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1. Introduction

UNEMPLOYMENT—its level and trend, and its composition—is widely regarded as a key index to the state of economic well-being. There is a basic need for an objective measure of the number and the characteristics of the unemployed. Although general agreement exists regarding the need for and the uses of a measure of unemployment, considerable difference of opinion has developed as to who shall be counted as "unemployed" and what are the essential tests of "unemployment." There are many ways in which unemployment can be defined and each definition provides a different count of the unemployed. The definition selected must be useful for a wide variety of purposes. It must be in keeping with our free enterprise system and with the free functioning of the labor market. At the same time, it must be easily applied, be readily understood, and yield reasonably accurate counts of the unemployed.

The term "unemployed" encompasses a variety of meanings. It may describe a condition—that of being not at work; an "activity"—that of seeking work; an "attitude"—that of desiring a job under certain conditions; and a "need"—that of needing a job. The term also has other connotations and various shadings and combinations. For example, should a definition of unemployed include individuals who do not have jobs and who are not looking for work but who would accept jobs under certain conditions? Is a person unemployed who is in need of a job but because of home responsibilities is unable to look for or to accept a job? Should only those persons be counted as unemployed who are without jobs but who are breadwinners of their families? Obviously, the definition used determines the resultant count.

Within the framework of an agreed definition, difficulties arise about the interpretation of the facts which are essential elements of the unemployment definition. In the final analysis, unemployment is a subjective state which depends upon the intent and desires of the individual. Even the apparently simple determination of whether a person is "at work" can be difficult. Are the members of a farm family at work or not during the inactive months on the farm? Under what

Note: Appreciation is expressed to V. D. Chavrid, Bureau of Employment Security, for his extensive assistance in the preparation of this paper.

circumstances is the industrial worker on vacation or on strike to be classified as employed or unemployed? Is the urban worker who works a few hours a week employed or not? Does it make any difference whether he wants only a few hours of work a week or whether he wants full-time employment? Should the number of hours he works or the amount of money he earns be considered in defining unemployment? Should an individual who has been working one-half of the week and looking for work the other half be counted as unemployed? Should a person who has a job always be counted as 'employed, even when he is temporarily not working?

The determination of whether an individual is "seeking work" is also generally subjective. Here the problem is one of the degree of the job-seeking effort in relation to the conditions of the labor market. It can generally be concluded that an individual is seeking work if he approaches employers and registers for work with an employment agency. But questions arise about the individual who knows there are no opportunities for employment for him in his community and who, therefore, limits his search for work. Questions also arise as to the validity of the employment search on the part of workers who restrict their efforts to a limited geographic area, to a small number of establishments, or to a short period of time.

Concern with the definition and measurement of unemployment is not a mere intellectual exercise. It has practical implications for the man in the street. It has important government policy and program implications. The administration of public employment offices and the operations of unemployment insurance systems are greatly influenced by these considerations. State employment security agencies have therefore found it necessary to undertake the preparation of estimates of total unemployment.¹ For the same reasons, estimates of local area unemployment have been developed even though at times, lack of data or inadequate data made accurate estimates difficult.

Since the inception of the employment service and unemployment insurance programs, state and local employment security offices have been collecting data on the volume and composition of unemployment. Initially, these data were limited to the number and characteristics of job applicants registered for work with the employment service (active file) or to the number of persons filing for unemployment insurance benefits (insured unemployed). However, since it was necessary to know the total volume of unemployment for a wide variety of uses, local and state employment security offices (and during the war years,

¹ "Total unemployment" as used here means "all unemployed" and differs from the legal unemployment insurance concept, which uses "total unemployment" to distinguish from "partial unemployment."

War Manpower Commission offices) began to make estimates of total unemployment. At present, state agencies prepare estimates of total unemployment for all important labor market areas, and many agencies also estimate total unemployment on a state-wide basis.

While current estimates of total unemployment, based on the Bureau of the Census sample household survey (Current Population Survey) are available for the nation as a whole, no estimates can be obtained from this source for states or areas. For such areas and states, data on unemployment are available only once every ten years from the decennial census of population. State employment security agencies, which collect a great deal of data on insured unemployment for the smallest geographic area as a by-product of their operations, naturally undertook the preparation of current estimates of total unemployment by local area and state. A description of the techniques and concepts used to develop these estimates is given in sections 2 and 3. As a part of this description there is included a comparison of the estimates resulting from these techniques with data from other sources. The fact that other sources provide little data by area limited the extent to which such comparisons were possible.

Sections 4 and 5 are concerned with an analysis of the behavior of unemployment by area and industry and with the characteristics of the unemployed with respect to duration of unemployment, sex, age, and occupation. It is apparent from this analysis that national figures on unemployment, though important in providing a general indication of the status of the economy, conceal wide variations in the employment and unemployment conditions in different areas of the country. These differences are significant both as to the level of unemployment and duration of unemployment, as well as to the characteristics of the unemployed by age, sex, occupation, and industry. The causes for these differences are also varied. It is only after the specific conditions creating the unemployment problems in the various communities are known that adequate programming to solve unemployment problems is possible. Similarly, measures to reduce joblessness are dependent not only upon information regarding the volume and characteristics of the unemployed but also on other aspects of area's economy, such as its industrial facilities, water power and fuel resources, transportation facilities, the local tax structure, and proximity of raw materials and markets to the area.

2. Definition of Local Labor Market Area

The labor market, viewed as an institution, means the complex of economic and social factors involved in the process through which employers recruit workers and workers seek employment. It encom-

passes all the factors involving the demand and supply of labor, wage differentials, variations in hours, shifts of work, employer hiring practices, and the multitude of other working conditions which shape employer-worker job relationships.

For purposes of characterizing the structure of the labor market or for measuring its behavior, it is frequently desirable to subdivide it into at least three broad divisions—industrial, occupational, and geographic. Although these are by no means completely exclusive categories, they are indicative of different approaches that may be taken in an analysis of the labor market. Moreover, depending upon the approach taken, certain economic and social factors operating in the labor market receive greater or lesser emphasis in the analyses. For example, in the analysis of an occupational labor market, it is necessary to concentrate on the relationship between the segment of the labor force having specified occupational characteristics and industries employing significant numbers of such workers. In an industrial labor market analysis, emphasis is placed on a given industry and the employer-worker relationships affecting such industry. Finally, in local labor market analysis the complex of economic and social factors affecting and shaping employer-worker job relationships within a given geographic area constitutes the focus of study.

The definition of any of these types of labor markets is influenced by different factors. The local labor market area definition is determined to a considerable degree by differences in the geographic mobility of labor, while this factor is less important in the definitions of both the occupational and industrial labor markets.

A study of unemployment trends by locality must start from a determination of the local geographic unit which constitutes the local labor market area. The discussions and data contained in the subsequent sections of this paper are for such areas. A local labor market area may be defined as a geographic area consisting of a central city (or cities) and surrounding territory in which there is a concentration of urban economic activity or urban labor demand and in which workers can generally change jobs without changing their residence. The basic factor in this definition is, of course, the relationship between the place of residence and the place of work of the local labor supply.

Sublabor markets may also exist within such local labor market areas. These submarkets usually result from limitation of employment opportunities in terms of specific occupations, industries, or companies. However, for general labor market analyses, these submarkets do not present serious obstacles since their effects are generally encompassed and reflected in the conditions of the entire area.

The possibility of each company's employment office being a real and distinct market for labor is noted in the study by Lloyd G. Reynolds. He found that "The employed worker is attached basically to a company rather than to an industry or an occupation."² This conclusion is reached by Reynolds because his study showed that if a worker leaves one company, his movement to another company within the area is conditioned chiefly by the hiring practices of other companies. However, Reynolds also found that shifts from company to company take place within the limits of an area and that a worker's mobility beyond this area is conditioned by a reluctance to change his place of residence. A similar conclusion was reached by Myers and Shultz in their study of a New England area in 1948. They found that, despite many factors such as seniority and others which isolate individual workers in the area labor market, changes in employment opportunities in certain establishments within the labor market area affect all workers in the area. In addition, they found that "Even in the period when the local employment outlook was bleak, though, unemployed workers generally tried to get along the best they could without moving. . . ." And that "Unemployed workers remain in the community long enough to produce purely local effects."8

Boundaries of all the labor market areas do not encompass the same amount of territory. Important reasons are that (1) the extremities of an area's boundaries are determined, in large part, by transportation time and cost rather than by the distances involved, and (2) in certain areas, partly because of the nature of the job opportunities, people will customarily travel shorter or longer distances to work.

These factors, as well as others, arise when efforts are made to determine the boundary of a specific labor market area. Thus, though an agreement regarding the concept of the labor market area can usually be reached, it is not simple to establish a uniform procedure for delineating labor market areas. With some few exceptions, the major labor market areas now defined in the employment security system conform to the Standard Metropolitan Areas established by the Bureau of the Budget in 1948.

A number of considerations were involved in the establishment of the Standard Metropolitan Areas.⁴ Most important was the need for having local economic and social statistical data collected by many government and private agencies presented in a common geographic pattern to facilitate comparative analyses and other uses of the data.

² Lloyd G. Reynolds, Structure of Labor Markets, Harper, 1951.

⁸ Charles A. Myers and George P. Shultz, The Dynamics of a Labor Market Area, Prentice-Hall, 1951.

^{*} Robert C. Klove, "The Definition of Standard Metropolitan Areas," Economic Geography, April 1952.

To meet this need, the areas were designed to serve a wide variety of statistical purposes, including the presentation of census statistics on population, housing, manufacturing, business, current employment and payroll data, and local labor market analyses. The definitions of necessity took into account the manner in which local data are usually available so as to ease the burden of compiling and collecting pertinent data. Commuting range was the single most important substantive element in determining the boundaries of the Standard Metropolitan Areas.

3. Measurement of Unemployment by Locality

STATEMENT OF PROBLEM

A study of a local labor market is usually hampered by a dearth of relevant data. This is particularly true where special surveys cannot be undertaken and only the available labor force data and other economic statistics can be used. Even where such data are available by locality, they often lack comparability over a period of time.⁵ These difficulties are magnified when one concentrates on such relatively detailed data as unemployment by locality.

Data on most aspects of unemployment have only recently become available. The first attempts to collect information on a national scale on unemployment were made in conjunction with our decennial censuses but until the 1930 decade, information on the unemployed did not yield a comparable and meaningful measure of unemployment because an adequate conceptual framework with respect to the labor force and its components had not been developed. With the studies of unemployment undertaken between 1930 and 1940, there emerged the labor force concept currently accepted which permits the identification and measurement of the unemployed with some degree of consistency. This is not to say that problems of concept and definition are still not present. Nevertheless, the use of the labor force concept has permitted the development of a substantial amount of information on the unemployed and other components of the labor force. As a result, the census of 1940 and that of 1950 provide considerable information on the unemployed, not only on a national scale, but also by locality.

However, data by labor market area, as now defined, were not available in the 1940 census. Labor force information, collected in that

⁵ Illustrations of the problems involved in developing and using data by locality for different time periods may be found in the discussion by Gladys L. Palmer and Ann Ratner in Appendix C, Use of Population Census Data in the Preparation of Estimates of Labor Force and Unemployment in a Metropolitan Area, of the booklet by Louis J. Ducoff and Margaret J. Hagood, Labor Force Definition and Measurement: Recent Experience in the United States, Social Science Research Council, Bull. 56, 1947.

census by metropolitan district, was not only inadequate but, more importantly, the definitions were not satisfactory for labor market analyses. The introduction of the Standard Metropolitan Area in the 1950 decennial census provides, for the first time on a national basis, local geographic labor force data that are adequate for area labor market analyses. Considerable detail on the characteristics of the various segments of the labor force is also available from this census. Information on unemployment is provided by age and sex, occupation of the experienced unemployed, industry of worker attachment, and other items in sufficient detail to satisfy many analytical needs.

Analyses on a current and continuing basis, unfortunately, cannot be made from census data. The Census Bureau's Current Population Survey (CPS) provides a national unemployment figure on a current and regular basis. Occasionally, as for example in 1947, labor force and unemployment data for selected localities have been obtained. Unemployment information on a national basis is an important indicator of economic conditions and is useful for the development of broad national economic policies. However, the national unemployment rate conceals wide differences in economic conditions among localities. The nature and importance of these differences (discussed in section 4) can be shown by comparing unemployment rates among areas in 1950 and in 1954.

The need for such local labor market information is widespread, not only for the operation of the employment security program, but for various groups concerned with local labor market conditions. The Bureau of Employment Security, in cooperation with its affiliated employment security agencies, has developed procedures for estimating unemployment by area based on data available from unemployment insurance (UI) operations. The estimates of total unemployment are based primarily on insured unemployment data.⁶

Many important considerations arise in the measurement of unemployment by locality, but fundamental to all of these is a thorough understanding of the unemployment concepts and criteria used for considering a person unemployed. Estimates of total unemployment, based upon a count of the insured unemployed derived from UI operations and in accordance with legal provisions of state laws and administrative procedures, differ in some ways from the concept of unemployment used by the Census Bureau in its CPS, and familiarity with both concepts is necessary. Review of the elements of similarity and differences in the unemployment measured by the employment security

⁶ For a description of these data see "Source, Nature and Limitations of Insured Unemployment Statistics," *The Labor Market and Employment Security*, Bureau of Employment Security, April 1954.

system and the Census sample survey is therefore desirable and is presented below.⁷

BUREAU OF THE CENSUS DEFINITION

The definition of unemployment used in the CPS is based primarily on the major activity of the individual in the survey week (the calendar week which includes the eighth of the month). This sample survey is designed to obtain information as to the work status of the population without duplication. The determination of work status is based on a person's labor-force activity during the survey week. Thus, if a person was working during the survey week (i.e. if he did any work at all for pay or profit, or worked without pay for fifteen hours or more on a family farm or business) he is classified as "at work" and "employed." If, on the other hand, he was not "at work," but was seeking work, he is classified as "unemployed." This basic system of classification, however, although appropriate for enumeration of most persons to be included in the labor force, is not all inclusive, since it fails to take into account persons who neither worked nor sought work during the survey week but who have a strong attachment to the labor force. (Included among such persons are, for example, individuals who were inactive during the survey week only because of illness, vacations, industrial disputes, and similar factors.) Accordingly, modifications have been made to permit their inclusion. With these modifications, the problem arose as to whether to include them with the employed or the unemployed segments of the labor force. In general, an attempt is made to classify these persons as employed or unemployed according to the degree of their attachment to jobs. This means that persons are not considered unemployed unless they are exerting pressure on the labor market for employment.

Accordingly, those who are deemed to have sufficient attachment to jobs to keep them from actively seeking work are included with "employed" and designated as "with a job but not at work." This group includes persons who have jobs but who did not work at all nor looked for work during the survey week because of illness, vacations, bad weather, and various personal reasons, or because of industrial disputes at their places of employment. It also includes persons who were temporarily laid off from their jobs with definite instructions to return to work within thirty days or who were waiting to report to new jobs scheduled to begin within thirty days.

⁷ Also see symposium on "How Much Unemployment?" Review of Economics and Statistics, February 1950, pp. 49-79 (also Hearings before the Joint Committee on the Economic Report, 83d Cong., 2d sess., February 1-18, 1954, pp. 230-239 and 345-348).

Just as modification was made in the "activity" concept to include as employed both those "at work" (i.e. actively employed) and those "with a job but not at work" (frequently termed the "inactive employed"), so too was modification made to include as unemployed both those actively seeking work and the so-called "inactive unemployed" group. A strict application of the activity concept would exclude from the unemployed certain groups of individuals who in any realistic sense must be regarded as unemployed even though they have not been looking for work continuously. For example, in a one-industry town, if all plants are shut down, most workers would have no alternative but to wait until the plants reopen and probably would not be actively seeking work meanwhile. The definition of unemployed persons is, therefore, expanded to include-in addition to persons actively seeking work-those who would have been seeking work except that (1) they believed that no job was available in their line of work or in their community, (2) they were temporarily ill, or (3) they were on indefinite layoff.

In the final analysis, the classification of persons as employed or unemployed by the Bureau of the Census rests on a system of priorities. The first priority is given to "at work"; the second, to "looking for work," including the "inactive" unemployed; the third, to "with a job but not at work" (inactive employed). This system of priorities is so designed that "looking for work" has priority over all other activities except "at work." Stated in other words, unless a person is "at work," he will always be classified as "unemployed" if he is actively seeking work, regardless of the degree of his attachment to a job. For example, persons who are directly involved in a labor dispute, or who have been kept from work by bad weather, or who are on an indefinite layoff, or who expect to start on a new job, are classified as unemployed rather than employed if they were looking for work during the survey week. Seeking work, therefore, is the very essence of the CPS definition of the unemployed.

The Bureau of the Census defines "looking for work" to include any effort to get a job or to establish a business or profession. Persons are reported as looking for work if in the last week they were waiting to hear the results of attempts made within the last sixty days to find a job. Examples of looking for work are: (1) registration at a public or private employment office; (2) being on call at a personnel office, at a union hiring hall, or from a nurses' register or other similar professional register; (3) meeting with or telephoning prospective employers; (4) placing or answering advertisements (5) writing letters of application; and (6) working without pay in order to get experience or training.

UI DEFINITION

Because the UI system is designed to pay benefits only to unemployed persons, it *requires* that a person to be eligible for benefits in any week must be totally or partially unemployed. So an understanding of "insured unemployment" stems from knowledge of the requirements for eligibility which have been set up under the various state laws. All of these laws require that a claimant, to receive benefits, be able to work and available for work. One evidence of availability for work is the filing of claims and regular reporting at a public employment office, required under all state laws, ordinarily on a weekly basis. Availability for work is also evidenced by registration at a local public employment office. Although not all state laws contain provisions requiring a claimant to "seek work actively" (or make a reasonably independent effort to obtain work), such requirements are contained in regulations in practically all of the states.

Essentially, therefore, for UI purposes, an unemployed person is one who is without work (or, in the case of a person partially unemployed, with earnings which are less than a certain specified amount), who is seeking work, and who is both able to work and available for work. Certain other conditions which must be met by an unemployed worker before he is deemed eligible for benefits (e.g. qualifying wages, no disqualifying acts). These do not essentially alter the underlying concept.

Except for the fact that the UI concept of unemployed includes persons who are only partially unemployed, the similarity between the two concepts is striking. Both the CPS definition and the UI laws require that a person to be considered unemployed must not have worked during the week in question. State employment security agencies in general require that a person be actively seeking work, able to work, and available for work. These requirements are at least partially met by registration with the local employment office. Similarly, the Bureau of the Census regards registration with a public employment office as one evidence of "seeking work." To be sure, there are some variations among the state laws, but such variations as do exist are relatively minor in terms of their effect on the basic definition. Aside from the treatment of partially unemployed persons, the CPS and UI definitions, conceptually, are in essential agreement. Differences arise principally from the treatment of some of the inactive employed and unemployed, as in the case of persons who do not seek work only because they are ill. Such persons would fail to meet the "ability to work" requirement of state UI laws but would be counted as unemployed in the CPS.

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There are other differences which arise, however, not from lack of agreement in concept, but from differences in the method of collecting data. Thus, there are some workers who are eligible for unemployment insurance who would normally be considered as unemployed by the Bureau of the Census, but are not included with the unemployed simply because the household interview fails to reveal that they were actively looking for work in the survey week. Persons included in this category are most likely to be found among (1) persons who had been temporarily laid off from their jobs with definite instructions to return to work within thirty days of layoff; (2) workers who were temporarily separated from their jobs because of bad weather; (3) workers who had a new job or business to which they were scheduled to report within the following thirty days; and (4) workers who were on unpaid vacations (this group is included with the total group on vacations in the CPS classification). It is important to note, however, that persons in the above-mentioned groups are considered by the Bureau of the Census as "with a job but not at work" and are so classified only if the household interview does not reveal that they were looking for work. If the interview reveals that they were looking for work in the survey week, they are included with the unemployed.

DEFINITION USED BY EMPLOYMENT SECURITY AGENCIES IN ESTIMATING UNEMPLOYMENT

Legal and administrative factors which are intertwined with the UI program must, of course, be reflected in the definition of unemployment used by state employment security agencies. At the same time, the preceding analysis of the CPS and UI definitions suggests that a definition can be devised for employment security use which would not be seriously at variance with the CPS definition and which would also come quite close to the common conception of unemployment. With these considerations in mind, the following definition has been devised for use in labor market analyses in the employment security system:

Unemployment is defined as a count of persons who, for an entire week, did not work at all, were able to work and available for work, and were looking for work.

However, those individuals who did not actively seek work during the week would be considered unemployed if they would have looked for work except that (1) they believed no work was available in their line of work or in the community, (2) they expected to return to a job from which they had been laid off, or (3) they had a job to which they expected to report.

Persons not at work because they are directly involved in a labormanagement dispute would be counted as unemployed only if they were actively looking for other work. Persons who were laid off as an indirect result of a labor-management dispute would be counted as unemployed. Persons on vacation would not be counted as unemployed unless they were actively seeking other work. Persons on sick leave would not be counted as unemployed because they are not "able to work."

The fact that a person has received a UI payment or waiting week credit is deemed adequate evidence that he was unemployed, except that claimants for partial or part-total benefits are not considered as unemployed.

AREA UNEMPLOYMENT ESTIMATING TECHNIQUE

The area unemployment estimating technique used in the employment security system may be described, in general terms, as one which starts with a count of the unemployed workers covered by the UI program and then derives estimates for the segments of the unemployed not covered by this program. This technique is described in greater detail under the following subitems: (1) unemployment related to employment covered by state UI laws; (2) unemployment related to noncovered employment (excluding entrants to the labor force); and (3) unemployed new entrants and re-entrants to the labor force.⁸ The relative importance of these several groups in the total estimate of unemployment in an average industrial area would be approximately as follows: the first group will account for about 60 to 70 per cent; the second group for about 15 to 20 per cent and the third, also for 15 to 20 per cent, depending upon the time of the year for which the estimate is prepared.

UNEMPLOYMENT RELATED TO UI COVERED EMPLOYMENT

From the UI claims-taking operations data are obtained on the number of covered workers claiming unemployment insurance who are totally unemployed in a given week. This group has been usually termed the "insured unemployed." Added to this figure are data provided by the Railroad Retirement Board on the number of unemployed railroad workers.

In order to obtain data on the total number of unemployed related to UI covered employment, three other groups must be taken into account. The first group consists of workers from covered industries

⁸ A detailed description of these procedures is provided in "Techniques for Estimating Unemployment" and Supplement 5, Bureau of Employment Security, July 1953.

filing initial claims; i.e. notices to the employment security offices that they have just become unemployed. Although such persons are expected to file their initial claim immediately upon becoming unemployed, there are a number who delay the filing of claims until they are unemployed for at least a full week or more. From unpublished studies conducted by the employment security agencies, data have been developed indicating the proportion of such workers. Using this information, it is possible to estimate the number of persons filing initial claims who have been unemployed for at least a full week before filing an initial claim.

The second group of unemployed, related to the UI program but not included in the insured unemployment figures, are persons who have exhausted their rights to unemployment benefits and remain unemployed. During periods of low unemployment, the number is relatively small. However, during those periods when unemployment is high and of long duration, this group becomes important. The procedures currently used for estimating this category of unemployed, although satisfactory during periods of low unemployment, may not be as satisfactory when unemployment levels are relatively high. Further work on the improvement of these estimates is now under way, and it is anticipated that procedures will be available shortly which will permit more reliable estimates of this group through all cycles of the economy.

The third group 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 fail to apply for them. At present, relatively crude procedures are available for estimating the number of such unemployed based on information and special studies of the employment security agencies. This is another area where further work is under way to develop improved estimating techniques.

UNEMPLOYMENT RELATED TO NONCOVERED EMPLOYMENT

For estimating purposes the unemployed in this category are divided into two groups: (1) those from covered industries but in noncovered establishments and (2) those from noncovered industries, such as domestic workers and government workers, workers from nonprofit institutions, wage and salaried agricultural workers, and self-employed and unpaid family workers (both agricultural and nonagricultural). The method used to estimate the number in each of these groups is given below.

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The estimate of the unemployed from noncovered establishments in covered industries is based upon the unemployment rates for workers in the covered segments of the same industries. From the data available in UI records, a distribution of insured unemployment by industry of employment prior to becoming unemployed is obtained. Information is also available from the UI records on total covered employment by industry. By relating insured unemployment to covered employment, industry-by-industry, unemployment rates for each of these industries may be obtained. The use of these rates in estimating unemployment from the noncovered sectors of these industries involves the assumption that the unemployment rates in the covered and noncovered segments are similar. However, even if this assumption is not completely valid, the resulting error in the estimate cannot affect the estimate of total unemployment significantly because the number of workers involved in this excluded group is relatively small (approximately 10 per cent of the total). It should also be noted that this procedure is not required in states where UI coverage applies to employers of one or more workers.

The unemployment rates for covered industries is also used to estimate unemployment in noncovered industries. The unemployment rates by industry provided by the CPS show that there are fairly constant relationships between the unemployment rates of various industries and classes of workers. For example, these data indicate that the unemployment rate for wage and salary workers in agriculture is approximately the same as the unemployment rate for wage and salary workers outside agriculture. Similarly, the data show that the incidence of unemployment among domestic-service workers is usually about the same as for wage and salary workers in "other personal services," which are covered by unemployment insurance. Thus, by using certain data for the covered industries, estimates of unemployed in all the noncovered segments may be obtained.

UNEMPLOYED NEW ENTRANTS AND RE-ENTRANTS

Unemployed new entrants and re-entrants are individuals whose present spell of unemployment has *not* been immediately preceded by employment. Unemployed new entrants may be defined as that group of individuals who have entered the labor market for the first time and have not found jobs; unemployed re-entrants are the individuals who have had prior work experience but who were out of the labor force and have re-entered the labor market but have not found jobs. The two groups taken together have been termed "unemployed entrants." Unemployed entrants appear to be significant numerically throughout the year, but there is an appreciable rise of this group when school graduations take place.

Unemployed entrants are probably one of the most difficult groups for which an estimate of unemployment must be developed. Despite the fact that the unemployed new and re-entrants may represent a significant part of total unemployment, there is insufficient information about them on a local basis. Although they are not covered by the UI program, some of this group seek employment through the employment service, including those eligible for unemployment compensation for "Korean" veterans. However, since neither this group as a whole nor any constant proportion of it seeks employment through this channel, the data cannot be used to estimate the total number of unemployed entrants. The only data that are available on the number of unemployed new entrants or re-entrants are those obtained in the CPS. By using these data, it is possible to devise a procedure for estimating the number of unemployed entrants for a local area. A study of the national data showed that there was a close relationship between unemployed entrants and the level of the civilian labor force (excluding unemployed entrants) and the level of unemployment (excluding unemployed entrants). Examination of the monthly labor force data from June 1948 to October 1952 also indicated that after adjusting for seasonal factors, unemployed entrants for any month of the year were-on the average-equal to 0.7 per cent of the civilian labor force (excluding unemployed entrants) and slightly over 11 per cent of the unemployed (excluding unemployed entrants).⁹

Although the techniques which have been developed for estimating total unemployment by area are by no means perfect, the results up to this time show that they do yield reasonably satisfactory local unemployment estimates. These procedures are inexpensive, require relatively little time once the necessary data are available, and have the advantage of using data that are available and needed in the employment security program. These techniques are, in a sense, expedients necessitated by the fact that household surveys for a local area similar to the CPS are not possible because of cost considerations and other factors.

COMPARISON OF ESTIMATES WITH OTHER DATA

The very factors, discussed earlier in this section, that necessitated the development of techniques for estimating unemployment by area also make it difficult to make direct comparisons of the estimates result-

⁹ A detailed description of this procedure is given in *Estimating the Volume of Unemployed New Entrants and Re-Entrants*, Supplement 4, Bureau of Employment Security, July 1953.

ing from these techniques with unemployment estimates from other sources. Except for area data from the decennial census of 1950, only indirect comparisons which shed some light on the reasonableness of the area unemployment estimates are possible. Unfortunately, for reasons which will be noted later, completely satisfactory comparison with the 1950 census data is not possible.

As previously mentioned, the insured unemployment data from the employment security system provide the base for the area unemployment estimates and account for a large part of the unemployed total. Despite the effect of the various exclusions under the UI program, the basic fact remains that covered employment accounts for about 75 per cent of the 48 million (August 1954) employees in nonagricultural establishments-both private and public. With the extension of coverage to federal civilian employees (from January 1955) and to private firms with four or more employees (from January 1956) in accordance with the legislation passed by the 83rd Congress, the coverage will rise to over 80 per cent. The UI coverage of the private sector of the economy which is most sensitive to economic change is even greater. Today, covered employment accounts for about 85 per cent of total private employment of wage and salary workers outside of agriculture. With the extension of coverage to four or more workers this percentage will rise to 90 per cent. It is evident from this that a large segment of our economy and one which is most responsive to economic change is adequately reflected in the insured unemployment data.

The usefulness of the UI data has been questioned by some because these data flow from the state employment security operations, and are, therefore, affected by differences in the administrative and legal factors underlying the state operations. While it is true that such factors affect the data, steps can be, and have been, taken to overcome some of the consequent limitations. Notwithstanding these limitations, comparisons between the Bureau of the Census unemployment data and insured unemployment show the existence of a close relationship when adjustments for differences in coverage are made. From Chart 1 it may be seen that for most of the time during the period 1950-1953 the two adjusted series have moved in the same direction and frequently by approximately the same amount. In order to make the two series as comparable as possible, persons who were not employed in industries covered by the UI program and who never had a full-time job were subtracted from the CPS series. From the insured unemployment total the estimated numbers drawing partial or part-total benefits were also deducted, since these individuals would not have been

included in the CPS count of unemployment. Persons on temporary layoff from nonagricultural jobs with definite instructions to return to work within thirty days are classified by the Bureau of the Census as employed unless they are reported as looking for other jobs. The extent to which such persons are claiming benefits is not known. It is probable that the number may be considerable at certain periods and

CHART 1

Estimates of Completely Unemployed Persons in Industries Covered By Unemployment Insurance, 1950-1953



Adjustments: Census—unemployed persons minus those who never had a full-time job or whose last reported job was in agriculture, government, domestic service, self-employment, or unpaid family work; added to the unemployed are persons laid off from nonagricultural jobs with instructions to return to work at a definite date within thirty days. Census data for the last four months of 1953 have been adjusted to correspond to the 230-area sample levels.

Insured unemployment—state-insured unemployment, unemployment compensation for veterans, and railroad insured unemployment, minus the number who received less than the full weekly benefit amount due to some employment during the week (partial and part-total employment).

Source: Bureau of the Census (CPS data) and Bureau of Employment Security (UI data).

for that reason, this group has been added to the CPS figure to improve comparability.

Complete comparability between the UI and CPS data could not be obtained because it was not possible to remove from the CPS series the unemployed workers from covered industries but in noncovered establishments. This probably explains the difference in level between the adjusted CPS series and the adjusted UI series.

A further indication of the sensitiveness of the employment security data to economic developments is shown in Chart 2. This chart compares the "disemployment" rates as measured by the initial claims data of the employment security system and the additions to unemployment from nonagricultural industries from the CPS for the period 1949 through the second quarter of 1954. The comparison shows a strikingly close relationship between the two rates. The initial claims rate in the chart represents the average of initial claims for the quarter expressed as a percentage of average covered employment for the quarter. Similarly, the CPS quarterly average of additions to unemployment from all nonagricultural industries is expressed as a percentage of nonagricultural employment. (For illustrative purposes quarterly averages were used; monthly averages would have shown similar results.)

When a covered worker becomes unemployed he reports to a local office of the state employment security agency and files an initial claim —a notice to the administrative agency of the beginning of a period of unemployment for which benefits are claimed. He is usually expected to file this claim immediately after separation from his job and it is to his advantage to do so since benefit payments cannot start until an initial claim has been filed. Consequently, initial claims are the most sensitive indicators available of emerging or new unemployment among covered workers. It is clearly shown in the chart that initial claims or disemployment in the covered industries follows the same pattern as new unemployment or disemployment in all nonagricultural industries.

The preceding comparisons have been between the UI covered portion of the nonagricultural sector of the economy and the total nonagricultural sector. These comparisons are most appropriate because the unemployment estimates prepared by the employment security system are for labor market areas which are urban centers in which nonagricultural activities predominate. There are only a few major areas where nonagricultural employment accounts for less than 90 per cent of total employment according to the 1950 Census of Population.

CHART 2

Relationship between Initial Unemployment Insurance Claims and Total New Unemployment from Nonagricultural Industries, Quarterly Rates, 1949-1954





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A comparison of unemployment estimates using the Bureau of Employment Security (BES) techniques and the 1950 census figures is difficult because in the 1950 census a large proportion of unemployed workers were not reported. On a national basis the understatement amounts to about 25 per cent. Unfortunately, it cannot be assumed, however, that the 1950 census underenumeration of the unemployed is distributed evenly among all the areas. It is more reasonable to expect that in some areas the nonreporting of unemployed might have been very small, while in others it could have greatly exceeded the 25 per cent national average.

One other problem that complicates the comparison is the fact that the census enumeration was spread over a relatively long period of time so that the reference week is constantly changing. While most of the census enumerations were completed by the end of April, a significant number were still going on in May and even later. The BES data, however, relate to a specific week in April.

Since the Bureau of the Census has no information available on the underenumeration error by area, definitive conclusions with respect to the results of the comparison of the BES and census rates are not possible. However, certain interesting facts come to light when the unemployment rates for the sixteen largest labor market areas are compared.¹⁰

In all cases except one, the BES rate was higher than the census rate. When the comparison is made in terms of ratios of the BES rate to the census unemployment rate the following results are shown: For one area the BES rate is about 6 per cent lower than the census rate. In three areas the BES rate is between 5 and 10 per cent higher than the census rate, while for seven areas the BES rate is between 10 and 15 per cent higher. In four cases the BES rate is greater than the census rate by somewhat more than 25 per cent, while in one instance (one of the larger areas of the country), the BES rate is about 40 per cent higher. In the latter instance there appears to be no question about the fact that there was a substantial understatement in the census estimate since the number of unemployment insurance claimants reported for this area was about equal to the census estimate of total unemployment. It may also be of some significance possibly to note that when the data for these sixteen areas are aggregated the resulting BES unemployment rate is higher than the census rate for

¹⁰ These areas are: New York, N.Y.; Newark, N.J.; Chicago, Ill.; Los Angeles, Calif.; Philadelphia, Pa.; Detroit, Mich.; Boston, Mass.; San Francisco, Calif.; Pittsburgh, Pa.; St. Louis, Mo.; Cleveland, Ohio; Washington, D.C.; Baltimore, Md.; Minneapolis-St. Paul, Minn.; Buffalo, N.Y.; and Cincinnati, Ohio.

this group by about 25 per cent, or the estimated understatement in the Census national unemployment estimate.

It is unfortunate that because of the underenumeration of the unemployed in the 1950 census, it is not possible to derive from the above comparison a clean-cut and clear evaluation of the reasonableness of the area unemployment estimates obtained by the use of the BES estimating procedure. However, from the results of the comparison the following inferences are possible:

1. The fact that the BES rates are in most instances higher than the census rates may be taken as an indication of the reasonableness of the BES estimates. Because of the nature of the reasons for the census understatement of the unemployed—incomplete reporting of the unemployment of teen-agers and women twenty-five years of age and over¹¹—it is plausible to assume that there was some degree of under-reporting of the unemployed in most areas and therefore the "true figures" for these areas would be higher than the census estimates.

2. The reasonableness of the BES estimates may also be inferred from the fact that on an aggregated basis the BES unemployment rate for the sixteen areas is greater than the census rate by about 25 per cent, or a proportion similar to the estimated underenumeration of the unemployed nationally. This group of areas accounted for a large proportion (approximately 40 per cent) of the total unemployed according to the 1950 census data. Given a figure of this magnitude there is some basis for assuming that for this group of areas as a whole the percentage understatement in the number of unemployed probably would be similar to that for the census national unemployment figure.

There are other indications that the system used by the BES for estimating unemployment by area is fairly satisfactory. When the estimates for all major areas are blown up to a national total, the resulting unemployment figures come within a few per cent of the CPS estimates. Also, comparison of estimates of unemployment in individual areas with other data reflecting local economic developments such as trends and levels in employment and department store sales give credence to the reasonableness of the unemployment estimates.

4. Behavior of Unemployment by Area

TRENDS IN AREA UNEMPLOYMENT

An over-all national analysis of employment and unemployment often fails to disclose the true character of manpower problems, especially in specific local labor markets.

¹¹ See Census of Population: 1950, Bureau of the Census, Vol. II, Characteristics of the Population, Part I, U.S. Summary, p. 12. Also see Census of Population Preliminary Reports, Series PC-7, No. 2, 1950.

A national labor market exists for only a relatively few professional occupations and for selected workers as in the construction field and in agricultural employment. Despite the volume of interarea migration, it is still true that for most occupations and industries, as well as for employers and workers, the labor market has relatively narrow geographical limits. Typically, workers seek jobs and employers recruit workers in the local area which has a composite of employing establishments as labor-demand points, and worker residential sectors as labor supply points.¹²

Examination of employment by industry in the various labor market areas shows a very wide difference in the types of industries that are located in specific communities. The relative importance of manufacturing employment alone varies greatly from one community to another. In May 1954, manufacturing employment ranged from as high as 66.0 per cent of total nonagricultural employment in New Britain, Connecticut to as little as 7.8 per cent in Austin, Texas (see Appendix Table A-1). The types of manufacturing employment in different localities also vary markedly. Metalworking employment accounted for 95.6 per cent of total manufacturing employment in the Flint, Michigan area, compared with 16.6 per cent in the Lawrence, Massachusetts area. As a result of these differences, changes in demand for goods and services of a general or limited nature will have differential impacts on the economic conditions of specific areas. Therefore, an adequate appraisal of unemployment experience requires an analysis not only of the national but also of the local labor market situations.

The differences that may occur in the behavior of unemployment by area in periods of relatively similar national economic conditions are illustrated by the comparison that follows of unemployment rates in a number of areas in early 1950 and mid-1954. These were periods of readjustment in the national economy. The unemployed represented approximately 7 per cent of the civilian labor force in early 1950 and in mid-1954 the unemployment rate was 5 per cent. However, the economic sectors of weakness and strength were different in these two periods. In 1950 the major decline was in the soft goods sector of the economy while in 1954, the downturn was concentrated primarily in durable goods manufacturing. In addition, defense expenditures were lower in 1950 than in 1954. The influence of these factors is reflected in the behavior of unemployment areawise.

The effects of changes in the allocation of defense expenditures between 1950 and 1954 on the economic conditions of specific areas

¹² Louis Levine, "Some Problems in the Organization and Administration of Our Labor Markets," in *Manpower in the United States: Problems and Policies*, William Haber, et al., editors, Harper, 1954.

is shown in the following instances: In the beginning of 1950 the unemployment rate in San Diego, California was in excess of 12 per cent, while rates approximating the national average for 1950 were reported for Columbus and Dayton, Ohio, and Hartford, Connecticut. However, in 1954 as the result of higher levels of defense expenditures for the aircraft and naval activities located in these communities unemployment rates well below the national average were reported for all of these areas. Hartford and Columbus had unemployment rates of less than 3 per cent while the rates in both San Diego and Dayton ranged between 3 and 5 per cent.

Substantial differences from the national unemployment level were also shown by the Des Moines, Iowa and Omaha, Nebraska areas. In mid-1954 unemployment in these localities was under 3 per cent of the labor force or about half the national average. Similarly, rates below the national average were reported in early 1950. At that time they ranged between 4 and 5 per cent. The economic strength of these areas is attributable to their importance as trading centers for the surrounding agricultural communities and in the diversification of their industrial activity. Industries such as food processing, railroad transportation, printing and publishing, and government make important contributions to the employment totals of these areas. In both 1950 and 1954 most of these activities as well as trade maintained high levels of employment.

The significance of the effects that limited economic changes such as shifts in the market position of a large firm or a segment of an industry have upon the economy of an area is strikingly illustrated in the case of South Bend, Indiana. In January 1950 it was one of the few areas showing an unemployment rate of less than 3 per cent. In contrast, in mid-1954 unemployment in South Bend was in excess of 12 per cent. Automobile production is a major activity in this area and the low unemployment rate in 1950 reflected the high levels of this activity. The unfavorable market position of certain independent producers in 1954 was reflected in the South Bend economy.

Some communities appear to have fared moderately well in both periods under consideration. In most instances, these were areas with diversified industrial activity. For example, the unemployment rate for the Chicago area was approximately 5 per cent in both 1950 and 1954. Similarly, Cleveland, another area of wide industrial diversification, had unemployment rates approximating the national average in both 1950 and 1954. The importance of diversification of industry on the economy of an area is illustrated by Utica-Rome. In 1950 this locality was seriously hit by the slump in the textile industry and by the reduction

in the activity of an Air Force base maintained in this area. In 1950 the unemployment rate was in excess of 12 per cent, or almost twice the national average. Continuous efforts have been made by this community since 1950 to expand the industrial base of the area. These efforts have been partly successful. Thus, despite continued low levels in textile employment, the unemployment rate in 1954 was approximately 7 per cent or only slightly higher than the national average.

There is a final group of areas that need mention here. These are areas which have faced unemployment problems over an extended period of time because of the type of industrial activity in the area. Improvements in the level of national economic activity have little effect on unemployment in most of these communities so that unemployment rates of 5 per cent or more were not unusual even in 1953 when the national economy was functioning at exceptionally high levels. These are discussed in detail in the subsequent paragraphs.

SURPLUS LABOR MARKETS

As was true during World War II, islands of heavy unemployment existed despite the expanding national volume of business, expanding employment opportunities, and higher levels of economic activity between 1950 and 1953.¹³ In a few of the nation's major production and employment centers, conditions have approximated those which generally prevailed during the depression years of the thirties. In a number of other areas where unemployment has not reached such serious proportions, it has been three or four times as high as for the country as a whole.

These centers of heavy unemployment represent a serious waste of the nation's most vital economic resource—manpower. A number of factors explain the high unemployment levels in particular areas, while the nation is generally prosperous. Although no single cause may be involved, it is possible to isolate several factors which contribute to the creation of labor surplus areas. Among these, the following can be identified: (1) depletion of natural resources, combined with dwindling markets (these largely affect coal mining and lumbering centers), (2) lack of sufficient industrialization to support a growing population and labor force, (3) technological changes, and (4) unbalanced local economy. The unbalanced economic areas can be subdivided into two categories: (a) areas which depend for their support primarily on one or two basic industries which have declining markets, or on industries which have experienced geographical shifts, and

¹³ See "Idle Manpower," The Labor Market and Employment Security, November 1951, pp. 17-21 for further discussion on this subject.

(b) areas which depend on one or two industries which temporarily cut their employment levels because of such factors as material shortages or temporary declines in consumer demand.

A large group of areas, with relatively heavy unemployment during the last three years, are basically depressed coal mining centers. Over the years, the economies of these areas have been progressively weakened by one of three major economic forces, acting singly or in combination: (1) reduced markets, resulting from use of substitute fuels and to some extent from reduced coal exports, (2) increased mechanization which cut drastically the amount of manpower required to operate the mines, and (3) depletion of coal resources or exhaustion of the higher grade and easily accessible seams. Employment in anthracite mining especially has been declining for several decades. Three Pennsylvania anthracite areas—Scranton, Wilkes-Barre-Hazleton, and Pottsville—are among the hardest hit of all major coal mining areas.

In Tacoma, Washington, the only western area with substantial surplus labor in 1953, a diminishing supply of saw and peeler logs, resulting from depleted timber resources, was primarily responsible for increased unemployment; poor markets for plywood and cutbacks at government installations were other contributing factors.

In several areas, changing technology played a part in declining employment levels. In Cumberland, Maryland, dieselization of the area's important railroad industry reduced manpower needs, while railroad operations were also affected by a lower volume of coal shipments. Textiles, this area's other important industry, also underwent technological changes, as modernization of equipment for weaving and dyeing synthetic yarn lowered the need for workers. The jobs lost through these technological changes in Cumberland have not yet been replaced.

Declining railroad employment also affected the Altoona, Pennsylvania area with its large repair shops. In Iron Mountain, Michigan, the area's largest firm, which had been producing wooden automobile station wagon bodies, closed down as the automobile makers converted to all-metal construction, while two other important activities in the area—lumbering and iron mining—have not been prosperous in recent years.

Lack of industrialization and limited year-round job opportunities kept unemployment high in a number of areas. While some of these have a significant amount of manufacturing employment, their major industries are characterized by severe seasonal fluctuations. In two North Carolina areas—Durham and Winston-Salem—the dominant tobacco-product industry operates at a low level for about eight months

each year. In Asheville, North Carolina and Atlantic City, New Jersey, extreme seasonality connected with resort activities creates an unstable economy. In both, unemployment remains at substantial levels for most of the year. Gloversville, New York has experienced declining employment for a number of years due to the problems of the local glove industry. A decline in sales of fine leather gloves and competition of foreign glove makers and manufacturers in the Middle West tended to depress the economy of this virtually one-industry area.

A large number of areas with continuous heavy unemployment have been affected by the ills of the textile, apparel, and shoe industries, particularly in New England. Declining textile employment is the dominant cause of high unemployment in Lawrence, Massachusetts. This area has consistently shown the highest unemployment rate of all the nation's major areas—a rate running between 15 and 30 per cent of the labor force. Lowell and New Bedford, Massachusetts, and Utica-Rome, New York have also been serious affected by declines in textile employment. In Providence, Rhode Island, employment reductions in the important textile industry were aggravated by declines in costume jewelry—the area's second largest manufacturing activity. Declines in employment in textiles and shoes led to excessive unemployment in Brockton, Massachusetts and Manchester, New Hampshire. Apparel by itself was the dominant cause of substantial surplus (during 1952) in only one area—Metropolitan New York.

A number of areas developed heavy labor surpluses during the period of Korean mobilization primarily as a result of restrictions on the use of scarce materials for nondefense production. Hardest hit were those producing automobiles, auto parts, household appliances, and similar metal products. The largest center so affected was Detroit, where unemployment rose from around 46,000 in April to about 122,000 in December 1951. Flint, Grand Rapids, and Bay City were other areas experiencing similar problems. Heavy unemployment in these areas was of short duration. In Detroit, for example, unemployment fell from the high of 122,000 to a minimum level of 20,000 by March 1953.

Substantial labor surpluses persisted in some areas even when economic conditions in the country generally were prosperous. In these areas, the basic industrial composition is such that it cannot be expected, either in the short or long run, to provide full employment for the area's workforce. The two most commonly mentioned solutions to unemployment problems in these areas are: (1) reduce the labor surplus by out-migration and balance the number of job seekers with the number of available jobs, and (2) bring new industries into the

area and increase the utilization of the local labor supply, thereby reducing unemployment.¹⁴

That population does not migrate in sufficient volume to bring into balance the number of job seekers with the number of jobs is indicated by the continuous heavy unemployment in depressed areas. It could well be that the very out-migration from the areas that has occurred creates further unemployment problems as the community's economy continues to lose the purchasing power of the out-migrants. In contrast to the population increase of 22 per cent which over the decade (1940-1950) occurred in all Standard Metropolitan Areas combined, all of the chronic labor surplus areas lost population. The Scranton and Wilkes-Barre areas, for example, had net declines in population of 14.6 and 11.2 per cent, respectively.

Out-migration indirectly leads to further local hardship since in many cases the outmigrants are individuals at the best working age. This leaves families dependent on secondary workers or in some cases completely stranded. Out-migration of the more able-bodied persons also results in a decline in the labor force participation rates. While close to 80 per cent of all males fourteen years of age and over were in the labor force for all Standard Metropolitan Areas in 1950, in Scranton and Wilkes-Barre the rates were 72.2 and 72.9 per cent, respectively. A substantial proportion of those in these two areas were unemployed. Communities face other problems when out-migration occurs. Some of these include the loss of tax revenues and, therefore, the slow decay of public installations and services; the loss of payrolls and markets and, therefore, decline in real estate and other property values with their effects on the ability of local banks and other lending institutions to advance credit for new enterprises. Failure of local secondary activities, including trade and service, adds to unemployment and further detracts from the community as an attractive place for the location of new enterprises.

Without some form of planned out-migration, the community is left with the "less desirable" workforce; it is likely to have an excessive proportion of older and younger persons and fewer of the most desirable working-age group.

The objective in dealing with local area unemployment problems is, of course, to increase the utilization of the local labor supply. To bring about greater utilization of local labor supply requires the expansion of existing industries or attraction of new industries and diversification of an area's economic base. New industries, offering additional and diversified employment opportunities, provide a basic approach to

¹⁴ See Employment Security Review, December 1953, for a discussion of the steps taken by various areas to attract new industry.

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chronic labor surplus problems. Planned efforts to relieve the distressed areas of surplus population are an alternative when it is possible for residents to move to other more prosperous and growing communities.

The availability of manpower, its occupational composition, and local wage rates are only some of the factors which are important in locating new facilities in an area. Others are unused industrial facilities; water power and fuel resources; transportation facilities, including railroad, highway, and air; housing, educational, and recreational facilities; proximity of raw materials and markets to the area; and the local tax structure. Many of the areas with chronic unemployment do not have such facilities and, therefore, are not able to attract new industries. Nevertheless, local communities, on an organized and planned basis, must constantly search for means of inducing private enterprise to select labor surplus areas as sites for expansion.

AREA LABOR MARKET CLASSIFICATIONS

Area classifications according to relative adequacy of labor supply, prepared by the BES, are intended to provide a quick, convenient tool to measure comparative differences in the availability of labor (and general economic well-being) of the nation's major production and employment centers. These indicators of area labor market conditions have been widely used by government agencies and private organizations in the introduction, administration, and evaluation of manpower programs, as well as of other programs that affect employment opportunities ever since the area classification program was first initiated in the early days of World War II. Table 1 gives a summary of area classifications for selected periods and includes a distribution of wage and salaried employment in each classification group.

LABOR FORCE PARTICIPATION

The extent of labor force participation has an important bearing on the well-being of the area's economy.¹⁵ The degree of labor force participation of both men and women varies greatly among areas. According to the 1950 census, some areas had as high as 87 per cent of their male population, fourteen years of age and over, in the labor force (Columbus, Georgia), while others had no more than 71 per cent (Tampa-St. Petersburg, Florida). Labor force participation rates for women ran as high as 42 and 41 per cent in Washington, D.C. and New Bedford, Massachusetts to as low as 19 per cent in Johnstown, Pennsylvania (see Appendix Table A-1).

The extent of participation by the population in the labor force

¹⁵ See Labor Force Participation, Its Significance to Labor Market Analysis, Bureau of Employment Security, June 1952.

	NUMI	BER OF EAS	PER C WAGE AN EM P LO	ENT OF ND SALARY DYMENT	PER C UNEMPI	ENT OF LOYMENT
CLASSIFICATION ^a	July 1954	July 1953	May 1954	Мау 1953	May 1954	May 1953
Total	145	145	100.0	100.0	100.0	100.0
Group I	0	5	0.0	1.4	0.0	0. 6
Group II	16	65	7.4	44.8	3.5	27.9
Group III	80	62	66.6	50.8	59.2	64.4
Group IV	49	13	26.0	3.0	37.3	7.1
IV-A	42	Ъ	24.0	b	31.8	' b
IV-B	7	b	2.0	b	5.5	· b

TABLE 1		
Distribution of Areas, and Nonagricultural Wage and Salary Empl	loym	ent
and Unemployment, by Classification Group, July 1953, May and J	uĺy∶	1954

^a See Appendix A, Table A-2, note b for an explanation of the classification groupings.

^b In 1953, Group IV areas were not subdivided into A and B.

depends upon many factors, the more important of which are the age and color composition of the population, the type of industries in the area, and the general health of the area's economy. Areas which have industries in which large numbers of women can be employed have a much higher female labor force participation rate, as for instance, Washington, D.C. and New Bedford, Massachusetts. On the other hand, areas such as Johnstown and Pittsburgh, Pennsylvania whose basic economies are dependent, in a large measure, on such heavy industries as production of steel and coal mining have very low rates. The age composition of the population is also an important factor in the labor force participation of both men and women. In Tampa-St. Petersburg, Florida, which has a disproportionately large older population, the participation rates are the lowest among all of the Standard Metropolitan Areas. On the other hand, areas which have experienced a large inmigration of workers because of their expanding economies have attracted a proportionately larger number of persons in the working-age groups. These communities have considerably higher-thanthe-national-average labor force participation rates.

5. Industrial and Other Characteristics of the Unemployed

SOURCES OF DATA

Because of the dynamic nature of the labor market, current information on the characteristics of the unemployed is extremely important, particularly when unemployment reaches major proportions. Evaluation of the significance of unemployment data and the development of

measures to reduce joblessness and to attract new business to the area are dependent upon detailed information regarding the kinds of workers who are unemployed. The more important characteristics for which there is a need for data are the duration of unemployment, age and sex, and occupation and industry of attachment. Other than the decennial census enumerations which provide data on some of these characteristics, there is no current comprehensive information on a uniform basis for all of the major labor market areas. The decennial censuses quickly become much too old for analysis of the current characteristics of the unemployed.

Aside from the broad categories of data available from the CPS, the only source of current information consists of the reports emanating from employment security operations. At present, regularly prepared reports of insured unemployment provide a breakdown by sex, and sex and veteran status is available for all jobseekers. A number of states also prepare reports on the previous industrial attachment of unemployment insurance beneficiaries. The only regular current employment security source on duration of unemployment covers the number of weeks of benefits received by claimants exhausting their benefit rights.

While no regularly reported data on many of the characteristics of unemployed workers are being made available, such basic information does exist. This information has not been utilized up to now primarily because of lack of funds. The existing employment security records could, however, yield more detailed statistics on such characteristics of the unemployed as age, sex, veteran status, industry of attachment, occupation, duration of unemployment, marital status, past earnings, education, previous work history, duration of stay in most recent area of residence, number of dependents, and physical handicaps. These basic data are available for all job seekers and benefit claimants at public employment offices and could be obtained not only for the nation as a whole but for individual states and areas.

The importance of the information on the characteristics of the unemployed in individual areas cannot be overemphasized. For example, unemployment in any one area at any specific time may be low; duration of unemployment, however, could conceivably be quite long. In such a case, a low unemployment figure could present problems which are more serious than when unemployment is high but is of short duration. More information is needed to carry out the necessary programs to assist older workers. Similarly, industry of attachment and the occupation of the unemployed is of vital importance in planning programs to alleviate unemployment.

To the extent to which job applicants at public employment offices are representative of total unemployment, they furnish a valuable

measure of the characteristics of the unemployed at any time in any area. In April 1950, the BES sponsored a ninety-area survey of job applicants at public employment offices.¹⁶ Characteristics of job applicants were tabulated according to age, sex, occupation, veteran status, unemployment insurance claimant status and length of time seeking work through the local office. In order to make possible a comparison of information on job applicants with information on total unemployment, the job applicant survey was scheduled for the same period as the 1950 Census of Population. Occupational groupings insofar as possible, intervals of length of time seeking work, and age groups were selected for the survey so as to be reasonably consistent with the groupings used by the Bureau of the Census.

Some differences still remained in definitions and coverage between the job applicant survey and the census. The job applicant survey included some persons who were seeking work through the employment service even though they may have had other jobs. There were also differences in the definitions of the "occupations" used in the survey and those used by the Bureau of the Census. Strict comparability was not possible between the "skilled and semiskilled" categories in the job applicant survey and the census' titles of "craftsmen, foremen and kindred workers." However, when the two former groups are combined the differences in definitions become relatively small. Another problem making comparisons by occupational group difficult was the very substantial number of unemployed in the census data for which occupation was not reported. For the country as a whole, the "occupation not reported" group accounted for over 20 per cent. In nearly all areas, these percentages were of approximately the same magnitude. The results, however, of the comparison between the census and the job applicant survey data for the country as a whole and for individual areas, as, for example, the Baltimore area, indicates that despite the differences between the two studies in certain specifics, there is a remarkable similarity in many over-all aspects.

The April 1950 job applicant survey data aggregated for the ninety areas revealed that these industrial centers accounted for over 2 million local office job applicants. For this month the CPS reported total unemployment as 3,515,000. The major difference between the job applicant survey and the 1950 census data occurred in the number of women and young job seekers included in the employment office files. Women appeared to be somewhat over-represented when compared with the census enumeration, while job seekers under twenty years of age were underrepresented in the employment office data. Young job

¹⁶ Job Seekers at Public Employment Offices, Bureau of Employment Security, April 1950.

seekers constitute a higher proportion of the total unemployed than of applicants at the local public employment offices because they lack wage credits under unemployment insurance programs, and therefore, do not use the employment service to the same extent as more experienced workers. The proportion of individuals in other age brackets was, of course, influenced by this difference in the lower age brackets.

A very close correlation by age, however, was found when those under twenty years of age were removed from both the census and the job applicant survey data. For the United States as a whole the census data show 45 per cent to be unemployed in the twenty-five and under forty-five age group as against 49 per cent in the BES data. For the Baltimore area, these percentages were 50 and 52. For those between forty-five and sixty-five, the ninety-area survey showed 29 per cent as against 30 per cent in the census, while in Baltimore, the similar percentages were 27 and 27. For the sixty-five years of age and over group, census data showed 5.4 per cent as against 6 per cent in the job applicant survey and in Baltimore these percentages were 3.8 and 5.7. Both sources showed a relatively smaller number of unemployed older women; about one-half the rate for men of the same age. In the group of women twenty and under twenty-five, the census data had 19 per cent as against 16.5 in the job applicant survey, while in Baltimore similar percentages were 19.5 and 15.4. Thus, both surveys clearly point up the well-known facts that women withdraw from the job market at a much earlier age than do men, that the greatest bulk of job seekers are between the ages of twenty-five and forty-five, and that the next largest group is between forty-five and sixty-five.

Comparison by occupation of the job applicants and the total unemployed as reported by the census was extremely difficult because of the afore-mentioned fact that the census data did not report occupation for a large group of the unemployed. It is believed that a large proportion of individuals for whom occupation was not reported would fall in the "unskilled" category, but there is no evidence to verify this. Nationally, excluding unemployed farm workers, "occupation not reported" was 24 per cent and for Baltimore 22 per cent.

If it is assumed that the census "not reported" group was distributed in the same proportion as those for whom occupations were reported, the job applicant survey has a somewhat smaller proportion for nearly all the occupational groups except the "unskilled." For the "unskilled" group, the job applicant survey shows a substantially higher percentage—for example, percentages in Baltimore were 31.7 per cent as against 17.3 per cent shown by the census. On the other hand, the census reported a substantially higher number of domestic service workers unemployed than did the job applicant survey. It is quite

likely that in many local offices domestic service workers are referred to available work without the formality of registration.

A strikingly close agreement on the data from the two sources is shown if it is assumed that the greater bulk of the "group not reported" in the census data are unskilled workers. Thus, the proper distribution of the "occupation not reported" exerts an almost decisive influence on the extent of the correspondence of data from the two sources. In general, it can be concluded, however, that the distribution of job applicants by occupation agrees fairly well with the occupational distribution of the experienced unemployed as reported by the census.

DURATION OF UNEMPLOYMENT

Analyses of the severity of unemployment require data on the length of time that the unemployed have been out of work. At times information on the duration of unemployment is even more significant to the analysis of the unemployment problem than the data on the total number of the unemployed. Unemployment may be low at any one time, but its duration long. Usually, however, high unemployment produces long spells of unemployment.

The most recent comprehensive information on the duration of unemployment for local areas was obtained in the April 1950 job applicant survey.¹⁷ Analyses of these data indicate wide differences in the duration of unemployment among local areas. As might be expected in areas with relatively large volume of unemployment, applicants had been looking for work much longer than in areas with tight labor supply. Thus, in areas with unemployment in excess of 12 per cent of the labor force, on the average, 20 per cent of applicants had been unemployed for more than twenty weeks, while only 27 per cent of the applicants sought work for less than four weeks. On the other hand, in areas with unemployment of less than 3 per cent, 48 per cent looked for work for less than four weeks and only 5 per cent for more than twenty weeks. South Bend, Indiana, for example, one of the tightest labor market areas in the country in 1950, had only 2.6 per cent of its applicants unemployed for over twenty weeks while almost 56 per cent were unemployed less than four weeks. In contrast, Scranton, Pennsylvania had close to 28 per cent of its job applicants seeking work for over twenty weeks and only 24 per cent unemployed for less than four weeks.

Another important source of data on duration of unemployment is found in the surveys of individuals who have exhausted unemployment insurance benefits. These studies are made by the state employment security agencies to determine the adequacy of benefits under state

17 Ibid.

unemployment insurance laws. Many of such surveys conducted in 1949-1950¹⁸ indicate that a significant proportion of workers were unemployed for very long periods. In Connecticut,¹⁹ for example, in 1949 when unemployment rose sharply and some 154,000 workers drew unemployment insurance benefits, the number of persons who exhausted benefits totaled 50,200; 45,900 still resided in the state during the survey week, the end of January 1950. The survey revealed that the majority of exhaustees were not re-employed after exhaustion of benefits. Of those who found jobs, only 10 per cent did so within a week after exhaustion of benefits while 26 per cent did not find jobs until sixteen weeks later. The average (median) duration of unemployment from exhaustion of benefits to first job was nine weeks. This is in addition to an average of sixteen and eight-tenths weeks of unemployment while drawing benefits. Of the 25,000 who were not reemployed after exhaustion, 9,300 dropped out of the labor market and 15,700 were looking for work at the time of the survey. Those who were looking for work had an average (median) duration of unemployment of nineteen weeks from the time they exhausted benefits, with a significant 15 per cent looking for work for over thirty-five weeks. These periods of unemployment were in addition to an average of sixteen and nine-tenths weeks of unemployment while in benefit status. Relatively more women than men exhausted benefits, and relatively more of the older workers than the workers in the age group thirty-five to forty-four. Significantly, however, about the same proportion of women as of men who had exhausted benefits were working during the survey week, while more women and older workers dropped out of the labor market.

Areas with heavier unemployment had a larger number of individuals exhausting benefits than those with better job opportunities. In Bridgeport, for instance, where many layoffs occurred, the ratio of exhaustions to covered workers was 9.3 per cent, whereas in Hartford where employment opportunities were relatively good the ratio stood at 4.1 per cent.

The age of applicants has a considerable bearing on duration of unemployment. Most areas showed a steadily increasing proportion in older age categories who were in the "seeking work over 20 weeks" group. In Houston, Texas, for example, 12.3 per cent of applicants, forty-five to sixty-four years of age, looked for work for "over 20 weeks"

¹⁸ Adequacy of Benefits under Unemployment Insurance, Bureau of Employment Security, September 1952.

¹⁹ "What Happens after Exhaustion of Benefits," The Labor Market and Employment Security, May 1950. Based in part on a Study of Persons Who Exhausted Unemployment Compensation Benefits in Connecticut during 1949, Connecticut Department of Labor, Employment Security Division, March 1950.

and 22.7 per cent of those sixty-five years of age and over as against 8 per cent of all the applicants.

SEX AND AGE CHARACTERISTICS

While the unemployment rate markedly affects the duration of unemployment, it does not appear to directly influence the sex composition of unemployment. Women constituted 35 per cent of all applicants in ninety areas surveyed by employment offices in 1950. While there were significant differences by area in the proportion of women applicants to the total, the difference could not be attributed to the relative volume of unemployment. Some areas with low unemployment had a relatively small proportion of women looking for work -as, for instance, Des Moines, Iowa (25 per cent)-while others with the same low volume of unemployment had a high proportion of women job seekers-as, for instance, South Bend (40 per cent). Similar differences were found in areas of heavy unemployment. The proportion of women job seekers in Scranton, Pennsylvania and Utica-Rome, New York was 26 per cent and 38 per cent, respectively. The industrial composition of the area, the degree of labor force participation by women, and the types of industries which released workers were the major factors that determined the relative severity of unemployment among women.

By age, 47 per cent of the applicants were in the most employable age bracket (twenty-five to forty-four), 33 per cent were forty-five or older, with an appreciable 6 per cent in the difficult-to-place oversixty-five category. The distribution varied by area. Although the overall average showed 33 per cent of the applicants to be forty-five and older, in more than half the areas a smaller proportion fell into this older age group.

Men, who constituted 65 per cent of all applicants, were in the majority in all age groups. However, their proportion of the total ranged from 56 per cent in the eighteen- to nineteen-year group to 84 per cent in the sixty-five-and-over group.

INDUSTRIAL AND OCCUPATIONAL CHARACTERISTICS

Divergence in the industrial characteristics of various areas introduces marked differences in the occupational distribution.²⁰ In Los Angeles, 8.5 per cent of the 139,600 job applicants had professional or managerial backgrounds, clerical and sales categories accounted for 21.4 per cent, and about 52 per cent of the total were quite evenly divided among skilled, semiskilled, and unskilled occupations. But in

²⁰ Job Seekers at Public Employment Offices, as cited.

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Philadelphia, with a far greater concentration of manufacturing establishments, only 3.4 per cent of the 124,400 job seekers were recorded in professional and managerial categories and but 12.1 per cent in clerical and sales; semiskilled occupations accounted for 28.1 per cent, and the skilled and unskilled groups each made up over a fifth of the total.

Current data on industry of attachment of the unemployed are generally lacking. Only the decennial census of population provides comprehensive information on this subject. These data are valuable for historic analysis of the unemployed but they cannot be used in the analysis of the current problems.

One approach to the analysis of unemployment by industry is the evaluation of the changes in employment from one period to another (see Appendix Table A-2). This, however, can be done only for short periods of time since a sizable number of the unemployed are likely to shift to other industries where job opportunities develop. In the analyses of the current unemployment situation, there is little question but that the growth in unemployment between 1953 and 1954 was primarily due to reduction in employment in durable goods industries. The increase in unemployment over the year in Detroit, for instance, was about the same as the reduction in employment in the durable goods industry. Many of the workers in Detroit who were released by the automobile industry left the area, while others entered the local labor force but did not find jobs.

While the data are not generally published, many of the state agencies tabulate information on the industry of attachment of unemployment insurance claimants for administrative uses. These data are often shown by sex and in some states, as in New York, information is provided for individual labor market areas. While these data are not representative of total unemployment, they are extremely valuable in the analysis of the most volatile and important industrial segment of our economy. Regardless of the size-of-firm coverage of the unemployment insurance laws, almost all manufacturing industry is covered.

	1954
	May
	Area,
	by
	Employment,
	Salary
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A-1	Wage
TABLE	Nonagricultural
	and
	1950,
	Force,
	Labor
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	Population

		1950				M	AY 1954		
	Pomulation	Per Cent Increase in Population	Pen 14 a in Lal	· Cent nd over oor Force	Total Nonagri- cultural Wage and Salary	Per Cent of Total in Manu-	Per Cent of Total in Metal-	Per Cent of Manu- facturing in Metal	Women as Per Cent
STATE AND AREA	(thousands)	over 1940	Men	Women	Employment	facturing	working ^a	working	of Total
Alabama: Birmingham Mobile	558.9 231.1	21.5 62.8	80.0 80.3	28.7 33.9	187.4 75.9	32.4 21.2	21.9 4.3	67.5 20.4	24.6 27.6
Arizona: Phoenix	331.8	78.2	75.1	27.8	97.4	15.9	9.3	58.4	30.0
Arkansas: Little Rock–North Little Roch	k 196.7	26.0	75.4	34.6	67.7	18.6	5.1	27.4	37.0
California: Fresno	276.5	54.9	78.1	25.7	66.2	18.3	5.4	29.3	31.4
Los Angeles	4.367.9	49.8	78.2	32.2	1,814.6	34.9	20.4	58.5	32.3
Sacramento	277.1	62.7	78.4	33.6	113.5	10.0	1.4	13.6	32.1
San Bernardino–Riverside	451.7	69.4	74.0	25.0	127.6	20.5	11.1	54.2	30.0
San Diego	556.8	92.4	81.1	27.4	178.2	28.6	24.0	83.9	32.6
San Francisco–Oakland	2.240.8	53.3	79.7	34.0	855.7	23.3	10.6	45.4	32.9
San Jose	290.5	66.1	73.7	29.1	89.2	26.5	9.9	37.3	31.6
Stockton	200.8	49.6	77.9	28.9	54.0	21.7	3.7	17.1	29.3
Colorado: Denver	563.8	38.3	79.1	32.6	223.5	19.1	2.8	14.5	38.4
		J	continued	l on next	page)				

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		1950				X	LAY 1954		
	Pomulation	Per Cent Increase in Pomulation	Per 14 an in Lab	Cent ud over or Force	Total Nonagri- cultural Wage and Salaru	Per Cent of Total in Mani-	Per Cent of Total in Metal-	Per Cent of Manu- facturing in Metal	Women as Per Cent
STATE AND AREA	t optimient (thousands)	over 1940	Men	Women	Employment	facturing	workinga	working	of Total
Connecticut:					, , ,	1			
Bridgeportb	258.1	21.4	81.3	33.7	106.1	58.7 20 0	43.4	13.9	33.U 27 2
Hartford ^D	1.000	1.12	01.0 83.5	20.0	1.04	0.00 66.0	58.6	7.00 88.88	32.1
New Diltant	0.171 9.64.6	66	75.9	34.2	117.5	39.1	20.8	53.0	35.9
Stamford–Norwalk ^b	196.0	22.3	81.7	34.4	72.9	45.0	22.9	50.9	34.6
Waterbury ^b	154.7	11.4	82.6	36.4	67.1	63.9	31.4	49.2	34.0
Delaware: Wilmington ^b	268.4	21.0	80.1	30.0	98.8	43.7	13.0	29.6	27.8
District of Columbia: Washington	1,464.1	51.3	81.1	42.5	600.9	4.3	0.8	19.3	39.3
Florida: Tacksonville	304.0	44.7	81.6	34.3	114.7	15.7	2.1	13.3	31.4
Miami	495.1	84.9	76.9	33.6	202.4	12.0	1.4	11.9	32.7
Tampa–St. Petersburg	409.1	50.4	70.9	29.6	122.4	18.8	1.8	9.8	35.1
Georgia: Atlanta	671.8	29.7	78.6	36.6	296.4	26.4	9.2	34.8	34.1
Columbus	170.5	34.9	87.1	37.1	42.7	40.5	2.9	7.0	38.3
Macon	135.0	42.0	82.1	36.0	54.4	23.0	4.3	18.7	32.1
Savannah	151.5	28.4	81.1	33.4	48.8	27.7	2.5	9.2	26.6
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TABLE A-1 (continued)

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		1950				X	tAY 1954		
	Pomulation	Per Cent Increase in Pomulation	Per 14 an in Lab	Cent ud over or Force	Total Nonagri- cultural Wage and Salary	Per Cent of Total in Manu-	Per Cent of Total in Metal-	Per Cent of Manu- facturing in Metal	Women as Per Cent
STATE AND AREA	(thousands)	over 1940	Men	Women	Employment	facturing	working ^a	working	of Total
Illinois:									
Aurora	80.5	16.0	84.8c	34.0°	30.1	52.5	31.5	60.0	37.0
Chicagob	5,031.5	12.8	82.2	35.2	2,263.3	39.3	21.3	54.3	30.8
Davenport-Rock Island-									
Moline	234.3	18.3	81.6	29.6	89.6	47.3	36.4	76.9	30.7
Joliet	134.3	17.6	75.4	25.6	47.0	46.4	21.8	47.0	30.5
Peoria	250.5	18.3	81.9	29.2	86.3	45.9	31.9	69.5	28.6
Rockford	152.4	25.8	85.8	33.5	63.4	58.4	48.1	82.5	29.2
Indiana:									
Evansville	160.4	22.7	81.8	29.6	66.3	47.7	32.5	68.1	28.8
Fort Wayne	183.7	18.5	92.2	32.7	73.4	47.8	36.1	75.5	33.8
Indianapolis	555.2	19.7	82.9	35.0	267.3	38.5	25.3	65.6	33.2
South Bend	205.1	26.7	81.7	31.1	74.1	49.3	30.4	61.8	33.2
Terre Haute	105.2	5.5	75.6	29.1	34.2	31.3	8.1	25.9	28.9
Iowa:									
Cedar Rapids	104.3	17.0	83.0	32.8	41.9	44.4	25.5	57.5	31.6
Des Moines	226.0	15.4	80.9	35.1	90.3	24.1	5.8	23.9	33.6
Kansas:									
Wichita	222.2	55.1	83.0	30.6	115.0	44.9	36.7	81.9	32.3
Kentucky:									
Louisville	576.9	27.8	80.5	30.8	218.2	41.0	15.6	38.0	34.9
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TABLE A-1 (continued)

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		F	ABLE /	V-1 (contin	ned)				
		1950				A	LAY 1954		
	Pomilation	Per Cent Increase in Population	Per 14 a in Lab	Cent nd over or Force	Total Nonagri- cultural Wage and Salaru	Per Cent of Total in Manu-	Per Cent of Total in Metal-	Per Cent of Manu- facturing in Metal	Women as Per Cent
STATE AND AREA	(thousands)	over 1940	Men	Women	Employment	facturing	working ^a	working	of Total
Louisiana:	158.9	70.0	74.8	301	2 2 2 2	39.7	0		9.4.8
Daton nouge New Orleans	685.4	24.1	78.8	30.9	266.2	20.2	6.2 0.2	30.9	27.3
Shreveport	176.5	17.5	79.3	33.6	51.0	14.3	3.2	22.6	28.4
Maine: Portland	119.9	12.6	78.3	31.8	51.9	26.0	4.9	19.0	31.2
Maryland: Baltimore	1,337.4	23.5	81.0	32.5	548.5	34.6	18.9	54.8	31.5
Massachusetts: Boston ^b	2,370.0	8. 8.	76.1	32.4	932.0	33.1	14.6	44.0	n.a.
Brocktonb	129.4	8.5	74.4	31.7	42.2	47.9	8.6	18.0	41.9
Fall River ^b	137.3	1.6	77.6	41.1	47.2	59.3	1.8	3.0	45.5
Lawrence	125.9	0.9	79.8	42.3	33.5	50.7	8.4	16.6	36.7
Lowellb	133.9	2.2	73.7	34.5	39.6	51.8	4.7	9.1	40.0
New Bedford ^b	137.5	2.3	78.4	41.1	52.0	54.6	15.3	28.1	40.7
Springfield-Holyoke ^b	407.3	11.7	80.1	34.3	157.7	49.6	22.9	46.1	32.0
Ŵorcesterb	276.3	9.3	74.4	30.1	103.8	48.2	24.6	51.0	34.1
Michigan: Bottle Creek	190.8	98.9	78.1	39.0	40.0	53 0	0.06	ע ע ע	0.00
Detroit	3.016.2	26.9	83.3	28.9	1.242.0	50.4	41.5	257 272	8.7.6
Flint	271.0	18.9	85.1	28.3	122.3	65.2	62.4	95.6	21.3
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		1950					tAY 1954		
	Domilation	Per Cent Increase in Powulation	Per 14 a in Lab	- Cent nd over or Force	Total Nonagri- cultural Wage and Salary	Per Cent of Total in Manu-	Per Cent of Total in Metal-	Per Cent of Manu- facturing in Metal	Women as Per Cent
STATE AND AREA	(thousands)	over 1940	Men	Women	Employment	facturing	working ^a	working	of Total
Michigan (cont):			-0		0.701	2	1 10	n Z	707
Grand Rapids Kalamazoo	288.3	17.0 26.6	0.18 77.4	20.8 8.08	104.3 44.3	54.2 54.2	24.4 16.9	31.2	30.5
Lansing	172.9	32.4	74.8	31.5	73.9	44.0	41.0	93.2	26.7
Muskegon	121.5	28.6	82.5	25.3	40.2	63.4	50.0	78.8	23.4
Saginaw	153.5	17.7	82.1	26.5	50.5	52.5	45.0	85.7	21.0
Minnesota: Duluth–Superior ^b	252.8	-0.5	78.4	28.1	50.9	21.8	11.7	53.5	33.2
Minneapolis–St. Paul	1,116.5	18.7	79.3	35.6	457.9	30.2	14.1	46.8	. 37.0
Mississippi: Jackson ^b	142.2	32.5	80.0	37.8	45.0	19.8	2.0	10.1	34.9
Missouri: Kansas City	814.4	18.6	80.5	33.3	364.6	30.6	14.2	46.4	29.4
St. Louis	1,681.3	17.4	80.2	31.6	703.5	37.9	17.0	44.8	31.0
Nebraska: Omaha	366.4	12.7	79.8	31.7	139.8	22.6	3.7	16.3	33.5
New Hampshire: Manchester	88.4	7.9	79.7	42.2	38.5	48.6	4.5	9.4	44.2
New Jersey: Atlantic City ^b	132.4	6.7	76.3	31.5	42.0	14.0	0.5	3.4	35.8
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TABLE A-1 (continued)

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		Г	ABLE /	A-1 (conti	ned)				
		1950				Ă	LAY 1954		
	Pomilation	Per Cent Increase in Population	Per 14 a in Lab	Cent nd over or Force	Total Nonagri- cultural Wage and Salaru	Per Cent of Total in Manu-	Per Cent of Total in Metal-	Per Cent of Manu- facturing in Metal	Women as Per Cent
STATE AND AREA	(thousands)	over 1940	Men	Women	Employment	facturing	workinga	working	of Total
New Jersey (cont.):									
Newark	1,743.1	7.9	81.4^{d}	32.8d	748.2	44.6	21.1	47.3	. 31.0
Paterson	1,040.6	17.6	đ	q	343.7	52.3	19.4	37.1	29.8
Perth Ambov	241.3	21.1	đ	đ	104.0	59.0	21.7	36.8	30.4
Trenton ^b	229.8	16.5	75.4	36.3	121.0	43.2	21.8	50.5	36.1
New Mexico: Albuquerque	145.7	109.9	78.9	26.6	53.2	16.4	11.1	68.2	25.9
New York:	בן א ב	и СГ	78.0	31 K	0.06.0	0.00	6 70	000	0.00
Auduy-Schenectauy-1109 Binghamton	184.7	11.4	79.2	33.9	75.5	54.3	21.9	40.9	34.8
Buffalo	1,089.2	13.6	80.6	28.4	432.7	46.5	29.0	62.2	26.0
New York ^b	9,555.9	9.8	79.0	33.5	3,959.9	27.2	6.7	24.7	n.a.
Rochester	487.6	11.3	79.4	34.3	208.9	52.7	14.2	27.0	35.1
Syracuse	341.7	15.8	77.6	33.2	139.3	42.1	30.5	72.4	30.4
Útica-Rome	284.3	8.0	76.4	31.1	95.0	46.3	27.4	59.1	35.0
North Carolina: Asheville	124.4	14.4	74.2	31.6	36.1	31.3	۵	υ	33.9
Charlotte	197.1	29.8	83.4	41.8	80.8	26.0	3.8	14.7	40.5
Durham	101.6	26.7	74.1	42.3	35.0	33.7	1.6	4.8	41.2
Greensboro–High Point	191.1	24.1	82.4	41.5	78.0	49.5	3.6	7.3	35.6
Winston-Salem	146.1	15.5	80.8	39.2	60.3	50.7	11.0	21.7	39.9
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Women as Per Cent of Total 29.2 29.6 30.8 36.7 29.1 224.2 228.8 30.5 30.5 30.0 28.9 30.1 28.4 29.9 27.5 29.0 35.1 facturing in Metal working Per Cent of Manu-27.1 74.3 51.0 68.7 68.7 73.2 73.2 87.8 87.8 90.9 61.5 85.0 26.0 63.7 25.5 48.5 45.7 67.9 40.7 of Total in Metalworking^a Per Cent MAY 1954 14.9 38.9 21.8 32.8 32.8 18.9 34.4 51.1 551.1 27.2 27.2 27.2 27.3 16.3 36.0 10.3 6.2 3.1 16.3 of Total in Manufacturing Per Cent 555.0 522.4 42.8 31.8 31.8 31.8 31.8 53.2 55.8 55.8 55.8 12.0 25.6 24.3 56.4 35.8 25.3 25.3 cultural Wage and Salary Total Nonagri-Employment 643.8 225.5 201.9 55.7 50.4 151.7 181.1 133.8 114.0 236.6 167.2 38.6 77.0 120.8 374.4 168.0 Women in Labor Force 33.6 32.1 32.0 29.0 26.6 30.7 32.6 33.1 4 33.4 33.4 33.4 33.4 33.9 30.9 25.1 25.0 25.0 32.7 22.0 30.1 32.2 14 and over Per Cent Men 82.4 82.3 82.3 82.9 82.9 82.9 83.4 83.4 83.4 83.4 83.4 83.1 82.1 82.0 80.2 79.0 79.7 76.0 80.6 79.4 1950 Increase in Population over 1940 Per Cent 20.8 14.9 15.6 15.6 29.5 38.0 38.0 31.8 31.8 11.6 40.6 33.3 30.2 10.4 --0.6 21.3 15.9 Population (thousands) 503.4 457.3 147.2 148.2 704.8 437.8 139.5 219.4 292.2 **410.0** 283.2 904.4 l,465.5 395.6 528.5 325.4 251.7 Hamilton-Middletown Allentown-Bethlehem STATE AND AREA Oklahoma City Lorain–Elyria Toledo^b Youngstown Pennsylvania: Harrisburg Columbus Cincinnati Cleveland Oklahoma: Portland Dayton Canton Altoona Akron Tulsa Oregon: Erie Ohio:

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UNEMPLOYMENT BY LOCALITY AND INDUSTRY

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		7			/ manif				
		1950				M	LAY 1954		
	Domilation	Per Cent Increase in Population	Per 14 a in Lab	Cent nd over ior Force	Total Nonagri- cultural Wage	Per Cent of Total in Manu-	Per Cent of Total in Metal-	Per Cent of Manu- facturing in Metal	Women as Per Cent
STATE AND AREA	(thousands)	over 1940	Men	Women	Employment	facturing	workinga	working	of Total
Pennsylvania (cont.):								1 00	
Iohnstown	291.4	-2.4	74.1	19.4	71.2	32.0	21.9	68.4	22.4
I ancaster	234.7	10.5	82.2	32.8	81.0	52.3	16.1	30.8	35.4
Philadelphia	3.671.0	14.7	78.7	31.6	1,392.5	41.6	17.6	42.4	30.8
Pittshurah	2.213.2	6.3	78.7	24.4	768.6	42.9	31.8	74.0	24.5
Reading	255.7	5.7	82.2	33.9	91.9	52.7	21.1	40.0	33.3
Scranton	257.4	-14.6	72.2	28.8	78.4	38.4	9.4	24.6	37.6
Wilkes-Barre-Hazleton	392.2	-11.2	72.9	27.7	107.1	31.7	3.6	11.4	41.7
York	207.7	13.9	83.7	32.6	79.1	58.2	23.1	39.8	32.2
Rhode Island: Providence	737.2	8.9	78.0	36.0	271.8	47.7	11.7	24.4	38.4
South Carolina: Aikan-Aumista	179.3	18.0	81.2	35.5	71.8	32.5	0.2	0.7	29.5
Charleston	164.9	36.1	79.1	33.3	48.7	32.0	15.9	49.7	30.6
Greenville	168.2	23.1	80.8	38.4	57.4	48.8	2.4	4.8	40.7
Tennessee:	246.5	16.5	78.6	32.5	87.3	46.8	13.9	29.6	32.0
Knowille	337.1	37.0	75.4	26.7	116.3	37.5	7.5	20.1	27.2
Memphis	482.4	34.7	82.1	35.6	165.6	25.5	3.6	14.0	30.1
Nashville	321.8	25.1	74.8	35.0	120.2	28.1	5.0	17.6	35.8
		Ŭ	continue	d on next	page)				

TABLE A-1 (continued)

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(continued)
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TABLE

Women as Per Cent of Total 38.5 22.5 34.5 31.8 32.7 32.7 32.7 32.7 28.1 30.2 34.8 32.0 27.8 36.1 30.4 30.1 facturing in Metal working of Manu-Per Cent 37.5 82.8 58.2 9.3 15.4 66.9 44.6 21.5 8.9 14.5 14.7 14.7 20.2 59.4 39.1 16.6 working^a Per Cent of Total in Metal-5.3 5.3 MAY 1954 0.7 5.7 2.2 3.4 3.4 20.3 20.3 20.3 20.3 29.9 12.9 3.9 5.7 of Total in Manufacturing Per Cent 7.8 39.6 14.9 28.1 17.0 34.2 25.6 12.5 15.3 36.1 22.2 24.5 25.1 28.4 19.9 24.6 Total Nonagricultural Wage Employment and Salary 49.9 66.2 51.8 51.8 61.1 151.8 307.5 150.7 104.5 52.3 134.2 144.6 49.8 279.8 66.8 69.0 (continued on next page) Women in Labor Force 30.7 30.5 38.6 32.1 32.6 28.7 26.5 29.4 14 and over Per Cent Men 80.4 81.6 87.4 80.1 77.1 78.7 75.5 80.3 68.2 83.4 84.8 83.3 83.1 83.1 83.1 83.2 83.1 1950 Increase in Population over 1940 Per Cent 69.5 72.3 24.7 18.9 29.9 45.2 34.6 51.5 45.0 34.2 54.3 54.3 60.2 52.5 52.5 (thousands) Population 274.9 195.1 165.5 614.8 195.0 361.3 806.7 500.5 143.2 446.2 733.0 221.6 275.9 61.0 328.1 133.4 Hampton-Newport News-Warwick Beaumont-Port Arthur Norfolk-Portsmouth Salt Lake Cityb STATE AND AREA Corpus Christi San Antonio Fort Worth Richmond Washington: Houston Roanoke El Paso Spokane Tacoma Seattle Virginia: Austin Dallas Texas: Utah:

UNEMPLOYMENT BY LOCALITY AND INDUSTRY

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		T	ABLE A	-1 (contin	ued)				
		1950			3	X	AY 1954		
	Pomulation	Per Cent Increase in Population	Per 14 an in Labi	Cent d over or Force	Total Nonagri- cultural Wage and Salaru	Per Cent of Total in Manu-	Per Cent of Total in Metal-	Per Cent of Manu- facturing in Metal	Women as Per Cent
STATE AND AREA	(thousands)	over 1940	Men	Women	Employment	facturing	working ^a	working	of Total
West Virginia: Charleston	322.1	16.6	76.7	22.3	89.4	28.9	4.4	15.1	23.6
Huntington-Ashland	245.8	8.9	73.6	23.1	63.6	37.4	16.3	43.5	28.2
Wheeling-Steubenville	354.1	2.8	77.5	23.8	109.4	48.4	31.2	64.3	24.0
Wisconsin:	- 1	1							. 1
Kenosha	75.2	18.5	86.5	28.2	21.0	62.9	39.9	63.4	C.02
Madison	169.4	29.6	74.8	36.0	51.6	25.8	7.9	30.6	40.8
Milwaukee	871.0	13.6	82.1	33.5	365.0	50.5	33.3	65.8	28.8
Racine	109.6	16.5	83.9	29.6	37.4	57.5	42.6	74.1	33.9
a Metalworking industries	are defined	to include	the fol-	to d	Data shown for	per cent]	4 and over New York-	in labor f	orce relate Jew Tersev
Classification Manual (Burea	u of the Budg	et, Novembe	er 1945):	Stan	dard Metropolit	an Area.			formal man
Ordnance; primary metal in	lustries; fabrič	cated metal	products;	e .	Data not shown	to avoid	disclosing	figures for	individual
machinery (except electrical); electrical n	iachinery, eg	luipment,	estal	olishments. a — not availah	al			
b Geographic area covered	l for 1950 no	t strictly co	mparable	Υ. Έ	urce: Populatic	on and lab	or force, B	ureau of th	le Census;
with area covered for May	1954.	•	4	guon .	ıgriculturâl wag	e and sala	ry employn	nent, Burea	u of Em-
c Geographic area covered	for per cent	14 and over	in labor	ploy	ment Security,	Departme	nt of Labo	or, based o	n regular
force not strictly comparable	e with area	covered for	all other	bimo	onthly reports	received fr	om athuate	ed state ei	nployment
data.				secu	nty agencies.				

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TABLE	

Changes in Nonagricultural Wage and Salary Employment between May 1953 and May 1954, and Labor Market Classifications, July 1953 and July 1954, by Area

		•	•	•			i
	TOTAL NONAGRICULTURAL WAGE AND SALARY	MANUFA EMPLO	CTURING YMENT	METALW EMPLO	ORKING ^a YMENT		
	EMPLOYMENT		Change from		Change from	CLASSIFI	CATION
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
Alabama: Birmingham Mobile	- 1.8 - 0.5	60.7 16.1	-3.1 +2.1	41.0 3.3	-4.0 +7.2	ΗH	ΠH
Arizona: Phoenix	+1.2	15.5	-4.9	9.0	-2.7	III	Ш
Arkansas: Little Rock–North Little Ro	ock –2.1	12.6	3.4	3.4	9.2	III	Ш
Californía: Fresno	-2.0	12.1	<u>-1.0</u>	3.6	+8.4	Ш	Ш
Los Angeles	-0.8	633.3	2.6	370.4	-2.2	II	Ξï
Sacramento Son Bornordino Binorrido	-0.4	11.4	+0.9	1.6	+3.3	ΞE	ΠШ
San Diego	-2.8	50.9	-2.5	42.7	-2.7	日	Ħ
San Francisco–Oakland	-3.3	199.2	-5.8	90.4	8.4	Η	III
San Jose	+2.4	23.6	+1.5	8.8	-3.3	ίΠ	III
Stockton	-3.2	11.7	-0.8	2.0	20.0	Η	II
Colorado: Denver	3.3	42.8	-6.1	6.2	0.0	п	п
	(co	ntinued on ne	ext page)				

UNEMPLOYMENT BY LOCALITY AND INDUSTRY

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	TOTAL NONAGRICULTURAL	MANUFA	CTURING	METALW	ORKING ⁸		
	EMPLOYMENT	EMERO	Change from	EMITLO	Change from	CLASSIFIC	d NOITAC
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
Connecticut:							
Bridgeport	-6.0	68.2	- 9.8	50.4	-10.5	III	П
Hartford	+0.5	76.1	-1.6	61.0	-1.4	Π	I
New Britain	-3.4	27.8	-5.4	24.7	-4.1	III	П
New Haven	-2.2	46.0	-7.3	24.4	-9.3	п	Π
Stamford–Norwalk	-4.8	32.8	-10.6	16.7	-6.4	III	п
Waterbury	-7.3	42.9	-11.7	21.1	-10.2	III	п
Delaware: Wilmington	-4.2	43.2	-9.9	12.8	-22.3	III	Π
District of Columbia: Washington	– 4.5 	25.7	-3.0	5.0	-1.0	III	III
Florida:				ļ	1	;	
Jacksonville Miami	+3.0 +6.4	18.0 24.3	+1.1 +6.6	2.9	-15.9 19.1	ΠШ	ΠΠ
Tampa–St. Petersburg	+7.0	23.0	+1.8	2.2	+15.4	H	H
Georgia: Atlanta	-0.4	78.2	-0.2	27.2	+8.2	ш	Ш
Columbus	-6.2	17.3	-8.3	1.2	-17.7	IV-A	H
Macon	-2.5	12.5	-4.7	2.3	0.0	III	П
Savannah	-3.8	13.5	-5.3	1.2	-24.8	H	Η
	(0	ntinued on ne	xt page)				

TABLE A-2 (continued)

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(continued)
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TABLE

	TOTAL NONACRUCULTURAL WAGE AND SALARY	MANUFA EMPLO	CTURING YMENT	METALW EMPLO	/ORKING ⁸ YMENT		
	EMPLOYMENT		Change from		Change from	CLASSIFIC	NOLIA
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
Illinois:				ł			
Aurora	6.7	15.8	-11.5	9.5	-15.4	IV-A	II
Chicaro	13.5	889.6	-8.9	482.8	-12.4	III	II
Davenport-Rock Island-	Moline -9.2	42.4	-15.0	32.6	-16.8	IV-A	п
Ioliet	-15.8	21.8	-22.1	10.2	-29.9	IV-A	Ι
Peoria	-7.2	39.6	-13.2	27.5	-17.2	IV-A	II
Rockford	-8.1	37.0	-11.5	30.5	-10.6	Η	H
Indiana:							
Evansville		31.6	-32.2	21.5	-40.2	IV-A	Π
Fort Wayne	-10.6	35.1	-16.4	26.5	-17.6	IV-A	II
Indianapolis	-5.4	103.0	-9.1	67.5	-12.0	III	Π
South Bend	24.8	36.5	-37.4	22.5	-47.7	IV-A	II
Terre Haute	6.9	10.7		2.8	-12.6	IV-A	N
Iowa:							
Cedar Rapids	+0.9	18.6 21 0	-0.1	10.7	-4.0		
Des Moines	0.0	21.8	4.6	5.2	9.6-	П	II
Kansas:							
Wichita	3.0	51.6	-7.0	42.2	8.7	П	Ι
Kentucky:							
Louisville	6.8	89.5	-11.5	34.0		III	п
	(00	ntinued on ne	xt page)				

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	TOTAL NONAGRICULTURAL WAGE AND SALARY	MANUFA EMPLO	CTURING YMENT	METALW EMPLO	ORKING ^A YMENT		
	EMPLOYMENT		Change from		Change from	CLASSIFIC	UNDITA
STATE AND AREA	'Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
Louisiana:							
Baton Rouge New Orleans	-0.9	18.5 53.8	4.0 3.7	0.6 16.6	-10.1		ΞĦ
Shreveport	-2.9	7.3	-13.3	1.6	-30.5	Ш	III
Maine: Portland	+0.9	13.5	-0.1	2.6	+14.8	III	III
Maryland: Baltimore	-1.8	189.7	-6.1	103.9	6.8	Ш	п
Massachusetts: Boston	-2.9	308.9	-6.1	136.0	-8.6	III	Ш
Brockton	-0.6	20.2	-3.8	3.6	-4.5	III	Ш
Fall River	, סיט סיט	28.0	-7.1	0.8	-17.0	A-VI	H
Lawrence	-16.8	17.0	-26.8	, 1 2	-3.1	IV-B	2
Lowell	-7.2	20.5	-12.9	1.9 0.0	+28.3	IV-A	21
New bearord Snringfeld_Holvoke	0.8-	78.2	-10.6	36.0	-14.5		H
Worcester	-3.4	50.0	-8.9	25.5	-10.0	H	H
Michigan: Battle Creek Domote		21.3 696.0	-22.3 19.8	11.6 516.0	35.6 22.8	IV-A IV-A	пμ
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TABLE A-2 (continued)

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	TOTAL NONAGRICULTURAL WAGE AND SALARY	MANUFA	CTURING YMENT	METALW EMPLO	VORKING ^a Yment		
	EMPLOYMENT		Change from		Change from	CLASSIFI	NOLLY
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
Michigan (cont.):)	÷	:
Flint Corred Barrids	+10.9	79.8 50 5	+9.0 4 5	76.3 98 6	6.8+ 2.8+	T	
Granu napius Kalamazoo	2 2 1 1	24.0	-3.6	7.5	-10.7	E	п
Lansing	-2.9	32.5	-7.9	30.3	-8.2	III	п
Muskegon		25.5		20.1	-21.8	IV-A	Ħ
Saginaw	-1.2	26.5	-4.7	22.7	-4.6	III	Ι
Minnesota:	ł		0	С И	03	TV-A	ш
Dulution-Superior Minneapolis-St. Paul	-2.4	11.1	-8.7	64.7	-13.7	Ш	Ħ
Mississippi: Jackson	-0.8	8.9	-5.5	0.9	6.6	IV-A	III
Missouri: Venere Citu	66	2111	1 8.3	51.8	-9.9	Ш	п
St. Louis	-5.1	266.5	-11.8	119.4	-19.7	IV-A	п
Nebraska: Omaha	-0.1	31.6	+1.8	5.2	-7.3	II	Ħ
New Hampshire: Manchester	-3.9	18.7	-7.6	1.8	+29.6	Ш	Ш
	ω)	ntinued on n	ext page)				

UNEMPLOYMENT BY LOCALITY AND INDUSTRY

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	TOTAL NONAGRICULTURAL WAGE AND SALARY	MANUFA EMPLO	CTURING YMENT	METALW EMPLO	'ORKING ⁴ YMENT		
	EMPLOYMENT		Change from		Change from	CLASSIFIC	UNDITAL
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
New Jersey:							
Atlantic City	+3.3	5.9	-2.1	0.2	0.0	IV-A	N
Newark	3.2	333.6	-7.5	157.8	10.9	III	III
Paterson	3.8	179.7	-7.3	66.6	+4.9	IV-A	Π
Perth Amboy	3.3	61.4	-7.1	22.6	-9.6	Ħ	п
Trenton	4.9	52.3	-12.4	26.4	15.8	E	Π
New Mexico:							
Albuquerque	-1.9	8.7	-0.5	5.9	+5.7	IV-A	III
New York:							
Albany-Schenectady-Troy	-8.1	82.2		50.1		IV-A	II
Binghamton	-1.7	41.0	-3.0	16.5	-0.9	III	Π
Buffalo	4.9	201.4	-8.1	125.3	9.3	IV-A	Π
New York	-1.9	1,077.6	-7.7	266.1	7.6	III	Η
Rochester	-1.6	110.0	3.9	29.7	-10.0	II	Π
Syracuse	+0.7	58.7	+1.7	42.5	+2.7	III	Π
Utica–Rome	5.2	44.0	8.3	26.0	-5.9	IV-A	Η
North Carolina:					•		
Asheville	+0.6	11.3	0.0	J		IV-A	N
Charlotte	+0.1	21.0	-1.6	3.1	-5.8	III	П
) Durham	-0.5	11.8	-4.1	0.6	23.5	IV-A	N
Greensboro–High Point	-1.4	38.6	-2.2	2.8	+1.6	III	III
Winston-Salem	+0.8	30.6	-1.8	6.7	-2.5	IV-N	VI
	(00	ntinued on ne	ext page)				

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TABLE A-2 (continued)

UNEMPLOYMENT BY LOCALITY AND INDUSTRY

	TOTAL NONAGRICULTURAL WAGE AND SALARY	MANUFA EMPLO	CTURING YMENT	METALW EMPLO	'ORKING ^a Yment		
	EMPLOYMENT		Change from		Change from	CLASSIFI	CATION
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
Ohio:							
Akron	-4.8	92.4	-11.6	25.0	-6.6	III	Π
Canton	-12.1	58.0	-15.9	43.1	-20.9	IV-A	Ш
Cincinnati	-3.9	160.3	-8.5	81.7	-13.0	III	Π
Cleveland	-4.2	307.2	-9.5	211.2	-12.5	III	II
Columbus	3.0	71.8	-9.1	42.6	9.0	III	Π
Dayton	-3.0	95.0	-5.6	69.5	-6.5	II	Ш
Hamilton–Middletown	-0.6	32.4	-1.3	28.4	-0.7	II	Π
Lorain–Elyria	-11.0	29.8	-17.0	27.1	-18.1	III	II
Toledo	-7.7	67.1	-16.2	41.3	-22.7	A-VI	Π
Youngstown	-8.2	101.1	-13.2	85.9	-12.5	III	II
Oklahoma:							
Oklahoma City	-2.6	16.1	+1.6	4.2	-3.0	III	п
Tulsa	-0.7	29.2	-4.4	18.6	-6.9	Π	Π
Oregon:							
Portland	-2.7	57.6	-5.6	14.7	9.8	IV-A	Ξ
Pennsylvania:							
Allentown–Bethlehem	-4.7	94.3	-9.3	45.7	-13.0	III	Π
Altoona	-14.9	13.8	-31.6	6.3	-48.8	IV-B	N
Erie	9.7	40.8	-16.8	27.7	-19.4	IV-A	III
	(co	ntinued on ne	xt page)		•		
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TABLE A-2 (continued)

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	TOTAL NONACRICULTURAL WACE AND SALARY	MANUF	LCTURING YMENT	METALW EMPLO	/ORKING ⁸ YMENT		
	EMPLOYMENT		Change from		Change from	CLASSIFI	CATION
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
Pennsylvania (cont.):							
Harrisburg	-5.6	30.6	-11.2	12.4	-25.9	III	Π
Iohnstown	-12.4	22.8	-17.8	15.6	23.9	IV-B	N
Lancaster	2.8	42.4	-4.2	13.0	-3.0	III	Π
Philadelphia	-4.0	578.7	-11.3	245.1	-14.9	IV-A	Ξ
Pittsburgh	<i>L</i> .7	329.8	-12.1	244.1	-13.5	IV-A	Η
Reading	6.7	48.4	-11.2	19.4	-15.3	IV-A	Η
Scranton	-5.9	30.1	-4.1	7.4	+2.1	IV-B	2
Wilkes-Barre-Hazleton	-9.5	33.9	-11.9	3.8	-27.4	IV-B	N
York	-3.3	46.0	-5.0	18.3	-5.9	III	Π
Rhode Island: Providence	-9.0	129.7		31.7	20.8	IV-B	Ŋ
South Carolina:	18.0	5 50	17.A	60	105	111	·H
Anken-Augusta Charleston		15.6	-10.6	7.8	-14.8	II	Ξ
Greenville	-3.0	28.0	-6.8	1.4	-15.6	III	Η
Tennessee:	В 1	0.04	00	191	14.3	IV.A	ш
Vilatianoga Knowijila	+31	43.6	-2.6	8.8	7.6	N-VI	IE
Memphis	-32	42.2	-6.1	5.9	-3.3	H	Ξ
Nashville	2.9	33.8	-10.2	6.0	-33.1	III	III
	(00	ontinued on n	ext page)				

TABLE A-2 (continued)

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			:				
	TOTAL NONAGRUCULTURAL WAGE AND SALARY	MANUFA EMPLO	CTURING	METALW EMPLO	'ORKING ^a Yment		
	EMPLOYMENT		Change from		Change from	CLASSIFI	CATION
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
Texas:							
Austin	+1.9	3.9	+1.8	0.3	+14.9	III	H
Beaumont–Port Arthur	-1.8	26.2	-1.0	3.8	-3.7	H	Ħ
Corpus Christi	-0.3	1.7	+6.5	1.1	+13.1	Ξ	Ξ
Dallas	-0.2	73.6	-0.3	36.3	+1.6	п	п
El. Paso	+2.2	10.4	+3.3	2.1	-5.1	H	Ħ
Fort Worth	+0.9	51.9	-0.6	30.8	-0.2	III	H
Houston	-0.5	78.8	-5.1	30.8	-11.0	111	
San Antonio	-6.9	18.9	-4.4	3.1	+1.8	IV-A	III
Utah: Salt Lake City	-1.2	16.0	-1.7	6.0	+3.8	ш	Ш
Virginia: Usuntan Namot Name	Womich 2.0	180	У У	15.A	с 2	111	11
Norfolk-Portsmouth	-3.5 -3.5	29.8	-8.7	17.4	-10.6	E	I
Richmond	-1.9	35.4	-5.1	3.3	+6.5	п	Ħ
Roanoke	-3.4	12.5	-9.7	1.9	-10.7	Ħ	H
Washington:							
Seattle	+3.0	79.5	+13.8	53.2	+24.5	H	H
Spokane	-5.9	13.3	-9.5	5.9	-12.4	H	H
Tacoma	-4.4	17.0	-6.6	3.7	-8.0	IV-A	N
	(00	ontinued on ne	ext page)				

TABLE A-2 (continued)

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	TA	BLE A-2 (c	ontinued)				
	TOTAL NONAGRICULTURAL WAGE AND SALARY	MANUF EMPL	ACTURING DYMENT -	METALW EMPLO	'ORKING ^a YMENT		
	EMPLOYMENT		Change from		Change from	CLASSIFIC	ATIONU
STATE AND AREA	Change from May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	May 1954 (thousands)	May 1953 (per cent)	July 1954	July 1953
West Virginia: Charleston	-7.4	25.8	-8.2	3.9		V-A	H
Huntington-Ashland	-7.0	23.8	-11.9	10.4	-16.9	IV-A	III
Wheeling-Steubenville	-5.4	53.0	-6.4	34.1	-7.8	IV-A	Η
Wisconsin							
Kenosha	26.8	13.2	-34.0	8.4	-41.0	IV-B	Ξ
Madison	+0.4	13.3	6.6	4.1	-4.6	Π	Π
Milwaukee	-5.0	184.5	-11.0	121.4		III	П
Racine	9.3	21.5		15.9	-17.6	IV-A	III
^a Metalworking industries industrial groups covered by tion Manual (Bureau of the nance; primary metal indu machinery (except electrical and supplies; transportation ^b Area classifications accor labor supply are assigned by according to uniformly appli market information submitts security agencies. While sew the extent of unemployment in determining the appropri	tre defined to include the for the Standard Industrial Cle Budget, November 1945) is Budget, November 1945) stries; fabricated metal pr is electrical machinery, equi equipment. ding to relative adequacy of the Bureau of Employment S ed criteria and are based of ed by affiliated state emplo- sral factors are taken into a in a particular area is a key ate classification assigned t	Ilowing assifica- t: Ord- t: Ord- oducts; ipment, ipment, of local becurity or labor oyment ccount, factor to each	locality. Unempless of total lah labor force, Gr Group IV-A	iloyment criter our force, Grou our III—3 to b to 12 per of ent or more of elassification ca instituted with nown to avoid nown to avoid au of Employ at's received j	ia are: Group up II-1.5 to (6 per cent of tent of total l total labor for tegory into tw the May 1954 disclosing fig ment Security from affiliated	I—1.5 per 3 per cent of f total labor abor force, ce. The divi- ce. The divi- ce. The divi- ce the divi- ce the divi- ce the divi- ce to the t labor mark t labor mark t labor mark t labor mark t labor mark t empl	cent or f cont or force, Group (IV-A (IV-A et area et area lividual regular oyment

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COMMENT

E. J. EBERLING, Vanderbilt University

The unemployment insurance system in the United States has been a primary contributor to the development of employment and unemployment data by industry and locality, as is evident from the paper presented by Louis Levine. With respect to information about employment, it might be pointed out that state "covered" employment data are used as bench marks for the development of current monthly estimates of nonagricultural employment for classified labor market areas, for the states, and for the nation as a whole.¹ This series which is sponsored jointly by the Bureau of Labor Statistics, the Bureau of Employment Security, and affiliated state employment security agencies is of considerable value in the preparation of total unemployment estimates by industry and locality.

Interest in the current measures of both employment and unemployment increased greatly during the early months of 1954 as economic activity slackened and unemployment levels rose sharply in certain areas of the country. Since the monthly unemployment estimates prepared by the Bureau of the Census (Monthly Report on the Labor Force) do not provide such information for the states or local labor market areas and make available only limited data by industry, it was not possible by using this series to identify the local areas most severely affected by the rising unemployment nor to measure its extent by area in terms of either total volume or industries affected. Furthermore, there was some evidence during 1953 that this series was not recording reliably the extent of the decline for the nation as a whole.

The question concerning the reliability of this series which arose in 1953 caused attention to be focused on area and industry estimates of unemployment as prepared by employment security agencies. The sharp impact of the cutback in government defense spending was immediately reflected in a rising volume of unemployment claims from workers laid off by industries which had incurred cancellation of contracts. The areas and industries thus affected were clearly identified by the nature and volume of the claims load. The extent of this increase in unemployment was also clearly indicated in the national aggregates. Corroborating evidence of the nature and extent of this decline was reflected in the monthly estimates of nonagricultural employment prepared under the current employment statistics program mentioned above.

¹ See Ernest J. Eberling and Charles S. Bullock, Jr., "Employment Statistics and Manpower," Industrial and Labor Relations Review, January 1952.

Efforts to reconcile the trends and levels of unemployment as recorded by the census data series and the employment security data resulted in considerable controversy and also confusion. It is, of course, well known that controversy and discussion concerning the nature and validity of unemployment estimates always intensifies during a period of economic slump.

A number of significant developments occurred as a result of the increased attention given to unemployment estimates:

1. A Committee for Review of Labor Force Concepts was established by the Office of Statistical Standards of the Bureau of the Budget to review the definitions of employment and unemployment used by governmental agencies, to investigate the methods of presentation and interpretation, and to point up gaps in the data.

2. The Bureau of Employment Security set up a Work Committee on Unemployment Estimates and Related Problems.

3. The Committee on Research and Reporting of the Interstate Conference of Employment Security Agencies made an excellent report on employment and unemployment estimates, pointing out reasons for major discrepancies between the census estimates and the insured unemployment data and presenting recommendations for improvement of the latter estimates.²

4. The confusion resulting from the conflicting data on unemployment released by the federal agencies led to the institution of a joint release by the Departments of Labor and Commerce each month on employment and unemployment.³

There are several facts which stand out in appraising the importance and value of the current total unemployment estimates prepared by employment security agencies for localities by industry:

1. They are the only data available which indicate unemployment levels and trends by area.

2. They have as their base unemployment as indicated by persons filing claims for benefits. In spite of differences in laws and administrative procedures, claims data reflect accurately the level and trends of unemployment within the limits of the coverage of the unemployment insurance program in each state. Generally, this component represents 50 to 70 per cent of the total unemployment in a state. Even more important is the fact that the coverage of this component is very close to 100 per cent of the segment of employment in which an economic change usually first becomes manifest, namely, manufacturing.

² See Report of the Second Meeting of the Committee on Research and Reporting, July 13-15, 1954, Chap. IV.

³ "Combined Employment and Unemployment Release," Depts. of Commerce and Labor.

One factor which should not be overlooked with respect to claims data is that they are available on a week-to-week basis. There is no other series in the country that gives an indication as immediate as this of changes in the volume of unemployment. In addition, claims data can be classified by industry, sex, area, and many other characteristics.

3. Unemployment insurance statistics [of unemployment] are largely cost free since they are by-products of the operation of the UI system. Hence, it is possible to expand at a low cost unemployment estimates based upon UI data. Further, the day-to-day contact of the system with claimants and other unemployed workers makes possible a wide variety of special studies on unemployment at low cost and with little inconvenience to the worker.

As pointed out in Levine's paper, total unemployment estimates for a given labor market area begin with the solid core of "insured unemployed," that is, the number of covered workers claiming unemployment insurance benefits who are totally unemployed in a given week. Data supplied by the Railroad Retirement Board on the number of unemployed railroad workers are added to this figure. So far, there are no particular difficulties in compiling the estimates.

Insured unemployment data exclude several classes of workers, however, whose unemployment is properly related to the UI program. One class includes workers from covered industries who file initial claims (notice of separation from their jobs), but who for various reasons may wait to file their claims until after a week or more of total unemployment has elapsed. The proportion who do this can be fairly well determined from the claims determinations made by the agency (comparison of date of separation with date of filing claim). Hence, estimates of unemployment among this group are made by the agency and added to the base figure of insured unemployment.

A much more difficult problem of estimating is presented by a second class of unemployed, namely, those claimants who have exhausted their benefits. The number of such claimants and the length of their unemployment after exhausting their benefit rights will vary with unemployment levels. At present the UI agencies make adjustments for this group based upon such sample studies as they have made from time to time. Actually, in many cases, such adjustments may be quite arbitrary and based upon inadequate information. This is an area which needs considerable study of ways and means to improve the quality of the estimates.

Finally, there is a third group of claimants for which estimates have to be made. It includes claimants who have been disqualified from receiving benefits and workers who are eligible but fail to apply for

benefits. Here, too, information so far developed is fragmentary and arbitrary adjustments are made.

Insured unemployment plus the adjustments for these three latter groups comprise what is termed "unemployment related to unemployment insurance covered employment." The ratio of total UI unemployment to total UI covered employment is then obtained. This unemployment rate may be further refined by the development of separate industry rates. In any event, this rate (or rates) constitutes the key to the further development of the estimates to include an additional group, namely, "unemployment related to noncovered employment." This group is divided into two subdivisions: (1) unemployment from noncovered establishments in covered industries, and (2) unemployment from noncovered industries.

For this first subgroup, it is assumed that the unemployment rates will be similar to those obtained for the covered establishments by the procedures outlined above. Hence, the "UI covered unemployment rate" is applied to the *current employment* for each industry and a total unemployment figure is thus obtained for all unemployment from both covered and noncovered establishments in covered industries.⁴

The second subgroup, the unemployed in noncovered industries, includes agricultural wage and salaried workers, domestics, government workers, and unpaid family workers. Current employment data are not compiled for this group with the exception of government workers. Hence, estimates of unemployment relating to this group must be based on arbitrary assumptions such as carrying forward the figures on employment for agricultural workers, domestics, etc. as constants from the 1950 census. The UI covered unemployment rate is then applied (with some adjustments in certain cases) to these estimated employment figures; that is, for example, the unemployment rate for agricultural wage and salaried workers is assumed to be the same as that for UI covered nonagricultural wage and salaried workers. This assumption is based, as Levine points out, on an analysis of the Census Bureau's Monthly Report on the Labor Force showing unemployment rates by industry. Of course, this assumption when applied to a given local area may be wide of the mark. Seasonal differences, weather, and a number of factors could cause a wide variation from the results obtained under this assumption. Indeed, since the total number of agricultural wage and salaried workers is not accurately known to begin with, the chances of error in this segment of the unemployment are greatly increased. The

[•] Current employment estimates are obtained for all non-agricultural workers except domestic, self-employed, and unpaid family workers, from the Bureau of Labor Statistics-State Employment Security Program of "Current Employment Statistics" (see p. I).

same point could be made with respect to the other groups in this category. With respect to the effects of errors in estimating unemployment for agricultural workers, it should be emphasized that since total unemployment estimates are prepared for the most part for local areas which are quite highly industrialized, the segment of the estimates relating to agricultural unemployment would ordinarily be relatively small.

But as Levine indicates, even greater difficulties are encountered in making unemployment estimates for the final group which must be included before it can be assumed that total unemployment in an area has been accounted for. This is the group known as unemployed new entrants and re-entrants, that is, those individuals whose current spell of unemployment was not preceded by employment. Information about this group is very limited. Based on data developed from the Monthly Report on the Labor Force, monthly rates for unemployed entrants related to the civilian labor force and to the total of all other unemployed have been developed. These rates, however, were developed on the basis of national data and hence may or may not apply to local area situations.

In summary then, total unemployment estimates for local areas as developed by state employment security agencies have as their base "insured unemployment" data. As indicated previously, there can be little doubt about the reliability of this series. Then too, since insured unemployment will include upwards of 50 per cent or more of total unemployment and nearly 100 per cent of manufacturing employment, this series provides a reliable picture of unemployment trends and a sound base from which to develop total unemployment estimates. When, however, these data are expanded to include all unemployment related to covered employment, it is necessary to make adjustments which are at times quite arbitrary and which are subject to considerable chance of error.

Moreover, when it becomes necessary to make estimates for the unemployment not covered by the program, even wider margins of error can creep into the data. The Bureau of Employment Security and state technicians have been working for over a decade on the problems involved in preparing reliable total unemployment estimates by area. One advantage inherent in the preparation of these estimates is that they are made at the local and state level and, therefore, are susceptible of some validation through the application of supplemental data and judgment factors derived from local data. This is not possible for estimates made at the national level. The recent action of Congress in providing for coverage of federal civilian employees and for all establishments in covered industries having four or more employees

will certainly aid in improving the quality of local unemployment estimates.

There is general agreement among technicians in this field that much remains to be done by way of exploration and study of means of improving these estimates of total unemployment. In this connection, the conclusions of the Research and Reporting Committee of the Interstate Conference of Employment Security Agencies are in point:

"A cooperative Bureau of the Census-Bureau of Employment Security-State Employment Security Agencies experiment should be set up to develop improved techniques for estimating total unemployment from unemployment insurance claims. This experiment would provide for detailed studies of new entrant and re-entrant unemployment, unemployment among persons having exhausted their unemployment insurance and unemployment among various groups not covered by unemployment insurance. These studies would be aimed at providing information on the variation in these factors by geographical area and under differing economic conditions."⁵

Levine's paper gives an excellent account of the development of techniques for preparing estimates of total unemployment by area and industry. Much of this development has been in the nature of a pioneering effort. In spite of the weaknesses which still exist in the estimating procedures, the information developed under this program has been invaluable in the administration of employment security and in the solution of manpower problems. Through the development of manuals by the Bureau of Employment Security providing uniform estimating procedures, constant improvement is being made in the comparability. of these estimates-area by area and state by state. It is to be hoped that the widespread interest and attention now being given to the problem of unemployment estimating by government agencies and private organizations will lead to intensified efforts on the part of technicians, both in government and in universities to study the various aspects of this problem thoroughly. Unemployment estimates developed from employment security data constitute a research frontier where much further refinement and improvement of the data should be expected in the next few years. The work of the Universities-National Bureau Committee for Economic Research is a most constructive step in this direction.

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It is significant to note the difference in the problems which face economists and statisticians concerned with the measurement of un-

⁵ Op.cit., p. 9.

employment now, in 1954, with those they faced twenty years ago. Then our major concern was with the paucity of statistical data. Estimates of unemployment were derived from other data and the results often varied widely. Since unemployment then, as now, was a political issue as well as an economic and statistical problem, organizations which had a political interest in the problem produced their own estimate and published the results. Thus, the A.F. of L., the C.I.O., and the National Industrial Conference Board, among others, provided monthly unemployment estimates. The Communist party found these estimates of the number of jobless too conservative and published its own series, invariably indicating far more unemployment than that estimated by the labor organizations, the Conference Board, or the Bureau of Labor Statistics. Even private persons, like Robert R. Nathan, provided a monthly series on the number of jobless.

It is well to remember how woefully inadequate our data on employment and unemployment really were only a short two decades ago. And it was on the basis of such data that we built our plans for public works and unemployment relief and carried on the vigorous controversies on public policy in dealing with the depression.

Reference to this brief historical note should allay our concern with the controversies concerning measurement of unemployment today. We now seem to be disturbed with the fact that we have too much data. We dispute the details of the sampling procedure and we question the value of industry and area data. Our shortcomings in measurement of unemployment today are far less important than was the case a decade or two decades ago. Phenomenal progress has been made. Vast areas of knowledge about our labor force have been illuminated.

The papers on unemployment by industry and locality prepared by David L. Kaplan and Louis Levine emphasize both the limitations and the contributions of such information. National data such as are provided by the decennial census and the monthly changes in the labor force are not adequate for many purposes. Such data do not even describe the true character of the national problem. To comprehend that, we need more detailed information on unemployment by industry and locality. National figures often hide dramatic changes that can only be ascertained by industry and area analysis. Both papers show the wide variations that often exist between industries and localities. I am impressed by Kaplan's emphasis on the limitations of industry data and that he considers it useful only as a general descriptive measure of one aspect of unemployment. His data on mobility and on the proportion of an industry's employees who get their next job in an industry other than the one they just left are useful in emphasizing

that the absorption of the unemployed depends upon the general health of the economy rather than on the health of a particular industry.

Levine's paper calls special attention to the particular problems of labor market administration. The employment security program of the states and the federal government requires the current availability of employment and unemployment information applicable to a particular labor market area. Such data are essential to the efficient administration of the unemployment insurance and employment service in each locality. Industry data on a national basis or unemployment in aggregate national terms provide only the roughest approximation of the situation in a particular state or area. Such national totals do not expose islands of local unemployment. The variations among localities are not reflected in average figures or national totals. Area data is therefore indispensable for local administration for determining staffing and budget needs.

In addition, much labor market information is a by-product of the employment security operations. Claims for unemployment insurance, exhaustion ratios, employment service registrations, and placement these measures, while covering but a segment of the local labor force, throw considerable light on the nature of the local unemployment. As Levine indicates, fuller coverage under the unemployment insurance program would provide more comprehensive measures of employment and unemployment and this will in time be achieved.

Even if limited, however, area labor market data is indispensable to the administrators of employment security and provides a necessary addition to the national data derived from the sample methods now employed. While such data may be less valuable for economic analysis, they are indispensable for short-run decisions and local and state planning. Every effort to refine and improve the area data must be made, for even the most accurate national estimates are often inadequate for local purposes.