

**Impact of Racial and Ethnic Exogamy and International Migration on Forecast  
Population Distributions for the United States in 2030: Results of a Macro-  
Simulation**

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For presentation at the XXVth International Population Conference of the International  
Union for the Scientific Study of Population, in Tours, France, July 18-23, 2005

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**U S C E N S U S B U R E A U**

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A major problem in forecasting race and ethnicity in a diverse population is the role of interracial childbearing, and the way in which children of interracial or inter-ethnic mating identify their race or ethnicity. The United States population represents an excellent case study of this problem, for two reasons. First of all, the U. S. population is becoming more racially and ethnically diverse, and it is almost inevitable that exogamy will rise, simply because of the increased diversity of potential mates. Secondly, a recent change in the guidelines for reporting race in the census and in administrative records has provided abundant evidence of the problems of characterizing race in a multi-racial environment. In this study we assume the results of the United States Census 2000 as a reporting universe for the cross-classification of race with Hispanic origin, and attempt to show the effects of different assumptions about the future on the evolution of racial diversity. We will examine the effect of imposing different assumptions on each of two major variables, exogamous parenting and international migration, on the racial and ethnic distribution of the population in 2030.

The United States population presents a unique challenge to official demographic forecasting by race and ethnicity. The subject of racial and ethnic diversity is a major source of interest to the government, the academic sector, and the media. Indeed, an official forecast of the United States population that did not show its composition by race and Hispanic origin would be unacceptable at the onset of the 21<sup>st</sup> century. Yet, especially since Census 2000, a revised taxonomy of race and Hispanic origin has presented both a major challenge and a major opportunity for population forecasters. As a result of a new guideline in race reporting put forth by the United States Office of Management and Budget (OMB) in 1997, respondents to Census 2000 were invited to check as many racial categories as applied to them, rather than choosing the single one that most applied. The opportunity lies in the fact that it is now possible to study race unencumbered by the limitation of assuming that everyone identifies with a single race. The challenge comes from two sources. Multiple reporting of race has resulted in a multiplicity of possible race responses, 31 response categories for combinations of five race responses. More importantly, forecasters have been forcibly weaned from the convenient assumption that—on average—children will assume the race of their mothers. As a result, a fundamental modification of cohort-component methodology is mandated to consider the effect of two parents' race responses, rather than just one. To complicate matters still further, multiple reporting is confined to race, and does not extend to Hispanic origin, which is a separate concept from race, measured from a separate question in the decennial census.

In this work, we will attempt to gauge the effect of multiple race reporting on a simple cohort-component population forecast, taking account of different assumptions regarding the level of interracial childbearing. We will also consider the effect of different levels of international migration, since international migration interacts with the forecast of race by

altering the racial composition of the population from an external source. We will do this by creating illustrative population projections by race and Hispanic origin, using the cohort-component method. None of the projections discussed coincide with official United States population projections produced by the U. S. Census Bureau.

### *Data and methods*

Forecasting the race and Hispanic origin of children from the race and origin of their parents requires postulating two distributions, beyond the assumptions normally required for cohort-component projections of population by age and sex. First, we must make, for each racial or origin category of mother, an assumption regarding the racial and origin composition of their children's fathers. Second, we must make, for each joint racial and origin category of two parents, an assumption of the racial and origin composition of their children. It is tempting to propose, at least for a parsimonious application, that the two assumptions could be combined into a simple composition of children by race and origin of mother. However, this approach suffers from the fact that the racial composition of fathers must change in response to the racial composition of eligible men in the forecast population.

The source data for both of these assumptions is found in a single, special tabulation from Census 2000, the decennial United States census taken for April 1, 2000, which also provides the base population for the illustrative forecasts. Because the census is an enumeration of households, it is possible to tabulate family households by race and Hispanic origin of mother, father, and children under 18 year old in the household, as well as age of mother and father. The file underlying this tabulation is more fully described in earlier research at the U. S. Census Bureau on the implications of the new racial categories for population estimates (Smith and Jones, 2003). For the present research, the tabulation is confined to families composed of at least a mother and a minimum of one natural child under the age of 18. For those families in which no father is present, a father's race is imputed from the race of mother and race of children. In those cases where a father is present, there are a small and unmeasured proportion of children who may not be the natural issue of both parents. In a small proportion of these cases, the relationship of children's race to father's race may appear impossible. Insofar as our objective in forecasting is to replicate the census population universe at future dates, we avoid placing constraints on family composition that would tend to misrepresent the composition of the population; hence, we do not rule out inconsistencies of this nature. While it might be argued that children under 18 years of age in families could misrepresent the composition of children at time of birth (given the joint race and origin of the parents), we reasoned that this is not necessarily a disadvantage, since we are bound to the assumption that race reporting of individuals does not change for the duration of the projection period. Therefore, the use of a larger aggregate of children will produce a more robust representation of the joint distribution of parents' and children's race and origin.

Race and Hispanic origin are separate concepts that are treated jointly. The race variable has five responses, for which the respondent may select one to five choices: 1) white or

Caucasian, 2) black or African American, 3) American Indian, Eskimo and Aleut (conventionally abbreviated AIAN—standing for American Indian and Alaska Native), 4) Asian, and 5) native Hawaiian or other Pacific Islander (NHPI). Hispanic origin is dichotomous: Hispanic or not Hispanic. Persons of Hispanic origin may be of any race. Because race is subject to multiple reporting, there are 31 racial categories ( $2^n - 1$ , where  $n=5$ ). Because Hispanic origin is strictly dichotomous, there are 62 cross-categories of race and Hispanic origin. In actual practice, some of the racial categories

In producing illustrative projections, we make the following assumptions that do not vary among the projections.

1. Race and Hispanic origin are defined as in the Census 2000 results; specifically, they are subjective concepts determined by the interpretation of respondents. In particular, there is no genetic mandate in the transmission of race or Hispanic origin from one generation to the next.
2. Race reporting, however subjective, is assumed to remain inalterable for individuals. This assumption is not entirely a consequence of the constancy of the definition of race, since it is conceivable that the subjective choice of race depends on the age of the respondent. This assumption may be somewhat treacherous, given that the reporting of the race of children in a census would often be a parental decision, subject to revision by the child as he or she matures. It is hoped that such revisions tend to negate each other.
3. The distribution of children by race and Hispanic origin remains constant over time, for each joint category of race and Hispanic origin of both parents. This is an effective operational assumption for this study, whether or not it is entirely sound.
4. We differentiate age-specific fertility rates by race and Hispanic origin of women, while assuming them invariant with respect to the race and origin of their mates, given the woman's race. Fertility and mortality rates are similar to those assumed in final population projections released in early 2000 (Hollmann, Mulder, and Kallan, 2000), with some correction for the revised population denominators obtained from Census 2000 results. Summarized in Table 1, they assume somewhat higher levels of fertility for Hispanic women than for non-Hispanic women, with some convergence over time, but little overall trend.
5. Life expectancy at birth, summarized in Table 1, is assumed to increase uniformly and gradually. Fertility and mortality are differentiated only by the three categories shown, and are assumed uniform among the many sub-categories of non-Hispanic non-Black.

The technical adaptation that distinguishes these illustrative simulations from ordinary cohort-component projections arises from the necessity to vary the racial composition of fathers of newly born infants over time. The procedural steps are as follows.

1. We determine, from the special census tabulation previously described, a likely age range of father for each mother's year of age. We add the mean observed age difference between mother and father, and allow the range to embrace one standard deviation in either direction, with age rounded to the year. These ranges form what we define as "eligible" fathers for each age of mother.
2. We measure the degree of selectivity of fathers for each age, race and Hispanic category of mother in the base population. We accomplish this by computing, for each category of mother's age, race, and Hispanic origin a vector of generalized logit differences between the proportional distributions of fathers by race and origin in the household file and the proportional distribution of eligible males in the enumerated base population. If mother's and father's racial and origin category is designated  $i$ , and  $j$ , respectively,  $p_{ij}$  is the proportion of women of category  $i$  with husbands in category  $j$ , and  $a_j$  is the proportion of eligible men in category  $j$ , the generalized logit differences are computed as follows.

$$D_{i1}=0$$

$$D_{ij}=\log_e(p_{ij}/p_{i1})-\log_e(a_j/a_1) \text{ for } j \text{ not equal to } 1.$$

3. We carry out the cohort-component projection procedure for one year, applying assumed age-specific fertility rates to project births by age, race, and Hispanic origin of mother.
4. We calculate the vector of generalized logits for the distribution of eligible men by race and Hispanic origin forecast in the previous step. If  $b_j$  designates the proportion of men in category  $j$ :

$$B_1=0$$

$$B_j=\log_e(b_j/b_1) \text{ for } j \text{ not equal to } 1.$$

5. Assuming (for the moment) that the degree of selectivity is to remain constant over time, we calculate the generalized logit of the distribution of fathers for each age, race, and Hispanic origin category of mother ( $i$ ) simply as  $F_{ij} = B_j + D_{ij}$ .
6. We convert the generalized logit distribution of fathers to a proportional distribution by calculating anti-logits (where  $n$  designates the number of categories)

$$f_{i1} = 1 / (1 + \exp(F_{i1}) + \exp(F_{i2}) + \dots + \exp(F_{in}))$$

$$f_{ij} = \exp(F_{ij}) / (1 + \exp(F_{i1}) + \exp(F_{i2}) + \dots + \exp(F_{in})) \text{ for } j \text{ not equal to } 1.$$

7. We apply the proportional distribution of fathers to the number of births by age, race, and Hispanic origin of mother, to yield a joint distribution of births by category of mother and father.

8. We apply to these births the distribution of children under 18 by race and Hispanic origin for each joint category of parents, obtained from the Census 2000 household file, and aggregate the births across race of parents to obtain the distribution of births by race and Hispanic origin to form the new birth cohort.

The use of the generalized logit to maintain a vector of mate selectivity in base population in the face of a changing trend in the characteristics of eligible males has a number of desirable properties. Most importantly, it mathematically imposes the constraint that proportions must remain between zero and one, obviating the need for proportional adjustments. Moreover, it creates a matrix indicator in the baseline logit differences ( $D_{ij}$  above) that can be manipulated to realize an alternative assumption about mate selectivity. In particular, the condition that  $D_{ij}=0$  in step 5 for all  $i$  and  $j$  is tantamount to the absence of any selectivity: the distribution of fathers for any race and Hispanic origin category of mothers collapses to the distribution of eligible men by race and origin.

In producing the illustrative projections, we treat endogamy versus exogamy in childbearing as a three-category concept. Because fertility rates are applied to the female population, we define the concept from the woman's (mother's) perspective. The father of a woman's child may be a) of the same race and the same Hispanic category as the woman, b) of a racial category that partially overlaps hers, meaning they share at least one race response, but not all of them, and are of the same Hispanic origin, or c) of an entirely different race or Hispanic origin. For purpose of this study, we characterize the first situation as "endogamy", the second as "partial exogamy", and the third as "full exogamy". The probability of partial exogamy is of necessity much higher for multiracial women than for women of a single race.

We formulate three different simulations for the degree of exogamous childbearing. In order to do this, we need to introduce two additional concepts. "Base line selectivity" means that endogamy, partial exogamy, and full exogamy at a future target date are at levels observed at the base date (April 1, 2000) adjusted only for the shift in the racial and ethnic composition of the male population in the reproductive ages. This is the situation brought about by constant  $D_{ij}$  in the technical description above. This means that a logit shift in the distribution of males of reproductive age is translated to the distribution of new fathers at the target date. An assumption of a slight increase in the racial and ethnic diversity of males will thus produce a slight increase in the diversity of new fathers, as would follow inevitably from the increasing diversity of men at risk of fatherhood. "No selectivity", the contrasting situation, means that the distribution of new fathers at the target date matches the distribution of the male population in the reproductive ages, irrespective of the mother's race and ethnicity, hence  $D_{ij}=0$ . This can be seen as a maximal value for both partial and full exogamy. We note that both of these concepts are complicated by the fact that the racial distribution of reproductive-age males, beginning 15 years from the base date is itself dependent on the diversity of those born after the base date, which is what is ultimately being modeled.

The three simulations represent alternative “mixing” of these two idealized concepts. The first simulation assumes base line selectivity, as defined in the previous paragraph, to 2030. In this case, both partial exogamous and fully exogamous childbearing increase slightly, but only as a consequence of the increased diversity of the male population. In the second simulation, we assume that there is an increase in partial exogamous childbearing, beyond what would be determined solely by the racial distribution of men, but that full exogamy remains at base line levels. Specifically, we assume that the logit proportion of mothers with partially exogamous mates in each year of the forecast (from 2000 to 2030) moves sufficiently to reach the level required for no selectivity (measured by that year’s distribution of males) by 2060. The logit proportions of mothers with fully exogamous mates assume base line levels, and the increase in the partially exogamous comes entirely at the expense of the endogenous mothers, whose proportions drop below base line. In the third simulation, we assume that the logits of all proportions move sufficiently in each year to target the level of non-selectivity applicable to that year, by the year 2060. From 2000 to 2030, the logit proportions would thus shift half of the difference between the forecast levels in 2030 and the levels consistent with no selectivity in 2030. Thus, the trends in the distributions of race of father by race of mother move toward a moving target of the simple distribution of men by race, rapidly enough to “strike” the target if the forecast period were extended to 60 years. In the third simulation, this occurs for all proportions; in the second, it occurs only for the proportions that represent partial exogamy or endogamy.

The results of these scenarios are shown as distributions of population by race, Hispanic origin, and large age groups. Race is shown both as the distribution of those reporting a single race alone, and the aggregate of those reporting more than one race.

The comparison of the first two simulations is intended to show the effects of a very modest assumption about future interracial childbearing. The exogamy hypothesized in the second simulation represents a change from the base line that is very small at first, but could grow in magnitude as multiracial men and women become a larger proportion of the pool of potential parents. Moreover, the type of exogamy assumed to increase in the second simulation would be very unremarkable from the standpoint of the parents, since at least one of the parents must be multiracial, hence probably the result of past exogamous childbearing.

The comparison of the first and third simulations is intended to show the effects of a more fundamental social evolution, namely the progressive abandonment of race or Hispanic origin as a criterion for mate selection. This comparison affects much larger groups of people, and the impact should therefore be greater. Yet it is not intended to overreach the realm of plausibility, given the evolution of racial and ethnic diversity in the US population.

While the primary intent of this work is to demonstrate the effect of interracial childbearing on racial and ethnic diversity of the population, the comparisons would be limited if we were to rely on a single assumption regarding the level of international migration. International migration is an especially important factor in these

considerations, because it fundamentally affects the results of all three simulations, as well as the comparisons among them. Higher levels of international migration are likely to bring about more racial and ethnic diversity in the population of men and women of childbearing age, and this will in turn impinge on the implications of our comparative assumptions about interracial childbearing. Based on recent past experience, higher levels of international migration will imply larger proportions of Asians, as well as people of Hispanic origin. For this reason, we replicate the analysis described in the preceding paragraph for two assumptions regarding international migration. One of the assumptions assumes that international migration to the United States remains constant at levels estimated for 2003. The second implies a continuation of the rise in international migration observed in the 1990s, resulting in a doubling of the net flow over a 50-year period.

### *Findings*

The results of carrying out the six simulations tend to lend credence to the notion that taking account of varying degrees of exogamy is important in determining the racial and ethnic selection of mates. However, the distinctions among the simulations with respect to exogamy have little impact on the characteristics of the population, forecast to 2030. The reason for the apparent lack of impact of a rather important assumption on the ultimate results lies with the subjective nature of race reporting in the census.

To illustrate the causative factor in the small impact of mate selectivity on population characteristics, it is necessary only to look at the distribution of race of children by race of parents in Census 2000 in the appropriate way. Table 2 represents an attempt to accomplish this, by showing the number and proportion of children of one or more than one race response, depending on the whether their parents were of different race and whether they had at least one multiple-race parent. Not surprisingly, 99.9 percent of all children who had two single-race parents of the same race were themselves of a single race. However, of those who had two single-race parents of a different race 70.8 percent were nevertheless of a single race. In the case where both parents were multi-racial and of the same racial combination, 93.5 percent of children were themselves multi-racial, as one would expect. Yet, among couples where at least one parent was multi-racial and parents were not of the exact same race, a majority of children were multi-racial: 52.7 percent for partially exogenous parents and 76.1 percent for fully exogamous parents. It thus appears that having multi-racial parents is a far more effective predictor of multi-racial children than having parents that are of completely different race.

Tabulations of forecast race of father by race of mother assure us that the assumptions we have made regarding exogamy do in fact produce contrasting results in mate selectivity, as shown in table 3. Under the assumption of increasing exogamy, births are 8.2 percent fully exogamous in 2001, but rise to 28.2 percent or 28.5 percent for low and high levels of international migration, respectively. Partial exogamy rises rapidly in the two non-baseline assumptions, but the percentage of all pairings that are of this type is too small for this to have a large effect on the demographic outcome. The hypothesis that international migration would have a significant interactive effect on exogamy by shifting



the racial and ethnic distribution of the eligible male population is not supported, as we note that exogamy reaches roughly the same levels under substantially different migration assumptions.

Finally, the modest impacts of these different assumptions on the racial and ethnic characteristics of the population are shown in tables 4 through 7; table 4 shows the total population by race and Hispanic origin, baseline and forecast to 2030, whereas tables 5, 6, and 7 show the same for three large age categories. We note at the outset that the small proportion of persons of multiple race increases substantially for the total population and all age categories from 2000 to 2030, although this increase happens irrespective of whether we assume large increases in exogamy. As would be expected, the effect of exogamy on this group is most felt in the population under 15 years of age (table 5). The non-Hispanic multi-racial category increases from 2.28 percent to 4.19 percent assuming baseline levels of exogamy, whereas it increases to 6.92 percent under an assumption of reduced mate selection (increasing full exogamy). Table 7 (population 30 year of age and older) shows no effect of the differing exogamy assumptions, simply because, with the exception of people born in the second quarter of 2000, the entire population was born before the base date of the projections.

The effect of international migration on the population composition is actually only very slight, although it would become greater for a longer projection period, as its second-generation effects would become apparent.

### *Conclusion*

We have addressed two objectives in this research; the first was to propose a rather simple method by which multi-racial childbearing can be incorporated into a cohort-component projection, the second was to assess the impact of multi-racial childbearing in a thirty-year projection of the United States population. We stand convinced that having such a procedure in place is essential to producing population projections in an environment where race and ethnicity are an essential element in population projections, and the definition of race allows multiple specification. To attempt to assume that race and ethnicity of a child can be adequately predicted by the race and ethnicity of the mother, as we have done in the past, is simply no longer logical. However, the subjective nature of race reporting in the United States has substantially suppressed the numerical importance of the procedure.

## *References*

Hollmann, Frederick W., Tammany J. Mulder, and Jeffrey E. Kallan, *Methodology and Assumptions for the Population Projections of the United States: 1999 to 2100*, Population Division Working Paper #38, issued January 13, 2000.

Smith, Amy Symens and Nicholas A Jones, 2003, *Dealing with the Changing U.S. Racial Definitions: Producing Population Estimates Using Data with Limited Race Detail*, paper prepared for presentation at the annual meeting of the Population Association of America in Minneapolis, MN, May 2003.

Table 1  
Fertility and Mortality Assumptions for Illustrative Projections

	Hispanic origin	Non-Hispanic Black	Non-Hispanic all other
Total fertility rate			
2001	2.57	2.06	1.86
2030	2.35	2.09	2.03
Life expectation at birth (years): male			
2001	76.68	68.42	74.78
2030	79.97	74.23	78.46
Life expectation at birth (years): female			
2001	82.43	75.28	80.29
2030	85.14	81.06	84.20

Source: Illustrative projections, prepared by authors for the current report,  
not consistent with published U.S. Census Bureau population projections

Table 2

Children by Racial and Ethnic Similarity of Parents, Distributed by Multiplicity of Race  
 Census 2000 Household File  
 (Percent distribution)

	All children	One race	Two or more	All children	One race	Two or more
<b>All children</b>						
All children	100.0	97.6	2.4	47,119,535	45,967,321	1,152,214
Endogamous parents	100.0	99.6	0.4	44,321,411	44,136,065	185,346
Partially exogamous parents	100.0	47.3	52.7	452,012	213,871	238,141
Exogamous parents	100.0	68.9	31.1	2,346,112	1,617,385	728,727
<b>Both parents of a single race</b>						
All children	100.0	98.5	1.5	46,425,596	45,721,520	704,076
Endogamous parents	100.0	99.9	0.1	44,172,189	44,126,315	45,874
Partially exogamous parents	--	--	--	0	0	0
Exogamous parents	100.0	70.8	29.2	2,253,407	1,595,205	658,202
<b>At least one parent multi-racial</b>						
All children	100.0	35.4	64.6	693,939	245,801	448,138
Endogamous parents	100.0	6.5	93.5	149,222	9,750	139,472
Partially exogamous parents	100.0	47.3	52.7	452,012	213,871	238,141
Exogamous parents	100.0	23.9	76.1	92,705	22,180	70,525

Source: U.S. Census Bureau, Special tabulation from Census 2000, described in Smith and Jones (2003)

Table 3  
 Births by Race and Hispanic Origin of Mother, Distributed by Similarity of Father's Race and Origin  
 (Percent distribution)

Mother's race/Hispanic category	Year ending June, 2001				Year ending June, 2030			
	Total	Endogamous	Partially exogamous	Fully exogamous	Total	Endogamous	Partially exogamous	Fully exogamous
Baseline Selectivity, low international migration	100.0	90.8	1.3	7.9	100.0	88.8	2.4	8.7
Increasing partial exogamous matches, low international migration	100.0	90.8	1.3	7.9	100.0	86.1	4.8	9.0
Increasing exogamous matches, low international migration	100.0	90.5	1.3	8.2	100.0	67.5	4.3	28.2
Baseline selectivity, high international migration	100.0	90.8	1.3	7.9	100.0	88.9	2.4	8.7
Increasing partial exogamous matches, high international migration	100.0	90.8	1.3	7.9	100.0	86.2	4.7	9.0
Increasing exogamous matches, high international migration	100.0	90.5	1.3	8.2	100.0	67.3	4.2	28.5

Source: Illustrative projections, prepared by authors for the current report, not consistent with published U.S. Census Bureau population projections

Table 4

Percent Distribution of Total Population by Race and Hispanic Origin, Projected to July 1, 2030

Six simulations

Race/Hispanic origin category	April 1, 2000 population	Low international migration			High international migration		
		Baseline	High part exog.	High exogamy	Baseline	High part exog.	High exogamy
All races	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Non-Hispanic white	69.50	56.76	56.79	56.65	55.62	55.65	55.51
Non-Hispanic black	12.19	12.55	12.57	12.50	12.46	12.48	12.41
Non-Hispanic American Indian and Alaska native	0.75	0.81	0.80	0.77	0.79	0.78	0.75
Non-Hispanic Asian	3.68	5.52	5.50	5.21	6.15	6.14	5.83
Non-Hispanic native Hawaiian and other Pacific islander	0.13	0.16	0.16	0.15	0.17	0.16	0.15
Non-Hispanic two or more races	1.21	2.27	2.25	2.94	2.25	2.23	2.93
Hispanic white	11.56	20.10	20.11	19.87	20.71	20.72	20.48
Hispanic black	0.49	0.84	0.84	0.85	0.85	0.85	0.86
Hispanic American Indian and Alaska native	0.20	0.35	0.35	0.32	0.36	0.35	0.32
Hispanic Asian	0.08	0.15	0.15	0.16	0.15	0.15	0.17
Hispanic native Hawaiian and other Pacific islander	0.03	0.07	0.06	0.06	0.07	0.06	0.06
Hispanic two or more races	0.17	0.41	0.42	0.54	0.41	0.42	0.54

Source: Illustrative projections, prepared by authors for the current report, not consistent with published U.S. Census Bureau population projections

Table 5

Percent Distribution of the Population Age Under 15 Years by Race and Hispanic Origin, Projected to July 1, 2030

Six simulations

Race/Hispanic origin category	April 1, 2000 population	Low international migration			High international migration		
		Baseline	High part exog.	High exogamy	Baseline	High part exog.	High exogamy
All races	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Non-Hispanic white	60.81	48.00	48.11	47.52	46.72	46.82	46.24
Non-Hispanic black	14.95	13.44	13.52	13.16	13.28	13.35	13.00
Non-Hispanic American Indian and Alaska native	0.95	0.91	0.88	0.77	0.88	0.85	0.74
Non-Hispanic Asian	3.42	4.39	4.32	3.11	5.00	4.93	3.64
Non-Hispanic native Hawaiian and other Pacific islander	0.16	0.16	0.14	0.10	0.16	0.15	0.10
Non-Hispanic two or more races	2.28	4.19	4.09	6.92	4.12	4.03	6.88
Hispanic white	15.84	26.07	26.13	25.11	26.98	27.03	26.04
Hispanic black	0.76	1.19	1.18	1.24	1.20	1.19	1.25
Hispanic American Indian and Alaska native	0.30	0.48	0.46	0.34	0.49	0.47	0.35
Hispanic Asian	0.13	0.24	0.22	0.29	0.24	0.23	0.31
Hispanic native Hawaiian and other Pacific islander	0.05	0.10	0.08	0.06	0.10	0.09	0.07
Hispanic two or more races	0.35	0.83	0.87	1.38	0.82	0.87	1.38

Source: Illustrative projections, prepared by authors for the current report, not consistent with published U.S. Census Bureau population projections

Table 6

Percent Distribution of the Population Age 15 to 29 Years by Race and Hispanic Origin, Projected to July 1, 2030

Six simulations

Race/Hispanic origin category	April 1, 2000 population	Low international migration			High international migration		
		Baseline	High part exog.	High exogamy	Baseline	High part exog.	High exogamy
All races	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Non-Hispanic white	62.49	50.02	50.06	49.92	48.69	48.72	48.58
Non-Hispanic black	13.68	13.53	13.55	13.55	13.39	13.41	13.41
Non-Hispanic American Indian and Alaska native	0.87	0.85	0.85	0.80	0.83	0.82	0.77
Non-Hispanic Asian	4.40	5.03	5.01	4.71	5.62	5.61	5.31
Non-Hispanic native Hawaiian and other Pacific islander	0.17	0.17	0.16	0.14	0.17	0.16	0.15
Non-Hispanic two or more races	1.37	3.12	3.09	3.80	3.04	3.02	3.70
Hispanic white	15.70	24.94	24.95	24.71	25.90	25.91	25.68
Hispanic black	0.66	1.06	1.05	1.04	1.07	1.07	1.06
Hispanic American Indian and Alaska native	0.28	0.44	0.44	0.40	0.45	0.45	0.41
Hispanic Asian	0.11	0.19	0.19	0.19	0.19	0.19	0.19
Hispanic native Hawaiian and other Pacific islander	0.05	0.08	0.08	0.07	0.09	0.08	0.08
Hispanic two or more races	0.22	0.57	0.57	0.67	0.56	0.56	0.66

Source: Illustrative projections, prepared by authors for the current report, not consistent with published U.S. Census Bureau population projections



Table 7

Percent Distribution of the Population Age 30 and Over Years by Race and Hispanic Origin, Projected to July 1, 2030

Six simulations

Race/Hispanic origin category	April 1, 2000 population	Low international migration			High international migration		
		Baseline	High part exog.	High exogamy	Baseline	High part exog.	High exogamy
All races	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Non-Hispanic white	75.24	61.68	61.68	61.68	60.73	60.73	60.73
Non-Hispanic black	10.64	11.96	11.96	11.96	11.90	11.90	11.90
Non-Hispanic American Indian and Alaska native	0.62	0.76	0.76	0.76	0.75	0.75	0.75
Non-Hispanic Asian	3.52	6.04	6.04	6.04	6.70	6.70	6.70
Non-Hispanic native Hawaiian and other Pacific islander	0.11	0.16	0.16	0.16	0.17	0.17	0.17
Non-Hispanic two or more races	0.76	1.39	1.39	1.39	1.39	1.39	1.39
Hispanic white	8.48	16.68	16.68	16.68	17.01	17.01	17.01
Hispanic black	0.34	0.66	0.66	0.66	0.67	0.67	0.67
Hispanic American Indian and Alaska native	0.14	0.28	0.28	0.28	0.29	0.29	0.29
Hispanic Asian	0.05	0.11	0.11	0.11	0.11	0.11	0.11
Hispanic native Hawaiian and other Pacific islander	0.02	0.05	0.05	0.05	0.05	0.05	0.05
Hispanic two or more races	0.09	0.23	0.23	0.23	0.23	0.23	0.23

Source: Illustrative projections, prepared by authors for the current report, not consistent with published U.S. Census Bureau population projections