

U.S. CENSUS OF POPULATION: 1960

Final Report PC(2)-6C

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SUBJECT REPORTS

Labor Reserve

*Age, Education, Occupation, and
Other Characteristics of Former
Members of the Labor Force*

*Prepared under the supervision of
HOWARD G. BRUNSMAN, Chief
Population Division*

U.S. DEPARTMENT OF COMMERCE
John T. Connor, Secretary
BUREAU OF THE CENSUS
A. Ross Eckler, Director



VOLUME II. SUBJECT REPORTS

Series PC(2) Final Reports

- 1A Nativity and Parentage
- 1B Persons of Spanish Surname
- 1C Nonwhite Population by Race
- 1D Puerto Ricans in the United States
- 1E Mother Tongue of the Foreign Born

- 2A State of Birth
- 2B Mobility for States and State Economic Areas
- 2C Mobility for Metropolitan Areas
- 2D Lifetime and Recent Migration

- 3A Women by Number of Children Ever Born
- *3B Childspacing

- 4A Families
- 4B Persons by Family Characteristics
- 4C Sources and Structure of Family Income
- *4D Age at First Marriage
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- 5A School Enrollment
- 5B Educational Attainment
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- 6A Employment Status and Work Experience
- 6B Journey to Work
- 6C Labor Reserve

- 7A Occupational Characteristics
- 7B Occupation by Earnings and Education
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- 7D Characteristics of Teachers
- 7E Characteristics of Professional Workers

- 8A Inmates of Institutions
- 8B Income of the Elderly Population
- 8C Veterans

* Report in preparation.

LIST OF CORRECTIONS

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U.S. Census of Population: 1960
 Subject Reports. Labor Reserve
 Final Report PC(2)-60

The following pages have obliterated figures:

PAGE 3, TABLE 1.

RESIDENCE, AGE, COLOR, AND SEX	LABOR RESERVE BY YEAR LAST WORKED				
				1955 TO 1958	1950 TO 1954
UNITED STATES-- CON.					
FEMALE					
* * *					
25 TO 29 YEARS.				1 007 398	820 028
25 YEARS.				229 568	115 888

PAGE 119, TABLE 14, COLUMN 3.

OCCUPATION, AGE, AND YEAR LAST WORKED	WOMEN EVER MARRIED	
	TOTAL	
LAST WORKED 1950 TO 1960		
* * *		
OPERATIVES AND KINDRED WORKERS.	2 357 620	
ASSEMBLERS.	212 853	
CHECKERS, EXAMINERS, AND INSPECTORS, MFG.	145 607	

PAGE 188, TABLE 16: SEE REVERSE SIDE.

THE ENTIRE PAGE HAS BEEN REPRODUCED; HOWEVER, ONLY THE LAST TWO LINES REFLECT CORRECTIONS OF OBLITERATED OR OMITTED FIGURES.

U.S. DEPARTMENT OF COMMERCE
 John T. Connor, Secretary
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Table 16.--INCOME OTHER THAN EARNINGS IN 1959 OF THE LABOR RESERVE, BY OCCUPATION, AGE, AND SEX, FOR THE UNITED STATES: 1960--CON. (Based on 5-percent sample. Median not shown where base is less than 1,000)

Table with columns: OCCUPATION, AGE, AND SEX; TOTAL LABOR RESERVE; PERSONS WITH OTHER INCOME (sub-columns: \$1 TO \$499 OR LOSS, \$500 TO \$999, \$1,000 TO \$1,499, \$1,500 TO \$1,999, \$2,000 TO \$2,499, \$2,500 TO \$2,999, \$3,000 TO \$3,999, \$4,000 TO \$4,999, \$5,000 AND OVER); MEDIAN INCOME (DOLLARS).

PC(2)
AC

IN VAN . . .	5 839	1 829	425
WYSBURG . . .	25 742	15 911	1 315
MONT . . .	148 658	35 579	22 443
PITTSBURGH . . .	56 321	99 607	33 847
ANTVILLE . . .	9 943	22 055	745
CHESTER . . .	38 582	15 911	9 79
VERVIS . . .	29 671	16 739	12 6
LE . . .	68 348	32 118	21
PSIE . . .	256 743	38 327	25
ER . . .	7 465	2 675	4
. . .	54 872	42 732	37
. . .	12 359	9 783	
. . .	28 980	19 689	
. . .	21 641	12 543	
. . .	6 003	2 333	
. . .	94 169	67 879	
. . .	112 248	98 564	
. . .	82 392	45 098	
. . .	41 004	16 321	
. . .	3 649	98	
. . .	136 932	38 40	
. . .	22 385	15 1	
. . .	46 940	18	
. . .	18 608	2	
. . .	74 320	54	
. . .	65 082	35	
. . .	1 642	206	
. . .	9 842		
. . .	321		
. . .	644		
. . .	100		
. . .	32		
. . .	3		

UNITED STATES CENSUS OF POPULATION 1960

Labor Reserve



U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS



U.S. DEPARTMENT OF COMMERCE
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PREFACE

This report presents statistics from the 1960 Census of Population on the skills of the labor reserve as represented by occupation. Other characteristics shown in addition to occupation include farm residence, age, color, residence in 1955, school enrollment, years of school completed, marital status, household relationship, number of own children, employment status, year last worked, industry, class of worker, and income in 1959 other than earnings. Legal provision for this census, which was conducted as of April 1, 1960, was made in the Act of Congress of August 31, 1954 (amended August 1957), which codified Title 13 United States Code.

The major portion of the information compiled from the 1960 Census of Population appears in Volume I, Characteristics of the Population, which contains data for the United States, States and counties and their urban and rural parts, cities, minor civil divisions, etc. The present report is part of Volume II, Subject Reports, and is designated as PC(2)-6C. A list of the Volume II Subject Reports appears on the inside of the front cover. A summary description of all the final reports of the 1960 Population Census appears on page IV.

ACKNOWLEDGMENTS

A large number of persons participated in the various activities of the 1960 Census of Population. Primary responsibilities were exercised by many of the persons listed on the preceding page. Within the Population, Demographic Operations, Field, Geography, and Statistical Methods Divisions, most of the staff members worked on the program. Important contributions were also made by the staffs of the Administrative and Publications Services Division, Cecil B. Matthews, Chief; Budget and Finance Division, William E. Stiver, Chief; Data Processing Systems Division, Robert F. Drury, Chief; Jeffersonville Census Operations Office, Robert D. Krook, Chief; Personnel Division, James P. Taff, Chief; and Statistical Research Division, William N. Hurwitz, Chief.

Stanley Greene, Chief, Stuart H. Garfinkle (Chief to October 1961), William J. Milligan, and Thomas C. Walsh of the Economic Statistics Branch, Population Division, had the major responsibility for planning this report and developing its content. John C. Beresford provided liaison with the operations staff, Elizabeth A. Larmon assisted in the preparation of the introductory text, and Mildred M. Russell and Leah S. Anderson performed the technical editorial work. The procedures for compiling the data were devised by Patience Lauriat, Catherine M. Neafsey, Alfonso F. Episcopo, Harry J. North, and Anthony B. Woodell of the Demographic Operations Division. The sampling materials were prepared by Robert Hanson and Warren J. Mitofsky of the Statistical Methods Division.

The census program was designed in consultation with a number of advisory committees and many individuals in order to maximize the usefulness of the data. Among the groups organized for this purpose were the Technical Advisory Committee for the 1960 Population Census, the Council of Population and Housing Census Users, and the Federal Agency Population and Housing Census Council (sponsored by the U.S. Bureau of the Budget). The persons who served with those groups represented a wide range of interest in the census program; their affiliations included universities, private industry, research organizations, labor groups, Federal agencies, State and local governments, and professional associations.

Tabulation of the data in this report was supported, in part, by funds provided by the Office of Manpower, Automation and Training, Department of Labor.

April 1966.

FINAL REPORTS OF THE 1960 CENSUS OF POPULATION

The final reports of the 1960 Population Census are arranged in three volumes and a joint Population-Housing series of census tract reports. The 1960 Population Census publication program also includes preliminary, advance, and supplementary reports, certain evaluation, procedural, and administrative reports, and graphic summaries. After publication, copies of all reports are available for examination or purchase at any U.S. Department of Commerce Field Office.

Certain types of unpublished statistics are available for the cost of preparing a copy of the data. Also, under certain conditions, special tabulations of the 1960 Census data can be prepared on a reimbursable basis. In addition, there are available for purchase magnetic tapes and punchcards containing 1960 Census information on the characteristics of a one-in-a-thousand and a one-in-ten-thousand sample of the population of the United States. Confidentiality of the information, as required by law, has been maintained by the omission of certain identification items. Further information about any of these materials can be obtained by writing to the Chief, Population Division, Bureau of the Census, Washington, D.C., 20233.

Volume I. Characteristics of the Population. This volume consists of separate reports for the United States, each of the 50 States, the District of Columbia, Puerto Rico, Guam, Virgin Islands, American Samoa, and Canal Zone. For each of these 57 areas, the data were first issued in four separate paper-bound "chapters," designated as PC(1)-A, B, C, and D. (For Guam, Virgin Islands, American Samoa, and Canal Zone, the material normally contained in chapters B, C, and D are included in chapter B.) For library and general reference use, the paper-bound reports have been assembled and reissued in buckram-bound books identified as Parts A and 1 to 57 of Volume I.

Series PC(1)-1A to 57A: Chapter A. Number of Inhabitants. These reports contain final population counts for States and counties and their urban and rural parts, and for standard metropolitan statistical areas, urbanized areas, all incorporated places, unincorporated places of 1,000 inhabitants or more, and minor civil divisions.

Series PC(1)-1B to 57B: Chapter B. General Population Characteristics. These reports present statistics on sex, age, marital status, color or race, and relationship to head of household for States and counties and their urban and rural parts, and for standard metropolitan statistical areas, urbanized areas, places of 1,000 inhabitants or more, and minor civil divisions.

Series PC(1)-1C to 53C: Chapter C. General Social and Economic Characteristics. These reports cover the subjects of nativity and parentage, State of birth, country of origin of the foreign stock, mother tongue, place of residence in 1955, year moved into present house, school enrollment by level and type, years of school completed, families and their composition, fertility, veteran status, employment status, weeks worked in 1959, year last worked, occupation group, industry group, class of worker, place of work, means of transportation to work, and income of persons and families. Each subject is shown for some or all of the following areas: States and counties and their urban, rural-nonfarm, and rural-farm parts, standard metropolitan statistical areas, urbanized areas, and urban places.

Series PC(1)-1D to 53D: Chapter D. Detailed Characteristics. These reports present most of the subjects covered in chapter C, above, cross-classified by age, color, and other characteristics. There is also included additional information on families, as well as data on single years of age, detailed occupation, and detailed industry. Each subject is shown for some or all of the following areas: States and their urban, rural-nonfarm, and rural-farm parts; and large counties, cities, and standard metropolitan statistical areas.

Volume I, Part A: Number of Inhabitants. This is a compendium of the 57 chapter A reports, i.e., PC(1)-1A to 57A.

Volume I, Parts 1 to 57: Characteristics of the Population. The 57 parts relate respectively to the United States, each of the 50 States, District of Columbia, Puerto Rico, Guam, Virgin Islands, American Samoa, and Canal Zone. Each part contains the data previously published in the four chapters A, B, C, and D, and is in the form of a separate, buckram-bound book. Parts 54, 55, 56, and 57--for Guam, Virgin Islands, American Samoa, and Canal Zone, respectively--are bound in a single book.

Volume II (Series PC(2) reports). Subject Reports. Each report in this volume concentrates on a particular subject. Detailed information and cross-relationships are generally provided on a national and regional level; in a few reports data for States or standard metropolitan statistical areas are also shown. Among the characteristics covered are ethnic origin and race, fertility, families, migration, education, employment, unemployment, occupation, industry, and income. There is also a report on the geographic distribution and characteristics of inmates of institutions. A list of reports is given on the inside of the front cover.

Volume III (Series PC(3) reports). Selected Area Reports. Four of the reports in this volume present selected characteristics of the population for State economic areas, for standard metropolitan statistical areas, and according to the size and type of place where the individual resided. A fifth report provides data on the social and economic characteristics of Americans overseas.

Series PHC(1). Census Tract Reports. These reports present information on both population and housing subjects. There is one report for each of 180 tracted areas in the United States and Puerto Rico. The population subjects include age, race, marital status, country of origin of the foreign stock, relationship to head of household, school enrollment, years of school completed, place of residence in 1955, employment status, occupation group, industry group, place of work, means of transportation to work, and income of families, as well as certain characteristics of the nonwhite population in selected tracts. The housing subjects include tenure, color of head of household, vacancy status, condition and plumbing facilities, number of rooms, number of bathrooms, number of housing units in structure, year structure built, basement, heating equipment, number of persons in unit, persons per room, year household head moved into unit, automobiles available, value of property, and gross and contract rent, as well as certain characteristics of housing units with nonwhite household head for selected tracts. In addition, for selected tracts these reports contain data on certain population and housing subjects for persons of Puerto Rican birth or parentage and for white persons with Spanish surname. (This series is the same as the tract reports listed in the publication program for the 1960 Census of Housing.)

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Labor Reserve

GENERAL

This report presents detailed national statistics on various social and economic characteristics of members of the labor reserve. The labor reserve is defined here as consisting of persons who have had work experience within the past 10 years--any time between 1950 and 1960--and were neither employed nor unemployed at the time of the census. These statistics are based on a 5-percent sample of the population enumerated in the Eighteenth Decennial Census of Population, taken as of April 1, 1960.

To describe the demographic and social characteristics of members of the labor reserve, data are presented on such personal characteristics as age, color, sex, residence in 1955, school enrollment, educational attainment, marital status, household relationship, the number and age of own children, and the number of children ever born to women ever married. To describe the labor reserve as a potential manpower resource and to present an inventory of skills, data relating to most recent work experience are shown for occupation, industry, class of worker, and year last worked. Data on income other than earnings in 1959 are also presented. Some of the statistics are shown separately for the rural-farm population.

RELATED MATERIALS

1960 Census reports.--Data on the labor reserve, based on a 25-percent sample, are presented for individual States and for the United States in chapter D of 1960 Census of Population, Volume I, Characteristics of the Population. Part I of Volume I presents data for the United States as a whole, and the remainder of the volume is divided into a part for each State and for the outlying areas. Chapter D contains the data originally published in the separate paper-bound series of PC(1)-D reports.

In chapter D of Volume I, data for the labor reserve are presented for the Nation as a whole, and for each State, each standard metropolitan statistical

area of 100,000 or more, and each county of 250,000 or more. Characteristics of members of the labor reserve shown in Volume I are age, color, sex, last occupation, and year last worked. The present report provides additional cross-classifications of data and greater detail than that presented in Volume I.

Several of the Volume II reports--also designated as Series PC(2)--contain data for the labor reserve. The report PC(2)-7A, Occupational Characteristics, contains national data for the labor reserve on last occupation, year last worked, and age. Statistics on persons whose last occupation was that of a teacher are presented in the report PC(2)-7D, Characteristics of Teachers.

Other PC(2) reports also present data on the labor reserve, in relation to the main subject of the report. Subjects covered in these reports are families, professional workers, inmates of institutions, and women by number of children ever born.

1950 Census reports.--Data on the labor reserve from the 1950 Census or any prior censuses are not available, because basic information (year last worked) necessary in classifying persons to the labor reserve was not collected prior to the 1960 Census.

AVAILABILITY OF UNPUBLISHED DATA

The demographic data presented in tables 1 to 7 of this report can also be obtained on a reimbursable basis for States and regions, and by type of residence, i.e., urban, rural nonfarm, and rural farm. Tables 8 to 17 covering economic data can also be obtained on a reimbursable basis for regions. Requests for these data, giving a specific description of the figures desired, may be made by writing to the Chief, Population Division, Bureau of the Census, Washington, D.C., 20233. Inquiries concerning unpublished data should be transmitted to the Bureau as soon as possible because tape files are not maintained indefinitely.

DEFINITIONS AND EXPLANATIONS

Some of the definitions used in 1960 differ from those used in 1950. These changes were made after consultation with users of census data in order to improve the statistics, even though it was recognized that comparability would be affected. The definitions and explanations should be interpreted in the context of the 1960 Censuses, in which data were collected by a combination of self-enumeration, direct interview, and observation by the enumerator.

The definitions below are consistent with the instructions given to the enumerator. As in all surveys, there were some failures to execute the instructions exactly. Through the forms distributed to households, the respondents were given explanations of some of the questions more uniformly than would have been given in direct interviews. Nevertheless, it was not feasible to give the full instructions to the respondents, and some erroneous replies have undoubtedly gone undetected.

More complete discussions of the definitions of population items are given in 1960 Census of Population, Volume I, Characteristics of the Population, Part 1, United States Summary, and in each of the State parts.

EMPLOYMENT STATUS

The data on employment status relate to the calendar week prior to the date on which the respondents filled their Household Questionnaires or were interviewed by enumerators. This week is not the same for all respondents because not all persons were enumerated during the same week.

Employed persons comprise all civilians 14 years old and over who were either (a) "at work"--those who did any work for pay or profit, or worked without pay for 15 hours or more on a family farm or in a family business; or (b) were "with a job but not at work"--those who did not work and were not looking for work but had a job or business from which they were temporarily absent because of bad weather, industrial dispute, vacation, illness, or other personal reasons.

Persons are classified as unemployed if they were 14 years old and over and not "at work" but looking for work. A person is considered as looking for work not only if he actually tried to find work but also if he had made such efforts recently (i.e., within the past 60 days) and was awaiting the results of these efforts. Persons waiting to be called back to a job from which they had been laid off or furloughed are also counted as unemployed. Unemployed persons who have worked at any time in the past are classified as the "experienced unemployed."

The "civilian labor force" includes all persons classified as employed or unemployed, as described above. The "labor force" also includes members of the Armed Forces (persons on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard). The "experienced civilian labor force" comprises the employed and the experienced unemployed.

Persons "not in the labor force" comprise all those 14 years old and over who are not classified as members of the labor force, including persons doing only incidental unpaid family work (less than 15 hours during the week).

YEAR LAST WORKED

The 1960 Census was the first to obtain data on year last worked necessary for classification as to membership in the labor reserve. The data were derived from answers to the following questions on the Household Questionnaire:

P26. When did he last work at all, even for a few days?

(Check one box)

Working now .. <input type="checkbox"/>	1949 or earlier ... <input type="checkbox"/>
In 1960	
In 1959	Never worked
1955 to 1958 .. <input type="checkbox"/>	
1950 to 1954 .. <input type="checkbox"/>	

The "year last worked" pertains to the most recent year in which a person did any work for pay or profit, or worked without pay on a family farm or in a family business. Active service in the Armed Forces is also included. Data derived from this item were tabulated for persons classified as not in the labor force and for persons classified as unemployed.

The data provide a means of evaluating the current applicability and significance of the inventory of occupational skills for those persons not in the labor force, and tabulations resulting from cross-classifications of this information provide data on the demographic characteristics of the labor reserve.

LABOR RESERVE

The labor reserve is comprised of those persons classified as not in the labor force during the reference week but who have had some work experience within the 10 years preceding 1960. Members of the labor reserve were determined through the following sequence of classifications: First, all persons 14 years old and over were classified according to the employment status categories as defined above, and second, those persons classified as not in the labor force were further classified according to the year in which they last worked.

OCCUPATION

In the 1960 Census of Population, information on occupation was collected for persons in the experienced civilian labor force and for persons not in the labor force who have worked some time during the period 1950 to April 1960 (i.e., the labor reserve). For an employed person, the information referred to the job he held during the reference period. If he was employed at two or more jobs, the job at which he worked the greatest number of hours during the reference period was reported. For the experienced unemployed and for persons not in the labor force, the occupational information referred to the last job that had been held.

Classification system.--The occupational classification system developed for the 1960 Census of Population is organized into 12 major groups and consists of 297 specific occupation categories. The composition of the 297 specific categories is shown in the publication, U.S. Bureau of the Census, 1960 Census of Population, Classified Index of Occupations and Industries, U.S. Government Printing Office, Washington, D.C., 1960.

For presentation of occupational data in this report, two levels of classification are shown. Subgroupings of 17 of the 297 specific occupations (mainly on the basis of industry) are made, resulting in the presentation of over 500 items in the detailed listing. Also presented is an intermediate classification system, which presents 161 items for males and 70 items for females. The relationship between the detailed and intermediate levels of classification is given in Lists A and B for males and females, respectively.

In the separation of "managers, officials, and proprietors (n.e.c.)" by class of worker into salaried

**List A.--INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR MALES (161 ITEMS)
WITH COMPONENT DETAILED ITEMS**

(Detailed occupation not shown where intermediate occupation consists of only one detailed occupation. "N.e.c." means not elsewhere classified)

- | | | |
|---|---|--|
| 1. Accountants and auditors | 28. Farmers and farm managers
Farmers (owners and tenants)
Farm managers | 43. Other clerical and kindred workers
Agents (n.e.c.)
Attendants and assistants, library
Attendants, physician's and dentist's office
Baggage men, transportation
Bank tellers
Cashiers
Collectors, bill and account
Dispatchers and starters, vehicle
Express messengers and railway mail clerks
File clerks
Insurance adjusters, examiners, and investigators
Messengers and office boys
Office machine operators
Payroll and timekeeping clerks
Postal clerks
Receptionists
Secretaries
Shipping and receiving clerks
Stenographers
Stock clerks and storekeepers
Telegraph messengers
Telegraph operators
Telephone operators
Ticket, station, and express agents
Typists
Clerical and kindred workers (n.e.c.) |
| 2. Architects | | |
| 3. Artists and art teachers | 29. Officials and inspectors, State and local
administration
Inspectors, State public administration
Inspectors, local public administration
Officials and administrators (n.e.c.), State public
administration
Officials and administrators (n.e.c.), local public
administration | |
| 4. Authors, editors, and reporters
Authors
Editors and reporters | | |
| 5. Chemists | | |
| 6. Clergymen | | |
| 7. College presidents, professors, and instructors
(n.e.c.) | 30. Other specified managers and officials
Buyers and department heads, store
Buyers and shippers, farm products
Conductors, railroad
Credit men
Floor men and floor managers, store
Inspectors, Federal public administration and
postal service
Managers and superintendents, building
Officers, pilots, purser, and engineers, ship
Officials and administrators (n.e.c.), Federal
public administration and postal service
Officials, lodge, society, union, etc.
Postmasters
Purchasing agents and buyers (n.e.c.) | |
| 8. Dentists | | |
| 9. Designers and draftsmen
Designers
Draftsmen | | |
| 10. Engineers, aeronautical | | |
| 11. Engineers, civil | | |
| 12. Engineers, electrical | | |
| 13. Engineers, mechanical | | |
| 14. Other technical engineers
Engineers, chemical
Engineers, industrial
Engineers, metallurgical, and metallurgists
Engineers, mining
Engineers, sales
Engineers, not elsewhere classified | Managers, officials, and proprietors (n.e.c.)--
salaried: | |
| 15. Lawyers and judges | 31. Manufacturing | |
| 16. Musicians and music teachers | 32. Wholesale and retail trade
Wholesale trade
Food and dairy products stores
Eating and drinking places
General merchandise and limited price variety
stores
Apparel and accessories stores
Furniture, housefurnishings, and equipment stores
Motor vehicles and accessories retailing
Gasoline service stations
Hardware, farm equipment, and building material
retailing
Other retail trade | 44. Insurance agents, brokers, and underwriters |
| 17. Natural scientists (n.e.c.)
Agricultural scientists
Biological scientists
Geologists and geophysicists
Mathematicians
Physicists
Miscellaneous natural scientists | 33. Finance, insurance, and real estate
Banking and other finance
Insurance and real estate | 45. Real estate agents and brokers |
| 18. Pharmacists | 34. Other industries (incl. not reported)
Construction
Transportation
Communications, and utilities and sanitary
services
Business services
Automobile repair services and garages
Miscellaneous repair services
Personal services
All other industries (incl. not reported) | 46. Other specified sales workers
Advertising agents and salesmen
Auctioneers
Demonstrators
Hucksters and peddlers
Newsboys
Stock and bond salesmen

Salesmen and sales clerks (n.e.c.): |
| 19. Physicians and surgeons | 35. Construction | 47. Manufacturing |
| 20. Social scientists
Economists
Psychologists
Statisticians and actuaries
Miscellaneous social scientists | 36. Manufacturing | 48. Wholesale trade |
| 21. Social, welfare, and recreation workers
Recreation and group workers
Social and welfare workers, except group | 37. Wholesale trade | 49. Retail trade |
| 22. Teachers, elementary schools | 38. Eating and drinking places | 50. Other industries (incl. not reported) |
| 23. Teachers, secondary schools | 39. Retail trade, except eating and drinking places
Food and dairy products stores
General merchandise and limited price variety
stores
Apparel and accessories stores
Furniture, housefurnishings, and equipment stores
Motor vehicles and accessories retailing
Gasoline service stations
Hardware, farm equipment, and building material
retailing
Other retail trade | 51. Bakers |
| 24. Teachers (n.e.c.) | 40. Other industries (incl. not reported)
Transportation
Communications, and utilities and sanitary
services
Banking and other finance
Insurance and real estate
Business services
Automobile repair services and garages
Miscellaneous repair services
Personal services
All other industries (incl. not reported) | 52. Blacksmiths, forgers, and hammermen
Blacksmiths
Forgers and hammermen |
| 25. Technicians, medical and dental | 41. Bookkeepers | 53. Boilermakers |
| 26. Technicians, electrical and electronic | 42. Mail carriers | 54. Cabinetmakers and patternmakers
Cabinetmakers
Pattern and model makers, except paper |
| 27. Other professional, technical, and kindred workers
Actors
Airplane pilots and navigators
Athletes
Chiropractors
Dancers and dancing teachers
Dietitians and nutritionists
Entertainers (n.e.c.)
Farm and home management advisors
Foresters and conservationists
Funeral directors and embalmers
Librarians
Nurses, professional
Nurses, student professional
Optometrists
Osteopaths
Personnel and labor relations workers
Photographers
Public relations men and publicity writers
Radio operators
Religious workers
Sports instructors and officials
Surveyors
Technicians, other engineering and physical sciences
Technicians (n.e.c.)
Therapists and healers (n.e.c.)
Veterinarians
Professional, technical, and kindred workers
(n.e.c.) | | 55. Carpenters |
| | | 56. Compositors and typesetters |
| | | 57. Cranemen, derrickmen, and hoistmen |
| | | 58. Electricians

Foremen (n.e.c.): |
| | | 59. Manufacturing, durable goods
Metal industries
Machinery, including electrical
Transportation equipment
Other durable goods |
| | | 60. Manufacturing nondurable goods (incl. not specified
manufacturing)
Textile, textile products, and apparel
Other nondurable goods (incl. not specified
manufacturing) |
| | | 61. Nonmanufacturing industries (incl. not reported)
Construction
Railroads and railway express service
Transportation, except railroad
Communications, and utilities and sanitary
services
Other industries (incl. not reported) |
| | | 62. Linemen and servicemen, telegraph, telephone, and
power |
| | | 63. Locomotive engineers |
| | | 64. Locomotive firemen |
| | | 65. Machinists and job setters
Job setters, metal
Machinists |

**List A.--INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR MALES (161 ITEMS)
WITH COMPONENT DETAILED ITEMS--Con.**

- | | | |
|--|---|--|
| 66. Masons, tile setters, and stone cutters
Brickmasons, stonemasons, and tile setters
Stone cutters and stone carvers | 92. Laundry and dry cleaning operatives | Operatives and kindred workers (n.e.c.)--Con. |
| 67. Mechanics and repairmen, airplane | 93. Meat cutters, except slaughter and packing house | 116. Food and kindred products
Meat products
Dairy products
Canning and preserving fruits, vegetables, and sea foods
Grain-mill products
Bakery products
Confectionery and related products
Beverage industries
Miscellaneous food preparations and kindred products
Not specified food industries |
| 68. Mechanics and repairmen, automobile | 94. Mine operatives and laborers (n.e.c.)
Coal mining
Crude petroleum and natural gas extraction
Mining and quarrying, except fuel | 117. Yarn, thread, and fabric mills |
| 69. Mechanics and repairmen, radio and TV | 95. Packers and wrappers (n.e.c.) | 118. Knitting and other textile mill products
Knitting mills
Dyeing and finishing textiles, except wool and knit goods
Floor coverings, except hard surface
Miscellaneous textile mill products |
| 70. Other mechanics and repairmen, and loom fixers
Loom fixers
Mechanics and repairmen, air conditioning, heating, and refrigeration
Mechanics and repairmen, office machine
Mechanics and repairmen, railroad and car shop
Mechanics and repairmen, not elsewhere classified | 96. Painters, except construction and maintenance | 119. Apparel and other fabricated textile products
Apparel and accessories
Miscellaneous fabricated textile products |
| 71. Millwrights | 97. Power station operators | 120. Paper and allied products
Pulp, paper, and paperboard mills
Paperboard containers and boxes
Miscellaneous paper and pulp products |
| 72. Molders, metal | 98. Sailors and deck hands | 121. Chemicals and allied products
Synthetic fibers
Drugs and medicines
Paints, varnishes, and related products
Miscellaneous chemicals and allied products |
| 73. Painters (construction), paperhangers, and glaziers
Glaziers
Painters, construction and maintenance
Paperhangers | 99. Sawyers | 122. Other nondurable goods
Tobacco manufactures
Newspaper publishing and printing
Printing, publishing, and allied industries, except newspapers
Petroleum refining
Miscellaneous petroleum and coal products
Rubber products
Miscellaneous plastic products
Leather: tanned, curried, and finished
Footwear, except rubber
Leather products, except footwear |
| 74. Plasterers and cement finishers
Cement and concrete finishers
Plasterers | 100. Spinners and weavers, textile
Spinners, textile
Weavers, textile | 123. Not specified manufacturing industries |
| 75. Plumbers and pipe fitters | 101. Stationary firemen | 124. Transportation, communication, and other public utilities
Railroads and railway express service
Transportation, except railroad
Communications, and utilities and sanitary services |
| 76. Printing craftsmen, except compositors and typesetters
Bookbinders
Electrotypers and stereotypers
Engravers, except photoengravers
Photoengravers and lithographers
Pressmen and plate printers, printing | 102. Taxicab drivers and chauffeurs | 125. Wholesale and retail trade |
| 77. Shoemakers and repairers, except factory | 103. Truck drivers and deliverymen
Delivery and routemen
Truck and tractor drivers | 126. Other industries (incl. not reported)
Construction
Business and repair services
Personal services
Public administration
All other industries (incl. not reported) |
| 78. Stationary engineers | 104. Welders and flame-cutters | 127. Private household workers
Baby sitters, private household
Housekeepers, private household--living in
Housekeepers, private household--living out
Laundresses, private household--living in
Laundresses, private household--living out
Private household workers (n.e.c.)--living in
Private household workers (n.e.c.)--living out |
| 79. Structural metal workers | 105. Other specified operatives and kindred workers
Asbestos and insulation workers
Blasters and powdermen
Boatmen, canalmen, and lock keepers
Chainmen, rodmen, and axmen, surveying
Conductors, bus and street railway
Dressmakers and seamstresses, except factory
Dyers
Fruit, nut, and vegetable graders and packers, except factory
Graders and sorters, manufacturing
Heaters, metal
Knitters, loopers, and toppers, textile
Milliners
Motormen, mine, factory, logging camp, etc.
Motormen, street, subway, and elevated railway
Oilers and greasers, except auto
Photographic process workers
Severs and stitchers, manufacturing | 128. Barbers |
| 80. Tailors and furriers
Furriers
Tailors | Operatives and kindred workers (n.e.c.): | 129. Charwomen, janitors, and porters
Charwomen and cleaners
Janitors and sextons
Porters |
| 81. Tinsmiths, coopersmiths, and sheet metal workers | 106. Sawmills, planing mills, and miscellaneous wood products
Sawmills, planing mills, and mill work
Miscellaneous wood products | 130. Cooks, except private household |
| 82. Toolmakers, and die makers and setters | 107. Furniture and fixtures | 131. Elevator operators |
| 83. Other craftsmen and kindred workers
Decorators and window dressers
Excavating, grading, and road machinery operators
Heat treaters, annealers, and temperers
Inspectors, scalers, and graders, log and lumber
Inspectors (n.e.c.), construction
Inspectors (n.e.c.), railroads and railway express
Inspectors (n.e.c.), transportation, except railroads, communications, and other public utilities
Inspectors (n.e.c.), other industries (incl. not reported)
Jewelers, watchmakers, goldsmiths, and silversmiths
Millers, grain, flour, feed, etc.
Motion picture projectionists
Opticians, and lens grinders and polishers
Piano and organ tuners and repairmen
Rollers and roll hands, metal
Roofers and slaters
Upholsterers
Craftsmen and kindred workers (n.e.c.)
Former members of the Armed Forces | 108. Stone, clay, and glass products
Glass and glass products
Cement, and concrete, gypsum, and plaster products
Structural clay products
Pottery and related products
Miscellaneous nonmetallic mineral and stone products | 132. Firemen, fire protection |
| 84. Apprentices
Apprentice auto mechanics
Apprentice bricklayers and masons
Apprentice carpenters
Apprentice electricians
Apprentice machinists and tool makers
Apprentice mechanics, except auto
Apprentice plumbers and pipe fitters
Apprentices, building trades (n.e.c.)
Apprentices, metalworking trades (n.e.c.)
Apprentices, printing trades
Apprentices, other specified trades
Apprentices, trade not specified | 109. Primary metal industries
Blast furnaces, steel works, and rolling and finishing mills
Other primary iron and steel industries
Primary nonferrous industries | 133. Guards, watchmen, and doorkeepers |
| 85. Assemblers | 110. Fabricated metal industries (incl. not specified metal)
Cutlery, hand tools, and other hardware
Fabricated structural metal products
Miscellaneous fabricated metal products
Not specified metal industries | 134. Policemen, sheriffs, and marshals
Marshals and constables
Policemen and detectives, government
Policemen and detectives, private
Sheriffs and bailiffs |
| 86. Attendants, auto service and parking | 111. Machinery, except electrical
Farm machinery and equipment
Office, computing, and accounting machines
Miscellaneous machinery | 135. Waiters, bartenders, and counter workers
Bartenders
Counter and fountain workers
Waiters |
| 87. Brakemen and switchmen, railroad
Brakemen, railroad
Switchmen, railroad | 112. Electrical machinery, equipment, and supplies | |
| 88. Bus drivers | 113. Motor vehicles and motor vehicle equipment | |
| 89. Checkers, examiners, and inspectors, manufacturing | 114. Transportation equipment, except motor vehicle
Aircraft and parts
Ship and boat building and repairing
Railroad and miscellaneous transportation equipment | |
| 90. Filers, grinders, and polishers, metal | 115. Other durable goods
Professional equipment and supplies
Photographic equipment and supplies
Watches, clocks, and clockwork-operated devices
Miscellaneous manufacturing industries | |
| 91. Furnacemen, smeltermen, and pourers | | |

List A.--INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR MALES (161 ITEMS)
WITH COMPONENT DETAILED ITEMS—Con.

- | | | |
|---|--|--|
| <p>136. Other service workers, except private household attendants, hospital and other institution attendants, professional and personal service (n.e.c.) attendants, recreation and amusement boothclacks
Boarding and lodging house keepers
Chambermaids and maids, except private household
Hairdressers and cosmetologists
Housekeepers and stewards, except private household
Kitchen workers (n.e.c.), except private household
Midwives
Practical nurses
Ushers, recreation and amusement
Watchmen (crossing) and bridge tenders
Service workers, except private household (n.e.c.)</p> <p>137. Farm laborers, unpaid family workers</p> <p>138. Farm laborers, except unpaid, and farm foremen
Farm foremen
Farm laborers, wage workers
Farm service laborers, self-employed</p> <p>139. Fishermen and cystemen</p> <p>140. Longshoremen and stevedores</p> <p>141. Lumbermen, raftsmen, and wood choppers</p> <p>142. Other specified laborers
Carpenters' helpers, except logging and mining
Garage laborers, and car washers and greasers
Gardeners, except farm, and groundskeepers
Teamsters
Truck drivers' helpers
Warehousemen (n.e.c.)</p> <p>Laborers (n.e.c.):</p> <p>143. Furniture, saw and planing mills, and miscellaneous wood products
Furniture and fixtures
Sawmills, planing mills, and millwork
Miscellaneous wood products</p> | <p>Laborers (n.e.c.)--Con.</p> <p>144. Stone, clay, and glass products
Glass and glass products
Cement, and concrete, gypsum, and plaster products
Structural clay products
Pottery and related products
Miscellaneous nonmetallic mineral and stone products</p> <p>145. Primary metal industries
Blast furnaces, steel works, and rolling and finishing mills
Other primary iron and steel industries
Primary nonferrous industries</p> <p>146. Fabricated metal industries (incl. not specified metal)
Cutlery, hand tools, and other hardware
Fabricated structural metal products
Miscellaneous fabricated metal products
Not specified metal industries</p> <p>147. Machinery, including electrical
Farm machinery and equipment
Office, computing, and accounting machines
Miscellaneous machinery
Electrical machinery, equipment, and supplies</p> <p>148. Transportation equipment
Motor vehicles and motor vehicle equipment
Aircraft and parts
Ship and boat building and repairing
Railroad and miscellaneous transportation equipment</p> <p>149. Other durable goods
Professional equipment and supplies
Photographic equipment and supplies
Watches, clocks, and clockwork-operated devices
Miscellaneous manufacturing industries</p> <p>150. Food and kindred products
Meat products
Dairy products
Canning and preserving fruits, vegetables, and sea foods
Grain-mill products</p> | <p>Laborers (n.e.c.)--Con.</p> <p>150. Food and kindred products--Con.
Bakery products
Confectionery and related products
Beverage industries
Miscellaneous food preparations and kindred products
Not specified food industries</p> <p>151. Textile mill products and apparel
Yarn, thread, and fabric mills
Other textile mill products
Apparel and other fabricated textile products</p> <p>152. Chemicals and allied products
Synthetic fibers
Drugs and medicines
Paints, varnishes, and related products
Miscellaneous chemicals and allied products</p> <p>153. Other nondurable goods
Tobacco manufactures
Pulp, paper, and paperboard mills
Paperboard containers and boxes
Miscellaneous paper and pulp products
Printing, publishing, and allied industries
Petroleum refining
Miscellaneous petroleum and coal products
Rubber and miscellaneous plastic products
Leather and leather products</p> <p>154. Not specified manufacturing industries</p> <p>155. Construction</p> <p>156. Railroads and railway express service</p> <p>157. Transportation, except railroad</p> <p>158. Communications, and utilities and sanitary services</p> <p>159. Wholesale and retail trade</p> <p>160. Other industries (incl. not reported)
Business and repair services
Personal services
Public administration
All other industries (incl. not reported)</p> <p>161. Occupation not reported</p> |
|---|--|--|

List B.--INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR FEMALES (70 ITEMS)
WITH COMPONENT DETAILED ITEMS

(Detailed occupation not shown where intermediate occupation consists of only one detailed occupation. "N.e.c." means not elsewhere classified)

- | | | |
|---|--|---|
| <p>1. Accountants and auditors</p> <p>2. Actors, dancers, and entertainers (n.e.c.)
Actors
Dancers and dancing teachers
Entertainers (n.e.c.)</p> <p>3. Artists and art teachers</p> <p>4. Authors, editors, and reporters
Authors
Editors and reporters</p> <p>5. College presidents, professors, and instructors (n.e.c.)</p> <p>6. Designers and draftsmen
Designers
Draftsmen</p> <p>7. Dietitians and nutritionists</p> <p>8. Lawyers and judges</p> <p>9. Librarians</p> <p>10. Musicians and music teachers</p> <p>11. Natural scientists
Agricultural scientists
Biological scientists
Chemists
Geologists and geophysicists
Mathematicians
Physicists
Miscellaneous natural scientists</p> <p>12. Nurses, professional</p> <p>13. Nurses, student professional</p> <p>14. Physicians and surgeons</p> <p>15. Social scientists
Economists
Psychologists
Statisticians and actuaries
Miscellaneous social scientists</p> <p>16. Social, welfare, and recreation workers
Recreation and group workers
Social and welfare workers, except group</p> | <p>17. Teachers, elementary schools</p> <p>18. Teachers, secondary schools</p> <p>19. Teachers (n.e.c.)</p> <p>20. Technicians, medical and dental</p> <p>21. Therapists and healers (n.e.c.)</p> <p>22. Other professional, technical, and kindred workers
Airplane pilots and navigators
Architects
Athletes
Chiropractors
Clergymen
Dentists
Engineers, aeronautical
Engineers, chemical
Engineers, civil
Engineers, electrical
Engineers, industrial
Engineers, mechanical
Engineers, metallurgical, and metallurgists
Engineers, mining
Engineers, sales
Engineers, not elsewhere classified
Farm and home management advisors
Foresters and conservationists
Funeral directors and embalmers
Optometrists
Osteopaths
Personnel and labor relations workers
Pharmacists
Photographers
Public relations men and publicity writers
Radio operators
Religious workers
Sports instructors and officials
Surveyors
Technicians, electrical and electronic
Technicians, other engineering and physics sciences
Technicians (n.e.c.)
Veterinarians
Professional, technical, and kindred workers (n.e.c.)</p> <p>23. Farmers and farm managers
Farmers (owners and tenants)
Farm managers</p> | <p>24. Specified managers and officials
Buyers and department heads, stores
Buyers and shippers, farm products
Conductors, railroad
Credit men
Floor men and floor managers, store
Inspectors, Federal public administration and postal service
Inspectors, State public administration
Inspectors, local public administration
Managers and superintendents, building
Officers, pilots, purasers, and engineers, ship
Officials and administrators (n.e.c.), Federal public administration and postal service
Officials and administrators (n.e.c.), State public administration
Officials and administrators (n.e.c.), local public administration
Officials, lodge, society, union, etc.
Postmasters
Purchasing agents and buyers (n.e.c.)</p> <p>Managers, officials, and proprietors (n.e.c.)--salaried:</p> <p>25. Wholesale and retail trade
Wholesale trade
Food and dairy products stores
Eating and drinking places
General merchandise and limited price variety stores
Apparel and accessories stores
Furniture, housefurnishing, and equipment stores
Motor vehicles and accessories retailing
Gasoline service stations
Hardware, farm equipment, and building materials retailing
Other retail trade</p> <p>26. Other industries (incl. not reported)
Construction
Manufacturing
Transportation
Communications, and utilities and sanitary services
Banking and other finance
Insurance and real estate
Business services
Automobile repair services and garages
Miscellaneous repair services
Personal services
All other industries (incl. not reported)</p> |
|---|--|---|

List B.--INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR FEMALES (70 ITEMS)
WITH COMPONENT DETAILED ITEMS--Con.

- Managers, officials, and proprietors (n.e.c.)--self-employed:
27. Eating and drinking places
28. Wholesale and retail trade, except eating and drinking places
Wholesale trade
Food and dairy products stores
General merchandise and limited price variety stores
Apparel and accessories stores
Furniture, housefurnishings, and equipment stores
Motor vehicles and accessories retailing
Gasoline service stations
Hardware, farm equipment, and building material retailing
Other retail trade
29. Other industries (incl. not reported)
Construction
Manufacturing
Transportation
Communications, and utilities and sanitary services
Banking and other finance
Insurance and real estate
Business services
Automobile repair services and garages
Miscellaneous repair services
Personal services
All other industries (incl. not reported)
30. Bookkeepers
31. Cashiers
32. Office machine operators
33. Secretaries
34. Stenographers
35. Telephone operators
36. Typists
37. Other clerical and kindred workers
Agents (n.e.c.)
Attendants and assistants, library
Attendants, physician's and dentist's office
Baggage men, transportation
Bank tellers
Collectors, bill and account
Dispatchers and starters, vehicle
Express messengers and railway mail clerks
File clerks
Insurance adjusters, examiners, and investigators
Mail carriers
Messengers and office boys
Payroll and timekeeping clerks
Postal clerks
Receptionists
Shipping and receiving clerks
Stock clerks and storekeepers
Telegraph messengers
Telegraph operators
Ticket, station, and express agents
Clerical and kindred workers (n.e.c.)
38. Insurance and real estate agents and brokers
Insurance agents, brokers, and underwriters
Real estate agents and brokers
39. Other specified sales workers
Advertising agents and salesmen
Auctioneers
Demonstrators
Bucketers and peddlers
Newsboys
Stock and bond salesmen
40. Salesmen and sales clerks (n.e.c.), retail trade
41. Salesmen and sales clerks (n.e.c.), except retail trade
Manufacturing
Wholesale trade
Other industries (incl. not reported)
42. Foremen (n.e.c.)
Construction
Metal industries
Machinery, including electrical
Transportation equipment
Other durable goods
Textiles, textile products, and apparel
42. Foremen (n.e.c.)--Con.
Other nondurable goods (incl. not specified manufacturing)
Railroads and railway express service
Transportation, except railroad
Communications, and utilities and sanitary services
Other industries (incl. not reported)
43. Other craftsmen and kindred workers (Includes all occupations in the major group "Craftsmen, foremen, and kindred workers" except "Foremen (n.e.c.)"; see table 201 for detailed listing.)
44. Assemblers
45. Checkers, examiners, and inspectors, manufacturing
46. Dressmakers and seamstresses, except factory
47. Laundry and dry cleaning operatives
48. Spinners and weavers, textile
Spinners, textile
Weavers, textile
49. Other specified operatives and kindred workers (Includes all occupations in the major group "Operatives and kindred workers" except those included in items 44, 45, 46, 47, and 48, and "Operatives and kindred workers (n.e.c.)"; see table 201 for detailed listing.)

Operatives and kindred workers (n.e.c.):
50. Machinery, including electrical
Farm machinery and equipment
Office, computing, and accounting machines
Miscellaneous machinery
Electrical machinery, equipment, and supplies
51. Other durable goods
Sawmills, planing mills, and mill work
Miscellaneous wood products
Furniture and fixtures
Glass and glass products
Cement, and concrete, gypsum, and plaster products
Structural clay products
Pottery and related products
Miscellaneous nonmetallic mineral and stone products
Blast furnaces, steel works, and rolling and finishing mill
Other primary iron and steel industries
Primary nonferrous industries
Cutlery, hand tools, and other hardware
Fabricated structural metal products
Miscellaneous fabricated metal products
Not specified metal industries
Motor vehicles and motor vehicle equipment
Aircraft and parts
Ship and boat building and repairing
Railroad and miscellaneous transportation equipment
Professional equipment and supplies
Photographic equipment and supplies
Watches, clocks, and clockwork-operated devices
Miscellaneous manufacturing industries
52. Food and kindred products
Meat products
Dairy products
Canning and preserving fruits, vegetables, and sea foods
Grain-mill products
Bakery products
Confectionery and related products
Beverage industries
Miscellaneous food preparations and kindred products
Not specified food industries
53. Textile mill products
Knitting mills
Dyeing and finishing textiles, except wool and knit goods
Floor coverings, except hard surface
Yarn, thread, and fabric mills
Miscellaneous textile mill products
54. Apparel, and other fabricated textile products
Apparel and accessories
Miscellaneous fabricated textile products
55. Other nondurable goods (incl. not specified manufacturing)
Tobacco manufactures
Pulp, paper, and paperboard mills
Paperboard containers and boxes
Miscellaneous paper and pulp products
- Operatives and kindred workers (n.e.c.)--Con.
55. Other nondurable goods (incl. not specified manufacturing)--Con.
News paper publishing and printing
Printing, publishing and allied industries, except newspapers
Synthetic fibers
Drugs and medicines
Paints, varnishes, and related products
Miscellaneous chemicals and allied products
Petroleum refining
Miscellaneous petroleum and coal products
Rubber products
Miscellaneous plastic products
Leather: tanned, curried, and finished
Footwear, except rubber
Leather products, except footwear
Not specified manufacturing industries
56. Nonmanufacturing industries (incl. not reported)
Construction
Railroads and railway express service
Transportation, except railroad
Communications, and utilities and sanitary services
Wholesale and retail trade
Business and repair services
Personal services
Public administration
All other industries (incl. not reported)
57. Private household workers--living in
Baby sitters--living in
Housekeepers--living in
Laundresses--living in
Private household workers (n.e.c.)--living in
58. Private household workers--living out
Baby sitters--living out
Housekeepers--living out
Laundresses--living out
Private household workers (n.e.c.)--living out
59. Attendants, hospital and other institution
60. Charwomen, janitors, and porters
Charwomen and cleaners
Janitors and sextons
Porters
61. Cooks, except private household
62. Hairdressers and cosmetologists
63. Housekeepers and stewards, except private household
64. Practical nurses and midwives
Midwives
Practical nurses
65. Waiters, bartenders, and counter workers
Bartenders
Counter and fountain workers
Waiters
66. Other service workers, except private household
Attendants, professional and personal service (n.e.c.)
Attendants, recreation and amusement
Barbers
Boarding and lodging house keepers
Bootblacks
Chambermaids and maids, except private household
Elevator operators
Kitchen workers (n.e.c.), except private household
Firemen, fire protection
Guards, watchmen, and doorkeepers
Marshals and constables
Policemen and detectives, government
Policemen and detectives, private
Sheriffs and bailiffs
Watchmen (crossing) and bridge tenders
Ushers, recreation and amusement
Service workers, except private household (n.e.c.)
67. Farm laborers, unpaid family workers
68. Farm laborers, except unpaid family workers and farm foremen
Farm foremen
Farm laborers, wage workers
Farm service laborers, self-employed
69. Laborers, except farm and mine (Includes major group "Laborers, except farm and mine"; see table 201 for detailed listing.)
70. Occupation not reported

and self-employed components, the number of unpaid family workers in this occupation is included in the self-employed component. Since the data presented in this report on occupation refer only to civilians, the category "former members of the Armed Forces" for the experienced unemployed and for persons in the labor reserve is limited to those whose last job was as a member of the Armed Forces.

The abbreviation "n.e.c." used in the tables means "not elsewhere classified."

Relationship to DOT Classification.--The occupational classification used in the 1960 Census is generally comparable with the system used in the Dictionary of Occupational Titles (DOT).¹ The two systems, however, are designed to meet different needs and to be used under different circumstances. The DOT system is much more detailed than that of the Bureau of the Census, and it also calls for many types of distinctions which cannot be made from census information.

Comparability of Occupational Classification Systems

The occupational classification system used in 1940 and 1950 is basically the same as that of 1960. There are a number of differences, however, in title and content for certain items, as well as in the degree of detail shown for the various major groups. For the Census of 1930 or earlier censuses, the occupational classification system was markedly different from the 1960 system. The following publications contain information on the various factors of comparability and are particularly useful for understanding differences in the occupation information from earlier censuses: U.S. Bureau of the Census, Sixteenth Census Reports, Population, Comparative Occupation Statistics for the United States: 1870 to 1940, 1943, and Bureau of the Census Working Paper No. 5, Occupational Trends in the United States: 1900 to 1950, 1958.

MEDIAN

The median is presented in connection with the data on age, years of school completed and income. It is the value which divides the distribution into two equal parts, one-half the cases falling below this value and one-half the cases exceeding this value.

A plus (+) or minus (-) sign after the median indicates that the median is above or below that number. For example, a median of \$10,000+ for income indicates that the median fell in the interval "\$10,000 or more."

FARM-NONFARM RESIDENCE

The rural population is subdivided into the rural-farm population, which comprises all rural residents living on farms, and the rural-nonfarm population, which comprises the remaining rural population. In the 1960 Census, the farm population consists of

persons living in rural territory on places of 10 or more acres from which sales of farm products amounted to \$50 or more in 1959 or on places of less than 10 acres from which sales of farm products amounted to \$250 or more in 1959. All persons living in group quarters are classified as nonfarm except the relatively few living in workers' quarters (including quarters for migratory agricultural workers) that are located on a farm or ranch.

AGE

The age classification is based on the age of the person in completed years as of April 1, 1960, as determined from the reply to a question on month and year of birth.

COLOR

The term "color" refers to the division of population into two groups, white and nonwhite. The color group designated as "nonwhite" includes Negroes, American Indians, Japanese, Chinese, Filipinos, Koreans, Hawaiians, Asian Indians, Malaysians, Eskimos, Aleuts, etc. Persons of Mexican birth or ancestry who are not definitely of Indian or other nonwhite race are classified as white.

RESIDENCE IN 1955

Residence on April 1, 1955, is the usual place of residence five years prior to enumeration. The category "same house as in 1960" includes all persons 5 years old and over who were reported as living in the same house on the date of enumeration in 1960 and five years prior to enumeration. Included in the group are persons who had never moved during the five years as well as those who had moved but by 1960 had returned to their 1955 residence. The category "different house in the U.S." includes persons who, on April 1, 1955, lived in the United States in a different house from the one they occupied on April 1, 1960. This category was subdivided into three groups according to their 1955 residence, viz., "different house, same county," "different county, same State," and "different State." The category "abroad" includes those with residence in a foreign country or an outlying area of the United States in 1955. (In the coding of this item, persons who lived in Alaska or Hawaii in 1955 but in other States in 1960 were classified as living in a different State in 1955.) Persons 5 years old and over who had indicated they had moved into their present residence after April 1, 1955, but, for whom sufficiently complete and consistent information regarding residence on April 1, 1955, was not collected, are included in the group "moved, place of residence in 1955 not reported."

In preparing the record for the 5-percent sample, on which the present report is based, all movers from one borough to another within New York City were classified as movers within the "same county," whereas in reports based on the 25-percent record, persons who moved across borough lines were classified as movers

¹ See U.S. Department of Labor, Bureau of Employment Security, Dictionary of Occupational Titles, Second Edition, Vols. I and II, Washington, D.C., 1949.

between counties within the "same State." Hence, the 5-percent sample shows more movers within the same county than would be shown in corresponding figures from the 25-percent sample, and fewer migrants between counties within the same State. This difference should have little influence on the percent distributions by personal characteristics within the various mobility status classes.

SCHOOL ENROLLMENT

School enrollment is shown for persons 20 to 34 years old in the present report. Persons were included as enrolled in school if they were reported as attending or enrolled in a "regular" school or college at any time between February 1, 1960, and the time of enumeration. Regular schooling is that which may advance a person toward an elementary school certificate or high school diploma, or a college, university, or professional degree. Schooling that was not obtained in a regular school and schooling from a tutor or through correspondence courses were counted only if the credits obtained were regarded as transferable to a school in the regular school system. Schooling which is generally regarded as not regular includes that which is given in nursery schools, in specialized vocational, trade, or business schools; in on-the-job training; and through correspondence courses.

Elementary school, as defined here, includes grades 1 to 8, and high school includes grades 9 to 12. College includes junior or community colleges, regular 4-year colleges, and graduate or professional schools.

YEARS OF SCHOOL COMPLETED

The data on years of school completed were derived from the answers to the two questions: (a) "What is the highest grade (or year) of regular school he has ever attended?" and (b) "Did he finish this grade (or year)?" Enumerators were instructed to obtain the approximate equivalent grade in the American school system for persons whose highest grade of attendance was in a foreign school system, whose highest level of attendance was in an ungraded school, whose highest level of schooling was measured by "readers," or whose training by a tutor was regarded as qualifying under the "regular" school definition. Persons were to answer "No" to the second question if they were attending school, had completed only part of a grade before they dropped out, or failed to pass the last grade attended.

The number in each category of highest grade of school completed represents the combination of (a) persons who reported that they had attended the indicated grade and finished it, and (b) those who had attended the next higher grade but had not finished it.

MARITAL STATUS

This classification refers to the marital status of the person at the time of enumeration. Persons classified as "married" comprise, therefore, both those who have been married only once and those who

remarried after having been widowed or divorced. Persons reported as separated (either legally separated or otherwise absent from the spouse because of marital discord) are classified as a subcategory of married persons. The enumerators were instructed to report persons in common-law marriages as married and persons whose only marriage had been annulled as single. Persons "ever married" are those in the categories married (including separated), widowed, and divorced.

The number of married men may be different from the number of married women for an area because of the absence of husbands or wives from the country, because the husband and wife have different places of residence, because of the methods used to inflate the sample data, or for other reasons.

A married person with "spouse present" is a man or woman whose spouse was enumerated as a member of the same household even though he or she may have been temporarily absent on business or vacation, visiting, in a hospital, etc., at the time of enumeration.

HOUSEHOLD, GROUP QUARTERS, AND RELATIONSHIP TO HEAD OF HOUSEHOLD

A household consists of all the persons who occupy a housing unit. A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live and eat with any other persons in the structure and there is either (1) direct access from the outside or through a common hall or (2) a kitchen or cooking equipment for the exclusive use of the occupants.

All persons who are not members of households are regarded as living in group quarters. Group quarters are living arrangements for institutional inmates or for other groups containing five or more persons unrelated to the person in charge. Most of the persons in group quarters live in rooming houses, college dormitories, military barracks, or institutions. Inmates of institutions are persons for whom care or custody is provided in such places as homes for delinquent or dependent children; homes and schools for the mentally or physically handicapped; places providing specialized medical care for persons with mental disorders, tuberculosis, or other chronic disease; nursing and domiciliary homes for the aged and dependent; and prisons and jails.

For persons in households, several categories of relationship to head of household are recognized in this report:

1. The head of the household is the member reported as the head by the household respondent. However, if a married woman living with her husband is reported as the head, her husband is classified as the head for the purpose of census tabulations.

2. The wife of a head of a household is a woman married to and living with a household head. This category includes women in common-law marriages as well as women in formal marriages.

3. A child of the head is a son, daughter, stepchild, or adopted child of the head of the household. "Child of head" is a more inclusive category than "own child of head" (defined below).

4. An other relative of the head is a person related to the head of the household by blood, marriage, or adoption, but not included specifically in another category.

5. A nonrelative of the head is any member of the household who is not related to the household head. This category includes lodgers (roomers and partners, relatives of such persons, and foster children) and resident employees (maids, hired farm hands, etc.).

OWN CHILD

An own child is defined here as a single (never married) son, daughter, stepchild, or adopted child of the person in question. Only those children who are present in the home are included in the number of own children.

CHILDREN EVER BORN

The number of children ever born includes children born to the woman before her present marriage, children no longer living, and children away from home, as well as children borne by the woman who were still living in the home. Although the question on children ever born was asked only of women reported as having been married, the data are not limited to legitimate births.

INDUSTRY

The data on industry for the labor reserve refer to the last job that had been held. The industry data presented are based on the detailed systems developed for the 1960 Census; see 1960 Census of Population, Classified Index of Occupations and Industries, U.S. Government Printing Office, Washington, D.C., 1960. An explanation of the industrial classification system, including its relation to the Standard Industrial Classification (SIC), is given in 1960 Census of Population, Volume I, Characteristics of the Population, Part 1, United States Summary.

CLASS OF WORKER

The class-of-worker classification refers to the same job as the occupation classification. The assign-

ment of a person to a particular class-of-worker category is basically independent, however, of the occupation in which he worked. The classification by class of worker consists of four categories which are defined as follows:

1. Private wage and salary workers.--Persons who worked for a private employer for wages, salary, commission, tips, pay-in-kind, or at piece rates.

2. Government workers.--Persons who worked for any governmental unit (Federal, State, local, or international), regardless of the activity which the particular agency carried on.

3. Self-employed workers.--Persons who worked for profit or fees in their own business, profession, or trade, or who operated a farm either as an owner or tenant.

4. Unpaid family workers.--Persons who worked without pay on a farm or in a business operated by a person to whom they are related by blood or marriage.

INCOME IN 1959

Information on income for the calendar year 1959 was requested from all persons 14 years old and over in the sample. "Total income" is the sum of amounts reported separately for wage or salary income, self-employment income, and other income. Wage or salary income is defined as the total money earnings received for work performed as an employee. It represents the amount received before deductions for personal income taxes, Social Security, bond purchases, union dues, etc. Self-employment income is defined as net money income (gross receipts minus operating expenses) from a business, farm, or professional enterprise in which the person was engaged on his own account. Earnings are the sum of wage or salary income and self-employment income. Income other than earnings includes money income received from such sources as net rents, interest, dividends, Social Security benefits, pensions, veterans' payments, unemployment insurance, and public assistance or other governmental payments, and periodic receipts from insurance policies or annuities. Not included as income are money received from the sale of property (unless the recipient was engaged in the business of selling such property), the value of income "in kind," withdrawals of bank deposits, money borrowed, tax refunds, and gifts and lump-sum inheritances or insurance payments.

COLLECTION AND PROCESSING OF DATA

COLLECTION OF DATA

Several enumeration forms were used to collect the information for the 1960 Census of Population. A few days before the census date, the Post Office Department delivered an Advance Census Report (ACR) to households on postal delivery routes. This form contained questions which were to be answered for every person and every housing unit. Household members were requested to fill the ACR and have it ready for the enumerator. The census enumerator recorded this information on a form specially designed for electronic

data processing by FOSDIC (Film Optical Sensing Device for Input to Computer). The information was either transcribed from the ACR to the complete-count FOSDIC schedule or entered on this schedule during direct interview.

In the densely populated areas, the enumerator left a Household Questionnaire to be completed by each household (or person) in the sample and mailed to the local census office. The population and housing information was transcribed from the Household Questionnaire to a sample FOSDIC schedule. When the Household Questionnaire was not returned or was returned

without having been completed, the enumerator collected the missing information by personal visit or by telephone and entered it directly on the sample FOSDIC schedule. In the remaining areas, when the enumerator picked up the ACR, he obtained all the information by direct interview and recorded it directly on the sample FOSDIC schedule.

Soon after the enumerator started work, his schedules were examined in a formal field review. This operation was designed to assure at an early stage of the work that the enumerator was performing his duties properly and had corrected any errors he had made.

More detailed descriptions of the 1960 Census procedures in the collection and processing of the data are given in reports entitled United States Censuses of Population and Housing, 1960: Principal Data Collection Forms and Procedures, 1961; and Processing the Data, 1962, U.S. Government Printing Office, Washington, D.C., 20402.

MANUAL EDITING AND CODING

After the FOSDIC forms had been checked for completeness in the field, they were sent to a central processing office for manual editing and coding and for microfilming. Except where some special problems arose, there was no manual coding of the FOSDIC forms for complete-count data. On the sample forms, the manual operation was limited to those items where coding required the reading of written entries and therefore could not be done effectively by machine. The coding clerks converted the written entries to codes by marking the appropriate circles on the FOSDIC schedules and at the same time were able to correct obviously wrong entries and sometimes supply missing information.

ELECTRONIC PROCESSING

After the enumerators and coders recorded the information by marking the appropriate circles, the schedules were microfilmed. The information on the microfilm was then read by FOSDIC, which converted the markings to signals on magnetic tape. The tape, in turn, was processed in an electronic computer, which was used extensively to edit and tabulate the data and to produce the publication tables.

EDITING

For a majority of items, nonresponses and inconsistencies were eliminated by using the computer to assign entries and correct inconsistencies. In general, few assignments or corrections were required, although the amount varied by subject and by enumerator.

The assignment of an acceptable entry by machine was based on related information reported for the person or on information reported for a similar person in the immediate neighborhood. For example, in the assignment of age in the complete-count tabulations, the computer stored reported ages of persons by sex, color or race, household relationship, and marital status; each stored age was retained in the computer only until a succeeding person having the same characteristics

and having age reported was processed through the computer; this stored age was assigned to the next person whose age was unknown and who otherwise had the same characteristics. This procedure insured that the distribution of ages assigned by the computer for persons of a given set of characteristics would correspond closely to the reported age distribution of such persons as obtained in the current census.

It was decided that, because of the great variety of occupations, allocation for omission of entries was not feasible. Therefore, persons whose occupation information was lacking were generally classified as "not reported." However, assignments of occupation codes were made in cases of certain omissions and inconsistencies. These assignments were made on the basis of obvious relationships existing between certain occupations, industries, and class of worker. For example, a person reporting himself as "self employed" in industry and as "own" in class of worker was assigned the occupation of a proprietor.

The extent of the allocations for nonresponse or for inconsistency is shown for the United States and for States, places of 10,000 inhabitants or more, and other areas in appendix tables in chapters B, C, and D of 1960 Census of Population, Volume I, Characteristics of the Population.

Specific tolerances were established for the number of computer allocations acceptable for a given area. If the number was beyond tolerance, the data were rejected and the original schedules were re-examined to determine the source of the error. Correction and reprocessing were undertaken as necessary and feasible.

ACCURACY OF THE DATA

Human and mechanical errors occur in any mass statistical operation such as a decennial census. Such errors include failure to obtain required information from respondents, obtaining inconsistent information, recording information in the wrong place or incorrectly, or otherwise producing inconsistencies between entries on interrelated items on the field documents. Sampling biases occur because some of the enumerators fail to follow the sampling instructions. Clerical coding and editing errors occur, as well as errors in the electronic processing operation.

Careful efforts are made in every census to keep the errors in each step at an acceptably low level. Review of the enumerator's work, verification of manual coding and editing, checking of tabulated figures, and ratio estimation of sample data to control totals from the complete count reduce the effects of the errors in the census data.

Very minor differences between tables in this report or between corresponding data in this report and other reports containing 1960 Census data from the 5-percent sample result from imperfections in the electronic equipment. No attempt has been made to reconcile these minor discrepancies.

Some innovations in the 1960 Censuses reduced errors in processing and others produced a more consistent quality of editing. The elimination of the card-punching operation removed one important source of error. The extensive use of electronic equipment

insured a more uniform and more flexible edit than could have been accomplished manually or by less intricate mechanical equipment. It is believed that the use of electronic equipment in the 1960 Censuses has improved the quality of the editing compared with that of earlier censuses but, at the same time, it has introduced an element of difference in the statistics.

A group of reports designated Series ER 60, Evaluation and Research Program of the U.S. Censuses of Population and Housing, deals with the methods, results, and interpretation of a group of evaluation and research studies. A report entitled The Post-Enumeration Survey: 1950, Technical Paper No. 4, presents evaluative material on the 1950 Census.

SAMPLE DESIGN AND SAMPLING VARIABILITY

SAMPLE DESIGN

For persons in housing units at the time of the 1960 Census, the sampling unit was the housing unit and all its occupants; for persons in group quarters, it was the person. On the first visit to an address, the enumerator assigned a sample key letter (A, B, C, or D) to each housing unit sequentially in the order in which he first visited the units, whether or not he completed an interview. Each enumerator was given a random key letter to start his assignment, and the order of canvassing was indicated in advance, although these instructions allowed some latitude in the order of visiting addresses. Each housing unit to which the key letter "A" was assigned was designated as a sample unit, and all persons enumerated in the unit were included in the sample. In every group quarters, the sample consisted of every fourth person in the order listed. The 1960 statistics in this report are based on a subsample of one-fifth of the original 25-percent sample schedules. The subsample was selected on the

computer, using a stratified systematic sample design. The strata were made up as follows: For persons in regular housing units there were 36 strata, i.e., 9 household size groups by 2 tenure groups by 2 color groups; for persons in group quarters, there were 2 strata, i.e., the 2 color groups.

Although the sampling procedure did not automatically insure an exact 5-percent sample of persons, the sample design was unbiased if carried through according to instructions. Generally, for large areas, the deviation from the estimated sample size was found to be quite small. Biases may have arisen, however, when the enumerator failed to follow his listing and sampling instructions exactly.

Table A compares the distribution of persons not in the labor force by year last worked, as presented in this report, based on the 5-percent sample with corresponding statistics based on the 25-percent sample presented in Volume I of the 1960 Census of Population. Differences in this table reflect primarily sampling error.

Table A.—COMPARISON OF 25-PERCENT AND 5-PERCENT SAMPLE DATA ON YEAR LAST WORKED, FOR PERSONS NOT IN LABOR FORCE, BY SEX, FOR THE UNITED STATES: 1960

Year last worked and sex	25-percent sample	5-percent sample	Percent distribution		Ratio of 25-percent sample number to 5-percent sample number
			25-percent sample	5-percent sample	
Both sexes.....	56,399,075	56,361,364	100.0	100.0	1.001
Last worked 1950 to 1960.....	21,900,981	21,878,343	38.8	38.8	1.001
1960.....	2,026,155	2,032,911	3.6	3.6	0.997
1959.....	7,978,408	7,963,076	14.1	14.1	1.002
1955 to 1958.....	7,127,019	7,106,288	12.6	12.6	1.003
1950 to 1954.....	4,769,399	4,776,068	8.5	8.5	0.999
Did not work 1950 to 1960.....	32,539,751	32,519,756	57.7	57.7	1.001
Year last worked not reported.....	1,958,343	1,963,265	3.5	3.5	0.997
Male.....	13,847,633	13,847,309	100.0	100.0	1.000
Last worked 1950 to 1960.....	6,866,548	6,866,553	49.6	49.6	1.000
1960.....	746,631	750,966	5.4	5.4	0.994
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1955 to 1958.....	2,039,163	2,035,809	14.7	14.7	1.002
1950 to 1954.....	1,084,129	1,084,736	7.8	7.8	0.999
Did not work 1950 to 1960.....	6,299,204	6,288,805	45.5	45.4	1.002
Year last worked not reported.....	681,881	691,951	4.9	5.0	0.985
Female.....	42,551,442	42,514,055	100.0	100.0	1.001
Last worked 1950 to 1960.....	15,034,433	15,011,790	35.3	35.3	1.002
1960.....	1,279,524	1,281,945	3.0	3.0	0.998
1959.....	4,981,783	4,968,034	11.7	11.7	1.003
1955 to 1958.....	5,087,856	5,070,479	12.0	11.9	1.003
1950 to 1954.....	3,685,270	3,691,332	8.7	8.7	0.998
Did not work 1950 to 1960.....	26,240,547	26,230,951	61.7	61.7	1.000
Year last worked not reported.....	1,276,462	1,271,314	3.0	3.0	1.004

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1955 to 1958.....	2,039,163	2,035,809	14.7	14.7	1.002
1950 to 1954.....	1,084,129	1,084,736	7.8	7.8	0.999
Did not work 1950 to 1960.....	6,299,204	6,288,805	45.5	45.4	1.002
Year last worked not reported.....	681,881	691,951	4.9	5.0	0.985
Female.....	42,551,442	42,514,055	100.0	100.0	1.001
Last worked 1950 to 1960.....	15,034,433	15,011,790	35.3	35.3	1.002
1960.....	1,279,524	1,281,945	3.0	3.0	0.998
1959.....	4,981,783	4,968,034	11.7	11.7	1.003
1955 to 1958.....	5,087,856	5,070,479	12.0	11.9	1.003
1950 to 1954.....	3,685,270	3,691,332	8.7	8.7	0.998
Did not work 1950 to 1960.....	26,240,547	26,240,951	61.7	61.7	1.000
Year last worked not reported.....	1,276,462	1,271,314	3.0	3.0	1.004

RATIO ESTIMATION

The statistics based on the 5-percent sample of the 1960 Census returns are estimates that have been developed through the use of a ratio estimation procedure. This procedure was carried out for each of the following 44 groups of persons in each of the sample weighting areas:²

Group	Sex, color, and age	Relationship and tenure
Male white:		
1	Under 5	
2	5 to 13	
3	14 to 24	Head of owner household
4	14 to 24	Head of renter household
5	14 to 24	Not head of household
6-8	25 to 44	Same groups as age group 14 to 24
9-11	45 and over	Same groups as age group 14 to 24
Male nonwhite:		
12-22	Same groups as male white	
Female white:		
23-33	Same groups as male white	
Female nonwhite:		
34-44	Same groups as male white	

The sample weighting areas were defined as those areas within a State consisting of central cities of urbanized areas, the remaining portion of urbanized areas not in central cities, urban places not in urbanized areas, or rural areas.³

For each of the 44 groups, the ratio of the complete count to the sample count of the population in the group was determined. Each specific sample person in the group was assigned an integral weight so that the sum of the weights would equal the complete count for the group. For example, if the ratio for a group was 20.1, one-tenth of the persons (selected at random) within the group were assigned a weight of 21, and the remaining nine-tenths a weight of 20. The use of such a combination of integral weights rather than a single fractional weight was adopted to avoid the complications involved in rounding in the final tables. In order to increase the reliability, where there were fewer than 275 persons in the complete count in a group, or where the resulting weight was over 80, groups were combined in a specific order to satisfy both of these two conditions.

² Estimates of characteristics from the sample for a given area are produced using the formula:

$$x' = \sum_{i=1}^{44} \frac{x_i}{Y_i} Y_i$$

where x' is the estimate of the characteristic for the area obtained through the use of the ratio estimation procedure, x_i is the count of sample persons with the characteristic for the area in one (i) of the 44 groups, y_i is the count of all sample persons for the area in the same one of the 44 groups, and Y_i is the count of persons in the complete count for the area in the same one of the 44 groups.

³ For the definitions of urbanized area and urban place, see 1960 Census of Population, Vol. I, Characteristics of the Population, Part 1, United States Summary.

These ratio estimates reduce the component of sampling error arising from the variation in the size of household and achieve some of the gains of stratification in the selection of the sample, with the strata being the groups for which separate ratio estimates are computed. The net effect is a reduction in the sampling error and bias of most statistics below what would be obtained by weighting the results of the 5-percent sample by a uniform factor of twenty. The reduction in sampling error will be trivial for some items and substantial for others. A byproduct of this estimation procedure, in general, is that estimates for this sample are generally consistent with the complete count with respect to the total population and for the subdivisions used as groups in the estimation procedure. A more complete discussion of the technical aspects of these ratio estimates will be presented in another report.

SAMPLING VARIABILITY

The figures from the 5-percent sample tabulations are subject to sampling variability, which can be estimated roughly from the standard errors shown in tables B and C. Somewhat more precise estimates of sampling error may be obtained by using the factors shown in table D in conjunction with table C for percentages and table B for absolute numbers. These tables⁴ do not reflect the effect of response variance, processing variance, or bias arising in the collection, processing, and estimation steps. Estimates of the magnitude of some of these factors in the total error are being evaluated and will be published at a later date. The chances are about two out of three that the difference due to sampling variability between an estimate and the figure that would have been obtained from a complete count of the population is less than the standard error. The chances are about 19 out of 20 that the difference is less than twice the standard error and about 99 out of 100 that it is less than 2½ times the standard error. The amount by which the estimated standard error must be multiplied to obtain other odds deemed more appropriate can be found in most statistical textbooks.

Table B shows rough standard errors of estimated numbers up to 50,000. The relative sampling errors of larger estimated numbers are somewhat smaller than for 50,000. For estimated numbers above 50,000, however,

Table B.--ROUGH APPROXIMATION TO STANDARD ERROR OF ESTIMATED NUMBER

(Range of 2 chances out of 3)

Estimated number	Standard error	Estimated number	Standard error
50.....	30	5,000.....	280
100.....	40	10,000.....	390
250.....	60	15,000.....	480
500.....	90	25,000.....	620
1,000.....	120	50,000.....	880
2,500.....	200		

⁴ The estimates of sampling variability are based on calculations from a sample of the 1960 Census results.

the nonsampling errors, e.g., response errors and processing errors, may have an increasingly important effect on the total error. Table C shows rough standard errors of data in the form of percentages. Linear interpolation in tables B and C will provide approximate results that are satisfactory for most purposes.

Table C.--ROUGH APPROXIMATION TO STANDARD ERROR
OF ESTIMATED PERCENTAGE
(Range of 2 chances out of 3)

Estimated percentage	Base of percentage					
	500	1,000	2,500	10,000	25,000	100,000
2 or 98.....	3.3	2.3	1.3	0.8	0.3	0.3
5 or 95.....	5.0	4.0	2.3	1.0	0.5	0.3
10 or 90.....	7.0	5.0	3.0	1.5	0.8	0.5
25 or 75.....	10.0	6.8	3.8	1.8	1.0	0.5
50.....	11.0	7.8	4.0	2.0	1.3	0.8

For a discussion of the sampling variability of medians and means and of the method for obtaining standard errors of differences between two estimates, see 1960 Census of Population, Volume I, Characteristics of the Population, Part 1, United States Summary.

Table D provides a factor by which the standard errors shown in table B should be multiplied to adjust for the combined effect of the sample design and the estimation procedure.

To estimate a somewhat more precise standard error for a given characteristic, locate in table D the factor applying to the characteristic. Multiply the standard error given for the size of the estimate

as shown in table B by this factor from table D. The result of this multiplication is the approximate standard error. Similarly, to obtain a somewhat more precise estimate of the standard error of a percentage, multiply the standard error as shown in table C by the factor from table D.

Illustration: Table 1 shows that there are 31,135 rural-farm males in the total labor reserve (last worked 1950 to 1960) in the age group 18 and 19 years old. Table D shows that for data on age, by sex (by farm, nonfarm), the appropriate standard error in table B should be multiplied by a factor of 1.8. Table B shows that a rough approximation to the standard error for an estimate of 31,135 is 684. The factor of 1.8 times 684 is 1,231, which means that the chances are approximately 2 out of 3 that the results of a complete census will not differ by more than 1,231 from this estimated 31,135. It also follows that there is only about 1 chance in 100 that a complete census result would differ by as much as 3,078, that is, by about 2½ times the number estimated from tables B and D.

Table D.--FACTOR TO BE APPLIED TO STANDARD ERRORS

Characteristic ¹	Factor
Age, by sex (by rural farm, nonfarm).....	1.8
Color or race (by rural farm, nonfarm).....	1.8
Nativity and parentage.....	1.4
Household relationship.....	0.8
School enrollment, by age.....	0.8
Residence in 1955.....	1.8

¹ All characteristics not appearing in this table have a factor of 1.0 to be applied to the standard errors.