

## USES AND INTERPRETATION OF RACIAL AND ETHNIC DATA FROM THE U.S. CENSUS

Michael J. Levin, Nampeo R. McKenney, and Patricia A. Berman, U.S. Bureau of the Census

This paper examines the size and of three groups--American Indians in Oklahoma, Japanese in Hawaii, and Hawaiians in Hawaii--derived from the 1980 census race and ethnic data to better understand the effects of and uses of different census questions and the implications of that self-identification.

The 1980 census data on race and ethnicity were collected subjectively using self-identification. The intent of the census items is to establish an individual's perception of his or her own racial or ethnic identity. In recent years, the data on race and ethnicity have been used increasingly in implementing Federal and state programs, allocating government funds, planning programs, and making policy decisions. These uses imply that the data reflect precise, rather than subjective, measures of race and ethnicity.

It is expected that race and ethnicity would overlap in varying degrees for certain groups such as American Indians, Blacks, Japanese, and Chinese. Responses to race and ethnicity provide similar estimates of the size and characteristics for some groups but very different estimates for other groups. Perceptions about differentiation further complicate the use and interpretation of the racial and ethnic data.

The analysis in this paper has been limited basically to Oklahoma for American Indians and Hawaii for Japanese and Hawaiians to minimize the effect of geographic variation in race and ethnicity reporting. The examination of data for the three groups is useful for interpreting in general the 1980 census data on race and ethnicity and as a basis for more extensive research in preparation for the 1990 census.

We will first briefly review the major uses, data collection procedures, and evaluation of self-identification for race and ethnic information, and then present a short analysis of data on the three groups for comparative purposes.

### Major Uses of Data

Since the 1950s, the uses of race and ethnic data have expanded; however, the major growth and changes in the use of the data took place during the 1970s. This expansion was due to the implementation of Federal legislation, programs, directives, and regulations which require the use of census data. A few examples of the use of the data are cited to provide insights into the varied uses of data. The

primary mandate on race and ethnic data is Federal Statistical Directive Number 15, which requires the Census Bureau and other appropriate Federal agencies to collect data

require data on race and Spanish origin (classified as an ethnic group) for redistricting under Public Law 94-171.

Examples of program implementation and funding allocation include revenue sharing, employment and training, energy and low-income assistance, and housing programs. For instance, counts of American Indians are used by the Treasury Department to allocate approximately \$11 million annually under the general revenue sharing program to tribal governments and Alaska Native villages; data on American Indians, Eskimos, Aleuts, and Hawaiians are required by the Labor Department for distributing monies under the Job Partnership and Training Act. Also, data on race and ethnicity are used for EEO and affirmative action programs.

In addition to the uses cited above, census data are used also for many other purposes, including assessment of the social and economic status of groups, program planning, and as the base for vital statistics and other rates.

A number of programs, particularly those involving allocation of funds or the implementation of anti-discrimination legislation, require a "precision" in reporting which is difficult to establish with a subjective question. For example, the size of the American Indian population on a reservation has a substantial impact upon the amount of funding that a tribal government receives under revenue sharing. Information on race or Spanish origin cross-classified by age for given geographic areas may be a major variable in determining whether a particular redistricting plan is challenged or accepted.

Population totals (and therefore different distributions of characteristics) were obtained in the 1980 census through self-identification rather than the traditional method of enumeration used in previous censuses in which the enumerator solely or in consultation with the respondents made the race or ethnic determination. In this paper, we will look at some of the implications of the different methods of identification.

### Data Collection Procedures

The use of the subjective approach for collecting race and ethnicity data evolved over several decades.

The methodological innovation of the mail-out census in 1960 permitted the introduction of self-identification of race. For the first time, respondents in the large urban areas of the country were asked to report their race. This procedure was expanded significantly in the 1970 census. However, in both 1960 and 1970, in rural areas and in personal visit follow-up situations, the enumerator still obtained race

prior to 1980 to identify the ethnic population led the Bureau first to use a self-identification approach for the Spanish origin item in 1970 and an ancestry item in 1980.

The question wording differed for the race and ethnic items in the 1980 census. In the race item, respondents were asked to report only one race. The ancestry question allowed for more than one response. For example, persons could respond with one single ancestry, for example, "American Indian," or could report two, three, or more ancestry groups, for example, "American Indian-English," or "American Indian-English-French." If more than two ancestries were reported, only the first two were coded unless the first three ancestries were one of 17 previously designated triple ancestries expected to be frequently reported. The designated triple ancestries including responses of American Indian were "American Indian-English-French," "American Indian-English-German," "American Indian-English-Irish," and "American Indian-German-Irish." Persons who reported multiple ancestries were tabulated in more than one group.

#### Advantages/Disadvantages of Subjective Measures

There are three advantages to the self-identification approach to obtain race and ethnicity:

(1) Evaluation studies of the census showed that self-identification of race has resulted in improved classification of the population by race. For instance, self-identification resulted in a more accurate identification than enumerators' observations of American Indians off reservations. Studies matching the race reported for persons in the 1970 census to the March 1970 Current Population Survey (CPS) where the interviewer observed the race generally showed a high degree of consistency in race reporting between self-identification and enumerator's observation for the White and Black populations at the National level. However, the census had a larger proportion than the CPS of persons reported in the "other race" component, including the American Indians and Asian and Pacific Islander groups. (1970 census, PHC(E)-11). Results from the 1970 census were based on analysis of estimated demographic change during the 1960-70 decade and other related information.

(2) Studies of race data prior to 1960 showed that enumerators' observations of the respondent race were subject to error, particularly for respondents of mixed racial background. Also, the specific rules for classifying an individual race, which were provided to the enumerators, tended to give priority to one race over another and also changed over time in line with societal views. For instance, in 1970, persons of mixed Indian and White or Black parentage were included

in the category "All other races." In censuses some identification of all persons, without regard to generation. Previous questions on birthplace pertained only to the first- and second-generation Americans. The objective questions on birthplace and language, used in previous censuses, identify only a segment of the ethnic groups and produce data on the characteristics that are generally not representative of the total ethnic group (McKenney, Farley, and Levin, 1983).

Two disadvantages to self-identification are:

(1) Responses to a question may vary considerably when the question is socially-defined and the perceptions of the individuals differ. Also, the particular group identification relevant to an individual may also be affected by external social and societal conditions. As a result, individual responses to race and/or ethnicity may vary substantially over time, as has been illustrated by some of the 1980 census results, which are discussed in the next section.

(2) It is important to note that although the census uses a self-identification approach, each respondent does not really respond for him/herself. Usually one person in the household fills out the questionnaire for all members of the house. Thus, the responses to subjective questions can vary depending on the respondent for the household.

#### Population Changes for the Japanese, Hawaiian, and American Indian Populations--Race Item

There were 701,000 Japanese living in the United States in 1980, an increase of 110,000 or 19 percent since 1970 (Table 1). The increase was less than during the decade of 1960s both in number and proportional increase. During both the 1960s and the 1970s, there were substantial increases in the urban Japanese population, and substantial decreases in the rural Japanese population.

Hawaii ranked second, following California, in the number of Japanese in 1980 (Table 2). The 1980 figure of 240,000 Japanese for Hawaii represented a moderate increase of 10 percent over the 1970 level and was well below the national level. Both at the national level and for the State of Hawaii, the changes from 1970 to 1980 in the Japanese population, based on self-identification race item, were consistent with expected growth based on natural increase and immigration.

There were 167,000 residing Hawaiians in the United States in 1980, a very large increase of about 67,000 or a 67 percent increase over the 1970 figure (Table 1). (The 1970 totals exclude Alaska, but this had a negligible impact on the change.) There were no comparative figures at the U.S. level from the 1960 census.

The 1980 Hawaiian population living in Hawaii was 116,000, also a considerable increase of 44,000 or 62 percent over the 1970 level.

addition to natural increase, contributed to substantial increase for Hawaiians during the 1970-80 decade. Also, the 1970 report PC(2)-1G noted that the 1970 total of Hawaiians had been affected by changes in the racial categories--elimination of the racial category "part Hawaiian" used in earlier censuses and changes in the rules on classifying persons of mixed racial parentage. This represents the situation where the influence of external forces affected the 1980 and 1970 counts and the intercensal population changes.

Of the three groups studied, the size of the American Indian population has been most affected by external forces--rising racial consciousness, changing perceptions of American Indians, and improvements in census-taking procedures. The 1980 census count of the American Indian population in the United States was 1,364,000, a significant increase of about 571,000 or 72 percent over the 1970 figure. This increase was greater than can be attributed to natural increase (and, of course, there was virtually no immigration of American Indians). Part of the increase is attributed to general improvements in the census, including the expansion of the use of self-identification to reservations. (In 1970, race was obtained by enumerator observation on most reservations.) As noted above, Census Bureau evaluation suggests that self-identification improved the identification of American Indians, particularly on reservations.

A preliminary evaluation of the census results also suggests that there may have been a greater tendency in 1980 for some persons, particularly those of mixed Indian and non-Indian descent, to report their race as American Indian (USBC, PC80-S1-13, forthcoming). Specifically, persons who identified as American Indian in 1980 may have reported a different race in 1970. This change has probably occurred to a greater extent in the urban areas (off reservation) than reservation or rural areas. Also, the omission of the word "Race" from the 1980 question wording of item 4 may have affected the reporting.

During both the decades of the 1960s and the 1970s, the urban American Indian population increased much more rapidly than the rural American Indian population, in both cases, increasing by more than 100 percent. The rural populations showed much slower growth, particularly during the 1960s.

In 1980, Oklahoma had the second largest American Indian population after California. The American Indian population in Oklahoma was 169,000; the percent increase during the 1970 decade was 72 percent, the same as the national level. These figures for the Nation and also for Oklahoma suggest that, in addition to natural

increase, American Indian single ancestry only, that is, American Indian and no other ancestry (area 2 on the figure), American Indian multiple ancestry only (area 3 in the figure), or some combination of American Indian ancestry and race.

A person who was American Indian race and also was identified as American Indian single ancestry, for example, would fall in area 4 of the figure. All persons of American Indian ancestry, but not American Indian race would be in all areas of the figure except area 1. Although the single and multiple ancestry areas are shown separately here, they are actually contiguous, with their sum being "total ancestry" responses. Although we are not giving actual counts for any group for the various areas in the figures here, we will be investigating how the various parts fit together in later publications.

#### Consistency of Race and Ethnicity Reporting

Looking at population sizes by race and ancestry shows the differences and similarities between the racial and ethnic populations. The analysis focuses on gross differences between the race and ethnic populations; detailed cross-tabulations of race and ethnicity, which are now being prepared, will be analyzed to provide a fuller analysis.

Although the race question was asked of everyone in the U.S. in 1980, the ancestry question appeared on approximately 20 percent of the questionnaires. By using the weighted figures for both ancestry and race from the sample questionnaires, we are able to compare the major racial groups with their corresponding ancestry figures for the United States (Table 3). A discussion of Whites and of the "Other Races" is not appropriate for this paper, since further research is required to make even preliminary statements. Data on Samoans have not yet been tabulated by ancestry. Ancestry data for the Black race exclude African groups as well as the general African category, and also will not be discussed here.

For most of the Asian groups, the data show a close correspondence between race and ancestry responses, ranging from Asian Indian with a ratio of .81 (more respondents identified race than ancestry), to 1.10 for Chinese and Japanese (more respondents reporting ancestry than race). There were 17 percent more Hawaiians by ancestry than race, although there are fewer Eskimos and Aleuts (combined), and Guamanians by ancestry than race.

American Indians have a unique place in U.S. history and in the 1980 census, as demonstrated in this first collection of ancestry data in a decennial census. There were 4.5 American Indians by ancestry for every American Indian by race in the census nationwide. Although 1.5 mil-

more likely to respond "Japanese" for ancestry than Japanese with some other group. Among Japanese, for example, although there were 110 Japanese ancestry responses for every 100 Japanese race responses, there were only 93 persons (for each 100 Japanese race responses) claiming single Japanese ancestry (again, Japanese and no other ancestry), but 17 percent claimed Japanese and some other response.

As expected, the Hawaiians and the American Indians diverged widely from the pattern shown for the immigrant groups. For the Hawaiians, almost 50 percent more persons claimed they were multiple ancestry Hawaiians than single ancestry Hawaiians; as noted before, in comparison to most other groups, a larger number of Hawaiians in general selected Hawaiian ancestry but recorded some other race.

American Indians on the other hand were unique in having a ratio of 3.24 for persons claiming American Indian ancestry with some other ancestry than the American Indian race. Unlike all of the other selected groups in Table 3, there were also more persons (130 to 100) of American Indian single ancestry than race. It is clear that some persons were attesting to their American Indian ancestry, but responding with a race other than American Indian. The data in Table 4 show that only a relatively small proportion, about 18 percent, of the persons who reported American Indian ancestry also reported American Indian race; over 77 percent reported "White" race (Table 4). The proportion reporting American Indian race was much higher, 48 percent, among those with only an American Indian ancestry. But even among this group, less than half, 46 percent, reported "White" in the race item. Almost all of the persons who gave an ancestry response of American Indian and another group were White. Data on ancestry from both the 1980 census and November 1979 Current Population Survey indicate that American Indian is frequently reported in combination with ancestries such as French, German, and English.

Of the 1.2 million American Indians reported in the race item, only 922,000, or 78 percent, were single American Indian ancestry.

These figures, as presented in Table 4, indicate the size of the American Indian population could vary widely, from 922,000 to 6.7 million, depending upon the subjective criteria used for measuring the population. Additional cross-tabulations will provide information on the characteristics of these different populations.

In this section, we will examine the consistency of reporting race and ethnicity for the three groups--Japanese and Hawaiian in Hawaii and American Indian in Oklahoma.

Japanese in Hawaii differ from American Indians in Oklahoma and Hawaiians in Hawaii in several crucial ways. First, Japanese is the

There was very close agreement in the race and ancestry totals for Japanese in Hawaii. There were about 240,000 Japanese by both race and ancestry in Hawaii in the 1980 census. Of those reporting Japanese ancestry, however, a much greater proportion reported single Japanese ancestry (200,000) than multiple ancestry (38,000).

There were differences between the race and ancestry figures for Hawaiians living in Hawaii. Although 115,500 persons (12.0 percent of the state total) were recorded as Hawaiian by race in the 1980 census, 137,115 were recorded as Hawaiian by ancestry. Of these 59,691 (43.5 percent) responded as single Hawaiian ancestry, and 77,424 were multiple ancestry responses (again, Hawaiian and some other ancestry). Part-Hawaiian was considered as a multiple ancestry response.

Only 22,000 more individuals responded with a Hawaiian ancestry response than Hawaiian race in Hawaii, unlike Oklahoma where more than twice as many persons responded with American Indian ancestry than race. The 1980 census in Oklahoma enumerated 171,092 American Indians by race and 364,016 American Indians by ancestry (12 percent of the total population). Of these American Indian ancestry persons, 207,982 (57 percent) responded with a single ancestry response (that is, American Indian only), and 156,034 persons (43 percent) responded with a multiple response, e.g., American Indian and some other ancestry. Similar to the figure for the Nation, we see that persons of American Indian ancestry responded with some other race than American Indian (primarily White), but seem to have felt an affinity (or have actual descent from) American Indians.

CONCLUSION

In this paper we have looked at different ways race and ethnicity were classified in the 1980 census. We found for some groups, such as Japanese, there was little difference between race and ancestry responses in the numbers of persons identifying themselves as Japanese. For other groups, such as Hawaiian, there was some difference between the responses by race and by ancestry, but the differences were not great. However, for still other groups at the other end of the continuum, such as American Indian, there were large differences in the counts.

It is important to continue this exploration of the changes in the reporting of race and differences between race and ethnic responses for several reasons. For Federal program funding distribution, knowing exactly how many American Indians there are (and in many cases, what their characteristics are) may be decisive in determining how much money will be appropriated for a project, and what will be the distribution of the funding which is available.

But, of course, the more fundamental question arises: Who is an American Indian? Since

mer, particularly since the ancestry item is open-ended and multiple responses were both accepted and tabulated.

As we begin to develop the questions for the 1990 census, the "Who is an American Indian?" question becomes even more important. The ancestry question was asked for the first time in 1980, and this paper is only one of a series of evaluation studies. If the same ancestry question is used again in 1990, we plan to test for reliability of responses in the 1990 census, although some pretesting will be done before the 1990 census. Also, questions on ethnicity may be included in a Current Population Survey later in this decade.

In this paper, we have only begun an exploration of the various ways people subjectively define themselves by race and ethnicity for census purposes. As we continue to investigate the 1990 census data, along with data from various Current Population Surveys and the Content Reinterview for the 1980 census, and plan for 1990, we should be able to make more definitive statements about what factors respondents choose in selecting their race or ethnicity and implement these findings in determining the content of questions for the 1990 census.

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Table 1. Japanese, Hawaiians, and American Indians in the United States: 1960 to 1980

(Minus sign (-) denotes a decrease.)

Characteristic	Japanese	Hawaiian	American Indian
<b>POPULATION</b>			
<b>1960</b>			
Total.....	464,332	(NA)	523,591
Urban.....	381,114	(NA)	145,593
Rural.....	83,218	(NA)	377,998
<b>1970</b>			
Total.....	591,290	100,179	792,730
Urban.....	523,651	(NA)	355,738
Rural.....	67,639	(NA)	436,992
<b>1980</b>			
Total.....	700,974	166,814	1,364,033
Urban.....	643,081	136,915	719,047
Rural.....	57,893	29,899	644,986
<b>POPULATION CHANGE</b>			
<b>1960 to 1970</b>			
<b>Number:</b>			
Total.....	126,958	...	269,139
Urban.....	142,537	...	210,145
Rural.....	-15,579	...	58,994
<b>Percent</b>			
Total.....	27.3	...	51.4
Urban.....	37.4	...	144.3
Rural.....	-18.7	...	15.6
<b>1970 to 1980</b>			
<b>Number:</b>			
Total.....	109,684	66,635	571,303
Urban.....	119,430	...	363,309
Rural.....	-9,746	...	207,994
<b>Percent:</b>			
Total.....	18.5	66.5	72.1
Urban.....	22.8	...	102.1
Rural.....	-14.4	...	47.6

Table 2. Japanese and Hawaiian Population in Hawaii and American Indian Population in Oklahoma: 1960 to 1980

Characteristics	Total	Urban	Rural
<b>JAPANESE POPULATION--HAWAII</b>			
Number			
1960.....	203,455	(NA)	(NA)
1970.....	217,307	186,412	30,895
1980.....	239,748	216,478	23,270
Population Change			
1960 to 1970.....	13,852	(NA)	(NA)
1970 to 1980.....	22,441	30,066	-7,625
<b>HAWAIIAN POPULATION--HAWAII</b>			
Number			
1960.....	(NA)	(NA)	(NA)
1970.....	100,179 <sup>1</sup>	(NA)	(NA)
1980.....	115,500	91,413	24,087
Population Change			
1960 to 1970.....	(NA)	(NA)	(NA)
1970 to 1980.....	15,321	(NA)	(NA)
<b>AMERICAN INDIAN POPULATION--OKLAHOMA</b>			
Number			
1960.....	64,689	(NA)	(NA)
1970.....	98,468	47,683	50,785
1980.....	169,292	83,936	85,356
Population Change			
1960 to 1970.....	33,779	(NA)	(NA)
1970 to 1980.....	70,824	36,253	34,571

<sup>1</sup>Excludes Koreans and Hawaiians in Alaska.

(NA) Not available.

Source: Bureau of the Census; 1960, 1970, and 1980 Census General Population Characteristics, State reports.

Figure 1. Combinations of Race and Ethnicity Reporting

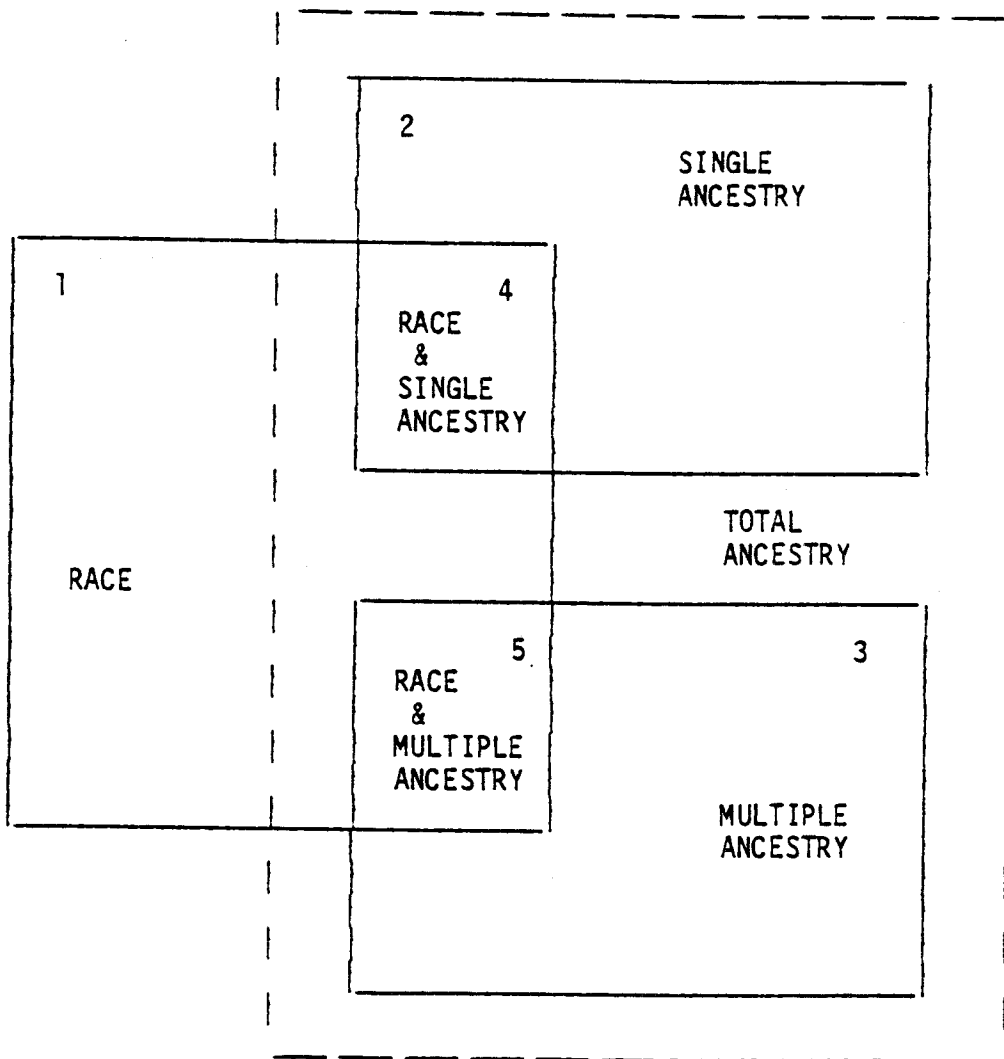




Table 3. Population by Detailed Race and Corresponding Ancestry: 1980  
(Data based on 1980 sample tabulations)

Race/ Ancestry Group	Number				Ratio		
	Total	Ancestry			Total Ancestry to Race	Single Ancestry to Race	Multipl Ancestr t Rac
		Total	Single Ancestry	Multiple Ancestry			
Total.....	226,545,805	...	...	...	...	...	...
White.....	189,035,012	...	...	...	...	...	...
Black.....	26,482,349	20,964,729	20,524,020	440,709	0.79	0.78	0.02
Chinese.....	812,178	894,453	757,777	136,676	1.10	0.93	0.17
Filipino.....	781,894	795,255	630,188	165,067	1.02	0.81	0.21
Japanese.....	716,331	791,275	666,856	124,419	1.10	0.93	0.17
Korean.....	357,393	376,676	343,705	32,971	1.05	0.96	0.09
Asian Indian.....	387,223	311,953	280,728	31,225	0.81	0.72	0.08
Vietnamese.....	245,025	215,184	201,334	13,850	0.88	0.82	0.06
American Indian...	1,478,523	6,715,819	1,920,824	4,794,995	4.54	1.30	3.24
Eskimo and Aleut..	55,813	50,555	38,468	12,087	0.91	0.69	0.22
Hawaiian.....	172,346	202,054	84,104	117,950	1.17	0.49	0.68
Guamanian.....	30,695	27,015	18,635	8,380	0.88	0.61	0.27
Samoa.....	39,520	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other.....	5,951,503	...	...	...	...	...	...

Notes: ... Not applicable. (NA) Not available. Ancestry data for Black excludes the general category "African" and all named African categories.

Source: U.S. Bureau of the Census, 1980 Census, PC80-1-C1 and PC80-S1-10 reports.

Table 4. American Indian Ancestry by Race for the United States: 1980  
(Data based on sample tabulations)

Race	Total Ancestry	Single	Multiple
<b>NUMBER</b>			
Total	6,715,819	1,920,824	4,794,995
American Indian	1,177,699	922,350	255,349
White	5,183,587	889,456	4,294,131
All Other <sup>1</sup>	354,533	109,018	245,515
<b>PERCENT BY ANCESTRY</b>			
Total	100.0	28.6	71.4
American Indian	100.0	78.3	21.7
White	100.0	17.2	82.8
All Other <sup>1</sup>	100.0	30.7	69.3
Total	100.0	100.0	100.0
American Indian	17.5	48.0	5.3
White	77.2	46.3	90.4
All Other <sup>1</sup>	5.3	5.7	5.1

<sup>1</sup> Include a small number of Eskimos and Aleuts as well as Asian and Pacific Islanders, Blacks, and persons who marked the "Other" and provided a write-in response.

Source: U.S. Bureau of the Census, Unpublished Tabulations.