

## Projecting population

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Montgomery Advertiser

October 10, 2008

During the past few years, states, cities, and towns across the United States have been looking for better ways to use their resources in connection with their development goals. A major variable in that equation is population, especially the expected changes in population size and composition.

Such long-range population planning strategies require good data, projecting how many people will be there in five to 30 years. To help our state and its metropolitan areas, the Center for Demographic Research at Auburn Montgomery is preparing demographic projections for the period of 2005-2035.

Our goal is to determine the size and composition of population in the future. We aim to answer questions such as: How many people will be living in Alabama in 2010, 2015, 2020, 2025, 2030, and 2035? How many people will be of preschool age? How many adults? How many senior citizens? What are the implications of such population changes? Perhaps the most important question is "How do we know about future population changes?"

Demographers use various scientific methods to determine future population size and composition. The outcomes are called population projections. Population projections result from mathematical models based on systematic study of past population changes. Demographers calculate population projections for the middle of the year, which is July 1.

Population projections are constructed by studying past trends in fertility, mortality and migration, as well as other relevant variables such as employment and household size. Then, a number of simulations are created and studied to derive the most plausible scenario that fits the future socio-demographic trends of a given geographic area.

Our first set of population projections focuses on the state of Alabama and the three counties that make up the Montgomery Metropolitan Planning Organization area: Autauga, Elmore and Montgomery.

The results of our projections show that the population of the state of Alabama will continue to grow slowly in the next three decades. Estimated at 4,539,611 in 2005, Alabama's population is projected to reach 4,808,994 by 2035. Although this is rather a small increase in 30 years, there are important changes in age structure.

For example, while we now count nearly one senior citizen (age 65 and older) for every 10 people in Alabama, the ratio will be two to 10 in the year 2035. In absolute numbers, the senior population of Alabama will increase from 602,411 in 2005 to a little more than 1 million in 2035. In other words, those age 65-plus will represent about one-fifth of Alabama's population by the year 2035.

This increase in number of people aged 65-plus will require various adaptive strategies in health care, living arrangements, employment, recreational programs and other activities. In addition,

retirement and other older-age programs will need to adapt to the growing number of senior citizens in the state.

In contrast, our state preschool-age population (0-4 years) will not change much in the next three decades. It will remain roughly around 300,000. In fact, the relative size of the preschool age population will slightly decrease from 7 percent of the total population in 2005 to about 6 percent in 2035.

Our projections also show major changes in the Montgomery Metropolitan Planning Organization area. Each of the three counties in the MPO zone is expected to grow during the next three decades. The biggest growth will be in Elmore County, where the population will increase from 73,303 in 2005 to about 127, 617 by 2035. Autauga County's population is expected to increase from 47,917 in 2005 to 72,669 in 2035. Montgomery County is expected to grow from 222,302 people in 2005 to about 257,155 by 2035.

There will be considerable changes in age structures in these three counties. First, the number of people aged 65-plus will more than double in each of the three Montgomery metropolitan area counties. This high growth of senior populations will necessitate new services and various types of programs, including work environments that accommodate seniors. Now that they live longer, many senior citizens will eventually return to school, either for fun, or to learn new skills which they can use to better their lives. Therefore, colleges and universities should be prepared to introduce more educational programs that will meet the needs of this older population.

Demographic projections, especially those that give detailed information on age structure, are essential for development planning, long-range transportation planning, and income determination and future budgeting plans. The Center for Demographic Research at AUM will release its long-range population projections for Alabama and for the Montgomery Metropolitan Planning Organization area by the end of this month. Specific area projections will be constructed upon request, to help metropolitan areas, counties, and cities/towns in their long range planning efforts.

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