**STATISTICAL RELEASE**
P0302

# Mid-year population estimates

## 2019

Embargoed until:
29 July 2019
10:00

The South Africa I know, the home I understand

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# Acronyms and abbreviations

| | |
|---|---|
| AIDS | acquired immune deficiency syndrome |
| AIM | AIDS impact model |
| ANC | antenatal care |
| ART | antiretroviral therapy |
| CBR | crude birth rate |
| CDR | crude death rate |
| DemProj | Demographic projections |
| HIV | human immunodeficiency syndrome |
| IMF | International Monetary Fund |
| IMR | infant mortality rate |
| IOM | International Organisation for Migration |
| NSO | National Statistical Organisation |
| OECD | The Organisation for Economic Co-operation and Development |
| PMTCT | prevention of mother-to-child transmission |
| PLWHIV | People living with HIV |
| RAPID | Rapid Mortality Surveillance |
| RNI | rate of natural increase |
| SDDS | Special Data Dissemination Standards |
| Stats SA | Statistics South Africa |
| TFR | total fertility rate |
| U5MR | under-five mortality rate |

# Summary

- The cohort-component methodology is used to estimate the 2019 mid-year population of South Africa.

- The estimates cover all the residents of South Africa at 2019 mid-year point, and are based on the latest available information. Estimates may change as new data become available. The new estimates are accompanied by an entire series of revised estimates for the period 2002–2019. On this basis, comparisons between this model and previous ones should not be made.

- For 2019, Statistics South Africa (Stats SA) estimates the mid-year population at 58,78 million.

- Approximately 51,2% (approximately 30 million) of the population is female.

- Gauteng comprises the largest share of the South African population, with approximately 15,2 million people (25,8%) living in this province. KwaZulu-Natal is the province with the second largest population, with an estimated 11,3 million people (19,2%) living in this province. With a population of approximately 1,26 million people (2,2%), Northern Cape remains the province with the smallest share of the South African population.

- About 28,8% of the population is aged younger than 15 years and approximately 9,0% (5,3 million) is 60 years or older. Of those younger than 15 years of age, the majority reside in Gauteng (21,5%) and KwaZulu-Natal (21,1%). Of the elderly (those aged 60 years and older), the highest percentage 23,9% (1,27 million) reside in Gauteng. The proportion of elderly persons aged 60 and older is increasing over time.

- Migration is an important demographic process, as it shapes the age structure and distribution of the provincial population. For the period 2016–2021, Gauteng and Western Cape are estimated to experience the largest inflow of migrants of approximately, 1 643 590 and 493 621 respectively (see migration stream Tables 7, 8 and 9 for net migration).

- Life expectancy at birth for 2019 is estimated at 61,5 years for males and 67,7 years for females.

- The infant mortality rate for 2019 is estimated at 22,1 per 1 000 live births.

- The estimated overall HIV prevalence rate is approximately 13,5% among the South African population. The total number of people living with HIV (PLWHIV) is estimated at approximately 7,97 million in 2019. For adults aged 15–49 years, an estimated 19,07% of the population is HIV positive.

**Table 1: Mid-year population estimates for South Africa by population group and sex, 2019**

| Population group | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| | **Number** | **% distribution of males** | **Number** | **% distribution of females** | **Number** | **% distribution of total** |
| Black African | 23 124 782 | 80,7 | 24 318 477 | 80,8 | **47 443 259** | **80,7** |
| Coloured | 2 513 221 | 8,8 | 2 663 530 | 8,8 | **5 176 750** | **8,8** |
| Indian/Asian | 768 594 | 2,7 | 734 413 | 2,4 | **1 503 007** | **2,6** |
| White | 2 266 151 | 7,9 | 2 385 855 | 7,9 | **4 652 006** | **7,9** |
| **Total** | **28 672 747** | **100,0** | **30 102 275** | **100,0** | **58 775 022** | **100,0** |

**Figure 1: Mid-year population estimates for South Africa by province, 2019**
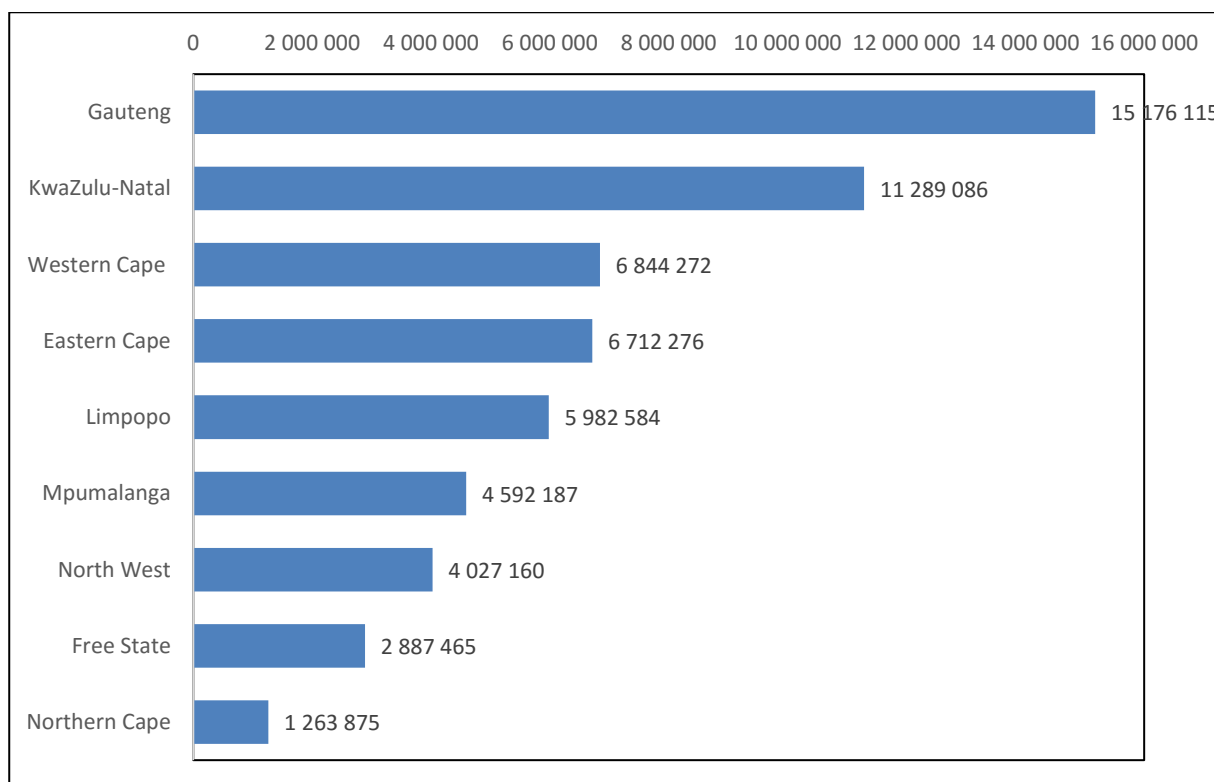


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## 1.  Introduction

In a projection, the size and composition of the future population of an entity such as South Africa is estimated. The mid-year population estimates produced by Statistics South Africa (Stats SA) uses the cohort-component method for population estimation. In the cohort-component method, a base population is estimated that is consistent with known demographic characteristics of the country. The cohort base population is projected into the future according to the projected components of change. Selected levels of fertility, mortality and migration are used as input to the cohort-component method. For the 2019 mid-year estimates, the cohort-component method is utilised within the Spectrum Policy Modelling system. Spectrum is a Windows-based system of integrated policy models (version 5.76). The DemProj module within Spectrum is used to develop the demographic projection, whilst the AIDS Impact Model (AIM) is used to incorporate the impacts of HIV and AIDS on fertility and mortality, and ultimately the population estimates.

Stats SA subscribes to the specifications of the Special Data Dissemination Standards (SDDS) of the International Monetary Fund (IMF). This standard is related to the dissemination of this report which dictates that it should be released within one month of the mid-year. The mid-year estimates are an estimate of the population as at 01 July in a given year. The estimates of stock such as population size, number infected with HIV etc. pertain to the middle of the year i.e. 01 July, whilst the estimates of flow e.g. births, deaths, Total Fertility Rates (TFRs), Infant Mortality Rates (IMRs) etc. are for a 12-month period e.g. 01 July 2019 to 30th June 2020. A stock variable is measured at a given time, and represents a quantity at each moment in time – e.g. the number of population at a certain moment whilst an estimate of flow is typically measured over a certain interval of time. The mid-year population estimates are published annually. It is misleading to compare values and rankings with those of previously published reports, due to revisions and updates of the underlying data and adjustments. Users are advised to use the complete series published along with this report on the Stats SA website.

## 2.    Demographic and other assumptions

A cohort-component projection requires a base population distributed by age and sex. Levels of mortality, fertility and migration are estimated for the base year and projected for future years. The cohort base population is projected into the future according to the projected components of population change. The DemProj module of Spectrum is used to produce a single-year projection, thus the TFR and the life expectancy at birth must be provided in the same format i.e. single years. The time series of TFR estimates for all population groups in South Africa are derived following a detailed review of TFR estimates (1985–2019), published and unpublished, from various authors, methods and data sources. The finalised TFR assumptions can be found in Table 2 (page 5). The estimates of fertility show a fluctuation over the period 2002–2019, giving rise to a population structure indicative of that of Census 2011 population structure. Between the period 2009 and 2019, fertility has declined from an average of 2,62 children per woman to 2,32 children in 2019. Other inputs required in DemProj include the age-specific fertility rate (ASFR) trend, sex ratios at birth and net international migration.

In estimating South Africa's population, international migration is provided as an input into the model (see Table 3). If the net flow is outward, then net migration is reflected as a negative number. If the net flow is inward, then it is reflected as a positive number. Net international migration estimates are derived using not only Census 2011 migration data, but also migration numbers and proportions from various other authors, methods and data sources such as the Organisation for Economic Co-operation and Development (OECD), International Organisation for Migration (IOM), which forms part of the UN network as well as census data from National statistics offices (NSOs) of various countries. Assumptions regarding future migration patterns are based on past and current trends. Compared to other components of change, net migration rate can be volatile, as it is significantly impacted by economic and policy changes. Also current data on emigration levels are limited.

The life expectancy assumption entered into DemProj by sex is the life expectancy in the absence of AIDS (see Table 2). Each population group is also subjected to non-AIDS mortality according to the input non-AIDS life expectancy and the selected model life table. AIM will calculate the number of AIDS deaths and determine a new set of life expectancies that incorporate the impact of AIDS, (see Figure 3, page 8). Stats SA applies the country-specific UN Model Life table for South Africa in Spectrum. The age pattern of mortality is based on various sources, data and methods, these include death date from the RAPID mortality surveillance report, Mortality and causes of death report, and the Demographic and Health Survey among others. Survival rates from the selected life tables were then used to project the population forward.

**Table 2: Assumptions of expectation of life at birth without HIV/AIDS and total fertility rate, 2002–2019**

| Year | TFR | Life expectancy at birth without HIV/AIDS | |
|------|-----|------|--------|
| | | **Male** | **Female** |
| 2002 | 2,45 | 60,8 | 68,6 |
| 2003 | 2,42 | 61,0 | 69,0 |
| 2004 | 2,54 | 61,3 | 69,7 |
| 2005 | 2,59 | 61,5 | 70,0 |
| 2006 | 2,63 | 61,6 | 70,0 |
| 2007 | 2,65 | 61,5 | 70,1 |
| 2008 | 2,66 | 61,8 | 70,2 |
| 2009 | 2,62 | 62,0 | 70,3 |
| 2010 | 2,58 | 62,5 | 70,5 |
| 2011 | 2,51 | 63,2 | 70,4 |
| 2012 | 2,46 | 63,5 | 70,3 |
| 2013 | 2,42 | 63,8 | 71,0 |
| 2014 | 2,39 | 63,9 | 71,1 |
| 2015 | 2,37 | 64,6 | 71,8 |
| 2016 | 2,36 | 65,0 | 72,4 |
| 2017 | 2,34 | 65,3 | 72,7 |
| 2018 | 2,33 | 65,4 | 72,8 |
| 2019 | 2,32 | 65,6 | 72,7 |

**Table 3: International net-migration assumptions for the period 1985–2021**

|           | Black African | Indian/Asian | White | Net international migration |
|-----------|--------------:|-------------:|------:|---------------------------:|
| 1985–2000 | 588 847 | 36 908 | -202 868 | 422 887 |
| 2001–2006 | 546 993 | 25 310 | -99 574 | 472 729 |
| 2006–2011 | 809 780 | 43 222 | -106 787 | 746 215 |
| 2011–2016 | 972 995 | 54 697 | -111 346 | 916 346 |
| 2016–2021 | 1 094 864 | 60 791 | -115 906 | 1 039 749 |

Note: The estimate refers the flow figure from 30th June of the first year in the period to 1st July of the last year of the period.

The Spectrum Policy Modelling System (Futures Group) consists of a number of components that result in the estimation of population to costing and planning of, and future health care services. For the purpose of the production of the MYPE, Stats SA uses two of the available components in this projection, namely (a) **Demproj** for population projections and (b) **AIM** in which the consequences of the AIDS epidemic were projected. In the AIM projection, several programmatic and epidemiological data inputs specific to South Africa are required. These include programme coverage of adults and children on antiretroviral treatment (ART) and Prevention of mother-to-child-transmission (PMTCT) treatment (NDoH, 2018). In addition to eligibility for treatment as per national guidelines, the epidemiological inputs include antenatal clinic data (ANC) (NDoH, 2018). The assumptions regarding the HIV epidemic in South Africa are based primarily on the prevalence data collected annually from pregnant women attending public antenatal clinics (ANC) since 1990 to the most recent estimates of 2017 (Woldesenbet, S.A, et al, 2018). However, antenatal surveillance data produce biased prevalence estimates for the general population because only a select group of people (i.e. pregnant women attending public health services) are included in the sample. The South African National HIV prevalence, incidence, behaviour and communication survey data that produces national estimates for the country are used in the model to correct for this bias (Shisana et al., 2014; HSRC, 2017). Other inputs in the AIM model include the following: Median time from HIV infection to death, and Ratio of new infections. Indicators of HIV prevalence, incidence and HIV population numbers over time show the impact of HIV on the population. HIV indicators shown in Figures 5 and 6 are based on the aforementioned assumptions.

The accuracy of the estimates depends on a number of factors that may be difficult to anticipate, such as economic crisis, wars and natural disasters, all of which can potentially impact the estimates.

## 3.  Demographic and other indicators

Figure 2 indicates that the crude birth rate (CBR) has increased between 2003 and 2008, thereafter it declines in the period 2009 to 2019. The CBR is directly related to the fluctuating TFR assumptions (Table 2, page 5). Figure 2 and Table 4 offer a glimpse into the mortality experience of South Africa, which incorporates the impact of HIV and AIDS (using the AIM model).  The crude death rate (CDR) has declined from 12,5 deaths per 1 000 people in 2002 to 9,2 deaths per 1 000 people in 2019. However due to the AIDS epidemic experience, the crude death rate in South Africa did increase between 2002–2006 thereafter declining as access to HIV treatment and care became available. The rate of natural increase (RNI) is the rate of population

growth in South Africa over time, without including the impact of migration i.e. deaths subtracted from births. The RNI fluctuates over time, mirroring the CBR, indicating the great influence of births in South Africa.

**Figure 2: Crude birth rate, crude death rate, and rate of natural increase over time, 2002–2019**
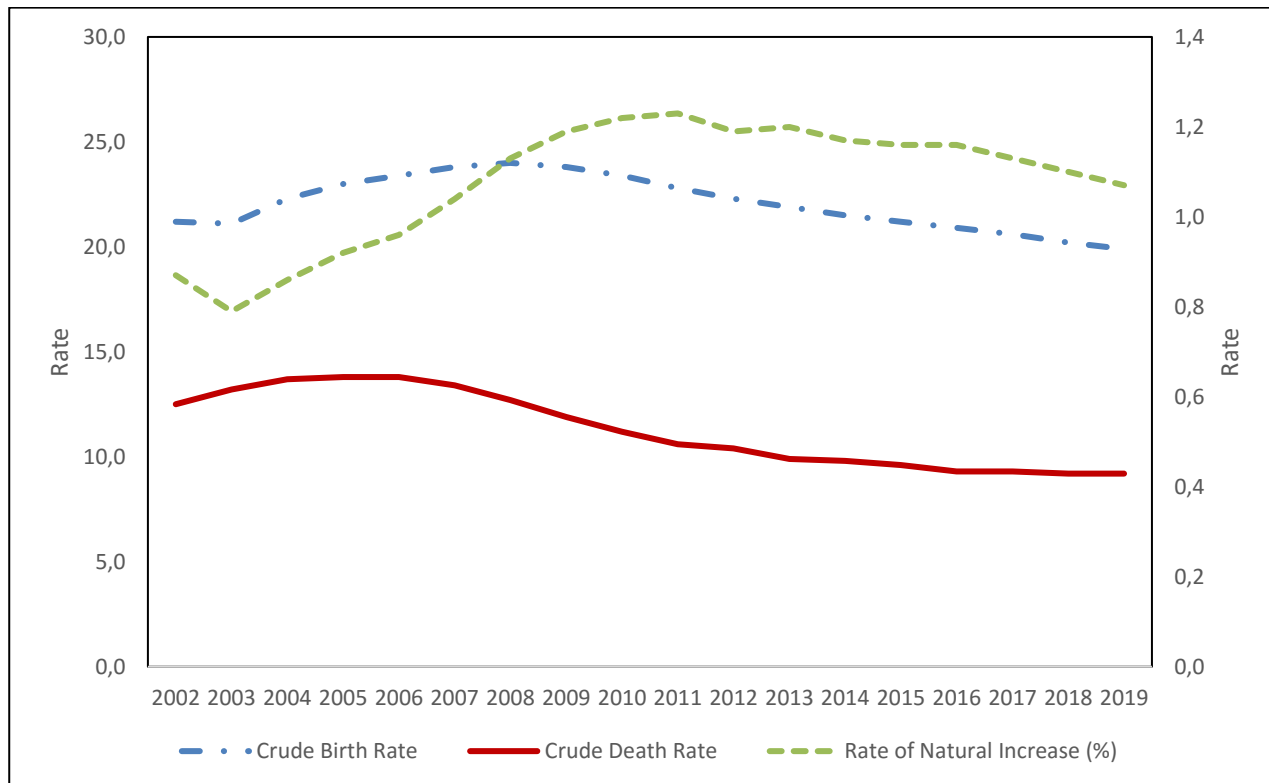


Life expectancy at birth declined between 2002 and 2006, largely due to the impact of the HIV and AIDS epidemic experienced, but expansion of health programmes to prevent mother-to-child transmission as well as access to antiretroviral treatment has partly led to the increase in life expectancy since 2007. By 2019 life expectancy at birth is estimated at 61,5 years for males and 67,7 years for females. Figure 3 and 4 indicate that life expectancy is increasing, and this may be related to marginal gains in survival rates among infants and children under-5 post HIV interventions in 2005. The infant mortality rate (IMR) has declined from an estimated 56,5 infant deaths per 1 000 live births in 2002 to 22,1 infant deaths per 1 000 live births in 2019. Similarly the under-five mortality rate (U5MR) declined from 79,0 child deaths per 1 000 live births to 28,5 child deaths per 1 000 live births between 2002 and 2019. The IMR and U5MR shown in Figure 4 are based on the selected model life table and may differ to similar indices published elsewhere.

Mid-year population estimates, 2019

**Figure 3: Life expectancy by sex over time, 2002–2019**
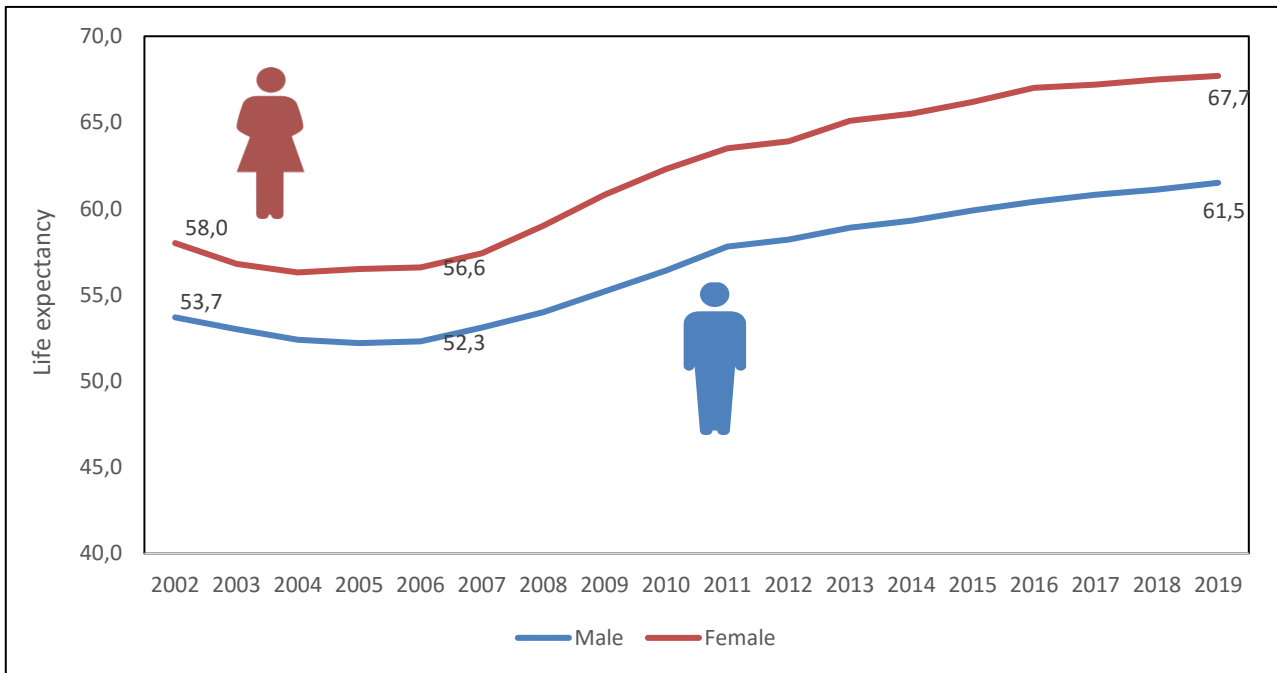


**Figure 4: IMR, U5MR and Total LE over time, 2002–2019**



Mid-year population estimates, 2019
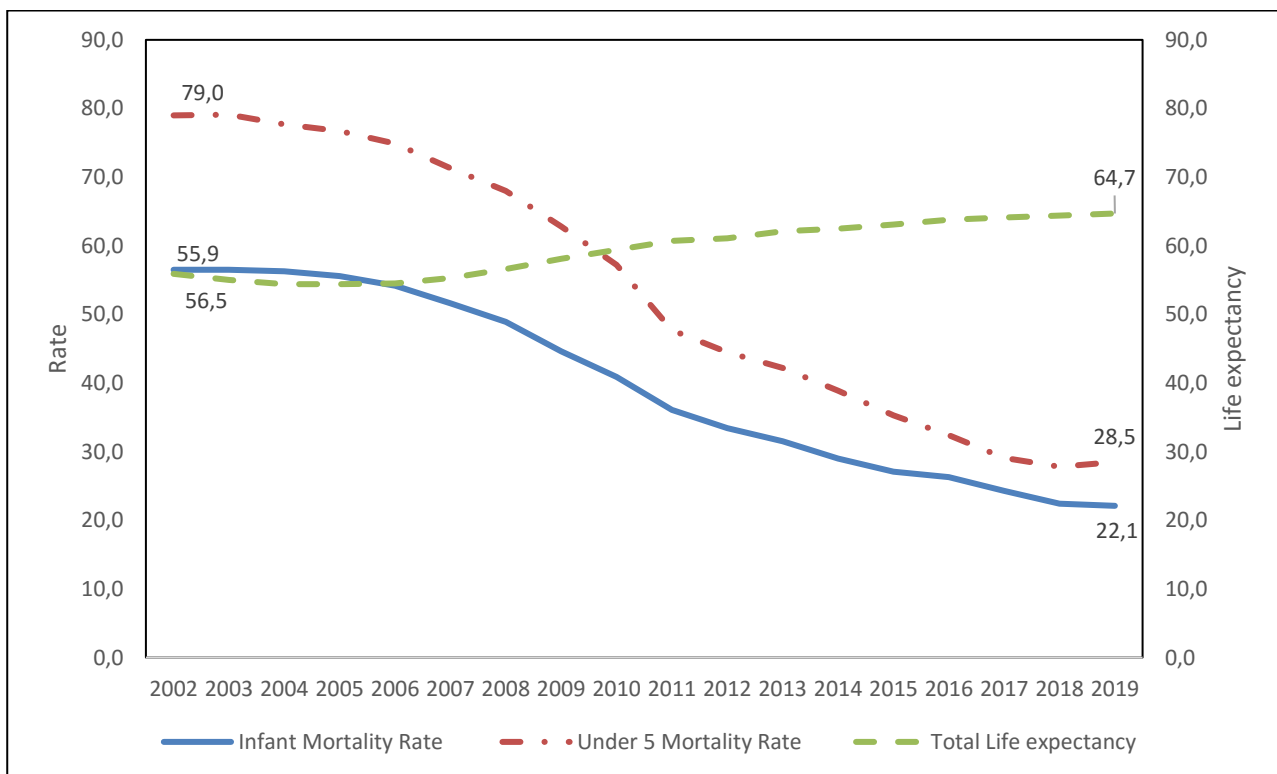
Table 4 below shows estimates for selected indicators. The highest number of deaths was estimated for the period 1 July 2006 to 30 June 2007. The decline in the percentage of AIDS-related deaths since 2007 can be attributed to the increase in the roll-out of ART over time. The national roll-out of ART began in 2005 with a target of one (1) service point in each of the 53 districts of South Africa at the time (later reduced to 52 districts). The estimated number of AIDS-related deaths declined consistently since 2007 from 267 417 to 126 805 AIDS related deaths in 2019. Access to antiretroviral treatment has changed significantly over time, altering the pattern of mortality over time. Access to ART has extended the lifespan of many in South Africa, who would have otherwise died at an earlier age, as evidenced in the decline of AIDS deaths post-2006.

**Table 4: Births and deaths for the period 2002–2019**

| Year | Number of births* | Number of deaths* | Number of AIDS related deaths* | Percentage of AIDS related deaths |
|------|------|------|------|------|
| 2002 | 985 592 | 581 147 | 204 164 | 35,1 |
| 2003 | 992 466 | 619 789 | 241 519 | 39,0 |
| 2004 | 1 058 035 | 648 774 | 273 113 | 42,1 |
| 2005 | 1 101 649 | 661 940 | 283 905 | 42,9 |
| 2006 | 1 136 560 | 671 812 | 286 588 | 42,7 |
| 2007 | 1 170 768 | 660 794 | 267 417 | 40,5 |
| 2008 | 1 196 587 | 634 042 | 238 476 | 37,6 |
| 2009 | 1 203 938 | 602 288 | 204 120 | 33,9 |
| 2010 | 1 204 340 | 574 718 | 176 946 | 30,8 |
| 2011 | 1 192 472 | 551 597 | 153 284 | 27,8 |
| 2012 | 1 184 855 | 550 702 | 148 374 | 26,9 |
| 2013 | 1 180 634 | 535 958 | 137 542 | 25,7 |
| 2014 | 1 178 657 | 538 866 | 131 908 | 24,5 |
| 2015 | 1 177 000 | 532 761 | 133 951 | 25,1 |
| 2016 | 1 179 465 | 526 226 | 130 434 | 24,8 |
| 2017 | 1 178 754 | 530 210 | 132 544 | 25,0 |
| 2018 | 1 175 282 | 535 401 | 129 677 | 24,2 |
| 2019 | 1 171 219 | 541 493 | 126 805 | 23,4 |

*The flow data as shown above are for a 12-month period e.g. 1st July 2018 to 30th June 2019

**HIV prevalence**

Figures 5 and 6 show the HIV prevalence estimated for the period 2002–2019. For 2019, an estimated 13,5% of the total population is HIV positive. Over a fifth of South African women in their reproductive ages (15–49 years) are HIV positive. HIV prevalence among the youth aged 15–24 has remained fairly stable over time. The total number of persons living with HIV in South Africa increased from an estimated 4,64 million in 2002 to 7,97 million by 2019.

**Figure 5: HIV prevalence by selected age groups, 2002–2019**
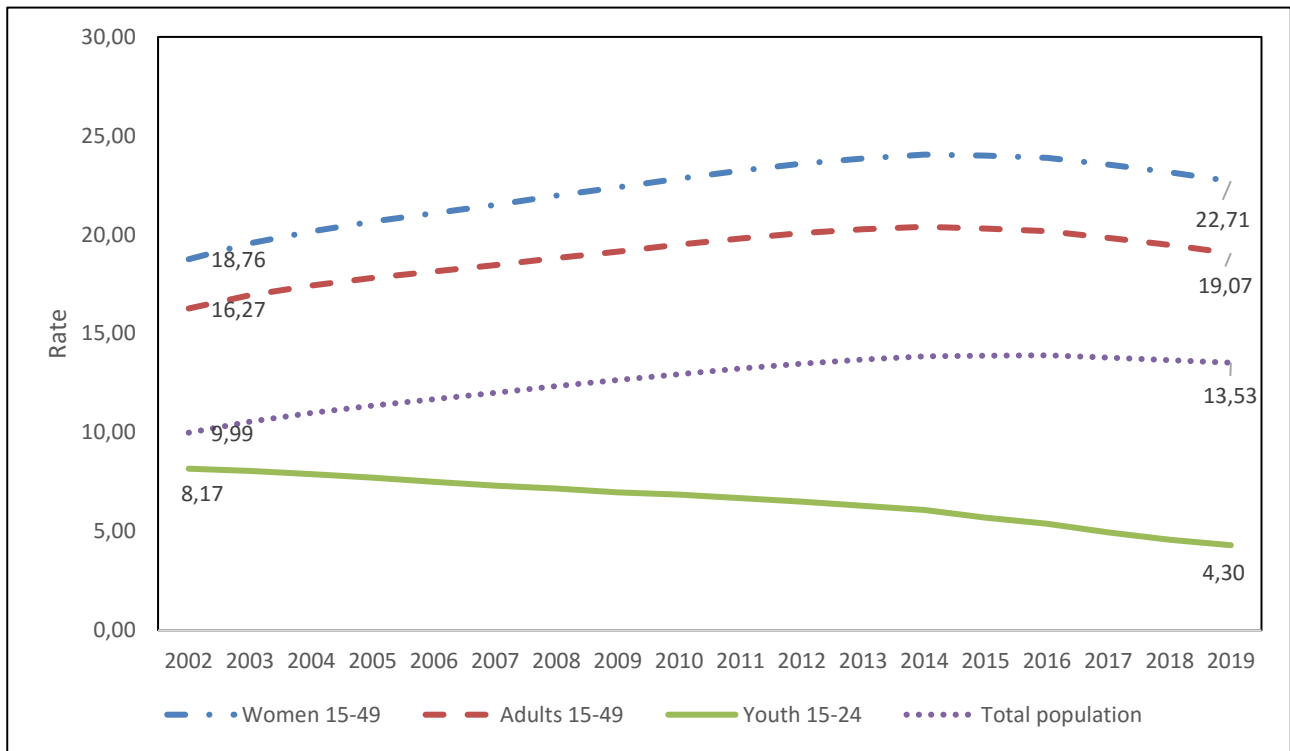


**Figure 6: HIV Population over time, 2002–2019**



Mid-year population estimates, 2019
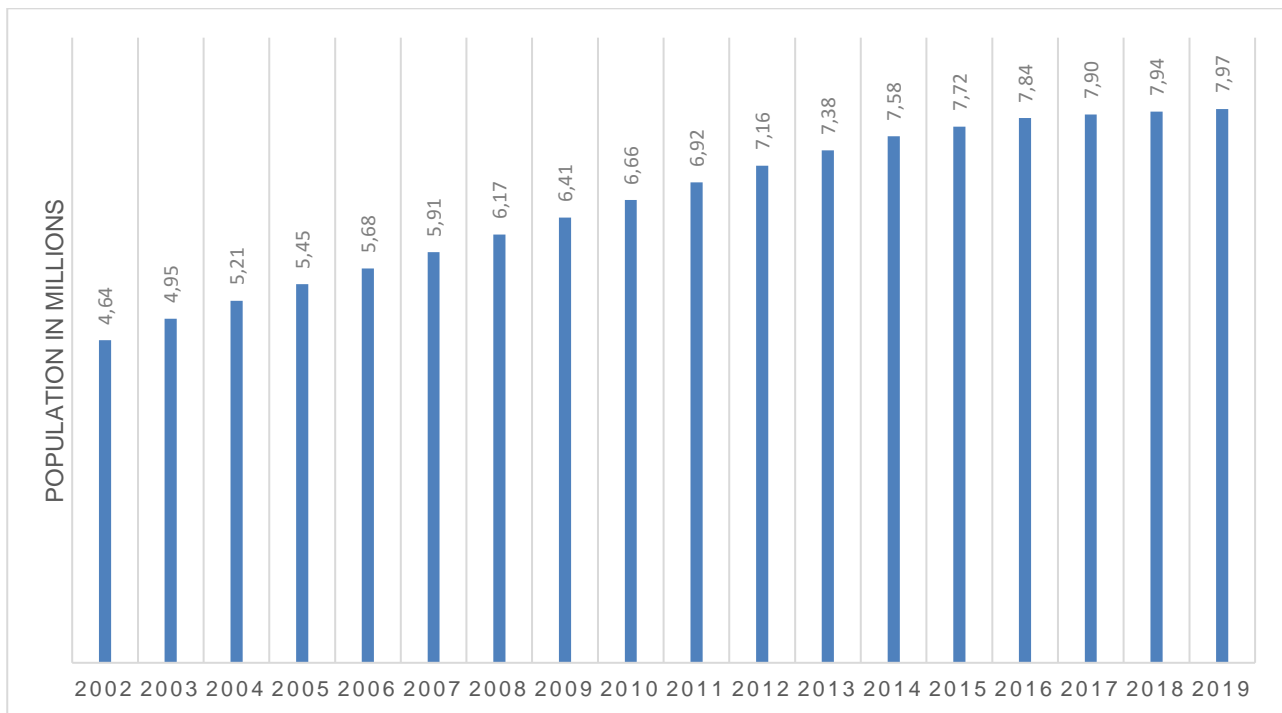
## 4. National population estimates

Table 5 shows the mid-year population estimates by population group and sex. The mid-year population is estimated at 58,8 million. The black African population is in the majority (47,4 million) and constitutes approximately 81% of the total South African population. The white population is estimated at 4,7 million, the coloured population at 5,2 million and the Indian/Asian population at 1,5 million. Just over fifty-one per cent (30 million) of the population is female.

**Table 5: Mid-year population estimates by population group and sex, 2019**

| Population group | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| | Number | % of total male population | Number | % of total female population | Number | % of total population |
| Black African | 23 124 782 | 80,7 | 24 318 477 | 80,8 | **47 443 259** | **80,7** |
| Coloured | 2 513 221 | 8,8 | 2 663 530 | 8,8 | **5 176 750** | **8,8** |
| Indian/Asian | 768 594 | 2,7 | 734 413 | 2,4 | **1 503 007** | **2,6** |
| White | 2 266 151 | 7,9 | 2 385 855 | 7,9 | **4 652 006** | **7,9** |
| **Total** | **28 672 747** | **100,0** | **30 102 275** | **100,0** | **58 775 022** | **100,0** |

Figure 7 below shows that the rate of growth for the South African population has increased between 2002 and 2019. The estimated overall growth rate increased from approximately 1,0% for the period 2002–2003 to 1,4% for the period 2018–2019. The proportion of the elderly in South Africa is on the increase and this is indicative of the estimated growth rate over time rising from 1,4% for the period 2002–2003 to 3,0% for the period 2018–2019. Given the fluctuation in fertility over time, the increase in the growth rate among children aged 0–14 between 2002 and 2013 is indicative of the rise in fertility between 2004 and 2008, ageing of children into the next age category, as well as the decline in infant and child mortality post-2006.

**Figure 7: Population growth rates by selected age groups over time, 2002–2019**



Mid-year population estimates, 2019
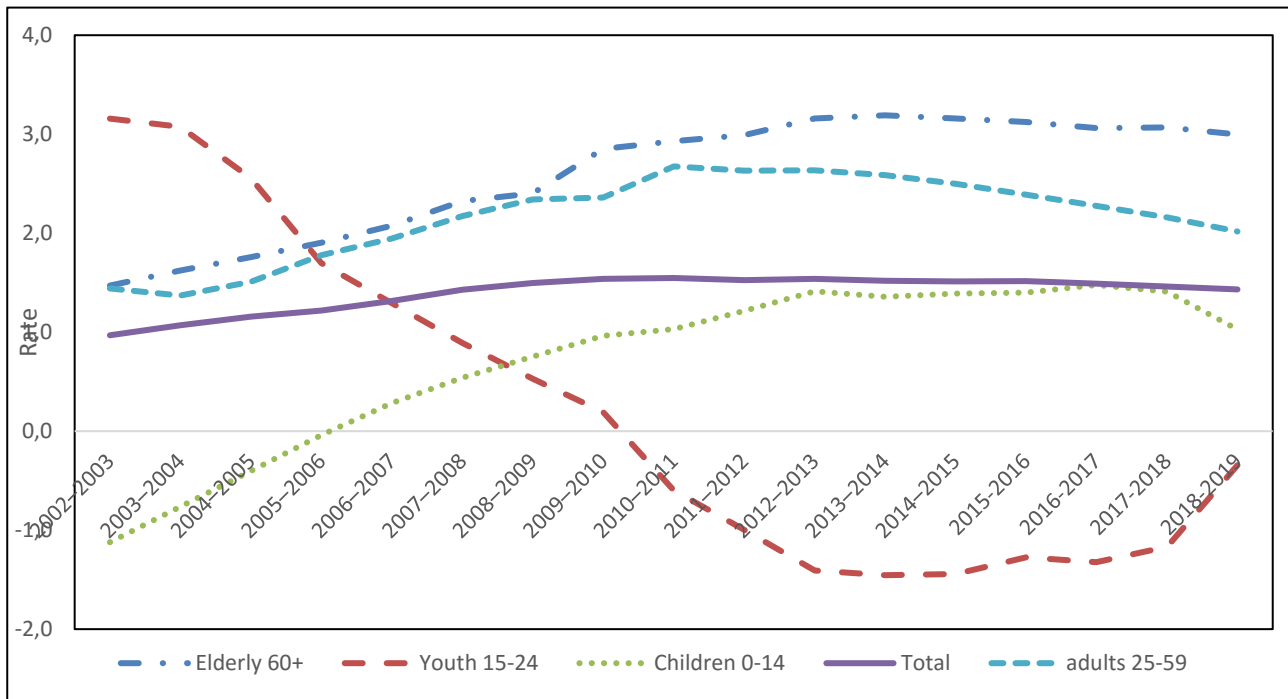
Table 6 shows the 2019 mid-year population estimates by age, sex and population group. About 28,8% of the population is aged 0–14 years and approximately 9,0% is 60 years and older.

**Table 6: Mid-year population estimates by population group, age and sex, 2019**

| | Black African | | | Coloured | | | Indian/Asian | | | White | | | RSA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0-4 | 2 493 588 | 2 433 265 | 4 926 852 | 242 060 | 236 024 | 478 084 | 50 094 | 48 388 | 98 482 | 117 715 | 112 812 | 230 527 | 2 903 457 | 2 830 489 | 5 733 946 |
| 5-9 | 2 489 446 | 2 422 169 | 4 911 615 | 240 168 | 234 678 | 474 845 | 49 765 | 47 704 | 97 469 | 129 355 | 124 155 | 253 510 | 2 908 734 | 2 828 705 | 5 737 439 |
| 10-14 | 2 331 064 | 2 293 569 | 4 624 633 | 226 845 | 222 704 | 449 549 | 47 116 | 44 719 | 91 835 | 133 532 | 128 354 | 261 886 | 2 738 556 | 2 689 347 | 5 427 902 |
| 15-19 | 1 968 109 | 1 949 466 | 3 917 575 | 206 805 | 203 900 | 410 705 | 44 959 | 42 502 | 87 461 | 124 102 | 120 159 | 244 261 | 2 343 975 | 2 316 027 | 4 660 002 |
| 20-24 | 2 075 048 | 2 049 234 | 4 124 282 | 214 488 | 212 277 | 426 765 | 55 525 | 48 689 | 104 214 | 130 335 | 128 590 | 258 925 | 2 475 396 | 2 438 790 | 4 914 186 |
| 25-29 | 2 376 819 | 2 311 026 | 4 687 845 | 219 362 | 218 181 | 437 544 | 72 137 | 58 336 | 130 473 | 137 357 | 135 353 | 272 710 | 2 805 676 | 2 722 896 | 5 528 571 |
| 30-34 | 2 383 626 | 2 286 491 | 4 670 117 | 210 804 | 211 304 | 422 108 | 79 467 | 63 396 | 142 862 | 152 726 | 150 149 | 302 875 | 2 826 623 | 2 711 340 | 5 537 963 |
| 35-39 | 1 910 753 | 1 847 716 | 3 758 469 | 181 326 | 188 412 | 369 739 | 75 996 | 62 282 | 138 277 | 152 533 | 152 157 | 304 690 | 2 320 608 | 2 250 567 | 4 571 175 |
| 40-44 | 1 392 548 | 1 448 164 | 2 840 712 | 155 605 | 159 124 | 314 730 | 63 320 | 54 375 | 117 695 | 153 314 | 158 957 | 312 271 | 1 764 787 | 1 820 620 | 3 585 408 |
| 45-49 | 1 074 833 | 1 197 682 | 2 272 515 | 150 348 | 162 533 | 312 881 | 55 804 | 51 111 | 106 915 | 174 298 | 179 008 | 353 306 | 1 455 283 | 1 590 334 | 3 045 617 |
| 50-54 | 785 476 | 1 027 394 | 1 812 870 | 136 383 | 161 398 | 297 781 | 46 718 | 47 242 | 93 959 | 161 324 | 169 114 | 330 438 | 1 129 900 | 1 405 148 | 2 535 048 |
| 55-59 | 637 128 | 903 083 | 1 540 211 | 118 093 | 138 586 | 256 679 | 39 260 | 42 958 | 82 218 | 150 907 | 162 497 | 313 404 | 945 388 | 1 247 124 | 2 192 512 |
| 60-64 | 482 543 | 735 389 | 1 217 932 | 86 702 | 110 581 | 197 283 | 31 728 | 36 855 | 68 583 | 144 098 | 156 581 | 300 679 | 745 071 | 1 039 405 | 1 784 476 |
| 65-69 | 339 833 | 554 771 | 894 604 | 59 313 | 83 499 | 142 812 | 24 548 | 31 110 | 55 658 | 129 884 | 147 162 | 277 046 | 553 578 | 816 542 | 1 370 121 |
| 70-74 | 198 981 | 381 497 | 580 478 | 34 424 | 54 926 | 89 350 | 16 400 | 23 687 | 40 088 | 111 602 | 128 294 | 239 896 | 361 408 | 588 404 | 949 812 |
| 75-79 | 106 936 | 233 195 | 340 131 | 18 524 | 34 402 | 52 926 | 9 371 | 15 839 | 25 210 | 80 115 | 99 493 | 179 608 | 214 946 | 382 928 | 597 874 |
| 80+ | 78 052 | 244 365 | 322 416 | 11 971 | 31 001 | 42 971 | 6 385 | 15 223 | 21 608 | 82 954 | 133 019 | 215 973 | 179 361 | 423 608 | 602 969 |
| Total | 23 124 782 | 24 318 477 | 47 443 259 | 2 513 221 | 2 663 530 | 5 176 750 | 768 594 | 734 413 | 1 503 007 | 2 266 151 | 2 385 855 | 4 652 006 | 28 672 747 | 30 102 275 | 58 775 022 |

Mid-year population estimates, 2019

## 5. Provincial population estimates

Provincial estimates are derived using a cohort-component method as suggested by the United Nations (United Nations, 1992), incorporating changes in births, deaths as well as migration over time. When provincial population estimates are desired and the appropriate data are available, a multi-regional approach should be considered as this is the only way to guarantee that the total migration flows between regions will sum to zero (United Nations, 1992). Multi-regional methods require the estimation of separate age-specific migration rates between every region of the country and every other region and such detailed data are rarely available. Although it is possible to estimate some of the missing data (see Willekens et al., 1978) the task of preparing data can become overwhelming if there are many regions. If there are only a few streams however the multi-regional method is the best method to use. In South Africa 2 448 (9x8x17x2) migration streams are derived if the multi-regional model is applied in calculating migration streams by age group (17 in total) and sex for each of the nine provinces.

## 5.1 Demographic assumptions

The demographic data from the 2011 Census i.e. fertility, mortality and migration rates are incorporated in the assumptions. The population structure as per Census 2011 as well as the distribution of births and deaths from vital registrations (adjusted for late registration and completeness) are used to determine provincial estimates (Stats SA, 2017). Figure 8 shows the provincial fertility estimates for the periods 2001–2006; 2006–2011; 2011–2016 and 2016-2021. In the period 2006–2011, there is a general rise in TFR, giving shape to the Census 2011 provincial population structure. However for the period 2011–2021 there is an overall decline in TFR over time. Fertility varies from province to province as is depicted in Figure 8. The more rural provinces of the Eastern Cape and Limpopo indicate higher fertility rates whilst more urbanised provinces such as Gauteng and the Western Cape indicate lower levels of fertility.

**Figure 8: Provincial average total fertility rate over time, 2001–2021**



| | EC | FS | GP | KZN | LP | MP | NC | NW | WC |
|---|---|---|---|---|---|---|---|---|---|
| ■ 2001-2006 | 3,25 | 2,72 | 2,15 | 2,94 | 3,00 | 2,91 | 3,10 | 3,09 | 2,33 |
| ⊞ 2006-2011 | 3,26 | 2,86 | 2,38 | 2,98 | 3,25 | 2,96 | 3,02 | 3,25 | 2,46 |
| ◪ 2011-2016 | 3,08 | 2,57 | 2,09 | 2,71 | 3,06 | 2,62 | 2,72 | 2,84 | 2,22 |
| ☐ 2016-2021 | 2,88 | 2,34 | 1,91 | 2,70 | 2,87 | 2,54 | 2,67 | 2,65 | 2,00 |

Mid-year population estimates, 2019
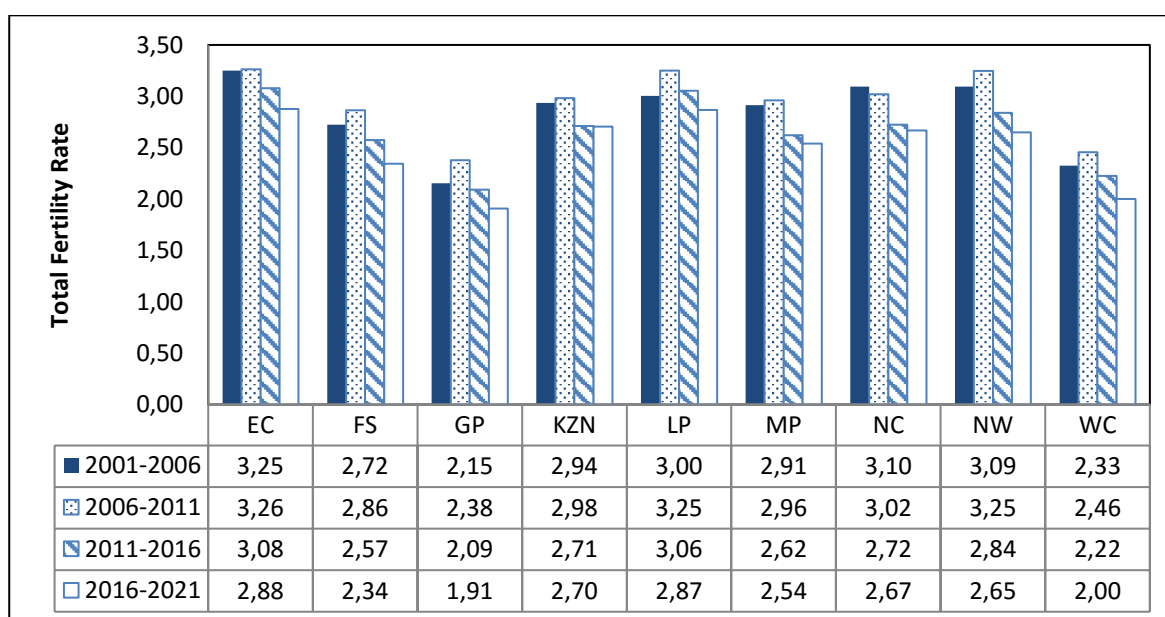
**Figure 9: Provincial average total fertility rate, 2016–2021**
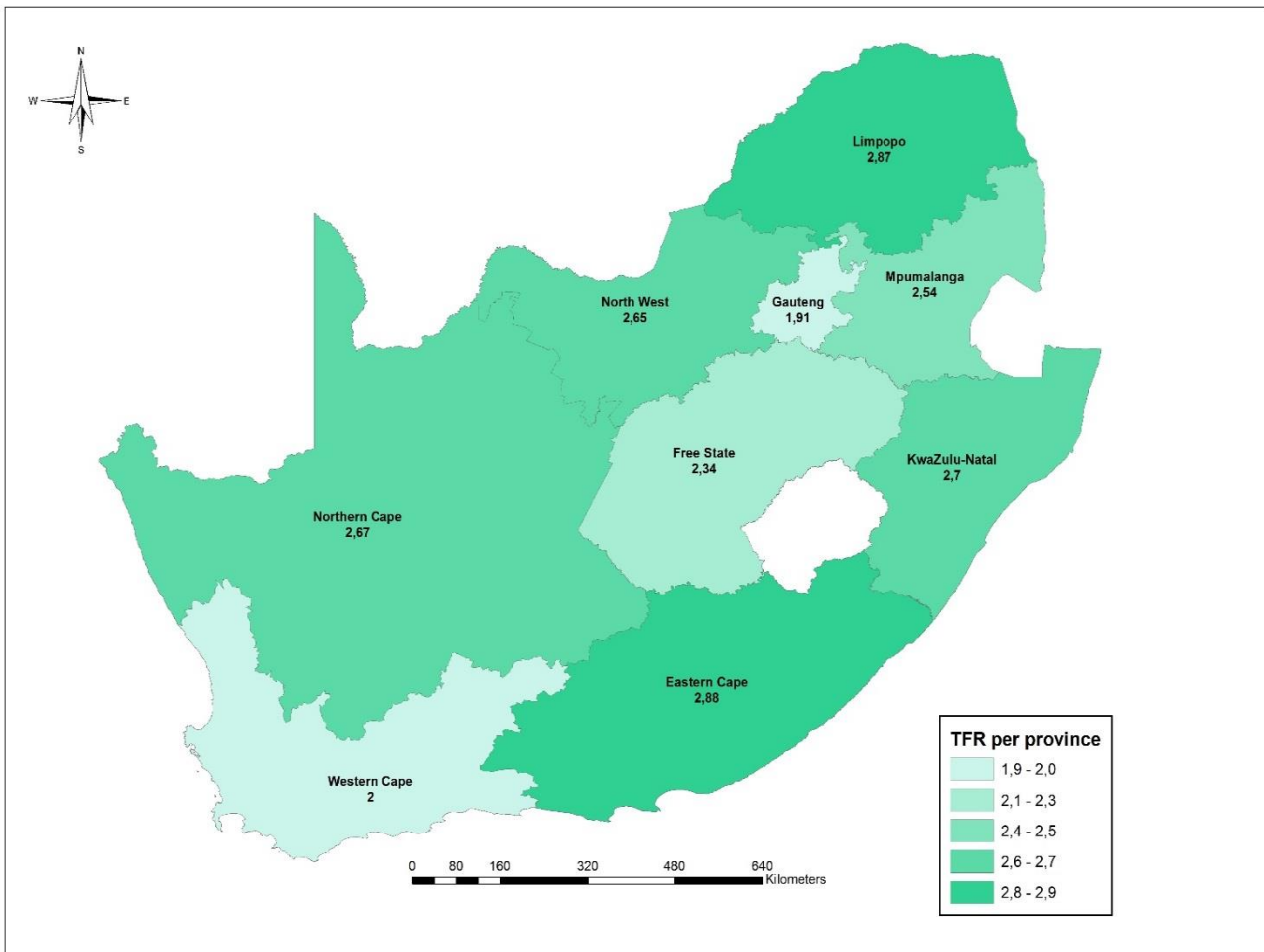


Figures 10 and 11 show the average provincial life expectancies at birth for males and females for the periods 2001–2006; 2006–2011; 2011–2016 and 2016–2021. Life expectancy at birth reflects the overall mortality level of a population. The life expectancy increased incrementally for each period across all provinces but more significantly in the period 2011–2016 due to the uptake of antiretroviral therapy over time in South Africa. Though the life expectancy in the periods 2001–2006 and 2006–2011, depicts marginal improvement, this masks the interaction between the highest number of deaths in 2006 in combination with declining numbers of deaths between 2007 and 2010. Western Cape consistently has the highest life expectancy at birth for both males and females over time whilst the Free State has the lowest life expectancy at birth.

**Figure 10: Provincial average life expectancy at birth (males), 2001–2021**

| | EC | FS | GP | KZN | LP | MP | NC | NW | WC |
|---|---|---|---|---|---|---|---|---|---|
| ■ 2001-2006 | 52,3 | 45,6 | 55,4 | 47,5 | 54,3 | 52,4 | 51,9 | 49,1 | 59,6 |
| □ 2006-2011 | 53,0 | 46,3 | 56,5 | 48,3 | 54,4 | 53,3 | 52,9 | 50,3 | 61,1 |
| ▨ 2011-2016 | 57,3 | 53,1 | 61,6 | 54,6 | 59,3 | 57,8 | 56,8 | 56,6 | 63,9 |
| □ 2016-2021 | 59,6 | 54,6 | 63,8 | 57,1 | 61,8 | 60,4 | 59,1 | 57,8 | 65,7 |
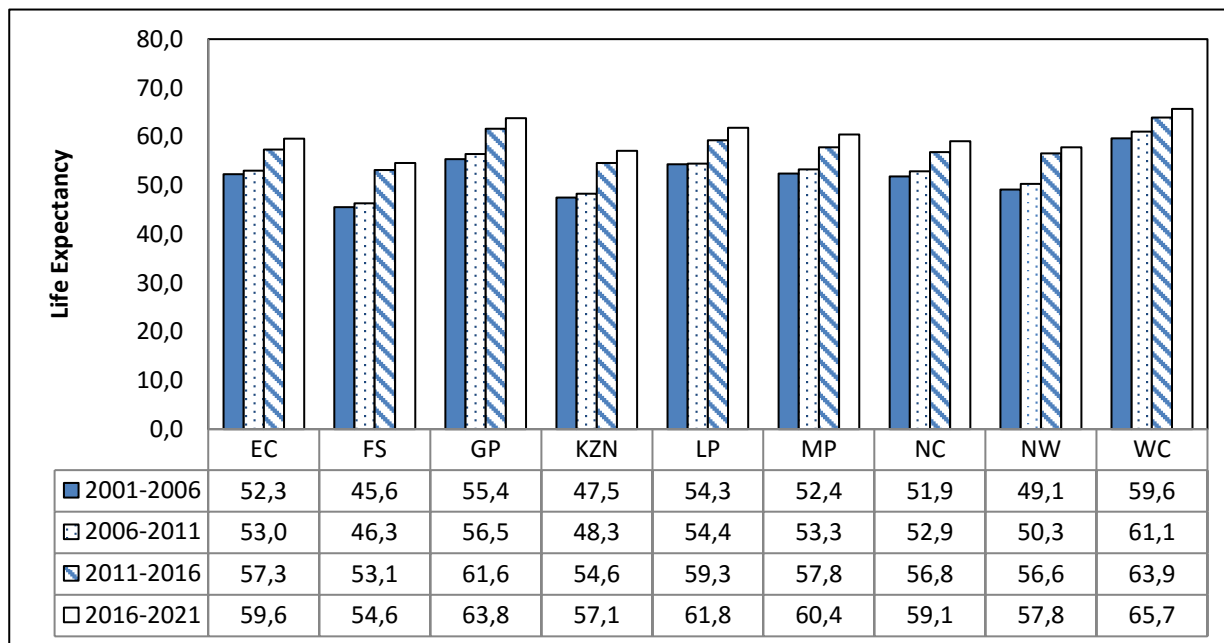
**Figure 11: Provincial average life expectancy at birth (females), 2001–2021**

| | EC | FS | GP | KZN | LP | MP | NC | NW | WC |
|---|---|---|---|---|---|---|---|---|---|
| ■ 2001-2006 | 56,8 | 49,2 | 59,2 | 52,6 | 57,7 | 56,1 | 57,2 | 53,3 | 64,5 |
| □ 2006-2011 | 58,6 | 50,7 | 60,9 | 54,4 | 58,6 | 57,6 | 58,5 | 55,0 | 67,2 |
| ▨ 2011-2016 | 64,0 | 58,6 | 66,6 | 60,9 | 65,1 | 63,5 | 63,3 | 62,6 | 70,6 |
| □ 2016-2021 | 67,1 | 61,3 | 69,2 | 63,7 | 67,4 | 66,2 | 66,0 | 65,2 | 71,1 |
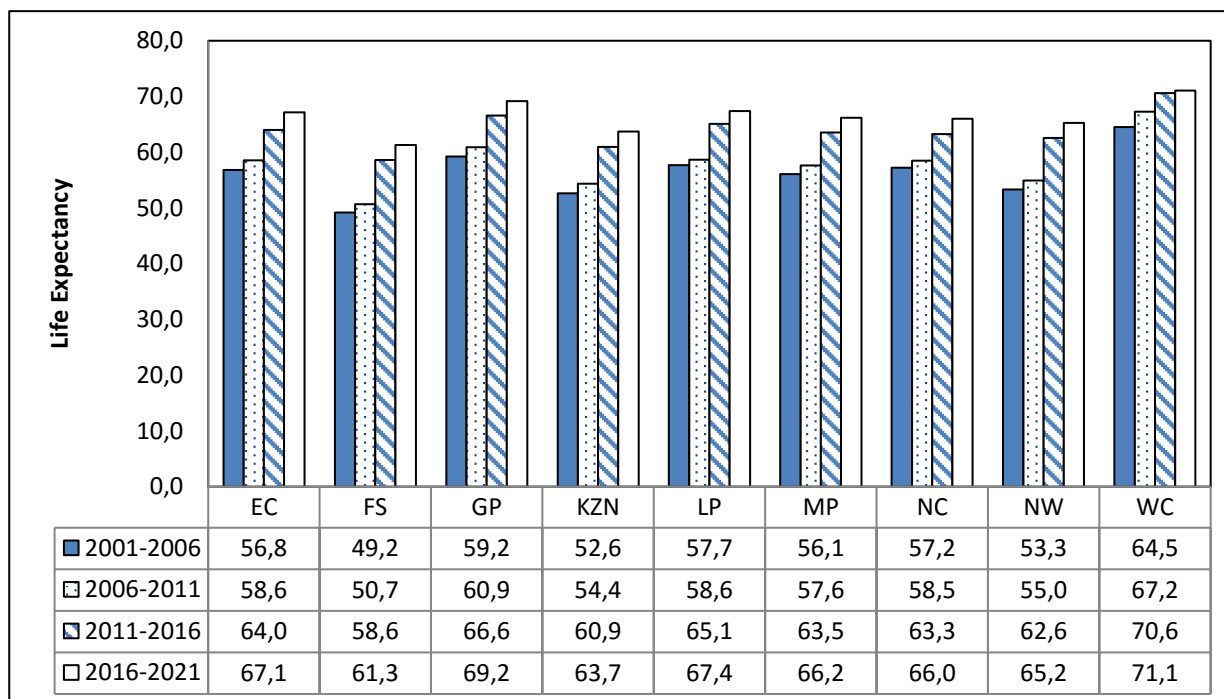
## 5.2 Migration patterns

From Census 2011 it was possible to determine out-migration rates for each province. Applying these rates to the age structures of the province it was possible to establish migration streams between the provinces. The result of these analyses is shown in Tables 7, 8 and 9. The assumptions indicate that Gauteng and Western Cape received the highest number of in-migrants for all periods. The Eastern Cape and Gauteng experienced the largest number of outflow of migrants. Due to its relatively larger population size, Gauteng achieved the highest number of in- and out-flows of migration. Gauteng, Mpumalanga, Northern Cape, North West and Western Cape provinces received positive net migration over all 3 periods. For all periods, the number of international migrants entering the provinces was highest in Gauteng, with Western Cape ranking second.

**Table 7: Estimated provincial migration streams 2006–2011**

| Province in 2006 | Province in 2011 | | | | | | | | | Out-migrants | In-migrants | Net migration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | EC | FS | GP | KZN | LP | MP | NC | NW | WC | | | |
| EC | 0 | 12 808 | 143 539 | 96 615 | 13 748 | 16 532 | 7 938 | 37 086 | 171 941 | 500 207 | 161 405 | -338 802 |
| FS | 8 119 | 0 | 78 919 | 7 565 | 6 300 | 10 368 | 8 721 | 22 862 | 11 718 | 154 573 | 114 624 | -39 948 |
| GP | 40 268 | 31 231 | 0 | 54 110 | 64 147 | 63 687 | 9 739 | 85 606 | 75 362 | 424 150 | 1 382 128 | 957 978 |
| KZN | 23 407 | 11 329 | 205 896 | 0 | 8 787 | 33 704 | 7 290 | 10 708 | 30 618 | 331 737 | 255 187 | -76 551 |
| LP | 4 274 | 5 552 | 316 191 | 7 847 | 0 | 45 334 | 2 468 | 30 891 | 10 829 | 423 387 | 220 311 | -203 075 |
| MP | 4 539 | 4 703 | 120 888 | 11 393 | 21 161 | 0 | 2 086 | 12 088 | 8 828 | 185 685 | 243 960 | 58 274 |
| NC | 4 045 | 8 101 | 15 222 | 5 182 | 2 420 | 3 965 | 0 | 11 613 | 16 645 | 67 193 | 75 386 | 8 192 |
| NW | 4 537 | 10 334 | 94 832 | 5 349 | 17 474 | 10 436 | 20 645 | 0 | 7 963 | 171 570 | 275 490 | 103 920 |
| WC | 43 954 | 6 851 | 53 048 | 11 180 | 4 951 | 6 200 | 10 947 | 7 121 | 0 | 144 253 | 420 480 | 276 227 |
| **Outside SA (net migration)** | **28 261** | **23 716** | **353 592** | **55 946** | **81 323** | **53 734** | **5 551** | **57 515** | **86 577** | | | |

**Table 8: Estimated provincial migration streams, 2011–2016**

| Province in 2011 | Province in 2016 | | | | | | | | | Out-migrants | In-migrants | Net migration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | EC | FS | GP | KZN | LP | MP | NC | NW | WC | | | |
| EC | 0 | 12 955 | 145 191 | 97 667 | 13 915 | 16 726 | 8 041 | 37 476 | 173 832 | 505 803 | 181 242 | -324 561 |
| FS | 8 331 | 0 | 80 931 | 7 765 | 6 471 | 10 645 | 8 951 | 23 467 | 12 041 | 158 603 | 128 327 | -30 276 |
| GP | 46 172 | 35 833 | 0 | 62 216 | 91 749 | 73 188 | 11 182 | 98 385 | 86 848 | 505 574 | 1 519 244 | 1 013 670 |
| KZN | 24 743 | 11 972 | 217 596 | 0 | 9 314 | 35 649 | 7 714 | 11 344 | 32 433 | 350 766 | 280 614 | -70 152 |
| LP | 4 467 | 5 794 | 329 721 | 8 206 | 0 | 47 333 | 2 584 | 32 237 | 11 304 | 441 645 | 271 305 | -170 340 |
| MP | 4 942 | 5 112 | 131 621 | 12 382 | 22 977 | 0 | 2 273 | 13 146 | 9 596 | 202 050 | 271 962 | 69 913 |
| NC | 4 289 | 8 620 | 16 212 | 5 501 | 2 575 | 4 213 | 0 | 12 345 | 17 705 | 71 460 | 82 321 | 10 861 |
| NW | 4 975 | 11 306 | 103 754 | 5 856 | 19 102 | 11 413 | 22 611 | 0 | 8 736 | 187 753 | 306 934 | 119 182 |
| WC | 48 710 | 7 639 | 59 224 | 12 490 | 5 523 | 6 927 | 12 197 | 7 962 | 0 | 160 673 | 458 720 | 298 047 |
| Outside SA (net migration) | 34 613 | 29 095 | 434 994 | 68 530 | 99 678 | 65 869 | 6 768 | 70 572 | 106 227 | | | |

**Table 9: Estimated provincial migration streams 2016–2021**

| Province in 2016 | Province in 2021 | | | | | | | | | Out-migrants | In-migrants | Net migration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | EC | FS | GP | KZN | LP | MP | NC | NW | WC | | | |
| EC | 0 | 13 178 | 147 729 | 99 306 | 14 149 | 16 974 | 8 168 | 38 019 | 176 784 | 514 308 | 199 855 | -314 453 |
| FS | 8 538 | 0 | 83 285 | 7 964 | 6 634 | 10 924 | 9 200 | 24 076 | 12 361 | 162 982 | 141 185 | -21 797 |
| GP | 52 381 | 40 711 | 0 | 70 764 | 104 073 | 83 250 | 12 709 | 111 893 | 98 925 | 574 705 | 1 643 590 | 1 068 885 |
| KZN | 26 277 | 12 717 | 231 241 | 0 | 9 864 | 37 877 | 8 191 | 12 066 | 34 448 | 372 681 | 303 732 | -68 949 |
| LP | 4 702 | 6 092 | 347 269 | 8 640 | 0 | 49 723 | 2 718 | 33 848 | 11 857 | 464 848 | 302 226 | -162 622 |
| MP | 5 371 | 5 552 | 143 213 | 13 440 | 24 957 | 0 | 2 473 | 14 286 | 10 420 | 219 711 | 297 949 | 78 238 |
| NC | 4 567 | 9 187 | 17 309 | 5 862 | 2 746 | 4 491 | 0 | 13 162 | 18 869 | 76 193 | 89 252 | 13 059 |
| NW | 5 427 | 12 336 | 113 419 | 6 388 | 20 832 | 12 449 | 24 712 | 0 | 9 537 | 205 099 | 336 180 | 131 081 |
| WC | 53 435 | 8 435 | 65 554 | 13 826 | 6 105 | 7 669 | 13 464 | 8 824 | 0 | 177 313 | 493 621 | 316 308 |
| Outside SA (net migration) | 39 158 | 32 978 | 494 571 | 77 542 | 112 866 | 74 593 | 7 616 | 80 005 | 120 420 | | | |

## 5.3    Provincial distributions

Table 10 below shows the estimated percentage of the total population residing in each of the provinces from 2002 to 2019. The provincial estimates show that Gauteng has the largest share of the population followed by KwaZulu-Natal, Western Cape and Eastern Cape. Inter-provincial as well as international migration patterns significantly influence the provincial population numbers and structures in South Africa. By 2019 approximately 11,4% of South Africa's population live in Western Cape. Northern Cape has the smallest share of the population (2,2%). Free State has the second smallest share of the South African population constituting 4,9 % of the population. Figures 12 and 13 indicate that Limpopo and Eastern Cape (both 33,3% respectively) have the highest proportions of persons younger than 15 years. The highest proportions of elderly persons aged 60 years and above are found in Eastern Cape (11,3%), Northern Cape (10.2%) and Western Cape (10,0%).

**Table 10: Percentage distribution of the projected provincial share of the total population, 2002–2019**

|       | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| EC    | 14,1 | 13,9 | 13,8 | 13,7 | 13,5 | 13,4 | 13,2 | 13,0 | 12,8 | 12,6 | 12,5 | 12,3 | 12,2 | 12,0 | 11,9 | 11,7 | 11,6 | 11,4 |
| FS    | 5,9  | 5,8  | 5,8  | 5,7  | 5,6  | 5,6  | 5,5  | 5,4  | 5,4  | 5,3  | 5,3  | 5,2  | 5,2  | 5,1  | 5,1  | 5,0  | 5,0  | 4,9  |
| GP    | 21,0 | 21,3 | 21,6 | 21,8 | 22,1 | 22,4 | 22,7 | 23,0 | 23,3 | 23,7 | 24,0 | 24,2 | 24,5 | 24,8 | 25,0 | 25,3 | 25,6 | 25,8 |
| KZN   | 20,8 | 20,7 | 20,6 | 20,5 | 20,4 | 20,3 | 20,2 | 20,1 | 20,0 | 19,8 | 19,8 | 19,7 | 19,6 | 19,5 | 19,4 | 19,3 | 19,3 | 19,2 |
| LP    | 11,4 | 11,3 | 11,2 | 11,1 | 11,0 | 11,0 | 10,9 | 10,8 | 10,7 | 10,7 | 10,6 | 10,5 | 10,5 | 10,4 | 10,4 | 10,3 | 10,2 | 10,2 |
| MP    | 7,6  | 7,6  | 7,6  | 7,7  | 7,7  | 7,7  | 7,7  | 7,7  | 7,7  | 7,8  | 7,8  | 7,8  | 7,8  | 7,8  | 7,8  | 7,8  | 7,8  | 7,8  |
| NC    | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  | 2,2  |
| NW    | 6,6  | 6,6  | 6,6  | 6,6  | 6,7  | 6,7  | 6,7  | 6,7  | 6,7  | 6,7  | 6,7  | 6,8  | 6,8  | 6,8  | 6,8  | 6,8  | 6,8  | 6,9  |
| WC    | 10,4 | 10,5 | 10,6 | 10,7 | 10,7 | 10,8 | 10,9 | 11,0 | 11,1 | 11,2 | 11,2 | 11,3 | 11,4 | 11,4 | 11,5 | 11,6 | 11,6 | 11,6 |
| **Total** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** | **100,0** |

Mid-year population estimates, 2019

**Table 11 (a): Provincial mid-year population estimates by age and sex, 2019**

| Age | Eastern Cape | | | Free State | | | Gauteng | | | KwaZulu-Natal | | | Limpopo | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0–4 | 366 330 | 358 650 | **724 979** | 136 294 | 133 271 | **269 566** | 646 704 | 631 382 | **1 278 086** | 624 531 | 606 570 | **1 231 101** | 340 626 | 330 518 | **671 145** |
| 5–9 | 386 340 | 375 040 | **761 380** | 144 196 | 141 022 | **285 218** | 625 578 | 609 549 | **1 235 127** | 607 157 | 589 752 | **1 196 909** | 349 044 | 336 445 | **685 489** |
| 10–14 | 376 879 | 368 010 | **744 889** | 141 172 | 140 166 | **281 338** | 560 699 | 554 552 | **1 115 251** | 573 074 | 563 089 | **1 136 163** | 326 621 | 311 593 | **638 214** |
| 15–19 | 299 385 | 291 583 | **590 967** | 121 277 | 120 753 | **242 030** | 513 427 | 514 346 | **1 027 773** | 492 961 | 487 612 | **980 573** | 267 079 | 254 592 | **521 671** |
| 20–24 | 252 572 | 246 936 | **499 509** | 118 601 | 117 186 | **235 788** | 666 410 | 669 194 | **1 335 604** | 505 198 | 500 833 | **1 006 031** | 249 874 | 241 430 | **491 304** |
| 25–29 | 263 271 | 258 119 | **521 391** | 128 282 | 124 777 | **253 059** | 830 800 | 826 453 | **1 657 254** | 534 838 | 526 234 | **1 061 072** | 255 603 | 250 862 | **506 465** |
| 30–34 | 257 568 | 255 791 | **513 360** | 130 754 | 126 043 | **256 796** | 851 972 | 822 418 | **1 674 390** | 505 101 | 503 472 | **1 008 574** | 245 229 | 249 486 | **494 715** |
| 35–39 | 210 454 | 217 419 | **427 873** | 107 408 | 106 692 | **214 099** | 699 448 | 658 453 | **1 357 901** | 392 259 | 413 146 | **805 406** | 201 109 | 213 356 | **414 464** |
| 40–44 | 159 263 | 183 106 | **342 369** | 81 233 | 89 539 | **170 772** | 549 909 | 507 925 | **1 057 834** | 282 544 | 330 508 | **613 052** | 148 071 | 182 798 | **330 869** |
| 45–49 | 131 071 | 173 519 | **304 590** | 69 390 | 82 226 | **151 616** | 458 148 | 412 888 | **871 036** | 226 914 | 290 118 | **517 033** | 115 433 | 159 655 | **275 088** |
| 50–54 | 103 770 | 163 695 | **267 466** | 56 816 | 74 335 | **131 151** | 348 006 | 354 634 | **702 640** | 168 558 | 255 374 | **423 932** | 88 615 | 137 373 | **225 989** |
| 55–59 | 92 438 | 159 309 | **251 747** | 48 714 | 64 995 | **113 709** | 287 064 | 306 248 | **593 312** | 143 386 | 233 152 | **376 538** | 71 632 | 123 746 | **195 379** |
| 60–64 | 79 775 | 144 091 | **223 865** | 39 702 | 55 203 | **94 905** | 222 590 | 251 579 | **474 169** | 114 078 | 192 451 | **306 529** | 56 346 | 103 935 | **160 280** |
| 65–69 | 62 422 | 114 096 | **176 518** | 29 954 | 45 139 | **75 093** | 159 521 | 189 530 | **349 051** | 89 431 | 155 433 | **244 864** | 44 051 | 86 532 | **130 583** |
| 70–74 | 43 229 | 85 121 | **128 350** | 19 052 | 32 183 | **51 235** | 100 605 | 129 565 | **230 171** | 60 742 | 118 042 | **178 784** | 29 147 | 61 701 | **90 848** |
| 75–79 | 33 110 | 67 360 | **100 470** | 11 560 | 20 602 | **32 162** | 52 244 | 74 290 | **126 533** | 34 596 | 71 508 | **106 104** | 18 145 | 43 738 | **61 883** |
| 80+ | 40 376 | 92 179 | **132 555** | 8 158 | 20 771 | **28 929** | 29 477 | 60 507 | **89 983** | 26 755 | 69 666 | **96 422** | 22 246 | 65 952 | **88 198** |
| Total | 3 158 253 | 3 554 023 | 6 712 276 | 1 392 563 | 1 494 903 | 2 887 465 | 7 602 602 | 7 573 514 | 15 176 116 | 5 382 124 | 5 906 962 | 11 289 086 | 2 828 873 | 3 153 712 | 5 982 584 |

**Table 11 (b): Provincial mid-year population estimates by age and sex, 2019 (concluded)**

| Age | Mpumalanga | | | Northern Cape | | | North West | | | Western Cape | | | All provinces | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0–4 | 235 459 | 231 177 | 466 635 | 63 157 | 61 733 | 124 890 | 201 889 | 198 721 | 400 609 | 288 467 | 278 467 | 566 934 | 2 903 457 | 2 830 489 | 5 733 946 |
| 5–9 | 234 815 | 230 987 | 465 802 | 61 735 | 59 810 | 121 544 | 204 883 | 200 706 | 405 590 | 294 986 | 285 394 | 580 381 | 2 908 734 | 2 828 705 | 5 737 439 |
| 10–14 | 225 726 | 224 004 | 449 730 | 60 117 | 60 075 | 120 192 | 195 368 | 193 895 | 389 264 | 278 900 | 273 962 | 552 862 | 2 738 556 | 2 689 347 | 5 427 902 |
| 15–19 | 193 457 | 193 178 | 386 635 | 50 993 | 52 175 | 103 167 | 159 675 | 157 553 | 317 228 | 245 721 | 244 235 | 489 956 | 2 343 975 | 2 316 027 | 4 660 002 |
| 20–24 | 199 715 | 194 788 | 394 503 | 48 351 | 48 927 | 97 278 | 159 700 | 149 445 | 309 145 | 274 974 | 270 050 | 545 024 | 2 475 396 | 2 438 790 | 4 914 186 |
| 25–29 | 224 775 | 206 550 | 431 325 | 55 188 | 52 499 | 107 688 | 188 426 | 165 434 | 353 859 | 324 491 | 311 967 | 636 458 | 2 805 676 | 2 722 896 | 5 528 571 |
| 30–34 | 231 703 | 206 382 | 438 085 | 60 367 | 53 395 | 113 762 | 200 937 | 170 184 | 371 120 | 342 992 | 324 170 | 667 162 | 2 826 623 | 2 711 340 | 5 537 963 |
| 35–39 | 189 463 | 171 911 | 361 374 | 52 552 | 44 619 | 97 171 | 172 898 | 144 740 | 317 638 | 295 017 | 280 232 | 575 249 | 2 320 608 | 2 250 567 | 4 571 175 |
| 40–44 | 135 504 | 139 761 | 275 265 | 40 087 | 36 630 | 76 718 | 134 756 | 121 177 | 255 934 | 233 420 | 229 175 | 462 595 | 1 764 787 | 1 820 620 | 3 585 408 |
| 45–49 | 105 043 | 122 378 | 227 421 | 33 314 | 33 615 | 66 928 | 110 037 | 107 093 | 217 130 | 205 932 | 208 843 | 414 775 | 1 455 283 | 1 590 334 | 3 045 617 |
| 50–54 | 80 460 | 104 665 | 185 125 | 26 380 | 30 475 | 56 856 | 89 246 | 91 479 | 180 725 | 168 049 | 193 117 | 361 166 | 1 129 900 | 1 405 148 | 2 535 048 |
| 55–59 | 66 384 | 87 153 | 153 537 | 21 745 | 26 763 | 48 509 | 77 189 | 78 282 | 155 471 | 136 835 | 167 476 | 304 311 | 945 388 | 1 247 124 | 2 192 512 |
| 60–64 | 51 077 | 68 176 | 119 252 | 17 989 | 23 297 | 41 286 | 59 534 | 64 541 | 124 075 | 103 981 | 136 133 | 240 114 | 745 071 | 1 039 405 | 1 784 476 |
| 65–69 | 38 232 | 53 960 | 92 193 | 13 703 | 19 155 | 32 858 | 39 663 | 49 854 | 89 517 | 76 600 | 102 844 | 179 444 | 553 578 | 816 542 | 1 370 121 |
| 70–74 | 23 525 | 36 180 | 59 706 | 8 936 | 14 208 | 23 144 | 24 612 | 35 850 | 60 462 | 51 560 | 75 554 | 127 114 | 361 408 | 588 404 | 949 812 |
| 75–79 | 14 077 | 24 528 | 38 606 | 5 670 | 9 768 | 15 439 | 14 722 | 25 777 | 40 499 | 30 822 | 45 356 | 76 179 | 214 946 | 382 928 | 597 874 |
| 80+ | 14 212 | 32 780 | 46 992 | 4 764 | 11 682 | 16 446 | 9 617 | 29 277 | 38 895 | 23 756 | 40 794 | 64 550 | 179 361 | 423 608 | 602 969 |
| Total | 2 263 628 | 2 328 559 | 4 592 187 | 625 049 | 638 826 | 1 263 875 | 2 043 152 | 1 984 008 | 4 027 160 | 3 376 504 | 3 467 769 | 6 844 272 | 28 672 747 | 30 102 275 | 58 775 022 |

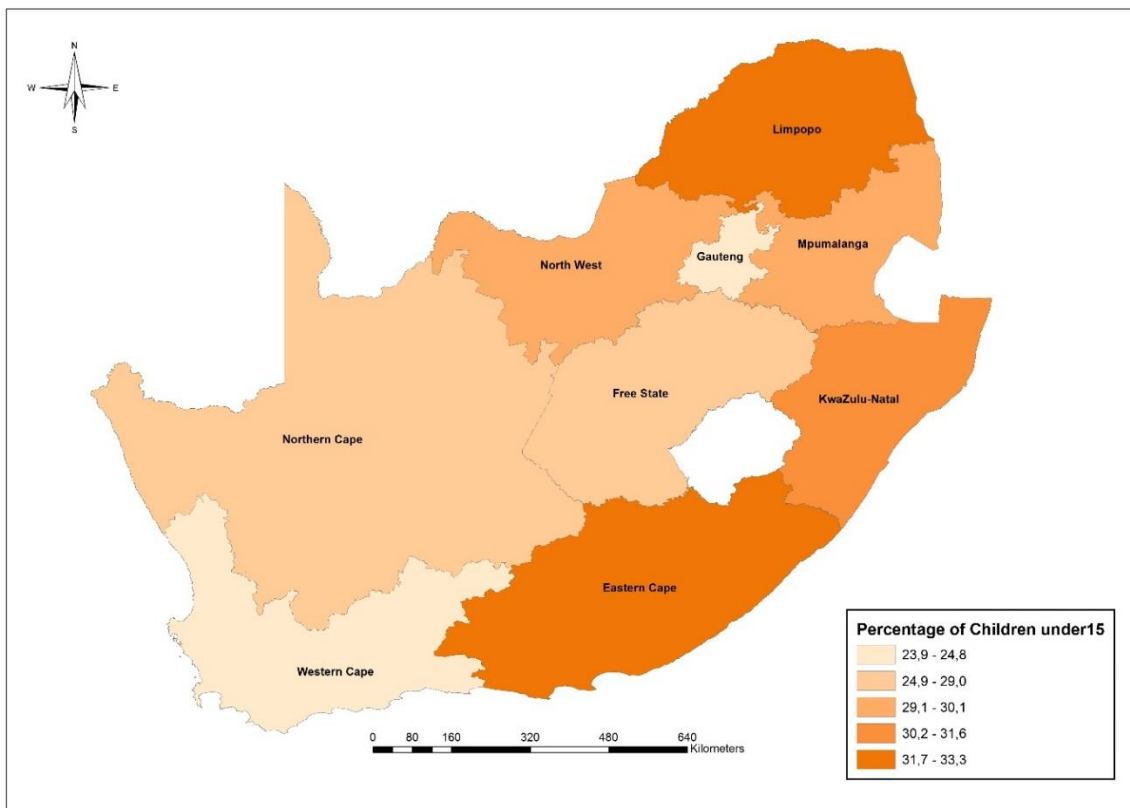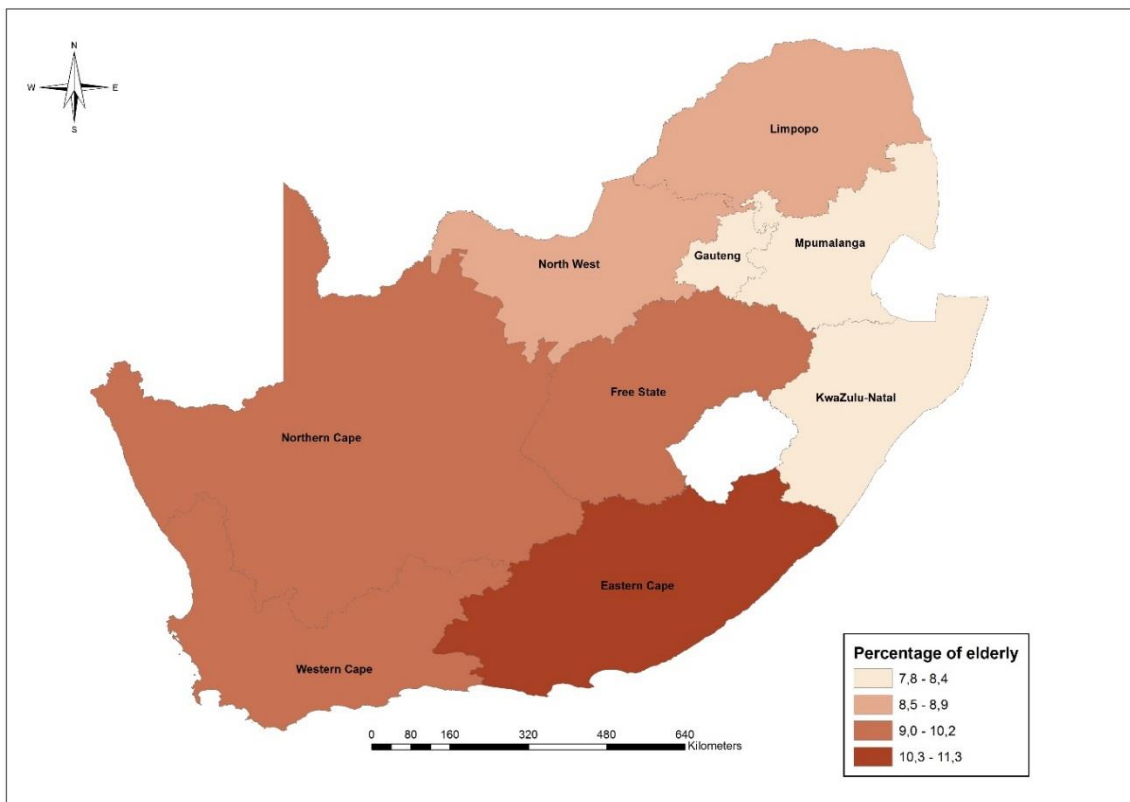**Figure 12: Population under 15 years of age**



**Figure 13: Proportion of elderly aged 60+**



Mid-year population estimates, 2019

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# Appendices

## Appendix 1: Mid-year population estimates by province, 2019

|                | Population estimate | % of total population |
|----------------|---------------------|-----------------------|
| Eastern Cape   | 6 712 276           | 11,4                  |
| Free State     | 2 887 465           | 4,9                   |
| Gauteng        | 15 176 116          | 25,8                  |
| KwaZulu-Natal  | 11 289 086          | 19,2                  |
| Limpopo        | 5 982 584           | 10,2                  |
| Mpumalanga     | 4 592 187           | 7,8                   |
| Northern Cape  | 1 263 875           | 2,2                   |
| North West     | 4 027 160           | 6,9                   |
| Western Cape   | 6 844 272           | 11,6                  |
| **Total**      | **58 775 022**      | **100,0**             |

## Appendix 2: Demographic indicators, 2002–2019

| Year | Crude birth rate | Life expectancy | | | Infant mortality rate | Under-5 mortality rate | Crude death rate | Rate of natural increase (%) |
|------|------------------|------|--------|-------|-----------------------|------------------------|------------------|------------------------------|
|      |                  | Male | Female | Total |                       |                        |                  |                              |
| 2002 | 21,2 | 53,7 | 58,0 | 55,9 | 56,5 | 79,0 | 12,5 | 0,9 |
| 2003 | 21,1 | 53,0 | 56,8 | 55,0 | 56,5 | 79,1 | 13,2 | 0,8 |
| 2004 | 22,3 | 52,4 | 56,3 | 54,4 | 56,3 | 77,7 | 13,7 | 0,9 |
| 2005 | 23,0 | 52,2 | 56,5 | 54,4 | 55,6 | 76,7 | 13,8 | 0,9 |
| 2006 | 23,4 | 52,3 | 56,6 | 54,5 | 54,2 | 74,9 | 13,8 | 1,0 |
| 2007 | 23,8 | 53,1 | 57,4 | 55,3 | 51,6 | 71,3 | 13,4 | 1,0 |
| 2008 | 24,0 | 54,0 | 59,0 | 56,6 | 48,9 | 68,0 | 12,7 | 1,1 |
| 2009 | 23,8 | 55,2 | 60,8 | 58,1 | 44,6 | 62,8 | 11,9 | 1,2 |
| 2010 | 23,4 | 56,4 | 62,3 | 59,4 | 40,9 | 57,2 | 11,2 | 1,2 |
| 2011 | 22,8 | 57,8 | 63,5 | 60,7 | 36,1 | 47,7 | 10,6 | 1,2 |
| 2012 | 22,3 | 58,2 | 63,9 | 61,1 | 33,4 | 44,5 | 10,4 | 1,2 |
| 2013 | 21,9 | 58,9 | 65,1 | 62,1 | 31,5 | 42,2 | 9,9 | 1,2 |
| 2014 | 21,5 | 59,3 | 65,5 | 62,5 | 29,0 | 38,9 | 9,8 | 1,2 |
| 2015 | 21,2 | 59,9 | 66,2 | 63,1 | 27,1 | 35,3 | 9,6 | 1,2 |
| 2016 | 20,9 | 60,4 | 67,0 | 63,8 | 26,3 | 32,4 | 9,3 | 1,2 |
| 2017 | 20,6 | 60,8 | 67,2 | 64,1 | 24,3 | 29,1 | 9,3 | 1,1 |
| 2018 | 20,2 | 61,1 | 67,5 | 64,4 | 22,4 | 27,8 | 9,2 | 1,1 |
| 2019 | 19,9 | 61,5 | 67,7 | 64,7 | 22,1 | 28,5 | 9,2 | 1,1 |

**Appendix 3: HIV prevalence estimates and number of people living with HIV, 2002–2019**

| | Prevalence (%) | | | | Incidence (%) | HIV population (in millions) |
|---|---|---|---|---|---|---|
| | **Women 15–49** | **Adults 15–49** | **Youth 15–24** | **Total population** | **15–49** | |
| 2002 | 18,76 | 16,27 | 8,17 | 9,99 | 2,40 | 4,64 |
| 2003 | 19,57 | 16,95 | 8,06 | 10,55 | 2,25 | 4,95 |
| 2004 | 20,16 | 17,43 | 7,90 | 10,99 | 2,12 | 5,21 |
| 2005 | 20,66 | 17,81 | 7,71 | 11,36 | 2,03 | 5,45 |
| 2006 | 21,09 | 18,14 | 7,50 | 11,69 | 1,95 | 5,68 |
| 2007 | 21,51 | 18,46 | 7,31 | 12,01 | 1,90 | 5,91 |
| 2008 | 21,97 | 18,82 | 7,16 | 12,35 | 1,85 | 6,17 |
| 2009 | 22,39 | 19,15 | 6,98 | 12,65 | 1,72 | 6,41 |
| 2010 | 22,84 | 19,50 | 6,86 | 12,94 | 1,69 | 6,66 |
| 2011 | 23,24 | 19,81 | 6,68 | 13,23 | 1,60 | 6,92 |
| 2012 | 23,60 | 20,08 | 6,51 | 13,48 | 1,50 | 7,16 |
| 2013 | 23,86 | 20,27 | 6,30 | 13,69 | 1,39 | 7,38 |
| 2014 | 24,05 | 20,40 | 6,08 | 13,86 | 1,31 | 7,58 |
| 2015 | 24,00 | 20,31 | 5,70 | 13,89 | 1,04 | 7,72 |
| 2016 | 23,88 | 20,18 | 5,38 | 13,90 | 0,98 | 7,84 |
| 2017 | 23,54 | 19,84 | 4,95 | 13,79 | 0,73 | 7,90 |
| 2018 | 23,15 | 19,48 | 4,58 | 13,66 | 0,68 | 7,94 |
| 2019 | 22,71 | 19,07 | 4,30 | 13,53 | 0,68 | 7,97 |

**Appendix 4: Estimates of annual growth rates, 2002–2019**

| Period | Children 0–14 | Youth 15–24 | Elderly 60+ | adults 25–59 | Total |
|--------|--------------|-------------|-------------|--------------|-------|
| 2002–2003 | -1,12 | 3,16 | 1,47 | 1,44 | **0,97** |
| 2003–2004 | -0,76 | 3,08 | 1,62 | 1,37 | **1,07** |
| 2004–2005 | -0,40 | 2,55 | 1,76 | 1,51 | **1,16** |
| 2005–2006 | -0,04 | 1,70 | 1,90 | 1,78 | **1,22** |
| 2006–2007 | 0,28 | 1,29 | 2,08 | 1,95 | **1,32** |
| 2007–2008 | 0,54 | 0,89 | 2,32 | 2,17 | **1,43** |
| 2008–2009 | 0,75 | 0,53 | 2,40 | 2,34 | **1,50** |
| 2009–2010 | 0,96 | 0,19 | 2,85 | 2,36 | **1,54** |
| 2010–2011 | 1,03 | -0,60 | 2,93 | 2,67 | **1,55** |
| 2011–2012 | 1,22 | -1,00 | 2,99 | 2,63 | **1,53** |
| 2012–2013 | 1,41 | -1,41 | 3,16 | 2,63 | **1,54** |
| 2013–2014 | 1,36 | -1,45 | 3,19 | 2,59 | **1,52** |
| 2014–2015 | 1,39 | -1,44 | 3,16 | 2,50 | **1,51** |
| 2015–2016 | 1,40 | -1,28 | 3,12 | 2,39 | **1,51** |
| 2016–2017 | 1,48 | -1,32 | 3,06 | 2,28 | **1,49** |
| 2017–2018 | 1,41 | -1,17 | 3,07 | 2,16 | **1,46** |
| 2018-2019 | 1,03 | -0,34 | 3,00 | 2,02 | **1,43** |

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Mid-year population estimates, 2019