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ETHNIC DIFFERENCES IN DEMOGRAPHIC BEHAVIOR IN THE UNITED STATES:
HAS THERE BEEN CONVERGENCE?

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ABSTRACT

This paper looks at the fertility, mortality, and marriage experience of racial, ethnic, and nativity groups in the United States from the 19th to the late 20th centuries. The first part consist of a description and critique of the racial and ethnic categories used in the federal census and in the published vital statistics. The second part looks at these three dimensions of demographic behavior. There has been both absolute and relative convergence of fertility across groups, It has been of relatively recent origin and has been due, in large part, to stable, or even slightly increasing, birth rates for the majority white population combined with declining birth rates for blacks and the Asian-origin, Hispanic-origin, and Amerindian populations. This has not been true for mortality. The black population has experienced absolute convergence but relative deterioration in mortality (neonatal and infant mortality, maternal mortality, expectation of life at birth, and age-adjusted death rates), in contrast to the Amerindian and Asian-origin populations. The Asian-origin population actually now has age-adjusted death rates significantly lower than those for the white population. The disadvantaged condition of the black population and the deteriorating social safety net are the likely origins of this outcome. Finally, there was a trend toward earlier and more extensive marriage from about 1900 up to the 1960s. At this point, coincident with the end of the “Baby Boom,” there has been a movement to later marriage for both males and females among whites, blacks, and the Hispanic-origin populations. This trend has been more extreme in the black population, especially among females. There has also been a significant rise in proportions never-married at ages 45-54 among blacks and, to a lesser extent, among Hispanics. So here too, there has been some divergence.

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THE CONCEPTS OF RACE AND ETHNICITY IN THE UNITED STATES CENSUS AND VITAL STATISTICS

The fascination of Americans with race, ethnicity, and counting have always come together in the census. From the earliest census's division of the population into three groups to the 63 ethnic categories in Census 2000, the census has both reflected social realities and changes and affected our perceptions of them.¹ This article summarizes the most recent estimates of trends in population, births, deaths, marriages, and divorces for most ethnic categories throughout American history. It is meant to serve as a reference about national ethnic trends from 1790 through 2000. Perhaps the most striking patterns show that, while ethnic group behavior has largely converged in fertility and marriage patterns, African-Americans continue to be markedly less healthy than whites or Asian-Americans.

The issue of measuring and analyzing racial and ethnic differences in population characteristics and vital processes has long been a feature of demography in the United States. The federal census has been collecting data on race since the first census of 1790, though that census merely divided the population into free whites, all other free persons, and slaves. The origin of this was in the Constitution itself which specified in Article I, Section 2 that the House of Representatives was to be apportioned "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." The "three fifths compromise" allowed slave states to count three fifths of their (disenfranchised and thus non-voting) slave populations for the purposes of Congressional representation. This distinction continued up to 1810, when the terms "colored persons" and "Indians not taxed" first appeared. In 1820, the free colored and slave populations were explicitly classified by age and sex. Since slaves were only persons of sub-Saharan African descent, no further racial distinction was used. Also, a category of "foreigners not naturalized" was given (and used again in 1830). This distinction continued up through 1850. In 1860, the categories of "Asiatics," "Civilized Indians," and "Half-Breeds" were added for some states.² In

¹ It should be strongly emphasized that the concept of race is a social one with no implication of a biological or genetic significance of component. For a detailed discussion of racial and ethnic classifications in the United States Census, see Lee [1993] for the 1890-1990 period, Edmonston and Schultze [1995, ch. 7] for the 1850 to 1990 period, and Anderson and Fienberg [1999, ch. 8] for the entire range of the federal census.

² Asiatics (likely almost all Chinese) were tabulated only for California, while the ambiguous category of "Half-Breeds" was used only for Wisconsin and New Mexico. "Civilized Indians" were those Amerindian people living in regular domiciles in areas subject to enumeration.

addition, in 1850, 1860, and 1870, the instruction was added to make a distinction between blacks and mulattos, though precisely how this was to be done was left unclear.³ A listing of the racial categories used in the U.S. censuses from 1790 to 1990 is provided in Appendix Tables A-1 and A-2.

The question of nativity was not fully addressed until the census of 1850, the first census to enumerate each individual (i.e., a nominal census). The previous six censuses had been enumerations by the name of head of household with summary categories of persons by age, sex, and race. As mentioned, the 1820 and 1830 censuses had questions about "foreigners not naturalized," but the 1850 census asked a question about each person's place of birth - state within the United States if native born and country of birth if foreign born. This has continued up to the present. In 1870, questions were added about the nativity of the person's father and mother, although initially it was only native or foreign born. For the censuses of 1880 to 1970, questions were asked about the detailed nativity of the father and mother (state within the United States, country if abroad), although these were only for samples for 1940-1970.⁴ With these questions, it was possible to tabulate the population by nativity. This was extensively done with a major distinction being made between the native white and the foreign-born white populations. Later categories were created for native white of native parentage and native white of foreign or mixed parentage. After 1970, however, the nativity of parents was no longer a question.

Some additional questions were added at various points in time that shed light on ethnicity. For example, a question on mother tongue as inserted in the censuses of 1910-1930 and again in 1960 and 1970 (for samples). Language spoken was also asked in 1910. This has been useful, for example, in analyzing some subgroups such as the Yiddish-speaking Jewish population) for which separate identification is otherwise difficult or impossible. [See, for example, Condran and Kramerow, 1991.] For immigrants, the number of years in the United States in 1900-1920 and again for 1970-1990. The ambiguous and difficult question on "ancestry" was first asked in 1980 and

³ For an account of instructions to enumerators up through the 2000 census, see U.S. Bureau of the Census [1979, 2002].

⁴ Sampling began in 1940 in which everyone was enumerated on the main form and then persons on the "sample lines" were asked supplementary questions. The same procedure was repeated in 1950. 25% of persons were asked to answer additional questions in 1960 by the enumerator. In 1970, the first true self-enumerating census, a variety of different sample groups were asked to answer additional questions. In 1980, the practice of short and long forms began, with everyone enumerated at least on the short form. When enumerators were used, they were instructed to allow respondents to self identify race (which, of course, would occur with self enumeration).

was repeated in 1990 and 2000. It is purely self identification and difficult to interpret.

The question of race has undergone a number of changes over time. At the 1870 census, slavery had legally ceased to exist in the United States, and the non-white population was then divided into "colored" (African American), "civilized Indians," Chinese, and Japanese. This taxonomy was continued in 1880, but in 1890 the black population was divided into blacks, mulattos, quadroons, and octoroons (see Appendix Table A-2). A simpler classification was restored in 1900, but the question on mulattos was asked again in 1910 and 1920. Thereafter, the black population was identified as "Negro" or, from 1970, also as black. From 1910, the number of categories for other groups has proliferated, as Table A-1 shows. In 1930, a decision was made to reclassify Mexicans as non-white, but that decision was reversed in the 1930s. Consequently, the 1940 census retabulated the population from 1930 with Mexicans placed among whites and published these results along with the 1940 tabulations. The 1990 census had 16 racial categories to choose from, including a residual category of "Other race."

The detailed tabulation of race, nativity, and ethnicity in the published volumes (for example by age and sex for geographic subunits) closely followed the official categories up to 1860, although detailed tabulations of the native- and foreign-born populations by age, sex, and race did not appear until 1870. Tabulations of the population by age, sex, race, and nativity at least for states then have been published up through the present, although the non-white population has sometimes been aggregated together (e.g., 1940-1960). For 1880, all non-white groups were placed together for the tables in a group called "colored." From 1870 to 1970, there was a distinction of the native-born and foreign-born white population, though for 1950-1970 it was generated from one of the samples. More recently (1980 and 1990), the distinction of nativity by race has been largely dropped. The current standard broad categories are: White; Black or African American; American Indian or Alaska Native; Asian; and Native Hawaiian or Pacific Islander. These categories were established by the Office of Management and Budget in 1977 in Statistical Policy Directive 15 and modified in 1997.⁵ There are also two questions now on ethnicity: Hispanic or Latino, and Non-Hispanic or Non-Latino.

⁵ The categories from 1977 to 1997 were: White; Black; American Indian, Eskimo, or Aleut; and Asian or Pacific Islander. Census data for 1980 and 1990 and much recent vital statistics data are categorized this way.

The identification of race is now self identification, which goes along with self enumeration (in effect since 1970). Some combination of self identification and enumerator identification was used in 1960. Before 1960 the judgement was left to the enumerator's observation. Persons of mixed white and another race were usually identified with the other race. Physical appearance was likely very important.

The separate enumeration and tabulation of the Hispanic population began in 1970, although the category "Mexican" had been given as an answer to the question on race or color in 1930. Before 1970, it is possible to identify a large portion of the Hispanic-origin population by looking at questions on place of birth, parent's place of birth, mother tongue or language, and (when available in the IPUMS samples) surname. These were used by Gratton and Gutmann [2000] to make their estimates of the size and composition of the Hispanic-origin population (see Table 2). Since 1970, specific questions have been asked about Spanish or Hispanic origin or descent. These are described in Appendix Table A-3. Unfortunately, Hispanic origin overlaps other racial categories, and so now there is a further division of the Hispanic and non-Hispanic populations by the OMB categories (white, black, American Indian and Alaskan native, Asian, Hawaiian native or Pacific islander). A considerable amount of tabulation has been done in recent censuses for the Hispanic-origin population.

Citizenship status is a related inquiry. It was first asked in 1900 (citizen [assumed as blank], naturalized, applied for first papers, and alien) and has been included in the census since then with the exception of 1960.⁶ In 1980, a confusing question on ancestry was introduced. It is wholly self identified and allows for multiple responses. The question certainly does not describe strict cultural or geographic categories and thus far seems to have had limited value for demographic and social science research.

The categories of race and ethnicity are still in a state of flux, having been changed as recently as 1997. They, and the politicized process of determining the categories, were seriously critiqued by William Petersen:

Indeed, the Census Bureau can do little or nothing to alter the political context of ethnic counts, nor can it escape from fiscal control by a Congress sensitive to racial and ethnic blocs. What it can do, for instance, is not to repeat the egregious error of inviting representatives of special interests to act as formal consultants supervising its operations. Instead of seeking to avoid pressure from ethnic blocs to revise definitions or enumeration procedures, the bureau invited the participation of blacks, Hispanics, Indians, and others, each of whom wanted to shape the process to its political advantage. These committees were of a type different from those made up of statisticians or typical users of census data, for the members were generally chosen less for

⁶ The citizenship question in 1970 was in the 5% sample.

their knowledge than for their ideology. Giving aspirant leaders this kind of quasi-official status aggravated the disadvantages of the procedure already established—the delineation of ethnic categories by self-identification combined with promotional campaigns that stressed the monetary advantages of larger counts, thus encouraging the creation of “instant” members of the various categories. [Petersen, 1987, p. 233.]

Presently, it is explicitly stated by the Census Bureau that the concept of race, whose categories are intended to be mutually exclusive, is not supposed to reflect any biological or anthropological definitions. That is laudable, but the fact remains that rather arbitrary changes over time have made secular comparisons more difficult. An example of the difficulty is the group of Hispanic origin population which is seen as an ethnic, and not a racial, group. Within the Hispanic origin population there are then racial groups. The change to self identification has further complicated matters. This is undoubtedly some improvement over enumerator identification, but further muddying the waters. For example, the Amerindian population of the United States grew by 5.4% per annum in the 1970s, 3.6% per annum in the 1980s, and 7.4% per annum in the 1990s.⁷ Since this was a group for which net in-migration was likely negligible, such rapid growth would indicate significant amounts of self-redefinition. Finally, the category of “Other” now includes persons who identify with no racial category, often persons of mixed race. We do the best we can with what we have, but the limitations must be kept in mind.

The vital statistics of the United States suffer from many of the same issues. Systematic collection of vital statistics at the federal level only began with the creation of the Death Registration Area in 1900 (comprising at first only ten states and the District of Columbia) and the Birth Registration Area in 1915 (also initially comprising only ten states and the District of Columbia). Both were complete only in 1933 with the admission of Texas. A Marriage Registration Area was only set up in 1957, and a Divorce Registration Area was only created in 1958, although national estimates exist for the period since 1920. The Marriage and Divorce Registration Areas are still not complete. Birth and death data were reported by race (with a few exceptions), while marriages and divorces were often not.⁸ Through the 20th century, much of the published reporting was done for whites and non-whites (often referred to

⁷ The term “Amerindian” is used here in preference to the term “Native American” because the latter is not properly descriptive of the origins of that group. The Canadian official statistics have used, for example, the terms “aboriginal” and “first inhabitants”.

⁸ Consequently, much of the analysis of nuptiality relies on census-based measures, such as those presented in Table 8, below.

as "All Others"). Separate reporting for blacks began in 1960 and for the Amerindian and Asian or Pacific Islander populations in 1980.

RACIAL AND ETHNIC DIFFERENCES IN DEMOGRAPHIC BEHAVIOR

Tables 1 and 2 provide information on the size, composition, and growth of the American population by race and ethnicity. An overview of fertility and mortality for the white and black population since 1800 is given in Table 3. Fertility is described in detail in Tables 4 and 5, mortality in Tables 7 to 9, and nuptiality in Table 13. In addition, Tables 6, 10-12, and 14 exhibit comparisons of differentials of fertility, mortality, and marriage by race and ethnicity.

POPULATION SIZE AND COMPOSITION

Table 1 provides information on the size and racial composition of the American population since 1790. The second panel has the percentage breakdown from 1790 to 2000 by race. Note that the category "Hispanic" is not part of the racial categorization and should be looked at separately.

At the beginning of the Republic, about four-fifths of the population was white and one-fifth black, most of whom were slaves in the South. In 1820, the first census to distinguish slaves from free blacks, the free black population was 13% of the total black population. This proportion actually fell to about 11% in 1860, largely due to the higher fertility of slaves relative to free blacks.. The share on the non-white population began to decline from the early 19th century to about 1930, when it stabilized for several decades. This decline was caused by the significant influx of migrants to the United States, most of whom were white Europeans. Between 1819 (the first date for which we have regular immigrant entry statistics) and 1920, approximately 34 million migrants entered the United States. This total was about 64 million through 1997. [U.S. Bureau of the Census, 1975, Series 89, and extensions by the author.]

From about 1950 the white share of total population began to decline such that it fell from about 90% to about 77% in the 2000 census. Although the share of the black population in the total has risen in recent decades, much of the increased share for non-whites has been in the category of "Other Races," especially Asians, who were about 45% of that group, and the Amerindian population (about 15% of "Other Races"). The Hispanic population is comprised of various races and is considered an ethnic and not a racial category (see Table 2). That population has grown at rates of 4% to 6% per year in the decades since 1940. A great deal of that growth more recently has

been from persons of Mexican origin, who now comprise 58% of the Hispanic origin population. The other important components are those of Puerto Rican origin and Cuban origin (9.6% and 3.5% of the Hispanic population, respectively), with a very rapidly growing group from other areas of Central and South America.

The implications for the demography of minorities is clear and well known. The United States is becoming less of a nation of white persons of European origin and more a racially and ethnically diverse group. In recent years, the Asian and Hispanic populations have shown the most rapid growth (Table 1, last panel). The exceptionally fast growth of the Amerindian population is due to ethnic re-identification. Given the present immigration laws, policies, and practices in place and the attraction of the United States labor market, this trend shows every indication of continuing.

FERTILITY

Evidence on fertility by race is presented in Tables 3 to 5. The measures selected are the crude birth rate, the general fertility rate, the total fertility rate, and the census-based child-woman ratio.⁹ A notable feature of fertility in the early Republic was the large family size of white women, who exhibited a crude birth rate of about 55 in 1800 which implies a total fertility rate of about 7 live births per woman in her reproductive lifetime. Information for the black population does not become available until 1820 in the form of a child-woman ratio (children aged 0-4 per 1,000 women aged 20-44) and not until the 1850s for the crude birth rate and the total fertility rate.¹⁰ It is apparent that white fertility declined fairly steadily from 1800 until the onset of the "Baby Boom" in the 1940s, while black fertility remained rather stable up to the Civil War. This is not too surprising, since the incentives under slavery were for the profitable reproduction of the slave population. Nonetheless, after about 1880, the fertility of the black population began to decline in parallel with that for whites.

Table 6 shows that the total fertility rates for blacks and whites did not begin to converge until about 1880, when the black TFR was over 70% higher than the white TFR. There was then a convergence up until about 1920, followed by some widening of

⁹ It is possible to reconstruct fertility and mortality rates back into the 19th century. Table 3 reports some of the results currently available. Improved estimates of the fertility of the white population back to 1850 will soon be available using own-children methods with the Integrated Public Use Micro Samples (IPUMS) of the censuses of 1850-1880, being conducted by J. David Hacker.

¹⁰ Note that the rates in Table 3 are for "All Other" (i.e., non-whites) for 1920-1970 for the crude birth rate and for 1940-1990 for the total fertility rate. But much of the non-white population (over 90%) was black during those decades.

the gap to about a 20-40% higher TFR among black women (about one birth per woman). Since about 1990, however, the gap has begun to close to only a 6.4% higher TFR in 1998, amounting to only about .1 birth per woman. The decline since the end of the "Baby Boom" in the early 1960s has been significant, though much of it occurred in the 1990s. This may be seen graphically in Figure 1. Some of this has come from declines in birth rates among very young black women. For instance, birth rates for black women aged 15-17 declined from 82.3 per 1,000 in 1990 to 56.8 in 1998 (and from 152.9 to 126.8 for black women aged 18-19). [U.S. Bureau of the Census, 2000, Table 80]. But there has been some decline in age-specific rates at older ages as well.

From 1980 onwards we have vital statistics for the Amerindian and the Asian populations, and from 1989 onwards for the Hispanic-origin population. In all these cases, convergence has been taking place. Indeed, for the Asian and Pacific Islander group, the TFR's are now below those for the white population, and those for the Hispanic-origin population are very close (Tables 5 and 6). For the Amerindian and Asian populations the convergence was taking place from the early 1980s. Table 5 provides some idea of the origins of all this. White TFR's stabilized in the 1970s and began a slow increase to above 2 per woman (or 2,000 per 1,000 women) in the late 1990s. The increased representation of the somewhat higher fertility Hispanic women in the white population was certainly playing some role. Simultaneously, the TFR's for black, Amerindian, and Asian women declined a bit. Finally, the fertility of Hispanic-origin women remain roughly stable from 1989. What is occurring is that all groups seem to be converging on about 2 births per woman.

As to why minorities should have different fertility is an open question. If, as in the case of blacks, Hispanics, and the Amerindian population, a higher proportion have lower incomes, less wealth, less stable employment, and less education than the majority white population. These are factors often associated with higher birth rates. But there is also the "Minority Group Status Hypothesis," which conjectures that minority groups strive to improve their status. [Bean and Marcum, 1978.] This might be achieved using the help of more children, hence leading to higher birth rates. But there is the competing view that the desire to be upwardly mobile might spur more efforts toward family limitation to conserve family resources and concentrate on more human capital per child. Thus the predicted direction of the differential is unclear. The American case would seem to support the view that lower socioeconomic status has had the effect of raising fertility, but that these effects are diminishing over time, as birth rates come close to replacement levels.

MORTALITY

Tables 7 through 9 provide measures of mortality for the racial and ethnic groups for which reporting was available over longer periods of time. Thus, the breakdown is for whites, all non-whites ("All Others"), and blacks. In the case of Hispanics, some data are available for infant mortality since 1989. The period covered is 1850 to 1998. Table 7 contains data on the neonatal mortality rate (deaths at 0-28 days of life per 1,000 live births), the infant mortality rate (deaths in the entire first year of life per 1,000 live births), and the maternal mortality rate (deaths from childbirth and its complications per 100,000 live births). Table 8 presents the expectation of life at birth by sex and for both sexes combined. Table 9 provides data on age-adjusted death rates by race and sex from 1900 to 1998. The data in Table 7 for 1915 to 1932 are for the current Birth Registration Area only. Similarly, the data in Tables 8 (lower panel) and 9 for 1900 to 1932 are for are also for the Death Registration Area. The relationships to the white population are given in Table 10 for the neonatal mortality rate, the infant mortality rate, and the maternal mortality rate, Table 11 for the expectation of life at birth, and Table 12 for age-adjusted death rates.

The picture for mortality is different from that for fertility. It is not one of relative convergence. If anything, there has been substantial relative divergence, although there has been much closing of the white/non-white gap in terms of absolute numbers of deaths per number of live births or in years of expectation of life. The difference in the number of infant deaths per 1,000 live births between whites and blacks has been reduced from 41 in 1900 and 46 in 1910 to 8.3 in 1998. The reduction has been even greater for all non-whites (to 2.6 infant deaths in 1998). But the relative situation has deteriorated. Black infant mortality was in a more favorable circumstance relative to white infant mortality in 1900 (42% higher) than at any subsequent date. In 1998 it was 137% higher. The more favorable showing of entire group of non-whites reflects undoubtedly the more favorable showing of the Asian and Pacific Islander population. A graphic depiction of this relative divergence is presented in Table 10 and Figure 2.

The serious disadvantage of the nonwhite population is traceable significantly to their low average levels of education and income. This is true especially for blacks but also for the Amerindian population. It also holds for the Hispanic population (both white and nonwhite). The Asian/Pacific Islander population as a whole does not suffer from this mortality penalty. On two counts, American society has come up short

- it has failed to provide adequate health and medical care to its poor, and it has also failed to raise the level of living of many of its poor. In 1996, the United States ranked 29th in the world in infant mortality. But even if all Americans has the same infant mortality rate as the white population (6.1), the United States would still only be tied for 21st place [World Bank, 1998]. A wealthy and technologically advanced society surely can and should do more. As Antonovsky and Bernstein [1977, p. 459] note: "Low social class *per se* does not cause high infant mortality...however,...social class does subsume a large set of more directly causative biological and behavioral variables." Some of those causative variables may be amenable to direct policy intervention (e.g., universal child immunization programs), but some may be address by more general improvements in the living standards of the society, particularly among its poor.

The record for neonatal mortality was about the same as for overall infant mortality. Similarly, maternal mortality showed deterioration from the early 20th century up to the early 1960s and then a modest improvement. But maternal mortality is still over three times higher for the black population than the white population, despite a reduction in the absolute number of maternal deaths per 100,000 live births from 455 in 1915 (for all non-whites) to 12 for blacks and 9.8 for all non-whites in 1998. The relative difference seems to have no trend at present.

Table 8 demonstrates that overall black and non-white mortality, as measured by the expectation of life at birth, was higher throughout the period 1900 to 1998. Table 11 gives the relative deficit of the total non-white and black expectations of life at birth annually since 1900. Up to 1933, those estimates are for the current Death Registration Area. The upper panel of Tables 8 and 11 contain estimates for 1900 and 1910 for the whole nation based on indirect estimation from the samples of the microdata from the 1900 and 1910 U.S. censuses. [Haines, 1998; Preston and Haines, 1991; Haines and Preston, 1997.] Since those are estimates for the whole population, rather than the rather restricted sample of the early Death Registration Area, those estimates are to be preferred to the annual estimates in the lower panel. If those benchmarks are used, the picture for the black population is somewhat more favorable, since in 1900 and 1910 the national black population was more rural than in the Death Registration Area, which afforded some degree of protection. The DRA of 1900 had less than 5% of the nation's African American population, and, of that, 82-83% was urban. The national average percentage urban of the black population was 20% in 1900 and 27% in 1910. [Haines and Preston, 1997.] Although by those standards, real progress has

been made, nonetheless, in 1998, black males still had e(0) 6.9 years below those for white males. The number for black females was a deficit of 5.2 years. These numbers in 1900 had only been 8.1 and 7.4 years, respectively.

Table 9 provides data on age-adjusted death rates by race and sex from 1900 to 1998. These are also for the Death registration Area up through 1932. Table 12 gives the ratios of these age-adjusted death rates to those for the majority white population. The record there would indicate only modest progress for the African American population (the overwhelming share of the "All Other" category until the 1950s). In 1998, the age-adjusted death rate for blacks stood 53% higher than for whites. Interestingly, for the Amerindian and Asian populations, the outcomes are better. Indeed, the younger populations of those groups do relatively well, with Amerindians close to the white rates and the Asian and Pacific Islander origin population substantially below the white population (58% of the white rates). Overall, however, the record on minority mortality is less than admirable.

The source of this is to be found in disadvantaged socioeconomic status not ameliorated by corrective social policies. No extensive national-level information on income for individuals exists before 1939. The first census to ask a question on income was the U.S. Census of Population of 1940, and for that census the question was only about wage and salary income for 1939, excluding proprietary, self-employment, and property income. Much of what we know about American incomes by race originates in the Current Population Survey, conducted monthly by the Bureau of the Census since 1947, particularly aimed at labor force issues such as unemployment and income.¹¹ One partial earlier piece of evidence may be gleaned from a Bureau of Labor Statistics survey taken in 1917-1919 of 12,817 families in 99 urban centers in 42 states of the United States for purposes of studying the cost of living [United States Bureau of Labor Statistics, 1924]. In that study, white family heads had average earnings of \$1,352 while colored family heads had average earnings of \$979 (or 72% of that of

¹¹ Originally in 1947, the Survey covered a representative sample of approximately 21,000 interviewed households in areas throughout the United States. This sample was increased to approximately 35,000 in May 1956 and to approximately 50,000 in January 1967. It is subject to sampling error. At present, about 50,000 occupied households are eligible for interview each month. Of these, about 4 to 5 percent are, for a variety of reasons, unavailable for the interview. Estimates of population characteristics based on the CPS will not agree with counts based on the census because the CPS and the census use different sampling procedures, different samples, and different procedures for racial groups, the Hispanic population, and other topics.

whites).¹² For the period 1947 to 1970, families headed by non-whites had median incomes of 51-64% of those for whites heading families. The range was 61-78% for unrelated individuals. In the case of families, there appeared to have been an improvement over time in both real income (in constant 1967 dollars) and in relation to income for white-headed families. This was not, however, true for unrelated individuals, who did experience a rise in real income but showed no trend relative to whites. [U.S. Bureau of the Census, 1975, Series G 189-204.] By 1998, the median income of black-headed households was 62% of that of white households (in contrast to 113% for Asian-headed households and 69% for Hispanic-headed households). [U.S. Bureau of the Census, 2000, Table 737.] In terms of income distribution, the Current Population survey also reveals that in 1947 46% of families with white head had income below \$3,000, while this was 81% for families with a non-white head. This had improved to 7.5% for whites and 20.1% for non-whites by 1970, both because of rising real and nominal incomes; but the gap was still substantial. Similar results obtain for unrelated individuals. In 1947, 61% of whites had incomes under \$1,500, while 79% of non-whites were in that situation. By 1970, this was 21% for whites but still 35% for non-whites. [U.S. Bureau of the Census, 1975, Series G 16-30.] In 1998, 8.7% of white-headed households had incomes below \$10,000, while this was 21.4% for black-headed households and 14.9% for Hispanic-headed households. [U.S. Bureau of the Census, 2000, Table 738.]

Overall, the disadvantaged status of non-whites generally, and blacks in particular, are demonstrated by these income disparities. Since socioeconomic well-being has an important effect on expectation of life, infant mortality, and death rates overall, it is not surprising that the relative disadvantage of the black population in mortality has not disappeared.

NUPTIALITY

Finally, some results on nuptiality are presented in Table 13 with ratios for the non-white, black, and Hispanic-origin populations to the white population in Table 14. Over the period 1880 to 1990 covered by those tables, there have been fluctuations in the age at marriage (given by the singulate mean age at marriage) and the percent married at ages 20-24. There have been comparable fluctuations in the proportion never-married at ages 45-54 and in Coale's indices of proportions married (I_m and I_m^*). There was a rise in the age of marriage to about 1900 (probably throughout the

¹² The source for this is the digitized version of the survey, ICPSR file 8299.

19th century), followed by a decline up to the 1960s, and then a rather dramatic increase. Among whites, the recent rising age of marriage was not accompanied by an increase in lifetime non-marriage (proportion single at ages 45-54); but there was a sharp rise in this among blacks. Most notably, the non-white population and the black population in particular have moved from having had a first marriage age substantially below that for whites to an age well above it. This dramatic reversal may be seen in Table 14 and in Figure 3. The black/white differential was even more pronounced for females than for males. This was not true of the Hispanic-origin population, which seemed to move more closely with the white population. The overall rise in the age at marriage and in the proportions never-marrying reflects a tendency toward delayed marriage and childbearing among working women and also a trend towards a greater proportion of female-headed households among all households. In 1990, 12.9% of all families were headed by women with no spouse present in the white population, in contrast to 43.8% in the black population. The percentages for female-headed families with no spouse present and with own children were 7.4% for whites and 29.9% for blacks. [U.S. Bureau of the Census, 1997, Table 50.] These proportions have been on the rise since the middle of the 20th century.

CONCLUDING COMMENTS

Examining data from a variety of statistical sources on the demography of racial and ethnic groups in the United States to the present reveals some interesting results. Taking into account the changing definitions and boundaries of race and ethnicity in official federal statistics, there has been both relative and absolute convergence in fertility behavior across groups. It has been of relatively recent origin and has been due, in large part, to stable (or even slightly increasing) birth rates for the majority white population combined with declining birth rates for blacks and the Asian-origin, Hispanic-origin, and Amerindian populations.

This has not been true for mortality, however. The black population has experienced absolute convergence but relative deterioration in mortality (neonatal and infant mortality, maternal mortality, expectation of life at birth, and age-adjusted death rates), in contrast to the Amerindian and Asian-origin populations. The Asian-origin population actually now has age-adjusted death rates significantly lower than those for the white population.¹³ The disadvantaged condition of the black population

¹³ The age-adjusted death rates for the Hispanic-origin population are available only since 1994. For the 1994-98 period, those rates were lower than those for the white population (at about 80%).

and the deteriorating social safety net are the likely origins of this outcome.

Finally, there was a trend toward earlier and more extensive marriage from about 1900 up to the 1960s. At this point, coincident with the end of the "Baby Boom," there has been a movement to later marriage for both males and females among whites, blacks, and the Hispanic-origin populations. This trend has been more extreme in the black population, especially among females. There has also been a significant rise in proportions never-married at ages 45-54 among blacks and, to a lesser extent, among Hispanics. So here too, there has been divergence.

The lessons to be learned are not that the American population is becoming more homogeneous. On the contrary, it is seemingly more heterogeneous. But it seems that groups are responding in similar ways to social trends and constraints. The most troubling result is the relative deterioration of the mortality situation for the black population. This is clearly an issue which warrants the most serious attention by policy makers.

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Table 1. Population by Race & Ethnicity. United States, 1790 to 2000.

Year	All Races	White	Black	Other Races /1	Amerindian	Asian or Pac. Isl.	Japanese	Chinese	Filipino	Other	Hispanic
1790	3929625	3172444	757181	-----	-----	-----	-----	-----	-----	-----	-----
1800	5308483	4306446	1002037	-----	-----	-----	-----	-----	-----	-----	-----
1810	7239881	5862073	1377808	-----	-----	-----	-----	-----	-----	-----	-----
1820	9638453	7866797	1771656	-----	-----	-----	-----	-----	-----	-----	-----
1830	12866020	10537378	2328642	-----	-----	-----	-----	-----	-----	-----	-----
1840	17069453	14195805	2873648	-----	-----	-----	-----	-----	-----	-----	-----
1850	23191876	19553068	3638808	-----	-----	-----	-----	-----	-----	-----	116943
1860	31443321	26922537	4441830	78954	44021	-----	-----	34933	-----	-----	-----
1870	\2 38558371	33589377	4880009	88985	25731	-----	55	63199	-----	-----	-----
1880	50155783	43402970	6580793	172020	66407	-----	148	105465	-----	-----	393555
1890	62947714	55101258	7488676	357780	248253	-----	2039	107488	-----	-----	-----
1900	75994575	66809196	8833994	351385	237196	-----	24326	89863	-----	-----	503189
1910	91972266	81731957	9827763	412546	265683	-----	72157	71531	160	3015	797994
1920	105710620	94820915	10463131	426574	244437	-----	111010	61639	5603	3885	1286154
1930	\3 122775046	110286740	11891143	597163	332397	-----	138834	74954	45208	5770	-----
1940	131669275	118214870	12865518	588887	333969	-----	126947	77504	45563	4904	2021820
1950	150697361	134942028	15042286	713047	343410	-----	141768	117629	61636	48604	3231409
1960	\4 179323175	158831732	18871831	1619612	523591	-----	464332	237292	176310	218087	5814784
1970	\5 203211926	177748975	22580289	2882662	792730	-----	591290	435062	343060	720520	8920940
1980	226545805	188371622	26495025	11679158	1364033	3500439	700974	806040	774652	8033459	14608673
1990	\6 248709873	199686070	29986060	19037743	1959234	7273662	-----	-----	-----	9804847	22354059
2000	\7 281421906	216930975	36419434	28071497	4119301	12773242	796700	2432585	-----	7949669	35505818

Table 1 (cont.)

Year	All Races	White	Black	Other Races	Amerindian	Asian or Pac. Isl.	Japanese	Chinese	Filipino	Other	Hispanic
	PERCENT SHARES										
1790	100.0%	80.7%	19.3%	----	----	----	----	----	----	----	----
1800	100.0%	81.1%	18.9%	----	----	----	----	----	----	----	----
1810	100.0%	81.0%	19.0%	----	----	----	----	----	----	----	----
1820	100.0%	81.6%	18.4%	----	----	----	----	----	----	----	----
1830	100.0%	81.9%	18.1%	----	----	----	----	----	----	----	----
1840	100.0%	83.2%	16.8%	----	----	----	----	----	----	----	----
1850	100.0%	84.3%	15.7%	----	----	----	----	----	----	----	0.5%
1860	100.0%	85.6%	14.1%	0.3%	0.1%	----	----	0.1%	----	----	----
1870	100.0%	87.1%	12.7%	0.2%	0.1%	----	0.0%	0.2%	----	----	----
1880	100.0%	86.5%	13.1%	0.3%	0.1%	----	0.0%	0.2%	----	----	0.8%
1890	100.0%	87.5%	11.9%	0.6%	0.4%	----	0.0%	0.2%	----	----	----
1900	100.0%	87.9%	11.6%	0.5%	0.3%	----	0.0%	0.1%	----	----	0.7%
1910	100.0%	88.9%	10.7%	0.4%	0.3%	----	0.1%	0.1%	0.0%	0.0%	0.9%
1920	100.0%	89.7%	9.9%	0.4%	0.2%	----	0.1%	0.1%	0.0%	0.0%	1.2%
1930	100.0%	89.8%	9.7%	0.5%	0.3%	----	0.1%	0.1%	0.0%	0.0%	----
1940	100.0%	89.8%	9.8%	0.4%	0.3%	----	0.1%	0.1%	0.0%	0.0%	1.5%
1950	100.0%	89.5%	10.0%	0.5%	0.2%	----	0.1%	0.1%	0.0%	0.0%	2.1%
1960	100.0%	88.6%	10.5%	0.9%	0.3%	----	0.3%	0.1%	0.1%	0.1%	3.2%
1970	100.0%	87.5%	11.1%	1.4%	0.4%	----	0.3%	0.2%	0.2%	0.4%	4.4%
1980	100.0%	83.1%	11.7%	5.2%	0.6%	1.5%	0.3%	0.4%	0.3%	3.5%	6.4%
1990	100.0%	80.3%	12.1%	7.7%	0.8%	2.9%	----	----	----	3.9%	9.0%
2000	100.0%	77.1%	12.9%	10.0%	1.5%	4.5%	0.3%	0.9%	----	2.8%	12.6%

Table 1 (cont.)

Year	All Races	White	Black	Other Races	Amerindian	Asian or Pac. Isl.	Japanese	Chinese	Filipino	Other	Hispanic	
	GROWTH RATE SINCE PREVIOUS CENSUS											
1800	3.01%	3.06%	2.80%	-----	-----	-----	-----	-----	-----	-----	-----	
1810	3.10%	3.08%	3.18%	-----	-----	-----	-----	-----	-----	-----	-----	
1820	2.86%	2.94%	2.51%	-----	-----	-----	-----	-----	-----	-----	-----	
1830	2.89%	2.92%	2.73%	-----	-----	-----	-----	-----	-----	-----	-----	
1840	2.83%	2.98%	2.10%	-----	-----	-----	-----	-----	-----	-----	-----	
1850	3.07%	3.20%	2.36%	-----	-----	-----	-----	-----	-----	-----	-----	
1860	3.04%	3.20%	1.99%	-----	-----	-----	-----	-----	-----	-----	-----	
1870	2.04%	2.21%	0.94%	1.20%	-5.37%	-----	-----	5.93%	-----	-----	-----	
1880	2.63%	2.56%	2.99%	6.59%	9.48%	-----	-----	5.12%	-----	-----	4.05%	
1890	2.27%	2.39%	1.29%	7.32%	13.19%	-----	-----	0.19%	-----	-----	-----	
1900	1.88%	1.93%	1.65%	-0.18%	-0.46%	-----	24.79%	-1.79%	-----	-----	1.23%	
1910	1.91%	2.02%	1.07%	1.60%	1.13%	-----	10.87%	-2.28%	-----	-----	4.61%	
1920	1.39%	1.49%	0.63%	0.33%	-0.83%	-----	4.31%	-1.49%	35.56%	2.54%	4.77%	
1930	1.50%	1.51%	1.28%	3.36%	3.07%	-----	2.24%	1.96%	20.88%	3.96%	-----	
1940	0.70%	0.69%	0.79%	-0.14%	0.05%	-----	-0.90%	0.33%	0.08%	-1.63%	2.26%	
1950	1.35%	1.32%	1.56%	1.91%	0.28%	-----	1.10%	4.17%	3.02%	22.94%	4.69%	
1960	1.74%	1.63%	2.27%	8.20%	4.22%	-----	11.86%	7.02%	10.51%	15.01%	5.87%	
1970	1.25%	1.13%	1.79%	5.77%	4.15%	-----	2.42%	6.06%	6.66%	11.95%	4.28%	
1980	1.09%	0.58%	1.60%	13.99%	5.43%	-----	1.70%	6.17%	8.15%	24.11%	4.93%	
1990	0.93%	0.58%	1.24%	4.89%	3.62%	7.31%	-----	-----	-----	1.99%	4.25%	
2000	1.24%	0.83%	1.94%	3.88%	7.43%	5.63%	0.64%	5.52%	-----	-2.10%	4.63%	

\1 Includes races not shown separately.

\2 Revisions to include adjustments for underenumeration in the Southern States show a total (both sexes) of 34,337,292 for whites and 5,392,172 for blacks.

\3 In 1930 Mexicans were classified as nonwhite. This decision was changed by 1940, and revised tabulations were published. The revised population estimates are given here. The actual 1930 figures are: white (108,864,207), all other races (1,428,303).

\4 Denotes first year for which figures include Alaska and Hawaii.

\5 The population of other races (i.e., neither white nor black) was overstated by about 327,000 in the 1970 census.

\6 American Indian, Eskimo or Aleut in 1990.

\7 American Indian and Alaska Native in 2000.

Source: 1790-1970, except Hispanic: U.S. Bureau of the Census [1975], Series A 91-104. 1980: U.S. Bureau of the Census [1983], Tables 40, 41. 1990: U.S. Bureau of the Census [1992], Table 13. 2000: U.S. Bureau of the Census, [2002]. Hispanic population: Gratton and Gutmann [2000], Table 2.

Table 2. Hispanic Population by Race & Ethnicity. 1850 to 2000.

Year	Total	Mexican Origin	Spanish Origin	Puerto Rican Origin	Cuban Origin	Other Hispanic Origin	Unknown Origin	White	Black	Ameri- indian	Other
1850	116943	80959	4955	0	2124	1112	27793	114617	2326	-----	-----
1880	393555	290642	32504	0	12267	11373	46769	337291	35319	20845	100
1900	503189	401491	47055	0	22006	18216	14421	434879	18216	25047	25047
1910	797994	640104	69020	2937	34903	29616	21414	688709	23792	27318	58175
1920	1286154	999535	120042	20384	35809	39465	70919	1216303	36330	17268	16253
1940	2021820	1567596	150332	95129	49938	86636	72189	1953681	45996	18804	3339
1950	3231409	2489477	134659	326186	70919	117023	93145	3136623	70599	16994	7193
1960	5814784	4087546	202822	1027338	163241	272972	60865	5614234	135389	35471	29690
1970	8920940	5641956	248439	1620777	637931	704798	67039	8496628	253835	54574	115903
1980	14608673	8740439	-----	2013945	803226	3051063	-----	8115256	390852	-----	6102565
1990	22354059	13495938	-----	2727754	1043932	5086435	-----	11557774	769767	165461	9861057
2000	35505818	20640711	-----	3406178	1241685	10017244	-----	-----	-----	-----	-----

Source: 1850 - 1970: Brian Gratton and Myron P. Gutmann, "Hispanics in the United States, 1850-1990: Estimates of Population Size and National Origin," *Historical Methods* (2000), plus additional calculations using the IPUMS samples. 1980: U.S. Bureau of the Census [1983, 1984]. 1990: U.S. Bureau of the Census [1992, 1993b]. 2000: U.S. Bureau of the Census [2002].

TABLE 3. Fertility and Mortality by Race. United States, 1800-1998.

APPROX. DATE	BIRTHRATE(a)		CHILD-WOMAN RATIO(b)		TOTAL FERTI- LITY RATE(c)		EXPECTATION OF LIFE(d)		INFANT MORTAL- ITY RATE(e)	
	WHITE	BLACK(f)	WHITE	BLACK	WHITE	BLACK(f)	WHITE	BLACK(f)	WHITE	BLACK(f)
1800	55.0		1342		7.04					
1810	54.3		1358		6.92					
1820	52.8		1295	1191	6.73					
1830	51.4		1145	1220	6.55					
1840	48.3		1085	1154	6.14					
1850	43.3		892	1087	5.42		39.5	23.0	216.8	340.0
1860	41.4	58.6(g)	905	1072	5.21	7.90(g)	43.6		181.3	
1870	38.3	55.0(h)	814	997	4.55	7.58(h)	45.2		175.5	
1880	35.2	55.4(i)	780	1090	4.24	7.69(i)	40.5		214.8	
		51.9(j)				7.26(j)				
1890	31.5	48.1	685	930	3.87	6.56	46.8		150.7	
1900	30.1	44.4	666	845	3.56	5.61	51.8(k)	41.8(k)	110.8(k)	170.3
1910	29.2	38.5	631	736	3.42	4.61	54.6(l)	46.8(l)	96.5(l)	142.6
1920	26.9	35.0	604	608	3.17	3.64	57.4	47.0	82.1	131.7
1930	20.6	27.5	506	554	2.45	2.98	60.9	48.5	60.1	99.9
1940	18.6	26.7	419	513	2.22	2.87	64.9	53.9	43.2	73.8
1950	23.0	33.3	580	663	2.98	3.93	69.0	60.7	26.8	44.5
1960	22.7	32.1	717	895	3.53	4.52	70.7	63.9	22.9	43.2
1970	17.4	25.1	507	689	2.39	3.07	71.6	64.1	17.8	30.9
1980	15.1	21.3	365	507	1.77	2.18	74.5	68.5	10.9	22.2
1990	15.8	22.4	355	458	2.00	2.48	76.1	69.1	7.6	18.0
1998	14.6	17.7			2.07	2.17	77.3	71.3	6.0	14.3

(a) Births per 1000 population per annum.

(b) Children aged 0-4 per 1,000 women aged 20-44. Taken from U.S. Bureau of the Census, [1975], Series 67-68 for 1800-1970. For the black population 1820-1840, Thompson and Whelpton, [1933], Table 74, adjusted upward 47% for relative under-enumeration of black children aged 0-4 for the censuses of 1820-1840.

(c) Total number of births per woman if she experienced the current period age-specific fertility rates throughout her life.

(d) Expectation of life at birth for both sexes combined.

(e) Infant deaths per 1000 live births per annum.

(f) Black and other population for CBR (1920-1970), TFR (1940-1990), e(0) (1950-1960), IMR (1920-1970).

(g) Average for 1850-59.

(h) Average for 1860-69.

(i) Average for 1870-79.

(j) Average for 1880-84.

(k) Approximately 1895.

(l) Approximately 1904.

SOURCE: 1800-1990: U.S. Bureau of the Census, [1975, 1986, 1997]. Coale and Zelnic, [1963]. Coale and Rives, [1973]. Haines, [1998]. Preston and Haines, [1991], Table 2.5. Steckel, [1986]. For 1998, see Tables 4-6 below.

Table 4. Crude Birth Rate and General Fertility Rate. By Race & Ethnicity. United States, 1800 to 1998. \1

Year	CRUDE BIRTH RATE				GENERAL FERTILITY RATE							
	Total	White	All other	Black	Amer- indian	Asian & Pac. Isl	Total	White	All other	Black	Amer- indian	Asian & Pac. Isl.
1800	-----	55.0	-----	-----	-----	-----	-----	278.0	-----	-----	-----	-----
1810	-----	54.3	-----	-----	-----	-----	-----	274.0	-----	-----	-----	-----
1820	55.2	52.8	-----	-----	-----	-----	-----	260.0	-----	-----	-----	-----
1830	-----	51.4	-----	-----	-----	-----	-----	240.0	-----	-----	-----	-----
1840	51.8	48.3	-----	-----	-----	-----	-----	222.0	-----	-----	-----	-----
1850	-----	43.3	-----	-----	-----	-----	-----	194.0	-----	-----	-----	-----
1855	-----	42.8	-----	58.6	\5	-----	-----	-----	-----	-----	-----	-----
1860	44.3	41.8	-----	-----	-----	-----	-----	184.0	-----	-----	-----	-----
1865	-----	35.4	-----	55.1	\6	-----	-----	-----	-----	-----	-----	-----
1870	-----	37.1	-----	-----	-----	-----	-----	167.0	-----	-----	-----	-----
1875	-----	36.8	-----	55.4	\7	-----	-----	-----	-----	-----	-----	-----
1880	39.8	33.6	-----	51.9	\8	-----	-----	155.0	-----	-----	-----	-----
1890	-----	31.2	-----	48.1	-----	-----	-----	137.0	-----	-----	-----	-----
1900	32.3	28.5	-----	44.4	-----	-----	-----	130.0	-----	-----	-----	-----
1909	30.0	29.2	-----	-----	-----	-----	126.8	123.6	-----	-----	-----	-----
1910	30.1	29.2	-----	38.5	-----	-----	126.8	123.8	-----	-----	-----	-----
1911	29.9	29.1	-----	-----	-----	-----	126.3	123.6	-----	-----	-----	-----
1912	29.8	29.0	-----	-----	-----	-----	125.8	123.3	-----	-----	-----	-----
1913	29.5	28.8	-----	-----	-----	-----	124.7	122.4	-----	-----	-----	-----
1914	29.9	29.3	-----	-----	-----	-----	126.6	124.6	-----	-----	-----	-----
1915	29.5	28.9	-----	34.4	-----	-----	125.0	123.2	-----	-----	-----	-----
1916	29.1	28.5	-----	-----	-----	-----	123.4	121.8	-----	-----	-----	-----
1917	28.5	27.9	32.9	-----	-----	-----	121.0	(NA)	-----	-----	-----	-----
1918	28.2	27.6	33.0	-----	-----	-----	119.8	(NA)	-----	-----	-----	-----
1919	26.1	25.3	32.4	-----	-----	-----	111.2	(NA)	-----	-----	-----	-----
1920	27.7	26.9	35.0	-----	-----	-----	117.9	115.4	137.5	-----	-----	-----
1921	28.1	27.3	35.8	-----	-----	-----	119.8	117.2	140.8	-----	-----	-----
1922	26.2	25.4	33.2	-----	-----	-----	111.2	108.8	130.8	-----	-----	-----
1923	26.0	25.2	33.2	-----	-----	-----	110.5	108.0	130.5	-----	-----	-----
1924	26.1	25.1	34.6	-----	-----	-----	110.9	107.8	135.6	-----	-----	-----
1925	25.1	24.1	34.2	-----	-----	-----	106.6	103.3	134.0	-----	-----	-----
1926	24.2	23.1	33.4	-----	-----	-----	102.6	99.2	130.3	-----	-----	-----
1927	23.5	22.7	31.1	-----	-----	-----	99.8	97.1	121.7	-----	-----	-----
1928	22.2	21.5	28.5	-----	-----	-----	93.8	91.7	111.0	-----	-----	-----
1929	21.2	20.5	27.3	-----	-----	-----	89.3	87.3	106.1	-----	-----	-----

Table 4 (cont.)

Year	CRUDE BIRTH RATE				GENERAL FERTILITY RATE									
	Total	White	All other	Black	Amer- indian	Asian & Pac.	Isl	Total	White	All other	Black	Amer- indian	Asian & Pac.	Isl.
1930	21.3	20.6	27.5	-----	-----	-----	-----	89.2	87.1	105.9	-----	-----	-----	-----
1931	20.2	19.5	26.6	-----	-----	-----	-----	84.6	82.4	102.1	-----	-----	-----	-----
1932	19.5	18.7	26.9	-----	-----	-----	-----	81.7	79.0	103.0	-----	-----	-----	-----
1933	18.4	17.6	25.5	-----	-----	-----	-----	76.3	73.7	97.3	-----	-----	-----	-----
1934	19.0	18.1	26.3	-----	-----	-----	-----	78.5	75.8	100.4	-----	-----	-----	-----
1935	18.7	17.9	25.8	-----	-----	-----	-----	77.2	74.5	98.4	-----	-----	-----	-----
1936	18.4	17.6	25.1	-----	-----	-----	-----	75.8	73.3	95.9	-----	-----	-----	-----
1937	18.7	17.9	26.0	-----	-----	-----	-----	77.1	74.4	99.4	-----	-----	-----	-----
1938	19.2	18.4	26.3	-----	-----	-----	-----	79.1	76.5	100.5	-----	-----	-----	-----
1939	18.8	18.0	26.1	-----	-----	-----	-----	77.6	74.8	100.1	-----	-----	-----	-----
1940	19.4	18.6	26.7	-----	-----	-----	-----	79.9	77.1	102.4	-----	-----	-----	-----
1941	20.3	19.5	27.3	-----	-----	-----	-----	83.4	80.7	105.4	-----	-----	-----	-----
1942	22.2	21.5	27.7	-----	-----	-----	-----	91.5	89.5	107.6	-----	-----	-----	-----
1943	22.7	22.1	28.3	-----	-----	-----	-----	94.3	92.3	111.0	-----	-----	-----	-----
1944	21.2	20.5	27.4	-----	-----	-----	-----	88.8	86.3	108.5	-----	-----	-----	-----
1945	20.4	19.7	26.5	-----	-----	-----	-----	85.9	83.4	106.0	-----	-----	-----	-----
1946	24.1	23.6	28.4	-----	-----	-----	-----	101.9	100.4	113.9	-----	-----	-----	-----
1947	26.6	26.1	31.2	-----	-----	-----	-----	113.3	111.8	125.9	-----	-----	-----	-----
1948	24.9	24.0	32.4	-----	-----	-----	-----	107.3	104.3	131.6	-----	-----	-----	-----
1949	24.5	23.6	33.0	-----	-----	-----	-----	107.1	103.6	135.1	-----	-----	-----	-----
1950	24.1	23.0	33.3	-----	-----	-----	-----	106.2	102.3	137.3	-----	-----	-----	-----
1951	24.9	23.9	33.7	-----	-----	-----	-----	111.4	107.7	141.7	-----	-----	-----	-----
1952	25.1	24.1	33.4	-----	-----	-----	-----	113.8	110.0	142.7	-----	-----	-----	-----
1953	25.1	24.0	33.9	-----	-----	-----	-----	115.0	110.9	146.4	-----	-----	-----	-----
1954	25.3	24.2	34.7	-----	-----	-----	-----	117.9	113.5	152.2	-----	-----	-----	-----
1955	25.0	23.8	34.5	-----	-----	-----	-----	118.3	113.7	154.3	-----	-----	-----	-----
1956	25.2	24.0	35.1	-----	-----	-----	-----	121.0	115.9	159.7	-----	-----	-----	-----
1957	25.3	24.0	35.0	-----	-----	-----	-----	122.7	117.6	161.7	-----	-----	-----	-----
1958	24.5	23.3	34.0	-----	-----	-----	-----	120.0	114.8	159.1	-----	-----	-----	-----
1959 \2	24.0	22.9	32.9	-----	-----	-----	-----	118.8	113.9	156.0	-----	-----	-----	-----
1960 \3	23.7	22.7	32.1	31.9	-----	-----	-----	118.0	113.2	153.6	153.5	-----	-----	-----
1961	23.3	22.2	31.6	-----	-----	-----	-----	117.1	112.3	153.0	-----	-----	-----	-----
1962 \4	22.4	21.4	30.5	-----	-----	-----	-----	112.0	107.5	147.8	-----	-----	-----	-----
1963 \4	21.7	20.7	29.7	-----	-----	-----	-----	108.3	103.6	143.7	-----	-----	-----	-----
1964	21.1	20.0	29.2	29.5	-----	-----	-----	104.7	99.8	140.0	142.6	-----	-----	-----

Table 4 (cont.)

Year	CRUDE BIRTH RATE				GENERAL FERTILITY RATE									
	Total	White	All other	Black	Amer- indian	Asian & Pac.	Isl	Total	White	All other	Black	Amer- indian	Asian & Pac.	Isl.
1965	19.4	18.3	27.6	27.7	-----	-----		96.3	91.3	131.9	133.2	-----	-----	
1966	18.4	17.4	26.1	26.2	-----	-----		90.8	86.2	123.5	124.7	-----	-----	
1967 \5	17.8	16.8	25.0	25.1	-----	-----		87.2	82.8	117.1	118.5	-----	-----	
1968	17.6	16.6	24.2	24.2	-----	-----		85.2	81.3	111.9	112.7	-----	-----	
1969	17.9	16.9	24.5	24.4	-----	-----		86.1	82.2	111.6	112.1	-----	-----	
1970	18.4	17.4	25.1	25.3	-----	-----		87.9	84.1	113.0	115.4	-----	-----	
1971	17.2	16.1	24.6	24.4	-----	-----		81.6	77.3	109.1	109.7	-----	-----	
1972	15.6	14.5	22.8	22.5	-----	-----		73.1	68.9	99.5	99.9	-----	-----	
1973	14.8	13.8	21.7	21.4	-----	-----		68.8	64.9	93.4	93.6	-----	-----	
1974	14.8	13.9	21.2	20.8	-----	-----		67.8	64.2	89.8	89.7	-----	-----	
1975	14.6	13.6	21.0	20.7	-----	-----		66.0	62.5	87.7	87.9	-----	-----	
1976	14.6	13.6	20.8	20.5	-----	-----		65.0	61.5	85.8	85.8	-----	-----	
1977	15.1	14.1	21.6	21.4	-----	-----		66.8	63.2	87.7	88.1	-----	-----	
1978	15.0	14.0	21.6	21.3	-----	-----		65.5	61.7	87.0	86.7	-----	-----	
1979	15.6	14.5	22.2	22.0	-----	-----		67.2	63.4	88.5	88.3	-----	-----	
1980	15.9	15.1	21.3	21.3		20.7	19.9	68.4	65.6	83.9	84.7	82.7	73.2	
1981	15.8	15.0	20.8	20.8		20.0	20.1	67.3	64.8	81.1	82.0	79.6	73.7	
1982	15.9	15.1	20.7	20.7		21.1	20.3	67.3	64.8	80.3	80.9	83.6	74.8	
1983	15.6	14.8	20.1	20.2		20.6	19.5	65.7	63.4	77.9	78.7	81.8	71.7	
1984	15.6	15.0	20.0	20.1		20.1	18.8	65.5	63.2	77.0	78.2	79.8	69.2	
1985	15.8	14.8	20.1	20.4		19.8	18.7	66.3	64.1	77.3	78.8	78.6	68.4	
1986	15.6	14.9	20.1	20.5		19.2	18.0	65.4	63.1	76.8	78.9	75.9	66.0	
1987	15.7	15.0	20.4	20.8		19.1	18.4	65.8	63.3	77.8	80.1	75.6	67.1	
1988	16.0	15.4	21.0	21.5		19.3	19.2	67.3	64.5	80.3	82.6	76.8	70.2	
1989	16.4	15.4	21.6	22.3		19.7	18.7	69.2	66.4	82.7	86.2	79.0	68.2	
1990	16.7	15.8	21.7	22.4		18.9	19.0	70.9	68.3	83.2	86.8	76.2	69.6	
1991	16.3	15.4	21.1	21.9		18.3	18.2	69.6	67.0	81.5	85.2	75.1	67.6	
1992	15.9	15.0	20.5	21.3		18.4	18.0	68.9	66.5	79.5	83.2	75.4	67.2	
1993	15.5	14.7	19.7	20.5		17.8	17.7	67.6	65.4	77.1	80.5	73.4	66.7	
1994	15.2	14.4	18.9	19.5		17.1	17.5	66.7	64.9	74.4	76.9	70.9	66.8	
1995	14.8	14.2	17.9	18.2		16.6	17.3	65.6	64.4	70.7	72.3	69.1	66.4	
1996	14.7	14.1	17.5	17.8		16.6	17.0	65.3	64.3	69.6	70.7	68.7	65.9	
1997	14.5	13.9	-----	17.7		16.6	16.9	65.0	63.9	-----	70.7	69.1	66.3	
1998	14.6	14.0	-----	17.7		17.1	16.4	64.6	71.0	-----	71.0	70.7	64.0	

Footnotes:

\1 Based on estimated total live births per 1,000 population for specified group. Based on a 50-percent sample of births for 1951-1954, 1956-1966, and 1968-1970; on 20- to 50-percent sample for 1967. Prior to 1959, births adjusted for underregistration; thereafter, registered live births. Rates by race are by race of child before 1980 and by race of mother from 1980 onwards. GFR is computed by relating total births, regardless of age of mother, to women aged 15-44 years.

\2 Includes Alaska.

\2 First year for which figures include Alaska and Hawaii.

\4 Figures by race exclude New Jersey; State did not require reporting of race.

\5 Based on 20- to 50-percent sample of births.

\6 1850-59.

\7 1860-69.

\8 1870-79.

\9 1880-84.

Source: CBR, total: 1820-1900, Sheldon [1955], p. 145. CBR & GFR, white: 1800-1850, Thompson and Whelpton [1933], p. 263. 1855-1900: Coale and Zelnik [1963], Table 1. CBR, black: 1855-1915: Coale and Rives [1973], p. 26. Numbers for 1890 to 1930 are arithmetic averages for the two quinquennia surrounding the year. CBR & GFR, all groups, 1909-1992: U.S. Public Health Service [1999a], Table 1-1. Reporting for the black population separately only began in 1960, was discontinued, and resumed in 1964. For 1994-1998 for all races, whites, all others, and blacks, and 1994-1998 and 1980-1998 for the Amerindian and Asian and Pacific Islander populations: U.S. Public Health Service [2000a], Table 1.

Table 5. Total Fertility Rate, by Race & Ethnicity. United States, 1800 to 1998. \1

Year	Total	White	All Other	Black	Amer-indian	Asian & Pacific Islander	Hispanic-Origin
1800	-----	7040.0	-----	-----	-----	-----	-----
1810	-----	6920.0	-----	-----	-----	-----	-----
1820	-----	6730.0	-----	-----	-----	-----	-----
1830	-----	6550.0	-----	-----	-----	-----	-----
1840	-----	6140.0	-----	-----	-----	-----	-----
1850	-----	5420.0	-----	-----	-----	-----	-----
1850/59	-----	-----	-----	7900.0	-----	-----	-----
1860	-----	5210.0	-----	-----	-----	-----	-----
1860/69	-----	-----	-----	7580.0	-----	-----	-----
1870	-----	4550.0	-----	-----	-----	-----	-----
1870/79	-----	-----	-----	7690.0	-----	-----	-----
1880	-----	4240.0	-----	-----	-----	-----	-----
1880/84	-----	-----	-----	7260.0	-----	-----	-----
1890	-----	3870.0	-----	6560.0	-----	-----	-----
1900	-----	3560.0	-----	5610.0	-----	-----	-----
1905/10	3551.0	3443.0	-----	4351.0	-----	-----	-----
1910	(NA)	3420.0	-----	4610.0	-----	-----	-----
1920	(NA)	3170.0	-----	3640.0	-----	-----	-----
1930	(NA)	2450.0	-----	2980.0	-----	-----	-----
1933	2210.3	2116.2	2962.4	-----	-----	-----	-----
1934	2274.3	2172.4	3098.9	-----	-----	-----	-----
1935	2235.2	2170.7	2728.0	-----	-----	-----	-----
1936	2193.3	2131.1	2660.5	-----	-----	-----	-----
1937	2224.8	2155.9	2755.7	-----	-----	-----	-----
1938	2280.5	2213.9	2789.5	-----	-----	-----	-----
1939	2232.4	2161.1	2779.9	-----	-----	-----	-----
1940	2301.3	2229.0	2870.0	2870.0	-----	-----	-----
1941	2399.0	2328.0	2956.0	-----	-----	-----	-----
1942	2628.0	2577.0	3022.0	-----	-----	-----	-----
1943	2718.0	2664.0	3128.0	-----	-----	-----	-----
1944	2568.0	2501.0	3075.0	-----	-----	-----	-----
1945	2491.0	2421.0	3017.0	-----	-----	-----	-----
1946	2943.0	2901.0	3238.0	-----	-----	-----	-----
1947	3274.0	3230.0	3575.0	-----	-----	-----	-----
1948	3109.0	3022.0	3742.0	-----	-----	-----	-----
1949	3110.0	3009.0	3855.0	-----	-----	-----	-----
1950	3091.0	2977.0	3928.0	3930.0	-----	-----	-----
1951	3269.0	3157.0	4091.0	-----	-----	-----	-----
1952	3358.0	3250.0	4147.0	-----	-----	-----	-----
1953	3424.0	3306.0	4283.0	-----	-----	-----	-----
1954	3543.0	3415.0	4474.0	-----	-----	-----	-----
1955	3580.0	3446.0	4550.0	-----	-----	-----	-----
1956	3689.0	3546.0	4730.0	-----	-----	-----	-----
1957	3767.0	3625.0	4798.0	-----	-----	-----	-----
1958	3701.0	3560.0	4727.0	-----	-----	-----	-----
1959	3670.0	3544.0	4595.0	-----	-----	-----	-----
1960 \2	3653.6	3532.9	4522.1	4541.8	-----	-----	-----
1961	3620.3	3496.9	4496.8	-----	-----	-----	-----
1962 \3	3461.3	3341.3	4340.1	-----	-----	-----	-----
1963 \3	3318.8	3193.5	4203.0	-----	-----	-----	-----

Table 5 (cont.)

Year	Total	White	All Other	Black	Amer-indian	Asian & Pacific Islander	Hispanic-Origin
1964	3190.5	3065.0	4070.2	4138.6	-----	-----	-----
1965	2912.6	2783.4	3807.9	3828.5	-----	-----	-----
1966	2721.4	2602.9	3531.5	3545.3	-----	-----	-----
1967	2557.7	2446.9	3299.2	3311.8	-----	-----	-----
1968	2464.2	2365.6	3108.4	3099.8	-----	-----	-----
1969	2455.5	2360.3	3061.2	3042.8	-----	-----	-----
1970	2480.0	2385.0	3066.7	3099.5	-----	-----	-----
1971	2266.5	2160.5	2919.5	2902.0	-----	-----	-----
1972	2010.0	1906.5	2627.5	2601.0	-----	-----	-----
1973	1879.0	1783.0	2443.0	2411.0	-----	-----	-----
1974	1835.0	1748.5	2338.5	2298.5	-----	-----	-----
1975	1774.0	1686.0	2276.0	2243.0	-----	-----	-----
1976	1738.0	1652.0	2222.5	2187.0	-----	-----	-----
1977	1789.5	1703.0	2278.5	2251.0	-----	-----	-----
1978	1760.0	1667.5	2264.5	2218.0	-----	-----	-----
1979	1808.0	1715.5	2309.5	2263.2	-----	-----	-----
1980	1839.5	1773.0	2199.0	2176.5	2162.5	1953.5	-----
1981	1812.0	1748.0	2133.5	2117.5	2090.0	1976.0	-----
1982	1827.5	1767.0	2132.0	2106.5	2213.0	2015.5	-----
1983	1799.0	1740.5	2084.0	2066.0	2180.5	1943.5	-----
1984	1806.5	1748.5	2078.5	2070.5	2136.0	1892.0	-----
1985	1844.0	1787.0	2106.5	2109.0	2128.0	1885.0	-----
1986	1837.5	1776.0	2114.5	2135.5	2082.0	1836.0	-----
1987	1872.0	1804.5	2168.5	2198.0	2099.0	1886.0	-----
1988	1934.0	1856.5	2264.5	2298.0	2153.5	1983.5	-----
1989	2014.0	1931.0	2360.5	2432.5	2247.0	1947.5	2014.0
1990	2081.0	2003.0	2398.0	2480.0	2183.0	2002.5	2081.0
1991	2073.0	1995.5	2383.0	2480.0	2169.0	1956.0	2073.0
1992	2065.0	1993.5	2343.0	2442.0	2190.0	1942.0	2065.0
1993	2046.0	1982.0	2293.5	2384.5	2141.0	1935.5	2046.0
1994	2036.0	1985.0	2300.0	2300.0	2080.0	1943.0	2036.0
1995	2019.0	1989.0	2175.0	2175.0	2033.5	1924.0	2019.0
1996	2027.0	2005.5	2149.0	2144.0	2030.0	1907.5	2027.0
1997 \4	2032.5	2009.0	-----	2154.0	2047.5	1925.5	2032.5
1998	2058.5	2041.0	-----	2171.0	2090.5	1867.5	2058.5

\1 Total fertility rates are the sums of birth rates, by age of mother, multiplied by 5. Birth rates are live births per 1,000 women in the specified groups. Beginning in 1970, data exclude births to nonresidents of the United States. Based on estimated total live births per 1,000 population for the specified group. Based on a 50-percent sample of births for 1951-1954, 1956-1966, and 1968-1971; on a 20- to 50-percent sample for 1967; and on a 100 percent sample for selected states and a 50 percent sample for all other states for 1972-1984. Prior to 1960, births adjusted for underregistration; thereafter, registered live births. Rates by race are by race of child before 1980 and by race of mother from 1980 onwards.

\2 Denotes first year for which figures include Alaska and Hawaii.

\3 Figures by race exclude New Jersey. That state did not require reporting of race.

\4 Beginning in 1997, rates for women aged 45-49 are computed by relating births to women aged 45-54 to women aged 45-49.

Source: White population, total fertility rate, 1800-1930: Coale and Zelnic [1963], p. 36. Black population, total fertility rate: Coale and Rives [1973], p. 26. Numbers for 1890 to 1930 are arithmetic averages for the two quinquennia surrounding the year. For 1905/10, total fertility rates and age-specific birth rates are from Haines [1989], Table 1. For 1933-1939, total fertility rates and age-specific birth rates are from Linder and Grove [1947], Table 46. The rates are adjusted upward on the basis of the annual adjustments implied in U.S. Public Health Service [1999a], Tables 1-1 and 1-2. 1940-1959: U.S. Public Health Service [1970], Table 1-1. 1960-1997: U.S. Public Health Service [1999a], Table 1-9; [2000a], Table 4.

Table 6. Ratio of Total Fertility Rates to White Total Fertility Rates. By Race. United States, 1850 to 1998.

Year	RATIO TO WHITE				
	All Other	Black	Amerin- dian	Asian & Pacific Islander	Hispanic- Origin
1850/59		1.458			
1860/69		1.455			
1870/79		1.690			
1880/84		1.712			
1890		1.695			
1900		1.576			
1905/10		1.264			
1910		1.348			
1920		1.148			
1930		1.216			
1933	1.400				
1934	1.426				
1935	1.257				
1936	1.248				
1937	1.278				
1938	1.260				
1939	1.286				
1940	1.288	1.288			
1941	1.270				
1942	1.173				
1943	1.174				
1944	1.230				
1945	1.246				
1946	1.116				
1947	1.107				
1948	1.238				
1949	1.281				
1950	1.319	1.320			
1951	1.296				
1952	1.276				
1953	1.296				
1954	1.310				
1955	1.320				
1956	1.334				
1957	1.324				
1958	1.328				
1959	1.297				
1960	1.280	1.286			
1961	1.286				
1962	1.299				
1963	1.316				
1964	1.328	1.350			
1965	1.368	1.375			
1966	1.357	1.362			
1967	1.348	1.353			
1968	1.314	1.310			
1969	1.297	1.289			
1970	1.286	1.300			

Table 6 (cont.)

Year	RATIO TO WHITE		Amerin- dian	Asian & Pacific Islander	Hispanic- Origin
	All Other	Black			
1971	1.351	1.343			
1972	1.378	1.364			
1973	1.370	1.352			
1974	1.337	1.315			
1975	1.350	1.330			
1976	1.345	1.324			
1977	1.338	1.322			
1978	1.358	1.330			
1979	1.346	1.319			
1980	1.240	1.228	1.220	1.102	
1981	1.221	1.211	1.196	1.130	
1982	1.207	1.192	1.252	1.141	
1983	1.197	1.187	1.253	1.117	
1984	1.189	1.184	1.222	1.082	
1985	1.179	1.180	1.191	1.055	
1986	1.191	1.202	1.172	1.034	
1987	1.202	1.218	1.163	1.045	
1988	1.220	1.238	1.160	1.068	
1989	1.222	1.260	1.164	1.009	1.043
1990	1.197	1.238	1.090	1.000	1.039
1991	1.194	1.243	1.087	0.980	1.039
1992	1.175	1.225	1.099	0.974	1.036
1993	1.157	1.203	1.080	0.977	1.032
1994	1.159	1.159	1.048	0.979	1.026
1995	1.094	1.094	1.022	0.967	1.015
1996	1.072	1.069	1.012	0.951	1.011
1997		1.072	1.019	0.958	1.012
1998		1.064	1.024	0.915	1.009

Source: Table 5.

Table 7. Neonatal, Infant, and Maternal Mortality Rates by Race. United States, 1850-1998. \1

Year	Neonatal mortality rate (per 1,000 live births)				Infant mortality rate (per 1,000 live births)				
	Total	White	All Other	Black	Total	White	All Other	Black	Hispanic
1850	-----	-----	-----	-----	228.9	216.8	-----	340.0	-----
1860	-----	-----	-----	-----	196.7	181.3	-----	-----	-----
1870	-----	-----	-----	-----	184.5	175.6	-----	-----	-----
1880	-----	-----	-----	-----	225.1	214.8	-----	-----	-----
1890	-----	-----	-----	-----	160.4	150.6	-----	-----	-----
1900	-----	-----	-----	-----	129.0	119.8	-----	170.3	-----
1910	-----	-----	-----	-----	104.2	96.5	-----	142.6	-----
1915	44.4	-----	-----	-----	99.9	98.6	181.2	-----	-----
1916	44.1	43.5	68.9	68.9	101.0	99.0	184.9	184.3	-----
1917	43.4	42.6	58.0	-----	93.8	90.5	150.7	-----	-----
1918	44.2	43.3	60.5	60.9	100.9	97.4	161.2	162.5	-----
1919	41.5	40.3	55.2	58.6	86.6	83.0	130.5	134.3	-----
1920	41.5	40.4	55.0	56.5	85.8	82.1	131.7	135.6	-----
1921	39.7	38.7	50.3	51.3	75.6	72.5	108.5	110.7	-----
1922	39.7	38.8	49.9	50.7	76.2	73.2	110.0	111.6	-----
1923	39.5	38.6	49.9	51.4	77.1	73.5	117.4	119.9	-----
1924	38.6	37.4	51.2	51.8	70.8	66.8	112.9	114.1	-----
1925	37.8	36.8	49.5	50.3	71.7	68.3	110.8	112.0	-----
1926	37.9	37.1	48.0	48.3	73.3	70.0	111.8	112.1	-----
1927	36.1	35.0	46.1	46.3	64.6	60.6	100.1	99.9	-----
1928	37.2	35.7	48.8	49.1	68.7	64.0	106.2	105.9	-----
1929	36.9	35.6	47.3	47.5	67.6	63.2	102.2	101.5	-----
1930	35.7	34.2	47.4	47.6	64.6	60.1	99.9	99.5	-----
1931	34.6	33.2	45.2	45.4	61.6	57.4	93.1	92.7	-----
1932	33.5	32.0	43.7	44.4	57.6	53.3	86.2	84.1	-----
1933	34.0	32.1	45.8	45.7	58.1	52.8	91.3	85.4	-----
1934	34.1	32.3	45.3	46.0	60.1	54.5	94.4	91.0	-----
1935	32.4	31.0	42.7	42.7	55.7	51.9	83.2	81.9	-----
1936	32.6	31.0	43.9	43.8	57.1	52.9	87.6	86.1	-----
1937	31.3	29.7	42.1	42.2	54.4	50.3	83.2	82.0	-----
1938	29.6	28.3	39.1	39.2	51.0	47.1	79.1	77.9	-----
1939	29.3	27.8	39.6	39.7	48.0	44.3	74.2	73.2	-----
1940	28.8	27.2	39.7	39.9	47.0	43.2	73.8	72.9	-----
1941	27.7	26.1	39.0	39.3	45.3	41.2	74.8	74.1	-----
1942	25.7	24.5	34.6	34.9	40.4	37.3	64.6	64.2	-----
1943	24.7	23.7	32.9	33.1	40.4	37.5	62.5	61.5	-----
1944	24.7	23.6	32.5	32.7	39.8	36.9	60.3	59.3	-----
1945	24.3	23.3	32.0	32.2	38.3	35.6	57.0	56.2	-----
1946	24.0	23.1	31.5	31.7	33.8	31.8	49.5	48.8	-----
1947	22.8	21.7	31.0	31.1	32.2	30.1	48.5	47.7	-----
1948	22.2	21.2	29.1	29.3	32.0	29.9	46.5	45.7	-----
1949	21.4	20.3	28.6	28.8	31.3	28.9	47.3	46.8	-----
1950	20.5	19.4	27.5	27.8	29.2	26.8	44.5	43.9	-----
1951	20.0	18.9	27.3	27.6	28.4	25.8	44.8	44.3	-----
1952	19.8	18.5	28.0	28.5	28.4	25.5	47.0	46.9	-----
1953	19.6	18.3	27.4	27.8	27.8	25.0	44.7	44.5	-----
1954	19.1	17.8	27.0	27.5	26.6	23.9	42.9	42.9	-----
1955	19.1	17.7	27.2	27.8	26.4	23.6	42.8	43.1	-----

Table 7 (cont.)

Year	Neonatal mortality rate (per 1,000 live births)				Infant mortality rate (per 1,000 live births)					Hispanic
	Total	White	All other	Black	Total	White	All other	Black		
1956	18.9	17.5	27.0	27.6	26.0	23.2	42.1	42.4	-----	
1957	19.1	17.5	27.8	28.5	26.3	23.3	43.7	44.2	-----	
1958	19.5	17.8	29.0	29.7	27.1	23.8	45.7	46.3	-----	
1959 \3	19.0	17.5	27.7	28.4	26.4	23.2	44.0	44.8	-----	
1960 *	18.7	17.2	26.9	27.8	26.0	22.9	43.2	44.3	-----	
1961	18.4	16.9	26.2	27.1	25.3	22.4	40.7	41.8	-----	
1962 \2	18.3	16.9	26.1	27.1	25.3	22.3	41.4	42.6	-----	
1963 \2	18.2	16.7	26.1	27.0	25.2	22.2	41.5	42.8	-----	
1964	17.9	16.2	26.5	27.5	24.8	21.6	41.1	42.3	-----	
1965	17.7	16.1	25.4	26.5	24.7	21.5	40.3	41.7	-----	
1966	17.2	15.6	24.8	25.9	23.7	20.6	38.8	40.2	-----	
1967	16.5	15.0	23.8	25.0	22.4	19.7	35.9	37.5	-----	
1968	16.1	14.7	23.0	24.3	21.8	19.2	34.5	36.2	-----	
1969	15.6	14.2	22.5	23.9	20.9	18.4	32.9	34.8	-----	
1970	15.1	13.8	21.4	22.6	20.0	17.8	30.9	32.6	-----	
1971	14.2	13.0	19.6	21.0	19.1	17.1	28.5	30.3	-----	
1972	13.6	12.4	19.2	20.7	18.5	16.4	27.7	29.6	-----	
1973	13.0	11.8	17.9	19.3	17.7	15.8	26.2	28.1	-----	
1974	12.3	11.1	17.2	18.7	16.7	14.8	24.9	26.8	-----	
1975	11.6	10.4	16.8	18.3	16.1	14.2	24.2	26.2	-----	
1976	10.9	9.7	16.3	17.9	15.2	13.3	23.5	25.5	-----	
1977	9.9	8.7	14.7	16.1	14.1	12.3	21.7	23.6	-----	
1978	9.5	8.4	14.0	15.5	13.8	12.0	21.1	23.1	-----	
1979	8.9	7.9	12.9	14.3	13.1	11.4	19.8	21.8	-----	
1980	8.5	7.4	13.2	14.6	12.6	10.9	20.2	22.2	-----	
1981	8.0	7.0	12.5	14.0	11.9	10.3	18.8	20.8	-----	
1982	7.7	6.7	12.0	13.6	11.5	9.9	18.3	20.5	-----	
1983	7.3	6.3	11.4	12.9	11.2	9.6	17.8	20.0	-----	
1984	7.0	6.1	10.9	12.3	10.8	9.3	17.1	19.2	-----	
1985	7.0	6.0	11.0	12.6	10.6	9.2	16.8	19.0	-----	
1986	6.7	5.7	10.8	12.3	10.4	8.8	16.7	18.9	-----	
1987	6.5	5.4	10.7	12.3	10.1	8.5	16.5	18.8	-----	
1988	6.3	5.3	10.3	12.1	10.0	8.4	16.1	18.5	-----	
1989	6.2	5.1	10.3	11.9	9.8	8.1	16.3	18.6	9.8	
1990	5.8	4.8	9.9	11.6	9.2	7.6	15.5	18.0	9.1	
1991	5.6	4.5	9.5	11.2	8.9	7.3	15.1	17.6	8.9	
1992	5.4	4.3	9.2	10.8	8.5	6.9	14.4	16.8	8.5	
1993	5.3	4.3	9.0	10.7	8.4	6.8	14.1	16.5	8.4	
1994	5.1	4.2	8.6	10.2	8.0	6.6	13.5	15.8	8.0	
1995	4.9	4.1	8.1	9.8	7.6	6.3	12.6	15.1	7.6	
1996	4.8	4.0	7.9	9.6	7.3	6.1	12.2	14.7	7.3	
1997	4.8	4.0	7.7	9.4	7.2	6.0	11.8	14.2	7.2	
1998	4.8	4.0	7.9	9.5	7.2	6.0	11.9	14.3	7.2	

Table 7 (cont.)

	Maternal mortality rate per 100,000 live births			
	Total	White	All Other	Black
1915	608.0	601.0	1056.0	-----
1916	622.0	608.0	1179.0	-----
1917	662.0	632.0	1177.0	-----
1918	916.0	889.0	1393.0	-----
1919	737.0	696.0	1244.0	-----
1920	799.0	760.0	1281.0	-----
1921	682.0	644.0	1077.0	-----
1922	664.0	628.0	1068.0	-----
1923	665.0	626.0	1095.0	-----
1924	656.0	607.0	1179.0	-----
1925	647.0	603.0	1162.0	-----
1926	656.0	619.0	1071.0	-----
1927	647.0	594.0	1133.0	-----
1928	692.0	627.0	1210.0	-----
1929	695.0	631.0	1199.0	-----
1930	673.0	609.0	1174.0	-----
1931	661.0	601.0	1114.0	-----
1932	633.0	581.0	976.0	-----
1933	619.1	554.9	1073.7	999.7
1934	593.2	534.8	1005.1	931.1
1935	582.1	530.6	945.7	954.8
1936	568.0	511.6	971.8	980.9
1937	488.8	436.1	858.5	862.2
1938	435.2	377.2	849.4	861.0
1939	403.9	352.8	762.1	771.3
1940	376.0	319.8	773.5	781.7
1941	316.5	266.0	678.1	690.2
1942	258.7	221.8	544.0	549.1
1943	245.2	210.5	509.9	512.8
1944	227.9	189.4	506.0	513.9
1945	207.2	172.1	454.8	456.7
1946	156.7	130.7	358.9	363.6
1947	134.5	108.6	334.6	336.2
1948	116.6	89.4	301.0	303.6
1949	90.3	68.1	234.8	237.6
1950	83.3	61.1	221.6	223.0
1951	75.0	54.9	201.3	204.2
1952	67.8	48.9	188.1	189.2
1953	61.1	44.1	166.1	168.3
1954	52.4	37.2	143.8	145.9
1955	47.0	32.8	130.3	134.3
1956	40.9	28.7	110.7	114.3
1957	41.0	27.5	118.3	121.6
1958	37.6	26.3	101.8	104.5
1959	\3	37.4	25.8	102.1
1960	*	37.1	26.0	97.9
1961		36.9	24.9	101.3
1962	\2	35.2	23.8	95.9
1963	\2	35.8	24.0	96.9
1964		33.3	22.3	89.9
1965		31.6	21.0	83.7
1966		29.1	20.2	72.4

Table 7 (cont.)

	Maternal mortality rate per 100,000 live births			
	Total	White	All Other	Black
1967	28.0	19.5	69.5	72.6
1968	24.5	16.6	63.6	65.9
1969	22.2	15.5	55.7	59.5
1970	21.5	14.4	55.9	59.8
1971	18.8	13.0	45.3	48.3
1972	18.8	14.3	38.5	40.7
1973	15.2	10.7	34.6	38.4
1974	14.6	10.0	35.1	38.3
1975	12.8	9.1	29.0	31.3
1976	12.3	9.0	26.5	29.5
1977	11.2	7.7	26.0	29.2
1978	9.6	6.4	23.0	25.0
1979	9.6	6.4	22.7	25.1
1980	9.2	6.7	19.8	21.5
1981	8.5	6.3	17.3	20.4
1982	7.9	5.8	16.4	16.2
1983	8.0	5.9	16.3	18.3
1984	7.8	5.4	16.9	19.7
1985	7.8	5.2	18.1	20.4
1986	7.2	4.9	16.0	18.8
1987	6.6	5.1	12.0	14.2
1988	8.4	5.9	17.4	19.5
1989	7.9	5.7	15.4	17.5
1990	8.2	5.5	17.8	21.1
1991	7.9	5.9	14.5	17.2
1992	7.8	5.1	16.8	19.5
1993	7.5	4.8	17.6	20.5
1994	8.3	6.2	16.2	18.5
1995	7.1	4.2	18.5	22.1
1996	7.6	5.1	16.9	20.3
1997	8.4	5.8	18.3	20.8
1998	7.1	5.1	14.9	17.1

\1 The neonatal mortality rate is deaths of infants aged 0-27 days per 1,000 live births. The infant mortality rate is deaths in the first year of life per 1,000 live births. the maternal mortality rate is deaths related to childbirth per 100,000 live births. Prior to 1980, race for live births is the race of the child. From 1980 onwards, race for live births is the race of the mother. For 1915 to 1932, for the current Birth Registration Area only.

\2 Includes Alaska.

\3 Denotes first year for which figures includes Alaska and Hawaii.

\4 Figures by race excludes New Jersey. The state did not require reporting of race.

Source: 1915-1992: U.S. Public Health Service [1996], Table 2-2. 1993-1998: U.S. Public Health Service [2000b], Table 27. For the total and white populations for 1850-1910 and for the black population for 1900 and 1910, Haines [1998]. For the black population in 1850, Steckel [1986].

Table 8. Expectation of Life (in Years) at Birth, by Race and Sex: 1850 to 1998.

Year	Total			White			Negro and other			Black			
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	
1850	38.3	37.2	39.4	39.5	38.4	40.6	-----	-----	-----	-----	-----	-----	
1860	41.8	41.6	42.2	43.6	43.2	44.1	-----	-----	-----	-----	-----	-----	
1870	44.0	43.0	44.9	45.2	44.1	46.4	-----	-----	-----	-----	-----	-----	
1880	39.4	39.7	39.1	40.5	40.4	40.6	-----	-----	-----	-----	-----	-----	
1890	45.2	44.8	45.6	46.8	46.0	47.4	-----	-----	-----	-----	-----	-----	
1900	47.8	47.1	48.4	49.6	48.5	50.7	-----	-----	-----	41.8	40.4	43.3	
1910	53.1	51.5	54.7	54.6	53.0	56.0	-----	-----	-----	46.2	44.7	47.7	
1900	\1	47.3	46.3	48.3	47.6	46.6	48.7	33.0	32.5	33.5	-----	-----	-----
1901		49.1	47.6	50.6	49.4	48.0	51.0	33.7	32.2	35.3	-----	-----	-----
1902		51.5	49.8	53.4	51.9	50.2	53.8	34.6	32.9	36.4	-----	-----	-----
1903		50.5	49.1	52.0	50.9	49.5	52.5	33.1	31.7	34.6	-----	-----	-----
1904		47.6	46.2	49.1	48.0	46.6	49.5	30.8	29.1	32.7	-----	-----	-----
1905		48.7	47.3	50.2	49.1	47.6	50.6	31.3	29.6	33.1	-----	-----	-----
1906		48.7	46.9	50.8	49.3	47.3	51.4	32.9	31.8	33.9	-----	-----	-----
1907		47.6	45.6	49.9	48.1	46.0	50.4	32.5	31.1	34.0	-----	-----	-----
1908		51.1	49.5	52.8	51.5	49.9	53.3	34.9	33.8	36.0	-----	-----	-----
1909		52.1	50.5	53.8	52.5	50.9	54.2	35.7	34.2	37.3	-----	-----	-----
1910		50.0	48.4	51.8	50.3	48.6	52.0	35.6	33.8	37.5	-----	-----	-----
1911		52.6	50.9	54.4	53.0	51.3	54.9	36.4	34.6	38.2	-----	-----	-----
1912		53.5	51.5	55.9	53.9	51.9	56.2	37.9	35.9	40.0	-----	-----	-----
1913		52.5	50.3	55.0	53.0	50.8	55.7	38.4	36.7	40.3	-----	-----	-----
1914		54.2	52.0	56.8	54.9	52.7	57.5	38.9	37.1	40.8	-----	-----	-----
1915		54.5	52.5	56.8	55.1	53.1	57.5	38.9	37.5	40.5	-----	-----	-----
1916		51.7	49.6	54.3	52.5	50.2	55.2	41.3	39.6	43.1	-----	-----	-----
1917		50.9	48.4	54.0	52.0	49.3	55.3	38.8	37.0	40.8	-----	-----	-----
1918		39.1	36.6	42.2	39.8	37.1	43.2	31.1	29.9	32.5	-----	-----	-----
1919		54.7	53.5	56.0	55.8	54.5	57.4	44.5	44.5	44.4	-----	-----	-----
1920		54.1	53.6	54.6	54.9	54.4	55.6	45.3	45.5	45.2	-----	-----	-----
1921		60.8	60.0	61.8	61.8	60.8	62.9	51.5	51.6	51.3	-----	-----	-----
1922		59.6	58.4	61.0	60.4	59.1	61.9	52.4	51.8	53.0	-----	-----	-----
1923		57.2	56.1	58.5	58.3	57.1	59.6	48.3	47.7	48.9	-----	-----	-----
1924		59.7	58.1	61.5	61.4	59.8	63.4	46.6	45.5	47.8	-----	-----	-----
1925		59.0	57.6	60.6	60.7	59.3	62.4	45.7	44.9	46.7	-----	-----	-----
1926		56.7	55.5	58.0	58.2	57.0	59.6	44.6	43.7	45.6	-----	-----	-----

Table 8 (cont.)

Year	Total			White			Negro and other			Black		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
1927	60.4	59.0	62.1	62.0	60.5	63.9	48.2	47.6	48.9	-----	-----	-----
1928	56.8	55.6	58.3	58.4	57.0	60.0	46.3	45.6	47.0	-----	-----	-----
1929	57.1	55.8	58.7	58.6	57.2	60.3	46.7	45.7	47.8	-----	-----	-----
1930	59.7	58.1	61.6	61.4	59.7	63.5	48.1	47.3	49.2	-----	-----	-----
1931	61.1	59.4	63.1	62.6	60.8	64.7	50.4	49.5	51.5	-----	-----	-----
1932	62.1	61.0	63.5	63.2	62.0	64.5	53.7	52.8	54.6	-----	-----	-----
1933	63.3	61.7	65.1	64.3	62.7	66.3	54.7	53.5	56.0	-----	-----	-----
1934	61.1	59.3	63.3	62.4	50.6	64.6	51.8	50.2	53.7	-----	-----	-----
1935	61.7	59.9	63.9	62.9	61.0	65.0	53.1	51.3	55.2	-----	-----	-----
1936	58.5	56.6	60.6	59.8	58.0	61.9	49.0	47.0	51.4	-----	-----	-----
1937	60.0	58.0	62.4	61.4	59.3	63.8	50.3	48.3	52.5	-----	-----	-----
1938	63.5	61.9	65.3	65.0	63.2	66.8	52.9	51.7	54.3	-----	-----	-----
1939	63.7	62.1	65.4	64.9	63.3	66.6	54.5	53.2	56.0	-----	-----	-----
1940	62.9	60.8	65.2	64.2	62.1	66.6	53.1	51.5	54.9	-----	-----	-----
1941	64.8	63.1	66.8	66.2	64.4	68.5	53.8	52.5	55.3	-----	-----	-----
1942	66.2	64.7	67.9	67.3	65.9	69.4	56.6	55.4	58.2	-----	-----	-----
1943	63.3	62.4	64.4	64.2	63.2	65.7	55.6	55.4	56.1	-----	-----	-----
1944	65.2	63.6	66.8	66.2	64.5	68.4	56.6	55.8	57.7	-----	-----	-----
1945	65.9	63.6	67.9	66.8	64.4	69.5	57.7	56.1	59.6	-----	-----	-----
1946	66.7	64.4	69.4	67.5	65.1	70.3	59.1	57.5	61.0	-----	-----	-----
1947	66.8	64.4	69.7	67.6	65.2	70.5	59.7	57.9	61.9	-----	-----	-----
1948	67.2	64.6	69.9	68.0	65.5	71.0	60.0	58.1	62.5	-----	-----	-----
1949	68.0	65.2	70.7	68.8	66.2	71.9	60.6	58.9	62.7	-----	-----	-----
1950	68.2	65.6	71.1	69.1	66.5	72.2	60.8	59.1	62.9	-----	-----	-----
1951	68.4	65.6	71.4	69.3	66.5	72.4	61.2	59.2	63.4	-----	-----	-----
1952	68.6	65.8	71.6	69.5	66.6	72.6	61.4	59.1	63.8	-----	-----	-----
1953	68.8	66.0	72.0	69.7	66.8	73.0	62.0	59.7	64.5	-----	-----	-----
1954	69.6	66.7	72.8	70.5	67.5	73.7	63.4	61.1	65.9	-----	-----	-----
1955	69.6	66.7	72.8	70.5	67.4	73.7	63.7	61.4	66.1	-----	-----	-----
1956	69.7	66.7	72.9	70.5	67.5	73.9	63.6	61.3	66.1	-----	-----	-----
1957	69.5	66.4	72.7	70.3	67.7	73.7	63.0	60.7	65.5	-----	-----	-----
1958	69.6	66.6	72.9	70.5	67.4	73.9	63.4	61.0	65.8	-----	-----	-----
1959	\2 69.9	66.8	73.2	70.7	67.5	74.2	63.9	61.3	66.5	-----	-----	-----
1960	\3 69.7	66.6	73.1	70.6	67.4	74.1	63.6	61.1	66.3	-----	-----	-----
1961	70.2	67.1	73.6	71.0	67.8	74.6	64.5	62.0	67.1	-----	-----	-----

Table 8 (cont.)

Year	Total Both Sexes	Male	Female	White			Negro and other			Black			
				Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	
1962	\4	70.1	66.9	73.5	70.9	67.7	74.5	64.2	61.6	66.9	-----	-----	-----
1963	\4	69.9	66.6	73.4	70.8	67.4	74.4	63.7	61.0	66.6	-----	-----	-----
1964		70.2	66.8	73.7	71.0	67.7	74.7	64.2	61.3	67.3	-----	-----	-----
1965		70.2	66.8	73.8	71.1	67.6	74.8	64.3	61.2	67.6	-----	-----	-----
1966		70.2	66.7	73.9	71.1	67.5	74.8	64.2	60.9	67.6	-----	-----	-----
1967		70.5	67.0	74.3	71.4	67.8	75.2	64.9	61.4	68.5	-----	-----	-----
1968		70.2	66.6	74.1	71.1	67.5	75.0	64.1	60.4	67.9	-----	-----	-----
1969		70.5	66.8	74.4	71.4	67.7	75.3	64.5	60.6	68.6	-----	-----	-----
1970		70.8	67.1	74.7	71.7	68.0	75.6	65.3	61.3	69.4	64.1	60.0	68.3
1971		71.1	67.4	75.0	72.0	68.3	75.8	65.6	61.6	69.8	64.6	60.5	68.9
1972		71.2	67.4	75.1	72.0	68.3	75.9	65.7	61.5	70.1	64.7	60.4	69.1
1973		71.4	67.6	75.3	72.2	68.5	76.1	66.1	62.0	70.3	65.0	60.9	69.3
1974		72.0	68.2	75.9	72.8	69.0	76.7	67.1	62.9	71.3	66.0	61.7	70.3
1975		72.6	68.8	76.6	73.4	69.5	77.3	68.0	63.7	72.4	66.8	62.4	71.3
1976		72.9	69.1	76.8	73.6	69.9	77.5	68.4	64.2	72.7	67.2	62.9	71.6
1977		73.3	69.5	77.2	74.0	70.2	77.9	68.9	64.7	73.2	67.7	63.4	72.0
1978		73.5	69.6	77.3	74.1	70.4	78.0	69.3	65.0	73.5	68.1	63.7	72.4
1979		73.9	70.0	77.8	74.6	70.8	78.4	69.8	65.4	74.1	68.5	64.0	72.9
1980		73.7	70.0	77.4	74.4	70.7	78.1	69.5	65.3	73.6	68.1	63.8	72.5
1981		74.1	70.4	77.8	74.8	71.1	78.4	70.3	66.2	74.4	68.9	64.5	73.2
1982		74.5	70.8	78.1	75.1	71.5	78.7	70.9	66.8	74.9	69.4	65.1	73.6
1983		74.6	71.0	78.1	75.2	71.6	78.7	70.9	67.0	74.7	69.4	65.2	73.5
1984		74.7	71.1	78.2	75.3	71.8	78.7	71.1	67.2	74.9	69.5	65.3	73.6
1985		74.7	71.1	78.2	75.3	71.8	78.7	71.0	67.0	74.8	69.3	65.0	73.4
1986		74.7	71.2	78.2	75.4	71.9	78.8	70.9	66.8	74.9	69.1	64.8	73.4
1987		74.9	71.4	78.3	75.6	72.1	78.9	71.0	66.9	75.0	69.1	64.7	73.4
1988		74.9	71.4	78.3	75.6	72.2	78.9	70.8	66.7	74.8	68.9	64.4	73.2
1989		75.1	71.7	78.5	75.9	72.5	79.2	70.9	66.7	74.9	68.8	64.3	73.3
1990		75.4	71.8	78.8	76.1	72.7	79.4	71.2	67.0	75.2	69.1	64.5	73.6
1991		75.5	72.0	78.9	76.3	72.9	79.6	71.5	67.3	75.5	69.3	64.6	73.8
1992		75.8	72.3	79.1	76.5	73.2	79.8	71.8	67.7	75.7	69.6	65.0	73.9
1993		75.5	72.2	78.8	76.3	73.1	79.5	71.5	67.3	75.5	69.2	64.6	73.7
1994		75.7	72.4	79.0	76.5	73.3	79.6	71.7	67.6	75.7	69.5	64.9	73.9
1995		75.8	72.5	78.9	76.5	73.4	79.6	71.9	67.9	75.7	69.6	65.2	73.9
1996		76.1	73.1	79.1	76.8	73.9	79.7	72.6	68.9	76.1	70.2	66.1	74.2

Table 8 (cont.)

1997	76.5	73.6	79.4	77.1	74.3	79.9	73.4	69.8	76.7	71.1	67.2	74.7
1998	76.7	73.8	79.5	77.3	74.5	80.0	-----	-----	-----	71.3	67.6	74.8

\1 For 1900 to 1929 (annual data) for the death-registration area only.

\2 Includes Alaska.

\3 Denotes first year for which figures includes Alaska and Hawaii.

\4 Excludes New Jersey; State did not require reporting of race.

Source: For the whole United States, 1850-1910: Michael R. Haines [1998]. For the total and white populations for 1850 to 1900, the U.S. Model life tables are used. For the total and white populations for 1910 and for the black population for 1900 and 1910, the West Model life tables are used. For the Death Registration Area, 1900-1928 and the whole United States, 1929-1997: National Center for Health Statistics, 1900-1993: U.S. Public Health Service [1997], Table 6.5; 1994-1997: U.S. Public Health Service [1999b], Table 6. U.S. Public Health Service [2000b], Table 6.

Table 9. Age-Adjusted Death Rates. By Sex and Race. United States, 1900-1998. \1

	Total	Total	White	White	All	All	Black	Black	Amerin-	Amerin-	Asian &	Asian &
	Male	Female	Male	Female	Other	Other	Male	Female	dian	dian	Pac Isl	Pac Isl
					Male	Female			Male	Female	Male	Female
1900	1862.7	1695.2	1843.7	1675.7	2866.9	2714.4	-----	-----	-----	-----	-----	-----
1901	1820.2	1623.0	1800.2	1604.6	2838.0	2554.4	-----	-----	-----	-----	-----	-----
1902	1721.2	1513.1	1701.7	1494.4	2745.4	2452.4	-----	-----	-----	-----	-----	-----
1903	1745.3	1546.9	1724.3	1526.2	2853.2	2589.6	-----	-----	-----	-----	-----	-----
1904	1839.2	1619.8	1815.6	1597.8	3069.5	2745.4	-----	-----	-----	-----	-----	-----
1905	1779.6	1567.9	1756.7	1545.7	2970.3	2689.1	-----	-----	-----	-----	-----	-----
1906	1789.8	1541.2	1762.2	1512.7	2695.7	2548.3	-----	-----	-----	-----	-----	-----
1907	1846.0	1569.8	1818.4	1541.6	2749.6	2565.6	-----	-----	-----	-----	-----	-----
1908	1682.5	1463.1	1658.0	1438.0	2525.6	2413.5	-----	-----	-----	-----	-----	-----
1909	1636.2	1420.0	1612.3	1396.5	2480.2	2331.0	-----	-----	-----	-----	-----	-----
1910	1693.2	1458.8	1671.3	1437.2	2483.1	2324.3	-----	-----	-----	-----	-----	-----
1911	1617.9	1403.6	1590.7	1376.4	2443.0	2289.4	-----	-----	-----	-----	-----	-----
1912	1595.3	1365.4	1568.5	1339.2	2401.5	2218.9	-----	-----	-----	-----	-----	-----
1913	1611.8	1373.1	1579.7	1338.3	2336.1	2201.5	-----	-----	-----	-----	-----	-----
1914	1555.7	1333.4	1521.4	1297.7	2335.6	2188.0	-----	-----	-----	-----	-----	-----
1915	1544.0	1337.9	1508.5	1300.1	2352.9	2262.0	-----	-----	-----	-----	-----	-----
1916	1623.7	1393.7	1581.6	1344.6	2264.5	2166.9	-----	-----	-----	-----	-----	-----
1917	1650.1	1397.8	1596.1	1338.1	2414.5	2272.8	-----	-----	-----	-----	-----	-----
1918	2085.2	1727.2	2022.9	1655.7	2891.0	2711.5	-----	-----	-----	-----	-----	-----
1919	1466.1	1339.6	1415.3	1274.7	2026.2	2086.8	-----	-----	-----	-----	-----	-----
1920	1470.6	1374.9	1420.6	1313.9	2042.4	2098.4	-----	-----	-----	-----	-----	-----
1921	1317.8	1212.9	1274.8	1158.3	1803.6	1859.6	-----	-----	-----	-----	-----	-----
1922	1371.1	1238.2	1324.0	1181.3	1838.6	1838.7	-----	-----	-----	-----	-----	-----
1923	1423.1	1277.8	1367.2	1213.9	2001.1	1971.1	-----	-----	-----	-----	-----	-----
1924	1373.4	1204.8	1305.0	1132.6	2105.7	2005.7	-----	-----	-----	-----	-----	-----
1925	1383.0	1213.6	1313.6	1141.0	2143.2	2036.3	-----	-----	-----	-----	-----	-----
1926	1434.1	1255.5	1363.1	1182.4	2207.2	2077.2	-----	-----	-----	-----	-----	-----
1927	1347.9	1162.6	1281.8	1091.4	2037.7	1926.6	-----	-----	-----	-----	-----	-----
1928	1436.0	1235.0	1360.5	1154.8	2167.4	2024.8	-----	-----	-----	-----	-----	-----
1929	1423.0	1213.1	1344.8	1133.7	2193.0	2001.1	-----	-----	-----	-----	-----	-----
1930	1352.0	1136.5	1272.2	1054.9	2136.5	1949.3	-----	-----	-----	-----	-----	-----
1931	1319.3	1099.4	1242.1	1020.6	2068.0	1873.5	-----	-----	-----	-----	-----	-----
1932	1286.4	1085.1	1219.2	1016.1	1931.3	1757.1	-----	-----	-----	-----	-----	-----
1933	1272.4	1052.8	1201.7	980.2	1924.1	1738.2	-----	-----	-----	-----	-----	-----
1934	1312.4	1066.6	1236.1	992.2	2016.0	1762.3	-----	-----	-----	-----	-----	-----

Table 9 (cont.)

	Total	Total	White	White	All	All	Black	Black	Amerin-	Amerin-	Asian &	Asian &
	Male	Female	Male	Female	Other	Other	Male	Female	dian	dian	Pac Isl	Pac Isl
					Male	Female			Male	Female	Male	Female
1935	1288.6	1040.4	1228.2	980.0	1846.6	1605.1	-----	-----	-----	-----	-----	-----
1936	1352.0	1080.3	1282.7	1014.5	2003.9	1702.5	-----	-----	-----	-----	-----	-----
1937	1308.9	1032.8	1243.6	968.9	1921.7	1628.8	-----	-----	-----	-----	-----	-----
1938	1213.7	969.5	1154.5	907.4	1765.9	1551.5	-----	-----	-----	-----	-----	-----
1939	1197.7	950.6	1143.3	893.4	1706.3	1487.5	-----	-----	-----	-----	-----	-----
1940	1205.9	933.2	1148.2	873.3	1755.5	1497.2	-----	-----	-----	-----	-----	-----
1941	1169.0	888.3	1113.1	829.5	1691.5	1433.3	-----	-----	-----	-----	-----	-----
1942	1132.3	849.8	1084.1	798.1	1576.8	1326.5	-----	-----	-----	-----	-----	-----
1943	1152.5	870.6	1109.3	820.1	1548.1	1340.1	-----	-----	-----	-----	-----	-----
1944	1097.9	827.3	1058.1	779.2	1455.3	1266.1	-----	-----	-----	-----	-----	-----
1945	1073.7	795.9	1037.1	751.9	1393.4	1192.7	-----	-----	-----	-----	-----	-----
1946	1051.7	771.1	1018.0	730.6	1342.8	1134.9	-----	-----	-----	-----	-----	-----
1947	1044.9	749.4	1010.4	706.9	1352.6	1141.9	-----	-----	-----	-----	-----	-----
1948	1031.5	726.5	993.7	683.8	1377.5	1121.7	-----	-----	-----	-----	-----	-----
1949	1007.3	702.2	970.3	659.1	1343.5	1105.8	-----	-----	-----	-----	-----	-----
1950	990.4	681.1	955.4	639.9	1303.0	1058.2	-----	-----	-----	-----	-----	-----
1951	986.1	670.9	951.9	631.0	1287.2	1033.0	-----	-----	-----	-----	-----	-----
1952	974.1	656.7	938.8	617.8	1284.0	1004.0	-----	-----	-----	-----	-----	-----
1953	967.1	642.7	933.8	605.5	1256.9	972.8	-----	-----	-----	-----	-----	-----
1954	921.2	607.1	892.4	573.3	1164.5	901.8	-----	-----	-----	-----	-----	-----
1955	927.9	605.1	900.6	571.8	1154.1	893.3	-----	-----	-----	-----	-----	-----
1956	931.1	600.7	903.5	566.8	1159.1	895.7	-----	-----	-----	-----	-----	-----
1957	949.4	609.8	918.9	573.8	1203.7	920.4	-----	-----	-----	-----	-----	-----
1958	938.2	599.2	908.8	564.0	1181.1	900.4	-----	-----	-----	-----	-----	-----
1959	\2 927.6	584.7	899.4	551.4	1155.8	863.1	-----	-----	-----	-----	-----	-----
1960	\3 943.4	586.9	912.0	551.5	1202.7	886.5	1239.3	910.0	-----	-----	-----	-----
1961	919.3	569.5	890.3	535.8	1155.2	852.9	1194.5	876.0	-----	-----	-----	-----
1962	\4 934.3	576.4	903.2	541.5	1196.2	873.4	(NA)	(NA)	-----	-----	-----	-----
1963	\4 955.2	581.3	921.2	546.0	1248.6	894.2	(NA)	(NA)	-----	-----	-----	-----
1964	936.6	565.5	903.4	531.2	1203.5	845.0	1260.7	874.2	-----	-----	-----	-----
1965	942.9	561.2	909.1	527.6	1213.7	831.5	1266.8	859.9	-----	-----	-----	-----
1966	951.0	560.9	915.2	527.1	1238.9	831.8	1296.4	861.4	-----	-----	-----	-----
1967	934.7	545.1	900.4	513.3	1207.9	795.9	1265.7	827.1	-----	-----	-----	-----
1968	961.6	557.1	921.6	522.9	1286.6	831.2	1353.2	865.9	-----	-----	-----	-----
1969	945.8	543.4	906.0	510.8	1266.5	800.7	1334.6	838.1	-----	-----	-----	-----

Table 9 (cont.)

	Total	Total	White	White	All	All	Black	Black	Amerin-	Amerin-	Asian &	Asian &
	Male	Female	Male	Female	Other	Other	Male	Female	dian	dian	Pac Isl	Pac Isl
					Male	Female			Male	Female	Male	Female
1970	929.1	531.1	889.9	499.8	1241.3	776.3	1311.9	812.6	-----	-----	-----	-----
1971	911.2	519.0	874.2	489.1	1202.0	749.5	1271.6	784.8	-----	-----	-----	-----
1972	916.5	516.6	878.1	487.6	1219.1	736.8	1292.6	773.2	-----	-----	-----	-----
1973	904.6	508.1	867.3	479.3	1196.6	727.6	1269.1	765.2	-----	-----	-----	-----
1974	869.7	487.0	835.1	461.0	1138.9	680.2	1212.1	717.1	-----	-----	-----	-----
1975	836.1	462.5	803.4	439.0	1087.5	634.7	1160.8	670.4	-----	-----	-----	-----
1976	820.0	455.0	788.5	432.4	1061.0	618.2	1135.9	654.4	-----	-----	-----	-----
1977	800.4	441.8	769.9	419.6	1033.9	601.8	1109.7	639.4	-----	-----	-----	-----
1978	790.6	437.4	760.4	416.4	1018.2	585.3	1091.8	622.6	-----	-----	-----	-----
1979	767.7	423.0	737.8	402.5	991.8	566.6	1071.1	605.2	-----	-----	-----	-----
1980	772.8	430.4	741.6	409.2	1004.0	576.9	1103.9	626.8	732.5	414.1	416.6	224.6
1981	753.0	420.8	724.2	401.5	962.2	551.4	1066.6	602.6	676.7	368.5	382.3	213.9
1982	733.5	411.9	706.2	393.6	929.1	533.8	1033.4	585.7	634.6	371.6	389.2	212.8
1983	728.7	412.4	701.1	393.2	927.0	540.1	1035.5	595.3	634.0	360.1	388.6	218.0
1984	720.9	410.4	693.0	391.7	919.7	533.2	1033.1	589.9	614.2	347.3	386.0	223.0
1985	722.3	410.3	692.7	391.0	930.1	535.5	1051.1	594.5	602.6	353.3	396.9	228.5
1986	715.5	407.6	684.3	388.1	929.9	530.6	1059.6	594.0	591.6	328.4	385.3	220.3
1987	706.1	404.6	673.6	384.8	925.7	527.4	1060.8	592.4	580.8	351.3	386.2	221.3
1988	705.4	406.1	670.7	385.3	935.9	532.6	1080.1	600.9	585.7	343.2	385.4	226.5
1989	688.5	397.3	651.6	376.0	930.6	525.1	1079.5	594.0	622.8	353.4	378.9	225.2
1990	676.2	389.0	640.8	368.5	901.2	508.6	1052.7	578.8	573.1	335.1	377.8	228.9
1991	668.5	386.3	632.8	365.9	890.6	503.9	1047.0	576.1	562.6	335.9	360.2	218.3
1992	655.1	380.2	620.2	359.8	868.5	494.3	1022.9	567.6	579.6	343.1	364.1	220.5
1993	663.5	388.4	626.6	367.9	885.2	501.9	1048.8	578.7	589.6	364.5	381.4	226.7
1994	653.0	385.4	616.9	365.2	866.1	494.8	1026.9	572.5	585.9	350.8	386.5	229.3
1995	644.5	385.1	609.3	365.0	852.1	492.8	1014.4	571.8	580.4	368.0	384.4	231.4
1996	623.4	380.8	591.2	361.7	811.0	481.2	965.0	560.4	555.9	367.7	355.8	214.4
1997	602.5	375.7	573.5	358.0	769.3	468.1	910.9	545.4	584.1	359.9	350.3	214.7
1998	589.4	372.5	562.4	355.2	-----	-----	884.5	540.9	564.9	363.3	336.2	207.4

\1 The overall death rate and the age-adjusted death rate are per 100,000 population. Prior to 1933, this is for the Death Registration States only.

\2 Includes Alaska.

\3 Denotes first year for which figures includes Alaska and Hawaii.

\4 Excludes New Jersey for rates by race. That state did not require reporting of race.

Source: Total deaths: 1900-1992, U.S. Public Health Service, National Center for Health Statistics, *Vital Statistics of the United States, 1992*, vol. II, part A "Mortality", Tables 1-2 and 1-3. 1993-1997 and data for the Amerindian and Asian and Pacific Islander populations 1980-1997: *National Vital Statistics Report, Vol. 47, No. 19, "Deaths: Final Data for 1997,"* Table 1. Deaths by age, sex, and race are taken from the various annual issues of the *Mortality Statistics of the United States* (1900-1936) and the *Vital Statistics of the United States* (1937-1992). Deaths by age, sex, and race for 1993-1997 come from the file "GMWK291A" found on the NCHS website (www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm) Population: Death Registration Area, 1900-1932, and United States, 1933-1939, Forrest Linder and Robert D. Grove, *Vital Statistics Rates in the United States, 1900-1940*, pp. 997-1034 and unpublished tables made available by the Mortality Statistics Branch of the National Center for Health Statistics. United States, 1940-1997: Machine readable versions of the data were obtained from U.S. Bureau of the Census, 1900-1979, PE-11 (POP 3987); 1980-1990, PE-10 (POP 3988-3990); 1990-1997, PE-61 (POP 3991-3998). See Frederick W. Hollmann, Lisa B. Kuzmekus, R. Colby Perkins, and Elizabeth A. Weber, "U.S. Population by Age, Sex, Race, and Hispanic Origin: 1990 to 1997," U.S. Bureau of the Census, PPL-91 and appendices. The population by race for 1962 and 1963 excludes New Jersey, which did

not report deaths by race in those years. The estimated population of the United States for whites and all other races was estimated and reported in *Vital Statistics of the United States, 1962*, Vol. II, Part A, "Mortality," "Technical Appendix" and *Vital Statistics of the United States, 1963*, Vol. II, Part A, "Mortality," "Technical Appendix." Age-adjusted death rates for the Amerindian and Asian and Pacific Islander populations 1980-1997 are taken from *National Vital Statistics Report*, Vol. 47, No. 19, "Deaths: Final Data for 1997," Table 1. The other overall and age-adjusted rates will differ from the official NCHS published rates because of the use of slightly different base populations here. Overall and age-adjusted death rates for 1998 are taken from *National Vital Statistics Report*, Vol. 48, No. 11, "Deaths: Final Data for 1998," Table 1. The rates for 1998 do not use the same base population estimates as for the period 1940-1997. The same standard is used for the age adjustment.

Table 10. Ratio of Infant and Maternal Mortality to White Mortality.
By Race. United States, 1850 to 1998.

Year	RATIO TO WHITE									
	Neonatal Mortality Rate			Infant Mortality Rate			Maternal Mortality Rate			
	All	Other	Black	All	Other	Black	Hispanic	All	Other	Black
1850						1.568				
1900						1.422				
1910						1.478				
1915				1.838				1.757		
1916	1.584		1.584	1.868		1.862		1.939		
1917	1.362			1.665				1.862		
1918	1.397		1.406	1.655		1.668		1.567		
1919	1.370		1.454	1.572		1.618		1.787		
1920	1.361		1.399	1.604		1.652		1.686		
1921	1.300		1.326	1.497		1.527		1.672		
1922	1.286		1.307	1.503		1.525		1.701		
1923	1.293		1.332	1.597		1.631		1.749		
1924	1.369		1.385	1.690		1.708		1.942		
1925	1.345		1.367	1.622		1.640		1.927		
1926	1.294		1.302	1.597		1.601		1.730		
1927	1.317		1.323	1.652		1.649		1.907		
1928	1.367		1.375	1.659		1.655		1.930		
1929	1.329		1.334	1.617		1.606		1.900		
1930	1.386		1.392	1.662		1.656		1.928		
1931	1.361		1.367	1.622		1.615		1.854		
1932	1.366		1.388	1.617		1.578		1.680		
1933	1.427		1.424	1.729		1.617		1.935	1.802	
1934	1.402		1.424	1.732		1.670		1.879	1.741	
1935	1.377		1.377	1.603		1.578		1.782	1.799	
1936	1.416		1.413	1.656		1.628		1.900	1.917	
1937	1.418		1.421	1.654		1.630		1.969	1.977	
1938	1.382		1.385	1.679		1.654		2.252	2.283	
1939	1.424		1.428	1.675		1.652		2.160	2.186	
1940	1.460		1.467	1.708		1.688		2.419	2.444	
1941	1.494		1.506	1.816		1.799		2.549	2.595	
1942	1.412		1.424	1.732		1.721		2.453	2.476	
1943	1.388		1.397	1.667		1.640		2.422	2.436	
1944	1.377		1.386	1.634		1.607		2.672	2.713	
1945	1.373		1.382	1.601		1.579		2.643	2.654	
1946	1.364		1.372	1.557		1.535		2.746	2.782	
1947	1.429		1.433	1.611		1.585		3.081	3.096	
1948	1.373		1.382	1.555		1.528		3.367	3.396	
1949	1.409		1.419	1.637		1.619		3.448	3.489	
1950	1.418		1.433	1.660		1.638		3.627	3.650	
1951	1.444		1.460	1.736		1.717		3.667	3.719	
1952	1.514		1.541	1.843		1.839		3.847	3.869	
1953	1.497		1.519	1.788		1.780		3.766	3.816	
1954	1.517		1.545	1.795		1.795		3.866	3.922	
1955	1.537		1.571	1.814		1.826		3.973	4.095	
1956	1.543		1.577	1.815		1.828		3.857	3.983	
1957	1.589		1.629	1.876		1.897		4.302	4.422	
1958	1.629		1.669	1.920		1.945		3.871	3.973	

Table 10 (cont.)

Year	RATIO TO WHITE								
	Neonatal Mortality Rate		Infant Mortality Rate		Hispanic	Maternal Mortality Rate			
	All	Other	Black	All		Other	Black	Black	
1959	1.583		1.623	1.897		1.931	3.957	4.070	
1960	1.564		1.616	1.886		1.934	3.765	3.985	
1961	1.550		1.604	1.817		1.866	4.068	4.233	
1962	1.544		1.604	1.857		1.910	4.029	4.176	
1963	1.563		1.617	1.869		1.928	4.038	4.213	
1964	1.636		1.698	1.903		1.958	4.031	4.206	
1965	1.578		1.646	1.874		1.940	3.986	4.205	
1966	1.590		1.660	1.883		1.951	3.584	3.673	
1967	1.587		1.667	1.822		1.904	3.564	3.723	
1968	1.565		1.653	1.797		1.885	3.831	3.970	
1969	1.585		1.683	1.788		1.891	3.594	3.839	
1970	1.551		1.638	1.736		1.831	3.882	4.153	
1971	1.508		1.615	1.667		1.772	3.485	3.715	
1972	1.548		1.669	1.689		1.805	2.692	2.846	
1973	1.517		1.636	1.658		1.778	3.234	3.589	
1974	1.550		1.685	1.682		1.811	3.510	3.830	
1975	1.615		1.760	1.704		1.845	3.187	3.440	
1976	1.680		1.845	1.767		1.917	2.944	3.278	
1977	1.690		1.851	1.764		1.919	3.377	3.792	
1978	1.667		1.845	1.758		1.925	3.594	3.906	
1979	1.633		1.810	1.737		1.912	3.547	3.922	
1980	1.784		1.973	1.853		2.037	2.955	3.209	
1981	1.786		2.000	1.825		2.019	2.746	3.238	
1982	1.791		2.030	1.848		2.071	2.828	2.793	
1983	1.810		2.048	1.854		2.083	2.763	3.102	
1984	1.787		2.016	1.839		2.065	3.130	3.648	
1985	1.833		2.100	1.826		2.065	3.481	3.923	
1986	1.895		2.158	1.898		2.148	3.265	3.837	
1987	1.981		2.278	1.941		2.212	2.353	2.784	
1988	1.943		2.283	1.917		2.202	2.949	3.305	
1989	2.020		2.333	2.012	2.296	1.210	2.702	3.070	
1990	2.063		2.417	2.039	2.368	1.197	3.236	3.836	
1991	2.111		2.489	2.068	2.411	1.219	2.458	2.915	
1992	2.140		2.512	2.087	2.435	1.232	3.294	3.824	
1993	2.093		2.488	2.074	2.426	1.235	3.667	4.271	
1994	2.048		2.429	2.045	2.394	1.212	2.613	2.984	
1995	1.976		2.390	2.000	2.397	1.206	4.405	5.262	
1996	1.975		2.400	2.000	2.410	1.197	3.314	3.980	
1997	1.925		2.350	1.967	2.367	1.200	3.155	3.586	
1998	1.975		2.375	1.983	2.383	1.200	2.922	3.353	

Source: Table 7.

Table 11. Ratio of White to Nonwhite and Black Expectations of Life at Birth. Differences of White and Nonwhite and Black Expectations of Life at Birth. By Sex. United States, 1900 to 1998.

Year	EXPECTATION OF LIFE AT BIRTH. RATIO OF WHITE TO:				DIFFERENCE IN YEARS OF EXPECTATION OF LIFE AT BIRTH			
	All Other		Black		All Other		Black	
	Male	Female	Male	Female	Male	Female	Male	Female
1900			0.833	0.854			8.1	7.4
1910			0.843	0.852			8.3	8.3
1900	0.697	0.688			14.1	15.2		
1901	0.671	0.692			15.8	15.7		
1902	0.655	0.677			17.3	17.4		
1903	0.640	0.659			17.8	17.9		
1904	0.624	0.661			17.5	16.8		
1905	0.622	0.654			18.0	17.5		
1906	0.672	0.660			15.5	17.5		
1907	0.676	0.675			14.9	16.4		
1908	0.677	0.675			16.1	17.3		
1909	0.672	0.688			16.7	16.9		
1910	0.695	0.721			14.8	14.5		
1911	0.674	0.696			16.7	16.7		
1912	0.692	0.712			16.0	16.2		
1913	0.722	0.724			14.1	15.4		
1914	0.704	0.710			15.6	16.7		
1915	0.706	0.704			15.6	17.0		
1916	0.789	0.781			10.6	12.1		
1917	0.751	0.738			12.3	14.5		
1918	0.806	0.752			7.2	10.7		
1919	0.817	0.774			10.0	13.0		
1920	0.836	0.813			8.9	10.4		
1921	0.849	0.816			9.2	11.6		
1922	0.876	0.856			7.3	8.9		
1923	0.835	0.820			9.4	10.7		
1924	0.761	0.754			14.3	15.6		
1925	0.757	0.748			14.4	15.7		
1926	0.767	0.765			13.3	14.0		
1927	0.787	0.765			12.9	15.0		
1928	0.800	0.783			11.4	13.0		
1929	0.799	0.793			11.5	12.5		
1930	0.792	0.775			12.4	14.3		
1931	0.814	0.796			11.3	13.2		
1932	0.852	0.847			9.2	9.9		
1933	0.853	0.845			9.2	10.3		
1934	0.992	0.831			0.4	10.9		
1935	0.841	0.849			9.7	9.8		
1936	0.810	0.830			11.0	10.5		
1937	0.815	0.823			11.0	11.3		
1938	0.818	0.813			11.5	12.5		
1939	0.840	0.841			10.1	10.6		
1940	0.829	0.824			10.6	11.7		
1941	0.815	0.807			11.9	13.2		
1942	0.841	0.839			10.5	11.2		
1943	0.877	0.854			7.8	9.6		

Table 11 (cont.)

Year	EXPECTATION OF LIFE AT BIRTH. RATIO OF WHITE TO:				DIFFERENCE IN YEARS OF EXPECTATION OF LIFE AT BIRTH			
	All Other		Black		All Other		Black	
	Male	Female	Male	Female	Male	Female	Male	Female
1944	0.865	0.844			8.7	10.7		
1945	0.871	0.858			8.3	9.9		
1946	0.883	0.868			7.6	9.3		
1947	0.888	0.878			7.3	8.6		
1948	0.887	0.880			7.4	8.5		
1949	0.890	0.872			7.3	9.2		
1950	0.889	0.871			7.4	9.3		
1951	0.890	0.876			7.3	9.0		
1952	0.887	0.879			7.5	8.8		
1953	0.894	0.884			7.1	8.5		
1954	0.905	0.894			6.4	7.8		
1955	0.911	0.897			6.0	7.6		
1956	0.908	0.894			6.2	7.8		
1957	0.897	0.889			7.0	8.2		
1958	0.905	0.890			6.4	8.1		
1959	0.908	0.896			6.2	7.7		
1960	0.907	0.895			6.3	7.8		
1961	0.914	0.899			5.8	7.5		
1962	0.910	0.898			6.1	7.6		
1963	0.905	0.895			6.4	7.8		
1964	0.905	0.901			6.4	7.4		
1965	0.905	0.904			6.4	7.2		
1966	0.902	0.904			6.6	7.2		
1967	0.906	0.911			6.4	6.7		
1968	0.895	0.905			7.1	7.1		
1969	0.895	0.911			7.1	6.7		
1970	0.901	0.918	0.882	0.903	6.7	6.2	8.0	7.3
1971	0.902	0.921	0.886	0.909	6.7	6.0	7.8	6.9
1972	0.900	0.924	0.884	0.910	6.8	5.8	7.9	6.8
1973	0.905	0.924	0.889	0.911	6.5	5.8	7.6	6.8
1974	0.912	0.930	0.894	0.917	6.1	5.4	7.3	6.4
1975	0.917	0.937	0.898	0.922	5.8	4.9	7.1	6.0
1976	0.918	0.938	0.900	0.924	5.7	4.8	7.0	5.9
1977	0.922	0.940	0.903	0.924	5.5	4.7	6.8	5.9
1978	0.923	0.942	0.905	0.928	5.4	4.5	6.7	5.6
1979	0.924	0.945	0.904	0.930	5.4	4.3	6.8	5.5
1980	0.924	0.942	0.902	0.928	5.4	4.5	6.9	5.6
1981	0.931	0.949	0.907	0.934	4.9	4.0	6.6	5.2
1982	0.934	0.952	0.910	0.935	4.7	3.8	6.4	5.1
1983	0.936	0.949	0.911	0.934	4.6	4.0	6.4	5.2
1984	0.936	0.952	0.909	0.935	4.6	3.8	6.5	5.1
1985	0.933	0.950	0.905	0.933	4.8	3.9	6.8	5.3
1986	0.929	0.951	0.901	0.931	5.1	3.9	7.1	5.4
1987	0.928	0.951	0.897	0.930	5.2	3.9	7.4	5.5
1988	0.924	0.948	0.892	0.928	5.5	4.1	7.8	5.7
1989	0.920	0.946	0.887	0.926	5.8	4.3	8.2	5.9
1990	0.922	0.947	0.887	0.927	5.7	4.2	8.2	5.8
1991	0.923	0.948	0.886	0.927	5.6	4.1	8.3	5.8
1992	0.925	0.949	0.888	0.926	5.5	4.1	8.2	5.9

Table 11 (cont.)

Year	EXPECTATION OF LIFE AT BIRTH. RATIO OF WHITE TO:				DIFFERENCE IN YEARS OF EXPECTATION OF LIFE AT BIRTH			
	All Other		Black		All Other		Black	
	Male	Female	Male	Female	Male	Female	Male	Female
1993	0.921	0.950	0.884	0.927	5.8	4.0	8.5	5.8
1994	0.922	0.951	0.885	0.928	5.7	3.9	8.4	5.7
1995	0.925	0.951	0.888	0.928	5.5	3.9	8.2	5.7
1996	0.932	0.955	0.894	0.931	5.0	3.6	7.8	5.5
1997	0.939	0.960	0.904	0.935	4.5	3.2	7.1	5.2
1998			0.907	0.935			6.9	5.2

Source: Table 8.

Table 12 (cont.)

	All Others Both Sexes	All Others Male	All Others Female	Black Both Sexes	Black Male	Black Female	Amer- indian Both Sexes	Amer- indian Male	Amer- indian Female	Asian & Pac Isl Both Sexes	Asian & Pac Isl Male	Asian & Pac Isl Female
1933	1.675	1.761	1.773									
1934	1.693	1.807	1.776									
1935	1.561	1.671	1.638									
1936	1.612	1.743	1.678									
1937	1.604	1.736	1.681									
1938	1.608	1.712	1.710									
1939	1.567	1.675	1.665									
1940	1.609	1.737	1.714									
1941	1.609	1.742	1.728									
1942	1.543	1.676	1.662									
1943	1.498	1.606	1.634									
1944	1.483	1.586	1.625									
1945	1.448	1.560	1.586									
1946	1.420	1.539	1.553									
1947	1.456	1.579	1.615									
1948	1.494	1.648	1.640									
1949	1.508	1.655	1.678									
1950	1.485	1.641	1.654									
1951	1.471	1.635	1.637									
1952	1.475	1.659	1.625									
1953	1.454	1.643	1.606									
1954	1.416	1.600	1.573									
1955	1.397	1.580	1.562									
1956	1.405	1.591	1.580									
1957	1.431	1.628	1.604									
1958	1.422	1.621	1.597									
1959	1.400	1.612	1.565									
1960	1.437	1.665	1.607	1.476	1.359	1.650						
1961	1.419	1.643	1.592	1.459	1.342	1.635						
1962	1.443	1.681	1.613									
1963	1.472	1.730	1.638									
1964	1.440	1.708	1.591	1.497	1.396	1.646						
1965	1.436	1.724	1.576	1.489	1.393	1.630						
1966	1.448	1.755	1.578	1.505	1.417	1.634						

Table 12 (cont.)

	All Others Both Sexes	All Others Male	All Others Female	Black Both Sexes	Black Male	Black Female	Amer- indian Both Sexes	Amer- indian Male	Amer- indian Female	Asian & Pac Isl Both Sexes	Asian & Pac Isl Male	Asian & Pac Isl Female
1967	1.430	1.748	1.550	1.489	1.406	1.611						
1968	1.479	1.825	1.590	1.545	1.468	1.656						
1969	1.471	1.833	1.568	1.542	1.473	1.641						
1970	1.464	1.834	1.553	1.537	1.474	1.626						
1971	1.444	1.813	1.532	1.517	1.455	1.604						
1972	1.443	1.837	1.511	1.520	1.472	1.586						
1973	1.440	1.831	1.518	1.518	1.463	1.597						
1974	1.413	1.812	1.476	1.494	1.451	1.555						
1975	1.395	1.807	1.446	1.479	1.445	1.527						
1976	1.384	1.795	1.430	1.471	1.440	1.513						
1977	1.383	1.797	1.434	1.475	1.441	1.524						
1978	1.369	1.789	1.406	1.460	1.436	1.495						
1979	1.371	1.798	1.408	1.471	1.452	1.504						
1980	1.376	1.803	1.410	1.502	1.489	1.532	1.013	0.988	1.012	0.567	0.562	0.549
1981	1.346	1.767	1.373	1.480	1.473	1.501	0.944	0.934	0.918	0.538	0.528	0.533
1982	1.331	1.746	1.356	1.469	1.463	1.488	0.929	0.899	0.944	0.552	0.551	0.541
1983	1.342	1.752	1.373	1.487	1.477	1.514	0.918	0.904	0.916	0.564	0.554	0.554
1984	1.339	1.752	1.361	1.490	1.491	1.506	0.908	0.886	0.887	0.570	0.557	0.569
1985	1.350	1.773	1.369	1.511	1.517	1.520	0.892	0.870	0.904	0.583	0.573	0.584
1986	1.357	1.789	1.367	1.531	1.548	1.531	0.868	0.865	0.846	0.571	0.563	0.568
1987	1.367	1.803	1.371	1.549	1.575	1.540	0.890	0.862	0.913	0.578	0.573	0.575
1988	1.384	1.826	1.382	1.578	1.610	1.560	0.890	0.873	0.891	0.586	0.575	0.588
1989	1.408	1.863	1.397	1.612	1.657	1.580	0.953	0.956	0.940	0.592	0.582	0.599
1990	1.388	1.837	1.380	1.598	1.643	1.570	0.907	0.894	0.909	0.607	0.590	0.621
1991	1.387	1.833	1.377	1.607	1.654	1.574	0.909	0.889	0.918	0.583	0.569	0.597
1992	1.381	1.820	1.374	1.604	1.649	1.578	0.949	0.935	0.954	0.599	0.587	0.613
1993	1.384	1.825	1.364	1.617	1.674	1.573	0.967	0.941	0.991	0.610	0.609	0.616
1994	1.374	1.806	1.355	1.608	1.665	1.568	0.960	0.950	0.961	0.624	0.627	0.628
1995	1.367	1.788	1.350	1.606	1.665	1.567	0.983	0.952	1.008	0.627	0.631	0.634
1996	1.343	1.738	1.330	1.580	1.632	1.549	0.979	0.940	1.016	0.595	0.602	0.593
1997	1.316	1.686	1.308	1.544	1.588	1.523	1.019	1.018	1.005	0.602	0.611	0.600
1998				1.534	1.573	1.523	1.017	1.004	1.023	0.587	0.598	0.584

Source: Table 9.

Table 13. Nuptiality Measures by Race, Nativity, & Ethnicity. United States, 1880-1990.

GROUP/YEAR	SMAM \1		% MARRIED 20-24		% SINGLE 45-54		Im \2	Im*\2	SEX RATIO AGE 20-29
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE			
TOTAL									
1880	26.80	23.08	22.8	50.7	7.8	6.7	0.588	0.641	103.9
1890	27.57	23.61	18.9	46.7	9.1	7.0	0.573	0.624	103.2
1900	27.43	23.65	21.3	46.6	10.4	7.8	0.574	0.615	101.7
1910	26.73	23.14	24.0	49.7	11.1	8.5	0.596	0.631	104.9
1920	25.92	22.50	28.3	52.3	12.0	9.6	0.622	0.643	97.5
1930	25.56	22.32	28.1	51.6	11.4	9.1	0.628	0.651	97.0
1940	25.60	22.74	27.4	51.3	11.1	8.7	0.627	0.645	96.5
1950	23.79	20.83	39.4	65.6	8.5	7.8	0.727	0.721	94.3
1960	23.38	20.33	45.9	69.5	7.4	7.0	0.740	0.746	95.8
1970	23.51	21.46	42.9	60.5	6.4	5.5	0.665	0.706	94.5
1980	25.20	23.32	29.5	44.4	6.0	4.6	0.579	0.608	98.3
1990	27.60	25.36	19.6	32.1	6.8	5.6	0.535	0.525	102.1
WHITE									
1880	27.00	23.27	20.6	48.9	8.1	7.0	0.585	0.639	104.7
1890	27.77	23.81	17.0	45.2	9.2	7.3	0.572	0.622	104.1
1900	27.64	23.85	19.6	45.2	10.4	8.1	0.574	0.613	102.3
1910	26.93	23.35	22.4	48.4	11.4	8.9	0.594	0.629	106.5
1920	26.06	22.70	26.5	50.8	12.4	10.0	0.620	0.640	98.8
1930	26.67	22.51	26.5	50.2	11.7	9.6	0.627	0.650	97.7
1940	25.70	22.86	26.1	50.3	11.1	9.0	0.626	0.645	97.7
1950	23.78	20.80	39.4	65.6	8.6	8.2	0.731	0.723	95.3
1960	23.18	20.18	46.3	70.5	7.2	7.2	0.749	0.755	96.9
1970	23.39	21.27	43.5	61.7	6.1	5.4	0.678	0.718	95.8
1980	25.00	22.95	30.6	46.7	5.6	4.2	0.602	0.628	100.0
1990	27.26	24.84	20.4	34.1	6.1	4.6	0.566	0.550	102.5
NATIVE-BORN WHITE									
1880	26.44	23.28	19.2	45.4	6.8	8.2	0.553	0.615	103.1
1890	27.65	23.71	17.5	45.4	8.4	8.2	0.554	0.619	100.8
1900	27.61	23.88	20.0	45.1	9.9	8.9	0.555	0.606	101.1
1910	26.75	23.41	23.3	47.3	11.3	9.8	0.571	0.619	99.1
1920	25.86	22.82	26.9	49.4	12.4	11.1	0.594	0.628	96.9
1930	25.46	22.40	27.1	50.3	11.5	10.5	0.610	0.645	97.6
NATIVE WHITE-NATIVE PARENTAGE									
1880	25.96	23.09	22.2	48.2	6.8	7.8	0.585	0.625	103.0
1890	27.14	23.02	20.2	50.3	8.0	8.1	0.593	0.643	102.4
1900	26.95	23.07	23.1	49.8	9.0	8.5	0.585	0.635	102.8
1910	26.19	22.75	26.5	51.8	9.8	8.5	0.604	0.650	100.6
1920	25.44	22.43	30.4	53.4	10.6	9.2	0.620	0.653	97.7
1930	25.07	22.10	30.9	54.4	9.9	8.8	0.633	0.667	98.0
NATIVE WHITE-FOREIGN/MIXED PARENTAGE									
1880	28.48	23.44	10.9	35.8	6.1	11.1	0.424	0.581	98.7
1890	28.81	25.40	10.8	33.9	11.8	8.7	0.451	0.557	97.1
1900	28.91	25.57	12.7	34.3	14.0	10.7	0.485	0.540	97.2
1910	28.23	25.02	15.2	36.2	15.1	13.2	0.493	0.546	95.4
1920	27.02	23.93	18.0	39.6	17.1	15.3	0.530	0.565	94.9
1930	26.52	23.26	17.2	40.3	16.1	14.8	0.551	0.591	96.5

Table 13 (cont.)

GROUP/YEAR	SMAM \1		% MARRIED 20-24		% SINGLE 45-54		Im \2	Im*\2	SEX RATIO AGE 20-29
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE			
FOREIGN-BORN WHITE									
1880	28.18	23.48	14.7	43.7	7.3	4.7	0.686	0.638	112.7
1890	28.31	23.94	14.9	44.6	10.6	5.3	0.650	0.631	118.4
1900	27.89	23.57	17.0	45.8	11.5	6.0	0.669	0.640	108.8
1910	27.51	22.83	19.0	54.2	11.6	6.1	0.702	0.670	141.9
1920	26.87	21.64	23.7	61.6	12.2	6.8	0.762	0.707	110.3
1930	27.19	22.91	18.1	47.4	12.1	6.3	0.758	0.667	98.3
NONWHITE									
1880	24.85	20.89	35.2	59.4	6.4	7.9	0.597	0.637	98.5
1890	25.99	22.24	32.6	57.3	8.7	4.8	0.579	0.635	97.2
1900	26.01	22.40	32.5	55.0	10.1	5.0	0.568	0.614	97.8
1910	25.20	21.81	36.7	59.2	8.8	4.6	0.608	0.642	93.2
1920	24.82	21.32	42.1	63.1	8.6	4.8	0.639	0.664	87.9
1930	24.98	21.37	39.6	60.7	9.1	4.5	0.631	0.653	93.0
1940	24.84	22.10	38.7	59.6	10.8	5.2	0.631	0.647	87.3
1950	23.86	21.21	43.9	65.7	7.7	4.6	0.698	0.702	86.8
1960	24.16	21.49	42.4	62.3	8.7	6.0	0.675	0.686	88.2
1970	24.36	22.67	38.7	52.4	9.0	6.6	0.582	0.628	85.8
1980	26.11	24.92	24.4	34.8	9.0	7.2	0.475	0.515	90.5
1990	28.81	27.12	17.0	25.6	10.8	10.4	0.426	0.434	100.6
BLACK									
1880	24.15	20.85	36.2	59.7	5.5	7.9	0.597	0.637	92.8
1890	25.54	22.25	33.4	57.3	6.4	4.8	0.579	0.635	93.1
1900	25.77	22.48	33.6	54.6	7.2	5.1	0.563	0.610	92.9
1910	25.14	21.84	37.8	59.0	6.8	4.7	0.606	0.640	89.7
1920	24.72	21.36	43.0	62.8	7.8	4.9	0.636	0.661	86.6
1930	24.54	21.40	42.8	60.4	8.1	4.6	0.625	0.646	86.3
1940	-----	-----	-----	-----	-----	-----	-----	-----	-----
1950	-----	-----	-----	-----	-----	-----	-----	-----	-----
1960	-----	-----	-----	-----	-----	-----	-----	-----	-----
1970	24.19	22.70	40.3	52.8	8.9	6.7	0.574	0.622	84.9
1980	26.63	25.84	20.9	29.4	9.8	7.9	0.421	0.466	87.0
1990	29.73	28.72	13.9	18.8	13.1	12.3	0.351	0.358	92.8
SPANISH ORIGIN									
1970	23.09	21.22	48.6	63.3	6.2	6.1	0.669	0.705	90.1
1980	24.56	22.47	36.1	51.2	6.5	6.4	0.592	0.628	100.3
1990	27.02	24.33	24.8	40.8	8.6	7.8	0.537	0.550	117.7

\1 SMAM is the singulate mean age at first marriage.

\2 Im is Coale's index of proportions married. Im* is the index of proportions married standardized for age structure.

Source: 1880: IPUMS, 1880 U.S. Census. 1890-1990: Various volumes, published U.S. Census. SMAM calculated by the procedure of Hajnal [1953]. Im and Im*: Coale and Watkins [1986], Appendix B.

Table 14. Ratio of Nuptiality Measures to those for Whites. By Race & Ethnicity. United States, 1880-1990.

GROUP/YEAR	SMAM		% MARRIED 20-24		% SINGLE 45-54		Im	Im*	SEX RATIO AGE 20-29
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE			
NONWHITE									
1880	0.920	0.898	1.709	1.215	0.790	1.129	1.021	0.997	0.941
1890	0.936	0.934	1.918	1.268	0.946	0.658	1.012	1.021	0.934
1900	0.941	0.939	1.658	1.217	0.971	0.617	0.990	1.002	0.956
1910	0.936	0.934	1.638	1.223	0.772	0.517	1.024	1.021	0.875
1920	0.952	0.939	1.589	1.242	0.694	0.480	1.031	1.038	0.890
1930	0.937	0.949	1.494	1.209	0.778	0.469	1.006	1.005	0.952
1940	0.967	0.967	1.483	1.185	0.973	0.578	1.008	1.003	0.894
1950	1.003	1.020	1.114	1.002	0.895	0.561	0.955	0.971	0.911
1960	1.042	1.065	0.916	0.884	1.208	0.833	0.901	0.909	0.910
1970	1.041	1.066	0.890	0.849	1.475	1.222	0.858	0.875	0.896
1980	1.044	1.086	0.797	0.745	1.607	1.714	0.789	0.820	0.905
1990	1.057	1.092	0.833	0.751	1.770	2.261	0.753	0.789	0.981
BLACK									
1880	0.894	0.896	1.757	1.221	0.679	1.129	1.021	0.997	0.886
1890	0.920	0.934	1.965	1.268	0.696	0.658	1.012	1.021	0.894
1900	0.932	0.943	1.714	1.208	0.692	0.630	0.981	0.995	0.908
1910	0.934	0.935	1.688	1.219	0.596	0.528	1.020	1.017	0.842
1920	0.949	0.941	1.623	1.236	0.629	0.490	1.026	1.033	0.877
1930	0.920	0.951	1.615	1.203	0.692	0.479	0.997	0.994	0.883
1940	-----	-----	-----	-----	-----	-----	-----	-----	-----
1950	-----	-----	-----	-----	-----	-----	-----	-----	-----
1960	-----	-----	-----	-----	-----	-----	-----	-----	-----
1970	1.034	1.067	0.926	0.856	1.459	1.241	0.847	0.866	0.886
1980	1.065	1.126	0.683	0.630	1.750	1.881	0.699	0.742	0.870
1990	1.091	1.156	0.681	0.551	2.148	2.674	0.620	0.651	0.905
SPANISH ORIGIN									
1970	0.987	0.998	1.117	1.026	1.016	1.130	0.987	0.982	0.941
1980	0.982	0.979	1.180	1.096	1.161	1.524	0.983	1.000	1.003
1990	0.991	0.979	1.216	1.196	1.410	1.696	0.949	1.000	1.148

Source: Table 13.

Appendix Table A-1. Census Race Categories, 1790-1840.

Year	Race Category
1790	Free white males 16 years and upward, including heads of families under 16 years Free white females, including heads of families All other free persons Slaves
1800-1810	Free white males, divided into 5 age groups Free white females, divided into 5 age groups All other free persons, except Indians not taxed Slaves
1820	Free white males, divided into 6 age groups Free white females, divided into 5 age groups Slave males, divided into 4 age groups Slave females, divided into 4 age groups Free colored males, divided into 4 age groups Free colored females, divided into 4 age groups All other persons, except Indians not taxed
1830-1840	Free white males, divided into 13 age groups Free white females, divided into 13 age groups Slave males, divided into 6 age groups Slave females, divided into 6 age groups Free colored males, divided into 6 age groups Free colored females, divided into 6 age groups

Source: Adapted from Anderson and Fienberg [1999], Table 8.1. Originally from Wright and Hunt [1900].

Appendix Table A-2. Census Race Categories, 1850-1990.(a)

Year		Census Race Category	
1850(b)		B	M
1850(b)		B	M (Ind.)(c)
1870	W	B	M, C, I
1880	W	B	M, C, I
1890	white	black	mulatto, quadroon, octoroon, Chinese, Japanese, Indian
1900	W	B	Ch, Jp, In
1910	W	B	Mu, Ch, Jp, In, Ot (+ write in)
1920	W	B	Mu, In, Ch, Jp, Fil, Hin, Kor, (Other races, spell out in full)
1930	W	Neg	Mex, In, Ch, Jp, Fil, Hin, Kor, (Other races, spell out in full)
1940	W	Neg	In, Ch, Jp, Fil, Hin, Kor, (Other races, spell out in full)
1950	W	Neg	Ind, Jap, Chi, Fil, (Other race--spell out)
1960	White	Negro	American Indian, Japanese, Chinese, Filipino, Hawaiian, Part Hawaiian, Aleut, Eskimo, (etc)
1970	White	Negro or Black	Indian (Amer), Japanese, Chinese, Filipino, Hawaiian, Korean, Other (print race)
1980	White	Negro or Black	Japanese, Chinese, Filipino, Korean, Vietnamese, Indian (Amer), Asian Indian, Hawaiian, Guamanian, Samoan, Eskimo, Aleut, Other (specify)
1990	White	Negro or Black	Indian (Amer), Eskimo, Aleut, Chinese, Filipino, Hawaiian, Korean, Vietnamese, Japanese, Asian Indian, Samoan, Guamanian, Other API, Other race

(a) The categories are given in the order in which they appeared on the schedule or in the enumerator's instructions. The abbreviations are those that were to be used on the schedules. W= white; B=black; M=Mulatto; Neg=Negro; I, In, Ind., or Indian (Amer)=Indian (Amerindian); C, Ch, or Chi=Chinese; Jp or Jap=Japanese; Ot=other; Fil=Filipino; Hin=Hindu (South Asian Indian); Kor=Korean; Mex=Mexican; API= Asian or Pacific Islander.

(b) In 1850 and 1860, on the schedule for free persons, the instructions to the enumerators were "in all cases where the person is White leave the space blank in the column marked 'Color'." For the slave schedule, the listed categories were "B" and "M".

(c) Although a category for Amerindian people was not listed on the census form, the enumerator's instructions for 1860 were: "5. Indians - Indians not taxed were not to be enumerated. The families of Indians who have renounced tribal rule, and who under State or Territorial laws exercise the rights of citizens, are to be enumerated. In all such cases write "Ind." opposite their names, in column 6, under the heading "Color"....9. Color. Under heading 6, entitled "Color," in all cases where the person is white leave the space blank; in all cases where the person is black with admixture insert the letter "B"; if a mulatto, or of mixed blood, write "M"; if an Indian, write "Ind." It is very desirable to have these instructions carefully observed."

Source: Adapted from Anderson and Fienberg [1999], Table 8.2. Originally from Wright and Hunt [1900] and U.S. Bureau of the Census [1979, 1993].

Appendix Table A-3. Census Questions on Hispanic or Spanish Origin or Descent. 1970-1990.(a)

Year	Questions
1970	Is this person's origin or descent? Mexican Puerto Rican Cuban Central American Other Spanish?(b)
1980	Is this person of Spanish/Hispanic origin or descent? No, not Spanish/Hispanic Yes, Mexican, Mexican American, Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic
1990	Is this person of Spanish/Hispanic origin? No, not Spanish/Hispanic Yes, Mexican, Mexican American, Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic, print one group..

(a) The census asked a specific question on "Spanish origin or descent" in 1970 on the 5% sample as a second part of a sample question on birthplace. In 1980, the question on "Spanish/Hispanic Origin or Descent" appeared on the short form (100% sample). Before 1970, members of the Hispanic origin population could be identified by a combination of questions on place of birth, place of birth of parents, and mother tongue. In the 1930 census only, the category "Mexican" was a separate category for answers to the question on "Color or Race." See Gratton and Gutmann [2000].

(b) This question appeared in the 1970 5% sample long form.

Source: Adapted from Anderson and Fienberg [1999], Table 8.4.

Figure 1
TFR in Relation to Whites
U.S. 1960-1998.

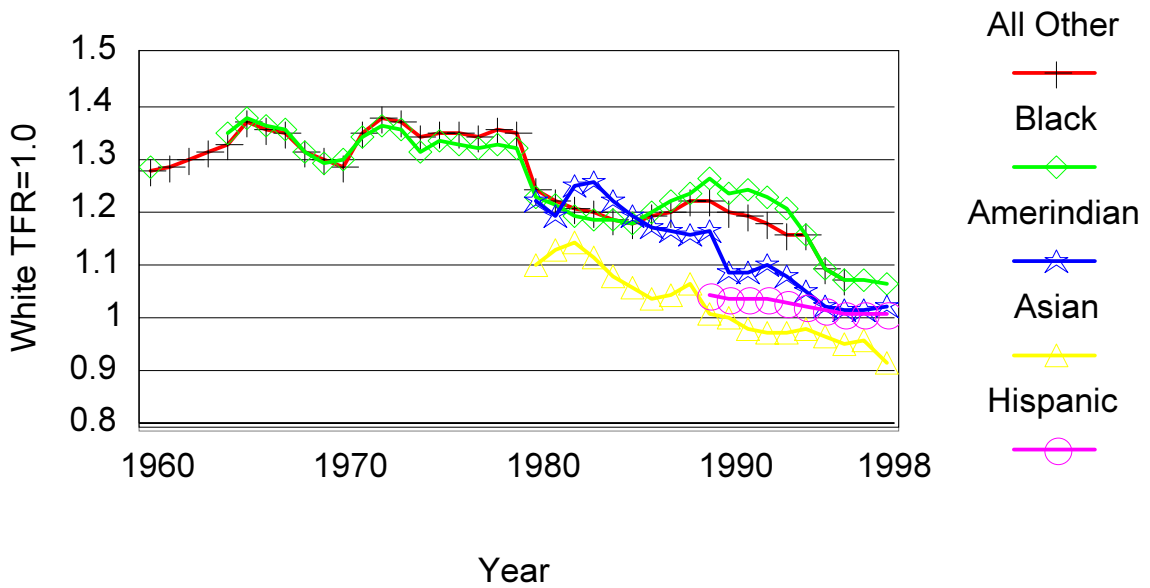


Figure 2
Infant Mortality Rate in Relation to Whites
U.S. 1915-1998

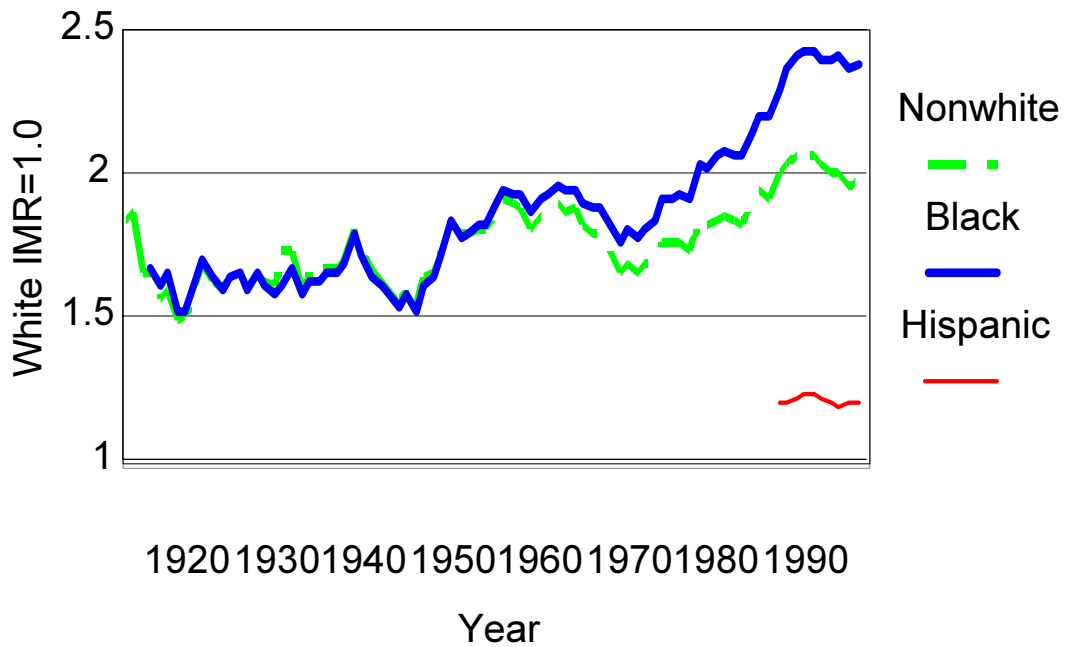


Figure 3
Singulate Mean Age at Marriage
By Race. U.S. 1880-1990.

