Race Soc Probl (2009) 1:111–131
DOI 10.1007/s12552-009-9011-5

Measurement of Race and Ethnicity in a Changing, Multicultural America

Karen Humes · Howard Hogan

Published online: 17 September 2009

Abstract It is well accepted that concepts of race, ethnicity, and ancestry are changing constructs that reflect the social, economic, and political climate of the times. Studying the history of the collection of data on race, place of birth, Hispanic origin, and ancestry in US decennial censuses provides a better understanding of the race and ethnic concepts currently in use for official federal statistics. This history can help guide the evolution of these concepts for research on alternative measurement approaches, future censuses, and future statistics. The purpose of this paper is threefold. The first objective is to provide a historical overview of race and ethnic measurement in US decennial censuses. The second and third objectives are to present Census Bureau plans to experiment with alternative approaches to measuring race and ethnicity in the 2010 Census and to discuss race and ethnic measurement issues for future decennial censuses.

Keywords Race · Ethnicity · Hispanic origin · Ancestry · Measurement

This report is released to inform interested parties of ongoing research and to encourage discussion of work in progress. Any views expressed on the statistical and methodological issues in this report are those of the authors and not necessarily those of the US Census Bureau.

K. Humes (✉)
US Census Bureau, 4600 Silver Hill Road, Room 5H177, Washington, DC 20233, USA
e-mail: Karen.Humes@census.gov

H. Hogan
US Census Bureau, 4600 Silver Hill Road, Room 8H134, Washington, DC 20233, USA
e-mail: Howard.R.Hogan@census.gov

Introduction

It is well accepted that concepts of race, ethnicity, and ancestry are changing constructs that reflect the social, economic, and political climate of the times. The US decennial census provides a valuable, perhaps unique, case study in the interaction between society and racial and ethnic concepts. The Census Bureau has collected data on race since 1790, place of birth since 1850, Hispanic origin since 1970, and ancestry since 1980. Studying this history provides a better understanding of the race and ethnic concepts currently in use for official federal statistics. Further, this history can help guide the evolution of these concepts for future censuses and future statistics. Importantly, we discuss alternative approaches that will be tested as part of the 2010 Census.

In this paper, we will trace the development of race and ethnic concepts from census to census. We will relate these changing concepts to changes in American society, including slavery, emancipation, civil rights, and immigration. We then discuss current issues in measurement of race and ethnicity and current research in improving the measurement. The purpose of this paper is threefold. The first objective is to provide a historical overview of race and ethnic measurement in US decennial censuses. The second and third objectives are to present Census Bureau plans to experiment with alternative approaches to measuring race and ethnicity in the 2010 Census and to discuss race and ethnic measurement issues for future US decennial censuses.

We accept that there is no firm distinction between "race" and "ethnicity," as both are dimensions in group identity. Groups currently considered "ethnic" or "national" were once viewed as separate "races." The US Supreme Court has specifically, and unanimously, ruled

that when applying earlier federal statutes, "race" can encompass groups such as Arabs, Jews, and others currently regarded as "white" or "Caucasian" (Shaare-Tefila Congregation v Cobb 1987). We will discuss race, ethnicity, origin, ancestry, and immigration status as markers for social, economic, and political divisions.

Useful social, or at least statistical, constructs of race and ethnicity would have three properties: (1) be recognized by society and the individual; (2) categorize individuals into the same groups over a long period of time; and (3) be predictive of social and economic opportunity. The conflict between properties will be one of our recurring themes, especially in assessing some of the current problems in measurement.

1790–1840 Censuses: Civil Status and Skin Color

Originally, the United States conceived itself as composed of whites, slaves, and American Indians. The whites were principally from northwest Europe, mainly from Great Britain, Ireland, the Netherlands, and Germany. In the age of sail, transoceanic immigration was limited. The overriding economic, social, and political concern was slavery. During this period, the US population grew from 4 to 17 million, mainly due to natural increase (US Census Bureau 1975).

The racial categorization in the first decennial census of 1790 was a reflection of Article 1, Sect. 2, of the newly ratified US Constitution.

> Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three-fifths of all other Persons.

Several things are striking here. There is a clear emphasis on economic and military power. "Taxes" are referenced twice. "One-person-one-vote" was many decades into the future. Secondly, on the surface, it divides people based on civil status and not overtly on race. Of course, all knew the actual meaning of "all other Persons."

The political motives for the fractional treatment of slaves were clear during the development of the US Constitution. Anticipating a political advantage, southern states advocated fully including slaves in the population count. Conversely, the northern states argued that fully counting slaves in the population enumeration would be contradictory, since slaves would be treated as both persons and property. In the end, slaves were included in the census because slaveholding states made this a nonnegotiable condition (Prewitt 2005). Apportionment, thus, roughly followed the military and economic power of the states, not "equal representation."

Even though the US Constitution divided people based on civil status, race was introduced with the first census. Data on race were recorded via enumerator observation using the categories: "Free white Males;" "Free white females;" "All Other Free Persons;" and "Slaves" (US Census Bureau 2002). "Free white males" were further divided between those of military age (16 years and older) and boys. These general race categories were utilized from the 1790 Census through the 1810 Census.

In the 1820 Census, a new racial category for "Free Colored Persons" was introduced, reflecting the different rights free whites and free blacks had, as well as the growth of the free black population. Thus, rights such as voting, owning property, and serving on juries strongly hinged on skin color (Prewitt 2005; Lowry 1982). Further, the proportion of blacks who were free had grown to be 13% by the 1820 Census (Gibson and Jung 2002). "Free Colored Persons" was included in the decennial census as a separate category through the 1840 Census.

1850–1920 Censuses: Race Science, the Indigenous Population, and Shifts in Immigration Patterns

Low cost transatlantic steamers first came into service in the late 1840s. As a result, America experienced its first waves of mass migration. Driven now in large part by immigration, the US population grew from 23 to 106 million between the 1850 Census and the 1920 Census (US Census Bureau 1975).

Spurred by repeated failure of the potato crop, starting in 1845, successive waves of poor Catholic Irish immigrated to the United States, with an estimated total of 1.2 million immigrants by 1854. These waves of immigrants had a perverse effect on how race was viewed in the United States. In order to gain acceptance into the dominant group, these immigrants had a stake in drawing the social boundaries between "white" and "non-white," rather than between "native/non-native" or "white Protestant/Other." Thus, the waves of immigrants helped to sharpen the racial divisions (Ignatiev 1995).

Race scientists during the mid-nineteenth century believed that it was important to measure the degree a person was removed from "pure white" and "pure black" races.[1] They argued that the white and black races had

[1] During the nineteenth century, racial classification in the academic community was primarily based upon the work of Johann Friedrich Blumenbach. Blumenbach, circa 1781, designated five races of man: Caucasian; Mongolian, American, Ethiopian; and Malayan—with Caucasian, Mongolian, and Ethiopian being the three principal races

permanent racial differences, which relegated blacks to an inferior status. Thus, white and black unions were theorized to result in multiracial children who were predominantly infertile, frail, and had a shorter life expectancy (Haller 1971; Williams 2006). Supporters of these theories desired more meticulous statistics on the black population, which could provide statistical evidence that blacks were inferior and unfit for freedom (Nobles 2000).

Census data were increasingly viewed as a means to obtain evidence to support these theories, justify the enslavement of blacks, and validate racial inequality. Consecutive data from US decennial censuses on "blood" quantum were desired to show whether the multiracial population was increasing, and had a shorter life expectancy, or whether the US population was becoming more "purely black" and "purely white" (Nobles 2000). Lobbying resulted in the 1850 Census using for the first time a category measuring a "black blood" quantum, termed "Mulatto," for free inhabitants, as well as slave inhabitants. Enumerator instructions included language emphasizing that it was desirable to carefully distinguish those with any perceptible "black blood" and that important "scientific" results depended upon the correct racial classification (US Census Bureau 2002). Therefore, the racial categories used in the 1850 Census to classify the "color" of the US population were "white," "black," and "Mulatto."

Introduction of the Place of Birth Question

Reacting, in part, to the wave of Irish immigration in the late 1840s, the 1850 Census introduced a new questionnaire item on place of birth that could be used to distinguish US natives from those who were foreign born. The number of foreign born now constituted about 10% of the total population (Gibson and Lennon 1999). Additionally, the place of birth question would also help track whether the new territories were being settled by those from "free" or "slave" states.

Before 1860, American Indians were regarded as belonging to separate nations and were not separately identified in the US decennial census (Snipp 2000). In 1860, census takers were instructed to enumerate only American Indians who were taxed. Taxed American Indians were those who had renounced tribal rule and exercised the rights of citizens under state or territorial laws (Census Office 1860). This primarily included American Indians who had settled in or near white communities and who had assimilated into American society. American Indians not taxed were considered to be those who lived among their kinsmen in tribal communities. The distinction between the taxed and not taxed populations was eventually dropped in the early twentieth century as the 1924 Indian Citizenship Act made all American Indians eligible for taxation (Snipp 2000). Thus, the racial categories utilized in the 1860 Census when classifying the "color" of individuals were "white," "black," "Indian," and "Mulatto."

Introduction of the Parental Place of Birth Question

After the Civil War, a census questionnaire for the slave population was no longer applicable. The flow of migrants to the United States began to increase from areas other than northwest Europe. At the same time, a new generation of children was born of Irish-immigrant (i.e., Catholic) parents—and could not be distinguished by place of birth. Consequently, the 1870 Census introduced a new question on parental place of birth. This was a yes/no question; there was no need seen to distinguish between groups of second-generation immigrants.

The flow of migrants from China began to rise prior to the 1870 Census. When compared with the 1.2 million Irish immigrants, the numbers from China were small, roughly one-quarter million. Yet, they constituted the first wave of non-European immigrants since the end of the slave trade. The racial category of "Chinese" was introduced beyond California on the census questionnaire for the 1870 Census (US Census Bureau 2002).[2] Therefore, the 1870 Census included the following categories to record the "color" of individuals: 'white," "black," "Indian," "Chinese," and "Mulatto." This was the first use of a national origin category, along with color and race. Identical racial categories were used to collect data on the "color" of the US population for the 1880 Census.

Before the 1890 Census, a shift in the pattern of Asian immigration occurred. As anti-Chinese violence increased along the West coast, pressure mounted on Congress to take action. This led to the Chinese Exclusion Act in 1882, which excluded Chinese laborers and their wives—but not teachers, students, merchants, or tourists—from entering the United States. However, high demand for inexpensive labor generated increased migration from Japan. The majority of the Japanese workers filled the need for unskilled agricultural labor. However, they began to buy land that was then successfully farmed. Despite their small number (around a quarter million), anti-Japanese sentiment

Footnote 1 continued
(Haller, 1971). In general, the racial classification systems used by the academic community during the nineteenth century do not appear to have had a direct impact upon the historical racial categories used in US decennial censuses. The exception being the introduction of "Mulatto," "Quadroon," and "Octoroon" as racial categories in the US decennial census.

[2] The racial category of "Chinese" was included on the 1860 Census questionnaire in California only (US Census Bureau, 2002).

and violence grew. These events led to the Gentleman's Agreement of 1907, in which the Japanese government agreed to regulate the issuance of passports to laborers who wished to migrate to the United States (Lee 2000). By the 1890 Census, the Japanese population was large enough to be included as a separate racial category beyond California.[3]

The 1890 Census also represented the first attempt to enumerate all American Indians—including those living in American Indian Territory and on reservations. Snipp (2000) indicates that the effort to completely enumerate the American Indian population was inspired by anthropologists' hypothesis that the extinction of the American Indian population was inevitable. Efforts increased to observe, document, and collect as much detailed information about the American Indian population as possible.

Also at this time, pressure to further assess race science theories heightened, resulting in Congress mandating the introduction of supplementary "black blood" quantum categories, "Quadroon" and "Octoroon," for the 1890 Census (US Census Bureau 1904). The enumerators were instructed to

> Be particularly careful to distinguish between blacks, Mulattos, Quadroons, and Octoroons. The word "black" should be used to describe those persons who have three-fourths or more black blood; "Mulatto," those persons who have from three-eighths to five-eighths black blood; "Quadroon," those persons who have one-fourth black blood; and Octoroon, those persons who have one-eighth or any trace of black blood (US Census Bureau 1904, p. 14).

Thus, the full list of racial categories used to record the "color or race" of the US population for the 1890 Census included: "white," "black," "Indian," "Chinese," "Japanese," "Mulatto," "Quadroon," and "Octoroon."

The shift in the pattern of immigration from Europe first garnered widespread attention during the latter part of the nineteenth century. Just as in the case of race, there was a need to produce statistics on narrowly defined groups among the white population, based on national origin. Data were gathered on the place of birth of both the mother and the father. Instructions for coding parental place of birth for the 1890 Census demonstrate the importance attached to "precise" classification:

> If the person, or father, or mother were born in the United States, name the state or territory, or if of foreign birth name the country. The names of countries, and not of cities, are wanted. In naming the country of foreign birth, however, do not write, for instance, ''Great Britain,'' but give the particular country, as *England, Scotland*, or *Wales*. If the person, or father, or mother were born in a foreign country of American parents, write the name of the country and also the words "*American citizen.*" If born at sea write the words ''At sea;'' if in the case of the father or mother the words ''At sea'' be used, add the nationality of the father's father or mother's father. If born in Canada or Newfoundland, write the word ''English'' or ''French'' after the particular place of birth, so as to distinguish between persons born in any part of British America of French and English extraction, respectively. *This is a most important requirement, and must be closely observed in each case and the distinction carefully made* (US Census Bureau 2002, p. 28).

The shift in the representation of nationalities among European immigrants began occurring on a large scale by the 1890s, with principal sources of migrants shifting to southern and eastern European countries such as Italy and Russia (mainly Jewish immigrants).

Due to the questionable ability of census enumerators to adequately assign black individuals into "Mulatto," "Quadroon," and "Octoroon" categories, the Census Board declared that the 1890 Census data for these groups were of little value and misleading (US Census Bureau 1904). Hence, "Mulatto," "Quadroon," and "Octoroon" were removed as racial categories for the 1900 Census. Thus, the attempt to classify individuals into these multiracial groups failed all of our statistical criteria. The distinctions were not recognized by either society or the individual, nor did they predict opportunity.

Nevertheless, recording information on "blood" quantum continued for the American Indian population. For the separate American Indian questionnaire, enumerators were instructed: "If the Indian has no white blood, write 0. If he or she has white blood, write 1/2, 1/4, 1/8, whichever fraction is nearest the truth" (US Census Bureau 2002, p. 44). Snipp (2000) purports that attention to recording "blood" quantum is attributed to the federal government's interest in the assimilation of American Indians. "Blood" quantum was viewed as a simple indicator of American Indian progress toward being fully assimilated into American society. Those with less than 1/4 "American Indian blood" quanta were considered to be lacking any trace of tribal cultural traits.

Additionally, new terminology was introduced for the 1900 Census. For the first time, "Negro" was used, in conjunction with "black," to describe the population of African origin. While there were no separate categories used to measure "black blood" quantum, the term "Negro"

[3] The racial category of "Japanese" was included on the 1870 Census questionnaire and on the 1880 Census questionnaire in California only (US Census Bureau, 2002).

was used to refer to full-blooded individuals and the term "of Negro descent" was used to refer to "Mulattos." Census officials noted:

> The dislike and avoidance of the word "Negro" among members of the African race is disappearing and seems to be implied by current usage as indicated in the title of such books as Mr. W.E.B. Du Bois's "The Philadelphia Negro" and Mr. Booker T. Washington's "The Future of the American Negro." As this opposition was the only known objection to the accurate term, the change of usage on the part of the census seems justified (US Census Bureau 1904, p. 14).

Prior to the 1890 Census, "colored" was generally used synonymously with "Negro." Except for "Indians not taxed," there were relatively few non-whites who were not indeed "Negro." However, beginning with the 1890 and 1900 Censuses, "colored" was given a wider significance and used to describe all non-white population groups. Thus, the racial categories used to record the US population's "color or race" for the 1900 Census were "white," "black (Negro or of Negro descent)," "Indian," "Chinese," and "Japanese."

The 1910 Census continued the collection of mixed-race data for the American Indian population through a separate census questionnaire. The 1910 Census is described as the "first at which any returns worthy of tabulation were secured as to the proportion of full bloods and mixed bloods in the Indian population" (US Census Bureau 1915, p. 31). All persons of mixed "white-American Indian blood" who had any appreciable amount of "American Indian blood" were to be counted as "American Indian"—even if the proportion of "white blood" exceeded the amount of "American Indian blood." Census officials explained that since there was an increasing amount of "white blood" in the American Indian population, it followed that the number of persons included in that category would tend to increase from census to census without necessarily any increase in the total amount of "American Indian blood" in the country (US Census Bureau 1915). There was no separate census questionnaire for American Indians in the 1920 Census.

The 1910 Census also resurrected the attempt to measure "black blood" quantum by including "Mulatto" as a racial category. Wilcox, a Census Bureau statistician (as cited in Nobles 2000), argued that the 1890 Census "blood" quantum data were a failure because they tried to record dubious distinctions (i.e., "Quadroon" and "Octoroon"). Keeping the "blood" quantum distinction simple by having only one category, "Mulatto," was expected to be more successful. Wilcox further argued that the "Mulatto" population was important to count since it was a distinct group in the nation and should be recorded separately.

For the first time, the category of "Other" was used to collect data on race during the 1910 Census enumeration. Excluding the population enumerated in US territories, the vast majority of those included in the "Other" category represented the Korean, Filipino, and Asian Indian (referred to as Hindu) populations. What was striking about the 1910 Census general report was the explanation given for including "Hindu" as part of the "Other" race category. The report stated that

> Pure-blood Hindus belong ethnically to the Caucasian or white race and in several instances have been officially declared to be white by the United States courts in naturalization proceedings. In the United States, however, the popular conception of the term white is doubtless largely determined by the fact that the whites in this country are almost exclusively Caucasians of European origin and in view of the fact that the Hindus, whether pure-blood or not, represent a civilization distinctly different from that of Europe, it was thought proper to classify them with non-white Asiatics (US Census Bureau 1913, p. 126).

The use of the term "Hindu" illustrates an important aspect of race/ethnic classification. The race theories, so important to the classification of non-whites, were quickly set aside to accommodate American social views of who was "really" white. "Hindu" represents a particular religion. This is the only time that a religious term has been included as a race category in a US decennial census. The population of the Indian sub-continent practices many religions, among them Hindu, Sikh, Jain, Islam, and Zoroastrian. However, in the American social, political, and statistical systems, these distinctions were unimportant. The classifications and terms reflected an American understanding of the rest of the world and the needs of the US political system. The 1910 Census used the following categories to classify the "color or race" of the US population: "white," "black (Negro)," "Indian," "Chinese," "Japanese," "Mulatto," and "Other."

The 1920 Census introduced new categories of race. The Census of 1910 recorded the nascent Korean, Filipino, and Asian Indian populations as part of the "Other" race category. However, Asian immigration was halted due to the Asiatic Barred Zone Act of 1917, which banned all Asian immigrants from migrating to the United States (Lal 2008). Nevertheless, the newer Asian immigrant groups had become sizeable enough to warrant creating separate race categories for the 1920 Census enumeration. Asian Indians began to arrive in the United States at about the turn of the twentieth century, mainly coming to work in the West as agricultural laborers in lumber mills, farms, etc. (Lal 2008).

Koreans also began to migrate to the United States about the turn of the twentieth century in small numbers. Both early Asian Indian and Korean migrants mainly represented laborers who were able to fill labor shortages that occurred after the exclusionary legislation geared toward the Chinese and Japanese (Barringer et al. 1993).

The Filipino population was unique in that they were considered US nationals following the annexation of the Philippines in 1898. Some Filipinos were recruited to work in sugar plantations in Hawaii, while others worked in agriculture in California at the turn of the twentieth century. Ultimately, the migration of Filipinos to the United States was controlled with the 1934 Tydings-McDuffie Act. This Act gave the Philippines the status of commonwealth, which meant that immigration could be limited (Lee 2000; Barringer et al. 1993). At this point, the restrictive immigration policies directed at Asians meant that the Asian population remained small and grew slowly throughout the following several decades.

The 1920 Census also continued the effort to obtain information on "black blood" quantum. Enumerators received the same instructions for the 1920 Census as they had for the 1910 Census in terms of classifying people as "black" and "Mulatto." Enumerators were instructed to record as "black" all full-blooded Negroes and as "Mulatto" all Negroes having some proportion of "white blood." Census Bureau officials observed a decrease in the Mulatto population between the 1910 and 1920 Censuses. This decrease was primarily attributed to a larger proportion of the black population being canvassed by black enumerators in the 1910 Census than in the 1920 Census. Part of the explanation for the Mulatto population decrease was that white enumerators were probably more likely to recognize subtle differences as "black," whereas black enumerators were probably more likely to record those individuals as "Mulatto" (US Census Bureau 1921).

After the 1920 Census, the Census Bureau concluded "considerable uncertainty necessarily attaches to the classification of Negroes as black and Mulatto, since the accuracy of the distinction made depends largely upon the judgment and care employed by the enumerators" (US Census Bureau 1921, p. 16). The 1920 Census was the last time that "Mulatto" was used as a separate race category. Again, attempting to measure racial dimensions that are not recognized by the community had failed. Thus, for the 1920 Census, the following categories were used to record the "color or race" of the US population: "white," "black (Negro)," "Indian," "Chinese," "Japanese," "Mulatto," "Filipino," "Korean," "Hindu," and "Other."

In 1920, for the first time in US history, the majority of Americans lived in urban areas (US Census Bureau 1995). The initial census data released in 1920 to reapportion the House of Representatives indicated that states with "rapidly growing urban areas benefited" (Anderson 1988, p. 134). This meant that political power was beginning to shift to areas with growing urban populations, and this growth was clearly fueled by increased immigration from southern and eastern European countries such as Italy, Russia, and Poland (Anderson 1988). This resulted in Congress refusing to reapportion the House of Representatives.[4] Congress also enacted legislative restrictions on immigration in 1924 (Anderson 1988). The Immigration Act of 1924 imposed a quota system based on 2% of each group's population according to the 1890 Census, that is, it reflected the America from a generation before.

1930–1960 Censuses: Hypodescent, New Hispanic Immigration, and New States

The US population grew from 123 to 179 million between the 1930 Census and the 1960 Census (US Census Bureau 1975). The Baby Boom drove the population growth, while immigration slowed to a trickle. During this time period, Alaska and Hawaii reaching statehood influenced the race categories. Additionally, the Hispanic population began to significantly increase, leading the Census Bureau to experiment with various methods to uniquely identify this group. This era brought forth the operationalization of hypodescent, the "one-drop rule," into census enumerator instructions for the 1930 through the 1960 Censuses.

Hypodescent designated anyone with any perceptible trace of "black blood" as black. At the time, this "one-drop rule" mirrored American law and social customs. During the latter nineteenth century and early twentieth century, southern states began enacting statutes that defined non-whites in terms of specific "blood" quanta and defined the category of "Negro" more broadly. As racial segregation and subordination became solidified in law via Jim Crow legislation, race, in some part, was shaped into legal definitions (Nobles 2000). After largely unsuccessful efforts to reliably measure "black blood" quanta in seven US decennial censuses, it was now important to simply separate white from non-white. Thus, the 1930 Census reflected the American culture at the time and the Jim Crow era by introducing the "one-drop rule" into enumerator instructions.

While hypodescent was explicitly applied to the black population, guidance was given through 1930 Census enumerator instructions for categorizing other non-white race groups with "mixed blood":

[4] There is also evidence that the 1920 Census was particularly flawed. For example, the census was, for the first and only time, conducted in January. Given the condition of rural roads in 1920, this might have led to a higher undercount in rural areas.

> Negroes.—A person of mixed white and Negro blood should be returned as a Negro, no matter how small the percentage of Negro blood. Both black and Mulatto persons are to be returned as Negroes, without distinction. A person of mixed Indian and Negro blood should be returned a Negro, unless the Indian blood predominates and the status of an Indian is generally accepted in the community. Indians.—A person of mixed white and Indian blood should be returned as Indian, except where the percentage of Indian blood is very small, or where he is regarded as a white person by those in the community where he lives. Other mixed races.—Any mixture of white and non-white should be reported according to the non-white parent. Mixtures of colored races should be reported according to the race of the father, except Negro-Indian (US Census Bureau 1933, pp. 1398–1399).

Thus, the 1930 Census began the careful categorization of the US population by race using the "one-drop rule" to maintain a white category that was as "pure" as possible.

For the 1930 Census, "Mexican" was introduced as a race category. Prior to the 1930 Census, Mexicans had been categorized as white, since it was presumed that Mexicans were of Spanish descent, and thus, white (Pascoe 1996). Due to their rapid growth in the United States over the previous decade, the 1930 Census separately identified the Mexican population (US Census Bureau 1933). Enumerators were instructed that "all persons born in Mexico, or having parents born in Mexico, who are not definitely white, Negro, Indian, Chinese, or Japanese, should be returned as Mexican" (US Census Bureau 1933, p. 1399). The enumerator instructions were prefaced with "all Mexican laborers are of a racial mixture difficult to classify" (US Census Bureau 1933, p. 1399). The difficulty in fitting the Hispanic population into US racial categories typifies the current discussion.

After the 1930 Census, Mexican-Americans, with the help of the Mexican government, lobbied against the continued use of "Mexican" as a separate race category (Choldin 1986). Chapa (2000) posits that the major impetus for protests was that being racially designated as "Mexican" excluded the possibility of being classified as "white." At the time, many rights, including the right to become a US citizen, were explicitly available to whites only. Ultimately, the lobbying succeeded and "Mexican" was dropped as a separate race category for all future censuses, although it was to reappear several decades later as a national origin category in the Hispanic origin question.

The 1930 Census utilized the following categories to classify an individual's "color or race": "white," "Negro," "Indian," "Chinese," "Japanese," "Filipino," "Korean," "Hindu," "Mexican," and "Other." Again this constituted a mixture of race, color, and national origins, with reference to specific countries in Asia and Latin America. This would set the pattern for many future censuses.

The 1940 Census used the same racial categories as the 1930 Census, with the exception that "Mexican" was dropped. "Persons of Mexican birth or ancestry who were not definitely Indian or of other non-white race were returned as white in 1940" (US Census Bureau 1943, p. 3). While the 1940 Census did not use a separate race category to identify the Mexican or Hispanic population, another method was explored. The Census Bureau made an effort to identify the population of Spanish origin by producing tabulations of the white population whose mother tongue was Spanish. This publication deviated from the traditional tabulations because, in previous censuses, published data on mother tongue had been limited to the white population of foreign stock (Gibson and Jung 2002). The growth of the Hispanic population led the Census Bureau to begin researching alternative means to estimate the size of this emerging group.

An additional attempt was made to estimate the growing Hispanic population using data collected during the 1950 Census. The last names of census respondents in five southwestern states (Arizona, California, Colorado, New Mexico, and Texas) were compared against a list of known Spanish surnames (Chapa 2000). This estimation attempt was related to the increased levels of Mexican immigration, particularly due to the Bracero Program. A similar effort to estimate the steadily increasing Hispanic population occurred with data collected in the 1960 Census.

The 1950 Census brought more change. The number of separate racial categories was actually reduced. "Korean" and "Hindu" were omitted as separate "race" categories. The term "Indian" was changed to "American Indian" in order to distinguish American Indians from those with origins in India. Thus, the racial categories used to classify the US population included "white," "Negro," "American Indian," "Chinese," "Japanese," "Filipino," and "Other." The "one-drop rule" continued.

A monumental shift in census procedure occurred for the 1960 Census. Self-response replaced enumerator reporting for most Americans. In previous censuses, the racial classification was made for the most part by the enumerator via observation (US Census Bureau 2002). Research had shown that self-response reduced census errors. Therefore, for most urban areas, the post office delivered a census form, respondents completed the questionnaire, and enumerators collected the forms.

The racial categories used to classify the US population expanded for the 1960 Census. The establishment of Alaska and Hawaii as US territories meant that the populations had been counted for decades using unique race

categories. However, Alaska and Hawaii achieved statehood in 1959, thus, 1960 marked the first US decennial census that incorporated Alaska Native and Pacific Islander race categories. Eskimo and Aleut populations were separately identified on census questionnaires used in Alaska only. Hawaiian and Part-Hawaiian populations were separately identified on census questionnaires used in Hawaii only (Gibson and Jung 2002). A distinction between "Hawaiian" and "Part-Hawaiian" was seen as desirable due to the high rate of intermarriage between Native Hawaiians and other groups. Thus, for the 1960 Census, the racial categories used to classify the US population into major groups were "white," "Negro," "American Indian," "Chinese," "Japanese," "Filipino," "Hawaiian," "Part-Hawaiian," "Eskimo," or "Aleut." A specific category titled "Other" was not used in the race question for the 1960 Census, rather the list of racial categories for respondents to choose from ended with "etc.?" The "one-drop rule" was in effect for the 1960 Census, just as it had been for the previous three censuses.

Race-related terminology and concepts were clarified for the 1950 and the 1960 Censuses. The 1950 Census enumerator instructions requested that enumerators list an individual's "race" instead of "color or race." The 1960 Census form did not use the word "race" at all, rather the question stem simply asked "Is this person—" followed by a list of categories. Although "color" was not used on the census form, "color" was still clearly defined in the 1950 and 1960 Census subject reports. "Color" referred to the division of the population into two groups, white and non-white. The non-white category consisted of Negroes, American Indians, Japanese, Chinese, Filipinos, and other non-white groups (US Census 1953; US Census Bureau 1963). Although the "one-drop rule" was still in effect and a clear distinction between whites and non-whites continued, Census documents revealed that a shift in thinking about race was underway. For the first time, 1950 and 1960 Census documents stated:

> The concept of race as it has been used by the Bureau of the Census is derived from that which is commonly accepted by the general public. It does not, therefore, reflect clear-cut definitions of biological stock, and several categories obviously refer to nationalities (US Census Bureau 1953, p. 3B-4, 1963, p. X).

These statements are significant, as it can be argued that they reflect the beginning of societal, political, and scientific abandonment of key elements of race science and eugenics. This shift in the societal environment was important as the civil rights movement and the demand for racial equality heightened.

1970–1990 Censuses: Civil Rights and Immigration Legislation, Growth of the Immigrant Population, and Directive 15

The US population grew from 203 to 249 million between the 1970 Census and the 1990 Census (Gibson and Jung 2002). As the birth rate fell, the importance of immigrant streams from Latin America and Asia increased. Driven partially by new civil rights and immigration legislation, many significant changes to race and ethnic classifications marked this era.

Increased immigration from Korea influenced the return of that category to the 1970 Census race question. The categories for "Part-Hawaiian," "Eskimo," and "Aleut" disappeared from the race question. Those who reported themselves as "Part-Hawaiian" were coded as "Hawaiian" (US Census Bureau 1976). Also, the "Negro" category now included the term "black," which proponents linked to the ethnic pride that flourished as a result of the civil rights movement. The Census Bureau confirmed the growing preference for the term "black" through several 1970 Census pretests and consultations with a number of national and regional organizations and individuals concerned with race relations in the United States (US Census Bureau 1976). Additionally, the "American Indian" category was changed to "Indian (Amer.)" to reduce the number of respondents erroneously selecting this category because they identified with the term "American." Therefore, the following categories were used to classify the US population into major "color or race" groups for the 1970 Census: "white," "Negro or black," "Indian (Amer.) *Print tribe*," "Chinese," "Japanese," "Filipino," "Korean," "Hawaiian," and "Other *Print race*."

The 1965 Immigration and Nationality Act Amendments changed the character of immigration to the United States. Discriminatory limits on Asian immigration, and immigration from other non-western European nations, ceased. A preference system was established with family unification and skills receiving high priority. One result of this policy change was increased immigration from Asia, Latin America, and the Caribbean.

Migrants from Latin America and the Caribbean increased substantially. In addition to a rise in people moving from Mexico and Puerto Rico, there was an exodus from Cuba as thousands sought asylum from the Castro regime. The dramatic growth of the Hispanic population led the Census Bureau to develop methods to estimate the size of this group. A number of indicators had been used in the past: country of birth or parentage, Spanish language, Spanish mother tongue, and Spanish surname. Leading up to the 1970 Census, there was no single indicator suitable to identify the Hispanic population nationwide.

Introduction of the Hispanic Origin Question

After the release of Hispanic population estimates based upon 1960 Census data, leaders of Mexican-American organizations contended that the data were not adequate. They argued, for example, that the Hispanic population estimates based on Spanish surname were artificially low, as many Hispanics had non-Spanish surnames. Mexican-American organization leaders proceeded to lobby for a single, separate self-identification question on the 1970 Census form that would more completely count the Hispanic population (Choldin 1986). Considering the passage of civil rights legislation, the Mexican-American leaders' objective was to ensure the production of adequate decennial census statistics, down to the block level, which could be used to show the social, economic, and housing conditions of Hispanics and to monitor equal access. As the lobbying increased, the 1968 US Interagency Committee on Mexican American Affairs began considering the quality of minority group statistics, and noted that current data on the Hispanic population were insufficient. The committee insisted upon the addition of a new question for the 1970 Census that allowed self-identification of the Hispanic population (Choldin 1986).

The White House then instructed the Secretary of Commerce to add a Hispanic self-identification question to the 1970 Census form. Since the Census Bureau had already printed millions of copies of the 1970 Census 100% form and the 15% sample form, but only 10,000 copies of the 5% sample form, the new question was added to the latter in 1969 and the form was reprinted (US Census Bureau 1976). The question asked, "Is this person's origin or descent—." The response categories used were "Mexican," "Puerto Rican," "Cuban," "Central or South American," "Other Spanish," and "No, none of these." As the largest estimated Hispanic populations in the United States at the time, Mexican, Puerto Rican, and Cuban origins were separately identified.

Development of Directive 15

During the early 1970s, the US Commission on Civil Rights set the overall tone for the federal government and its initial efforts to develop standard racial and ethnic categories. Upon reviewing the practices of many federal government agencies, the commission noted the inconsistency in the utilization of racial and ethnic categories. The commission emphasized that race and ethnic classification used by the federal government does not refer strictly to biologically based race or color, but rather are used to identify minority group membership perceived both by the particular groups and by the general public. Further, the commission stated that racial and ethnic classification can be justified only if the data produced have a legitimate use in terms of combating discrimination, planning programs, or conducting program evaluation (US Commission on Civil Rights 1973). This argument closely parallels the three standards we have set: recognition, continuity, and predictive value. The commission recommended that the Office of Management and Budget (OMB) take leadership over the development and enforcement of a policy for the collection and use of racial and ethnic data, including establishing government-wide standards.

In 1976, Congress passed Public Law 94–311, which called for adequate statistics on the US population of Spanish origin. The law required the development of methods for improving and expanding the collection, analysis, and publication of data on the social, health, and economic conditions of Americans of Spanish origin or descent. It further called for the director of OMB and the Secretary of Commerce, along with other leaders of data-gathering federal agencies, to develop a government-wide program. The law explicitly mentions Americans who identify themselves as having a Spanish-speaking background and trace their origin or descent from Mexico, Puerto Rico, Cuba, Central or South America and other Spanish-speaking countries.

In 1977, OMB issued its Directive 15 policy on racial and ethnic classification for federal data. The basic racial and ethnic categories for federal statistics and program administrative reporting were defined as follows:

> *American Indian or Alaskan Native*. A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.
> *Asian or Pacific Islander*. A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.
> *Black*. A person having origins in any of the black racial groups of Africa.
> *Hispanic*. A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.[5]
> *White*. A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (OMB 1978, p. 19269).

[5] Note that the 1977 OMB race and ethnic standards maintain that ethnicity ("Hispanic" or "not Hispanic") is a separate and distinct concept from race ("White," "Black," "American Indian or Alaskan Native," or "Asian or Pacific Islander"). Therefore, individuals who are Hispanic may be of any race. This distinction also exists in the 1997 OMB race and ethnic standards.

With the establishment of Directive 15, the question on Hispanic origin was revised for the 1980 Census, with changes to address the major reporting problems experienced during the 1970 Census. First, the question was clarified to ask, "Is this person of Spanish/Hispanic origin or descent?" The "No (not Spanish/Hispanic)" was moved to be the first response category, since it applied to the overwhelming majority of the US population. Also, "Yes" was added in front of the Hispanic origin response categories as a way to balance the first response category that began with "No," and to reinforce that respondents were indeed identifying with the Hispanic origin listed next to the checkbox. The category of "Central or South American" was deleted, since many non-Hispanic respondents living in the central and southern regions of the United States reported in that category for the 1970 Census. Further, the "Mexican" category was expanded to include "Mexican, Mexican-Amer., Chicano." These additional terms were used to reach a wider population who identified with various terms depending upon geography in the United States (McKenney et al. 1988; Bean and Tienda 1987). Additionally, the Hispanic origin question was included on the 1980 Census 100% form. Thus, the 1980 Census Hispanic origin question used the following response categories: "No (not Spanish/Hispanic)," "Yes, Mexican, Mexican-Amer., Chicano," "Yes, Puerto Rican," "Yes, Cuban," and "Yes, other Spanish/Hispanic."

Asian immigration occurred rapidly in the years leading up to the 1980 Census. Immigration from India had notably increased. More significantly, the end of the Vietnam War generated a large flow of refugees-turned-immigrants from Vietnam, Cambodia, and Laos and had a huge impact on the Asian population presence in the United States. These newer Southeast Asian immigrant/refugee groups began heavily migrating during the mid-1970s (US Census Bureau 1983). The first wave of refugee immigrants was from Vietnam, and it peaked in 1975. A second wave of Vietnamese peaked in 1980, and represented those who fled by any means necessary and had lower levels of occupational skills. The largest arrival of refugees from Laos and Cambodia was in 1980. Hmong refugees were welcomed to migrate when Laos was overtaken by communism in the mid-1970s. As Southeast Asian immigration increased, migration from the Pacific Islands was also on the rise.

Since about the turn of the twentieth century, both Guam and American Samoa have been US territories. These populations are US nationals, with the ability to freely enter the United States. It was not until about the mid-twentieth century, and particularly after the 1960s, that economic motives and the lure of relatively high paying jobs began to entice more Pacific Islanders to come to the United States (Barringer et al. 1993).

In light of OMB's Directive 15 and changing Asian and Pacific Islander immigration patterns, the question on race was altered for the 1980 Census. In response to recent immigration patterns, "Asian Indian" returned and "Vietnamese," "Guamanian" and "Samoan" were introduced as racial categories. "Eskimo" and "Aleut" were returned as racial categories, ostensibly due to the need to fully represent the Directive 15 category of "American Indian and Alaskan Native." Additionally, a shift in wording occurred so that "black or Negro," with "black" now listed first, was used as the racial category label. While "Negro" was still deemed a relevant term, reversing the order of the terms for the 1980 Census is attributed to the race category label used in Directive 15 and the growing preference for "black" over "Negro" among the population of African descent. Another interesting development was the absence of the word "race" in the race question. It is not clear why the term was dropped. Thus, for the 1980 Census, the following categories were used to racially classify the US population: "white," "black or Negro," "Indian (Amer.) *Print tribe*," "Eskimo," "Aleut," "Chinese," "Japanese," "Filipino," "Korean," "Vietnamese," "Asian Indian," "Hawaiian," "Guamanian," "Samoan," and "Other *Specify*."

Introduction of the Ancestry Question

In 1980, another significant change occurred in the measurement of ethnicity—the parental place of birth question was replaced with a new question on ancestry. While the parental place of birth question made it possible to identify the first- and second-generations of immigrants (known as "foreign stock"), others who shared their heritage, such as grandchildren and later descendents, could not be identified. Waters (1990) summarized that "as the population of European origin progressed generationally, a smaller proportion of it consisted of "foreign stock" and a greater proportion disappeared into the category "native white of native parentage" (p. 9). Recognizing this, white ethnic group organizations exerted pressure on the federal government to add a question to the census form that would permit them to obtain counts of their population groups, including third and higher generations (Waters 1990; Perlmann and Waters 2002). Farley (1991) also notes that the proportion of the US population with a foreign-born parent, which peaked at 24% in 1920, fell to 12% by 1970, which can largely be attributed to the restrictive immigration policy enacted during the 1920s. Therefore, the 1980 Census sample questionnaire included an open-ended question that asked, "What is this person's ancestry?" The question included the following list of examples: "Afro-Amer.," "English," "French," "German," "Honduran," "Hungarian," "Irish," "Italian," "Jamaican," "Korean,"

"Lebanese," "Mexican," "Nigerian," "Polish," "Ukrainian," "Venezuelan." The list of examples was slightly modified for subsequent censuses.

External Stakeholder and Congressional Concerns with the Proposed 1990 Census Questionnaire

For the 1990 Census, the Hispanic origin question underwent more changes to improve data quality. While the same categories were used, the question was changed to "Is this person of Spanish/Hispanic origin?" The term "descent" was dropped. Also, there was poor reporting in the 1980 Census by newer immigrant groups who did not have a separate checkbox response category and did not understand the "Other Spanish/Hispanic" response category (McKenney et al. 1988). To remedy this, a list of examples and a write-in line were introduced for the 1990 Census. Therefore, the 1990 Census Hispanic origin question included the following response categories: "No (not Spanish/Hispanic)," "Yes, Mexican, Mexican-Am., Chicano," "Yes, Puerto Rican," "Yes, Cuban," "Yes, other Spanish/Hispanic (*Print one group, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on*)."

A number of question design issues led to misreporting of race in the 1980 Census. The race question in the 1980 Census included a separate checkbox response category for only one Southeast Asian group—"Vietnamese." There were incidents of new refugees from Southeast Asia misreporting in the 1980 Census because they were confused by the race question since other Southeast Asian groups did not have their own response checkbox. Thus, new refugees searched for a racial category that was the closest to their own. As a result, many Cambodians filled in the circle for "Vietnamese," scratched out "Vietnamese," and wrote "Cambodian" in the margin. Additionally, many respondents did not understand the intent of the 1980 Census race question, with its long list of skin color, indigenous, and national origin checkbox response categories. The omission of the term "race" from the 1980 Census question is thought to have added further confusion (McKenney et al. 1988).

To address these issues in the 1990 Census, Census Bureau staff proposed the use of a "shortened" race question. The proposal included the term "race" in the question stem and included checkbox response categories only for "white," "black or Negro," "Asian or Pacific Islander," "Indian (Amer.) (*Print the name of the enrolled or principal tribe*)," "Eskimo," "Aleut," and "Other race (*Print race*)." Additionally, a list of examples was added, along with a write-in line directly below the "Asian and Pacific Islander" category. It read "Print one group, for example, Chinese, Filipino, Asian Indian, Japanese, Laotian, Hawaiian, Korean, Samoan, Vietnamese, etc." The examples chosen were the largest Asian and Pacific Islander groups counted in the 1980 Census. There was an initial concern that the removal of the Asian and Pacific Islander national origin checkbox response categories would result in greater nonresponse, since it was questioned whether these individual groups identified with the general "Asian and Pacific Islander" category. However, the results of tests conducted during the 1980s found the "shortened" question to be successful in eliciting the reporting of detailed Asian and Pacific Islander groups. Thus, the proposed 1990 Census question for race, along with the proposed question for Hispanic origin, were delivered to Congress for approval and announced publicly in January 1988 (Lowry 1989).

Asian and Pacific Islander lobbyists were concerned about the proposed design of the "shortened" race question. The objections focused on three aspects. First, many recent immigrants were not able to write in English, so they would fail to write-in their specific national origin. Some lobbyists doubted that this group would even choose the general "Asian and Pacific Islander" category, because the only category they were likely to recognize would be their specific national origin group. Second, there was a data processing issue—although the Census Bureau promised to code write-ins from the 100% form race question in the spring of 1992, there was no promise to provide these coded data in time for the 1991 release of the redistricting data. Third, explicitly naming an ethnic group or national origin on the census questionnaire is often construed as social validation of its importance (Lowry 1989).

In response to these issues, Congressman Robert Matsui (D-CA) filed a bill. The bill, H.R. 4432, required the Census to use the race question that included the same checkbox groups that were present in the 1980 Census. An identical bill (S. 2444) was filed by Senator Mark Matsunaga (D-HI). HR. 4432, as amended, passed both the House and the Senate and was presented to President Reagan in October 1988. Although President Reagan "pocket-vetoed" the bill in November 1988, the Census Bureau acknowledged the Asian and Pacific Islander communities' stance on the race question and was concerned that this issue could negatively impact the 1990 Census. Thus, the Census Bureau decided to revise the 1990 Census race question to include the same individual Asian and Pacific Islander groups that were present for the 1980 Census.

The 1990 Census question on race included the following categories to classify the population: "white," "black or Negro," "Indian (Amer.) *Print the name of the enrolled or principal tribe*," "Eskimo," "Aleut," "Chinese," "Japanese," "Filipino," "Korean," "Vietnamese," "Asian Indian," "Hawaiian," "Guamanian," "Samoan," and "Other API," and "Other race (*Print race*)." To

address the issue of aiding new immigrants when reporting their race, a revised list of examples was added to the race question instruction, which appeared near the "Other API" write-in line. "Hmong," "Fijian," "Laotian," "Thai," "Tongan," "Pakistani," and "Cambodian" were used as examples. In order to reduce respondent confusion, a spanner was added above the national origin and ethnic groups to clarify that they are a subset of the OMB-defined race category of "Asian or Pacific Islander."

2000–2010 Censuses: The Multiracial Movement, A Revised Directive 15, and Congressional Intervention in the Design of the Race Question

Preparation for the 2000 and 2010 Censuses led to changes in the US decennial census' measurement of race and ethnicity. Many external stakeholders were given an opportunity to voice their opinions on a number of race and ethnicity measurement issues, when the OMB opened the Directive 15 for review. This led to research to provide data to support changes to the OMB race and ethnicity standards. The Census Bureau's American Community Survey (ACS), the nation's largest household survey, is the replacement for the decennial census sample form, beginning with the 2010 Census. Thus, data on place of birth and ancestry would be produced from the ACS, instead of the US decennial census. Further, because of the interest of Congress, the Census Bureau experienced greater political pressure regarding the measurement of race during this era.

Development of Revised Race and Ethnic Standards

During the years prior to Census 2000, the 1977 OMB race and ethnicity standards faced increasing criticism from those who felt that the minimum set of categories did not reflect the growing racial and ethnic diversity within the US population. In order to initiate a dialogue with federal statistical agency staff, academic researchers, and racial and ethnic communities, OMB solicited public comment on the 1977 race and ethnicity standards in a Federal Register notice published in 1994, and held four public hearings in 1994 (OMB 1994). It also established the Interagency Committee for the Review of the Racial and Ethnic Standards, which drew from more than 30 federal agencies. One major issue that arose regarding the 1977 standards involved the ability to report more than one race.

Classifying people of mixed racial background had troubled the statistical system throughout the nineteenth century and was again an issue prior to Census 2000. Williams (2006) explained that the multiracial movement started with a small number of activist groups that formed on the West Coast in the late 1970s and early 1980s. In 1988, a number of these local organizations joined forces to create the Association of MultiEthnic Americans (AMEA), whose political goal was to persuade the Census Bureau to add a multiracial category to the decennial census question on race. The AMEA felt strongly that it was inaccurate and unacceptable to force multiracial Americans into monoracial categories. The AMEA's and other multiracial organizations' demand for a multiracial category seems to have been more for recognition of multiraciality than for any specific political or economic advantage for those with a multiracial background. The advocates did not want to deny a part of their own, or their children's, origin (Perlmann and Waters 2002). Indeed, there had been an increase in the proportion of households with interracial unions in the United States, growing from 0.4% in 1960 to 2.9% in 1990 (US Census Bureau 1998). In Census 2000, 5.7% of married-couple households had a householder and spouse of different races (Simmons and O'Connell 2003).

However, there was also strong opposition to the addition of a multiracial category in the decennial census race question. A number of civil rights organizations opposed the addition of a multiracial category, with the link between numbers and power driving their concern (Williams 2006). The general concern was that if individuals were allowed to indicate origins in more than one racial group, the counting of races (the foundation for much civil rights legislation) would be muddled, resulting in weakened enforcement of civil rights and obscured documentation of inequality and discrimination (Perlmann and Waters 2002; Williams 2006).

Options for reporting multiple races were tested during the 1990s by the Census Bureau and the Bureau of Labor Statistics (de la Puente and McKay 1995; US Census Bureau 1996, 1997). Aside from adding a multiracial category, a race question instruction to "mark one or more" was tested. The appeal of using an instruction to "mark one or more," rather than an additional multiracial checkbox, was that the individual's specific origin could be reported. It would be known if a person were "Asian" ***and*** "white" or "black" ***and*** "American Indian," instead of only knowing that the person was multiracial. This approach, which satisfied most civil rights advocates and multiracial advocates, allows various tabulations that produce counts of individuals who identify solely or partially with particular race groups.

One issue not yet solved is whether this approach meets the fundamental requirements for a useful classification system. The individual may indeed recognize his or her background, but it is unclear whether these groups are recognized by their social networks. Evidence also indicated that the classification into multiracial groups is not stable over time (Bentley et al. 2003). Finally, it is too soon

to determine whether these multiracial categories are predictive of social or economic opportunity.

In 1997, OMB issued revised race and ethnicity standards. The final race categories were "white," "black or African American," "American Indian or Alaska Native," "Asian," and "Native Hawaiian or Other Pacific Islander." The final ethnicity categories were "Hispanic or Latino," and "Not Hispanic or Latino." The race question would allow the reporting of more than one race. There would be two separate questions on race and ethnicity when collecting data via self-identification. OMB defined the race and ethnic groups as:

> *American Indian or Alaska Native*. A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
> *Asian.* A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
> *Black or African American*. A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "black or African American."
> *Hispanic or Latino*. A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."
> *Native Hawaiian or Other Pacific Islander.* A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
> *White*. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa (OMB 1997b).

Therefore, the Census 2000 categories provided as responses to the question "Is this person Spanish/Hispanic/Latino? *Mark the "**No**" box if **not** Spanish/Hispanic/Latino*." were "No, not Spanish/Hispanic/Latino" "Yes, Mexican, Mexican Am., Chicano," "Yes, Puerto Rican," "Yes, Cuban," and "Yes, other Spanish/Hispanic/Latino *Print group*." The categories provided as responses to the question "What is this person's race? ***Mark one or more races** to indicate what this person considers himself/herself to be*." were "white," "black, African Am., or Negro," "American Indian or Alaska Native *Print name of enrolled or principal tribe*," "Asian Indian," "Chinese," "Japanese," "Korean," "Filipino," "Vietnamese," "Other Asian *Print race*," "Native Hawaiian," "Guamanian or Chamorro," "Samoan," "Other Pacific Islander *Print race,*" and "Some other race." Examples were not included to streamline the questionnaire.

The "Some Other Race" Category

The "Some Other Race" category, long part of the Census, did not fit into either the 1977 OMB Directive 15 or the 1997 OMB revised race and ethnic standards. It was not used in the administration of federal programs or to enforce civil rights laws. Thus, the Census Bureau had long been required to prepare special tabulations in which the "Some Other Race" population was allocated, using statistical models, to one of the recognized OMB categories. These files were then used by many federal agencies.

With the adoption of the multiracial response option, the purpose of the "Some Other Race" category was not clear. Most living in the United States could trace their ancestry to one particular, or a combination of the, recognized OMB race groups.[6] The Census Bureau successfully tested the removal of the "Some Other Race" category, which was viewed as a way to increase the reporting in one or more of the OMB race categories (Martin et al. 2004). The testing of the removal of the "Some Other Race" category caught the attention of Congress.

Congressman Jose Serrano (D-NY) raised concerns about the potential removal of the "Some Other Race" category from the race question. Serrano asserted that many racial and ethnic identities exist within the Hispanic community; therefore, Hispanics do not neatly fit into the OMB racial categories. He noted that to force Hispanics to choose one racial category or to declare themselves multiracial would result in inaccurate data and undermine the census' central mission (Serrano 2004). Serrano added language to the 2005 Omnibus Appropriations Bill that stated "none of the funds provided in this or any other Act for any fiscal year may be used for the collection of Census data on race identification that does not include 'some other race' as a category" (Congress of the United States of America 2005, p. 19).

Interest in Collecting Ancestry Data on the 100% Census Form

The "white" category has remained on the US decennial census form virtually unchanged in terminology since 1790. However, as we have seen there has been a continued shift in its actual composition, as more and more "white" groups immigrated to America. What started as a term synonymous with northwest European people has broadened to include groups that in the nineteenth century would

[6] The only groups that would seem to be not included would be the original inhabitants of Australia, New Zealand, and Papua New Guinea. The OMB race and ethnic standards are silent as to the classification of American Indians who do not maintain "cultural identification through tribal affiliation or community recognition."

likely have been considered "colored," such as some of the peoples of North Africa and the Middle East.

In preparation for the 2010 Census, research then focused on whether a series of questions could be developed that captured not just race and Hispanic origin, but also ancestry data for all Americans. However, the testing revealed that this approach lowered the reporting of some specific groups such as Dominican and Samoan (Alberti 2006). The selection of the traditional two separate race and Hispanic origin questions for the 2010 Census meant that there would be no opportunity to put an ancestry question on the US decennial census 100% form.

This 2010 Census content decision triggered a flurry of lobbying to compel the Census Bureau to alter the 100% form for the 2010 Census. Congressional offices requested the addition of the ancestry question. The Arab American Institute Foundation garnered support from the Democratic National Committee, which passed a resolution supporting the use of an ancestry question to list an individual's ethnic heritage or national origin, as a necessary supplement to the limits of the OMB race categories. The resolution was unanimously approved by the full Democratic National Committee (H. Samhan, personal communication, December 12, 2007). In response, the Census Bureau repeatedly assured external stakeholders that data for white ethnic groups such as the Arab population would continue to be available through the American Community Survey's ancestry question.

The 2010 Census Hispanic origin question will include the following categories to classify the ethnicity of the US population: "No, not of Hispanic, Latino, or Spanish origin," "Yes, Mexican, Mexican Am., Chicano," "Yes, Puerto Rican," "Yes, Cuban," "Yes, another Hispanic, Latino, or Spanish origin *Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard*." The 2010 Census race question will use the following categories to classify the race of the US population: "white," "black, African Am., or Negro," "American Indian or Alaska Native *Print name of enrolled or principal tribe*," "Asian Indian," "Chinese," "Filipino," "Japanese," "Korean," "Vietnamese," "Other Asian *Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian*," "Native Hawaiian," "Guamanian or Chamorro," "Samoan," "Other Pacific Islander *Print race, for example, Fijian, Tongan*," "Some other race *Print race*" (see Fig. 1).

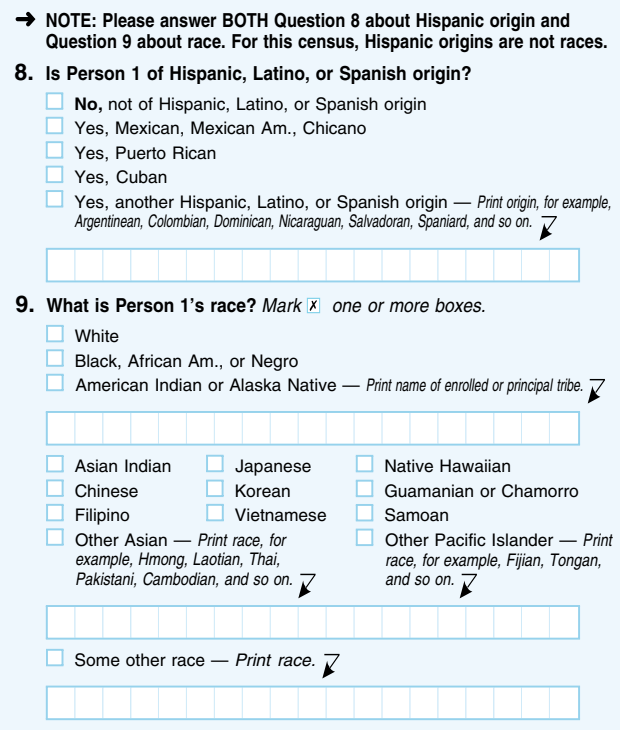

Fig. 1 2010 Census Hispanic origin and race questions

Exploring Race and Ethnicity in the 2010 Census Alternative Questionnaire Experiment

Looking forward, the Census Bureau and the federal statistical system face many challenges, including a growing list of groups who find the current race and ethnic classification system confusing, if not irrelevant, to their life experience, or who wish to see their own specific group highlighted on the US decennial census questionnaire. The near-term research objectives of the Census Bureau are to design questionnaire items that will increase reporting in the standard race and ethnic categories established by OMB, elicit the reporting of detailed race and ethnic groups, lower item nonresponse, and increase accuracy and reliability. The Census Bureau's next opportunity to engage in such research will be the 2010 Census Alternative Questionnaire Experiment (2010 AQE).

The 2010 AQE will test variations in the design of the mailout/mailback questionnaire in a decennial census environment. The 2010 AQE experimental forms will be mailed to a national sample of housing units, with replacement experimental questionnaires sent to initial-mailing nonrespondents. For housing units that do not respond by mail, the nonresponse follow-up enumeration will be conducted using the regular 2010 Census questionnaire. The 2010 Census mailout/mailback questionnaire will serve as the 2010 AQE control panel. The control panel provides a baseline to which the experimental treatments can be compared.

As Humes (2009, unpublished manuscript) documents, the 2010 AQE race and Hispanic origin treatments focus on:

(1) The use of modified examples in the race and Hispanic origin questions.
(2) The removal of the term "Negro" from the "black, African Am., or Negro" category.
(3) The use of a modified Hispanic origin question instruction that permits multiple responses.
(4) An approach to clarifying that the Asian and the Pacific Islander checkbox response categories are part of two broader OMB race groups. This set of treatments also tests limiting the use of the term "race" in the race question.
(5) Multiple approaches to combining the race and Hispanic origin questions into one item.

We will focus on the last aspect, as it best illustrates how the process of adapting federal statistics to a changing and multicultural society will continue into the next decade.

A primary purpose of the 2010 AQE is to test alternative approaches to combining the Hispanic origin and race questions into one item. Although the OMB race classification system works well for many respondents, there are others, particularly those of Hispanic origin, who do not identify with OMB race categories. A number of studies show that some respondents, particularly Hispanics, view Hispanic origin as a race rather than an ethnic group (Alberti 2006; Gerber and Crowley 2005 (unpublished data); National Research Council 2004; OMB 1995; Rodriguez 2000; US Census Bureau 1997).

The classification of responses as "Some Other Race" has grown considerably over time. Census 2000 data show that about 42% of Hispanic respondents provided a response to the race question that was classified as "Some Other Race alone." For Census 2000, of all those who were classified as "Some Other Race alone," 97% reported being Hispanic in the Hispanic origin question (Guzman 2001). The "Some Other Race alone" population was the third largest race group, behind the "white alone" and the "black alone" populations in 2000 (Grieco and Cassidy 2001). Thus, the Census Bureau is forced to statistically allocate an increasing number of people to a specific OMB race category when preparing special tabulations for the administration of federal programs. With the projected steady growth of the Hispanic population, the "Some Other Race alone" population is expected to continue increasing (US Census Bureau 2008).

With the growth of the "Some Other Race" population in the 1990 Census, testing a combined question was subsequently proposed during the review of the 1977 OMB race and ethnicity standards (OMB 1997a). As a result, the Census Bureau's 1996 Race and Ethnic Targeted Test included a combined question. The combined question performed well in terms of lower item nonresponse and the percentage reporting being of Hispanic origin, but it did not provide comparable levels of detail on the type of Hispanic origin as the separate questions provided (US Census Bureau 1997). Thus, in light of the growing "Some Other Race" population in consecutive decennial censuses, new approaches to combining the race and Hispanic origin questions into one item are being tested in the 2010 AQE.

The overall objectives are for the 2010 AQE combined question to achieve lower item nonresponse, maintain or improve reporting of whites, blacks, Hispanics, American Indians and Alaska Natives, Asians, and Native Hawaiians and Other Pacific Islanders; maintain or improve reporting of detailed race and Hispanic origin information; and significantly reduce responses that are classified as "Some Other Race." In all of the combined question experimental panels, respondents will be allowed to mark all that apply.

For example, the design of one panel represents a "detailed" approach to the combined question. This panel combines the two questions, lists examples for all OMB groups, has write-in areas for each OMB group and "Other," and retains all of the checkbox response categories on the 2010 Census control panel. A simple instruction is used that directs respondents to mark one or more boxes and to write in a specific race or origin. The use of both terms "race" and "origin" was included to represent both of the existing OMB concepts. This version provides an opportunity for all OMB race and ethnic groups to report detailed ethnic information in their own write-in areas—for which many groups have recently lobbied the Census Bureau and Congress.

Another design panel represents a "streamlined" approach to the combined question (see Fig. 2). This version also provides examples for all OMB groups, as well as an opportunity for all OMB race and ethnic groups to report detailed ethnic information in their own specified write-in areas. This approach removes all national origin and ethnic checkboxes, which simplifies and streamlines the presentation of the combined question. All groups that are national origin checkboxes on the 2010 Census control panel have been added as examples to their respective checkbox response categories. This permits the removal of the individual checkboxes, yet still allows the groups to be listed on the questionnaire in the form of additional examples.

Yet another panel represents a "very streamlined" approach to the combined question. This approach also removes all national origin checkboxes, which simplifies and streamlines the question. This panel also brings equity to all OMB race and ethnic groups by providing one shared write-in area for reporting all detailed race and ethnic responses.

The 2010 AQE represents the beginning of the 2020 Census content testing. The 2010 AQE was designed to assess *strategies* for improving race and Hispanic origin reporting (e.g., combined question, multiple response option to the Hispanic origin question, modified example

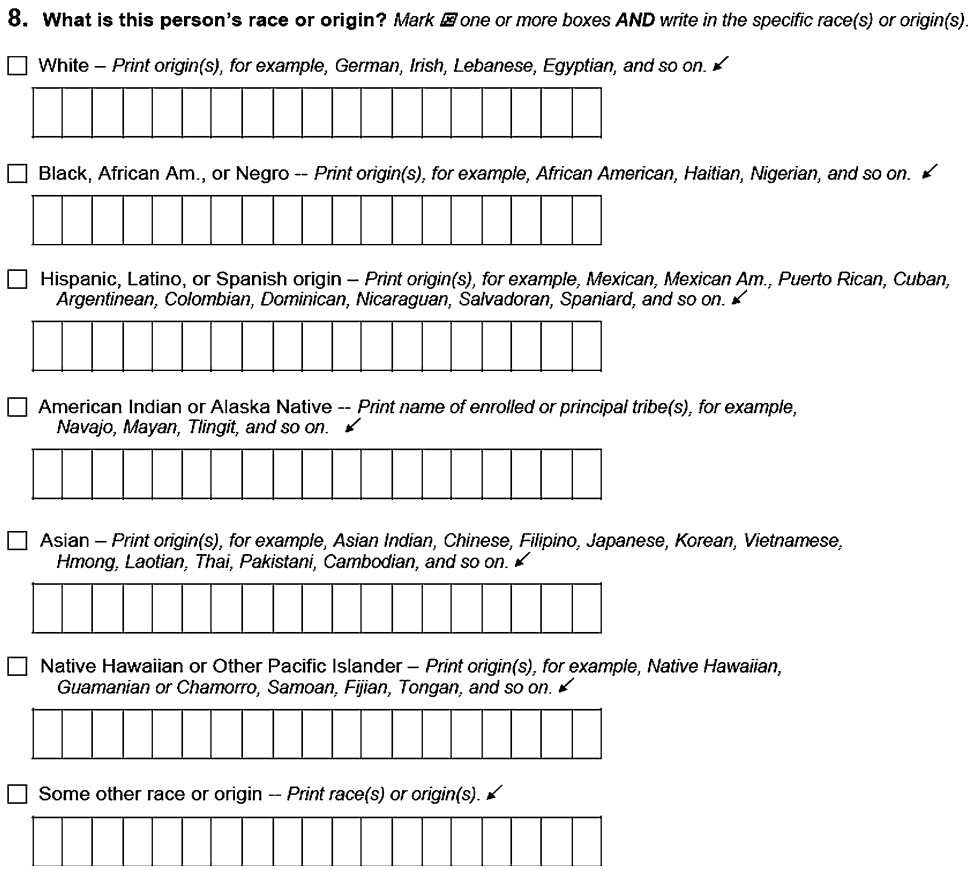

Fig. 2 2010 AQE streamlined question

strategies), rather than assessing which specific panels should move forward into the 2020 Census content testing (Hill 2008). Early in the next decade, in consultation with the Office of Management and Budget and other stakeholders, the Census Bureau hopes to determine promising strategies from the 2010 AQE and further refine actual race and Hispanic origin questions. The analysis and results of the 2010 AQE will be eagerly awaited, as this will launch the race and ethnic research program that will begin informing the 2020 Census.

Conclusion and Summary

Evidence from recent decennial censuses and other federal surveys shows that the application of the 1997 OMB standards to data collection efforts is becoming increasingly problematic. Since a significant proportion of Hispanic respondents do not identify with any of the five OMB race groups ("white," "black or African American," "American Indian or Alaska Native," "Asian," or "Native Hawaiian or Other Pacific Islander"), the "Some Other Race" population is expected to swell for future data collection efforts. Further, the greater the proportion of the US population who do not identify with OMB race groups in the decennial census, the greater the impact on other federal statistical programs that rely on census data. As we have discussed, most federal statistical programs do not include a "Some Other Race" category. In order to meet the requirements of those programs, the Census Bureau must allocate those classified as "Some Other Race alone" to one of the five OMB race groups.

The results of the 2010 AQE could provide the basis for a discussion. While the 2010 AQE by no means will offer the final race and Hispanic origin questions for the 2020 Census, it will provide direction for focusing future research efforts. Thus, if any of the combined Hispanic origin and race questions prove to be successful, the information could initiate a dialogue about the future standards and measurement of race and ethnicity. Any request to open the 1997 OMB standards for review would need to be well rooted in statistical evidence and stakeholder support. The last review of the standards required 4 years of public hearings and research before OMB issued revised standards in 1997. Further, any change to the OMB race and ethnicity standards would impact the entire federal statistical system. As of today, some federal agencies are still migrating to the 1997 OMB standards in their data collection efforts.

Another aspect of the 1997 OMB race and ethnic standards should also be considered—are race and Hispanic origin data alone the best approach to aid in enforcing civil rights laws and monitoring equal access? The requirement to collect and tabulate race and ethnic data is legislatively based, in support of civil rights laws and the monitoring of equal access. However, are the concepts of "race" and "Hispanic origin" the only vehicles to provide data to meet these legislative needs? It is true that concepts of race and ethnicity have historically reflected ascribed characteristics that are often correlated with social and economic opportunity and achievement. And, for the most part, race and Hispanic origin will inevitably continue to do so, particularly for some groups that have a long history of institutionalized disenfranchisement in this country. Are there indicators, other than race and Hispanic origin, which can be just as powerful predictors of opportunity and achievement? Thus, are there other predictors, for which data can be collected, that should also be regarded as necessary to enforce civil rights and monitor equal access?

Examining the ancestries reported by those who identified as particular race and origin groups is of interest when considering data available for the enforcement of civil rights, monitoring equal access, and predicting opportunity and achievement (see Table 1). Overall, an overwhelming majority of those who identified ethnically and racially as non-Hispanic American Indian and Alaska Native alone, Pacific Islander alone, and Asian alone reported corresponding ancestries. Additionally, most of those who identified ethnically as Hispanic or Latino also reported Latin American and Caribbean ancestries.

For those who identified ethnically and racially as either non-Hispanic white alone or black alone, the ancestry question provides data unobtainable from the race question. The ancestry data reveal that while the majority of those classified as non-Hispanic black alone reported their ancestry as African American, a small, but substantive, segment reported Caribbean and sub-Saharan African ancestries. Similarly, while the preponderance of those classified as non-Hispanic white alone reported their ancestry as eastern, northern, and western European, a small, but substantive, segment reported Western Asian (i.e., Middle Eastern) and Northern African ancestries. Considering the limitations of the current design of the 2010 Census race question, these findings reflect the importance of the collection of ancestry data to reveal ethnic diversity among the white and the black populations. This ethnic diversity, along with recency of immigration, can be paramount when considering civil rights enforcement, monitoring equal access, and predicting opportunity and achievement.

Factors such as recency of immigration can also be a critical predictor of opportunity and achievement and aid in the enforcement of civil rights and monitoring equal access. Historically, as new groups migrated to the United States they often faced harsh discrimination and exclusion. Recent immigrants to the United States, who represent their country of origin through speech, dress, and other ethnic customs, can face discrimination just as severe as groups that have been historically discriminated against. For example, among those who are white alone, not Hispanic, and foreign born, the largest specific non-European ancestry reported is Iranian (US Census Bureau 2007, unpublished data). Among those who are black alone, not Hispanic, and foreign born, the largest specific ancestry reported is Jamaican (US Census Bureau 2007, unpublished data). Foreign-born Iranians may face discrimination not traditionally associated with the white population, while foreign-born Haitians and Jamaicans may endure additional discrimination.

The association is clear between rising major immigrant populations and the introduction of race and ethnic categories in the US decennial census. At the time of the introduction of the race and ethnic categories on the decennial census form, the immigrant communities were just blossoming. Thus, the US decennial census served as a method to track, and identify, such groups. However, as most of these immigrants assimilated into American society, it could be argued that the level of discrimination that they faced was not as extreme as newly arriving immigrants and their children from their country of origin. This discussion posits that there may be other factors, aside from race and Hispanic origin, to also consider when determining major correlates with the need for civil rights protection and monitoring of equal access.

Therefore, multiple factors could be taken into consideration when rethinking the 1997 OMB race and ethnicity standards. The ultimate goal should be to develop a racial and ethnic classification system that will allow the multicultural population to self-identify their heritage in the most meaningful manner possible, yet will still provide the critical data needed for the enforcement of civil rights laws and monitoring equal access.

The Census Bureau will continue its long history of researching a variety of approaches to measuring race and ethnicity for future US decennial censuses. The broad objectives of the Census Bureau are expected to remain the same: to design a questionnaire that meets the needs of federal data users, while respecting the self-identification of our respondents, the American people. Future measurement experimentation will include testing approaches that will generate data to meet legislative mandates, yet will also allow the increasingly multicultural population to more easily identify with race and ethnic categories on the US decennial census questionnaire and report information about their heritage.

Table 1 Ancestry distribution for those who reported one or two ancestries by Hispanic origin and race: 2007

Ancestry[a]	Non-Hispanic														Hispanic	
	White alone		Black alone		American Indian and Alaska Native alone		Asian alone		Native Hawaiian and Other Pacific Islander alone		Some Other Race alone		Two or More Races			
	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]
Total	174,205,048	116,522	34,579,604	58,154	1,927,638	16,689	12,615,124	31,603	379,520	9,095	618,375	21,745	4,463,721	51,131	44,059,673	34,564
African																
Northern African[c]	266,060	15,703	53,509	7,381	595	792	3,190	1,528	102	167	13,029	3,937	8,486	1,919	5,023	1,790
Other African	90,311	7,938	2,345,420	48,656	1,239	445	6,115	1,896	2,308	1,268	37,817	5,576	133,134	8,988	46,101	5,037
Asian																
Eastern Asian	252,252	9,669	24,620	3,638	1,386	752	5,182,023	46,492	17,866	3,126	12,969	2,380	594,546	16,932	128,394	8,820
Southern Asian	298,065	11,606	59,417	7,523	6,400	1,768	6,793,107	52,900	17,070	3,402	77,968	7,385	563,994	15,098	188,417	8,941
Western Asian	2,477,822	47,076	21,866	4,081	960	495	27,448	5,934	129	190	7,348	2,148	30,114	3,821	61,892	5,094
Other Asian	52,846	6,127	10,264	2,706	969	591	365,500	16,150	2,801	1,418	9,599	2,258	62,103	4,340	13,262	1,771
European																
Eastern European	19,180,432	95,035	29,462	3,392	11,389	2,065	18,325	2,786	1,041	569	10,230	2,008	174,735	8,544	210,945	9,858
Northern European	79,111,016	139,433	287,667	13,707	101,109	5,885	59,561	4,913	11,043	2,748	37,667	3,804	1,138,118	20,015	987,965	25,715
Western European	77,051,991	137,215	268,920	14,539	99,600	5,102	73,433	5,646	15,384	1,932	58,736	4,824	1,114,405	22,634	1,867,020	32,682
Other European	2,849,995	36,615	15,469	3,692	3,139	997	4,414	945	483	540	5,076	1,690	63,404	4,701	76,138	5,693
Latin American and Caribbean																
Caribbean, Hispanic	260,879	12,841	60,485	7,561	2,039	851	4,940	1,561	574	352	33,792	5,623	23,373	3,750	6,053,450	70,055
Caribbean, non-Hispanic	107,299	6,974	2,143,343	39,787	2,344	1,018	21,048	3,096	2,598	2,310	17,349	3,162	75,492	7,293	63,822	6,197
Central American, Hispanic	615,120	18,410	63,658	6,333	11,528	1,973	10,866	2,085	2,375	1,097	104,084	9,386	42,550	4,806	29,364,448	90,810
Central American, non-Hispanic	5,114	2,485	22,943	4,419	–	–	309	367	–	–	7,683	2,721	1,928	844	7,181	2,545
South American, Hispanic	150,962	9,579	9,205	2,144	248	214	1,398	727	49	84	16,215	3,265	8,132	2,040	2,239,357	39,313

Table 1 continued

Ancestry[a]	Non-Hispanic														Hispanic	
	White alone		Black alone		American Indian and Alaska Native alone		Asian alone		Native Hawaiian and Other Pacific Islander alone		Some Other Race alone		Two or More Races			
	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]	Estimate	Margin of error[b]
South American, non-Hispanic	235,129	17,358	114,071	12,180	1,904	1,043	38,889	6,139	1,175	882	107,514	10,303	20,159	2,895	24,648	3,619
Other Latin American/ Caribbean	908,219	17,496	44,606	4,530	9,257	1,887	27,148	3,913	2,176	970	36,715	4,416	47,342	5,006	5,188,645	67,214
Northern American																
African American	180,220	9,342	28,609,735	78,015	13,668	1,876	8,229	2,273	647	596	48,470	5,515	1,069,198	26,167	338,617	14,391
American	18,142,285	89,058	708,506	26,230	20,471	2,770	46,580	5,890	5,033	2,414	19,962	3,621	105,066	7,135	333,365	15,671
American Indian and Alaska Native	7,945,001	69,422	826,379	24,366	1,827,789	16,666	215,321	7,372	4,656	1,473	32,481	4,337	1,296,359	25,132	510,399	17,408
Other Northern American	2,784,169	36,133	17,409	3,599	13,318	2,097	4,416	1,322	220	367	2,740	871	50,677	5,095	34,340	3,384
Oceanian																
Australian/New Zealander	110,917	6,735	556	363	82	112	450	324	54	106	141	144	4,489	1,495	1,947	837
Pacific Islander	99,141	7,108	10,866	3,318	1,504	766	27,155	3,454	333,710	8,920	2,040	1,045	256,359	10,705	61,491	5,804
Other Ancestries[d]	9,898,324	90,223	72,096	6,192	5,646	1,464	14,651	2,901	547	440	10,159	2,048	49,175	5,200	78,097	6,169

Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and accuracy of the data, see http://www.census.gov/acs/www/UseData/Accuracy/Accuracy1.htm

Source: US Census Bureau, 2007 American Community Survey, Special Tabulation

– Represents or rounds to zero

[a] The total is equal to the number of people in each race and Hispanic origin group who reported ancestry. People who reported two ancestries were included once in each ancestry category; therefore, the sum of ancestry estimates for each race and Hispanic origin group is more than the total

[b] This number, when added to and subtracted from the estimate, produces the 90% confidence interval around the estimate

[c] Ancestry question responses of "Algerian," "Egyptian," "Libyan," "Moroccan," "Tunisian," "Berber," "Sudanese," or "North African" were combined to represent the ancestry category of "Northern African"

[d] This category includes reported ancestries that could not be categorized into the other ancestry groupings included in this table

References

Alberti, N. (2006). *2005 National census test: Analysis of the race and ethnicity questions*. Washington, DC: US Census Bureau.

Anderson, M. J. (1988). *The American census: A social history*. New Haven, CT: Yale University Press.

Barringer, H. R., Gardner, R. W., & Levin, M. J. (1993). *Asians and Pacific Islanders in the United States*. New York: Russell Sage Foundation.

Bean, F. D., & Tienda, M. (1987). *The Hispanic population of the United States*. New York, NY: Russell Sage Foundation.

Bentley, M., Mattingly, T., Hough, C., & Bennett, C. (2003). *Census quality survey to evaluate responses to the census 2000 question on race: An introduction to the data*. Washington, DC: US Census Bureau.

Chapa, J. (2000). Hispanic/Latino ethnicity and identifiers. In M. J. Anderson (Ed.), *Encyclopedia of the US census* (pp. 45–48). Washington, DC: CQ Press.

Choldin, H. M. (1986). Statistics and politics: The "Hispanic issue" in the 1980 Census. *Demography, 23*, 403–418.

Congress of the United States of America. (2005). *HR2862*. Washington, DC: Author.

de la Puente, M. & McKay, R. (1995). Developing and testing race and ethnic origin questions for the Current Population Survey supplement on race and ethnic origin. *Statistical Research Report Series*, SM95/17. Retrieved May 26, 2009, from http://www.census.gov/srd/www/byyear.html.

Farley, R. (1991). The new census question about ancestry: What did it tell us? *Demography, 28*, 411–429.

Gibson, C. & Jung, K. (2002). *Historical census statistics on population totals by race, 1790 to 1990, for the United States, regions, divisions, and states*. Population Division working paper series, 56. Retrieved May 26, 2009, from http://www.census.gov/population/www/techpap.html.

Gibson, C. & Lennon, E. (1999). *Historical census statistics on the foreign-born population of the United States: 1850 to 1990*. Population Division working paper series, 29. Retrieved May 26, 2009, from http://www.census.gov/population/www/techpap.html.

Grieco, E., & Cassidy, R. (2001). *Overview of race and Hispanic origin: 2000*. Washington, DC: US Census Bureau.

Guzman, B. (2001). *The Hispanic population: 2000*. Washington, DC: US Census Bureau.

Haller, J. S. (1971). *Outcasts from evolution: Scientific attitudes of racial inferiority: 1859–1900*. Carbondale, IL: Southern Illinois University Press.

Hill, J. (2008). *The 2010 census alternative questionnaire experiment-introduction to the 2020 census life-cycle content testing*. Paper presented at the meeting of the Census Advisory Committee of Professional Associations, Suitland, MD.

Ignatiev, N. (1995). *How the Irish became White*. New York: Routledge.

Lal, V. (2008). *The other Indians: A political and cultural history of South Asians in America*. Los Angeles, CA: Asian American Studies Center Press.

Lee, S. (2000). Asian and Pacific Islander Americans. In M. J. Anderson (Ed.), *Encyclopedia of the US census* (pp. 45–48). Washington, DC: CQ Press.

Lowry, I. S. (1982). The science and politics of ethnic enumeration. *Ethnicity and Public Policy, 1*, 42–59.

Lowry, I. S. (1989). *Counting ethnic minorities in the 1990 census*. Pacific Palisades, CA: Author.

Martin, E., Sheppard, D., Bentley, M., & Bennett, C. (2004). *Results of the 2003 national census test of race and Hispanic questions. Research report series, survey methodology #2007–34*. Washington, DC: US Census Bureau.

McKenney, N. R., Cresce, A. R., & Johnson, P. A. (1988). *Development of the race and ethnic items for the 1990 Census*. Paper presented at the meeting of the Population Association of America, New Orleans, LA.

National Research Council. (2004). *The 2000 census: Counting under adversity*. Washington, DC: The National Academies Press.

Nobles, M. (2000). *Shades of citizenship: Race and the census in modern politics*. Stanford, CA: Stanford University Press.

Census Office, Department of Interior. (1860). *Eighth census, United States. 1860. Act of Congress of twenty-third May, 1850. Instructions to US marshals. Instructions to assistants*. Washington, DC: Author.

Office of Management and Budget. (1978). Statistical directive no. 15: Race and ethnic standards for federal agencies and administrative reporting. *Federal Register, 42*(1926), 9–19270.

Office of Management and Budget. (1994). Advance notice of proposed review and possible revision of OMB's Statistical Policy Directive No. 15, race and ethnic standards for federal statistics and administrative reporting. *Federal Register*, June 9. Retrieved May 26, 2009, from http://www.whitehouse.gov/omb/fedreg_notice_15/.

Office of Management and Budget. (1995). Standards for the classification of federal data on race and ethnicity, *Federal Register*, August 28. Retrieved May 26, 2009, from http://www.whitehouse.gov/omb/fedreg_race-ethnicity/.

Office of Management and Budget. (1997a). Recommendations from the Interagency Committee for the review of the racial and ethnic standards to the Office of Management and Budget concerning changes to the standards for the classification of federal data on race and ethnicity. *Federal Register*, July 9. Retrieved May 26, 2009, from http://www.census.gov/population/www/socdemo/race/Directive_15.html.

Office of Management and Budget. (1997b). Revisions to the standards for the classification of federal data on race and ethnicity. *Federal Register*, October 30. Retrieved May 26, 2009, from http://www.whitehouse.gov/omb/fedreg_1997standards/.

Pascoe, P. (1996). Miscegenation law, court cases, and ideologies of "race" in twentieth-century America. *The Journal of American History, 83*, 44–69.

Perlmann, J., & Waters, M. C. (2002). Introduction. In J. Perlmann & M. C. Waters (Eds.), *The new race question: How the census counts multiracial individuals (p. 13)*. New York, NY: Russell Sage Foundation.

Prewitt, K. (2005). Racial classification in America: Where do we go from here? *Daedalus, 134*, 5–17.

Rodriguez, C. E. (2000). *Changing race: Latinos, the census, and the history of ethnicity in the United States*. New York, NY: New York University Press.

Serrano, J. E. (2004). *Serrano succeeds in retaining the "Other race" option on census form, Hispanic organizations applaud action*. News release. Retrieved May 26, 2009, from http://www.house.gov/list/press/ny16_serrano/041122Census.html.

Simmons, T., & O'Connell, M. (2003). *Married-couple and unmarried-partner households: 2000*. Washington, DC: US Census Bureau.

Snipp, C. M. (2000). American Indians and Alaska natives. In M. J. Anderson (Ed.), *Encyclopedia of the US Census* (pp. 28–31). Washington, DC: CQ Press.

US Census Bureau. (1904). *Negroes in the United States*. Washington, DC: Author.

US Census Bureau. (1913). Color or race, nativity, and parentage. In *Population: 1910, General report and analysis*. Washington, DC: Author.

US Census Bureau. (1915). *Indian population in the United States and Alaska: 1910*. Washington, DC: Author.
US Census Bureau. (1921). Color or race, nativity, and parentage. In *Population: 1920, General report and analytical tables*. Washington, DC: Author.
US Census Bureau. (1933). Color or race, nativity, and parentage. In *Population: 1930, General report*. Washington, DC: Author.
US Census Bureau. (1943). Characteristics of the population. In *Population: 1940, Part 1: United States summary and Alabama-District of Columbia*. Washington, DC: Author.
US Census Bureau. (1953). *US Census of population: 1950. Nonwhite population by race*. Washington, DC: Author.
US Census Bureau. (1963). *US Census of population: 1960. Nonwhite population by race*. Washington, DC: Author.
US Census Bureau. (1975). *Historical statistics of the United States, colonial times to 1970, bicentennial edition, part 1*. Washington, DC: Author.
US Census Bureau. (1976). *US Census of population and housing: 1970. Procedural history*. Washington, DC: Author.
US Census Bureau. (1983). *1980 Census of population. Asian and Pacific Islander population by state: 1980*. Washington, DC: Author.
US Census Bureau. (1995). *Urban and rural populations: 1900 to 1990*. Retrieved May 26, 2009, from http://www.census.gov/population/www/censusdata/files/urpop0090.txt.
US Census Bureau. (1996). *Findings on questions on race and Hispanic origin tested in the 1996 national content survey*. Washington, DC: Author. Retrieved May 26, 2009, from http://www.census.gov/population/www/documentation/twps0016/twps0016.html.
US Census Bureau. (1997). *Results of the 1996 race and ethnic targeted test*. Washington, DC: Author. Retrieved May 26, 2009 from http://www.census.gov/population/www/documentation/twps0018/twps0018.html.
US Census Bureau. (1998). *Interracial tables.* Washington, DC: Author. Retrieved May 26, 2009 from http://www.census.gov/population/www/socdemo/race/interrace.html.
US Census Bureau. (2002). *Measuring America: The decennial censuses from 1790 to 2000* (POL/02-MA(RV)). Washington, DC: Author.
US Census Bureau. (2008). 2008 National population projections (data file). Washington, DC: Author. Retrieved May 26, 2009, from http://www.census.gov/population/www/projections/2008projections.html.
US Commission on Civil Rights. (1973). *To know or not to know: Collection and use of racial and ethnic data in federal assistance programs*. Washington, DC: Author.
Waters, M. C. (1990). *Ethnic options: Choosing identities in America*. Berkeley, CA: University of California Press.
Williams, K. M. (2006). *Mark one or more: Civil rights in multiracial America*. Ann Arbor, MI: The University of Michigan Press.