

# **Mid-year population estimates, South Africa 2006**

**Embargoed until  
1 August 2006  
13:00**

**Published by:**

Statistics South Africa  
Private Bag X44  
Pretoria  
South Africa  
0001

© Copyright, 2006

**Users may apply or process this data, provided Statistics South Africa (Stats SA) is acknowledged as the original source of the data; that it is specified that the application and/or analysis is the result of the user's independent processing of the data; and that neither the basic data nor any reprocessed version or application thereof may be sold or offered for sale in any form whatsoever without prior permission from Stats SA.**

**Stats SA products**

A complete set of Stats SA publications is available at the Stats SA Library and the following libraries:

National Library of South Africa, Pretoria Division  
National Library of South Africa, Cape Town Division  
Natal Society Library, Pietermaritzburg  
Library of Parliament, Cape Town  
Bloemfontein Public Library  
Johannesburg Public Library  
Eastern Cape Library Services, King William's Town  
Central Regional Library, Polokwane  
Central Reference Library, Nelspruit  
Central Reference Collection, Kimberley  
Central Reference Library, Mafikeng

Stats SA also provides a subscription service.

**Electronic services**

A large range of data are available via on-line services, diskette and computer printouts. For more details about our electronic data, contact user information services.

You can visit us on the Internet at: [www.statssa.gov.za](http://www.statssa.gov.za)

**Contact details**

Telephone: (012) 310 8600/ 8390/ 8351/ 4892/ 8496/ 8095 (user information services)

(012) 310 8636 (technical enquiries)

(012) 310 8161 (orders)

(012) 310 8490 (library)

Fax: (012) 310 8500/ 8495 (user information services)

(012) 310 8339 (technical enquiries)

Email: [info@statssa.gov.za](mailto:info@statssa.gov.za) (user information services)

[hestonp@statssa.gov.za](mailto:hestonp@statssa.gov.za) (technical enquiries)

[distribution@statssa.gov.za](mailto:distribution@statssa.gov.za) (orders)

## EXECUTIVE SUMMARY

- This release uses the cohort-component methodology to estimate the 2006 mid-year population of South Africa. These estimates explicitly account for HIV and AIDS.
- The 2006 mid-year population is estimated at approximately 47,4 million.
- Fifty-one per cent (approximately 24,1 million) of the population is female.
- Kwazulu-Natal has the largest share of the South African population. Just over 20 percent of the population lives in this province.
- For 2006, life expectancy at birth is estimated at approximately 49 years for males and 53 years for females.
- The estimated overall HIV-prevalence rate is approximately 11%. The HIV positive population is estimated at approximately 5,2 million.

### Mid-year estimates for South Africa by population group and sex, 2006

Population group	Male		Female		Total	
	Number	% of total population	Number	% of total population	Number	% of total population
African	18 558 500	79,6	19 104 400	79,4	37 662 900	79,5
Coloured	2 060 000	8,8	2 138 800	8,9	4 198 800	8,9
Indian/Asian	570 200	2,4	593 700	2,5	1 163 900	2,5
White	2 138 900	9,2	2 226 400	9,3	4 365 300	9,2
<b>Total</b>	<b>23 327 600</b>	<b>100</b>	<b>24 063 300</b>	<b>100</b>	<b>47 390 900</b>	<b>100</b>



**Pali J. Lehohla**  
**Statistician-General**  
**Statistics South Africa**  
**27 July 2006**

## INTRODUCTION

Statistics South Africa (Stats SA) subscribes to the specification of the IMF's Special Data Dissemination Standard (SDDS) and publishes the population estimates for the country as a whole and for the nine provinces annually. The estimates in this release cover all the residents of South Africa at the 2006 mid-year and explicitly take HIV/AIDS into account.

The cohort-component method of estimation is used for both the national and sub-national estimates. Estimates at the national level are presented by population group, age and sex. Provincial estimates are provided by age and sex. The estimates given here may change as new data and information become available.

## KEY ASSUMPTIONS ABOUT FERTILITY, MORTALITY AND MIGRATION

### National level assumptions

#### *Fertility*

Table 1 shows the national fertility assumptions used in this report. Fertility declined from an average of 2,9 children per woman in 2001 to 2,7 children by 2006.

**Table 1: Estimated total fertility rates, 2001–2006**

	<b>African</b>	<b>Coloured</b>	<b>Indian/Asian</b>	<b>White</b>	<b>South Africa</b>
2001	3.10	2.35	1.98	1.73	2.86
2002	3.07	2.33	1.92	1.73	2.84
2003	3.04	2.32	1.89	1.72	2.82
2004	3.01	2.30	1.87	1.72	2.80
2005	2.98	2.28	1.88	1.73	2.78
2006	2.92	2.27	1.88	1.73	2.73

#### *Mortality, HIV and treatment programs*

For 2006, life expectancy at birth is estimated at 49,0 years for males and 52,5 years for females. The life expectancy for both sexes is estimated at 50,7 years.

This release assumes a mother-to-child transmission rate (the proportion of babies born to HIV-positive mothers who will also become HIV-positive) of 32% if no HIV treatment program is followed and 11% if such a program is in place. Mother-to-child transmissions occur primarily during the perinatal period and largely through breastfeeding. The model assumes a

median duration of breastfeeding consistent with data from the Department of Health. The mother-to-child transmissions can be reduced through antiretroviral treatment to mothers and their babies or through replacement feeding options.

The estimates take the administration of nevirapine treatment to pregnant HIV-positive women and the promotion of alternative infant feeding options into account. The PMTCT program is assumed to be phased-in and assumptions about the levels are based on information from the Department of Health.

The model assumes a phased-in uptake of child ART starting in 2001 and an increasing proportion of children born to HIV-positive mothers receiving cotrimoxazole from 2003.

The median time lapse from becoming HIV-positive until death due to AIDS in this release is estimated to be 10 years for both males and females and a female-to-male HIV prevalence ratio of 1,3 was assumed for 2006.

The adult HIV-prevalence rate (the proportion of adults who are infected with HIV) is shown in Table 2. As expected, the prevalence rate is highest among women aged 15-49. The overall prevalence rate of this group is 20%. The estimated total HIV-prevalence rate increased to about 11% in 2006 (from less than 9 percent in 2001). The HIV-positive population is estimated at 5,2 million which compares to an UNAIDS estimate of 5,5 million at present.

**Table 2: Estimated adult HIV-prevalence rates, 2001–2006**

	2001	2002	2003	2004	2005	2006
Women 15–49 years	16.1	16.9	17.7	18.5	19.3	20.0
Women 20–64 years	14.7	15.4	16.1	16.7	17.2	17.8
Men 20–64 years	14.3	15.0	15.6	16.3	16.9	17.5
Adults 20–64 years	14.5	15.2	15.9	16.5	17.1	17.7
Adults 15–49 years	14.7	15.4	16.1	16.9	17.5	18.2
<b>Total population</b>	8.5	9.0	9.5	10.0	10.4	10.9

#### *Documented international migration*

It is often difficult to make plausible migration assumptions, due to inadequate data. This estimate incorporates migration assumptions using published and adjusted migration data from Stats SA and other sources (Table 3). It is estimated that the large documented out-

migration of whites will decline substantially over time and that the positive documented in-migration of Africans will continue.

**Table 3: Estimated net international migration assumptions, 1991–2010**

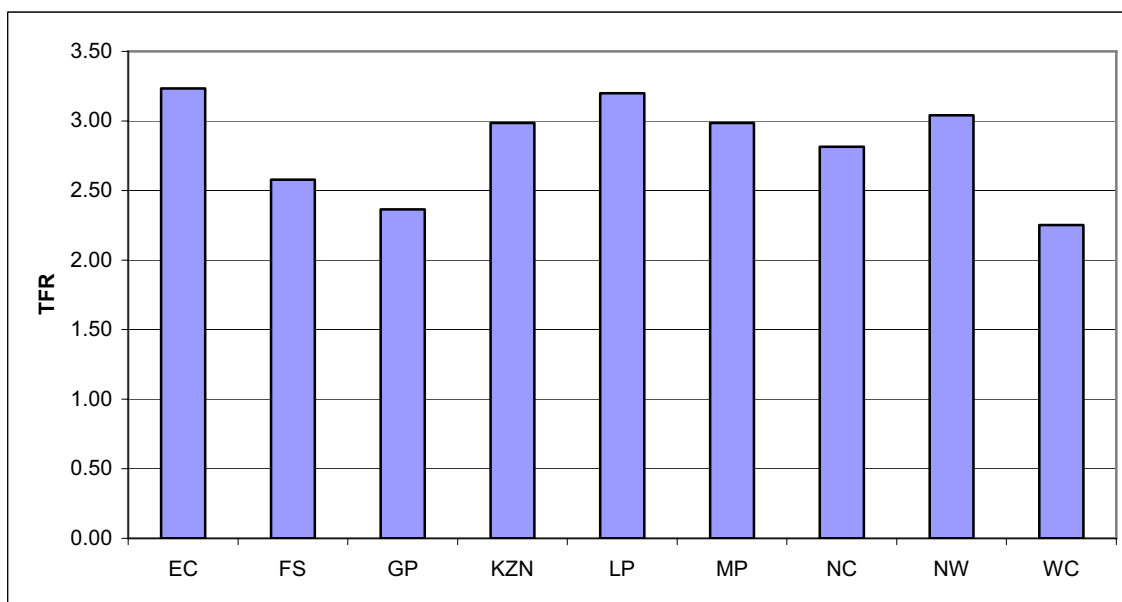
Period	Non-African	African
1991–1995	-284 000	81 000
1996–2000	-325 000	145 000
2001–2005	-139 000	192 000
2006–2010	-48 000	205 000

**Provincial level assumptions**

*Fertility*

Figure 1 shows the provincial assumptions about fertility for the period 2001-2006. Gauteng and the Western Cape have the lowest level of fertility while the Eastern Cape and Limpopo provinces have the highest level of fertility.

**Figure 1: Provincial total fertility rates, 2001–2006**

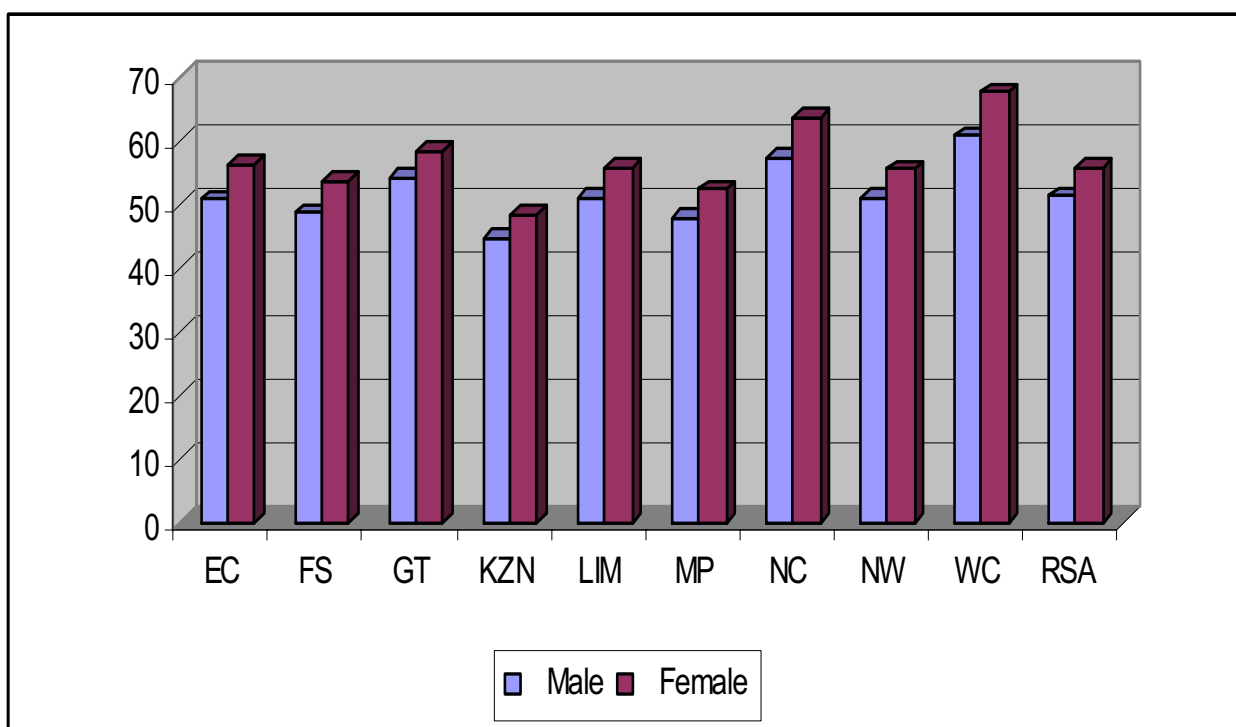


*Mortality*

The initial set of mortality estimates were adjusted separately for males and females. The revised life expectancies at birth and survival ratios ( ${}_nS_x$ ) were then used for the projections.

Figure 2 shows the average provincial life expectancies at birth for males and females for the period 2001-2006. Life expectancy at birth for females is the highest in the Western Cape (67 years) and lowest in Kwazulu Natal (less than 50 years). For Gauteng, life expectancy at birth is estimated at 54 years for males and 57 years for females. For both sexes, life expectancy is estimated at 50,7 years (49,0 years for males and 52,5 years for females).

**Figure 2: Provincial expectation of life at birth, 2001–2006**



*Internal migration streams*

An analysis of the internal migration streams revealed that Gauteng, Western Cape and Kwazulu-Natal experience positive net migration. There seems to be a high migration movement from Limpopo and the North West provinces into Gauteng. The provinces with the highest outflow of people were Eastern Cape and Limpopo.

## NATIONAL POPULATION ESTIMATES, 2006

Table 4 shows the mid-year estimates for 2006 by population group and sex. This table shows that the mid-year population is estimated at approximately 47,4 million. Africans are in the majority (approximately 37,7 million) and constitute about 80 percent of the total South African population. The white population is estimated at 4,4 million, the coloured population 4,2 million and the Indian/Asian population 1,2 million. Fifty-one per cent (approximately 24,1 million) of the population is female.

**Table 4: Mid-year estimates by population group and sex, 2006**

Population group	Male		Female		Total	
	Number	% of total pop	Number	% of total pop	Number	% of total pop
African	18 558 500	79,6	19 104 400	79,4	37 662 900	79,5
Coloured	2 060 000	8,8	2 138 800	8,9	4 198 800	8,9
Indian/Asian	570 200	2,4	593 700	2,5	1 163 900	2,5
White	2 138 900	9,2	2 226 400	9,3	4 365 300	9,2
<b>Total</b>	<b>23 327 600</b>	<b>100</b>	<b>24 063 300</b>	<b>100</b>	<b>47 390 900</b>	<b>100</b>

Table 5 shows that the implied rate of growth for the South African population has been declining steadily between 2001 and 2006. The overall growth rate for 2005–2006 is estimated at 1,06% with the rate for females slightly lower than that of males.

**Table 5: Estimated annual population growth rates, 2001–2006**

	2001–2002	2002–2003	2003–2004	2004–2005	2005–2006
Male	1,27	1,24	1,21	1,20	1,09
Female	1,23	1,20	1,16	1,14	1,02
Total	1,25	1,22	1,19	1,17	1,06

Table 6 shows the mid-year population by age, sex and population group explicitly taking HIV/AIDS into account. There are approximately 15,3 million children (32%) aged 0–14 years and approximately 3,7 million people older than 60 years (7,7%) in the population.



**Table 6: Mid-year population estimates by population group, age and sex, 2006**

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	2 238 700	2 207 900	4 446 600	203 800	201 300	405 100	44 500	43 500	88 000	113 900	110 900	224 800	2 600 900	2 563 600	5 164 500
5-9	2 142 500	2 115 600	4 258 100	202 600	200 300	402 900	47 200	46 400	93 600	130 300	127 200	257 500	2 522 600	2 489 500	5 012 100
10-14	2 146 500	2 129 000	4 275 500	201 500	199 600	401 100	51 800	51 200	103 000	157 000	153 200	310 200	2 556 800	2 533 000	5 089 800
15-19	2 065 700	2 053 900	4 119 600	191 700	191 300	383 000	53 400	53 500	106 900	166 100	162 400	328 500	2 476 900	2 461 100	4 938 000
20-24	1 937 600	1 927 000	3 864 600	184 300	184 600	368 900	54 200	54 100	108 300	156 700	155 300	312 000	2 332 800	2 321 000	4 653 800
25-29	1 796 800	1 733 000	3 529 800	191 100	192 600	383 700	50 600	51 000	101 600	128 400	127 600	256 000	2 166 900	2 104 200	4 271 100
30-34	1 582 300	1 556 000	3 138 300	190 700	194 000	384 700	44 800	45 500	90 300	114 700	113 500	228 200	1 932 500	1 909 000	3 841 500
35-39	1 041 000	1 090 600	2 131 600	161 100	167 800	328 900	41 300	42 300	83 600	150 100	147 900	298 000	1 393 500	1 448 600	2 842 100
40-44	811 600	913 300	1 724 900	138 000	146 500	284 500	38 300	40 000	78 300	170 400	170 100	340 500	1 158 300	1 269 900	2 428 200
45-49	729 100	822 800	1 551 900	114 400	122 800	237 200	34 800	36 700	71 500	174 300	180 100	354 400	1 052 600	1 162 400	2 215 000
50-54	580 800	673 600	1 254 400	86 400	95 700	182 100	30 600	33 300	63 900	157 400	163 000	320 400	855 200	965 600	1 820 800
55-59	437 000	526 700	963 700	62 100	72 900	135 000	25 200	28 600	53 800	145 900	156 700	302 600	670 200	784 900	1 455 100
60-64	383 500	460 500	844 000	49 700	57 400	107 100	20 800	23 700	44 500	132 500	141 500	274 000	586 500	683 100	1 269 600
65-69	286 600	363 400	650 000	36 600	45 700	82 300	14 800	18 000	32 800	99 000	110 700	209 700	437 000	537 800	974 800
70-74	192 000	255 800	447 800	24 100	32 700	56 800	9 200	12 200	21 400	65 200	81 200	146 400	290 500	381 900	672 400
70-79	109 800	152 300	262 100	12 900	18 800	31 700	5 100	7 600	12 700	40 600	58 500	99 100	168 400	237 200	405 600
80+	76 900	123 000	199 900	9 000	14 800	23 800	3 600	6 100	9 700	36 400	66 600	103 000	125 900	210 500	336 400
<b>Total</b>	18 558 400	19 104 400	37 662 800	2 060 000	2 138 800	4 198 800	570 200	593 700	1 163 900	2 138 900	2 226 400	4 365 300	23 327 600	24 063 300	47 390 900

All numbers have been rounded off to the nearest hundred.

## PROVINCIAL POPULATION ESTIMATES, 2006

Table 7 shows the percentage of the total population residing in each of the provinces from 2001 to 2006. This Table also shows the shifts in population size based on the new provincial boundaries announced in January 2006.

The provincial estimates show that KwaZulu-Natal has the largest share of the population, followed by Gauteng and Eastern Cape in 2006. Ten percent of the population live in the Western Cape. The Northern Cape has the smallest population. Free State has the second smallest share of the South African population, with about 6% of the total population residing in this province.

**Table 7: Percentage distribution of the projected provincial share of the total population, 2001–2006**

Province	2001	2002	2003	2004	2005	2006	2006 (New boundaries)
Eastern Cape	15,5	15,4	15,2	15,1	15,0	14,9	14,6
Free State	6,5	6,4	6,4	6,3	6,3	6,2	6,2
Gauteng	18,5	18,7	18,9	19,0	19,2	19,4	20,1
Kwazulu-Natal	20,7	20,7	20,7	20,6	20,6	20,5	20,9
Limpopo	12,3	12,2	12,1	12,1	12,0	12,0	11,3
Mpumalanga	6,9	6,9	6,9	6,9	6,9	6,9	7,4
Northern Cape	1,9	1,9	1,9	1,9	1,9	1,9	2,3
North West	8,2	8,2	8,2	8,2	8,2	8,1	7,1
Western Cape	9,4	9,5	9,7	9,8	9,9	10,0	10,0
<b>Total</b>	100	100	100	100	100	100	100

Table 8 shows the detailed provincial mid-2006 population estimates by age and sex. Where necessary the totals by age were reconciled with the national totals, for males and females separately<sup>1</sup>. Table 8 also shows the sex distribution of the provinces based on the new provincial boundaries.

<sup>1</sup> 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 in Table 6.

**Table 8: Provincial mid-year population estimates by age and sex, 2006**

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	391 800	389 900	781 700	150 100	148 500	298 600	479 100	465 100	944 200	552 500	547 700	1 100 200	339 700	335 800	675 500
5-9	393 800	385 800	779 600	151 400	149 700	301 100	402 400	394 900	797 300	554 200	547 400	1 101 600	347 000	346 500	693 500
10-14	454 600	447 100	901 700	153 000	151 200	304 200	349 800	345 600	695 400	571 900	566 200	1 138 100	383 200	383 000	766 200
15-19	440 300	433 300	873 600	156 700	153 500	310 200	347 700	349 300	697 000	542 700	536 100	1 078 800	363 000	361 900	724 900
20-24	347 200	351 800	699 000	146 700	144 200	290 900	443 500	420 600	864 100	501 400	504 800	1 006 200	282 500	294 200	576 700
25-29	258 500	267 400	525 900	129 800	129 600	259 400	552 900	477 200	1 030 100	433 500	435 200	868 700	209 000	238 800	447 800
30-34	205 400	230 100	435 500	115 300	119 400	234 700	541 700	452 500	994 200	373 400	382 800	756 200	160 400	206 300	366 700
35-39	148 300	183 000	331 300	90 600	96 200	186 800	382 200	332 700	714 900	248 400	279 100	527 500	112 700	150 500	263 200
40-44	128 600	170 200	298 800	78 000	84 100	162 100	302 600	280 200	582 800	203 300	248 300	451 600	93 400	134 100	227 500
45-49	128 000	172 500	300 500	72 100	76 000	148 100	268 700	254 500	523 200	180 300	223 000	403 300	82 600	117 300	199 900
50-54	109 900	146 600	256 500	60 300	65 400	125 700	207 100	203 900	411 000	150 200	183 000	333 200	71 100	102 400	173 500
55-59	89 200	120 900	210 100	46 400	53 000	99 400	154 700	157 100	311 800	124 800	159 200	284 000	58 200	82 600	140 800
60-64	83 700	111 000	194 700	40 800	45 600	86 400	127 400	131 500	258 900	106 200	135 400	241 600	51 700	70 200	121 900
65-69	75 400	109 700	185 100	28 200	33 000	61 200	83 600	86 100	169 700	77 600	106 900	184 500	42 900	63 200	106 100
70-74	55 500	78 200	133 700	19 800	25 700	45 500	50 200	55 800	106 000	48 300	73 200	121 500	29 600	51 400	81 000
70-79	32 900	47 300	80 200	10 300	13 500	23 800	26 900	32 000	58 900	28 500	48 300	76 800	20 600	37 500	58 100
80+	23 600	40 000	63 600	7 600	13 100	20 700	20 600	31 100	51 700	20 300	37 700	58 000	16 500	31 000	47 500
<b>Total</b>	3 366 700	3 684 800	7 051 500	1 457 100	1 501 700	2 958 800	4 741 100	4 470 100	9 211 200	4 717 500	5 014 300	9 731 800	2 664 100	3 006 700	5 670 800
<b>Total*</b>	3 294 900	3 599 400	6 894 300	1 457 100	1 501 700	2 958 800	4 889 700	4 636 500	9 526 200	4 802 100	5 121 900	9 924 000	2 525 500	2 839 900	5 365 400

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.

\* Totals are based on the new provincial boundaries

**Table 8: Provincial mid-year population estimates by age and sex, 2006 (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	187 200	185 100	372 300	48 200	47 300	95 500	218 300	216 000	434 300	234 000	228 200	462 300	2 600 900	2 563 600	5 164 500
5-9	191 900	191 700	383 600	49 200	48 300	97 500	202 900	202 300	405 200	229 900	222 800	452 700	2 522 700	2 489 400	5 012 100
10-14	186 400	187 100	373 500	45 900	45 500	91 400	199 400	197 700	397 100	212 600	209 600	422 200	2 556 800	2 533 000	5 089 800
15-19	179 900	178 100	358 000	43 000	42 700	85 700	192 300	192 600	384 900	211 300	213 600	424 900	2 476 900	2 461 100	4 938 000
20-24	164 500	162 000	326 500	40 400	38 000	78 400	176 200	173 100	349 300	230 400	232 300	462 700	2 332 800	2 321 000	4 653 800
25-29	143 400	141 500	284 900	38 500	35 500	74 000	174 600	160 100	334 700	226 600	218 900	445 500	2 166 800	2 104 200	4 271 000
30-34	125 500	129 700	255 200	36 200	33 900	70 100	160 700	151 100	311 800	214 000	203 100	417 100	1 932 600	1 908 900	3 841 500
35-39	89 900	97 000	186 900	29 100	28 600	57 700	126 800	116 400	243 200	165 500	165 300	330 800	1 393 500	1 448 800	2 842 300
40-44	77 100	83 500	160 600	24 500	25 200	49 700	112 200	101 000	213 200	138 600	143 400	282 000	1 158 300	1 270 000	2 428 300
45-49	68 100	70 700	138 800	23 300	24 200	47 500	106 400	91 700	198 100	123 100	132 500	255 600	1 052 600	1 162 400	2 215 000
50-54	56 700	59 700	116 400	20 300	21 500	41 800	81 600	76 700	158 300	98 100	106 200	204 300	855 300	965 400	1 820 700
55-59	41 900	45 900	87 800	16 000	17 700	33 700	60 000	59 700	119 700	78 800	88 800	167 600	670 000	784 900	1 454 900
60-64	35 000	37 700	72 700	15 000	16 400	31 400	55 500	56 800	112 300	71 100	78 600	149 700	586 400	683 200	1 269 600
65-69	25 500	30 600	56 100	11 200	11 600	22 800	38 600	40 800	79 400	54 000	55 900	109 900	437 000	537 800	974 800
70-74	15 300	20 300	35 600	8 000	8 600	16 600	26 000	29 500	55 500	37 800	39 200	77 000	290 500	381 900	672 400
70-79	10 000	13 900	23 900	4 100	4 600	8 700	14 700	17 100	31 800	20 500	22 900	43 400	168 500	237 100	405 600
80+	8 000	11 700	19 700	3 200	4 800	8 000	11 400	18 000	29 400	14 800	23 100	37 900	126 000	210 500	336 500
<b>Total</b>	1 606 300	1 646 200	3 252 500	456 100	454 400	910 500	1 957 600	1 900 600	3 858 200	2 361 100	2 384 400	4 745 500	23 327 600	24 063 300	47 390 900
<b>Total*</b>	1 722 400	1 785 600	3 508 000	544 100	550 400	1 094 500	1 730 700	1 643 500	3 374 200	2 361 100	2 384 400	4 745 500	23 327 600	24 063 300	47 390 900

All numbers have been rounded off to the nearest hundred

\* Totals are based on the new provincial boundaries

## REFERENCES

Stover, J. 2003. *AIM version 4. A computer program for HIV/AIDS projections and examining the social and economic impacts of AIDS*. Spectrum system of Policy Models. The Futures Group International.

United Nations. 2002a. *HIV/AIDS and fertility in sub-Saharan Africa: A perspective of the research literature*. United Nations, New York.

United Nations. 2002b. *Fertility levels and trends in countries with intermediate levels of fertility: A background paper for the Expert Group Meeting on Completing the Fertility Transition*. 11-14 March 2002. United Nations, New York.

World Health Organisation. 2001. *Prevention of mother-to-child transmission of HIV: Selection and use of Nevirapine*. Technical notes. World Health Organisation, Geneva, Switzerland.