2022 Census of Population, Households and Dwellings

POPULATION PROJECTIONS

OF THE REPUBLIC OF SERBIA 2022-2052

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2022 Census of Population, Households and Dwellings

Belgrade, 2024

POPULATION PROJECTIONS, 2022–2052

BASIC RESULTS OF POPULATION PROJECTIONS OF THE REPUBLIC OF SERBIA¹ FOR THE PERIOD 2022-2052, ACCORDING TO THE MEDIUM SCENARIO:

> IN 2052, SERBIA WILL HAVE 5.2 MILLION INHABITANTS, BY ABOUT 1.5 MILLION LESS THAN IN 2022.

POPULATION SIZE WILL DECLINE UNDER THE DOMINANT EFFECT OF A NEGATIVE NATURAL INCREASE (ON AVERAGE 86%) COMPARED WITH THE EFFECT OF NEGATIVE NET MIGRATIONS.

THE ADOPTED FERTILITY AND MORTALITY HYPOTHESES SUGGEST THAT TILL THE END OF THE PROJECTION PERIOD THE TOTAL FERTILITY RATE IS PROJECTED TO RISE MODERATELY TO 1.7 CHILDREN PER WOMAN, AND LIFE EXPECTANCY TO BE PROLONGED BY ALMOST 6 YEARS. OVER 2022–2052, THE NUMBER OF BIRTHS AND DEATHS WILL BE LOWER THAN IN THE PAST TEN YEARS - THE BIRTH RATE WILL BE STABLE, ABOUT 8.7% AND THE MORTALITY RATE WILL VARY BY ABOUT 15.7‰ (±1‰).

THE PROCESS OF POPULATION AGEING WILL CONTINUE. THE AVERAGE POPULATION AGE WILL INCREASE BY 2.6 YEARS OVER 2022-2052, FROM 43.8 TO 46.4.

UNTIL 2052 THE NUMBER OF CHILDREN AGED 0-14 YEARS WILL BE HALF THAT OF POPULATION AGED 65 YEARS AND OVER. THE DECREASE IN THE NUMBER OF INHABITANTS AGED 15-64 YEARS WILL RESULT IN A RATIO OF DEPENDENT PEOPLE TO PEOPLE OF WORKING AGE OF 3:4, WHICH WILL INCREASE THE BURDEN ON THE LABOUR FORCE CONTINGENT BY MORE THAN 25% COMPARED TO 2022.

THE PROPORTION OF PEOPLE AGED 65 YEARS AND OVER IN THE TOTAL POPULATION WILL RISE FROM 21.9% (2022) TO 28.5% (2052), AND OF THE OLDEST ONES, FROM THE AGE GROUP OF 80 YEARS AND OVER, FROM 4.5% TO 7.3%. WITH THESE TENDENCIES, SERBIA WILL BECOME MORE AND MORE A COUNTRY WITH OLD AGE POPULATION.

MORE THAN THREE FOURTH OF MUNICIPALITIES/TOWNS BELONG TO THE EMIGRATION TYPE, WHICH IS CHARACTERISED BY THE DEMOGRAPHIC EXTINCTION DUE TO THE NEGATIVE VALUE OF THE GROWTH RATE OF THE NUMBER OF INHABITANTS, AS WELL AS OF THE NATURAL INCREASE AND NET MIGRATION. SUCH DEMOGRAPHIC TREND WILL ALSO PERSIST OVER THE NEXT THIRTY YEARS.



¹ Without data for AP Kosovo and Metohia.

AND JUŽNOBAČKA OBLAST. LESS THAN 10%.

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JUŽNOBAČKA OBLAST

REPUBLIC OF SERBIA







OVER THE NEXT THREE DECADES THE DEMOGRAPHIC HETEROGENEITY OF THE POPULATION WILL INTENSIFY: ALMOST 50% OF THE POPULATION WILL BE CONCENTRATED IN FIVE CITIES BEING MAJOR URBAN CENTRES: BELGRADE, NOVI SAD, NOVI PAZAR, KRAGUJEVAC AND NIŠ, WHILE THE OTHER HALF WILL BE UNEQUALLY DISTRIBUTED IN THE REMAINING 140 TERRITORIAL UNITS. ON THE OTHER HAND, THE PROCESS OF POPULATION FRAGMENTATION WILL INTENSIFY, CHARACTERISED BY A SIGNIFICANT INCREASE IN THE NUMBER OF MUNICIPALITIES WITH LESS THAN 5000 INHABITANTS, WHICH WERE ALMOST INEXISTENT IN THE PREVIOUS PERIOD, AS WELL AS OF MUNICIPALTIES WITH 5000 TO 10000 INHABITANTS.

THE LARGEST LOSS OF POPULATION UNTIL 2052 WILL HAPPEN IN BORSKA AND ZAJEČARSKA OBLAST, APPROXIMATELY BY 50%, WHILE THE SMALLEST ONE IS PROJECTED FOR BEOGRADSKA

A HUNDRED YEARS OF DEMOGRAPHIC CHANGES IN SERBIA: **POPULATION GROWTH STOPPED IN 1991**

The analysis of demographic trends in Serbia during a century, from 1953 to 2053², based on the results of population census and projections, indicates the year 1991 as the turning point. Until then, the number of inhabitants of Serbia was growing mainly owing to the positive natural increase. However, due to unfavourable economic and social changes that happened at the end of the 20th century (war conflicts on the territory of the former SFRY, economic sanctions, inflow of refugees and internally displaced persons), the number of inhabitants started to drop during the 90s. This downward trend continued until 2022, which the last Population Census has confirmed (chart 1). According to the expected projection scenario the number of inhabitants in Serbia in 2032 will be similar to that in 1953, about 6.2 million. The same scenario suggests that, until the end of the observed centenary period, the number of inhabitants would amount to 5.2 million. Even the most favourable, high projection variant without migration does not indicate a major improvement, predicting that in 2053 there will be about 5.5 million inhabitants in Serbia, while in the case of the least favourable, constant scenario, the number of inhabitants at the end of the projection period will be less than 5 million (4.7 million).





² The number of inhabitants for 2053 refers to the beginning of that year and is the same as at the end of 2052. The publication contains the results of population projections at the beginning of the year in the period from 2022 to 2052, while the data for 2053 is included only for the purpose of the analysis of the centenary period that starts with the 1953 Census and ends with 2053.



TOTAL POPULATION

LIFE EXPECTANCY	
AVERAGE AGE	
AGEING INDEX (60+/0-19 YEARS)	



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DEPOPULATION PROCESS IN SERBIA WILL INTENSIFY IN THE NEXT THIRTY YEARS

The number of inhabitants in Serbia is expected to be 5.2 million in 2052, being a fall of about 1.5 million compared with 2022, approximately 22%. The average annual population growth rate in the period from 2022 to 2052 will be negative, with a value of -8.2‰. In the previous thirty-year period (from 1992 to 2022) the average growth rate was also negative but twice less in intensity. It is predicted that this trend will reduce the number of inhabitants of Serbia to less than six million, for the first time in the middle of the projection period, i.e. in 2037.

The main reason for the expected population declines in the next decades will be a negative natural increase, which will range from -46.5 thousand (in 2022) to -34.5 thousand (in 2052), on average about 86% of the total annual change.



MODERATE GROWTH OF THE TOTAL FERTILITY RATE **UNTIL 2052**

The total fertility rate³ in Serbia has undergone a transition: from the relatively high value in 1992 of 1.8 child per woman, it has fallen to the level of 1.4 in 2011, then rose up to the level of 1.6 child per woman in 2022. From the starting TFR value of 1.6 in 2022, according to the medium variant, a moderate growth is projected, reaching a value of 1.7 by the end of the projection interval. The high variant reaches nearly the value of 1.9, while the low one predicts a return to a long-term average value of about 1.4 children per woman.

The participation of births, according to mothers' age, indicates a trend of delayed childbearing, mostly towards the age group 30–34 years, over the entire projection period. All signs point out that the moment when young women, aged from 20 to 24 years, mostly chose to give birth, is irreversible. This age group was, on average, the most represented in terms of realised fertility in 1992.

³ Total fertility rate (TFR) is the number of live births per woman







Population projections, 2022-2052

REPUBLIC OF SERBIA

LONGER LIFESPAN **BY 5.7 YEARS UNTIL 2052**

Life expectancy of women in Serbia in 2022 was 78 and of men 73 years. It is projected that by 2052, the lifespan will be approximately 84, i.e. 79 years, respectively. In the next thirty years the increase of life expectancy of both sexes would be approximately six years, as well as the difference between sexes, which would remain at the level of five years.



SMALLER NUMBER OF BIRTHS AND DEATHS THAN IN THE PAST THREE DECADES

The resultant of fertility and mortality hypotheses, along with the effect of migration, is the decreasing number of births and deaths compared with the period 1992–2022. However, observed per 1000 inhabitants the number of births remains at the level of about 8.7%, and the death rate, after an initial slight fall, returns to the 2022 level of about 16.5% in the interval from 2037 to 2047. It is a period in which higher mortality is anticipated among the cohorts born in the seventies and eighties of the last century the echo "baby boom" generation.







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DEMOGRAPHIC PROFILE

THE AGE STRUCTURE OF THE POPULATION OF SERBIA IS CHARACTERISED BY A REGRESSIVE AGE PYRAMID

Changes in the age structure are best visible when analyzing age pyramids and the share of population by five-year age groups at the beginning (2022) and end (2052) of the projection period. Up to 2052, only the share of persons aged 70 years and over in the total population is expected to grow. This is anticipated, given that in 2022, the largest age groups were 40-44 years for men and 65-69 years for women.



IN 2052, THE NUMBER OF CHILDREN AGED 0–14 WILL **BE TWICE SMALLER THAN THE POPULATION OF** PERSONS AGED 65 AND OVER

Even though the share of the young population aged 0–14 in the total population will remain on the level of about 14% over 2022–2052, the size of this contingent will be reduced by about 25%. The decrease refers both to preschool children (aged 0–6) and school age children (aged 7–14). This is a direct consequence of a smaller number of live births. Compared with the number of people aged 65 and over, the number of young people aged 0–14 will be twice smaller at the end of the projection interval.







Population projections, 2022-2052

REPUBLIC OF SERBIA

BIGGER BURDEN ON THE WORKING AGE POPULATION

The working age population will, in absolute amount, decrease from 4.3 million in 2022 to 3 million in 2052. Furthermore, the share of the working age people in the total population of Serbia will fall from about 64% to 58% over the projection period. A significant increase in the overall population dependency ratio (the ratio of dependents to working-age persons) is expected in the next three decades. In 2022, there were about 57 dependent persons per 100 inhabitants aged 15–64. According to the projections, the total dependency ratio will go up to 73% until 2052.



SERBIA 2052 – PORTRAYAL OF AN OVERAGEING NATION

The projection results show that Serbia will be demographically older at the end of the projection period than it was thirty years ago, according to all projection variants. In 2022, the average age of the population of Serbia was 43.8 years, and the expected projections suggest that it will go up to 46.4 years until 2052.

Furthermore, in the next thirty years, the share of the population aged 65 and more in the total population will considerably change, from 21.9% (2022) to 28.5% (2052).

The fact is that the population of Serbia is very old, best demonstrated by the ageing index according to which the ratio of the number of people aged 60 and over versus the young ones aged 0–19 was 3:2 in 2022, and in 2052 this ratio will be close to 4:2. In these circumstances of demographic ageing, there has also been an increase in the old-age dependency ratio, which indicates the ratio of the number of people aged 65 and over versus 100 people of the working age contingent (15–64) and reflects the potential of the country to face economic consequences of ageing, especially in the context of the sustainability of the pension system and global economic stability. In 2022, the value of the ratio was 34.7%, and in 2052 a growth to 49.6% is expected, representing the ratio of old-age people versus working age people of 1:2. The results of life tables for 2022 suggest that women who turned 65 are expected to live another 17 years, and men another 14 years. In the next thirty years, the life expectancy of people aged 65 and over is expected to be prolonged approximately by three years. In the context of the estimation of future demand for services such as human health and social security of the eldest, it is important to draw attention to the population aged 80 and over. The share of the eldest in the total population will increase from 4.5% in 2022 to 7.3% in 2052.









Population projections, 2022-2052

REPUBLIC OF SERBIA

INTENSIFICATION OF DEMOGRAPHIC **HETEROGENEITY OF THE POPULATION UNTIL 2052**

Looking at regions, in the next thirty years the depopulation process is expected to continue in all four regions of the Republic of Serbia. The weakest intensity will be in Beogradski region, which will see a decrease of about 5% in 2052 compared with 2022 because the loss based on natural increase alleviate the positive migration balance. Region Vojvodina will lose a quarter of its population until 2052, and the two other regions will experience a loss of around 30%. On the level of areas, the largest loss in 2052 to 2022 will be in Borska oblast (by 55%) and Zaječarska oblast (almost 50%). The smallest loss is expected in Beogradska and Južnobačka oblast, less than 10%. Besides the still on-going tendency of an increasingly large population convergence towards the north of the Republic (territory of Belgrade and Novi Sad) there is ever larger concentration of population in towns that are big urban and university centres. This will result in the fact that in 2052 nearly a half of the total population of Serbia will live on the territory or five towns - Belgrade, Novi Sad, Niš, Kragujevac and Novi Pazar. For the sake of comparison, the population of these towns accounted for 30%, i.e. 40% of the total population of Serbia in 1992 and 2022, respectively. The rest of the population is distributed in the other 140⁴ municipalities/towns in Serbia. It is worth mentioning that the process of population fragmentation of territorial units will be intensified over the next thirty years. Namely, the categorisation of the municipalities and towns in Serbia according to the number of inhabitants shows a noticeable trend of a growing number of municipalities with less than 5000 and of those between 5000 and 10000 inhabitants. On the other hand, in 2052 the number of towns with more than 100000 inhabitants will be twice smaller than in 1992 and 2022.

⁴ Except for the municipalities part of the City of Belgrade, as well as the cities of Novi Sad, Novi Pazar, Kragujevac and Niš.

In the last projection year, in a quarter of municipalities the average population age will be over 50 years, while in 2022 there were only six such municipalities.

> According to the analyzed demographic indicators of age, due to the high share of older population, the most demographically endangered municipalities in the base year, alongside Crna Trava, are Negotin, Golubac, Boljevac, Bosilegrad, Osečina and Nova Varoš. A relatively more favourable age structure is recorded in the municipalities Sjenica, Tutin, Novi Pazar, Opovo and Žabalj.







