

**Estimates of the Total Population of Counties in Texas
by Age, Sex and Race/Ethnicity for July 1, 2001**

produced by

Population Estimates and Projections Program
Texas State Data Center
Department of Rural Sociology
Texas Agricultural Experiment Station
Texas A&M University System

and

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Department of Rural Sociology
Texas Agricultural Experiment Station
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The attached are estimates of the total population of counties in Texas by age, sex and race/ethnicity for July 1, 2001 completed by personnel in the Department of Rural Sociology in the Texas Agricultural Experiment Station in the Texas A&M University System. The total population estimates which are used as the base for these estimates were reviewed in provisional form by a network of reviewers from across the State and where appropriate, changes were made in the provisional estimates prior to the release of the final estimates of total population shown here.

The methodology used to prepare the estimates of the age, sex and racial/ethnic composition of the estimated population in each county in Texas is described in this writeup. Due to space limitations only a summary of the methodology is presented. Those wishing more detailed information on the methodology should contact program personnel in the Department of Rural Sociology at Texas A&M.

Methodology

To derive estimates of age, sex and race/ethnic detail from the estimates of the total population for counties for July 1, 2001, a procedure was used to first project from the 2000 base population the proportion of the population expected to be in each age, sex and racial/ethnic group in each county as of July 1, 2001. These proportions were then multiplied by the estimate of total population for the county for racial/ethnic groups controlled to the total for the county estimate of total population for July 1, 2001.

The projection of the proportion of persons who were in each age, sex and racial/ethnic group was obtained by projecting the 2000 population of each county by age, sex and race/ethnicity forward to July 1, 2001. The baseline populations for both the projections and estimates consist of four groups. These are an Anglo, Black, Hispanic, and an Other population group. In general these consist of Non-Hispanic Whites who are referred to as Anglos, Non-Hispanic Blacks or African Americans, Hispanics of all races, and persons in all other non-Hispanic racial groups referred to as the Other population group. However, because the 2000 Census allowed respondents to indicate more than one racial identity decisions had to be made about the classification of persons in 126 race categories (63 racial combinations each for Hispanic and Non-Hispanic ethnic groups). This required an extensive evaluation of several classification alternatives which were evaluated to arrive at the categories used in these estimates. Those wishing a more detailed description of the procedure used should contact the item "Comparing Race/Ethnicity Between the 2000 Census and Earlier Censuses" on the Texas State Data Center website (<http://txsdc.tamu.edu/census/data/redistrict/pl94-171/re-report.php>).

It was also necessary to adjust the base population for "special populations". Special populations are populations who reside in an area, usually in institutional settings, who do not generally experience the same demographic processes over time as the indigenous population in the area. Rather, they tend to come into and leave an area at fixed intervals. Examples of such populations are college populations, prison populations, and other persons in institutional settings. Because their movement into and out of an area is a function of events (e.g.,

enrollment, graduation, incarceration) which are not determined by local socioeconomic conditions, special populations must be removed from the base populations of projection areas before birth, death and migration rates are applied to the base population. If special populations of substantial size are not removed, they will create distortions in age and other characteristics of the population that will remain in the population through the cohort aging process and create inaccuracies in the projections. Special populations are, therefore, generally removed from the cohort base, the base cohorts projected forward and a separate projection of the special population for the projection date is added to the projected base cohorts to obtain the projection of the total population.

The July 1, 2001 projections were obtained by using standard cohort component techniques with single years of age, sex and racial/ethnic cohorts and assumptions related to 2000-2001 rates of mortality, fertility and net migration for each cohort. Age, sex and race/ethnicity specific fertility rates were computed using births by age, sex and race/ethnicity and place of residence of the mother. The numerators for such rates are the average number of births for 2000 and 2001 for mothers in each age, sex and race/ethnicity group and the denominators are the population counts by age, sex and race/ethnicity. Birth data to compute the rates were obtained from the Texas Department of Health and data on women by age (10-49 years) and race/ethnicity were obtained from the 2000 Census of Population.

To obtain baseline mortality measures, survival rates by single years of age, for both sexes and for each of the racial/ethnic groups were needed. Survival rates for Anglos, Blacks, Hispanics, and the Other racial/ethnic category were computed using death data from the Texas Department of Health.

Migration is the most difficult component process to project and for which to obtain baseline rates. For the Texas State Population Estimates and Projections Program's projections, rates were derived using a standard residual migration formula. Thus, births and deaths by age, sex and race/ethnicity cohort were added or subtracted (as appropriate) to the 1990 population to produce an expected 2000 population. This expected population was compared to the actual Census count to estimate net migration for 1990-2000. For the purposes of these 2001 age, sex, race/ethnicity estimates for counties in Texas, the 1.0 scenario, otherwise called the 1990-2000 scenario was utilized. This projection scenario assumes that the trends in the age, sex and race/ethnicity net migration rates of the 1990s will characterize those occurring in the future of Texas.

Utilizing the projected populations for each age, sex, and race/ethnicity cohort for July 1, 2001, proportions that each of these cohorts represented of the total population were computed and then applied to the total residential population estimated for counties for the same date. County population estimates by age, sex, and race/ethnicity are then controlled to the total population estimated for each county. The result is an estimated population by age, sex and race/ethnicity for each county in Texas which sums to the total population estimate for the county and for the state for July 1, 2001.

Comparisons to Other Estimates

The estimates presented here may differ from those available from other sources due to difference in both assumptions and estimation techniques. Users should thus be careful to compare both the assumptions and methodologies underlying different estimates when comparing estimates from different sources.

If you have any questions about these estimates, please contact:

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