



# Population Estimates and Projections

## Building Statistical Capacity

National statistical offices often produce estimates and projections of various characteristics of a population. These statistics are a vital source of information for decision-makers throughout the government, the private sector, and civil society.

An **estimate** is a calculation of the size or distribution of a population or another characteristic of the population for the present or past, while a **projection** describes these characteristics in the future.

Policymakers and other data users often require accurate information between census data releases, which in most countries occur every ten years. Although an actual population count only occurs during a census, statistical methods and tools are often used to produce regular, up-to-date estimates of a population.

Population estimates can describe the total population size as well as demographic characteristics such as age, sex, or education level.

Population estimates are dependent on the demographic components of change: mortality, fertility, and migration. Estimates of mortality, fertility, and migration are derived from data available from censuses, surveys, registration systems, and other administrative records.

**Estimates and projections are calculated similarly.** However, **estimates** employ observed data and hypotheses of demographic change when data are incomplete. **Projections**, on the other hand, rely on hypotheses about demographic change into the future.

The U.S. Census Bureau works with international assistance partners, such as the USAID Office of Population and Reproductive Health and other bilateral and international organizations, to provide training and technical assistance to countries.

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One of the most widely used approaches for producing population estimates and projections is the **Cohort Component Method**, which can be used to calculate detailed statistics such as population by age and sex, total fertility rate, infant mortality rate, and population growth rate.

A population may also be estimated and projected for multiple units of geography, from the national to various sub-national levels (e.g., provinces, states, counties, districts).

For countries seriously affected by HIV, national statistical offices can estimate and project AIDS-related mortality and its impact on future populations and various demographic measures.

The U.S. Census Bureau produces the International Data Base (IDB) <http://www.census.gov/ipc/www/idb/>, which includes regularly updated population estimates and projections for over 200 countries and areas. Census Bureau also provides training and technical assistance to other countries in the development of population estimates and projections using a population projection software package and numerous population analysis spreadsheets developed by in-house experts.

**Population estimates and projections inform planning and monitoring of policy decisions throughout all levels of government and the private sector.**

This is one in a series of fact sheets introducing the Census Bureau and the assistance it provides to countries around the world. The Census Bureau helps countries improve their national statistical systems by engaging in statistical capacity building activities that aim to enhance competencies in several areas in sustainable ways.

Topics in this series include:

- Statistical Capacity Building
- Population Census
- Socioeconomic and Demographic Surveys
- Population Estimates and Projections
- CSPro – Processing Census and Survey Data
- Demographic and Economic Analysis
- Geographic Information Systems
- Courses and Workshops