Statistical release

P0302

Mid-year population estimates

2010

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Summary

- This release uses the cohort-component methodology to estimate the 2010 mid-year population of South Africa.

- The estimates cover all the residents of South Africa at the 2010 mid-year, and are based on the latest available information. Estimates may change as new data become available.

- For 2010, Statistics South Africa (Stats SA) estimates the mid-year population as 49,99 million.

- Fifty-one per cent (approximately 25,66 million) of the population is female.

- Gauteng comprises the largest share of the South African population. Approximately 11,19 million people (22,4%) live in this province. KwaZulu-Natal is the province with the second largest population, with 10,65 million people (21,3%) living in this province. With a population of approximately 1,10 million people (2,2%), Northern Cape remains the province with the smallest share of the South African population.

- Nearly one-third (31,0%) of the population is aged younger than 15 years and approximately 7,6% (3,8 million) is 60 years or older. Of those younger than 15 years, approximately 23% (3,52 million) live in KwaZulu-Natal and 19,3% (2,99 million) live in Gauteng.

- Migration is an important demographic process in shaping the age structure and distribution of the provincial population. For the period 2006–2011 it is estimated that approximately 211 600 people will migrate from the Eastern Cape; Limpopo is estimated to experience a net out-migration of just over 140 000 people. During the same period, Gauteng and Western Cape are estimated to experience a net inflow of migrants of approximately 364 400 and 94 600 respectively.

- Life expectancy at birth is estimated at 53,3 years for males and 55,2 years for females.

- The infant mortality rate is estimated at 46,9 per 1 000 live births.

- The estimated overall HIV prevalence rate is approximately 10,5%. The total number of people living with HIV is estimated at approximately 5,24 million. For adults aged 15–49 years, an estimated 17% of the population is HIV positive.

- For 2010, this release estimates that approximately 1,6 million people aged 15 and older; and approximately 183 000 children would be in need of ART.

- The total number of new HIV infections for 2010 is estimated at 410 000. Of these, an estimated 40 000 will be among children.

Table 1: Mid-year population estimates for South Africa by population group and sex, 2010

Population group	Male		Female		Total	
	Number	Percentage of total population	Number	Percentage of total population	Number	Percentage of total population
African	19 314 500	79,4	20 368 100	79,4	**39 682 600**	**79,4**
Coloured	2 124 900	8,7	2 299 200	9,0	**4 424 100**	**8,8**
Indian/Asian	646 600	2,7	653 300	2,5	**1 299 900**	**2,6**
White	2 243 000	9,2	2 341 700	9,1	**4 584 700**	**9,2**
Total	**24 329 000**	**100,0**	**25 662 300**	**100,0**	**49 991 300**	**100,0**

Table 2: Mid-year population estimates by province, 2010

	Population estimate	Percentage share of the total population
Eastern Cape	6 743 800	13,5
Free State	2 824 500	5,7
Gauteng	11 191 700	22,4
KwaZulu-Natal	10 645 400	21,3
Limpopo	5 439 600	10,9
Mpumalanga	3 617 600	7,2
Northern Cape	1 103 900	2,2
North West	3 200 900	6,4
Western Cape	5 223 900	10,4
Total	**49 991 300**	**100,0**

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1.   Introduction

Statistics South Africa (Stats SA) subscribes to the specifications of the Special Data Dissemination Standards (SDDS) of the International Monetary Fund (IMF) and publishes the mid-year population estimates for the country annually. This release uses the latest available software from UNAIDS. The HIV epidemic curves were derived using the Estimation and Projection Package (EPP-Version 10.0/EPP2010 Beta U). Estimates from EPP were then used as input into SPECTRUM (Version 3.49). Stats SA also used JMP script language (JSL) developed by the SAS institute Inc.

2.   Demographic and other assumptions

Our knowledge of the HIV epidemic in South Africa is based primarily on the prevalence data collected annually from pregnant women attending public antenatal clinics (ANC) since 1990. 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. To correct this bias we adjusted the ANC prevalence estimates by adjusting for relative attendance rates at antenatal clinics and for the difference in prevalence between pregnant women and the general adult population. For a detailed description of the adjustment see: www.statssa.gov.za.

Antiretroviral therapy (ART) for adults and children

Those who become infected with HIV do not need treatment with antiretroviral drugs immediately. There is an asymptomatic period during which the body's immune system controls the HIV infection. After some time the rapid replication of the virus overwhelms the immune system and the patient is in need of antiretroviral treatment (USAID Health Policy Initiative, 2009).

The WHO recommends that cotrimoxazole be provided to all children born to HIV+ mothers until their status can be determined. With normal antibody tests a child's HIV status cannot be determined until 18 months of age because the mother's antibodies are present in the child's blood. Thus all children born to HIV-positive mothers should receive cotrimoxazole until 18 months. For children aged between 18 months and 5 years the WHO recommends cotrimoxazole should be provided to all children who are HIV positive. After the age of 5 years children should be on cotrimoxazole if they have progressed to Stage III or IV. If early diagnosis is available then only HIV-positive children are considered in need of cotrimoxazole (USAID Health Policy Initiative, 2009).

Table 3: Estimated number of adults receiving ART and the percentage of children receiving ART and cotrimoxazole, 2005–2009

	Adults (15+ years)	Children	
	Estimated number receiving ART*	Estimated percentage receiving ART	Estimated percentage receiving cotrimoxazole
2005	133 000	7	2
2006	239 000	8	4
2007	424 000	12	12
2008	679 000	29	21
2009	920 000	38	29

*Source: Health Information Epidemiology Evaluation and Research, Department of Health
        (November 09/Report)

Median time from HIV infection to death
This release assumed the median time from HIV infection to death in line with the UNAIDS Reference Group recommendation of 10,5 years for men and 11,5 years for women.

Ratio of new infections

Adult HIV incidence is disaggregated into female and male incidence by specifying the ratio of new female infections to new male infections. This report assumes a ratio of female to male prevalence for those aged 15–49 of 1,5 by 2010.

HIV prevalence

Table 4 shows the prevalence estimates and the total number of people living with HIV from 2001 to 2010. The total number of persons living with HIV in South Africa increased from an estimated 4,10 million in 2001 to 5,24 million by 2010. For 2010 an estimated 10,5% of the total population is HIV positive. Shisana, et al. (2009) estimated the HIV prevalence for 2008 at 10,9%. Approximately one-fifth of South African women in their reproductive ages are HIV positive.

Table 4: HIV prevalence estimates and the number of people living with HIV, 2001–2010

Year	Population 15–49 years		Percentage of the total population	Total number of people living with HIV (in millions)
	Percentage of women	Percentage of the population		
2001	18,7	15,4	9,4	4,10
2002	19,2	15,8	9,6	4,38
2003	19,4	16,1	9,8	4,53
2004	19,6	16,3	9,9	4,64
2005	19,7	16,5	10,0	4,74
2006	19,7	16,6	10,1	4,85
2007	19,7	16,7	10,2	4,93
2008	19,7	16,9	10,3	5,02
2009	19,6	17,0	10,3	5,11
2010	19,7	17,3	10,5	5,24

International migration

This release assumes an inflow of 1,3 million for the Black/Africa population since 1996. For the same period it assumes an out-migration of 440 000 whites.

Expectation of life at birth and Total fertility

This report makes assumptions about life expectancy at birth by sex and uses a model life table of age-specific mortality rates. Stats SA used the UN East Asia model life tables. Table 5 shows the life expectancies used to generate survival ratios from the UN East Asia model life tables. It also shows the estimates of the fertility assumptions and the infant mortality rates associated with the given mortality pattern. Life expectancy at birth had declined between 2001 and 2005 but has since increased partly due to the roll-out of antiretrovirals. For 2010 life expectancy at birth is estimated at 53,3 years for males and 55,2 years for females. This increase in life expectancy at birth is expected to continue.

While still high, infant mortality has declined from an estimated 57 live births per 1 000 in 2001 to 47 per 1 000 live births in 2010.

Fertility has declined from an average of 2,86 children per woman in 2001 to 2,38 children in 2010.

Table 5: Assumptions about fertility, life expectancy and infant mortality levels, 2001–2010

	Crude birth rate	Total fertility rate (TFR	Male life expectancy at birth	Female life expectancy at birth	Infant mortality rate (IMR)	Crude death rate
2001	25,43	2,86	52,7	56,6	56.9	11,6
2002	25,03	2,81	51,6	55,0	56,4	12,4
2003	24,61	2,75	50,9	53,8	56,0	13,2
2004	24,16	2,70	50,3	52,8	55,4	13,8
2005	23,71	2,65	50,3	52,6	54,6	14,1
2006	23,27	2,59	50,8	52,9	52,4	14,2
2007	22,78	2,54	51,4	53,4	51,3	14,1
2008	22,28	2,48	52,5	54,6	49,3	13,7
2009	21,81	2,43	53,2	55,3	48,2	13,6
2010	21,33	2,38	53,3	55,2	46,9	13,9

3. National population estimates

Table 6 shows the mid-year estimates by population group and sex. The mid-year population is estimated at 49,99 million. The Black Africans are in the majority (39,68 million) and constitute just more than 79% of the total South African population. The white population is estimated at 4,58 million, the coloured population at 4,42 million and the Indian/Asian population at 1,30 million. Fifty-one per cent (25,66 million) of the population is female.

Table 6: Mid-year estimates by population group and sex, 2010

	Male		Female		Total	
Population group	Number	Percentage of total population	Number	Percentage of total population	Number	Percentage of total population
African	19 314 500	79,4	20 368 100	79,4	**39 682 600**	**79,4**
Coloured	2 124 900	8,7	2 299 200	9,0	**4 424 100**	**8,8**
Indian/Asian	646 600	2,7	653 300	2,5	**1 299 900**	**2,6**
White	2 243 000	9,2	2 341 700	9,1	**4 584 700**	**9,2**
Total	**24 329 000**	**100,0**	**25 662 300**	**100, 0**	49 991 300	**100,0**

Table 7 shows that the implied rate of growth for the South African population has declined between 2001 and 2010. The estimated overall growth rate declined from approximately 1,40% between 2001–2002 to 1,06% for 2009–2010. The growth rate for females is lower than that of males.

Table 7: Estimated annual population growth rates, 2001–2010

	2001–2002	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009-2010
Male	1,53	1,43	1,34	1,30	1,27	1,25	1,26	1,25	1,18
Female	1,29	1,18	1,08	1,03	1,00	0,99	1,00	1,01	0,94
Total	**1,40**	**1,30**	**1,21**	**1,16**	**1,13**	**1,11**	**1,13**	**1,12**	**1,06**

Selected indicators

Tables 8, 9 and 10 show estimates for selected indicators[1].

Table 8: Births and deaths for the period 2001–2010

	Number of births	Total number of deaths	Total number of AIDS deaths	Percentage AIDS deaths
2001	1 142 909	526 052	198 030	37,6
2002	1 140 844	569 535	236 390	41,5
2003	1 136 390	609 562	271 488	44,5
2004	1 129 598	645 371	302 530	46,9
2005	1 121 455	661 664	314 196	47,5
2006	1 113 087	666 473	314 309	47,2
2007	1 101 612	662 969	306 154	46,2
2008	1 089 916	646 187	284 658	44,1
2009	1 078 767	637 301	270 107	42,1
2010	1 066 401	654 360	281 404	43,0

From the Spectrum model, the need for ART may be determined. These estimates are shown in Table 9. The need for ART has increased between 2005 and 2010. By 2010 it is estimated that approximately 1,6 million people are in need of ART.

Table 9: Number of persons in need for ART, 2005–2010

Year	Adults (15+ years)	Children
2005	1 069 000	93 000
2006	1 153 000	99 000
2007	1 238 000	129 000
2008	1 332 000	132 000
2009	1 438 000	139 000
2010	1 555 000	183 000

Table 10: Other HIV related estimates, 2010

Indicator	Estimate
AIDS orphans	1,99 million
Number of new HIV infections among adults aged 15+	370 000
New infections among children	40 000

Table 11 shows the 2010 mid-year population estimates by age, sex and population group for the medium variant. Approximately one-third of the population is aged 0–14 years and approximately 7,6% is 60 years and older.

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[1] Births, deaths and AIDS deaths as well as the need for ART and the estimated number of orphans refer to events from July$_{t-1}$ to July$_t$. New infections refer to events during the calendar year.

Table 11: Mid-year population estimates by population group age and sex, 2010

Age	African			Coloured			Indian/Asian			White			South Africa		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0–4	2 194 200	2 161 500	4 355 700	201 600	202 000	403 600	51 300	49 900	101 200	132 200	128 000	260 200	2 579 300	2 541 400	5 120 700
5–9	2 222 600	2 190 300	4 412 900	203 500	205 000	408 500	46 500	45 200	91 700	136 100	132 000	268 100	2 608 700	2 572 500	5 181 200
10–14	2 217 000	2 185 300	4 402 300	202 800	203 600	406 400	50 000	48 700	98 700	149 500	145 400	294 900	2 619 300	2 583 000	5 202 300
15–19	2 210 200	2 184 700	4 394 900	200 000	201 700	401 700	54 700	53 500	108 200	162 900	158 500	321 400	2 627 800	2 598 400	5 226 200
20–24	2 116 800	2 095 200	4 212 000	186 200	189 900	376 100	61 000	58 500	119 500	157 400	153 500	310 900	2 521 400	2 497 100	5 018 500
25–29	1 792 800	1 942 200	3 735 000	175 700	188 700	364 400	65 900	61 300	127 200	145 900	146 300	292 200	2 180 300	2 338 500	4 518 800
30–34	1 578 000	1 685 400	3 263 400	181 100	196 500	377 600	58 500	55 800	114 300	139 600	140 800	280 400	1 957 200	2 078 500	4 035 700
35–39	1 294 700	1 419 800	2 714 500	176 500	194 500	371 000	46 900	46 600	93 500	142 000	144 200	286 200	1 660 100	1 805 100	3 465 200
40–44	848 500	943 200	1 791 700	146 500	164 300	310 800	41 300	42 200	83 500	168 800	169 400	338 200	1 205 100	1 319 100	2 524 200
45–49	716 200	820 600	1 536 800	127 900	145 100	273 000	38 600	39 900	78 500	170 000	172 300	342 300	1 052 700	1 177 900	2 230 600
50–54	632 700	743 800	1 376 500	104 400	120 000	224 400	35 200	36 700	71 900	169 400	176 900	346 300	941 700	1 077 400	2 019 100
55–59	502 400	603 300	1 105 700	78 800	92 900	171 700	30 700	33 100	63 800	152 800	159 700	312 500	764 700	889 000	1 653 700
60–64	368 400	475 600	844 000	56 800	70 900	127 700	24 400	27 800	52 200	141 000	154 800	295 800	590 600	729 100	1 319 700
65–69	263 200	354 200	617 400	36 100	47 400	83 500	18 100	21 200	39 300	115 500	129 500	245 000	432 900	552 300	985 200
70–74	177 000	262 700	439 700	24 400	36 300	60 700	11 700	15 100	26 800	75 800	91 900	167 700	288 900	406 000	694 900
75–79	107 700	171 500	279 200	13 900	23 400	37 300	7 000	9 800	16 800	44 500	63 600	108 100	173 100	268 300	441 400
80+	72 100	128 800	200 900	8 700	17 000	25 700	4 800	8 000	12 800	39 600	74 900	114 500	125 200	228 700	353 900
Total	19 314 500	20 368 100	39 682 600	2 124 900	2 299 200	4 424 100	646 600	653 300	1 299 900	2 243 000	2 341 700	4 584 700	24 329 000	25 662 300	49 991 300

All numbers have been rounded off to the nearest hundred and may therefore lead to small differences in the overall totals by age and sex.

4.   Provincial population estimates

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). The methods developed for this purpose by Willekens and Rogers (1978) have not been widely used in developing countries, partly due to the lack of adequate migration data and the difficulty of applying these methods.
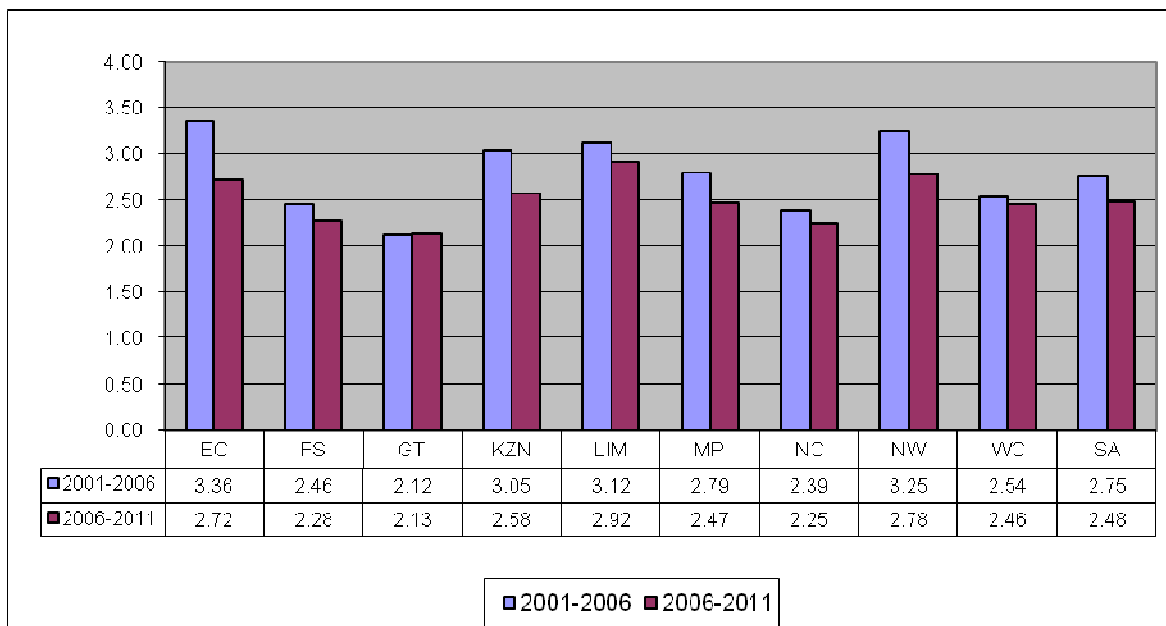
Multi-regional methods require the estimation of separate age-specific migration rates between every region of the country and every other region and such detailed data are rarely available. Although it is possible to estimate some of the missing data (see Willekens et al., 1979) the task of preparing 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 2448 (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.

The cohort-component approach suggested by the United Nations (United Nations, 1992) was used to undertake the provincial projections for this report. The programming was done through JMP script language (JSL). JMP was developed by the SAS Institute Inc. JMP is not a part of the SAS System though portions of JMP were adapted from routines in the SAS System particularly for linear algebra and probability calculations. Version 8.01 was used to develop the projection for the 2010 provincial mid-year estimates and used the matrix algebra approach. A detailed description of the methodology that Stats SA used for the provincial projections is available at: www.statssa.gov.za

4.1   Demographic assumptions

Figure 1 shows the provincial fertility estimates for the periods 2001–2006 and 2006–2011. For all the provinces it was assumed that the total fertility rates will decline, although the decline in Western Cape was much smaller and Gauteng experienced a slight increase. This was expected because the rates of these two provinces were already on low levels.

Figure 1: Provincial average total fertility rates for the periods 2001–2006 and 2006–2011

	EC	FS	GT	KZN	LIM	MP	NC	NW	WC	SA
2001-2006	3.36	2.46	2.12	3.05	3.12	2.79	2.39	3.25	2.54	2.75
2006-2011	2.72	2.28	2.13	2.58	2.92	2.47	2.25	2.78	2.46	2.48

Figures 2 and 3 show the average provincial life expectancies at birth for males and females for the periods 2001–2006 and 2006–2011. The assumptions for this projection were that Western Cape has the highest life expectancy at birth for both males and females; while the Free State has the lowest life expectancy at birth.

Figure 2: Provincial average life expectancy at birth, 2001–2006 and 2006–2011 (males)

	EC	FS	GT	KZN	LIM	MP	NC	NW	WC	SA
2001-2006	49.9	44.8	55.1	48.8	54.3	49.6	52.9	46.1	56.2	51.2
2006-2011	51.3	46.2	55.9	49.1	55.0	50.3	53.5	47.5	57.6	52.2
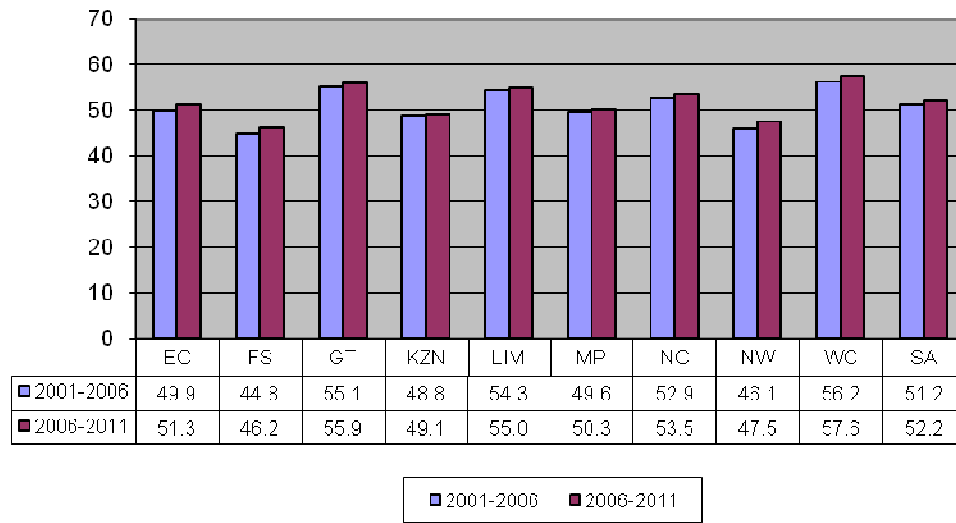
Figure 3: Provincial average life expectancy at birth, 2001–2006 and 2006-2011 (females)

	EC	FS	GT	KZN	LIM	MP	NC	NW	WC	SA
2001-2006	53.1	48.3	58.7	50.3	57.8	51.5	55.0	50.5	60.7	54.2
2006-2011	53.1	48.4	58.7	50.2	58.0	51.6	54.9	50.5	60.8	54.3
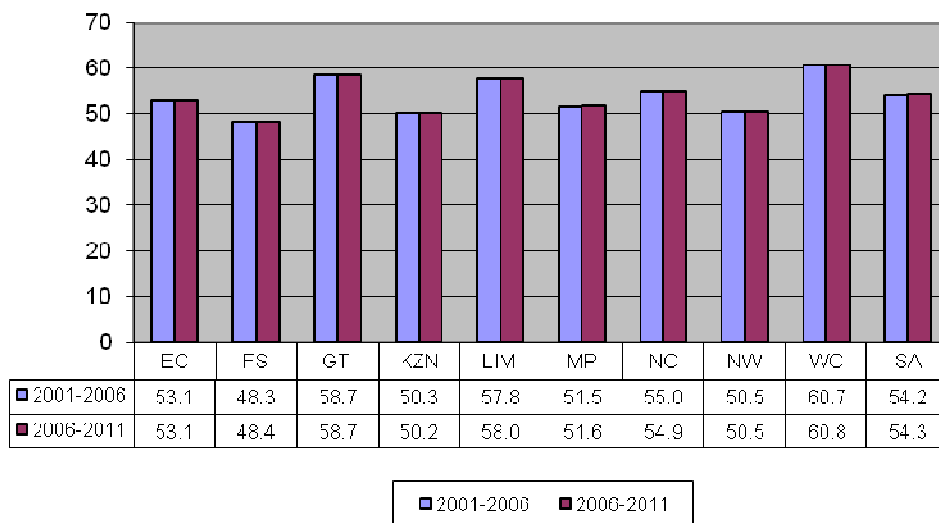
4.2 Provincial distributions

Table 12 shows the estimated percentage of the total population residing in each of the provinces from 2001 to 2010. The provincial estimates show that since 2004 Gauteng had the largest share of the population followed by KwaZulu-Natal and Eastern Cape. Approximately 10% of South Africa's population lives in Western Cape. Northern Cape has the smallest population. Free State has the second smallest share of the South African population, constituting approximately 6% of the population.

Table 12: Percentage distribution of the projected provincial share of the total population 2001–2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Eastern Cape	14,3	14,2	14,1	14,0	13,9	13,9	13,8	13,7	13,6	13,5
Free State	6,1	6,1	6,0	6,0	5,9	5,8	5,8	5,7	5,7	5,7
Gauteng	21,0	21,2	21,3	21,5	21,7	21,8	21,9	22,1	22,2	22,4
KwaZulu-Natal	21,3	21,3	21,3	21,3	21,4	21,4	21,4	21,4	21,3	21,3
Limpopo	11,1	11,0	11,0	11,0	10,9	10,9	10,9	10,9	10,9	10,9
Mpumalanga	7,4	7,4	7,4	7,4	7,4	7,3	7,3	7,3	7,3	7,2
Northern Cape	2,4	2,4	2,4	2,3	2,3	2,3	2,3	2,2	2,2	2,2
North West	6,6	6,5	6,5	6,5	6,5	6,5	6,4	6,4	6,4	6,4
Western Cape	9,8	9,8	9,9	10,0	10,1	10,2	10,2	10,3	10,4	10,4
Total	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**

4.3 Migration patterns

From Census 2001 and the Community Survey that Stats SA undertook in 2007, 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 Table 13 below. Although the assumptions still implies that Gauteng and Western are the only provinces that receive migrants, the number of migrants is lower in comparison to the estimates in the 2009 release. The Eastern Cape and Limpopo experienced the largest outflow.

4.4 Provincial estimates by age and sex

Table 14 shows the detailed provincial population estimates by age and sex. Where necessary the totals by age were reconciled with the national totals for males and females separately[2].

Nearly one-third (31,4%) of the population is younger than 15 years and approximately 7 5% (3,7 million) is 60 years or older. Of those younger than 15 years approximately 23% (3,54 million) live in KwaZulu-Natal and 17,9% (2,78 million) live in Gauteng. The smallest province Northern Cape has nearly one-third (32%) of its population aged younger than 15 years.

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[2] Due to the rounding off of data in the tables to the nearest 100, the population totals by sex and age may not always correspond with the totals presented elsewhere.

Table 13: Estimated provincial migration streams, 2006–2011

Province In 2006	Province in 2011									Out-migration	In-migration	Net migration
	EC	FS	GP	KZN	LP	MP	NC	NW	WC			
EC	-	14 100	82 400	75 400	9 100	11 500	3 300	28 000	103 400	327 200	115 500	-211 600
FS	7 400	-	55 600	5 700	9 500	6 200	5 000	23 200	9 400	122 000	92 600	-29 400
GP	33 100	32 400	-	59 200	34 900	42 900	7 900	49 700	49 100	309 300	673 700	364 400
KZN	18 700	8 600	118 200	-	6 300	17 200	1 800	7 900	17 300	196 100	197 900	1 800
LP	3 500	5 300	165 700	5 500	-	26 300	800	25 500	4 800	237 400	96 300	-141 000
MP	6 400	3 900	99 800	15 300	16 900	-	5 200	11 500	5 800	164 900	120 700	-44 200
NC	11 600	6 900	11 700	1 900	2 900	2 500	-	10 900	13 100	61 500	43 000	-18 500
NW	4 800	15 400	100 000	21 600	12 100	10 600	9 300	-	3 300	177 100	161 000	-16 000
WC	30 100	6 000	40 300	13 300	4 500	3 500	9 600	4 300	-	111 500	206 100	94 600

All numbers have been rounded off to the nearest hundred and may therefore lead to small differences in the overall totals.

Table 14: Provincial population estimates by age and sex, 2010

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	361 900	360 900	722 800	130 400	129 100	259 500	522 200	507 200	1 029 400	574 800	567 300	1 142 100	311 000	309 900	620 900
5–9	375 100	369 100	744 200	135 300	135 700	271 000	512 000	496 600	1 008 600	598 800	587 900	1 186 700	304 800	298 200	603 000
10–14	384 100	363 300	747 400	146 400	147 400	293 800	471 500	477 400	948 900	605 000	589 400	1 194 400	342 100	320 600	662 700
15–19	427 700	407 800	835 500	147 000	148 100	295 100	441 500	447 400	888 900	609 000	601 100	1 210 100	356 600	335 700	692 300
20–24	378 200	367 700	745 900	145 600	145 300	290 900	482 600	481 400	964 000	564 600	559 100	1 123 700	312 200	297 400	609 600
25–29	278 100	297 700	575 800	123 600	134 600	258 200	522 600	537 700	1 060 300	466 900	512 600	979 500	229 400	250 900	480 300
30–34	208 100	230 400	438 500	105 500	118 400	223 900	581 700	556 600	1 138 300	390 500	429 800	820 300	169 900	202 700	372 600
35–39	163 600	195 800	359 400	90 700	105 400	196 100	520 000	494 600	1 014 600	321 000	360 600	681 600	128 100	168 100	296 200
40–44	120 500	151 200	271 700	71 800	80 800	152 600	368 500	349 200	717 700	215 700	255 400	471 100	92 200	119 400	211 600
45–49	111 000	144 500	255 500	63 400	71 400	134 800	310 200	301 300	611 500	187 400	231 700	419 100	81 000	109 300	190 300
50–54	108 400	145 600	254 000	57 600	65 000	122 600	271 000	272 200	543 200	164 700	207 300	372 000	72 000	97 200	169 200
55–59	92 600	121 200	213 800	48 000	55 100	103 100	208 400	216 400	424 800	138 600	171 400	310 000	62 600	84 400	147 000
60–64	73 700	100 800	174 500	36 200	44 500	80 700	153 700	169 700	323 400	112 500	149 700	262 200	50 100	68 900	119 000
65–69	59 200	83 000	142 200	26 000	32 800	58 800	106 600	123 700	230 300	79 800	110 200	190 000	37 800	52 300	90 100
70–74	48 000	76 900	124 900	15 900	22 200	38 100	62 300	75 800	138 100	52 500	82 200	134 700	28 500	45 500	74 000
75–79	30 100	46 300	76 400	10 400	16 800	27 200	35 600	49 300	84 900	29 700	52 300	82 000	17 600	34 000	51 600
80+	22 000	39 400	61 400	6 400	11 700	18 100	24 300	40 500	64 800	21 300	44 600	65 900	15 800	33 400	49 200
Total	3 242 300	3 501 500	6 743 800	1 360 200	1 464 300	2 824 500	5 594 700	5 597 000	11 191 700	5 132 800	5 512 600	10 645 400	2 611 700	2 827 900	5 439 600

All numbers have been rounded off to the nearest hundred and may therefore lead to small differences in the overall totals by age and sex.

Table 14: Provincial mid-year population estimates by age and sex, 2010 (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	182 200	179 600	361 800	46 400	45 300	91 700	176 300	174 400	350 700	274 200	267 700	541 900	**2 579 300**	**2 541 400**	**5 120 700**
5–9	194 300	192 900	387 200	52 600	51 500	104 100	172 200	179 500	351 700	263 700	261 200	524 900	**2 608 700**	**2 572 500**	**5 181 200**
10–14	214 500	214 800	429 300	64 400	63 700	128 100	156 000	167 400	323 400	235 400	239 100	474 500	**2 619 300**	**2 583 000**	**5 202 300**
15–19	206 600	204 400	411 000	59 200	57 300	116 500	156 700	163 300	320 000	223 400	233 300	456 700	**2 627 800**	**2 598 400**	**5 226 200**
20–24	199 500	194 800	394 300	54 300	53 400	107 700	152 600	158 100	310 700	231 700	239 900	471 600	**2 521 400**	**2 497 100**	**5 018 500**
25–29	163 700	172 800	336 500	45 300	46 600	91 900	130 800	138 600	269 400	219 800	247 000	466 800	**2 180 300**	**2 338 500**	**4 518 800**
30–34	133 400	146 300	279 700	39 800	42 100	81 900	122 400	126 600	249 000	205 900	225 500	431 400	**1 957 200**	**2 078 500**	**4 035 700**
35–39	109 000	126 800	235 800	35 300	38 200	73 500	106 200	112 600	218 800	186 300	202 900	389 200	**1 660 100**	**1 805 100**	**3 465 200**
40–44	79 500	90 600	170 100	28 800	30 300	59 100	83 300	83 900	167 200	144 800	158 400	303 200	**1 205 100**	**1 319 100**	**2 524 200**
45–49	70 300	78 500	148 800	25 400	27 300	52 700	78 000	73 200	151 200	126 000	140 600	266 600	**1 052 700**	**1 177 900**	**2 230 600**
50–54	61 400	66 500	127 900	24 400	26 400	50 800	71 200	67 700	138 900	110 900	129 700	240 600	**941 700**	**1 077 400**	**2 019 100**
55–59	51 300	56 800	108 100	20 300	22 700	43 000	53 000	55 400	108 400	89 900	105 500	195 400	**764 700**	**889 000**	**1 653 700**
60–64	36 900	43 300	80 200	16 200	18 800	35 000	39 100	43 900	83 000	72 100	89 300	161 400	**590 600**	**729 100**	**1 319 700**
65–69	26 400	31 700	58 100	12 800	15 000	27 800	29 800	36 100	65 900	54 500	67 600	122 100	**432 900**	**552 300**	**985 200**
70–74	17 800	24 600	42 400	8 400	10 000	18 400	18 400	23 900	42 300	37 100	45 000	82 100	**288 900**	**406 000**	**694 900**
75–79	9 200	15 100	24 300	5 600	7 200	12 800	11 500	16 900	28 400	23 400	30 500	53 900	**173 100**	**268 300**	**441 400**
80+	8 300	13 800	22 100	3 500	5 400	8 900	7 900	14 000	21 900	15 800	25 800	41 600	**125 200**	**228 700**	**353 900**
Total	**1 764 300**	**1 853 300**	**3 617 600**	**542 700**	**561 200**	**1 103 900**	**1 565 400**	**1 635 500**	**3 200 900**	**2 514 900**	**2 709 000**	**5 223 900**	**24 329 000**	**25 662 300**	**49 991 300**

All numbers have been rounded off to the nearest hundred.

References

Shisana, O. et al. 2009. South African National HIV Prevalence, Incidence, Behaviour and Communication Survey 2008: A Turning Tide among Teenagers? HSRC Press, Cape Town.

Stover, J. & Kirmeyer, S. March 2009. Demproj Version 4. A computer program for making population projections (The Spectrum system of policy models).

UNAIDS. 2009. Spectrum Version 3.39. United Nations, Geneva, Switzerland.

UNAIDS. 2009. EPP Version 10.0/2009 Beta U. United Nations, Geneva, Switzerland.

United Nations. 1992. *Preparing Migration Data for Subnational Population Projections.* Department of International and Economic and Social Affairs. United Nations, New York.

USAID Health Policy Initiative. March 2009. AIM: A Computer Program for Making HIV/AIDS Projections and Examining the Demographic and Social Impacts of AIDS.

Willekens, F. & Rogers, A. 1978. *Spatial Population Analysis: Methods and Computer Programs.* International Institute for Applied System Analysis. Research Report RR 78-18. Laxenberg, Austria.

Willekens, F., Por, A. & Raquillet, R. 1978. *Entropy multiproportional and quadratic techniques for inferring detailed migration patterns from aggregate data.* International Institute for Applied System Analysis. Working Paper WP-79-88. Laxenberg, Austria.