included in the computation.

(5) All persons who worked part time because their jobs started or terminated during the survey week are assumed to be working part time for economic reasons. In an unknown number of cases, such short weeks may be caused by personal rather than economic factors.

USEFULNESS OF THE CONCEPT

In his letter Congressman Bolling inquired if "useful" data could be prepared. This raises the question if, in addition to separate information on temporary layoffs, and a separate series on economic part-time workers and the hours they worked, a purpose can be served by combining these two groups, together with the unemployed, into a single aggregative measure. In the following analysis, four possible uses of labor force data are distinguished, and the relation of the proposed series to each use is described.

1. As an indicator of changing economic conditions

Basic data by which the total full-time equivalent unemployment can be calculated have been collected only infrequently in the past, but from the scattered evidence available, it appears that such a series would move less sharply than the number of unemployed in response to changes in the business cycle. Adding in estimates for partial unemployment and the number of persons on temporary layoff, in other words, tends to smooth out rather than accentuate cyclical swings. One reason is that the group with regular part-time jobs who prefer and could accept full-time employment (or the substitute recently developed for this classification, as described in note 1 below) contains a relatively large proportion of persons in unstable occupations, such as domestic service and farm wage work. It is only moderately affected by changes in business conditions and then with a definite time lag. In addition, the group on temporary layoff has generally been small and often influenced by short-term dislocations not related to the business cycle. On the other hand, there is evidence that the number of persons regularly working full time who are on part-time work due to economic factors, although it does not have large movements relative to the unemployed, may move somewhat more quickly in response to economic conditions. If this is true, this may become a useful series to watch when it is reported monthly in the future. Thus, for predictive purposes it seems more important to look at the groups separately, rather than in combination.

2. As a measure of the welfare of the labor force

Although an estimate of full-time equivalent unemployment is larger than a number of unemployed, it is not as large as the number of different individuals affected by changes in economic conditions, on account of the adjustment to full-time equivalent weeks. For purpose of effective policy formulation and execution with regard to unemployment and underemployment, the proposed measure has the additional drawback that it lumps together persons on short-time and persons without a job. Yet these two groups are in quite different situations, and the policies which might be developed to secure jobs for unemployed persons might conceivably be very different from the actions which might be deemed desirable in the face of widespread work sharing.

3. In manpower analysis

Since the proposed concept does not relate to individuals, it would not be of assistance in manpower analysis. To answer such questions as why people enter and withdraw from the labor market, who are the people who become unemployed, what are the reasons for long-duration unemployment, information on work experience needs to be related to the personal characteristics of the labor force—age, sex, martial status, education, skills, industrial attachment, etc.

4. As a measure of the economy's ability to attain full or maximum employment

The appendix to the committee's report suggests that the purpose of the proposed series is to measure "the degree to which there is maximum utilization of the labor force." By making a variety of assumptions concerning the amount of time that would have been worked by various groups had there been sufficient demand for their services, it is possible to develop an estimate of time lost. However, it would be misleading to assume that such an estimate includes all the lost time that could be ascribed to less than perfect functioning of the economy. Some people withdraw from the labor market instead of seeking other work when they lose their jobs involuntarily. It has been argued by some economists that such persons should be considered in evaluating the employment situation in terms of maximum or full employment. Furthermore, not all of the time lost of the people who are classified as in the labor force is included in this concept. (See above, under "Technical considerations.") Without more general agreement as to what should be included in a concept of maximum or full employment, it is difficult to say whether or not the proposed series provides a useful approximation to the departure from full employment.

Further emphasis on the separate components of the labor force in analytical work; further research in reasons for labor force entry and withdrawal; developmental work on ways to obtain occasional estimates of the numbers of persons not in the labor force who are available for or want work (without seeking it) can be recommended in any case as fruitful lines of inquiry.

Finally there is a likelihood of adding to public confusion with such a difficult set of estimates to explain as full-time equivalent unemployment. Since there

seem to be few, if any, offsetting advantages, the problem of increasing public confusion needs careful consideration.

A number of attempts have been made from time to time, however, to construct this kind of a measure, particularly to obtain a retrospective view of the relative severity of a trough in the business cycle. We are, therefore, adding a description of an alternative concept which has been proposed in the past without drawing any conclusion as to whether it is preferable to the concept used by the committee's staff. Although there are a number of concepts which might be employed, they all have the same disadvantage of requiring an arbitrary assumption as to what is a normal workweek, or what is a normal or full employment level.

AN ALTERNATIVE CONCEPT

A somewhat different formulation of a measure of the degree to which the labor force is utilized, the ratio of manhours of unemployment to total labor force time, was suggested by T. K. Hitch (The Meaning and Measurement of Full or Maximum Employment—Review of Economics and Statistics, XXXIII, February 1951, pp. 1–11). Mr. Hitch's proposal, stated in terms of man-hours rather than man-weeks, is based on the actual hours of persons at work. Thus overtime hours were included and tended to offset the undertime of other workers in establishing the level of his estimate. Changes in overtime hours affected the trend. Thus a decline in overtime hours while unemployment and underemployment remain unchanged would be reflected in his series by an increase in the ratio of man-hours of unemployment to total labor force time.

The proposal of the committee's staff, on the contrary, makes no allowance for overtime. Implicitly, a person working 40 hours or a person working 60 hours would each be counted as 1 man-week of equivalent full-time employment. A higher level of equivalent full-time unemployment is thus shown, since there is no offset for overtime, but there would be no variation in the trend of the series for changes in weekly hours so long as they do not fall below 35 hours a week.

Whether either of these concepts or some other would be preferable is open to question. The most relevant issue, perhaps, is whether or not a particular decline in hours is primarily voluntary or involuntary. This leads to the conclusion that neither alternative can be a substitute for detailed analysis of what is taking place in each segment of the labor force and the economy.

Note I. Information on part-time workers

The Census Bureau asks, for each worker identified in the Current Population Survey, "How many hours did he work last week?" In the past, sometimes on a quarterly basis, sometimes less frequently, an additional set of part-time worker questions has been asked to separate those working part time for economic reasons from the larger number of persons working part time because they either do not want or are not in a position to accept full-time work.

These questions, asked of everyone who worked less than 35 hours, were:

1. "Does he usually work 35 hours or more a week at this job?"
2. If yes, "What was the reason he did not work the usual number of hours last week?"
3. If no to question 1, "Would he prefer to work full time?"
4. If yes to question 3, "Is there any reason he could not work full time now?" If yes, the reason is specified.

By analyzing the replies to question 2, the regular full-time workers on short hours due to economic factors were determined: slack work, material shortages, plant or machine repairs, new job started during week, job terminated during week. Questions 3 and 4 determined the regular part-time workers who wanted and could accept full-time work.

In May of this year, the Census Bureau, as a result of the considerable interest expressed by the Joint Committee on the Economic Report and others in more frequent information on part-time work, and after receiving the approval of the interagency Review of Concepts Subcommittee, decided to obtain such information monthly. There was need, if possible, to reduce the number of questions. At the same time, it was felt desirable to get away from the formulation of question 3, which had been criticized as not relying on the activity of seeking full-time work, but simply accepting a worker's preference and availability for full-time work as a method of classification.

The new set of questions, which have been tested against the old, and do not seem to result in significantly different figures, are (still addressed to persons who worked less than 35 hours) :

1. "Does he usually work 35 hours or more a week at this job?"
2. (Asked of all part-time workers, not just those who regularly work full time) : "What is the reason he worked less than 35 hours last week?"

The same list of reasons are used to determine those working part time on account of economic factors and, in addition, space is provided for an answer of "Could only find part-time work," to accommodate the regular part-time workers who are not working full time on account of economic conditions.

Note II. Data available

Information on the number of persons who worked part time on account of economic factors has been collected by the Census Bureau on a comparable basis for 19 separate months, beginning in May 1949. The attached table 1 shows estimates of the unemployed, persons on temporary layoff, economic part-time workers, and estimated full-time equivalent unemployment for each of these months. The full-time equivalent unemployment estimate is computed following the procedures used by the committee's staff except that it applies to all workers, rather than being restricted to nonagricultural workers. Data were not available to carry the nonagricultural estimates back to 1949, and the purpose here is to show the trend in the figures over as long a period as possible.

Indexes based on May 1949 as 100 are shown in table 2.

Since the estimates are based on a sample, they are subject to sampling variability, which may be relatively large in the case of the small estimates or small differences between estimates.

TABLE 1.—*Unemployed persons, persons on temporary layoff, part-time workers, and estimated full-time equivalent unemployment: Selected months, May 1949–June 1955*

[In thousands]

Month and year	Unemployed persons	Persons on temporary layoff	Persons who worked part time because of economic factors			Total full-time equivalent unemployment [2]
			Total	Usually work full time	Usually work part time [1]	
May 1949	3,289	167	2,457	1,571	886	4,331
August 1949	3,689	209	2,545	1,464	1,081	4,896
November 1949 [3]	3,409	139	2,340	1,375	965	4,451
February 1950	4,684	72	2,083	1,095	988	5,631
May 1950	3,057	110	2,155	1,087	1,068	4,036
August 1950	2,500	65	2,357	1,245	1,112	3,539
November 1950 [3]	2,240	72	1,807	986	821	3,107
February 1951	2,407	87	1,971	1,123	848	3,311
May 1951	1,609	110	1,797	978	819	2,440
May 1952	1,602	142	1,722	1,014	708	2,420
November 1952 [3]	1,418	98	1,398	826	572	2,081
December 1953 [4]	2,313	316	2,059	1,542	517	3,344
March 1954	3,724	236	2,756	1,878	878	5,004
May 1954	3,305	294	2,592	1,644	948	4,550
August 1954	3,245	143	3,047	1,861	1,186	4,580
November 1954 [3]	2,893	120	2,579	1,506	1,073	4,056
February 1955	3,383	145	2,224	1,328	896	4,445
May 1955	2,489	133	2,040	1,024	1,016	3,491
June 1955	2,679	107	2,282	1,125	1,157	3,803

[1] Prior to May 1955, this group was comprised of persons who regularly worked less than 35 hours a week but preferred and could have accepted full-time employment. It is currently defined to include regular part-time workers working less than 35 hours because of inability to find full-time work or because of slack work.

[2] Includes all persons totally unemployed, those on temporary layoff with definite instructions to return to work within 30 days of layoff, and the full-time equivalent unemployed of man-hours lost by part-time workers because of economic factors (assuming 37.5 hours as the standard full-time workweek for the economy as a whole).

[3] Survey week contained a legal holiday (Armistice Day). No adjustment made either in the assumed standard full-time workweek or in the imputed man-hours lost.

[4] Revised.

Source: Current Population Survey, Bureau of the Census.

TABLE 2.—*Indexes of total unemployment, temporary layoffs, part-time employment, and estimated full-time equivalent unemployment: Selected months, May 1949–June 1955*

[May 1949=100]

Month and year	Unemployed	Temporary layoffs	Worked part time because of economic factors			Total full-time equivalent unemployment [2]
			Total	Usually work full time	Usually work part time [1]	
May 1949	100	100	100	100	100	100
August 1949	112	125	104	93	122	113
November 1949 [3]	104	83	95	88	109	103
February 1950	142	43	85	70	112	130
May 1950	93	66	88	69	121	93
August 1950	76	39	96	79	126	82
November 1950 [3]	68	43	74	63	93	72
February 1951	73	52	80	71	96	76
May 1951	49	66	73	62	92	56
May 1952	49	85	70	65	80	56
November 1952 [3]	43	59	57	53	65	48
December 1953 [4]	70	189	84	98	58	77
March 1954	113	141	112	120	99	116
May 1954	100	176	105	105	107	105
August 1954	99	86	124	118	134	106
November 1954 [3]	88	72	105	96	121	94
February 1955	103	87	91	85	101	103
May 1955	76	80	83	65	115	81
June 1955	81	64	93	72	131	88

[1] Prior to May 1955, this group was comprised of persons who regularly worked less than 35 hours a week but preferred and could have accepted full-time employment. It is currently defined to include regular part-time workers working less than 35 hours because of inability to find full-time work or because of slack work.

[2] Includes all persons totally unemployed, those on temporary layoff with definite instructions to return to work within 30 days of layoff, and the full-time equivalent unemployment of man-hours lost by part-time workers because of economic factors (assuming 37.5 hours as the standard full-time workweek for the economy as a whole).

[3] Survey week contained a legal holiday [Armistice Day]. No adjustment made either in the assumed standard full-time workweek or in the imputed man-hours lost.

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