

## A Guide for Population Clock

To develop national population clock, the National Population projection method has been used. The national population projection has been made according to the Cohort Component Method'. In this method, different components affecting the population changes are studied and reviewed, and then appropriate options are selected out of them. Accordingly, the number, age and sex composition of the population are projected for the future by using the impact of their outcome on the number of base population;

According to the Cohort Component Method, the number of the population at any time point in the future is equal to the number of the population at a point in time past, plus the number of births and net immigrants minus the number of deaths at the time interval of the two mentioned points.

The calculation of the formula is as follows:

$$P_{(t+1)} = \rho_t + (B - D) + (IM - EM)$$

whereas  $P_{(t+1)}$  is the number of population at any time point in the future,  $\rho_t$  is the number of population in a time in the past, B is the number of births, D is the number of deaths, and (IM- EM) is the net migrants that are calculated from the difference between the number of immigrants (people coming into an area) and the number of emigrants (people leaving an area). Accordingly,  $P_{(t+1)}$  is Iran's population in 2026 and  $\rho_t$  is the population of Iran in 2016 (based on the results of the population and housing census), B is the number of births and D is the number of deaths between 2016 and 2026 for which assumptions have been made by using demographic methods and models.

Since there are no official statistics on the number of international migrations, it is assumed in this projection that the balance of international migration in the country is close to zero and has no significant impact on the population growth of the country. Therefore, in this projection, the assumptions of international migration are not considered. The above-mentioned population clock estimates and displays the number of the country's population in real time and is usually revised based on the existing realities of the community after several years.