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ABSTRACT

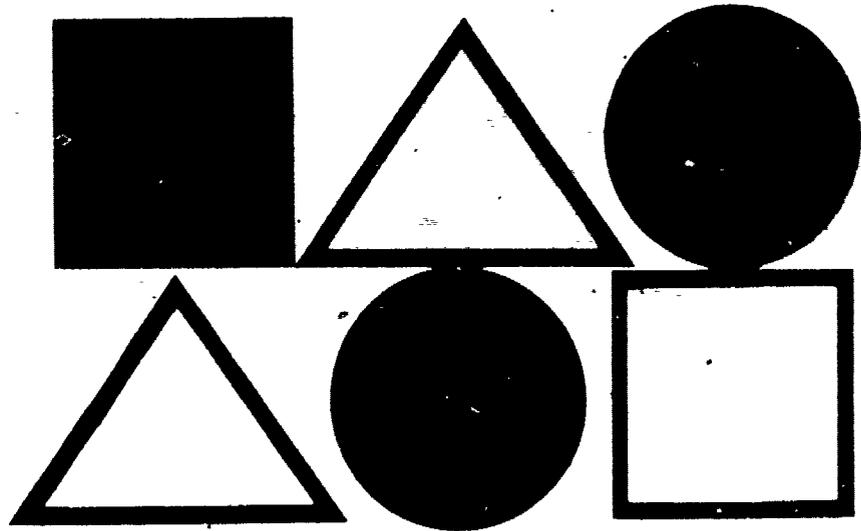
This handbook is the first of two volumes designed to assist manpower planners in the use of data from the 1970 Decennial Census of Population and Housing. Intended to facilitate data gathering, improve the quality of analysis, and provide suggestions for identifying community needs, the handbook attempts to break down the mass of available census data into usable patterns. Information on population by race, ethnic group, sex, and age, selected target groups, educational attainment, employment status, income level, and occupational are provided in simple tables. A minimum data table gives the planner most of the information necessary to begin area comparisons. The "Manpower Indicators" section of the handbook contains several suggested tabulations which include national figures as well as sources for state figures. Other aids to the use of the census data are included with a comment sheet for feedback from users of the handbook. (KH)

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census use study

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# handbook for manpower planners



part 1

U.S. DEPARTMENT OF LABOR  
Manpower Administration

U.S. DEPARTMENT OF COMMERCE  
Social and Economic Statistics Administration  
BUREAU OF THE CENSUS

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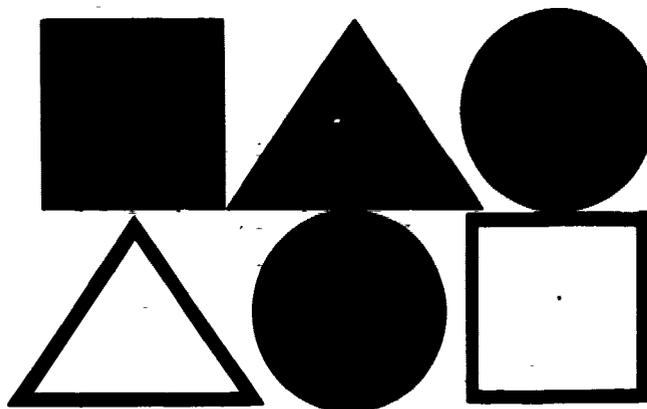
**introductory rhetoric** 

**bare necessities** 

**manpower indicators** 

**added attractions** 

# handbook for manpower planners



**part 1**

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**introductory rhetoric**



## INTRODUCTION

This HANDBOOK is the first of two volumes designed to assist manpower planners in the use of data from the 1970 Decennial Census of Population and Housing in the manpower planning process. Part I of the HANDBOOK is a companion to the "Summary Manpower Indicators" package published by the Manpower Administration Region IX and Lawrence Berkeley Laboratory. These Indicator packages have been distributed for use in the preparation of 1974 Comprehensive Manpower Plans. Part II of the HANDBOOK, scheduled for publication in time for the 1975 planning cycle, will be a more comprehensive and detailed exposition of data available for manpower planning.

The Region IX project will produce several manpower data packages which are tailored to the specific informational needs of individuals in the manpower field. The Census Use Study's HANDBOOKS are intended to provide technical assistance to users of the manpower data packages.

There is a plethora of Census documents available - more than any one person would ever care to read. Why publish an additional explanation of the Census? The point is well taken, but the HANDBOOK is itself a tool - not just an explanation of the Census. The 1970 Decennial Census of Population and Housing has fostered major innovations in information technology and has introduced new concepts, formulations, potentials and

limitations in its applications. The Census can be a valuable tool if used correctly; but like any new tool, it ought to be accompanied by directions which describe and facilitate its use.

Because their job is so complex, planners especially have difficulty keeping pace with new advances in technology. As the rate of growth of technology increases, so does the time lag between the development of the technology and its applications as a working tool. The complexity of the planner's task also introduces the possibility of error in both financial and social terms. By increasing the amount of information relating to any problem and by assisting in the valid interpretation and analysis of that information, the probability that error may occur is diminished.

Since 1966, the Census Use Study has directed its activities toward accommodating the needs of Census users. By developing tools for assessing the 1970 Census and by explaining its intricacies and mysteries to the unwary, the Census Use Study has facilitated the flow of information from the Census Bureau to the user. This HANDBOOK is part of that effort. It has been compiled with the assistance of manpower planners representing local, state, regional and Federal levels. It is hoped that its use will shorten the time lag between the design of a planning tool - in this case the Region IX Manpower Packages - and its adoption by manpower planners.

## PLANNERS AND PLANNING AND PLANS AND PLANNERS AND PLANNING AND PLANS AND PLANNERS

Because of their close association with Mayors and Governors and because their work involves most components of the social service delivery system, manpower planners are often relied upon to make recommendations for human resources development planning. This kind of comprehensive planning is a relatively primitive activity at both State and municipal levels. Where it is evident, the efforts in all probability began with Department of Labor Cooperative Area Manpower Planning System (CAMPS) grants. The evolution of CAMPS has yielded valuable information about interagency structures and relationships, much of which is transferrable to human resources planning. Thus any improvement in manpower planning can be regarded as having broad implications for the development and implementation of human resources policy.

The methods of analysis, resource materials and the data base discusses in this HANDBOOK are applicable to human resources planning. The manpower planners who participated in the preparation of this document were insistent that the material in it be presented as part of a decision-making process within a broad policy context. Local officials who have been reluctant to address human resources policy will find that Revenue Sharing not only forces them to influence agency priorities and programs, but also encourages them to develop expertise in functional planning and programming, the kind of activities in which manpower planners are experienced.

Increasing media coverage of local government activities is allowing the public to scrutinize the decision making process of elected officials. Because of this scrutiny, the likelihood of decisions being made arbitrarily is reduced, and the need for good information as a basis for decision making is increased. Politically awkward decisions especially must have a factual basis. Citizens groups, civic organizations, political parties, and lobby groups are also asking for more information about local situations. The need for more and better statistics will continue to grow - manpower planners who have some experience in the area of information technology will be in a position to share their knowledge and experience with others as the field continues to expand and as the demand for information increases.

Some of the information already available to the city practitioner can provide the facts necessary for the development of human resources policy. The required information is the kind that reveals the interrelatedness of components of the social system - the kind of information gathered by manpower planners. Specific programs, priorities and policies should not be adopted on their merit alone but should be accepted or rejected as they relate to the requirements of the total system. The concept of interrelatedness or the systems approach to problem solving, although far from new, is revolutionary when implemented because it tears away the layers of cliché thinking, prejudice and emotional response that tend to cloud reality. A human resources policy without the necessary

underpinnings - data, statistical expertise, knowledge of social science and management, associated software and hardware - is nothing but an exercise in futility. The information or data component of the manpower planning process has been the target of much criticism, most of it justified and most of it coming from manpower planners themselves. Previously, in the preparation of comprehensive plans, unavailable or non-existent data were required, and data that did exist was manipulated or massaged to fit both local and national needs. The diverse statistical and research skills possessed by manpower planners and the scarcities and deficiencies in available data both gave validity to this criticism, but the real culprit was technology. The fact of the matter is that information technology, even 5 years ago, was not adequate to accommodate manpower planning needs.

Not all the problems associated with the data requirements of manpower planners can be solved but most of them are at least beginning to be resolved. Manpower programs were designed to serve people, and the planning process requires that a determination be made of which people are to be served. Until quite recently there has been no practical method of determining whether or not individuals enrolled in manpower programs were actually those requiring manpower services. Now, through the use of data from the 1970 Decennial Census of Population and Housing (along with some of the tools developed concomitantly) this determination can be made. Additionally, there is now a method available for determining the geographic distribution of manpower program enrollees and linking them

to descriptive base line data to determine (among other things) the geographic distribution of manpower services. This is important because as manpower planning becomes more sophisticated, the process itself forces an equitable distribution of resources among competing geographic areas as well as equal access to manpower services. Ultimately, an analysis of the need for manpower services must be based on small geographic areas such as census tracts. Now information technology makes that analysis possible.

The Manpower Administration has recognized the need for improved data and has enlisted the help of the Census Bureau in providing adequate data, in undertaking research in labor market information systems, and in utilizing local data files for up dating manpower information in intercensal years. The first project for improving the data base was the acquisition, display, and distribution of Census data in the Manpower Indicators packages produced by Region IX.

The data problem was further addressed by the Manpower Administration in the preparation of the 1974 planning guidelines which were coordinated with the Region IX Indicator packages. An effort was made to insure that each element required in the 1974 Comprehensive Manpower Plans have integrity and consistency with all other elements; 1974 guidelines were thus developed in concert with the development of a planning process model. The group that developed the model was representative of every hierarchy, vantage point and vested interest in manpower planning. The

result of this interaction was a planning model which may be subject to several interpretations but which was flexible enough to accommodate the wide variation in local priorities.

The data requirements contained in the 1974 guidelines are much less stringent than those of previous years, and the amount of required data is substantially reduced. This is not to suggest that data has become less important in the planning process but, rather, to recognize the fact that data gathering does not constitute manpower planning. The planners who produced the model agreed that data collection and analysis ought to take place only within planning constraints which have definite goals and objectives. There was agreement that certain basic information is essential in order to begin to plan for alleviating labor market imbalances. The required data, Table I, represents the consensus of the group as to what minimum knowledge is necessary to begin establishing priorities or assessing needs. This minimum data ought to be supplemented with additional information as dictated by distinctive local labor market characteristics.

The HANDBOOK is designed for the user's convenience. The first section is addressed to minimum information requirements described in the 1974 planning guidelines.

MANPOWER INDICATORS is a guide to the Region IX Indicator package. The last part of the HANDBOOK presents several supplemental sources and information for the planner who needs to highlight local priorities.



**bare necessities**



## 1974 PLANNING GUIDELINES

The attachment to Interagency Cooperative Issuance (ICI) 74-1 describes the planning process in terms of essential steps, required analyses, and optional analytic tools. Two underlying assumptions guided its development: first, that manpower funds for 1974 will either be maintained at the present level or will be reduced; and second, that State and local officials will exercise more authority in allocating Federal funds to meet local needs.

Data gathering, analysis, and presentation are a small but essential part of the planning process. This HANDBOOK is intended to facilitate data gathering, improve the quality of analysis, and provide suggestions for identifying and clarifying community needs. The 1970 census contains sufficient multi-dimensional information on population and housing to be the basis for this activity. These data, however, can be complemented by information from other sources to form a nearly complete description of the supply portion of the labor market equation.

One of the problems associated with the 1970 census has been that there is so much information the analyst seldom finds what she wants and usually gets sidetracked into looking at other interesting tabulations that have nothing to do with the problem at hand. Our approach has been to try to enable the census user to break down the mass of available data into chunks that can form a suitable pattern or structure for use in manpower planning. The identification of extreme or unusual local condi-

tions presupposes gathering and tabulating certain minimum local data. The data required on Tables I and II of the Attachment to ICI 74-1 are that minimum data. All of the information required in these Tables can be found in the "Summary Manpower Indicators" package. For your convenience, we have listed appropriate Tables where the indicators can be found.

The minimum data table gives the planner most of the information necessary to begin area comparisons. The MANPOWER INDICATORS section of the HANDBOOK contains several suggested tabulations which include national figures as well as sources for State figures. Comparison is one way of identifying extreme or unusual conditions whether desirable or undesirable. Once an extreme condition has been identified, the next step is to determine which factors contribute to the condition. In most cases census data will be detailed and varied enough to make this determination.

An example might make this idea crystal clear. A manpower planner may know, without the benefit of data, that in her planning jurisdiction most of the unemployed persons are blacks and women. Census data can further refine this information enabling the planner to learn that a high percentage of the unemployed women have graduated from high school, while male high school graduates have a lower than average unemployment rate. Even this much information enables the planner to focus attention on sex discrimination, to plan training programs for women in non-traditional occupations, to encourage counselors and job developers to address barriers to employment associated with sex discrimination, or to develop affirmative action guidelines.

Census data could demonstrate that a high percentage of the unemployed blacks had not graduated from high school. In designing the program mix for this target group, the planner would include GED or remedial education.

Non-categorical programs especially require determinations of this kind. Part I of the HANDBOOK is intended to help planners begin this type of analysis and familiarize themselves with available information. Part II, which will be published in late 1973, will expand this approach after incorporating planners needs, desires, opinions and gripes obtained from Comments, Please and from Regional Seminars planned for Spring, 1973.

FIGURE 1 FACSIMILE OF TABLES 1 AND 2 OF  
THE ATTACHMENT TO ICI 74-1

<u>INDICATORS</u>	<u>SOURCE</u>
<b>TOTAL POPULATION</b>	Table 1
<b>AGE</b>	
Total, all ages	Table 2
10-15	} Table 2
16-17	
18-21	
22-44	
45-54	
55 and up	
<b>TOTAL LABOR FORCE 16 AND UP</b>	Table 6
Labor force participation rate	Table 6
Civilian labor force	Table 6
Employed	Table 6
Unemployed	Table 6
Unemployment rate	Table 6
Disabled	Table 7
Unemployment rate	Table 7
Not in labor force	Table 6
Inmate of institution	Table 6
Enrolled in school	Table 6
Other under 65 years	Table 6
Disabled or handicapped	Table 6
Able to work	Table 7
Other over 65 years	Table 6
Population 16-21, not in school, unemployed, and not in labor force	
High school graduates	Table 7
Percent of graduates, 16-21	Table 7
Non high school graduates	Table 7
Percent nongraduates, 16-21	Table 7
<b>EDUCATION</b>	
Population 25 and up with less than 8 years of education	Table 5
Percent	Table 5
Population 25 and up who are not high school graduates	Table 5
Percent	Table 5

<u>INDICATORS</u>	<u>SOURCE</u>
Population 25 and up with any college	Table 5
Percent	Table 5
Total men 16-64 with less than 3 years college completed	Table 5
Men 16-64 with vocational training	Table 5
Percent of males 16-64 with less than 3 years of college	Table 5
<b><u>INCOME LEVELS</u></b>	
Total families below poverty level (0.0-.99 of poverty level)	Table 13
Percent of all families	Table 13
Number with female head	Table 13
Percent of poverty families with public assistance income	Table 13
Percent of families with income less than 1.25 poverty level	Table 12
<b><u>SELECTED TARGET GROUPS</u></b>	
Vietnam veterans	Table 3
Percent of males 16 and up	Table 3
Persons employed 26 weeks or less during the year	Table 8
Males	Table 8
Females	Table 8
Recipients of public assistance income	Table 12
Families	Table 12
Unrelated individuals	Table 12



**manpower indicators**



## SUMMARY MANPOWER INDICATORS

This section of the HANDBOOK contains a Table by Table reference to "Summary Manpower Indicators," the data booklet produced by the Manpower Administration - Region IX and Lawrence Berkeley Laboratory. All the data in the Indicator package are from the 1970 Decennial Census of Population and Housing and are intended for use in manpower planning.

For each Table in the Indicator package there is a General Note which introduces the subject matter of the tabulation and explains its general use in manpower planning. There are also detailed notes on the particular idiosyncrasies of the data. The reference section contains definitions, technical considerations, suggestions for analysis and sources for additional data. Data are displayed graphically as well as in tabular form. Following the reference section, there are instructions on how to obtain additional Indicator packages.

Planners may wish to utilize data from sources other than the Census in preparing manpower plans. In synthesizing data from different sources it is necessary to compare definitions of terms, sample size and coverage, survey dates and methodology used in obtaining data. Making this determination often explains apparent contractions in data, delineates areas of compatibility for comparison purposes, increases the quality of the analysis and reduces the frustration of the planner.

## MINIMUM REFERENCE LIBRARY

A further reduction in frustration can be accomplished by assembling all reference material before you start preparing the plan. A minimum reference library would contain:

**Region IX - Lawrence Berkeley Laboratory Packages:**

"PEP Indicators"

"Summary Manpower Indicators"

**Census Bureau Publications for your Area:**

General Social and Economic Characteristics PC(1)-C

Detailed Characteristics PC(1)-D

Employment Profiles for Selected Low-Income Areas PHC(3)

(see ADDED ATTRACTIONS)

County Business Patterns CBP-71

**Census Maps:**

BLOCK STATISTICS REPORTS - HC(3) Metropolitan Maps

CENSUS TRACT REPORTS - PHC(1) Tract Outline Maps

**Other Manpower Documents:**

How the Government Measures Unemployment. U.S. Department of Labor, Bureau of Labor Statistics

Concepts and Methods Used in Manpower Statistics from the Current Population Survey. Report No. 313, Series P-23, No. 22. U.S. Department of Labor, Bureau of Labor Statistics

New Definitions for Employment and Unemployment. U.S. Department of Labor, Bureau of Labor Statistics (Reprinted from February 1967 Employment and Earnings and Monthly Report on the Labor Force)

Measuring Employment and Unemployment. President's Committee to Appraise Employment and Unemployment Statistics

Annual Manpower Planning Report (AMPR): State Employment Security Agencies

## TABLE 1

### POPULATION BY RACE, ETHNIC GROUP, SEX AND AGE

#### GENERAL NOTE

Table 1 contains two tabulations:

- population by race and ethnic group by sex including whole numbers and horizontal and vertical percentages
- population by age group by race including whole numbers and vertical percentages.

#### Use of Horizontal and Vertical Percentages

The horizontal and vertical percentages which appear throughout the Summary Indicators package facilitate use of the data and can be used as the basis for comparison or in making a statement emphatic.

- Comparison: Super City has 39% minority population compared with 18% for the State and 12.5% nationally.
- Emphasis: To know that there were 78,463 families with incomes below the poverty level is less meaningful than the knowledge that these 78,463 families comprised 60% of all the families in the area, or less than 1% of all the families in the area; or that 90% of these 78,463 families were Spanish American.

#### Ethnic Group

Data in Table 1 are derived from the 100-percent count (refers to data collected from every person and household) except for the Spanish American ethnic group data which was obtained from a sample count. The Spanish American data is presented independently of the race data since Spanish American persons may appear in the white, black, or other race

categories according to their response to the question on race. See the section explaining Spanish American in ADDED ATTRactions tabulations as they apply to your particular State.

#### Age

The statement "one half of the population of this area was below X Age" means that the figure given is the median age for the area. See Table 2 for age by sex.

#### 100% Count Data

Except for the figures on Spanish Americans, Table 1 presents 100-percent or "complete count" data. These data are more accurate than the data based on 20, 15, or 5-percent samples of the population (as are data in the other tables). As a result, when a difference is noticed between a figure in Table 1 and a figure in another table, the Table 1 figure should be used. For example, the count of white males (216,438) given in this table is more accurate than the figure of 217,123 found in Table 2.

Many of the 1970 census questions were asked of only samples of the population in order to reduce the burden on respondents and reduce collection and processing costs. The data collected on a sample basis were then inflated to represent the entire population, as reflected in most of the Summary Manpower tables. The sample statistics are highly reliable for cities and other large areas. In fact, statistics based on the 15-percent and 20-percent samples are routinely reported with confidence for census tracts and other small areas averaging only a few thousand in population.

TABLE 2

TOTAL POPULATION BY AGE, SEX, RACE AND ETHNIC GROUP

GENERAL NOTE

Table 2 contains age categories by sex and by race. Vertical percentages are calculated to correspond to the total.

Median Age

This statistic can be used to illustrate the relative youthfulness of persons in your area. An area with a large number of retirees relative to the total population can be expected to have a higher median age than the average.

Median Age <sup>1</sup>			
	Planning Area	State	U.S.A. <sup>2</sup>
Total Persons	Summary Indicators Table 2	PC(1)-C Table 48	28.1
<b>Males</b>			
Total			26.8
White			27.6
Black			21.0
Spanish American			20.1
<b>Females</b>			
Total			29.3
White			30.2
Black			23.7
Spanish American			21.2

<sup>1</sup> No counts or medians are presented for "other races." However, counts of "other races" persons could be determined by subtracting white and black from total population for each age group. Medians for male and female "other races" persons could then be calculated.

<sup>2</sup> Source: "General Social and Economic Characteristics", PC(1), U.S. Summary Table 85.

TABLE 3

SPANISH INDICATORS, ORIGIN OF FOREIGN STOCK,  
VETERAN STATUS AND MOBILITY BY RACE AND ETHNIC GROUP

GENERAL NOTE

Table 3 contains four separate sets of data which can provide much of the information necessary for identifying and assigning priorities among various target groups. Manpower program mix and the variety of support service programs ought to differ from locality to locality depending on the needs of the target groups, their differing barriers to employment and the demands of the economy.

Spanish Indicators

The four measures contained in the Spanish indicators table provide different approaches to the identification of this large ethnic minority group. All the measures should not be aggregated to determine the total Spanish American population for the following reasons: (1) there can be considerable overlap (example--persons of Puerto Rican birth who also report Spanish language); (2) only specific measures are used to identify Spanish American according to the State being tabulated (example--in Arizona only the Spanish language and Spanish surname measures are aggregated to derive the total Spanish American population); (3) the Spanish origin measure (a 5-percent sample count) cannot be aggregated with the other three measures (15-percent sample counts) because they were derived from different samples. The Spanish origin measure specifically asked

the respondent to identify himself as being Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish.

#### Foreign Stock

The foreign stock population includes persons in the United States of foreign or mixed parentage and the foreign born population. The foreign stock is classified by country of origin and is used to identify first and second generation immigrants.

#### Veteran Status

This table pertains to all males 16 years and over and classifies them by veteran/non-veteran status.

Vietnam veteran target group data are in this tabulation.

#### Mobility

This table is potentially one of the most interesting in the package in terms of analysis. High mobility ratios generally indicate an area that is undergoing economic expansion; however, within a given city a sub-area with high mobility rates will more likely indicate the presence of several social problems and economic decline. This table alone does not provide sufficient information for analysis but it does give some indication of the economic activity of your area. For more information on mobility see Summary Manpower Indicators, Appendix B page 8.

**PERCENT STABLE POPULATION INDICATOR**

**Step I**

Divide the number who live in the same house by  $\frac{\% \text{ stable}}{\text{population}}$   
all persons 5 years old and over in 1970

**Step II**

**Comparison: Stability Indicator**

Your Planning Area	Summary Manpower Indicators Table 3
Your State	PC(1)-C Table 45
U.S.A.	52%

TABLE 4

LIVING ARRANGEMENTS BY RACE AND ETHNIC GROUP

GENERAL NOTE

The first two tabulations in Table 4 together account for all persons in the area. The logic used is that persons reside either in households or in group quarters.

Five principal positions or relationships within households are recognized in the "Persons in Households" portion of Table 4: head of household, wife of head, child of head, other relative of head, and nonrelative of head. Head of household is subdivided into two main categories:

Family head - a household head living with one or more persons related to him by blood, marriage or adoption.

Primary individual - a household head living alone or with nonrelatives only.

More information on household relationships can be found in Appendix B, page 12 of Summary Manpower Indicators.

TABLE 5

EDUCATIONAL ATTAINMENT AND SCHOOL ENROLLMENT OF PERSONS  
BY AGE AND VOCATIONAL TRAINING AND MEN 16-64 YEARS OLD BY  
RACE AND ETHNIC GROUP

GENERAL NOTE

Table 5 contains information about the educational attainment of the population. The level of educational attainment is one of the major reflectors of an overall quality of life. Where the level of education is low, there tend also to be other dysfunctional social concomitants such as inadequate income, unemployment, unskilled labor force, dependency, and social disorganization. Manpower planners can compare levels of educational attainment for sub-areas in their jurisdiction to help isolate geographic target areas. Note that Summary Indicator packages can be obtained for user specified small areas.

Since education and employment are closely related, analysis of the data contained in this table can be especially valuable to manpower planners. Research has shown that in most cases the higher the level of educational attainment the more likely a person is to be employed, however, some anomalies have been discovered. With respect to minorities, educational attainment is less influential when compared with exogenous factors such as discrimination. Abrupt shifts in demand, such as cut-backs in the space industries, can cause high rates of unemployment for highly educated professionals such as engineers.

### Vocational Training

Vocational training is defined as a formal learning program in a skill or trade and for census purposes includes formal high school training programs, armed forces and apprenticeship programs, business, nursing trade school and technical programs. Excluded are single courses, on-the-job training, training in company schools, correspondence training and armed forces basic training.

The data on Vocational Training are for men 16-64 only. There are no comparable data for women with vocational training; thus, these figures are only a partial representation of the total population with vocational training. Table 83 "General Social and Economic Characteristics" PC(1)-C has information on Vocational Training for both Males and Females. Tables 149 and 150 in "Detailed Characteristic" PC(1)-D have State level figures on vocational training.

If your area has higher levels of educational attainment than another area you would expect to find that your unemployment rate would be lower than that of the other area. If your unemployment rate turned out to be higher, you would have to search further for peculiar local conditions which may have caused the situation.

Suggested format for comparative analysis of educational attainment:

YEARS OF SCHOOL COMPLETED, PERSONS AGE 25 AND OVER AND 18-24 YEARS			
Educational Category	Your City	Your State	U.S.A.
% with less than 8 years	Manpower Indicators Table 5	PC(1)-C Table 46	15.5
% high school graduate	Table 5	"	52.3
% college graduate	Table 5	"	10.7
Median years completed	Table 5	"	12.1
Years of School Completed (18-24)			
% high school graduate	Table 5	PC(1)-D Table 147	66.5
% college graduate	Table 5	"	6.2

TABLE 6

EMPLOYMENT STATUS FOR PERSONS 16 YEARS AND OVER  
TOTAL, MALE AND FEMALE, BY RACE AND ETHNIC GROUP

GENERAL NOTE

Table 6 contains basic labor market information for persons 16 years and over by race and by sex. Definitions of these terms are fairly well established and are generally understood to have precise meaning.

Comparability or non-comparability of census data with data from other sources is very often a matter of definition. What follows is a list of census definitions for these terms. To determine whether or not the data are comparable, compare definitions.

Total Labor Force

All persons employed or unemployed including members of the Armed Forces. Note that labor force is not the same as work force.

Labor Force Participation Rate

This denotes the number of persons employed, unemployed or in the Armed Forces expressed as a percent of total persons 16 years and above.

Participation rates can be computed for any group of persons which is a sub-set of a larger group for any geographic area. For example:

CEP Area

$$\text{CEP area Female Participation Rate} = \frac{\text{CEP area female labor force}}{\text{CEP area total females 16 and over}}$$

COMPARISON OF PARTICIPATION RATES	
	Source
<b>Your City</b>  Participation Rate Unemployment Rate	Summary Indicators Table 6 Summary Indicators Table 6
<b>Your City CEP or Model City Area</b>  Participation Rate Unemployment Rate	Special Summary Indicator Tabulation
<b>Your State</b>  Participation Rate Unemployment Rate	Handbook: Manpower Indicators for State and Regional Comparison
<b>U.S.A.</b>  Participation Rate Unemployment Rate	58.2% 4.4%

### Civilian Labor Force

All persons employed or unemployed excluding members of the armed forces.

#### Employed

This concept denotes all persons 16 years old and over who were either at work or were with a job but not at work during the reference week. Excluded from the employed were volunteer workers and those who worked around the house.

#### Unemployed

This concept denotes all persons 16 and over who were not at work but had looked for work during the 4 weeks prior to the survey date and were available to accept a job, and persons not at work who were waiting to be called back from a job from which they had been laid off.

#### Unemployment Rate

All persons 16 years and above are classified as either in the labor force or not in the labor force. This set of data describes persons who are not working, laid off nor actively seeking work expressed as a percent of the labor force.

TABLE 7

EMPLOYMENT STATUS BY SCHOOL COMPLETION FOR 16-21 YEAR OLDS,  
AND BY DISABILITY STATUS FOR 16-64 YEAR OLDS, BY SEX,  
RACE AND ETHNIC GROUP

GENERAL NOTE

Table 7 contains data for several manpower target groups:

- 16-21 years unemployed or not in the labor force  
high school graduates  
non-high school graduates
- 16-64 not inmates and not enrolled in school  
disabled or handicapped unemployed  
not in the labor force, able to work

In analyzing the data, note that male and female totals must be aggregated to derive a total for both sexes.

Unemployed or Not in the Labor Force 16-21

This tabulation gives detailed information of the population of a youthful target group both with a high school education and with less than a high school education. Manpower youth program enrollment ought to be weighed against the data in this table.

Using these data the manpower planner knows that there are at least X number of 16-21 year olds who have not completed high school, who are not enrolled in school and who are unemployed. This figure provides a minimum dimension for youth manpower programming, and actual enrollment totals can be measured against this target. The high school graduates who were unemployed or not in the labor force form a second target group in

the area of youth programming.

These statistics have further utility. If the school board in your area reports the annual number of high school drop-outs, ratios derived from this table could be the basis for estimating an annual updated number of those youths who will require manpower services because they are unemployed. The same process could be used to estimate these target groups by race and by sex.

ESTIMATING UNEMPLOYED YOUTH IN NEED OF MANPOWER SERVICES	
<b>Step I</b>	
Unemployed males and females (16-21)	=
<hr/>	=
Unemployed and employed males and females (16-21)	% of High School non-graduates likely to be unemployed
<b>Step II</b>	
Annual number of High school dropouts X % computed in Step I	=
estimated unemployed youth in need of manpower services	

**EMPLOYMENT STATISTICS**

U.S. statistics on the employment status of "16-21 year olds not enrolled in school" are presented for males only in Table 88 of "General Social and Economic Characteristics" Report, PC(1)-C, U.S. Summary. The following statistics for the U.S. may be useful for comparison with State and local figures:

U.S. Statistics (Males Only)					
	Total	White	Negro	Other Races	Spanish American
Percent of all males 16-21 years who are not high school graduates	15.1	13.6	26.8	45.3	26.1
Percent of non-high school graduates who are unemployed or not in the labor force	37.8	34.3	50.3	47.6	35.8
Percent of high school graduates who are unemployed or not in labor force	17.4	16.0	28.0	25.9	20.6
<p>These percentages can also be calculated for States, using data from Table 51 of the PC(1)-C State reports. Table 7, Summary Manpower Indicators, gives local data.</p>					

Disabled or Handicapped 16-64

This tabulation refers to persons whose health or physical condition may hinder them in working or seeking a job. Disabled or handicapped persons who are unemployed comprise a target group for manpower planners.

Disability Statistics

Statistics on disability from Table 89 U.S. Summary Report "General Social and Economic Characteristics," PC(1)-C do not include figures on those "not disabled or handicapped" so it is not possible to calculate a labor force participation rate for that group.

The disability statistics presented in the PC(1)-C U.S. Summary Report permit compilation of only the following rates and percentages comparable to those in Table 7. Note that the figures are not broken down by sex.

U.S. Disabled or Handicapped					
	Total	White	Negro	Other Races	Spanish American
Labor force participation rate	47.8	49.2	39.4	45.7	46.0
Percent of those unable to work who have been disabled 6 months or more	94.1	94.1	94.1	91.2	89.9
Note: the <u>Summary Manpower</u> table incorrectly states "more than 6 months."					
Comparable State statistics can be derived from Table 52 of the PC(1)-C State reports.					

TABLE 8.

WEEKS WORKED IN 1969 FOR MALES AND FEMALES 16 YEARS  
AND OVER BY RACE AND ETHNIC GROUP

GENERAL NOTE

The data in Table 8 pertain to the number of weeks in 1969 during which a person did any work for pay or profit, or worked without pay on a family farm or in a family business. Weeks of active service in the Armed Forces are also included. These data are comparable with data from the 1960 census and are useful in estimating the number of full-time and part-time jobs in your area.

TABLE 9

EMPLOYED PERSONS 16 YEARS AND OVER BY OCCUPATION,  
TOTAL AND FEMALE, BY RACE AND ETHNIC GROUP

GENERAL NOTE

Each employed person is classified by the census in three ways: by occupation, by industry and by class of worker. This table classifies employed persons by occupation and is fairly complicated. The information is presented in percentages for both sexes and for females.

The approximate number of persons in any particular category (e.g., white female medical and health workers) can be determined by multiplying the figure at the top of the column (e.g., 81,495 white females) by the percent expressed as a decimal number. Also, figures for many of the categories can be found in tables of the PC(1)-C State reports. Tables 86, 93, and 99 present occupation data for places of 50,000 or more and certain other areas.

Male totals and percentages can be derived by several arithmetic calculations. However, if your area is an SMSA of 250,000 or more, you can find the same tabulation with greater detail for both sexes published in Detailed Characteristics (PC(1)-D) Table 172.

Asterisk

An asterisk (\*) following a tabulation item indicates that the item was derived by aggregating other data, some of which was withheld by the

Census Bureau to avoid disclosure of information about individuals. Any data or derived statistical measure (means, percentages) using such items will also be shown with an asterisk.

#### Asterisk Asterisk

The double asterisk means that this information is not available for women. It does not mean, for example, that there are no female engineers. It means that the census tabulated only male engineers for the fourth count summary tapes. Both male and female tabulations of occupation can be found in Table 170 Detailed Characteristics PC(1)-D.

#### Occupation Classification

Specific occupational groupings are listed in the Summary Manpower Indicators booklet, Appendix page 19. Census occupational classification are generally comparable with DOT (Dictionary of Occupational Titles) classifications with the exception of blue collar workers. The basic difference between census and DOT is that DOT is a job-defining scheme and census is a data collecting scheme.

- The 1970 Occupational data has limited comparability with data from other Census (See Appendix pp 4-5 - Summary Manpower Indicators) and with data from other sources.

The data can be used in constructing professional/clerical and other ratios for your area and for noting the extent of minority or female participation in occupations for the development of affirmative action base data.

### Low-Pay and Low-Status Occupations

The National average for this calculation is 13.3. This interesting statistic indicates what percentage of your labor force is employed in marginal jobs.

Manpower planners ought to be aware of the extent to which persons in their area are employed in these jobs because these persons are likely to become unemployed in the event of a slow-down or decline in economic activity. This is a potential manpower target group.

TABLE 10

EMPLOYED PERSONS 16 YEARS AND OVER BY INDUSTRY  
AND CLASS OF WORKER, TOTAL AND FEMALE, BY RACE

GENERAL NOTE

This Table has employment by industry and employment by class of worker data. Male employment totals can be derived by subtracting female employment from total employment.

Employed by Industry

The industry classification system developed for the census corresponds to the Standard Industrial Classification (SIC). However, census totals may differ from those obtained from establishments. One reason for this is that replies from household respondents may differ in detail and nature from those obtained from establishments. Other differences are caused by the geographic differences between residence and place of work, different dates of reference between surveys, dual job holders that may be counted in the reports of two establishments but counted in the census for only their major job, and differences in Public Administration government workers categories.

Because the data in all categories except services is generally comparable to data from other sources, trend analysis is possible. Employment by SIC code is available in U.S. Bureau of the Census, County Business Patterns, and the U.S. Bureau of the Census, Census of Manufacturers, as well as from State Departments of Employment Security.

### Employed by Class of Worker

Each employed person is classified by occupation, by industry and by class of worker. Class of worker is really a misnomer. The seven class of worker categories are really class or type of employer categories as follows:

- persons who worked for a private employer for wages, salaries, tips, etc.
- persons who worked for any unit of government; Federal, State or local.
- persons who worked for themselves in their own incorporated or unincorporated businesses.
- persons who worked unpaid for a relative.

The tabulation gives the best estimate of the extent of government employment, and some indication of under-employment in the last category.

TABLE 11

INCOME IN 1969 OF FAMILIES AND UNRELATED INDIVIDUALS  
14 YEARS AND OVER, BY RACE AND ETHNIC GROUP

GENERAL NOTE

The data presented in Table 11 is self-explanatory, and gives an indication of income differentials among minority groups as well as the vertical income structure of the planning area. 1970 income data is comparable to income data from earlier censuses. However, in some types of analysis dollar amounts will need to be adjusted to account for inflation.

In order to facilitate comparison of income levels for your area with income levels for your State and national averages, U.S. figures are provided in the following table.

USA: Mean and Median Income

	<u>Total</u>	<u>White</u>	<u>Black</u>	<u>Other races</u>	<u>Spanish American</u>
<b><u>FAMILIES</u></b>					
Median family income	\$ 9,590	\$ 9,961	\$6,067	NA	\$7,534
Mean family income	10,999	11,418	7,114	NA	8,578
<b><u>FAMILIES WITH FEMALE HEAD</u></b>					
Mean family income	6,263	6,871	4,396	NA	4,565
<b><u>UNRELATED INDIVIDUALS 14 YEARS AND OVER</u></b>					
Median income	2,489	2,568	1,936	NA	2,382
Mean income	3,889	4,028	2,895	NA	3,321
<b><u>FAMILIES AND UNRELATED INDIVIDUALS 14 YEARS AND OVER</u></b>					
Median income	7,699	8,110	4,654	NA	6,523
Mean income	9,097	9,477	5,833	NA	7,585

Source: Table 94, PC(1)-C U.S. Summary Report.

Comparable figures for States may be found in Table 57 of the "General Social and Economic Characteristics" PC(1)-C State reports.

TABLE 12

TYPE OF INCOME IN 1969 OF FAMILIES AND UNRELATED INDIVIDUALS  
14 YEARS OLD AND OVER, AND RATIO OF FAMILY INCOME TO POVERTY  
LEVEL BY RACE AND ETHNIC GROUP

GENERAL NOTE

The tabulations in Table 12 all relate to income sources and amounts and are tabulated by race.

Type of Income of Families and Unrelated Individuals

Since families and individuals may be tabulated in more than one category, it is not possible to compute percentages. For example, a particular family may have earnings as well as Social Security income.

Earnings

Earnings include wage and salary income, and farm and nonfarm self-employment income. Self-employment income is gross receipts minus business expenses.

Social Security

Payments to retired persons, and to dependents of deceased insured workers are included in this category.

Public Assistance Income

Included are payments from Federal, State and local public programs such as aid for dependent children, old age assistance, general assistance and aid to the blind or totally disabled.

### Other Income

Other income includes interest, dividends, veterans' payments, retirement payments, rental income, unemployment insurance benefits, workmen's compensation, private welfare payments, alimony or child support, and armed forces allotments. It excludes receipts from sale of personal property, capital gains, lump sum insurance, inheritance payments or payments in kind.

### Ratio of Family Income to Poverty Level

This tabulation is expressed as a percent of all families. The Social Security Administration's Poverty Index, upon which this tabulation is based, takes into account factors such as family size, number of children and amount of income. The poverty level is based on an "economy food plan" and the definition assumes that a family is classified as poor if its total income amounts to less than approximately three times the cost of the "economy" food plan. Appendix B, page 30 in the Indicator package presents a table of poverty level incomes. These data are interpreted as follows: X percent of the families in the area have incomes which are less than half (.50) of the poverty level. If the poverty level income for a family of 4 is \$4000, then the families in question have incomes less than \$2000.

No data comparable to this were collected in the 1960 census.

TABLE 13

SELECTED POVERTY INDICATORS FOR PERSONS, FAMILIES, AND UNRELATED  
INDIVIDUALS, 14 YEARS AND OVER BY RACE AND ETHNIC GROUP

GENERAL NOTE

Table 13 pertains to individuals and families with incomes below the poverty level. Additional data on income is contained in Detailed Characteristics (PC(1)-D). Note that individuals may be tabulated in more than 1 category. For example, a family may have social security income as well as earnings.

MEAN INCOME, ALL SOURCES

This is a dollar figure and it pertains to poverty families.

PERCENT WITH EARNINGS

This figure refers to the number of families, expressed as a percentage of all poverty families, who have at least one person who works and who also have an income below the poverty level.

In the tabulation Total Unrelated Individuals, the Percent with Earnings refers to persons not living in families who work and whose income is below the poverty level. These individuals can be defined as working poor and comprise a manpower target group.

**ESTIMATED NUMBER OF WORKING POOR**

<b>Total Number of Poverty Families</b>	<u>Table 13</u>
<b>% of Poverty Families with Earnings</b>	<u>Table 13</u>
<b>Compute Number of Poverty Families with Earnings (line 1 times line 2)</b>	_____
<b>Total Number of Poverty Unrelated Individuals</b>	<u>Table 13</u>
<b>Percent Number of Poverty Unrelated Individuals</b>	_____
<b>Compute Number of Poverty Individuals with Earnings (line 4 times line 5)</b>	_____
<b>Estimated Number of Working Poor (line 3 plus line 6)</b>	_____

**PUBLIC ASSISTANCE INCOME**

This includes cash receipts of payments made under the following public assistance programs: aid to families with dependent children, old age assistance, general assistance, aid to the blind and aid to the permanently and totally disabled.

TABLE 14

MEDIAN AND MEAN INCOME IN 1969 BY MAJOR OCCUPATIONAL  
GROUP OF MALES AND FEMALES 16 YEARS OLD AND OVER BY  
RACE AND ETHNIC GROUP

GENERAL NOTE

This table has complete data for males but only limited data for females and the only sets that can be compared are Operative and Total Labor force. Tables 175, 176, and 203 in Detailed Characteristics (PC(1)-D) contain more detailed data - however this published data is available only for states and SMSA's of 250,000 or more.

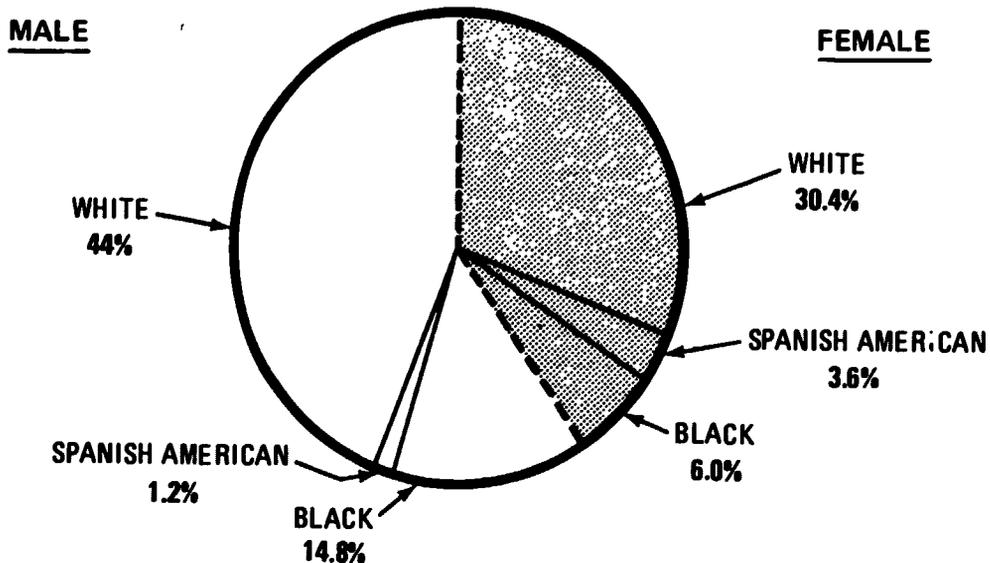
## GRAPHICS AND DATA DISPLAY

A common lament of users of census data is "What do I do with all these numbers?" How can you tell your Mayor that 17274 of 212695 workers are black and expect him to remember it 3 days later? Graphic displays of the data are easily constructed and, more important, easily understood by those who are not familiar with the data. It is an excellent method for illustrating the major concerns of manpower planners or for making a point particularly evident to decision makers. The figures on the following pages are some examples of graphics that are easily assembled.

The pie chart on the next page is a display of the information found in Table 6 of the Summary Manpower Indicators: Employment Status For Persons 16 Years and Over. The composition of the labor force in Super City by ethnic group and sex is extracted from the "total labor force" figures and converted to percents in the various categories. When this is compared to a similar graph showing the composition of the unemployed, a definite trend becomes apparent. (See Figure 3). Participation of minorities in the labor force and the characteristics of the unemployed are important issues. If, by chance, your area has a situation like the fictitious one displayed in these graphs, the message won't be missed. Similarly, these same statistics for the State and the U.S. can be charted for comparisons.

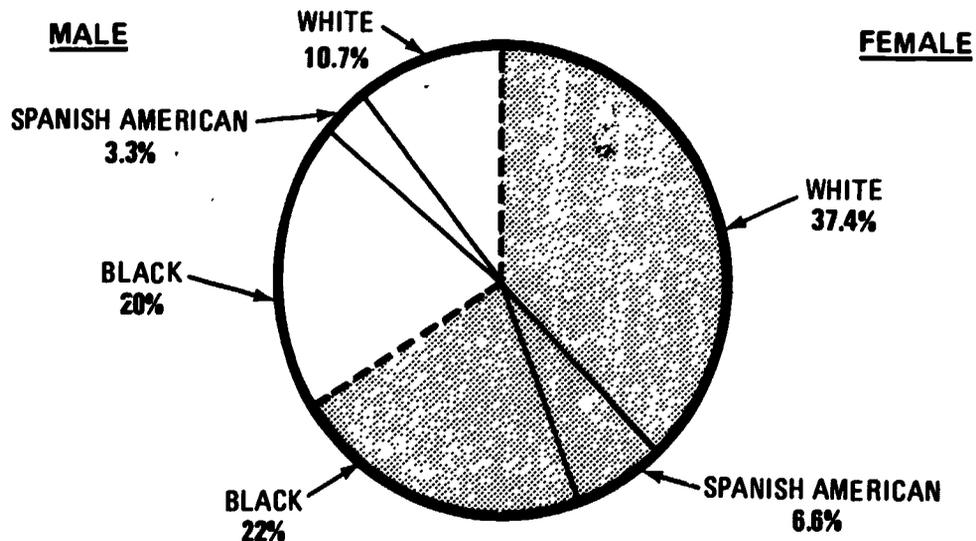
**Figure 2**  
**LABOR FORCE**  
**COMPOSITION BY RACE, ETHNIC GROUP AND SEX**

TOTAL	200,000	100%
MALE	120,000	60%
FEMALE	80,000	40%



**Figure 3**  
**THE UNEMPLOYED**  
**COMPOSITION BY RACE, ETHNIC GROUP AND SEX**

TOTAL	75,000	100%
MALE	25,000	34%
FEMALE	50,000	66%



**Figure 4**  
**LOW PAY/LOW STATUS OCCUPATIONS**

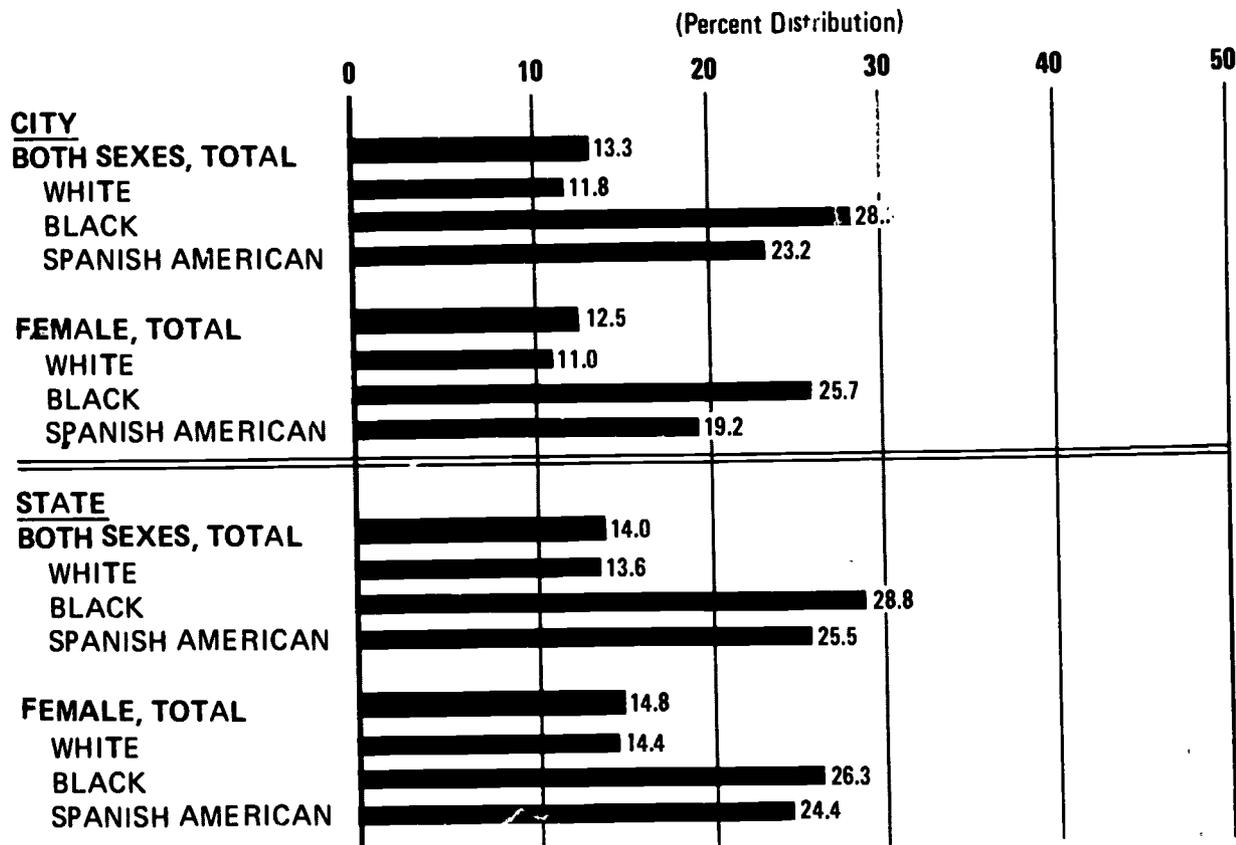
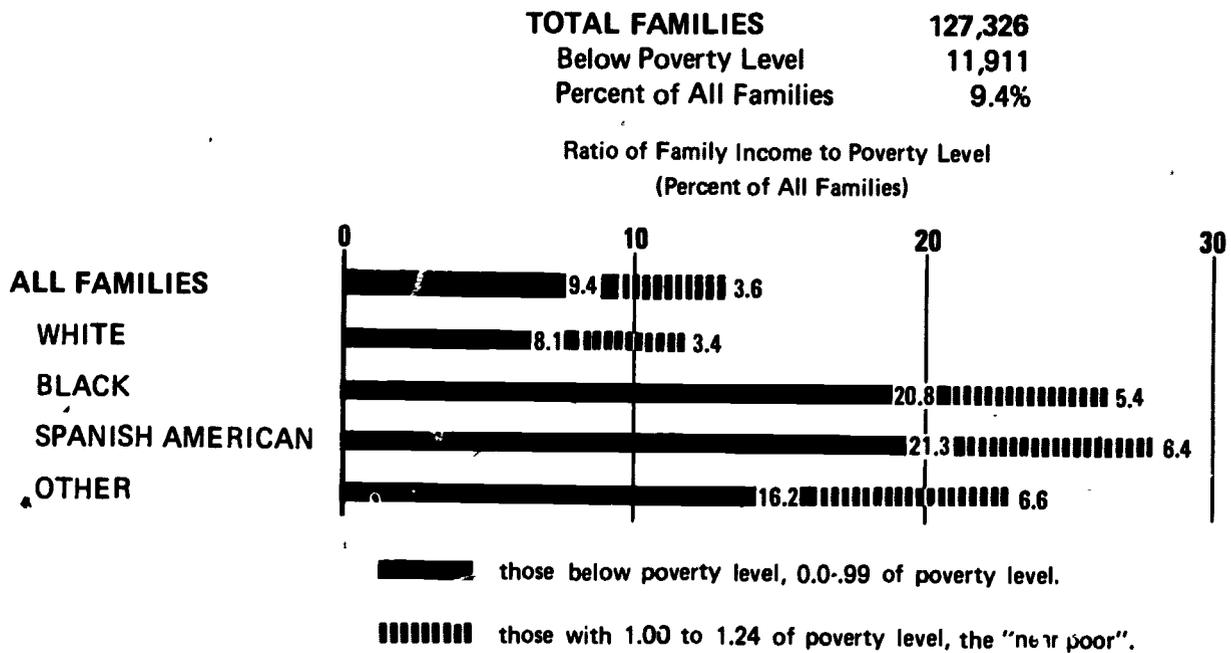


Figure 4 shows the extent to which minorities hold low pay/low status occupations in Denver, Colorado. Here we also compare the city situation to the State situation. Low pay/low status occupations include nonfarm laborers, farm laborers and foremen, cleaning and food service workers, and private household workers. For the State figures, we had to compute the percent distribution of the numbers presented in the State report for those categories - not hard. These State figures are found in Table 54 of Census report PC (1)-C7: General Social and Economic Characteristics, Colorado. What is evident in this case is that the city figures do not differ greatly from the State's. Merely reading the numbers does not give a clear indication of that relationship. This kind of display can answer many question such as "How are we doing in relation to those other guys?", "Can I allocate funds in the city as they are allocated at the State level?"

Figure 5, Families Living in Poverty, is a bar chart showing the percent of families living in poverty or near poverty as defined by the Social Security Administration's Poverty Index. The shaded area is a total of the first three categories under "Ratio of Family Income to Poverty Level" in Table 12. The remainder (or slashed area) are those defined as "near poor" - income 1.00 to 1.24 of poverty level. Again, this graph shows much more succinctly the differences among the area's racial and ethnic groups in poverty status. Interarea comparisons can be made by desinging similar graphs for the state and the U.S. Table 58 in the PC (1)-C series for states and Table 95 in the U.S. Summary provide the data necessary for the comparisons.

**Figure 5**  
**FAMILIES LIVING IN POVERTY**



The utility of charts becomes apparent when you must describe a set of data without providing the source tables. Using a graph to picture the data is one choice. The alternative is a long, boring written description. For instance, the data in figure 5 might read:

In Denver, 9.4 percent of all families are living below the poverty level, with an additional 3.6 percent in the "near poor" category; of all white families, 8.1 and 3.4 fall into these categories; 20.8 and 5.4 for Black families; 21.3 and 6.4 for Spanish American; and 16.2 and 6.6 for Other Races. The comparable figures for the state are..., and on and on.

Which you choose depends on the type of data, and your patience with either method.

These are just a few of the ways to illustrate the data. Your area may have specific or unusual characteristics that can be depicted graphically for many purposes. Charting may clarify a situation that is difficult to understand as well as verify or disprove common assumptions of social and economic characteristics. Data for making comparisons, though it may be presented in a different format from that of the "Summary Indicators", are available from many sources such as those listed in the Minimum Reference Library found at the beginning of this section.

## MANPOWER INDICATORS FOR STATE AND REGIONAL COMPARISONS

State planners may wish to compare their own situation with the situation in other states in their region. The data is presented by Region with the states tabulated within the Region in alphabetical order. U.S. figures are also presented for comparison.

The five indicators are:

- <sup>1</sup> Participation Rate: Number of persons in the labor force expressed as a percent of the total population 16 years and over.
- <sup>2</sup> Unemployment Rate: Number of persons unemployed expressed as a percentage of the civilian labor force.
- <sup>3</sup> Percent of Poverty Families: Number of families with income less than the poverty level expressed as a percent of total families.
- <sup>4</sup> Percent of Persons 25 years and above with less than a high school education.
- <sup>5</sup> Women's Unemployment Rate: Number of unemployed women expressed as a percent of female civilian labor force.

Note that these U.S. figures do not include data for Puerto Rico, the Virgin Islands, or Guam, although data for those outlying regions are included in the tables.

MANPOWER INDICATORS FOR STATE AND REGIONAL COMPARISONS

	Participation Rate <sup>1</sup>	Unemployment Rate <sup>2</sup>	% of Poverty Families <sup>3</sup>	% with less than High School Education <sup>4</sup>	Women's Unemployment Rates <sup>5</sup>
U.S.A.	58.2	4.4	10.7	47.7	5.2
Region I					
Connecticut	62.1	3.5	5.3	44.0	4.0
Maine	57.2	4.2	10.3	45.3	5.0
Massachusetts	60.3	3.8	6.2	41.5	4.0
New Hampshire	60.6	3.5	6.7	42.4	4.2
Rhode Island	61.5	4.0	8.5	53.6	4.8
Vermont	57.6	4.1	9.1	42.9	4.7
Region II					
New Jersey	60.0	3.8	6.1	47.5	5.0
New York	57.3	4.0	8.5	47.3	4.6
Puerto Rico	41.1	5.6	59.6	73.0	7.1
Virgin Islands	65.9	4.6	NA	61.0	7.5
Region III					
Delaware	60.7	3.8	8.2	45.4	5.1
Maryland	61.7	3.2	7.7	47.7	4.1
Pennsylvania	56.4	3.7	7.9	49.6	4.2
Virginia	60.1	3.0	12.3	52.2	4.0
West Virginia	47.1	5.1	18.0	58.4	5.5
Region IV					
Alabama	54.6	4.5	20.7	58.7	5.9
Florida	53.4	3.8	12.7	47.4	4.7
Georgia	60.5	3.2	16.7	59.4	4.4

	Participation Rate <sup>1</sup>	Unemployment Rate <sup>2</sup>	% of Poverty Families <sup>3</sup>	% with less than High School Education <sup>4</sup>	Women's Unemployment Rates
Kentucky	53.0	4.6	19.2	61.5	5.5
Mississippi	53.3	5.0	28.9	59.0	6.3
North Carolina	61.4	3.4	16.3	61.5	4.9
South Carolina	60.9	3.8	19.0	62.2	5.5
Tennessee	56.6	4.4	18.2	58.2	5.4
<b>Region V</b>					
Illinois	60.2	3.7	7.7	47.4	4.5
Indiana	59.5	4.1	7.4	47.1	5.6
Michigan	58.1	5.9	7.3	47.2	6.6
Minnesota	59.6	4.2	8.2	42.4	4.4
Ohio	58.1	4.0	7.6	46.8	4.9
Wisconsin	59.2	4.0	7.4	45.5	4.7
<b>Region VI</b>					
Arkansas	52.1	5.7	22.8	60.1	6.9
Louisiana	52.6	5.4	21.5	57.8	6.3
New Mexico	54.9	5.7	18.5	44.8	6.7
Oklahoma	55.2	4.2	15.0	48.4	5.2
Texas	58.6	3.6	14.6	52.6	4.7
<b>Region VII</b>					
Iowa	57.7	3.5	8.9	41.0	4.6
Kansas	58.2	3.9	9.7	40.1	4.7
Missouri	57.2	4.2	11.5	51.2	5.0
Nebraska	58.6	2.7	10.1	40.7	3.6
<b>Region VIII</b>					
Colorado	60.1	4.2	9.1	36.1	4.7
Montana	56.6	6.2	10.4	40.8	6.8

	Participation Rate <sup>1</sup>	Unemployment Rate <sup>2</sup>	% of Poverty Families <sup>3</sup>	% with less than High School Education <sup>4</sup>	Women's Unemployment Rate <sup>5</sup>
North Dakota	54.0	4.6	12.4	49.7	4.5
South Dakota	56.2	3.7	14.8	46.7	4.4
Wyoming	58.8	4.8	9.3	37.1	5.7
Utah	59.2	5.2	9.1	32.7	5.9
<b>Region IX</b>					
Arizona	55.8	4.2	11.5	41.9	4.9
California	59.4	6.3	8.4	37.4	7.0
Guam	65.6	1.7	NA	50.5	3.3
Hawaii	65.9	3.0	7.6	38.1	3.7
Nevada	65.1	5.4	7.0	34.8	6.4
<b>Region X</b>					
Alaska	67.9	9.2	9.3	33.3	7.6
Idaho	57.7	5.2	10.9	40.5	5.4
Oregon	56.9	7.0	8.6	40.0	7.1
Washington	58.8	7.9	7.6	36.5	8.7
Washington, D.C.	64.1	3.8	12.7	44.8	3.6

## HOW TO OBTAIN MANPOWER INDICATORS

The "Summary Manpower Indicators" packages were forwarded for each of the geographical areas to the appropriate Manpower Administration Regional Office for internal distribution and redistribution to State, County, and local manpower planning agencies. If, by chance, you haven't received a copy, you can obtain one by contacting:

Census Service Facility  
109 Moses Hall  
Berkeley, California 94720  
Telephone: (415) 642-5687

Similar summaries can be tabulated for special areas such as Model Cities areas, Concentrated Employment Program (CEP) areas and so on. If you would like to analyze a labor market area that conforms to county lines, those counties that you identify can be aggregated and summarized.

The first step in requesting these special summaries is defining in terms of the census geography, the administrative area for which the data will be aggregated. The Census Use Identification form must be used to do this. If you have any questions about the codes that define the area, the Data Systems and Reports Office in your Region can help you. They also have extra copies of the Census Use Identification Form if you need them. The geographic area codes can also be found in Public Employment Program (PEP) Indicators and various census reports. The cost of these special tabs is \$10. Send the identification form and money to the Census Service facility.



**added attractions**



ATTRACTIONS

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COMMENTS, PLEASE

This HANDBOOK was designed to help you use the "Summary Manpower Indicators" report more easily and effectively. Your replies to the following questions, or any others you care to add, will assist us in improving HANDBOOK for Manpower Planners Part II.

1. Has the handbook been useful to you? Why or why not?
  
2. What improvements are needed in the discussions of tables? (e.g., more assistance in understanding table format, more suggestions about using the data).
  
3. Should any topic be covered more thoroughly? (e.g., the geographic definitions, census concepts and terms).
  
4. Other comments?

PLEASE TEAR THIS PAGE OUT AND MAIL TO:

Data User Services Office  
Census Use Study  
Bureau of the Census  
Room 3547, FOB - 3  
Washington, D.C. 20233

ATTENTION: Manpower Handbook

**MANPOWER TARGET GROUPS**

Target Group	Where to Find Data in Summary Indicators Package
Age Group	Table 1 Table 2
Disabled or Handicapped	Table 7
Labor Force	Table 6
Low Status/Low Pay Occupations	Table 9
Part-Time Employed	Table 8
Poverty Level Income	Table 13
Racial Groups	Table 1 Table 2 Table 3
Public Assistance Recipient	Table 12
Unemployed Persons	Table 6
Unpaid Family Workers	Table 10
Vietnam Veterans	Table 3
Working Poor	Table 13
Youth, 16-21 years old Unemployed or not in Labor Force	Table 7

## EMPLOYMENT PROFILES OF SELECTED LOW-INCOME AREAS

Employment Profiles from the Census Employment Survey are available in published reports for selected cities and rural counties. The in-depth information is the result of a comprehensive survey of the employment situation of low-income people.

### WHAT?

The survey covers all factors considered barriers to employment, also extensive information on subjects such as employment, unemployment, extent of job training for work, job-seeking methods, job tenure, sources and levels of income, residential mobility, transportation to work, lowest weekly pay acceptable, and main reason for less than full-year work.

### WHY?

This supplemental data is available because it was recognized that the regular Census survey did not provide enough detailed information about the employment status of low-income persons.

### WHO?

The survey includes persons residing in the "Low-Income Area" of the city. Note that these statistics do not apply to the entire city but only to a sub-area. There is a map in each city publication which shows the survey area, and each booklet describes in detail how the area was chosen. These areas do not necessarily coincide with low-income areas defined for other purposes, nor should this be construed as the only part of the city where low-income people live.

In using the data, note that all information in the tables pertains to persons 16 years of age or older unless specifically indicated otherwise.

WHERE?

The cities and rural counties listed are the only places where this special survey was conducted. If your area is not listed you cannot obtain data.

HOW CAN I GET AN "EMPLOYMENT PROFILE" FOR MY CITY?

If your city is listed, ask for PHC(3) report for your city. Supply the corresponding report number. Contact your local Department of Commerce Field Office or write directly to:

Superintendent of Documents  
 U.S. Government Printing Office  
 Washington, D.C. 20402

WHAT DOES IT COST?

\$2.00 (about)

Suggested Indicators for Comparison of Low-Income Area with Planning Area

Indicators	Source	
	Planning Area SMSA	Low-Income Area
Unemployment Rate (total 16 years and over)	PC(1)-C Table 41	PHC (3) Table F
Median School years completed (25 and over)	PC(1)-C Table 40	PHC (3) Table C
% of Families with Incomes below the Poverty Level	PC(1)-C Table 41	PHC (3) Table K
Median Income	PC(1)-C Table 89	PHC (3) Table I



## CENSUS GEOGRAPHY

Census tabulations are prepared in terms of specific geographic areas--whether the entire United States or a city block. In this section concise definitions are presented for the key geographic areas below the State level for which 1970 census data are tabulated. The definitions do not include a statement of the subject matter tabulated for each type of area. Generally speaking, however, the larger the area the greater the number and detail of the tabulations produced. Figure 6 shows how most of the geographic areas described below relate to each other (e.g., census tracts and subdivisions of Standard Metropolitan Statistical Areas).

**COUNTIES:** Counties are the primary political and administrative divisions of the States. The only major exceptions are in Louisiana where the divisions are called parishes, and in Alaska where 20 census divisions have been created as county equivalents. There are a number of cities which are independent of any county organization and, because they constitute primary divisions within their states, are accorded the same treatment as the county units in the preparation of census tabulations. **NOTE:** The District of Columbia and the independent cities within the States of Maryland, Missouri, Nevada and Virginia are all identified as county equivalents.

**MINOR CIVIL DIVISIONS (MCD's):** These are the primary political and administrative subdivisions of counties. The most common type of MCD is the township but there are also towns, precincts, magisterial districts, gores, etc.

CENSUS COUNTY DIVISIONS (CCD's): These are statistical subdivisions of counties in 21 States where minor civil divisions were not suitable for presenting census data. In these States the MDC's are either too small, have lost nearly all meaning locally, or have frequent boundary changes. Over 7,000 CCD's have been established as relatively permanent statistical areas by the Bureau of the Census in cooperation with State and local groups. The States containing CCD's are: Alabama, Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Kentucky, Montana, New Mexico, North Dakota, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Washington and Wyoming.

PLACES: There are two types of places recognized in the census tabulations--incorporated and unincorporated. Incorporated places are political units incorporated as cities, towns, villages, or boroughs, with the following exceptions: Towns in New England, New York, and Wisconsin and the boroughs in Alaska are not recognized as places; rather they are considered to be MCD's. Most incorporated places are subdivisions of the minor civil divisions (or census county divisions). Some incorporated places, however, constitute MCD's or cross MCD and county lines.

Unincorporated places are densely settled population centers without legally defined corporate limits. Each has a definite residential nucleus, and boundaries are drawn by the Bureau of the Census to include, insofar as possible, all the densely settled area.

STANDARD METROPOLITAN STATISTICAL AREAS (SMSA's): As reported in the 1970 Census, Standard Metropolitan Statistical Areas consist of a county or group of contiguous counties (except in the New England States) containing at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county(s), containing the central city(s), contiguous counties are included in an SMSA if they are metropolitan in character and are socially and economically integrated with the central city. In the New England States, SMSA's consist of groups of towns and cities instead of counties because these geographic areas are administratively

more important than counties. The title of an SMSA identifies the central city or cities. The SMSA's are defined by the Office of Management and Budget. The 1970 census data were tabulated for a total of 247 SMSA's. NOTE: An additional 21 SMSA's were created in 1971 and 1972 as a result of post censal revision of criteria; the total number of SMSA's is presently 268.

URBANIZED AREAS: An urbanized area consists of a central city (or "twin cities") of 50,000 inhabitants or more plus the surrounding densely settled incorporated and unincorporated areas which meet specific criteria of population size or density. Urbanized areas differ from SMSA's in that rural portions of the counties composing an SMSA are excluded, as are those places which are urban in nature but separated by rural territory from the densely populated area surrounding the central city. The urbanized area population is sometimes divided into those in the central city and those in the remainder of the area or the urban fringe.

CENSUS TRACTS: Tracts are statistical subdivisions of SMSA's and a limited number of areas outside of SMSA's. Tract boundaries are determined by a local committee and approved by the Bureau of the Census; they conform to county lines. Tracts are generally designed to be relatively homogeneous with respect to population characteristics, economic status and living conditions. The average tract has about 4,000 to 5,000 residents. For the 1970 census all SMSA's that were recognized at the time of the census were completely tracted. Over 100 counties, cities, or parts of counties outside SMSA's are also tracted.

ENUMERATION DISTRICTS (ED's): These are small areas defined by the Census Bureau, which have an average population of about 800. ED's are newly defined with each census for use as administrative units for the control of census operations. (In addition, some census tabulations are prepared for ED's). They never cross the boundary of a city, township, or other area (except city blocks) for which census data are tabulated.

**BLOCK GROUPS:** A block group is a combination of contiguous city blocks and generally has a population of about 1,000. They are subdivisions of census tracts and are defined without regard to the boundaries of political or administrative areas, such as cities or minor civil divisions. When a block group straddles one or more of these boundaries, data for those parts in different areas are tabulated separately. For the purpose of providing small-area census data, block groups are the equivalent of enumeration districts in the built-up portions of the 145 largest SMSA's.

**BLOCKS:** Blocks are usually well-defined rectangular pieces of land, bounded by streets or roads. However, they may be irregular in shape or partially bounded by railroad tracks, streams, or other features. Blocks may not cross other boundaries such as city limits. Statistics for blocks are tabulated for all cities of 50,000 or more and for the urbanized areas of these cities. In addition, the Bureau also collected and tabulated data for blocks on a contractual basis in over 900 areas outside urbanized areas. A list of these contract block areas is available upon request from the Census Bureau.

Figure 6. Area Units Used in Data Tabulation

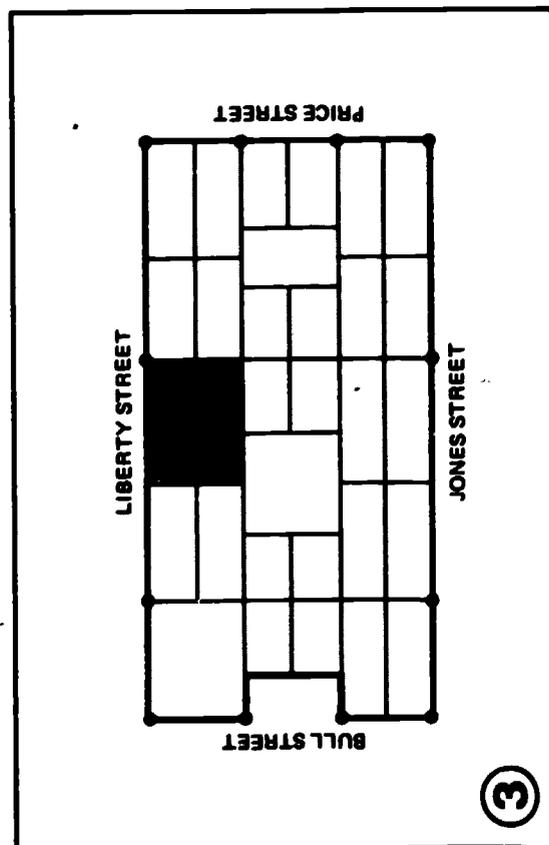
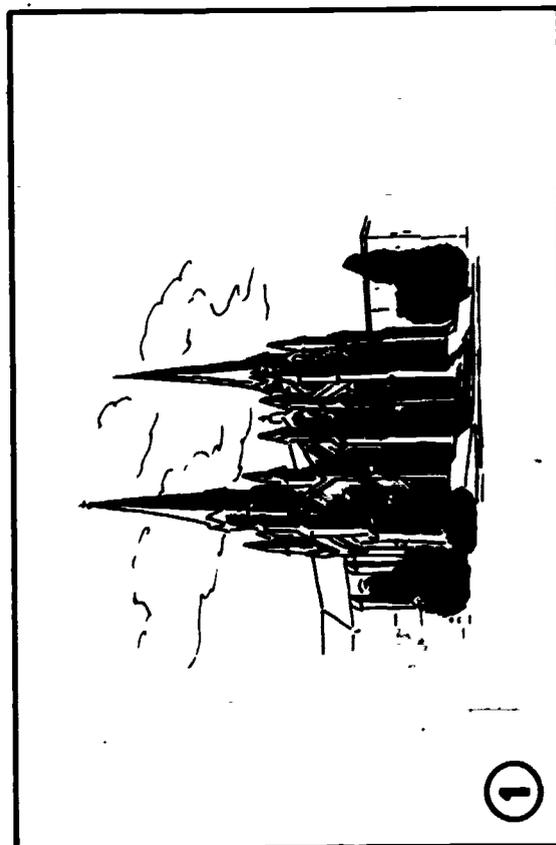
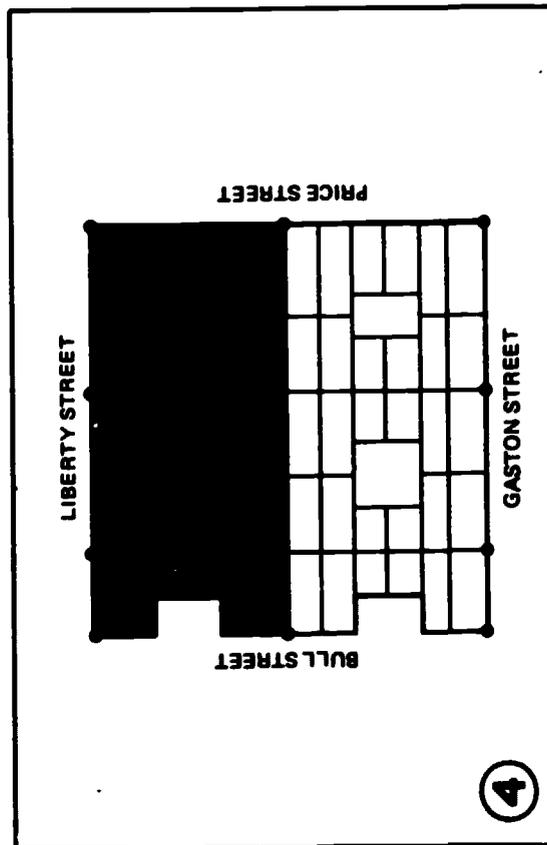
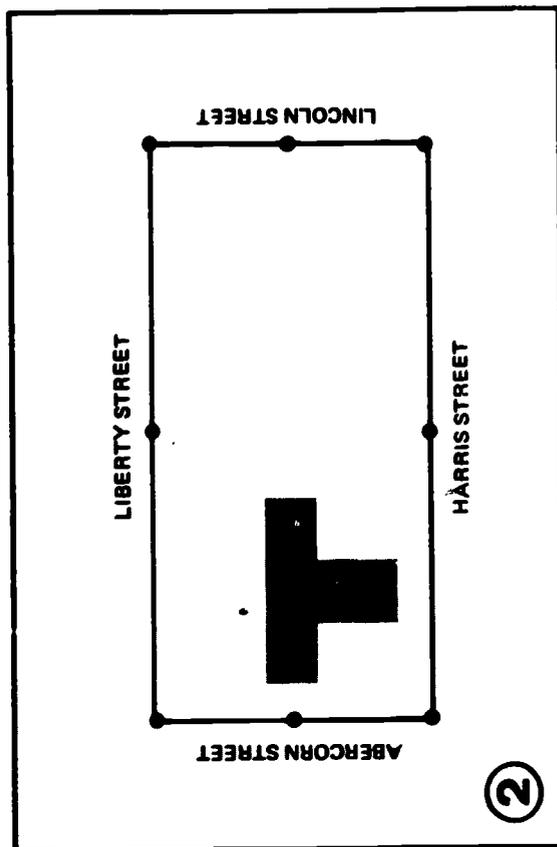
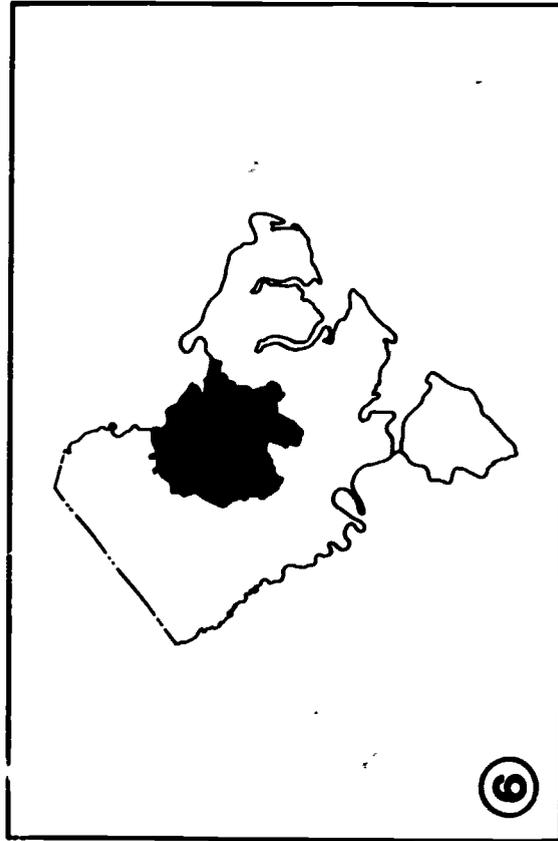
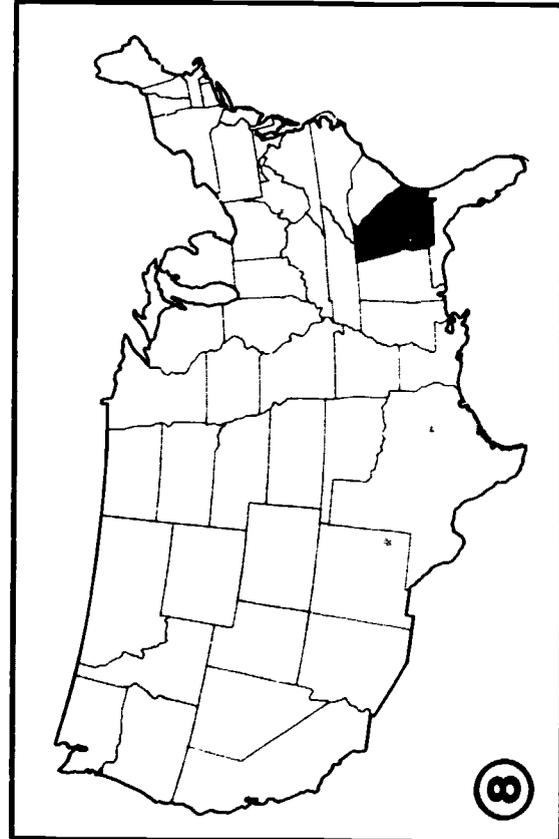


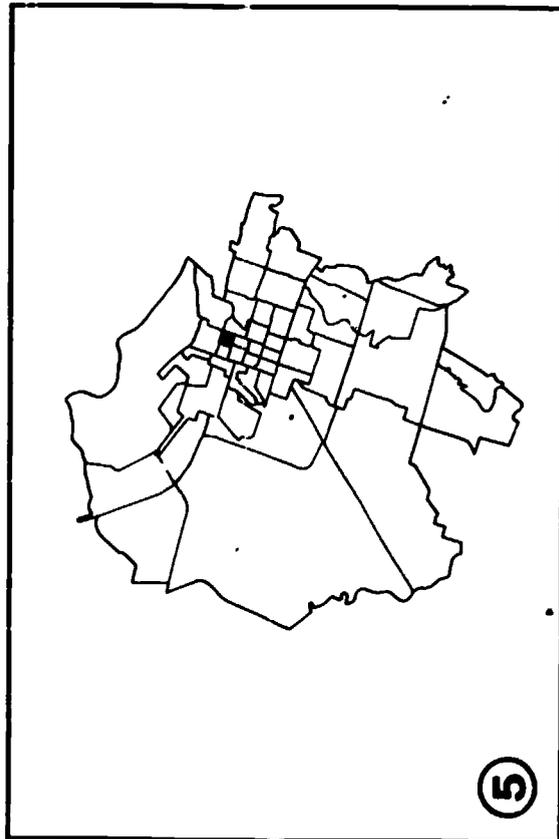
Figure 6. Area Units Used in Data Tabulation—Continued



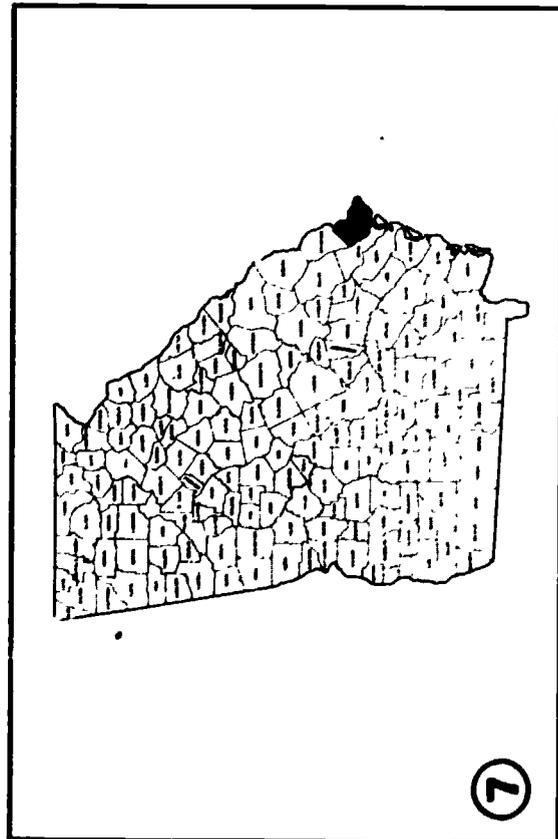
SAVANNAH WITHIN CHATHAM COUNTY



GEORGIA WITHIN THE U.S.



TRACT 9 WITHIN SAVANNAH



CHATHAM COUNTY WITHIN GEORGIA

## CENSUS PRODUCTS GUIDE

The results of the 1970 census are released in two major data products: printed reports and computer tapes.

Printed reports have long been the most common means of releasing census data. If you do not require information in great detail for a large number of areas, the printed reports are the most convenient and readily available source. Your local library may have the reports you need, or you may purchase copies, usually for less than \$2.00, from the Superintendent of Documents or from the nearest U.S. Department of Commerce field office. The 1970 census printed reports are briefly described below.

### Population Census Reports

NUMBER OF INHABITANTS, series PC(1)-A: Final official population counts are presented for States, counties (by urban-rural residence), SMSA's, urbanized areas, minor civil divisions, census county divisions, all incorporated places, and unincorporated places of 1,000 inhabitants or more.

GENERAL POPULATION CHARACTERISTICS, series PC(1)-B: Statistics on age, sex, race, marital status, and relationship to head of household are presented for States, counties (by urban-rural residence), SMSA's, urbanized areas, minor civil divisions, census county divisions, and places of 1,000 inhabitants or more.

GENERAL SOCIAL AND ECONOMIC CHARACTERISTICS, series PC(1)-C: These reports focus on the population subjects collected on a sample basis. Each subject is shown for some or all of the following areas: States (by urban, rural-nonfarm, and rural-farm residence), counties, SMSA's, urbanized areas, and places of 2,500 inhabitants or more.

DETAILED CHARACTERISTICS, series PC(1)-D: These reports will cover most of the population subjects collected on a sample basis, presenting the data in considerable detail and cross-classified by age, race, and other characteristics. Each subject will be shown for some or all of the following areas: States (by urban, rural-nonfarm, and rural-farm residence), SMSA's, and large cities.

VOLUME II. SUBJECT REPORTS, series PC(2): Each report in this volume will concentrate on a particular subject. Detailed information and cross-relationships will generally be provided on a national and regional level; in a few reports, data for States or Standard Metropolitan Statistical Areas will also be shown. Among the characteristics to be covered are national origin and race, fertility, families, marital status, migration, education, employment, unemployment, occupation, industry, and income. There will also be a report on the geographic distribution and characteristics of the institutional population.

#### Housing Census Reports

GENERAL HOUSING CHARACTERISTICS, series HC(1)-A: Statistics on 100-percent housing subjects are presented for States, counties, SMSA's (by urban-rural parts), urbanized areas, and places of 1,000 inhabitants or more.

DETAILED HOUSING CHARACTERISTICS, series HC(1)-B: These reports focus on the housing subjects collected on a sample basis. Each subject is shown for some or all of the following areas: States, counties, SMSA's, urbanized areas, and places of 2,500 inhabitants or more.

VOLUME II. METROPOLITAN HOUSING CHARACTERISTICS, series HC(2): These reports will cover most of the 1970 census housing subjects in considerable detail and cross-classification. There will be one report for each SMSA, presenting data for the SMSA and its component large cities, as well as a national summary report.

VOLUME III. BLOCK STATISTICS, series HC(3): One report for each urbanized area showing data for individual blocks on selected 100-percent housing and population subjects. The series also includes reports for the communities outside urbanized areas which have contracted with the Census Bureau to provide block statistics from the 1970 census.

#### Joint Population-Housing Reports

CENSUS TRACT REPORTS, series PHC(1): One report for each SMSA, showing data for most of the population and housing subjects included in the 1970

census. Some tables will be based on the 100-percent tabulation, others on the sample tabulation. For each SMSA, the former will be prepared several months prior to publication of the full report. Copies of these tables will be purchasable at the cost of reproduction as they are prepared.

GENERAL DEMOGRAPHIC TRENDS FOR METROPOLITAN AREAS, 1960 TO 1970, series

PHC(2): This series consists of one report for each State and the District of Columbia, as well as a national summary report, presenting statistics for the State and for SMSA's and their central cities and constituent counties. Comparative 1960 and 1970 data are shown on population counts by age and race and on such housing subjects as tenure, plumbing facilities, value, and contract rent.

EMPLOYMENT PROFILES OF SELECTED LOW-INCOME AREAS, series PHC(3): This

series will consist of 75 reports, each presenting statistics on the social and economic characteristics of the residents of a particular low-income area, as well as a United States summary. The data, derived from sample surveys conducted during latter 1970 and early 1971, relate to low-income neighborhoods in 54 cities and seven rural areas. Each report will provide statistics on employment and unemployment, education, vocational training, availability for work, job history, and income, as well as on value or rent and number of rooms in the housing unit.

## TABLE FINDING GUIDES

The table finding guides on the following pages are provided to give you a quick indication of the type of information that is available in 1970 Decennial Census reports. They also show, for the printed reports, the geographic breakdown of the data and the availability of that data for different areas. It is simpler to use these guides, which are placed in the front of the reports, than it is to go through the tables of contents. Most subjects are cross-classified with age and sex, and there are also numerous cross-classifications of social and economic characteristics (veteran status by employment status). With a few exceptions, the tables include statistics for the black population and for persons of Spanish heritage for the State and for other areas containing 25,000 or more of the designated population group. With the guides, simply look up the subject and the geographic area you are interested in, find the appropriate table, and go from there.

Each census printed report has these table finding guides, though the coverage and subjects do differ. These table finding guides are reprinted from the State series of the following publications:

U.S. Bureau of the Census  
Census of Population: 1970  
General Social and Economic Characteristics PC(1)-C

Detailed Characteristics PC(1)-D

## TABLE FINDING GUIDE—Subjects by Type of Area and Table Number

This guide lists all subjects covered in the report, but does not indicate all cross-classifications (e.g., by sex). An asterisk (\*) indicates that the table presents data for Negroes exclusively; the symbol (†) means the table presents data for persons of Spanish heritage exclusively. Data on allocation rates appear in tables C1 to C4.

Subject	The State			Metropolitan nonmetropolitan residence	Standard metropolitan statistical areas Urbanized areas	Places of—			Counties	
	1979 and 1980	Total Urban Rural nonfarm Rural farm	Size of place			50,000 or more	10,000 to 50,000	2,500 to 10,000	Total	Rural nonfarm
<b>SUMMARY CHARACTERISTICS</b>										
Social	—	—	—	—	40	40	40	42	43	—
Economic	—	—	—	—	41	41	41	42	44	—
<b>GENERAL CHARACTERISTICS</b>										
Age	—	48	59	70	96*	96*	112*	—	129*	134, 136
Relationship to head of household	—	48	59	70	96*	96*	112*	—	129*	134, 136
Families by presence of own children under 18 years	—	48	59	70	96*	96*	112*	—	129*	—
<b>SOCIAL CHARACTERISTICS</b>										
Nativity and parentage	45	49	60	71	81	81	102	—	119	—
State of birth	45	50	61	72	82, 91*, 97*	82, 91*, 97*	102, 108*, 113*	117	119, 125*, 130*	—
Country of origin	45	49	60	71	81	81	102	—	119	—
Mother tongue	—	49	60	71	81	81	102	—	119	—
Residence in 1985 by selected classes of migrants	45	50	61	72	82, 91*, 97*	82, 91*, 97*	102, 108*, 113*	117	119, 125*, 130*	—
Year moved into present house	—	50	61	72	82	82	102	—	119	—
School enrollment	45	51	62	73	83, 91*, 97*	83, 91*, 97*	103, 108*, 113*	117	120, 125*, 130*	—
Years of school completed	46	51, 52	62, 63	73, 74	83, 84, 91*, 97*	83, 84, 91*, 97*	103, 108*, 113*	117	120, 125*, 130*	134, 136
Vocational training	—	51	62	73	83	83	—	—	—	—
Marital history	—	52	63	74	84	84	—	—	—	—
Fertility	—	52	63	74	84	84	—	—	—	—
Own children under 5 years old	—	52	63	74	84, 91*, 97*	84, 91*, 97*	103, 108*, 113*	—	120, 125*, 130*	134, 136
Children ever born	45	52	63	74	84, 91*, 97*	84, 91*, 97*	103, 108*, 113*	—	120, 125*, 130*	—
Family composition	—	52	63	74	84, 91*, 97*	84, 91*, 97*	103, 108*, 113*	—	120, 125*, 130*	—
Type of group quarters	—	52	63	74	84	84	103	—	120	—
Disability	—	52	63	74	84	84	—	—	—	—
Veteran status	—	50	61	72	82	82	102	—	119	—
<b>ECONOMIC CHARACTERISTICS</b>										
Employment status by marital status and presence of own children for males 16-21 not attending school	46	53	64	75	85, 92*, 98*	85, 92*, 98*	104, 108*, 114*	117	121, 126*, 131*	136, 137
Labor force participation	46	53	64	75	85, 92*, 98*	85, 92*, 98*	104, 108*, 114*	—	121, 126*, 131*	—
Weeks worked in 1989	46	56	67	78	88, 92*, 98*	88, 92*, 98*	104, 108*, 114*	117	121, 126*, 131*	—
Labor mobility	—	56	67	78	88, 92*, 98*	88, 92*, 98*	104, 108*, 114*	—	121, 126*, 131*	—
Occupation of employed persons	46	54	65	76	86, 93*, 99*	86, 93*, 99*	106, 110*, 115*	118	122, 127*, 132*	136, 137
Industry of employed persons	47	55	66	77	87, 94*, 100*	87, 94*, 100*	106, 110*, 115*	117	123, 127*, 132*	134, 136
Class of worker	—	56	67	78	88, 92*, 98*	88, 92*, 98*	104, 108*, 114*	118	121, 126*, 131*	—
Last occupation of experienced unemployed	—	56	67	78	88, 94*, 100*	88, 94*, 100*	106	—	123	—
Place of work	—	50	61	72	82	82	102	—	119	—
Means of transportation	—	50	61	72	82	82	—	—	—	—
<b>Income in 1989</b>										
Total	47	57	68	79	89, 94*, 100*	89, 94*, 100*	107, 111*, 116*	118	124, 128*, 133*	136, 137
Type	—	57	68	79	89, 94*, 100*	89, 94*, 100*	107, 111*, 116*	118	124, 128*, 133*	—
Median earnings	—	57	68	79	89, 93*, 99*	89, 93*, 99*	106, 110*, 115*	—	122, 127*, 132*	—
Poverty status	—	58	69	80	90, 95*, 101*	90, 95*, 101*	107, 111*, 116*	118	124, 128*, 133*	136, 137

## TABLE FINDING GUIDE—Subjects by Type of Area and Table Number

This guide lists all subjects covered in this report, but does not indicate all cross-classifications. Most subjects are cross-classified with age and sex, and there are also numerous cross-classifications of social and economic characteristics (e.g., veteran status by employment status). With a few exceptions, the tables include statistics for the Negro population and for persons of Spanish heritage for the State and for other areas containing 25,000 or more of the designated population group.

Subject	The State		Standard metropolitan statistical areas of		Central cities of SMSAs of 250,000 or more	Cities of	
	Total	Urban Rural nonfarm Rural farm	250,000 or more	100,000 or more		250,000 or more	100,000 or more
<b>GENERAL AND SOCIAL CHARACTERISTICS</b>							
Race	139						
Nativity	138-142	138	138-142	138		138,140-142	138,140,141
Place of birth	140					140	140
Country of birth or country of origin	141-144		144			141,144	141
Mother tongue	142		142			142	
Citizenship	143-144		143-144			143,144	
Year of immigration	144		144			144	
Residence in 1965	145-178						
School enrollment	146-166-215	146-166-215	146-166-215		215		
Years of school completed							
Persons 16 to 24 years old	147	147	147				
Family heads	158	158	158				
By age	148	148	148				
By occupation	179						
By income	197-202	197	197-202				
By poverty status	211-216	211-216	211-216		211-216		
Vocational training	149-150						
Veteran status	151						
Marital status	152-155-165	152-155-165	152-155-165				
Marital history							
Whether married more than once	152	152	152				
Age at first marriage	159-160						
Household relationship	153	153	153				
Group quarters	154	154	154				
Inmates of institutions	154-155	154-155	154-155				
Families							
By type and composition	155-157	155-157	155-157				
By characteristics of head and wife	158	158	158				
By income	198-205	198-205	198-205				
By poverty status	207-214	207-214	207-214		207-214		
Subfamilies	155	155	155				
Children under 18 years old							
Presence and age	155-156	155-156	155-156				
By characteristics of family head	158	158	158				
By family income	198-205	198	198				
By poverty status of family	208-213-214	208-213-214	208-213-214		208-213-214		
Unrelated individuals							
By age	153	153	153				
By marital status	155	155	155				
By income	198-200-205	198-200-205	198-200-205				
By poverty status	207-213	207-213	207-213		207-213		
Fertility							
Children ever born	161-162	161	161				
Own children under 5 years old	163	163	163				
Work disability	169		169				

Subject	The State		Standard metropolitan statistical areas of		Central cities of SMSA's of 250,000 or more	Cities of	
	Total	Urban Rural-nonfarm Rural farm	250,000 or more	100,000 or more		250,000 or more	100,000 or more
<b>ECONOMIC CHARACTERISTICS</b>							
Labor force status	158 165	158 165	158 165	-	-	-	-
Employment status							
By age	164 168	164 168	164 168	-	-	-	-
By school enrollment	166	166	166	-	-	-	-
By income	196 201	196 201	196 201	-	-	-	-
By poverty status	209	209	209	-	209	-	-
Hours worked	166	166	166	-	-	-	-
Weeks worked in 1969							
By age race and sex	167	167	167	-	-	-	-
By occupation and industry	172 185		172 185	-	-	-	-
By income and poverty status	195 201 210	195 201 210	195 201 210	-	210	-	-
Year last worked	168 172 185	168	168 172 185	-	-	-	-
Occupation							
By detailed classification	170 171		171	-	-	-	-
By age	174		174	-	-	-	-
By years of school completed	179		-	-	-	-	-
By employment characteristics	172		172	-	-	-	-
By industry	177 180-182		180	-	-	-	-
By class of worker	173		173	-	-	-	-
By earnings or income	175-177 203		175 176 203	-	-	-	-
By poverty status	210	210	210	-	210	-	-
By occupation 5 years ago	178		-	-	-	-	-
Industry							
By detailed classification	183 184		184	-	-	-	-
By occupation	177 180 182		180	-	-	-	-
By employment characteristics	185		185	-	-	-	-
By class of worker	186		186	-	-	-	-
By age	187		187	-	-	-	-
By earnings	177,188 189		188 189	-	-	-	-
By income	204		204	-	-	-	-
Class of worker	173 186		173 186	-	-	-	-
Activity 5 years ago	145 178		-	-	-	-	-
Place of work	191		190	190	-	-	-
Means of transportation to work			190	190	-	-	-
Income of persons in 1969							
By general characteristics	192 193	192 193	192 193	-	-	-	-
By family status	194	194	194	-	-	-	-
By employment characteristics	195 196	195 196	195 196	-	-	-	-
By years of school completed	197	197	197	-	-	-	-
Income of families in 1969							
By family type and composition	198-200	198-200	198-200	-	-	-	-
By years of school completed	202	-	202	-	-	-	-
By employment characteristics	201,203 204	201	201 203 204	-	-	-	-
By type of income	205	205	205	-	-	-	-
Income of unrelated individuals in 1969	198 200 205	198,200,205	198 200 205	-	-	-	-
Income of households in 1969	206	206	206	-	-	-	-
Earnings in 1969							
By occupation	175-177		175,176	-	-	-	-
By industry	177 188,189		188 189	-	-	-	-
By place of work	191		-	-	-	-	-
By weeks worked	195,201	195 201	195,201	-	-	-	-
Poverty status of persons in 1969	207,215,216	207,215 216	207 215,216	-	207,215 216	-	-
Poverty status of families in 1969							
By characteristics of the head	207,211	207,211	207,211	-	207,211	-	-
By number of children under 18	208 213 214	208 214	208 213 214	-	208,213 214	-	-
By employment characteristics	209 210	209 210	209 210	-	209	-	-
By type of income	212	212	212	-	212	-	-
Poverty status of unrelated individuals in 1969	207 213	207 213	207 213	-	207 213	-	-

## CENSUS MAPS

There are basically five kinds of census maps which show small areas: the Metropolitan Map Series, county maps, county subdivision maps, place maps and tract outline maps. These maps are essential in locating census tracts and defining target areas and should be a part of a reference library.

The Metropolitan Map Series covers the urbanized area of SMSA's and shows street names, census tracts, enumeration districts, block groups, and blocks. The series is available as part of the Block Statistics reports series HC(3) of the 1970 census reports. The maps and the report can be purchased from the U.S. Government Printing Office for less than \$5.

County Maps show portions of counties in SMSA's not covered by the Metropolitan Map series and all counties outside of SMSA's. Boundaries of minor civil divisions or census county divisions, places, tracts, and enumeration districts (ED's) are identified on these maps. County maps may be obtained from the Census Bureau at the price of \$1.00 per sheet.

Tract Outline Maps show the boundaries of census tracts, counties, and all places with population of 25,000 or more. Names of streets which constitute tract boundaries are included on these maps. Generally, there are two tract outline maps sheets per SMSA. These maps are included as part of the Census Tract reports for SMSA's series PHC(1) of the 1970 census reports which sell for less than \$2. This is a bargain, don't pass it up.

County Subdivision Maps of States show boundaries for counties and subdivisions of counties. The maps are priced at 20 cents per State. Copies of the county subdivision map on a smaller scale appear in sectionalized form in the Number of Inhabitants report, series PC(1)-A of the 1970 census reports.

Place Maps cover every incorporated and unincorporated place reported in the 1970 census that is not included in the Metropolitan Map Series. If your planning area is not an SMSA, this is

the map you want. Place Maps are sold individually by the Census Bureau at a price of \$1.50 and up per sheet depending upon the size of the sheet.

Metropolitan Maps, County Subdivision Maps and Tract Outline Maps can be obtained from the Department of Commerce field offices or by writing:

Superintendent of Documents  
U.S. Government Printing Office  
Washington, D.C. 20402

For all other maps call or write:

Users' Service Staff  
U.S. Bureau of the Census  
Washington, D.C. 20233  
(301) 763-5146

## MANPOWER GLOSSARY

CIVILIAN LABOR FORCE: All persons employed and unemployed and not in the Armed Forces.

CURRENT POPULATION SURVEY: Monthly household survey of a sample (60,000) of the civilian noninstitutional population of the U.S. The survey provides monthly statistics on employment, unemployment and related subjects which are analyzed and published by the Bureau of Labor Statistics. Each month labor force information from this survey is published by the Department of Labor in Employment and Earnings and Monthly Report on the Labor Force.

DOT - Dictionary of Occupational Titles: This classification scheme, used in defining jobs, often is more detailed than the Census Bureau's occupational classifications. The Census Bureau is generally comparable with DOT with the exception of blue collar workers. For more detail see Technical Paper 26: 1970 Occupation and Industry Classification Systems in Terms of Their 1960 Occupation and Industry Elements. U.S. Bureau of the Census.

DISCOURAGED WORKERS: Hidden unemployed persons who make no overt attempt to find a job because they think none are available. These persons are not included in the unemployment count--most are women and teenagers.

ESARS - Employment Security Automated Reports System: Reports based on data compiled from State and local Employment Security job applications, orders and office operations. The data on those forms are optically scanned and the characteristics are summarized locally and on a State-by-State basis.

EMPLOYED: Persons who did any work at all and were paid; those who were in their own business, profession or farm; and persons who were not working but had jobs or businesses and were temporarily absent because of vacation, illness, labor management disputes or personal reasons. Each employed person is counted only once. Persons who worked around the house and persons who did volunteer work for religious, charitable or similar organizations were excluded.

FULL TIME EMPLOYED: Persons working 35 hours or more per week.

INSURED UNEMPLOYMENT: Statistics on insured unemployment are collected as a byproduct of Unemployment Insurance (UI) programs. Workers covered by UI upon losing their jobs file claims which serve as notice that they are beginning a period of employment.

About two-thirds of the civilian labor force is covered by unemployment insurance programs.

Principal groups not covered are:

- Agricultural workers
- Domestic service workers
- Employees of State and local governments
- Self-employed workers
- Unpaid family workers
- Workers in non-profit institutions
- Workers who have been unemployed long enough to exhaust their benefit rights, new workers who have not earned benefit rights.

**LABOR FORCE:** All persons classified as employed or unemployed plus members of the armed forces.

**MEAN:** Measure of central tendency derived by dividing the total of a particular statistical universe by the number of units in the universe or "Average."

**MEDIAN:** Measure of central tendency that is the middle value or the arithmetic mean of the two middle values of a set of numbers arranged in order of magnitude. One-half of the items of a set lies above and one-half lies below this middle value.

**PARTICIPATION RATE:** Labor force participation rate refers to the number of persons in the total labor force expressed as a percent of all persons 16 years of age and over.

**PART TIME EMPLOYED:** Persons working between 1 and 34 hours per week.

**PART TIME EMPLOYED FOR ECONOMIC REASONS:** Persons working between 1 and 34 hours per week because of slack work, material shortages, repairs to plant and equipment, start or termination of job during the week or inability to find full time work. This is one aspect of underemployment which can be measured.

**SEASONALLY ADJUSTED DATA:** Because many changes in employment and unemployment occur during the course of the year due to seasons, holidays, vacation, and harvest time, it is difficult to tell whether developments between any two time periods reflect changing economic conditions or merely normal seasonal fluctuations. A seasonal adjustment is a statistical technique that eliminates regularly occurring fluctuations in the employment situation.

**SMSA - Standard Metropolitan Statistical Area:** A county or a group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. The population living in SMSA's is designated as the metropolitan population.

**SIC CODE - Standard Industrial Classification Code:** This scheme classifies establishments by the type of industrial activity in which they are engaged. Generally, the Census Bureau defines employment data in SIC terms with one major exception--the classification of government establishments. See PC(1)-D Appendix 19 for further detail.

**16 YEARS OLD AND ABOVE:** Official labor force statistics relate to persons 16 years old and over because in the U.S. individuals under 16 do relatively little work because of laws which restrict child labor, laws regarding compulsory school attendance and general social custom.

**SUBEMPLOYMENT INDEX:** This measure was developed because the conventional unemployment rate did not adequately describe the employment situation of disadvantaged persons. Subemployment rates are derived from the Census Employment Survey: Employment Profiles of Selected Low-Income Areas. (See ADDED ATTRACTIONS).

The subemployment indices include persons who are:

Unemployed;

Working part time, but seeking full time work;

Discouraged workers (who have dropped out because they looked but could not find work);

Full time workers paid less than \$80 a week (enough, if work is available full time, year around, to earn \$4,000 a year, the official poverty level for a family of four) and those paid less than \$3.50 an hour (enough, again assuming steady work, to earn \$7,000 a year, the B.L.S. lower family budget).

**UNDEREMPLOYMENT:** Workers who were employed 34 hours/week or less due to economic conditions, i.e., these persons usually work full time but their hours were cut back because of slack work, material shortages, etc. Also included are persons who work part time because they cannot find full time work. Other kinds of underemployment not easily measured are persons who have occupational training but are working either below their level of competence or at a different occupation.

**UNEMPLOYED:** Persons who did not work during the survey week who made specific efforts to find a job within the last 4 weeks and who were available for work during the survey week. Also included were those who were waiting to be called back to a job from which they had been laid off or were waiting to report to a new wage or salary job within 30 days.

**UNEMPLOYMENT RATE:** The number of persons unemployed expressed as a percent of the civilian labor force.

**UNIVERSE OF NEED:** From the standpoint of ES State and local office operations, the "universe of need for manpower services" represents the total number of different individuals, both unemployed and underutilized, who may need employment-related assistance at some time during the target year. It includes estimates of the disadvantaged; other poor persons who do not meet the criteria for designation as disadvantaged; individuals in near-poverty; and nonpoor workers who are unemployed or underutilized during the course of the year. Specific components include (1) workers counted as unemployed under standard labor force concepts; (2) workers employed part time because they are unable to find full time employment; (3) workers employed full time but with earnings which do not raise family income above the poverty or near-poverty level; and (4) persons not currently in the labor force but who should be.

**WORK FORCE:** These statistics are derived from surveys of establishments--they differ from census data because persons who work for more than one establishment may be counted more than once. Establishment data exclude private household workers, unpaid family workers and self-employed persons, but may include workers less than 16 years of age. Persons who had a job but were not at work are not likely to be included in establishment data. Establishment data are based on the place of work, census data are based on the place of residence. This is particularly significant when data are being compared for places where workers commute between areas.

## BASIC STATISTICAL MEASURES

Much statistical analysis is done with the aid of only a few very simple measures as described below.

**MEAN:** represents an average of a set of data calculated by dividing the sum of all data in a set by the number of data items in the set. For example, if your children had ages of 3, 5, 6, and 8, then the average or mean age is  $\frac{3 + 5 + 6 + 8}{4} = \frac{22}{4} = 5.5$ .

**MEDIAN:** represents the middle value of a set of data. If the set contains an odd number of data items, the median is equal to the central data item. But, if the set contains an even number of data items, the median is equal to the average of the two central data items. For example, if five children had ages of 4, 5, 7, 8, and 10, then the median age is 7; if four children had ages of 4, 5, 7, and 10, then the median age is 6.

**MODE:** represents the most frequently occurring value in a set of data. For example, 20 is the mode for the following set of data: 20, 40, 10, 15, 20, and 20.

**RATIO:** expresses the size of one number in relation to another number. A ratio is obtained by dividing the number which serves as the basis of comparison into the number which is being compared to it. For example, 140 is twice as large as 70; thus the ratio of 140 to 70 is 2. Likewise, 70 is one-half the size of 140; thus the ratio of 70 to 140 is 0.5.

**PROPORTION:** a ratio in which the size of one number is compared to the size of a total number. For example, if the rural population of an area is 30,000 and the urban population is 10,000, then the proportion of the total population which is rural is .75 or  $\frac{30,000}{30,000 + 10,000} = .75$ . Proportions

are usually multiplied by 100 and expressed as percentages (e.g., the rural population is 75% of the total population.)

**RATE:** a ratio of one thing to another in a specified period of time. In calculating a rate, the numerator is the number of events which occurred during an even period and the denominator is the population in which the events occurred. For example, if the number of unemployed persons in a town is 225 and the population is 5,175, then the unemployment rate is  $\frac{225}{5,175} \times 100 = 4.3\%$ .

## SPANISH AMERICAN TABULATIONS

Separate tabulations of social and economic data from the 1970 census are presented for Spanish Americans. To identify the Spanish American population for the 20-percent and 15-percent sample tabulations, three different measures were used.

-If your working area is in New Jersey, New York, and Pennsylvania, the Spanish American tabulations consist of persons who were born in Puerto Rico and other persons with one or both parents born in Puerto Rico.

-In Arizona, California, Colorado, New Mexico, and Texas the Spanish American tabulations are of persons of Spanish language, plus all other persons not of Spanish language but of Spanish surname. Persons of Spanish language are those who reported Spanish as their mother tongue (the language spoken in a person's home when he was a child), as well as all other persons in families where the head or wife reported Spanish as his or her mother tongue. Spanish surname was determined by matching the surname with a list of over 8,000 such names.

-If your working area is in the remaining 42 States and the District of Columbia, the Spanish American tabulations consist only of persons of Spanish language.

However, a single measure was used to identify the Spanish American population for the 5-percent sample tabulations. This measure was based on a question regarding Spanish origin or descent which asked the respondent to identify himself as either Mexican, Cuban, Puerto Rican, Central American, or other Spanish.

What does this mean to a planner? When totals appear to disagree,

look at the way the Spanish American population was measured for that State. Also check the sample size. States with different measures cannot be compared, nor can data based on different sample size be compared. With the 5-percent sample, States can be compared with each other.

## AUTOMATED DATA

Most 1970 census results have been produced in a set of computer tapes referred to as "summary tapes." These summary tapes yield the same kind of data presented in most of the previously mentioned reports except there is just more of it. To help meet the needs of census users, the summary tapes were designed to provide data with much greater subject and geographic detail than is feasible or desirable to publish in printed reports. Many of you will be able to find the data you need in the printed reports. However, if you plan extensive use of census data and need cross-tabulations which are not published, the summary tapes would probably meet your requirements.

The summary tapes are issued in six different counts. The first three counts relate to the subject items collected on a 100-percent basis in the census. The last three counts relate to the subject items collected on a sample basis, but also generally include the 100-percent items for purposes of cross-tabulation.

Summary tapes, which are generally organized on a State basis, can be purchased for \$70 per reel from the Users' Service Staff, Bureau of the Census, Washington, D.C. 20233. You may wish to obtain data services from organizations which have purchased the tapes. Over 170 organizations have advised the Bureau of their plans to obtain summary tapes and furnish data services. See following section: Summary Tape Processing Centers.

The six summary tape counts are briefly described below. The term "cell" used in the descriptions indicates the scope of subject content of the counts and refers to each figure or statistic in the tabulation for a specific geographic area. For example, in the third count there are six cells for a cross-tabulation of race by sex: three categories of race (white, black, other race) by the categories of sex (male, female).

**FIRST COUNT:** Source of the PC(1)-A reports; contains about 400 cells of data on the subjects covered in the PC(1)-B and HC(1)-A reports and tabulated for each of the approximately 240,000 enumeration districts and block groups in the United States.

**SECOND COUNT:** Source of the PC(1)-B, HC(1)-A, and part of the PHC(1) reports; contains about 3,500 cells of data covering the subjects in these reports and tabulated for the approximately 35,000 tracts and 35,000 county subdivisions in the United States.

**THIRD COUNT:** Source of the HC(3) reports; will contain about 250 cells of data on the subjects covered in the PC(1)-B and HC(1)-A reports and tabulated for approximately 1,500,000 blocks in the United States.

**FOURTH COUNT:** Source of the PC(1)-C, HC(1)-B, and part of the PHC(1) reports; will contain about 13,000 cells of data covering the subjects in these reports and tabulated for the approximately 35,000 tracts and 35,000 county subdivisions in the United States; will also contain about 30,000 cells of data for each county.

**FIFTH COUNT:** Will contain approximately 800 cells of population and housing data for 5-digit ZIP code areas in SMSA's and 3-digit ZIP code areas outside SMSA's, the ZIP code data will be available only on tape.

**SIXTH COUNT:** Source of the PC(1)-D and HC(2) reports; will contain about 260,000 cells of data covering the subjects in these reports and tabulated for States, SMSA's, and large cities.

## SUMMARY TAPES AND SUMMARY TAPE PROCESSING CENTERS

In addition to the data contained in the printed reports (the most convenient and readily available source of data), the Census Bureau releases more extensive information on computer summary tapes.

Releasing census data on computer summary tapes makes it possible to include more tabulations, greater detail, and more geographic areas than feasible in printed reports. The summary tapes have the same kind of data as found in printed reports; there is just more of it. There is practically no limit to the number of combinations or cross-tabulations of census data which may be prepared for a geographic area. For example, in reporting for a particular county, a count of females could be given, or a count of females by single years of age, or a count of females by single years of age by race, and so on.

For frequent and extensive use of census data in more detailed planning, using the summary tapes may be the most reasonable approach because of the speed and relative convenience of machine processing. Upon request, the Census Bureau designates many organizations (private, public, governmental, and academic) as Summary Tape Processing Centers. These recognized organizations file a statement with the Bureau indicating their intention to service the needs of census data users outside their organization and specifying their planned activities. Several organizations throughout the