

CENSUS '80

Product Primers

Primer Number 5

GENERAL POPULATION CHARACTERISTICS (PC80-1-B)

Issued August 1983

The 1980 census established that dramatic changes took place in the social fabric of virtually every State during the 1970's. Shifts in family, household, and marriage patterns over the decade have altered the makeup of American society at the National, State, and local levels.

According to the 1980 census counts, the median age of the population increased to 30 years from 28 years in 1970. This increase was a result of declining fertility, aging of the "baby boom" cohorts, and increasing longevity of the population. Less than one-quarter of the population was under 15 years of age and 11.3 percent were 65 years old and over in 1980. These findings document one of the most dramatic public policy-related events regarding the 1980 census.

The data for virtually all States show faster growth of nonfamily households (one person or unrelated people in the same household) than families, smaller household size, and more families maintained by women with no husband present. These trends reflect a greater tendency of people to live alone, delay marriages, and separate and divorce. While families still make up 73 percent of all households, this is down from almost 90 percent in 1950. The data also reveal variations in the composition of families among different race and Spanish origin groups.

"General Population Characteristics" (PC80-1-B) offers useful demographic measures for the total population, racial groups and persons of Spanish origin. It is the second of four chapters in volume 1 of the 1980 Census of Population. The first population chapter reports on the number of inhabitants for several decades and geographic areas (see

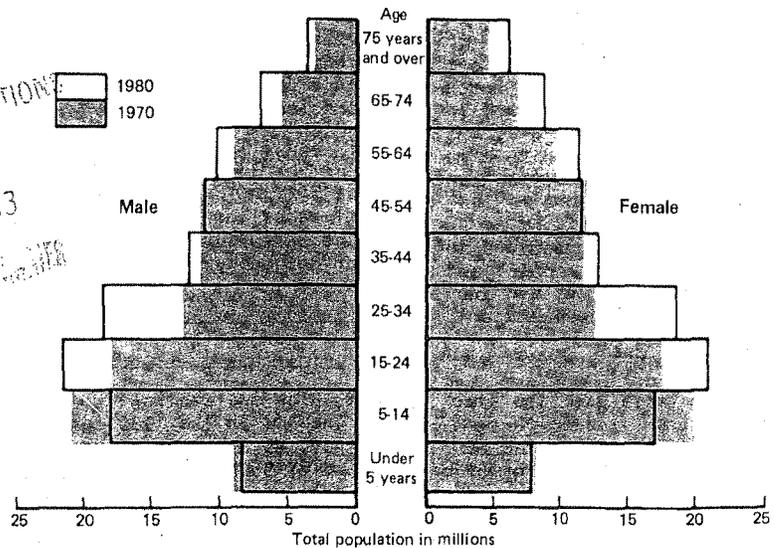
Primer 1). "General Population Characteristics" summarizes the characteristics of the population using all of the complete-count population items (i.e., household relationship, age, sex, race, Spanish origin, marital status). Therefore, it will help you construct population pyramids (figure 1), calculate sex ratios or ratios of dependency for the young and old, study the characteristics of households and/or families, or examine the extent of marital disruption. The chapter also provides useful information on household type and relationship (e.g., spouse, children, nonrelatives) for the total population as well as for persons under 18 years and for those 65 years and over. The tabulations of family type will help you determine the number of children in various age categories who live either in married-couple families or in families maintained by one parent.

There is a separate volume for the United States, each State, the District of Columbia, and outlying areas in the PC80-1-B series. Volumes contain information for urban and rural areas, inside and outside Standard Metropolitan Statistical Areas, places of various sizes down to 1,000 population, counties, American Indian reservations, and Alaskan Native villages.

You can obtain any of the PC80-1-B reports from the Government Printing Office. They cost between \$5.50 and \$13.00, depending on the size of the State.

Product Primers are prepared primarily for college-level instructors but can also be used for self-study. This Primer includes background information (page 1), exercises designed to teach census concepts and data-use skills (pages 2 and 3), and a presentation outline and the exercise answer keys (page 4).

Figure 1.
Distribution of the Total Population, by Age and Sex: 1980 and 1970



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EXERCISE 1: WHERE ARE THEY?

If it is hard to figure out what the numbers in a statistical table mean, the following exercise may help remove some of the mystery. By completing this exercise, you will be able to list some of the frequently-used population concepts and differentiate between race and ethnicity concepts used in the 1980 census.

PROBLEM: Ms. Gomez (fictitious resident) completed the population portion of the census questionnaire (figure 2) on April 1, 1980. You are to decide which numbers in a 1980 census population table contain data given by Ms. Gomez on this questionnaire. To complete this exercise, photocopy table 24 from "General Population Characteristics" (PC80-1-B) from a State report.

1. Examine figure 2. All householders (the persons listed in column 1) received a copy of this portion of the questionnaire. Each householder also provided information on the characteristics of their housing unit (house or apartment). After Ms. Gomez listed her name and Andy's at the top of the questionnaire, what six items did she provide to complete the population part of the form?

2. Use this information to describe the characteristics of the Gomez household and its occupants. How many people lived in the household? How old were they? Was the household headed by a male or female? What information can you infer about Ms. Gomez's husband and Andy's father? What was the relation of the occupants to each other? To what race(s) and Spanish origin group(s) did they belong? Was this household a family?

3. Examine table 24. The stub (i.e., the item listing that appears along the left side of the table) summarizes information about many of the topics asked of all of the population in the 1980 census. Which of the six items listed in step 1 are not included in this stub?

Figure 2. 1980 Census Population Questionnaire

Here are the QUESTIONS ↓	PERSON in column 1		PERSON in column 2	
	Last name <i>Gomez</i>	Middle initial	Last name <i>Gomez</i>	Middle initial
2. How is this person related to the person in column 1? <i>Fill one circle.</i> <i>If "Other relative" of person in column 1, give exact relationship, such as mother-in-law, niece, grandson, etc.</i>	<i>START in this column with the household member (or one of the members) in whose name the home is owned or rented. If there is no such person, start in this column with any adult household member.</i>		If relative of person in column 1: <input type="radio"/> Husband/wife <input type="radio"/> Father/mother <input checked="" type="radio"/> Son/daughter <input type="radio"/> Other relative <input type="radio"/> Brother/sister If not related to person in column 1: <input type="radio"/> Roomer, boarder <input type="radio"/> Other nonrelative <input type="radio"/> Partner, roommate <input type="radio"/> Paid employee	
3. Sex <i>Fill one circle.</i>	<input type="radio"/> Male <input checked="" type="radio"/> Female		<input checked="" type="radio"/> Male <input type="radio"/> Female	
4. Is this person — <i>Fill one circle.</i>	<input type="radio"/> White <input type="radio"/> Asian Indian <input checked="" type="radio"/> Black or Negro <input type="radio"/> Hawaiian <input type="radio"/> Japanese <input type="radio"/> Guamanian <input type="radio"/> Chinese <input type="radio"/> Samoan <input type="radio"/> Filipino <input type="radio"/> Eskimo <input type="radio"/> Korean <input type="radio"/> Aleut <input type="radio"/> Vietnamese <input type="radio"/> Other — Specify <input type="radio"/> Indian (Amer.) Print tribe →		<input type="radio"/> White <input type="radio"/> Asian Indian <input checked="" type="radio"/> Black or Negro <input type="radio"/> Hawaiian <input type="radio"/> Japanese <input type="radio"/> Guamanian <input type="radio"/> Chinese <input type="radio"/> Samoan <input type="radio"/> Filipino <input type="radio"/> Eskimo <input type="radio"/> Korean <input type="radio"/> Aleut <input type="radio"/> Vietnamese <input type="radio"/> Other — Specify <input type="radio"/> Indian (Amer.) Print tribe →	
5. Age, and month and year of birth <i>a. Print age at last birthday.</i> <i>b. Print month and fill one circle.</i> <i>c. Print year in the spaces, and fill one circle below each number.</i>	a. Age at last birthday: <u>32</u> b. Month of birth: <u>July</u> <input checked="" type="radio"/> Jan.—Mar. <input type="radio"/> Apr.—June <input type="radio"/> July—Sept. <input type="radio"/> Oct.—Dec.		a. Age at last birthday: <u>2</u> b. Month of birth: <u>Oct</u> <input type="radio"/> Jan.—Mar. <input type="radio"/> Apr.—June <input type="radio"/> July—Sept. <input checked="" type="radio"/> Oct.—Dec.	
6. Marital status <i>Fill one circle.</i>	<input type="radio"/> Now married <input type="radio"/> Separated <input checked="" type="radio"/> Widowed <input type="radio"/> Never married <input type="radio"/> Divorced		<input type="radio"/> Now married <input type="radio"/> Separated <input type="radio"/> Widowed <input checked="" type="radio"/> Never married <input type="radio"/> Divorced	
7. Is this person of Spanish/Hispanic origin or descent? <i>Fill one circle.</i>	<input checked="" type="radio"/> No (not Spanish/Hispanic) <input type="radio"/> Yes, Mexican, Mexican-Amer., Chicano <input type="radio"/> Yes, Puerto Rican <input type="radio"/> Yes, Cuban <input type="radio"/> Yes, other Spanish/Hispanic		<input type="radio"/> No (not Spanish/Hispanic) <input checked="" type="radio"/> Yes, Mexican, Mexican-Amer., Chicano <input type="radio"/> Yes, Puerto Rican <input type="radio"/> Yes, Cuban <input type="radio"/> Yes, other Spanish/Hispanic	

4. The stub used in this table is repeated in 12 other tables in chapter B because it presents much of the population data in a concise manner. For what geographic area are data presented in table 24?

5. Flipthrough PC80-1-B to locate at least four other tables that use this stub. For what levels of geography do they show data?

6. Race and ethnicity are separate concepts in the 1980 census. Andy, as an example, was Black and of Spanish origin and Ms. Gomez was Black and not of Spanish origin. Look at table 24 to determine which five of the nine columns contain data about Ms. Gomez and/or Andy.

7. Table 24 uses 792 cells (88 stub x 9 header items) to describe the population characteristics of the State. Statistics on Ms. Gomez, Andy, and the Gomez household and family can be found in the counts and median values for 86 of these cells. The first one is in the upper left corner (the total population for the State). Circle this cell and the remaining 85 cells. Be careful, however, because some concepts are tricky. Use appendix B of PC80-1-B if you are not certain about the definition of a concept.

8. Figure 5 shows which cells you should have circled. If your answers are correct, you are well on your way to unlocking the rich insights that PC80-1-B offers.

EXERCISE 2: SOME FAMILY MEASURES



The American family underwent a remarkable amount of change during the 1970's. For example, nonfamily households accounted for an increasing percentage of all households. Additionally, the size of households and families decreased during the 1970's. This exercise introduces these and other measures so that you can study the characteristics of families using 1980 census data.

PROBLEM: Compare the status of families in your State and in the Nation. Use appendix B of "General Population Characteristics" (PC80-1-B) if you need additional information on the concepts (printed in bold) that follow.

1. According to the findings from the the 1980 census, less than 6 million people lived in settings such as college dormitories, rest homes, and correctional institutions. Use figure 3 to determine the approximate percentage of the population living in these settings called **group quarters**.
2. The remainder of the population lived in **housing units**. Each housing unit that was occupied had a **householder** (i.e., the person in whose name the unit was owned or rented). The Census

Bureau classified householders who lived alone or with persons not related by birth, marriage, or adoption as a **nonfamily householder**. These individuals lived in **nonfamily households**. There were 72.3 percent more nonfamily households in 1980 than in 1970. In 1970 they accounted for 19.7 percent of all households; in 1980, 26.8 percent. Use the first page of table 21 in PC80-1-B to find the information you will need to fill out part A, column 3, of figure 4. Using total households as the denominator, calculate the percentages for each household type in column 5.

3. A **family**, according to the census definition, consists of a householder plus all of the other residents who are related to this person by birth, marriage, or adoption. Shade in the portion of figure 3 to show the categories of persons who belonged to a family in 1980.

4. Table 21 also shows the relationships of the family members to the householder. Find the counts of the population by their relationship to the **family householder** and record these totals in figure 4, part B, column 3. Use their sum as the denominator so that you can calculate the per-

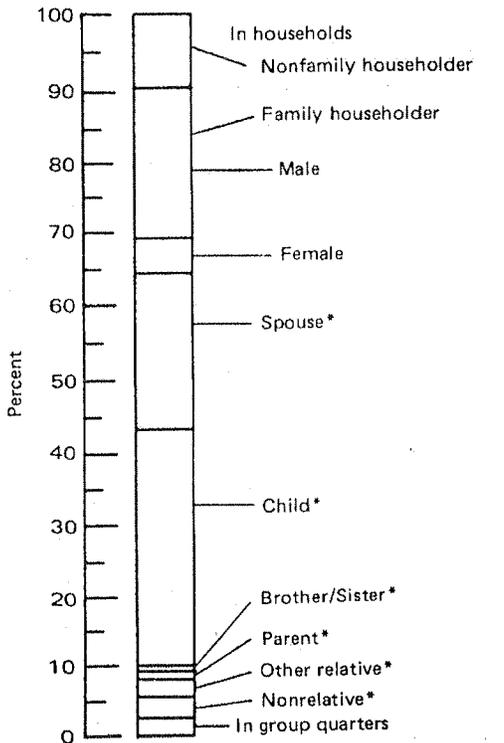
centages for the family composition category in column 5.

5. There are three types of families: **married-couple families**, **female householders with no husband present**, and **male householders with no wife present**. Using total families as the denominator, determine the percentages of families that were married-couple families or have female householders with no husbands present. Record your answers in figure 4, part C, column 5. Then, calculate (by subtraction) the percentage of male householders who maintained a family but did not have a wife present.

6. Number of persons is a measure of size. Although some people might use the first measure they come across in table 21 (i.e., **persons per household**), if your interest is in families, you should use **persons per family**. Record in column 5 both measures for your State. Why is the latter measure usually greater than or equal to the former measure?

7. Write a paragraph summarizing how your State compares to the Nation in its household and family structure.

Figure 3. Total Population: 1980



*Relationship to householder

Figure 4. Selected Family Measures

Part (1)	Measure (2)	Counts from table 21 (3)	Nation (4)	Your State (5)
A	Household type			
	Total households		100%	
	Family		73.2%	___%
B	Family composition			
	Total family members		100.0%	
	Family householder		30.6%	___%
	Spouse		25.1%	___%
	Child		39.1%	___%
	Brother or sister		1.1%	___%
	Parent		.8%	___%
C	Family type			
	Total families		100.0%	
	Married-couple family		82.1%	___%
	Female householder, no husband present		14.3%	___%
	Male householder, no wife present		3.6%	___%
D	Size			
	Persons per household		2.75	___
	Persons per family		3.27	___

Source: PC80-1-B

TECHNICAL NOTES

"General Population Characteristics" contains the most detailed reporting in printed form of the complete-count population data (those data gathered from all households) from the 1980 census. The following outline highlights important features of this series:

I. Report designation and series:

A. PC80-1-B4 means 1980

Census of Population, volume 1, chapter B "General Population Characteristics", State number 4 (Arizona).

B. Includes a U.S. summary report, 51 State reports, and reports for outlying areas.

II. PC80-1-B relationship to other products:

A. Summary Tape File (STF) 2 generates this series. Both include complete-count items only (e.g., age, sex, race, Spanish origin, marital status).

B. PC80-1-A (first population chapter) reports on the number of inhabitants by geographic level for several decades. See Primer 1.

C. HC80-1-A "General Housing Characteristics" and PC80-1-B have similar organizations: both repeat tables for race and Spanish origin, and both contain tables for the same geographic levels (e.g., SMSA's, counties, places). See Primer 2.

III. PC80-1-B contents:

- A. Most tables show age, household type and relationship, family type by presence of own children, and marital status.
- B. Some tables present detailed cross-tabulations for age and sex.
- C. Some population counts show decade-by-decade changes since 1900.

IV. Applications of PC80-1-B data:

- A. Create population profiles for areas and population subgroups.
- B. Examine distributions of age, family and household composition, and extent of marital disruption.
- C. Compare demographic characteristics and household structure of racial and Spanish-origin groups.
- D. Conduct market analyses, identifying areas of prob-

able high demand for specific types of products or services (e.g., baby products in areas with young families, meals-on-wheels where elderly live).

V. Other features:

- A. Table Finding Guide matches table numbers with specific data items and geographic areas.
- B. Maps show counties, SMSA's, selected places, county subdivisions, American Indian reservations, and Alaskan Native villages.
- C. Appendixes define geographic areas and census concepts (e.g., group quarters, race, Spanish origin, householder, nonfamily household), describe census procedures, and discuss accuracy of the data.

Additional References

CENSUS '80: Continuing the Factfinder Tradition, chapter 7

CENSUS '80: Projects for Students, exercise 4.2
1980 Census Users' Guide, chapters 4 and 5

ANSWER KEYS

Exercise 1 (page 2) requires students to work with the definitions that the 1980 census used for such concepts as race, ethnicity, family, and household. The task appears to be rather simple: locate the cells in a PC80-1-B table that show data for Sandra Gomez and Andy. Ms. Gomez, the householder, is Black, not of Spanish origin, and widowed; her young son, however, is Hispanic and Black. The exercise is rather challenging even when you consult the definitions found in appendix B.

The exercise answers are: (1) relationship, sex, race, age, marital status, Spanish origin; (2) 2, 32 and 2, female, deceased, mother and son, both are Black, Andy is of Spanish origin, yes; (3) race, Spanish origin; (4) State; (5) several possible answers. Figure 5 gives the answers to steps 6 and 7 of this exercise. Only the five columns that contain data on Ms. Gomez and Andy are shown. Also we have removed the 6 lines of data on the marital status of males and the 10 lines of data for persons 65 years and over.

Exercise 2 (page 3) introduces a number of family measures. Use figure 3 to show that all of the population lives in either group quarters (2.5%) or households (97.5%) and that the latter group lives in either family or non-family households.

Figure 4 highlights some of the measures you can use to study families. In addition to these, the **marital disruption index** measures the extent of disruption caused by separation, divorce, and death of a spouse. You can calculate it by summing the number of males and females who were counted as separated, divorced, or widowed and dividing by the number of males and females 15 years and over who had ever been married. You can also look at this index separately for males and females.

Once your students have completed this exercise, they can apply these measures to study the variations that exist between different race and Spanish origin (tables 21-24) or geographic areas (tables 27-31; 34-39; and 47-53).

Figure 5. Answers to Exercise 1

The State	Spanish origin		Not of Spanish origin	
	Total	Male	Total	Male
AGE				
Total persons	4,116,972	2,142,748	1,974,224	1,974,224
Under 5 years	394,272	198,272	196,000	196,000
5 to 9 years	356,378	182,027	174,351	174,351
10 to 14 years	317,876	161,876	156,000	156,000
15 to 19 years	292,991	147,372	145,619	145,619
20 to 24 years	271,194	136,313	134,881	134,881
25 to 29 years	252,876	126,434	126,442	126,442
30 to 34 years	237,876	118,876	119,000	119,000
35 to 39 years	224,876	112,876	112,000	112,000
40 to 44 years	214,876	107,876	107,000	107,000
45 to 49 years	206,876	103,876	103,000	103,000
50 to 54 years	199,876	100,876	99,000	99,000
55 to 59 years	193,876	97,876	96,000	96,000
60 to 64 years	188,876	94,876	94,000	94,000
65 to 69 years	184,876	92,876	92,000	92,000
70 to 74 years	181,876	91,876	91,000	91,000
75 years and over	179,876	90,876	90,000	90,000
16 years and over	2,118,224	1,059,112	1,059,112	1,059,112
Median	26.7	26.7	26.7	26.7
Family	3,321,876	1,660,938	1,660,938	1,660,938
Under 5 years	314,272	157,136	157,136	157,136
5 to 9 years	282,378	141,189	141,189	141,189
10 to 14 years	247,876	123,938	123,938	123,938
15 to 19 years	224,876	112,438	112,438	112,438
20 to 24 years	204,876	102,438	102,438	102,438
25 to 29 years	187,876	93,938	93,938	93,938
30 to 34 years	173,876	86,938	86,938	86,938
35 to 39 years	161,876	80,938	80,938	80,938
40 to 44 years	151,876	75,938	75,938	75,938
45 to 49 years	143,876	71,938	71,938	71,938
50 to 54 years	137,876	68,938	68,938	68,938
55 to 59 years	132,876	66,438	66,438	66,438
60 to 64 years	128,876	64,438	64,438	64,438
65 to 69 years	125,876	62,938	62,938	62,938
70 to 74 years	123,876	61,938	61,938	61,938
75 years and over	122,876	61,438	61,438	61,438
16 years and over	1,660,938	830,469	830,469	830,469
Median	27.6	27.6	27.6	27.6
HOUSEHOLD TYPE AND RELATIONSHIP				
Total persons	4,116,972	2,142,748	1,974,224	1,974,224
In household	3,942,272	1,971,136	1,971,136	1,971,136
Householder	1,204,876	602,438	602,438	602,438
Nonfamily householder	371,876	185,938	185,938	185,938
Spouse	842,376	421,188	421,188	421,188
Other relatives	1,204,876	602,438	602,438	602,438
Nonrelatives	1,204,876	602,438	602,438	602,438
Widow of nonspouse	44,876	22,438	22,438	22,438
Other, in group quarters	49,876	24,938	24,938	24,938
Persons per household	3.14	3.14	3.14	3.14
Persons per family	3.14	3.14	3.14	3.14
Persons under 18 years	1,147,876	573,938	573,938	573,938
Householder or spouse	1,147,876	573,938	573,938	573,938
Own child, under 18 years	1,147,876	573,938	573,938	573,938
In married-couple family	1,147,876	573,938	573,938	573,938
Other relatives	1,147,876	573,938	573,938	573,938
With female householder, no husband present	1,147,876	573,938	573,938	573,938
Other relatives	1,147,876	573,938	573,938	573,938
Nonrelatives	1,147,876	573,938	573,938	573,938
Multiple dwellings	1,147,876	573,938	573,938	573,938
FAMILY TYPE BY PRESENCE OF OWN CHILDREN				
Total persons	3,321,876	1,660,938	1,660,938	1,660,938
With own children under 18 years	1,147,876	573,938	573,938	573,938
With own children under 5 years	401,876	200,938	200,938	200,938
Married-couple families	842,376	421,188	421,188	421,188
With own children under 18 years	441,876	220,938	220,938	220,938
With own children under 5 years	141,876	70,938	70,938	70,938
Female householder, no husband present	181,876	90,938	90,938	90,938
With own children under 18 years	131,876	65,938	65,938	65,938
With own children under 5 years	41,876	20,938	20,938	20,938
MARITAL STATUS				
Total persons	2,118,224	1,059,112	1,059,112	1,059,112
Female, 16 years and over	1,059,112	529,556	529,556	529,556
Single	442,876	221,438	221,438	221,438
Married, except separated	442,876	221,438	221,438	221,438
Separated	111,876	55,938	55,938	55,938
Widowed	111,876	55,938	55,938	55,938
Divorced	111,876	55,938	55,938	55,938