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Kansas Population Projections, 2014-2064
Methodology

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The Kansas county population projections for 2014-2064, prepared by Wichita State University's Center for Economic Development and Business Research, is based primarily on the age-cohort survival method of forecasting. For each county, each five year age-gender cohort's population change was forecasted in five year increments, starting with U.S. Census Population Estimates data for 2014. Under this forecasting method, each cohort group's population is forecasted forward five years at a time by using the estimated mortality rate and the estimated migration rate for that age-gender cohort in the county to projection population changes for that age-gender cohort.

To forecast later years in the projection, the method is repeated, using the results from each forecast to build the results for the forecast of the next five-year period. This method allows for the forecast to follow each age-gender cohort over time and model factors such as the mortality rate change as the age-gender cohort ages. The trends in the change of the mortality rate for each age-gender cohort were estimated using data on historical deaths in each Kansas region.

The model also forecasts the births for each Kansas county, based on the age-cohort specific birth rates for the female population of the county. The trends in the change of the birth rate for each female age-cohort were projected based on the historical trends in the birth rate for each Kansas region, and the historical gender mix of Kansas newborns. The births over each five year increment then form the new age-gender cohorts for those under five years old for the forecasted year.

The model assumes that migration will remain constant over the forecasted period. Data on each individual county's net migration were used to determine the overall level of migration for each county. This was then applied to each age-gender cohort within the county based on national patterns of the age distribution of migration since county-level data on the age distribution of net migration was unavailable. In addition to this overall migration, additional college and post-college migration adjustment factors were added to model the effects of college-aged students leaving counties without universities, as well as the influx of migration of only college-aged students to counties that contained large universities. These adjustment factors model both the college-aged student migration, as well as the post-college migration from counties with universities back to counties without universities.