STATISTICS BOTSWANA

UNFPA

BOTSWANA POPULATION PROJECTIONS
2011 – 2026

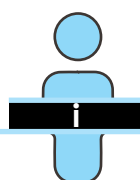# POPULATION PROJECTIONS FOR BOTSWANA
2011-2026

PREFACE

This Population Projections Report is another product of a series of reports that are derived from the 2011 Population and Housing Census data. It is one of the main volumes in the 2011 Population and Housing Census series of publications. The report contains the projected counts of the future population. Unlike in the previous projections, which projected for a 30 year period, the current report projects the population for the next 15 years using the 2011 census data as the base population. These population projections are presented at national, district. A report on locality population projections will be published separately.

The main purpose of producing population projections is to provide an estimate of the future population as a common framework for use in planning, policy formulation and decision making in various sectors of the economy. This would assist the planning process in presenting a future outlook of the population. This includes among others; informing the allocation of the resources from the central government to local areas and plan ahead for the provision of servies.

I hope you will find this publication useful for planning and other purpose.

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EXECUTIVE SUMMARY

Population figures are required for planning in every sector of a population. Outside the census year, census figures do not adequately meet planning needs for future population figures. The purpose of this report is therefore to project the population of Botswana at national, and district level. Populations of urban and rural areas are also projected. To meet the requirement of generating projections by using different variants/scenarios a re-analysis/re-adjustment and estimation of fertility and mortality was carried out on both the 2001 and 2011 Censuses to enable the development of appropriate assumptions for the projections.

Four scenarios of projections were undertaken – High, Medium, Low and HIV/AIDS scenarios – thus embodying different assumptions about levels and trends in fertility and mortality. On the basis of issues raised regarding various fertility and mortality estimates derived from Botswana census data and the re-estimation carried out on the data, it is recommended that the low scenario projections be used for planning. The results from this scenario were almost similar to those from the HIV/AIDS scenario projections. The low scenario projections projected that the population of Botswana may increase from about 2,024,904 persons in 2011 to about 2,565,855 persons by 2026. The HIV/AIDS scenario projections projected that the number of HIV+ persons in Botswana may increase from about 322,972 persons in 2011 to about 472,944 persons by 2026.

CHAPTER 1

1.0   INTRODUCTION

1.1.1   The Need for Population Projections

Population figures at national and sub-geographical levels are required by policy makers, planners, and local administrators for planning in every sector of a population. The traditional source of such figures is the census. Sample sizes in surveys are usually not large enough to produce population figures at sub-geographical levels. Furthermore, from the perspective of planning, census figures are outdated immediately they are released because planners require population figures for the present and possibly for future dates. Population figures are required in between censuses, which in most countries are obtained every ten years or five years in a few countries. Population projections are a cost effective way of producing such figures.   The primary focus of this report therefore to project the population of Botswana at national, district and village populations as well as urban rural projections from 2011 to 2026.

1.1.2   Type of Projections

Population Projections can be varied by types depending on whether they are long term (over 25 years) medium term (10-25 years) and short term (1-10 years). Each of these terms have their own usefulness like the medium term which is normally used for planning needs and programmes such as for schools, post offices, clinics etc.

Secondly population projections can be produced for various geographic levels like projections at national levels, district/regional level and locality/village level. This report has followed this line of projecting. Furthermore population projections may be made of the total population of an area or of particular classes of the population in the area distinguished by age and or sex.

1.1.3   Review of Documents on Demographic Indicators Relevant to the Projections

Population change and hence projections are driven by fertility, mortality and net migration usually expressed in the basic demographic equation as:

$$P_{(t+n)} = P_t + B_{(t, t+n)} - D(t,t+n) + I(t,t+n) - E(t,t+n)$$
Where:
$P_{(t+n)}$ is the population at time $t+n$,
P_t is the base population at time t,
$B_{(t, t+n)}$ is the number of births in the population during the period $t, t+n$,
$D_{(t,t+n)}$ is the number of deaths in the population during the period $t, t+n$,
$I_{(t,t+n)}$ is the number of immigrants into the population during the period $t, t+n$,
$E_{(t,t+n)}$ is the number of emigrants from the population during the period $t, t+n$.

The terms on the right hand of the equation are the components of population change.

Since assumptions in projections are developed based on the historical and current levels of these components, it was essential to review the estimates of the levels of the components. The review specifically focused on the officially published demographic estimates from the 2001 and 2011 Censuses being the last two censuses as given statistical and analytical reports pertaining to these censuses. Some pertinent issues emerged from the review as follows.

Fertility: The reference period for the question on current births was 11 months (Independence Day of the previous year to the month of the census) in the 2001 and 2011 Censuses. Therefore, in order to compute the total fertility rates from the responses to this question, the births needed to be annualised by an adjustment factor of 1.0833. However, this was not done with regard to the estimates based on the 2011 Census. Hence, the estimation of total fertility rate (2.9) from the 2011 Census (2011 Census Report) are biased downward. Although the reported births were annualised in the estimation from the 2001 census, the adjustment factor was slightly too high (1.091). Furthermore, regarding the estimates from the 2001 census, the observed Total Fertility Rate was adjusted from 2.58 to 3.27 using Rele's method. According to the 2001 Analytical Report, the adjustment was based on the ratio of the 0-4 age group to either women age 15 to 44 or women aged 15 to 49. The report further noted that the 0-4 age group was under reported in the 2001 census (Census Analytical Report; 2004). Therefore the estimated total fertility rate of 3.27 was an underestimate. Since the 5-9 age group was used for the adjustment, the reference period of the estimate would not be the current period but 5-9 years before the 2001 census. Beside the above issues, the accuracy of total fertility rates using Rele's method is very sensitive to the completeness of enumeration of the 0-4 age group as well as the accuracy of those actually aged 5-9 years at the time of the census.

Mortality: Estimates of mortality was based on reported members of households that died in a specified period (11 months) before the 2001 and 2011 Censuses and the (orphanhood) question in the case of the 2001 Census. Regarding the estimates based on household deaths, these were done without assessing the completeness of the reported deaths. . Reports on household deaths in African censuses have not been shown in any scientific publication to be complete. Additionally, although questions on orphanhood) were asked in the 2001 and 2011 Censuses, this information was not utilised in the estimation of mortality from the 2011 Census. Usually, when these two sets of information are available in a census (or survey), they are used to complement each other in the estimation of mortality. The utilisation of the orphan-hood information from the 2001 Census in estimating mortality was restricted to estimating adult female mortality. Even then, the estimates were not combined with those from survivorship of children (proportions dead of children ever born reported by women of reproductive age) as is usually the case (if the quality of the data permits) to produce mortality estimates for the general population.

Migration: Analysis of international migration was carried out in the 2001 and 2011 Census data. However, there was very little attention to emigration in the 2011. Estimates of net migration were not provided either from the 2001 Census or 2011 Censuses. As seen from the basic demographic equation, it is net migration that is required for population projections.

The above issues necessitated a re-analysis of the 2001 and 2011 Census data in the estimation of fertility and mortality levels as well as the magnitudes of net migration to aid the development of appropriate assumptions for the current projections.

2.0   FERTILITY AND MORTALITY RE-ANALYSIS

2.1   A Re-Analysis and Estimation of Fertility from the 2001 and 2011 Censuses

The fertility questions in the 2001 and 2011 Botswana Population and Housing Censuses wanted to establish the number of children ever born and the number born alive since Independence Day. Since the censuses were carried out in August, the number of children born alive since Independence day to the time of the month of the census was annualised by raising by a factor of 1.083 to approximate the number of births in the last 12 months. Estimation of observed total fertility rate is usually based on births in the last 12 months before the census. It is well established (see Brass 1971) that there are often errors in the responses to the questions on fertility in censuses (and surveys).

The relational Gompertz model was developed to detect and correct for such errors. In the application of the model, it is neither necessary to assume that fertility has been constant in recent years or that reporting errors is independent of age of the women reporting. In the development of the model, Brass noted that it is a rigid model that fits good data very well.. The model is expressed as:

$$F(x) = F. \, e^{-e^{[\alpha + \beta Ys(x)]}}$$

Where *F(x)* is the cumulated age-specific fertility rate up to age x and F represents the total fertility rate, *Ys(x)* is defined as –ln [–ln Fs(x)/F}] where *Fs(x)* is a standard cumulative fertility rate up to age x (Brass 1981). The a and *β* parameters measure the location and spread of the fertility distribution for the particular population (Brass 1981).

The application of the model to the fertility reports in the Botswana 2001 and 2011 Censuses are illustrated in figures 2.1 and 2.2. If there were no errors in the data, the two sets of points would lie on a straight line. If fertility has been changing and no errors in the data, the two sets of points though diverging should still lie on a straight but with the points converging on a straight line at the younger ages.   Based on the 2001 census fertility reports, figure 1 shows two curves as seen in the plots. Although both curves converge at the younger ages, neither set of points lies on a straight line which is a clear indication of reporting errors in the number of births in the last 12 months (F Points) and number of children ever born (P points). The position of the scatter plot of the F points (to the left of the P points) at the older ages is a clear indication of fertility decline in Botswana. The Gompertz parameters computed from fitting a straight line to the F Points in figure 1 produced an estimated total fertility rate of 4.1 for Botswana in 2001.

FIGURE 2.1: Fitting the Relational Gompertz Model to Current Fertility (F) and Mean Children Ever Born (P), 2001 Census
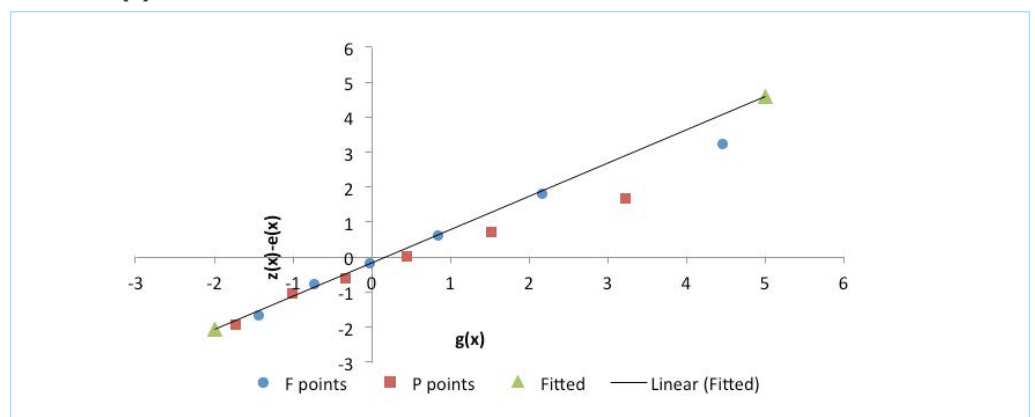
Based on the 2011 Census, figure 2.2 shows a similar pattern as in figure 2.1 – reporting errors in the number of births in the last 12 months and in the number of children ever born – as seen in the plots of the F and P points. Applying a similar approach as in figure 2.1 resulted in an estimated total fertility rate of 3.2 in Botswana in 2011.

FIGURE 2.2: Fitting the Relational Gompertz Model to Current Fertility (F) and Mean Children Ever Born (P), 2011 Census
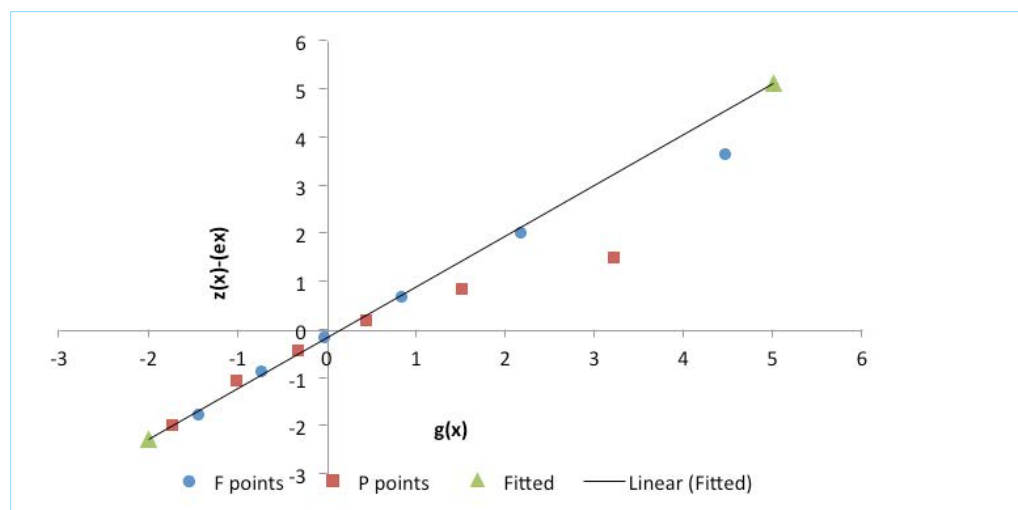
2.2: A Re-Analysis and Estimation of mortality from the 2001 and 2011 Censuses

2.2.1 Estimation of mortality from the recorded distribution of deceased members of households

Several questions that can be used to estimate mortality were included in the 2001 and 2011 Censuses. It was asked in both censuses, whether since Independence Day, any member of the household died and if so, a listing of such members, their sex and age. This question was designed originally to produce estimates of adult mortality. Since the censuses were carried out in August, the number of deceased members of households since Independence Day to the month of the census was annualised by raising by a factor of 1.083 to approximate the number of deaths in the last 12 months. Although direct estimates of adult mortality could be produced from the distribution of the deaths, it is well recognised that the reports on the number of deceased members of households cannot be accepted at face value to produce estimates of mortality. For example, Brass (1971) observed that attempts have been made to produce direct estimates of mortality from such data, "none have given satisfactory results" without adjustments, "since they are affected by problems of both reference period and omissions" (Brass 1971: 60). Also, Blacker noted that "retrospective questions on deaths in the last twelve months have rarely been successful: apart from massive errors of omission, the question seems to have been particularly susceptible to complete misunderstanding" (Blacker 1977: 107). Blacker further noted that "in some surveys, reports have been published not only of the crude death rates, but also of age-specific mortality rates and abridged life tables calculated from recorded figures accepted at their face value. Such faith however, appears somewhat naïve, and closer examination of the data will nearly always reveal massive errors" (Blacker 1977: 107).

In view of the above, Brass (1971) developed the Growth Balance method for examining the completeness of number of deceased members of households

members in the last twelve months recorded in a census (or vital registration). The model is based on the linear relationship of deaths and age distributions that may be expressed as:

$$N(x)/N(x+) = r + k(D(x+)/N(x+))$$

Where $N(x)$ is the number of persons at exact age x, $N(x+)$ is the total number of persons above age x, $D(x+)$ is the total number of deaths occurring to persons aged x and over and r is the growth rate, which implies that there should be a straight line relationship of intercept r, slope k, a coefficient of the estimated ratio of true to reported deaths (a factor representing the completeness of reporting of deaths). Further extension of the method has been provided by Hill (1987). The method assumes that the population is (1) closed to migration, (2) demographically stable, (3) completeness of death recording is constant at all ages and (4) completeness of census coverage was constant at all ages (Hill, 1987). Concerning the assumption of closed migration, if there were substantial net migration in the population under study, this would be discernible in the pattern produced in the application of the method to the data: upward arching of the points denoting net immigration or downward arching of the points denoting net emigration. The unadjusted numbers of net migrants indicated in the Botswana censuses suggest that net migration is negligible (see below section on net migration) and hence the migration assumption may not be a serious problem in the application of the Growth Balance method. Furthermore, Hill (1987) has produced an extension of the model (generalised growth balance method) for application in stable and non-stable populations that can also be used to estimate the number of inter-censal net migrants. This requires data from two censuses.

Furthermore, regarding the assumption of stability, it has been observed on the basis of simulations that the bias introduced in the estimation of the coefficient of the completeness of reporting of deaths is relatively small (see UN (1983) cited in Udjo (2006)). A careful examination and selection of the points in fitting the model can overcome the violation of assumptions 3 and 4 above (see Udjo, 2006).

A summary of the results of the application of the method to the distribution of the number of deceased members of household that were females recorded in the 2001 census is illustrated in figure 2.3. If there were no errors in the data, the plot of $N(x)/N(x+)$ against $D(x+)/N(x+)$ should lie on a straight line if the assumptions underlying the model are not seriously violated. As seen in figure 2.3, the points deviate markedly from a single straight line – there are two lines, one corresponding to the younger ages and the other, corresponding to the older ages making it unrealistic to fit a single straight line and interpret the result.

This could be interpreted as indication of errors in the reporting of the number of deceased female members of household during the 2001 Census. If that argument was true, then one would expect the same pattern of results in the application of the model to the census male data as well as the vital registration.

FIGURE 2.3: **Plot of Partial Birth Rate, N(x)/N(x+), Against Partial Death Rates, D(x+)/N(x+), 2001 Census, Botswana: Females**
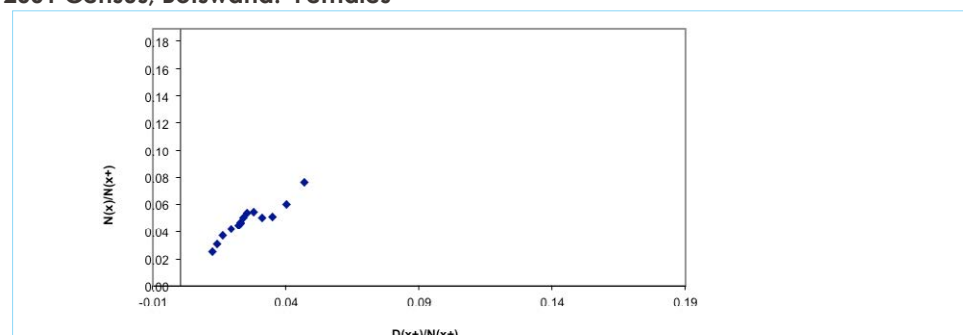
As seen from figure 2.4, the plot of N(x)/N(x+) against D(x+)/N(x+) for males in the 2001 census though not perfectly linear is quite different from the pattern in figure 2.3. One may then ask why the method would produce a better fit for males if the model was not appropriate for Botswana. This casts doubt on the validity of the argument.

FIGURE 2.4: **Plot of Partial Birth Rate, *N(x)/N(x+)*, Against Partial Death Rates, *D(x+)/N(x+)*, 2001 Census, Botswana: Males**
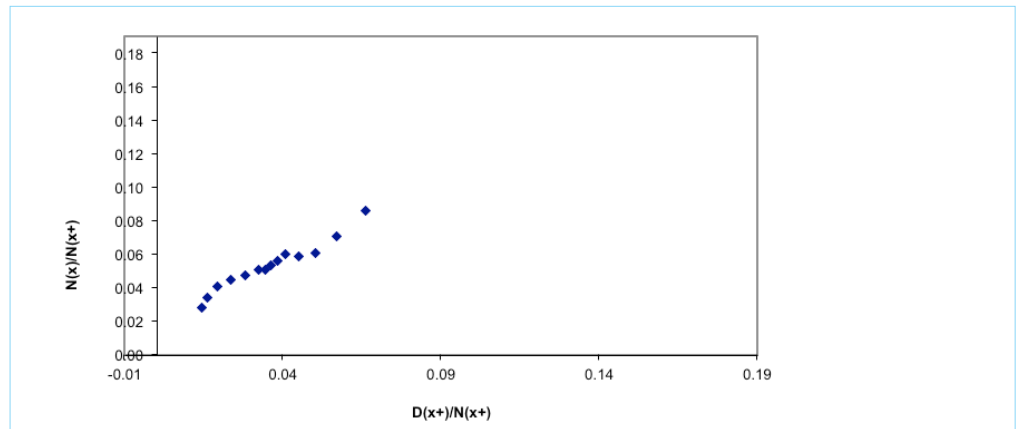
The results of the application of the method to the 2011 Census data (figures 2.5 and 2.6) also show better fit, than for females in the 2001 Census. To provide a rough indication of the level of completeness of reporting of deceased members of household, a straight line was fitted to the points in figure 2.6 (excluding the first and last two points). The result suggests that the completeness of reporting of deceased male members of household twelve months before the 2011 Census was about 77%.

FIGURE 2.5: **Plot of Partial Birth Rate, N(x)/N(x+), Against Partial Death Rates, D(x+)/N(x+), 2011 Census, Botswana: Females**
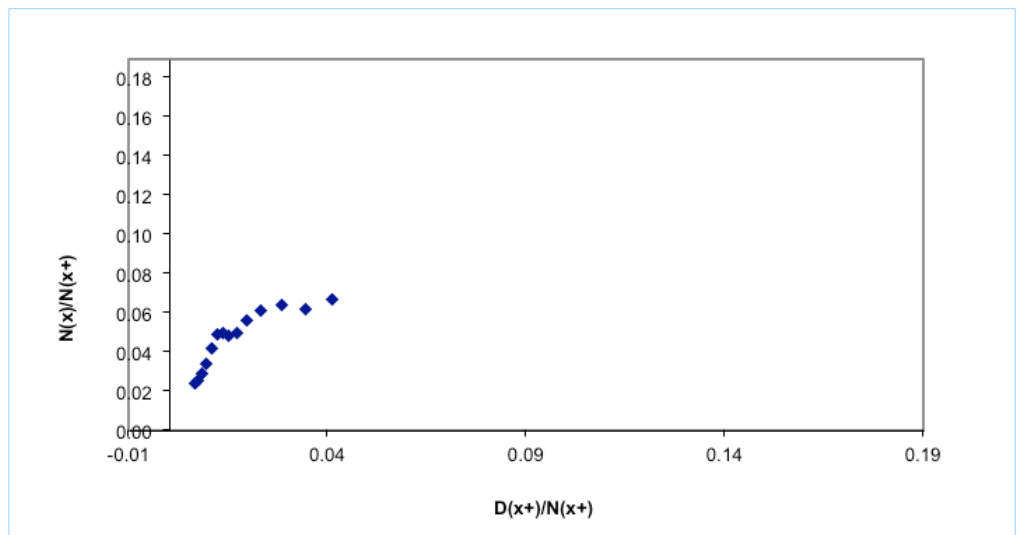
FIGURE 2.6: Plot of Partial Birth Rate, N(x)/N(x+), Against Partial Death Rates, D(x+)/N(x+), 2011 Census, Botswana: Males
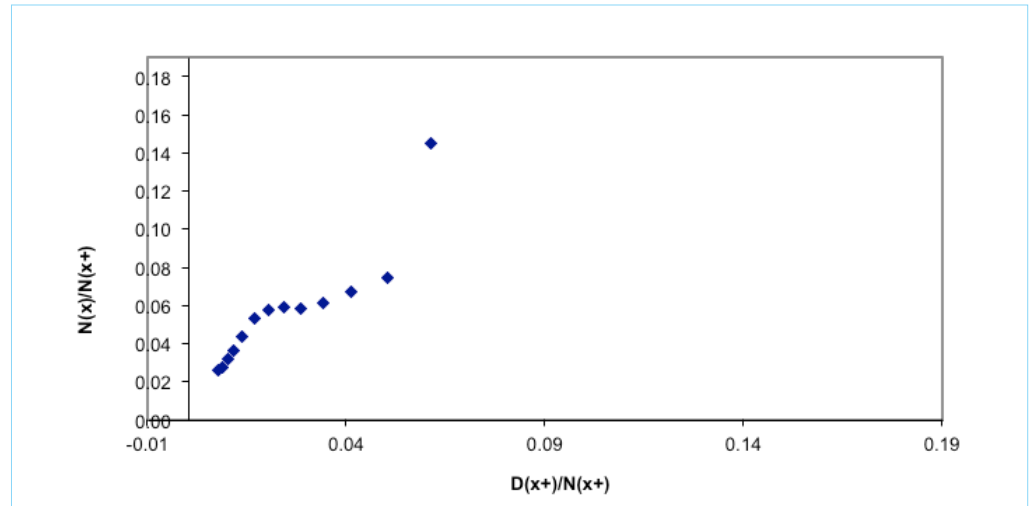
Therefore, one cannot assume from these results that the number of deceased members of household was accurately reported in the 2001 and 2011 Censuses or that vital registration is complete in Botswana. Estimates of mortality based on such assumption would most probably produce exaggerated high levels of life expectancies at birth as well as exaggerated low levels of infant mortality rates.

In view of the challenge of fitting straight lines to the plots of *N(x)/N(x+)* and D(x+)/N(x+) in the 2001 and 2011 Censuses (see figure 2.3 in particular), estimates of mortality from the distribution of the number of deceased members of household were obtained in a different approach as follows: (1) Age specific death rates were computed from the data. (2) Next observed life tables were constructed from the age specific death rates. (3) Next, the logit transformations of the lx values of the observed life tables were computed. (4) Next, the transformed lx values of the observed life table (Y-axis) were plotted against the transformed lx of the INDEPTH life table. (5) Next, the intercept, a (level of mortality) and slope, β (relationship between childhood and adult mortality) were then computed. (6) Adjusted mortality was then computed as:

$$Y_x = α + βY_{sx}$$

Where Y_x is the fitted logit transformation of the proportion surviving from birth to exact age x, Y_{sx} is the logit transformation of the proportion surviving from birth to exact age x in the standard life table. The mortality estimates obtained for females based on the 2001 census by this approach was improbably high (life expectancy at birth: 48 years). In view of this, 5 years were added to the estimate obtained for males to derive the estimate for females. This was done on the assumption that the difference in life expectancy at birth between males and females in 2001 was 5 years. The life expectancies at birth and infant mortality rates obtained from the above procedure are shown in table 2.1.

TABLE 2.1: Estimated Life Expectancies at Birth and Infant Mortality Rates from Household Deaths in 2001 And 2011

	2001		2011	
	Males	**Females**	**Males**	**Females**
Life expectancy at birth (years)	51.5	56.5	62.6	64.6
Infant mortality rate per thousand	52		23	

Source: Author's computation from the 2001 and 2011 Botswana censuses

2.2.2 Estimation of Childhood and Adult Mortality from Children Ever Born and Maternal/Paternal Orphanhood

Questions on the numbers of children dead of children ever born as well as on orphan-hood (is your biological mother/father alive?) are a rich source of estimating childhood and adult mortality if the quality of the data permits. This section provides a re-analysis and estimation of childhood mortality from the questions on child survival of children ever born as well as estimation of adult mortality from the orphan-hood questions. The second part of the analysis integrates the two sets of estimates to produce mortality estimates for the general population.

The probability of surviving from birth to exact age x can be estimated from the proportions dead of children ever born derived from the childhood survival questions using the equation provided by Brass (1971):

$$qx = D_i k_i$$

Where qx is the probability of dying between birth and exact age x, Di is the proportion of deaths among children ever born to women in age group i, and ki is a multiplier. The estimated qxs in this re-analysis were based on Fernandez multipliers. Fernandez (1985) showed that the Brass method over-estimates mortality of children born to younger mothers and using several datasets from different countries demonstrated that this often produces rising childhood mortality in the more recent period as the estimates for the more recent period are derived from the younger mothers. In view of this, Fernandez developed a set of coefficients to adjust the estimates derived from the Brass method. AIDS was incorporated into the estimates in this re-analysis using the INDEPTH (2004) standard life tables. The estimated qx were converted into a values (level of childhood) in the logit system as follows:

$$\alpha = Y_x - Y_{xs} \quad where$$
$$Y_x = ½\log_e \{(1-l_x)/l_x\} \quad and$$
$$Y_{xs} = ½\log_e \{(1-l_{xs})/l_{xs}\}.$$

Where lx and lxs are respectively observed, and INDEPTH life table probabilities of survival from birth to exact age x. The reference dates of the a values were estimated using a model for estimating the time location of childhood mortality developed by Brass (1985).

It is important to provide a brief historical perspective regarding the estimation of adult mortality from the questions: Is your biological mother alive? Is your biological father alive? The development of the orphan-hood method for estimating adult mortality by Brass (1971) was largely driven by the absence or incomplete vital registration systems in Africa at the time as well as the poor performance of estimating adult mortality from information on household deaths reported in censuses and surveys (Blacker, 1977). It is important to note that the orphan-hood method was developed before the advent of HIV/AIDS. It is noteworthy that the orphan-hood questions were not designed for the purpose of obtaining the number of orphans in the population especially at younger aged but for indirectly

estimating adult mortality. Despite this, some researchers and organisations use the questions to estimate the magnitude of the number of young orphans as well as infer the number of "orphans" due to AIDS mortality (Udjo, 2011). The information on orphan-hood pertaining to younger persons especially persons 0-5 and 5-9 age groups are usually biased due to the "adoption" effect – persons often report children of relatives they have adopted after the death of the mother/father as their children (Brass, 1971). In view of this, the reports on orphan-hood pertaining to the younger persons are often ignored in the estimation of adult mortality. According to Hill (1977), information from respondents, below about age 20, cannot be used because of the adoption effect, and proportions reported as orphaned are far too low. Therefore the analysis was based on reports pertaining to persons aged 10-49 years.

The probability of dying from an adult age, B to age B+N can be estimated from the proportions of persons with a surviving parent from the equation developed by Brass (1971):

$$l_{B+N}/l_B = W_N(_5P_{N-5}) + _5P_N(1-W_N)$$

Where l_{B+N}/l_B is the probability of surviving from age B (25 years for females and 35 years for males), to B+N.

N is the central age between two adjacent five year age groups; $_5P_{N-5}$ is the proportion in the age group $N-5$ to N having a surviving parent; $_5P_N$ is the proportion in the age group N to $N+5$ having a surviving parent; and W_N is a weighting factor. The survival probabilities were converted into a values (levels of adult mortality) in the logit system as follows:

$$\alpha = \tfrac{1}{2}log_e(1 + (_NP_B - 1/l_{sB})/(1-_NP_B))$$

Where NPB is the probability of surviving from age B to age B+N; Is(B+N) is the probability of surviving to exact age B+N in a standard life table (Brass & Bamgboye, 1981). AIDS was incorporated into the estimates using the INDEPTH (2004) standard life tables. The reference date of the a values was estimated using the model by Brass and Bamgboye (1981).

The estimated trend in childhood mortality using the procedure described above is illustrated in figure 2.8.

FIGURE 2.8: Trend in Childhood Mortality from the 2001 and 2011 Censuses
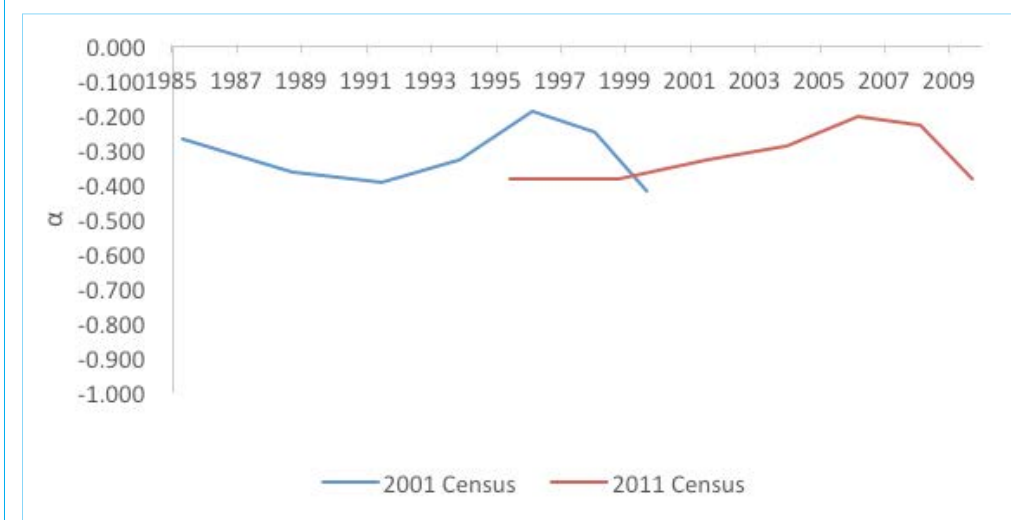
Ignoring the first three points derived from the 2001 census, the trend suggests that childhood mortality declined till about 1991 and thereafter increased till around 2005. Childhood mortality then declined after 2005. Apart from the first three points derived from the 2001 census, the estimated levels and trends in childhood mortality from the two censuses are consistent with one another.

The estimated trend in adult female mortality based on maternal orphan-hood using the procedure described above is illustrated in figure 2.9 while figure 2.10 shows the estimated trend in adult male mortality based on paternal orphan-hood. Figure 2.9 shows that mortality among adult females was lower in the 1990s than in the 2000s – it declined during the period 1988-1991 and thereafter increased till about 2003 then downward since 2003.

FIGURE 2.9 : Trend in Adult Female Mortality from the 2001 and 2011 Censuses
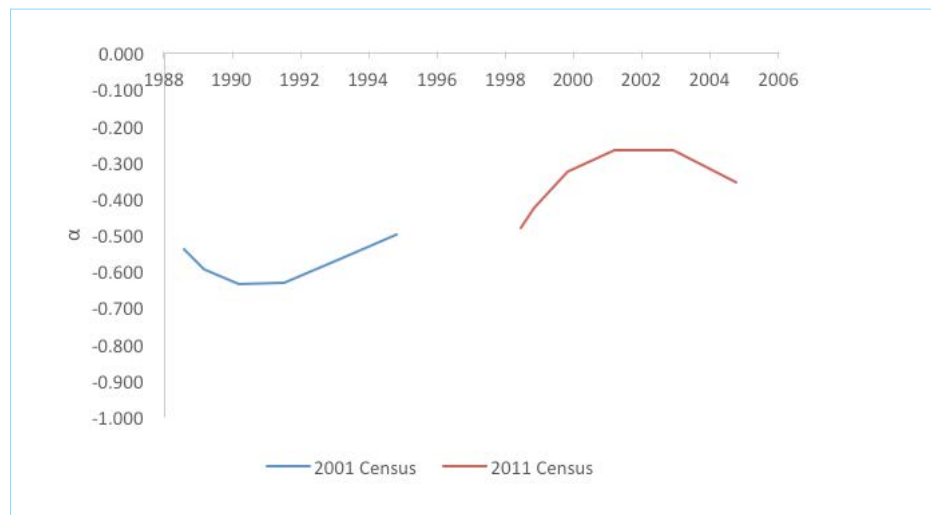
FIGURE 2.10: Trend in Adult Male Mortality from the 2001 and 2011 Censuses
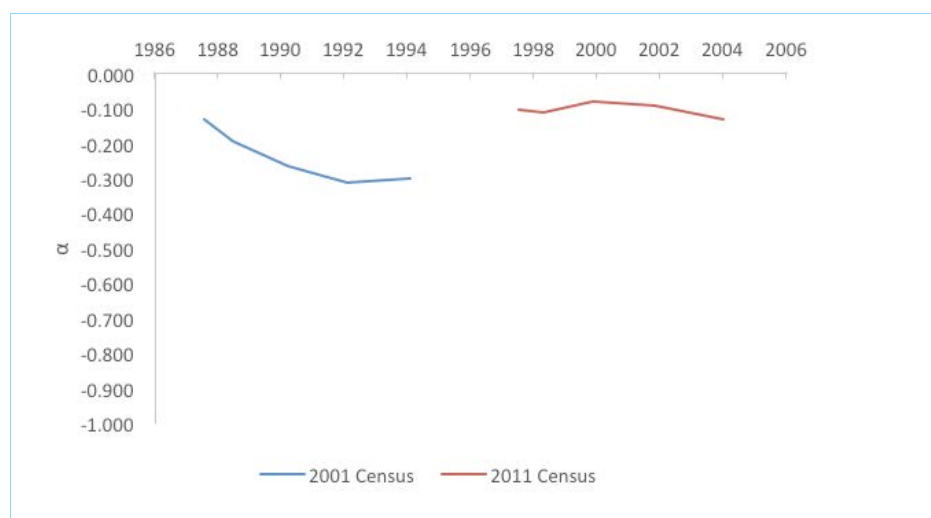
Figure 2.10 suggests that adult male mortality was also lower in the 1990s than in the 2000s – it declined during the 1980s till about 1992 and increased thereafter till about 2002. It would appear that adult male mortality began to decline after 2002. It can be seen from figures 9 and 10 that as expected, adult male mortality has been higher than adult female mortality over time in Botswana.

As it is usually the case, the childhood mortality estimates from the proportions of children surviving of children ever born were integrated with the adult mortality estimates from the orphan hood by constructing hybrid life tables to enable the construction of two-parameter logit life tables. The procedure is described in Udjo (2008). The summary results for selected time periods are shown in Table 2.2

TABLE 2.2: Estimated Life Expectancies at Birth and Infant Mortality Rates from the Childhood Survival and Orphanhood Reports in the 2001 and 2011 Censuses

	1994		2002		2004	
	Males	**Females**	**Males**	**Females**	**Males**	**Females**
Life Expectancy at birth (years)	60.9	64.6	56.2	59.4	57.5	61.5
Infant Mortality rate per thousand	37		42		38	

It can been seen from the above results that the information on proportions surviving of children ever born as well as maternal and paternal orphan-hood provide a more comprehensive (and probably more reliable) picture of mortality in Botswana than the information on reported number of deceased members of household although the reference period of the estimates derived from the latter is usually more recent than that those obtained from the orphan-hood approach.

2.3 Computing Net-Migration from the 2001 and 2011 Censuses

It is possible to compute net migration from the 2001 and 2011 Census questions: (1) Place of birth and (2) List of all members of household (Botswana Citizens only) outside Botswana. While the former provides the magnitude of immigration, the latter provides the magnitude of emigration as at the time of the censuses. The characteristics of the migrants can be obtained by tabulating the information by socio-economic characteristics such as sex and age (the pertinent variables in this study). While most censuses in Africa include questions on place of birth (used in estimating volume of immigration), Botswana is one of very few countries that has included questions on emigrants.

Table 2.3 shows the magnitude of net migration computed from these questions. The table suggests that the number of net migrants increased from 32,506 in 2001 to 88,751 in 2011. The difference between the two figures (56,245) is the number of intercensal net migrants both sexes combined.

TABLE 2.3: Number of Immigrants, Emigrants and Net Migrants, 2001 and 2011 Censuses

	Immigrants		Emigrants		Net Migrants	
	Males	**Females**	**Males**	**Females**	**Males**	**Females**
2001	34,731	25,985	16,801	11,409	17,930	14,576
2011	63,749	48,007	11,766	11,239	51,983	36,768

Source: Botswana 2001 and 2011 Botswana Censuses

Note that the numbers of emigrants reported in the censuses were most likely biased firstly, because the information was reported at household level. If all members of a household emigrated, which is sometimes the case in reality, there would have been no one to report on them during the census (unless if one of them returned at the time of the census). Secondly, the questions on emigration pertained to Botswana citizens only. But not all Botswana citizens are "Botswana born". Some foreign born people may have naturalised and became

FIGURE 2.11: Age Distribution of Net Migrants by Sex, 2011
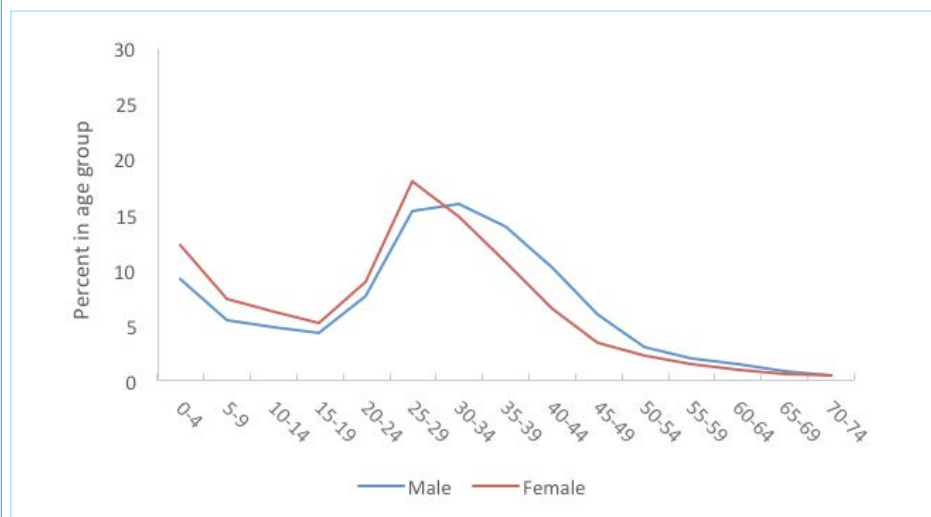
CHAPTER 3

3.0 METHODOLOGY

3.1 Approaches to the Projections

The cohort component method (the preferred method of population projections) was the basis of the projections at the national level and due to data deficiencies, employed the ratio method at the district level.

3.1.1 The Cohort Component Method

The cohort component method is essentially an age-sex decomposition of the basic demographic equation and entails projecting separately, fertility and net migration. Details of the method are given by Preston, et al. (2001) and summarised as follows. For age groups older than the 0-4 age group, the mortality component is estimated as:

$$_nP_x^{(m,f)}\,(t+n) = {_nP_{x-n}^{(m,f)}}\,(t).\ _nL_x\big/\ _nL_{x-n}$$

Where $_nPx^{(m,f)}\,(t+n)$ is the number of persons, males or females, in a specific age group x, in an age group interval n, at the end of the estimation interval, $t+n$, $_nP_{x-n}^{(m,f)}\,(t)$ is the number of persons, males or females, in a specific age group x, in an age group interval n, at the beginning of the estimation t, $_nL_x/nL_{x-n}$ is the survivorship ratio (the proportion of persons aged $x-n$ to x that will be alive n years later.

The fertility component is estimated as:

$$_nP_{0-4} = \ _nF_x \ .\ n\ .\ [\{_nP_x^{(f)}\,(t) + \ _nPx\text{-}n^{(f)}\,(t)\ .\ _nL_x\big/\ _nL_{x-n}\}/2]$$

Where $_nP_{0-4}$ is the population aged 0-4 years at time $t+n$, $_nF_x$ is the age-specific fertility rate for a particular age group x, in the age group interval n (See Preston, et al. 2001).

The numbers of projected net migrants for each age group and by sex are then added or subtracted (depending on whether the numbers are positive or negative) to the projected numbers for each age group and by sex.

3.1.2 Issues in the Cohort Component Method

The main issue in the application of the cohort component method is: the

appropriate life table for the projections. The life tables in projections software including DemProj in Spectrum, utilise conventional life tables that were developed before the advent of HIV/AIDs and therefore do not take into consideration the characteristic hump in young adult ages usually associated with excess deaths related to AIDS in populations with generalised HIV epidemic such as Botswana. Although DemProj in Spectrum was used in the following projections, the life tables used in two of the scenarios is the INDEPTH life table (see Udjo (2008) for details of how the INDEPTH life tables were incorporated into Spectrum).

During the expert group meeting for this study, it was suggested that one of the conventional model life tables be used for one of the projections scenarios. In determining which of these life tables to use, an EXCEL spread sheet was prepared containing infant mortality *(1q0)* and child mortality *(4q1)* rates at all levels of life expectancy at birth shown in the four family of Coale-Demeny Regional model life tables as well as all the patterns of the UN model life tables for developing countries. The infant mortality rates were then plotted against the child mortality rates in these life tables. The adjusted male life table infant mortality and child mortality rates derived from the reported distribution of deceased members of households in the Botswana 2011 Census were then inserted on the same graph. The conventional life table closest to the Botswana point on the graph was the UN Far Eastern pattern. This model life table was therefore chosen for the Scenario 1B and HIV/AIDS scenarios projections (while the INDEPTH life table was used for the other two scenarios).

3.1.3 The Ratio Method of projecting the district populations

As already noted, the ratio method was used for the district population projections. In this context, the ratio method may be expressed as:

$$D(i,t) = P(n,t) * r(i,t)$$

Where $D(i,t)$ is a projected district population i, in a specific time period t, $P(n,t)$ is the projected national population n, at time t and $r(i,t)$ is a projected ratio of district population to the projected national population at time t. The projections of r(i,t) were based on: (1) computing the ratios of district population to the national population as obtained in the 2001 and 2011 Censuses since some of the districts were not in existence either in 1971, 1981 or 1991; (2) computing the ratios of district population to the national population for the period 2002 and 2010 by linear interpolation on the ratios in 2001 and 2011; (3) extrapolating the ratios linearly to 2026 based on the computed ratios for 2010 and 2011.

3.2 Projections Scenarios

In view of the above re-analysis, four projections scenarios in consultation with experts, UNFPA and Statistics Botswana were agreed upon as follows.

High Scenario 1A: Assumptions in this scenario were based on officially published demographic estimates of fertility, mortality and migration and using INDEPTH model life table.

High Scenario 1B: Assumptions in this scenario were based on officially published demographic estimates of fertility, mortality and net migration but using conventional model life table (UN Far Eastern pattern). The conclusion arising from the results of the re-analysis of the 2001 and 2011 Census data were that: (1) the published total fertility rates from the 2001 and 2011 Censuses were most probably biased downwards. (2) The published life expectancy at birth from the 2011 Census was most probably biased upward (too high) while the infant mortality rates are most probably biased downwards (too low). These conclusions necessitated the production of other scenarios in the projections.

Medium Scenario: The assumptions in this scenario were based on adjusted fertility and mortality from household deaths and using the INDEPTH life table. Therefore, the term "medium scenario" takes a different connotation than conventional usage in projections. It is used here merely as a label rather than meaning the "most likely" outcome.

Low Scenario: In this scenario, the assumptions were based on adjusted fertility and mortality from the proportions dead of children ever born as well as from the information on orphan-hood. The INDEPTH life table was used in this scenario. It was noted above that the results on mortality from the information on proportions surviving of children ever born as well as maternal and paternal orphan-hood provide a more comprehensive (and probably more reliable) picture of mortality in Botswana than information on reported number of deceased members of household.

The fertility assumptions in the medium and low scenarios were the same but different mortality assumptions (lower in the medium than in the low scenario). HIV/AIDS in the High 1A, Medium and Low scenarios were factored in the estimation through the use of the INDEPTH model life tables.

HIV/AIDS Scenario: Assumptions in this Scenario were based on adjusted fertility but the input life expectancies at birth assumed there were no HIV/AIDS in Botswana population. HIV/AIDS was then factored in a second stage of the projections by including HIV/AIDS and other HIV/AIDS related epidemiological parameters. This was aided through the use of the Aids Impact Model (AIM) package available in the spectrum suit of package.

3.3   Projections Assumptions

The assumptions underlying the projections were based on the historical trends in fertility, mortality and net migration as well as the re-analysis of the 2001 and 2011 Census data presented above.

Fertility: Fertility has declined now doubt in Botswana though the levels and hence the magnitude of the decline may be debatable in view of the officially published figures in comparison with the estimates resulting from the re-analysis above. Officially published and re-estimation figures suggest that the fertility decline between 2001 and 2011 appeared to be less steep than during the period 1980-2001. It was therefore assumed in all the scenarios that total fertility rate will continue to decline slowly during the period 2011 to 2016 at the same magnitude of the decline in 2001-2011 (whether using or officially published figures or re-estimation figures). Furthermore, it was assumed that total fertility will stabilise during the period 2016-2026 at the level in 2016. The implications of this assumption for the different scenarios are shown in table 3.1.

TABLE 3.1: Assumed Total Fertility Rates

Year	High Scenario	Medium Scenario	Low Scenario
2001	3.2	4.1	4.1
2011	2.8	3.2	3.2
2016	2.4	2.3	2.3
2021	2.4	2.3	2.3
2026	2.4	2.3	2.3

Life Expectancy at Birth: Historical trends in life expectancy at birth suggest that there was improvement in life expectancy at birth during the 1980s till the early 1990s. However, life expectancy at birth seemingly deteriorated during the early 2000s and evidence from the 2011 Census suggests that mortality has been improving perhaps since about 2005 (see figures 8 and 9). Therefore, it was assumed that life expectancy at birth will continue to improve and will follow a logistic curve. A logistic curve was fitted to the officially published figures of life expectancy at birth for 2001 and 2011 with an upper asymptote of 75 years for males and 80 years for females (that is, life expectancy at birth in Botswana will not exceed 80 years. Note that Japan has the highest life expectancy at birth in the world: 80 years for males and 86 years for females (see Population Reference Bureau 2014). Similarly, a logistic curve was fitted to the estimated life expectancies at birth based on household deaths (Medium scenario) and those from child survival and orphan-hood (Low scenario) but with an upper asymptote of 66 years for males and 70 years for females. The implications of this assumption for the different scenarios are shown in table 3.2.

For the HV/AIDS scenario, it was assumed that in the absence of AIDS, the improvement in life expectancy at birth would have followed a logistic curve fitted to the officially published life expectancies at birth for 1971 and 1991 with an upper asymptote of 70 years for males and 75 years for females. The implications of this assumption are shown in table 3.3a. A logarithm curve was fitted to observed adult (15-49 years) HIV prevalence from surveys so as to back and forward project the observed HIV prevalence. The observed HIV prevalence was taken from the Botswana AIDS impact surveys (Statistics Botswana 2004; 2008; 2013). The outcome of the HIV prevalence projections which constitute the HIV prevalence assumptions is shown in table 3.3b. With regard to anti-retroviral therapy (ART), the Botswana National AIDS Coordinating Agency (2014) estimated that coverage of ART of increased from 88.8% in 2009 to 94.5% in 2010 to 96.1% in 2011. On the basis of this trend, it was assumed that coverage of ART would be 100% by 2026.

TABLE 3.2: Assumed Life Expectancy at Birth (Years)

Year	High Scenario		Medium Scenario		Low Scenario	
	Male	Female	Male	Female	Male	Female
2001	52	57.4	51.5	56.5	56.2	59.4
2011	66	70	62.6	64.6	61.1	66.4
2016	66.6	70.6	64.6	67.5	62.8	68.2
2021	67.2	71.3	65.4	68.2	63.9	69.1
2026	67.7	71.8	65.8	69	64.7	69.6

TABLE 3.3a: Assumed Life Expectancy at Birth (Years) in the Absence of HIV/AIDS

Year	Male	Female
2001	66.3	69.8
2011	68	71.7
2016	68.6	72.4
2021	69	73
2026	69.3	73.4

TABLE 3.3b: Observed and Assumed Adult (Age 15-49 Years) HIV Prevalence

Year		Per cent prevalence
2001		25.9
2004	(observed)*	25.3
2008	(observed)**	25.0
2013	(observed)***	24.3
2016		24.2
2021		23.6
2026		23.1

Source: Botswana AIDS Impact Survey II 2004, Statistics Botswana
*** Source: Botswana AIDS Impact Survey III 2008, Statistics Botswana*
**** Source: Botswana AIDS Impact Survey IV 2008, Statistics Botswana*

Net Migration: Officially published figures suggest that Botswana seemingly experienced cumulative negative net international migration during the period 1971 and 1991 and cumulative positive net international migration during the period 2001 and 2011. To project the number of cumulative net migration in 2026, it was assumed that the number would follow a logarithm curve fitted to the historical cumulative numbers. (Figures for 2012-2025 in the projections were obtained by linear interpolation to avoid negative figures in some years in the projection period). It was further assumed that the proportion of male to female net migrants will remain the same throughout the projection period at the level observed in 2011 (0.5849). The assumptions were the same for all the projections scenarios. The implications of the assumptions are shown in table 3.4.

TABLE 3.4: Official and Assumed Cumulative Net Migrants

Year	High Scenario	Medium Scenario	Low Scenario
2001	32,506	32,506	32,506
2011	88,751	88,751	88,751
2026	116,000	116,000	116,000

3.4 Base and End Year of the Projections

The base year of the projections with the exception of the HIV scenario is 2011, being the last census year. The age-sex distribution therefore constituted the base population figures. There are elements of coverage errors in censuses globally. With the exception of a few countries (such as Nigeria), the usual pattern is under count. Assessing coverage errors in censuses is through a post enumeration survey (PES). In the absence of PES in Botswana censuses, it is difficult to ascertain whether the published census figures are the true population sizes of Botswana at the census years. It may be argued based on experience elsewhere, that there may have been pockets of under-enumeration either due to refusal, or difficulty in access to certain communities, among other reasons. The published census figures therefore may be under-representation of the size of Botswana population at the various census years. One may also argue otherwise theoretically (that is, pocket of over-count in certain communities. These theoretical perspectives make the evaluation of projection figures difficult when new census figures become available.

Regarding the age-sex distributions, the usual pattern of errors is digit preference (or age heaping) and age shifting. The latter is usually more difficult to detect even when five-year population pyramids are plotted. An evaluation of the 2011 Census single year age-sex distributions was carried out in the re-analysis. Although there was evidence from the results, of some elements of digit preference, they were minor and did not warrant smoothing of the age-sex distributions.

The base of the projections for the HIV scenario is the 1980 age-sex distributions. This is because, the HIV/AIDS projections using AIM requires that the first year of the projections should be before the starting year of the HIV/AIDS epidemic in the country for better accuracy of the results (Futures Institute, undated). The first diagnosis of HIV case in Botswana was in 1985 (Mogomotsi, 2004) but there was no information on when the person first contracted the virus. Therefore, 1980 was considered appropriate as the base of the projections for the HIV scenario. The 1980 age-sex distributions were obtained by exponential interpolation on the 1981 and 1991 censuses age-sex distributions.

Regarding the end year of the projections, Statistics Botswana has this time around deviated from producing long range projections of 30 years to 15 years.. This is because the shorter the projections period, the magnitude of the errors is more likely to be smaller than in long range projections.

CHAPTER 4

4.0   RESULTS

4.1   Projected Absolute Numbers

The projected absolute population numbers in the projections scenarios are shown in appendix 1. Despite the issues raised with regard to the officially published fertility and mortality indicators, there is little difference in the projected population numbers in the projection scenarios. This is because of lower fertility in the medium and low scenarios compensating for lower mortality in the high scenario projections. The projections suggest that Botswana population could increase from about 2.02 million in 2011 to between 2.57 million (low scenario) and 2.62 million (high scenario) in 2026 if current trends in the components of population change continue.

4.2   Projected Age-Sex Distributions

The projected age-sex distributions are shown in appendices 2-6. The projections suggest that the male population may increase from about 988,957 in 2011 to between 1,261,764 (low scenario) and 1,291,855 (high scenario) in 2026. The female population is projected to increase from 1,035,947 in 2011 to between 1,304,090 and 1,325,979 in 2026. The projected single year age distributions are shown in appendices 7-11.

4.3   Projected Key Demographic Indicators

Projected key demographic indicators are shown in appendices 12-16. The annual rate of population growth is projected to decrease from about 2.03% in 2011 to about 1.46% in 2026 in the high scenario projections while the low scenario suggests a decrease from about 2.22% in 2011 to about 1.31% in 2026. The HIV/AIDS scenario suggests a decrease from about 2.17% in 2011 to about 1.30% in 2026. The annual rates of population growth are not constant for individual years even in the short periods as can be seen from each of the scenarios. This highlights one of the dangers of using mathematical methods in population projections which often assume a constant rate of growth over some specified period. The projected numbers of annual deaths in each of the projection scenarios suggest that registration of deaths in the vital registration in Botswana in 2011 (14,262) as well as recorded household deaths in the 2011 Census (12,234) were incomplete. The numbers resulting from the high scenario projections that used officially published fertility and mortality figures are also consistent with this conclusion. The HIV/AIDS scenario suggests that the HIV+ population might increase from about 322,972 persons in 2011 to about 472,944 in 2026. The number of new HIV infections is projected to increase from about 14,131 in 2011 to about 17,618 in 2026. It

is projected that the number of AIDS-related deaths might increase marginally from about 6,256 in 2011 to about 6,782 in 2026.

4.4   Projected District Populations

Appendices 17-19 show the projected population of each of the districts. As seen in the figures, some of the district populations like in Gaborone and Francistown are projected to grow due to natural increase and net migration while some other district populations such as in Lobatse, Selibe Phikwe and Orapa are projected to decrease after certain periods most probably due to out-migration from these areas.

4.5   Urban-Rural Projections

The official definition of an urban area in Botswana is any settlement with a population of 5,000 people or more and at least 75% of the population engaged in non-agricultural occupations. The urban-rural projections are shown in appendices 20-103. At national level, the urban population is projected to increase from about 1,297,287 people in 2011 to about 2,081,732 people in 2026. This is expected to put pressure on the government in the provision of services (for example, water, electricity, and housing) in urban districts that are projected to experience urban population growth such as Gaborone, Jwaneng, Ngwaketse and South East.

CHAPTER 5

5.0   DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1   Discussion and Conclusion

The latest census in Botswana was undertaken in 2011 but planners in various sectors need population size information for the present and beyond. To meet this need, this report produced population projections for the period 2011-2026. Because of certain issues regarding demographic indicators required to produce such projections and the fact that no one can accurately predict the future, four scenarios (high, medium, low and HIV/AIDS) projections were undertaken embodying different assumptions about fertility and mortality. The projected size of the population by 2026 from the different scenarios was largely similar: high scenario (2,617,834 or 2,596,819), medium scenario (2,584,645), low scenario (2,566,449) and HIV/AIDS scenario (2,566,449).

As indicated above, HIV/AIDS projections using AIM requires that the first year of the projections should be before the starting year of the HIV/AIDS epidemic in the country for better accuracy of the results. Therefore, in the current projections, the base year of the HIV/AIDS scenario was 1980. Note that the fertility and net migration inputs from 1980 up to 2011 in this scenario were not based on assumptions but computed from empirical data. With this in mind, it can be seen from Appendix 8 that the estimated population size in 2011 (2,045,483) though very close to the enumerated population in the 2011 Census (2,024,904), is slightly higher than the latter by about 20,579 persons (that is, a difference of 1.01%). There are a number of theoretical explanations for the minor discrepancies in the two figures as follows. It could be that the 1981 census or 1991 census was an over-count (the 1980 base population was obtained by exponential interpolation on the 1981 and 1991 Census figures), or the 2011 Census was an undercount. Another theoretical explanation is that the assumption about the levels of life expectancy at birth in the absence of HIV/AIDS in this scenario was too high.

Regarding the previous projections by Statistics Botswana, the 2001 projections (Central Statistics Office, 2005) for the period 2011 (1,826,022) was lower than

the 2011 Census enumerated population (2,024,904). In the absence of a PES, one cannot establish that this was the case. Another theoretical explanation for the difference is that the mortality assumptions in the 2001 projections may have been too high for the period 2001-2011 or the fertility assumptions for the period 2001-2011 in general were too low. It is probable that the difference in the figures is a combination of the fertility and mortality assumptions in the 2001 projections.

The 2001 projections projected a total population of 2,221,007 by 2026. This figure is lower than all the scenario projections in the current projections for the same period – even lower than the HIV/AIDS scenario projections for the period 2026 (2,566,449 persons). The explanation for the difference lies in the base population, fertility and mortality assumptions. Firstly, the current projections started from a technically, higher base (the 2011 Census enumerated population) which as indicated above is higher than the 2001 projections for 2011. Secondly, while the 2001 projections assumed a total fertility rate of 3.0 for the period 2001-2006, the current projections estimated and used a total fertility rate of 3.2 for the period 2011.

In view of the above as well as the issues raised in an earlier section of this report regarding official fertility and mortality estimates from the 2001 and 2011 Census data, this study recommends the use of the low scenario projections in the current projections for planning. Note that the results from this scenario were almost similar to those from the HIV/AIDS scenario projections. There were several challenges in producing the current projections. The main challenge centred on developing the mortality assumptions due to limitations in the available mortality data. Additionally, there was limited information in producing the HIV/AIDS scenario projections and in the absence of the required information for some of the inputs, the default values in AIM were used. In view of these limitations, and the fact that no one can predict future population size with absolute certainty, the current projections should be interpreted as indicative. The projections need to be revised when new information on the parameter inputs becomes available.

APPENDICES

Appendix 1: Projected Absolute National Population Size

Year	High Scenario 1A	High Scenario 1B	Medium Scenario 2	Low Scenario 3	HIV Scenario
2011	2,024,904	2,024,904	2,024,904	2,024,904	2,045,483
2012	2,066,406	2,065,305	2,070,984	2,068,529	2,088,031
2013	2,107,484	2,105,186	2,114,890	2,110,050	2,128,597
2014	2,147,906	2,144,356	2,156,366	2,149,255	2,166,650
2015	2,187,477	2,182,643	2,195,134	2,185,903	2,201,886
2016	2,226,040	2,219,879	2,230,905	2,219,732	2,234,207
2017	2,264,993	2,257,471	2,266,857	2,254,021	2,266,816
2018	2,304,238	2,295,307	2,302,878	2,288,651	2,299,691
2019	2,343,649	2,333,286	2,338,851	2,323,493	2,332,817
2020	2,383,117	2,371,304	2,374,698	2,358,445	2,366,108
2021	2,422,555	2,409,286	2,410,338	2,393,396	2,399,440
2022	2,461,915	2,447,170	2,445,720	2,428,241	2,432,815
2023	2,501,145	2,484,896	2,480,833	2,462,930	2,466,217
2024	2,540,215	2,522,422	2,515,674	2,497,435	2,499,640
2025	2,579,109	2,559,729	2,550,268	2,531,743	2,533,089
2026	2,617,834	2,596,819	2,584,645	2,565,855	2,566,449

Appendix 2: Age-Sex, High Scenario 1a Projections

Age (years)	2011 Males	2011 Females	2012 Males	2012 Females	2013 Males	2013 Females	2014 Males	2014 Females
0-4	119,999	117,315	121,895	119,368	123,309	120,921	123,790	121,577
5-9	108,544	106,618	110,105	108,128	111,621	109,608	113,454	111,372
10-14	104,419	102,875	104,761	103,023	105,420	103,596	106,360	104,517
15-19	104,818	105,928	105,339	105,647	105,309	104,964	104,957	104,102
20-24	97,249	103,101	97,994	103,097	99,637	103,750	101,743	104,739
25-29	101,194	106,658	101,681	107,502	100,880	106,914	99,422	105,485
30-34	84,515	86,027	88,465	90,727	92,661	95,674	96,640	100,359
35-39	68,435	66,784	71,990	70,428	75,178	74,031	78,189	77,698
40-44	48,767	50,530	52,217	52,943	56,132	55,900	60,289	59,265
45-49	37,881	44,380	39,594	45,384	41,347	46,226	43,278	47,116
50-54	29,742	36,620	30,984	38,063	32,402	39,615	33,954	41,180
55-59	24,368	29,681	25,380	31,176	26,263	32,472	27,095	33,651
60-64	17,344	20,240	18,508	21,766	19,773	23,550	21,069	25,460
65-69	12,243	15,504	12,838	16,022	13,529	16,601	14,317	17,306
70-74	9,464	12,797	9,787	13,151	10,033	13,448	10,260	13,727
75-79	6,968	10,924	7,079	10,893	7,289	10,953	7,557	11,095
80+	13,007	19,965	11,956	18,514	11,117	17,361	10,457	16,430
Total	**988,957**	**1,035,947**	**1,010,572**	**1,055,833**	**1,031,899**	**1,075,585**	**1,052,828**	**1,095,078**

Appendix 2 cont'd: Age-Sex, High Scenario 1a Projections

Age (years)	2015 Males	2015 Females	2016 Males	2016 Females	2017 Males	2017 Females	2018 Males	2018 Females
0-4	123,118	121,107	121,241	119,433	120,035	118,242	119,311	117,526
5-9	115,729	113,572	118,404	116,194	120,261	118,210	121,656	119,743
10-14	107,514	105,676	108,849	107,000	110,385	108,487	111,877	109,944
15-19	104,632	103,386	104,597	103,056	104,922	103,192	105,563	103,750
20-24	103,657	105,560	104,922	105,868	105,416	105,574	105,363	104,881
25-29	98,190	104,051	97,801	103,206	98,495	103,172	100,073	103,787
30-34	99,773	104,110	101,656	106,486	102,077	107,282	101,235	106,672
35-39	81,307	81,588	84,701	85,773	88,508	90,364	92,557	95,198
40-44	64,383	62,834	68,200	66,454	71,617	70,020	74,678	73,547
45-49	45,574	48,342	48,348	50,101	51,668	52,465	55,440	55,365
50-54	35,577	42,621	37,235	43,858	38,884	44,844	40,571	45,670
55-59	27,982	34,836	29,003	36,114	30,198	37,531	31,563	39,055
60-64	22,305	27,322	23,426	29,013	24,388	30,469	25,228	31,734
65-69	15,201	18,221	16,173	19,394	17,254	20,860	18,428	22,571
70-74	10,556	14,051	10,977	14,471	11,513	14,962	12,135	15,510
75-79	7,818	11,272	8,039	11,455	8,313	11,777	8,525	12,053
80+	9,946	15,667	9,558	15,035	9,201	14,411	9,016	14,013
Total	**1,073,263**	**1,114,214**	**1,093,129**	**1,132,910**	**1,113,132**	**1,151,861**	**1,133,218**	**1,171,019**

Age (years)	2019 Males	2019 Females	2020 Males	2020 Females	2021 Males	2021 Females	2022 Males	2022 Females
0-4	119,104	117,320	119,452	117,660	120,386	118,581	120,386	118,581
5-9	122,140	120,399	121,495	119,948	119,651	118,300	119,651	118,300
10-14	113,685	111,685	115,932	113,860	118,578	116,457	118,578	116,457
15-19	106,482	104,656	107,616	105,797	108,929	107,103	108,929	107,103
20-24	104,993	104,012	104,650	103,287	104,594	102,946	104,594	102,946
25-29	102,107	104,731	103,951	105,509	105,153	105,780	105,153	105,780
30-34	99,749	105,236	98,487	103,795	98,053	102,932	98,053	102,932
35-39	96,394	99,778	99,405	103,442	101,195	105,758	101,195	105,758
40-44	77,570	77,137	80,569	80,949	83,836	85,052	83,836	85,052
45-49	59,449	58,667	63,398	62,171	67,081	65,726	67,081	65,726
50-54	42,433	46,545	44,649	47,750	47,328	49,478	47,328	49,478
55-59	33,058	40,593	34,622	42,008	36,220	43,225	36,220	43,225
60-64	26,022	32,886	26,870	34,046	27,847	35,297	27,847	35,297
65-69	19,631	24,403	20,779	26,189	21,820	27,813	21,820	27,813
70-74	12,844	16,177	13,640	17,042	14,516	18,150	14,516	18,150
75-79	8,725	12,313	8,984	12,617	9,349	13,005	9,349	13,005
80+	8,945	13,779	8,921	13,628	8,905	13,513	8,905	13,513
Total	**1,153,332**	**1,190,317**	**1,173,421**	**1,209,697**	**1,193,440**	**1,229,114**	**1,193,440**	**1,229,114**

Appendix 2 cont'd: Age-Sex, High Scenario 1a Projections

Age (years)	2023		2024		2025		2026	
	Males	Females	Males	Females	Males	Females	Males	Females
0-4	121,868	120,047	122,465	120,642	123,009	121,184	123,533	121,707
5-9	117,728	116,399	117,506	116,180	117,828	116,499	118,736	117,400
10-14	121,781	119,960	122,244	120,596	121,582	120,129	119,725	118,468
15-19	111,912	110,012	113,695	111,734	115,917	113,888	118,535	116,463
20-24	105,509	103,607	106,400	104,491	107,502	105,609	108,784	106,891
25-29	105,497	104,741	105,085	103,850	104,701	103,103	104,601	102,735
30-34	100,177	103,438	102,119	104,333	103,872	105,063	104,995	105,296
35-39	100,686	105,903	99,186	104,471	97,905	103,033	97,434	102,163
40-44	91,411	94,300	95,110	98,796	98,005	102,393	99,711	104,664
45-49	73,329	72,695	76,117	76,225	79,009	79,974	82,163	84,011
50-54	54,185	54,655	58,062	57,903	61,883	61,350	65,446	64,849
55-59	39,439	45,009	41,237	45,871	43,378	47,057	45,967	48,759
60-64	30,295	38,176	31,725	39,680	33,221	41,066	34,751	42,258
65-69	23,500	30,432	24,244	31,546	25,040	32,668	25,956	33,879
70-74	16,549	21,144	17,634	22,870	18,670	24,552	19,609	26,082
75-79	10,349	13,961	10,960	14,574	11,647	15,369	12,403	16,384
80+	8,973	13,482	9,085	13,581	9,262	13,744	9,508	13,970
Total	**1,233,186**	**1,267,959**	**1,252,873**	**1,287,342**	**1,272,429**	**1,306,680**	**1,291,855**	**1,325,979**

Appendix 3: Age-Sex, High Scenario 1b Projections

Age (years)	2011		2012		2013		2014	
	Males	Females	Males	Females	Males	Females	Males	Females
0-4	119,999	117,315	122,367	119,560	123,954	121,069	124,563	121,652
5-9	108,544	106,618	110,131	108,144	112,006	109,909	114,271	112,020
10-14	104,419	102,875	104,774	103,044	105,452	103,638	106,417	104,585
15-19	104,818	105,928	105,347	105,680	105,325	105,026	104,981	104,188
20-24	97,249	103,101	98,054	103,208	99,744	103,954	101,886	105,016
25-29	101,194	106,658	101,836	107,709	101,167	107,308	99,815	106,038
30-34	84,515	86,027	88,651	90,903	93,040	96,046	97,215	100,947
35-39	68,435	66,784	72,141	70,506	75,494	74,209	78,684	78,000
40-44	48,767	50,530	52,285	52,935	56,289	55,899	60,558	59,288
45-49	37,881	44,380	39,525	45,284	41,234	46,043	43,151	46,871
50-54	29,742	36,620	30,795	37,861	32,041	39,225	33,438	40,617
55-59	24,368	29,681	25,041	30,874	25,611	31,879	26,160	32,783
60-64	17,344	20,240	18,133	21,468	19,011	22,931	19,908	24,495
65-69	12,243	15,504	12,468	15,704	12,789	15,973	13,200	16,369
70-74	9,464	12,797	9,412	12,779	9,300	12,724	9,188	12,671
75-79	6,968	10,924	6,706	10,382	6,567	9,999	6,499	9,749
80+	13,007	19,965	12,335	19,264	11,724	18,607	11,168	17,967
Total	**988,957**	**1,035,947**	**1,010,001**	**1,055,303**	**1,030,748**	**1,074,438**	**1,051,102**	**1,093,254**

Appendix 3 cont'd: Age-Sex, High Scenario 1b Projections

Age (years)	2015		2016		2017		2018	
	Males	Females	Males	Females	Males	Females	Males	Females
0-4	123,981	121,099	121,987	119,203	120,911	118,150	120,307	117,559
5-9	117,046	114,603	120,432	117,763	122,768	119,978	124,328	121,461
10-14	107,602	105,771	108,974	107,125	110,537	108,628	112,388	110,370
15-19	104,665	103,491	104,638	103,178	104,977	103,331	105,638	103,910
20-24	103,825	105,893	105,101	106,237	105,605	105,972	105,562	105,303
25-29	98,666	104,740	98,342	104,011	99,093	104,078	100,723	104,781
30-34	100,542	104,926	102,606	107,535	103,178	108,533	102,453	108,092
35-39	81,996	82,040	85,600	86,405	89,626	91,198	93,901	96,255
40-44	64,788	62,897	68,764	66,577	72,351	70,222	75,594	73,851
45-49	45,462	48,051	48,283	49,782	51,666	52,127	55,521	55,019
50-54	34,924	41,902	36,463	43,007	38,015	43,881	39,632	44,616
55-59	26,794	33,710	27,585	34,744	28,558	35,927	29,709	37,226
60-64	20,739	25,991	21,459	27,310	22,051	28,411	22,557	29,344
65-69	13,694	16,968	14,260	17,806	14,916	18,899	15,644	20,198
70-74	9,152	12,678	9,230	12,784	9,411	12,962	9,663	13,197
75-79	6,438	9,575	6,356	9,442	6,322	9,432	6,253	9,403
80+	10,662	17,333	10,195	16,697	9,730	16,024	9,369	15,483
Total	**1,070,972**	**1,111,670**	**1,090,274**	**1,129,606**	**1,109,716**	**1,147,756**	**1,129,240**	**1,166,067**

Age (years)	2019		2020		2021		2022	
	Males	Females	Males	Females	Males	Females	Males	Females
0-4	120,214	117,467	120,672	117,914	121,725	118,943	122,635	119,831
5-9	124,915	122,022	124,314	121,452	122,307	119,541	121,210	118,467
10-14	114,628	112,458	117,376	115,017	120,733	118,151	123,044	120,342
15-19	106,584	104,840	107,749	106,008	109,101	107,344	110,643	108,828
20-24	105,199	104,450	104,864	103,739	104,816	103,409	105,133	103,545
25-29	102,801	105,798	104,677	106,630	105,896	106,933	106,348	106,630
30-34	101,053	106,790	99,854	105,460	99,472	104,696	100,156	104,721
35-39	97,966	101,074	101,192	104,981	103,172	107,531	103,680	108,490
40-44	78,681	77,567	81,889	81,530	85,386	85,815	89,297	90,522
45-49	59,632	58,324	63,705	61,846	67,532	65,437	70,987	68,996
50-54	41,447	45,420	43,640	46,567	46,319	48,245	49,534	50,517
55-59	30,998	38,552	32,368	39,777	33,789	40,830	35,222	41,665
60-64	23,047	30,186	23,614	31,053	24,319	32,018	25,185	33,122
65-69	16,387	21,584	17,074	22,909	17,669	24,077	18,162	25,057
70-74	9,983	13,541	10,366	14,053	10,803	14,764	11,309	15,689
75-79	6,188	9,380	6,175	9,401	6,237	9,492	6,368	9,637
80+	9,076	15,035	8,807	14,631	8,540	14,243	8,296	13,900
Total	**1,148,797**	**1,184,489**	**1,168,335**	**1,202,969**	**1,187,817**	**1,221,470**	**1,207,210**	**1,239,961**

Appendix 3 cont'd: Age-Sex, High Scenario 1b Projections

Age (years)	2023 Males	2023 Females	2024 Males	2024 Females	2025 Males	2025 Females	2026 Males	2026 Females
0-4	123,426	120,603	124,127	121,288	124,773	121,919	125,400	122,530
5-9	120,584	117,852	120,466	117,736	120,897	118,156	121,922	119,157
10-14	124,580	121,803	125,146	122,344	124,528	121,755	122,508	119,829
15-19	112,472	110,551	114,688	112,618	117,411	115,156	120,741	118,268
20-24	105,768	104,103	106,688	105,011	107,825	106,155	109,148	107,467
25-29	106,258	105,925	105,850	105,038	105,469	104,292	105,375	103,924
30-34	101,710	105,376	103,707	106,343	105,504	107,126	106,649	107,383
35-39	102,909	108,024	101,473	106,708	100,237	105,365	99,809	104,582
40-44	93,453	95,491	97,402	100,224	100,527	104,059	102,430	106,556
45-49	74,110	72,541	77,085	76,172	80,182	80,048	83,562	84,240
50-54	53,196	53,316	57,100	56,514	60,969	59,921	64,606	63,397
55-59	36,718	42,373	38,400	43,148	40,434	44,251	42,920	45,860
60-64	26,208	34,333	27,352	35,569	28,567	36,710	29,825	37,692
65-69	18,588	25,892	19,004	26,651	19,486	27,434	20,082	28,306
70-74	11,872	16,783	12,444	17,947	12,973	19,059	13,430	20,039
75-79	6,547	9,825	6,772	10,097	7,039	10,499	7,343	11,050
80+	8,088	13,619	7,918	13,392	7,790	13,215	7,704	13,085
Total	**1,226,487**	**1,258,409**	**1,245,622**	**1,276,800**	**1,264,612**	**1,295,118**	**1,283,455**	**1,313,365**

Appendix 4: Age-Sex, Medium Scenario Projections

Age (years)	2011 Males	2011 Females	2012 Males	2012 Females	2013 Males	2013 Females	2014 Males	2014 Females
0-4	119,999	117,315	125,433	122,607	129,496	126,618	131,646	128,797
5-9	108,544	106,618	110,071	108,077	111,473	109,366	113,180	110,935
10-14	104,419	102,875	104,736	102,990	105,370	103,528	106,286	104,414
15-19	104,818	105,928	105,308	105,588	105,252	104,858	104,879	103,963
20-24	97,249	103,101	97,945	102,978	99,547	103,537	101,619	104,452
25-29	101,194	106,658	101,592	107,314	100,719	106,571	99,207	105,022
30-34	84,515	86,027	88,365	90,552	92,466	95,324	96,356	99,840
35-39	68,435	66,784	71,892	70,305	74,986	73,781	77,910	77,317
40-44	48,767	50,530	52,131	52,855	55,960	55,723	60,030	58,997
45-49	37,881	44,380	39,526	45,310	41,211	46,081	43,076	46,905
50-54	29,742	36,620	30,929	37,996	32,292	39,483	33,791	40,986
55-59	24,368	29,681	25,338	31,117	26,179	32,355	26,970	33,480
60-64	17,344	20,240	18,463	21,705	19,686	23,429	20,943	25,283
65-69	12,243	15,504	12,797	15,954	13,449	16,471	14,199	17,120
70-74	9,464	12,797	9,748	13,076	9,958	13,307	10,154	13,526
75-79	6,968	10,924	7,046	10,815	7,226	10,807	7,464	10,889
80+	13,007	19,965	11,945	18,482	11,092	17,290	10,417	16,317
Total	**988,957**	**1,035,947**	**1,013,265**	**1,057,719**	**1,036,362**	**1,078,529**	**1,058,125**	**1,098,241**

Appendix 4 cont'd: Age-Sex, Medium Scenario Projections

Age (years)	2015 Males	2015 Females	2016 Males	2016 Females	2017 Males	2017 Females	2018 Males	2018 Females
0-4	131,622	128,896	129,345	126,831	124,008	121,647	119,929	117,676
5-9	115,318	112,911	117,796	115,217	123,085	120,415	127,110	124,427
10-14	107,416	105,534	108,728	106,820	110,240	108,271	111,626	109,551
15-19	104,537	103,225	104,488	102,883	104,798	102,999	105,421	103,530
20-24	103,506	105,221	104,753	105,499	105,230	105,179	105,164	104,467
25-29	97,938	103,499	97,523	102,590	98,193	102,499	99,747	103,062
30-34	99,410	103,435	101,228	105,678	101,597	106,362	100,719	105,665
35-39	80,948	81,075	84,268	85,126	87,999	89,575	91,970	94,259
40-44	64,040	62,473	67,779	66,000	71,118	69,463	74,104	72,877
45-49	45,305	48,067	48,010	49,763	51,256	52,056	54,949	54,875
50-54	35,362	42,370	36,970	43,556	38,566	44,490	40,199	45,264
55-59	27,817	34,614	28,797	35,844	29,950	37,212	31,270	38,684
60-64	22,145	27,092	23,237	28,738	24,168	30,148	24,977	31,365
65-69	15,046	17,983	15,982	19,109	17,027	20,522	18,166	22,175
70-74	10,422	13,798	10,816	14,171	11,323	14,615	11,915	15,116
75-79	7,698	11,013	7,895	11,151	8,145	11,425	8,335	11,654
80+	9,889	15,510	9,483	14,832	9,109	14,167	8,904	13,726
Total	**1,078,418**	**1,116,717**	**1,097,097**	**1,133,808**	**1,115,812**	**1,151,045**	**1,134,505**	**1,168,373**

Age (years)	2019 Males	2019 Females	2020 Males	2020 Females	2021 Males	2021 Females	2022 Males	2022 Females
0-4	117,216	115,028	115,970	113,806	116,266	114,090	116,481	114,307
5-9	129,286	126,657	129,342	126,843	127,219	124,917	121,996	119,837
10-14	113,314	111,106	115,429	113,061	117,879	115,341	123,126	120,501
15-19	106,322	104,404	107,435	105,508	108,727	106,775	110,217	108,205
20-24	104,781	103,584	104,428	102,849	104,363	102,502	104,651	102,607
25-29	101,757	103,961	103,581	104,702	104,769	104,949	105,197	104,610
30-34	99,209	104,163	97,930	102,668	97,482	101,757	98,091	101,646
35-39	95,731	98,685	98,672	102,200	100,403	104,380	100,721	105,039
40-44	76,923	76,344	79,848	80,019	83,041	83,973	86,630	88,317
45-49	58,874	58,086	62,738	61,490	66,337	64,938	69,551	68,324
50-54	42,002	46,084	44,154	47,229	46,761	48,890	49,888	51,135
55-59	32,718	40,168	34,233	41,530	35,781	42,693	37,317	43,611
60-64	25,737	32,469	26,549	33,579	27,487	34,777	28,586	36,109
65-69	19,334	23,945	20,449	25,668	21,460	27,231	22,323	28,574
70-74	12,593	15,735	13,354	16,547	14,193	17,594	15,128	18,908
75-79	8,514	11,869	8,752	12,127	9,093	12,466	9,528	12,868
80+	8,812	13,444	8,766	13,244	8,729	13,079	8,717	12,975
Total	**1,153,123**	**1,185,728**	**1,171,629**	**1,203,068**	**1,189,988**	**1,220,350**	**1,208,148**	**1,237,573**

Appendix 4 cont'd: Age-Sex, Medium Scenario Projections

Age (years)	2023 Males	2023 Females	2024 Males	2024 Females	2025 Males	2025 Females	2026 Males	2026 Females
0-4	116,653	114,491	116,819	114,679	117,354	114,565	117,950	114,519
5-9	117,986	115,932	115,301	113,316	114,046	112,097	114,318	112,380
10-14	127,116	124,481	129,265	126,687	129,304	126,858	127,172	124,926
15-19	111,581	109,466	113,244	111,001	115,332	112,935	117,753	115,193
20-24	105,248	103,124	106,119	103,979	107,199	105,063	108,456	106,308
25-29	105,088	103,887	104,666	102,995	104,271	102,251	104,158	101,888
30-34	99,562	102,174	101,476	103,031	103,203	103,734	104,303	103,954
35-39	99,821	104,347	98,303	102,868	97,008	101,396	96,520	100,494
40-44	90,449	92,894	94,060	97,221	96,872	100,660	98,508	102,794
45-49	72,422	71,664	75,129	75,058	77,936	78,659	80,999	82,533
50-54	53,445	53,896	57,224	57,043	60,943	60,379	64,405	63,761
55-59	38,887	44,374	40,620	45,183	42,686	46,310	45,189	47,942
60-64	29,843	37,544	31,220	38,990	32,658	40,317	34,125	41,453
65-69	23,073	29,737	23,778	30,795	24,531	31,863	25,399	33,015
70-74	16,145	20,443	17,186	22,088	18,177	23,689	19,074	25,144
75-79	10,034	13,321	10,609	13,881	11,255	14,614	11,965	15,558
80+	8,753	12,951	8,843	12,999	8,994	13,110	9,211	13,280
Total	**1,226,106**	**1,254,727**	**1,243,861**	**1,271,813**	**1,261,769**	**1,288,499**	**1,279,504**	**1,305,141**

Appendix 5: Age-Sex, Low Scenario Projections

Age, (years)	2011 Males	2011 Females	2012 Males	2012 Females	2013 Males	2013 Females	2014 Males	2014 Females
0-4	119,999	117,315	123,976	121,621	126,729	124,645	127,700	125,905
5-9	108,544	106,618	110,051	108,094	111,378	109,445	113,001	111,074
10-14	104,419	102,875	104,722	103,000	105,342	103,549	106,240	104,445
15-19	104,818	105,928	105,291	105,607	105,219	104,892	104,831	104,005
20-24	97,249	103,101	97,914	103,017	99,489	103,605	101,537	104,541
25-29	101,194	106,658	101,540	107,375	100,622	106,681	99,071	105,166
30-34	84,515	86,027	88,308	90,609	92,351	95,436	96,181	100,002
35-39	68,435	66,784	71,838	70,345	74,876	73,860	77,741	77,435
40-44	48,767	50,530	52,087	52,883	55,866	55,778	59,879	59,078
45-49	37,881	44,380	39,492	45,334	41,139	46,126	42,961	46,969
50-54	29,742	36,620	30,901	38,018	32,233	39,525	33,698	41,046
55-59	24,368	29,681	25,316	31,136	26,133	32,392	26,896	33,533
60-64	17,344	20,240	18,442	21,725	19,641	23,467	20,871	25,337
65-69	12,243	15,504	12,778	15,976	13,409	16,511	14,135	17,176
70-74	9,464	12,797	9,731	13,100	9,923	13,351	10,099	13,586
75-79	6,968	10,924	7,033	10,840	7,197	10,852	7,418	10,950
80+	13,007	19,965	11,941	18,492	11,082	17,311	10,398	16,350
Total	**988,957**	**1,035,947**	**1,011,360**	**1,057,169**	**1,032,626**	**1,077,424**	**1,052,658**	**1,096,597**

Appendix 5 cont'd: Age-Sex, Low Scenario Projections

Age (years)	2015 Males	2015 Females	2016 Males	2016 Females	2017 Males	2017 Females	2018 Males	2018 Females
0-4	126,649	125,164	123,541	122,345	118,775	117,601	115,323	114,161
5-9	115,043	113,115	117,380	115,514	121,268	119,735	124,026	122,755
10-14	107,352	105,576	108,644	106,873	110,136	108,334	111,448	109,670
15-19	104,476	103,271	104,415	102,930	104,710	103,050	105,318	103,588
20-24	103,405	105,323	104,633	105,605	105,094	105,291	105,014	104,583
25-29	97,768	103,666	97,323	102,770	97,965	102,693	99,494	103,269
30-34	99,175	103,640	100,934	105,916	101,254	106,629	100,335	105,955
35-39	80,717	81,230	83,972	85,316	87,636	89,803	91,539	94,528
40-44	63,826	62,579	67,496	66,130	70,767	69,619	73,687	73,063
45-49	45,142	48,148	47,792	49,859	50,976	52,170	54,602	55,009
50-54	35,231	42,445	36,798	43,643	38,350	44,590	39,938	45,377
55-59	27,715	34,681	28,664	35,924	29,782	37,304	31,066	38,791
60-64	22,045	27,160	23,109	28,816	24,012	30,237	24,794	31,467
65-69	14,955	18,053	15,861	19,189	16,874	20,614	17,980	22,282
70-74	10,344	13,872	10,714	14,255	11,197	14,710	11,763	15,223
75-79	7,633	11,088	7,809	11,235	8,038	11,520	8,209	11,760
80+	9,860	15,555	9,442	14,889	9,055	14,234	8,836	13,803
Total	**1,071,337**	**1,114,566**	**1,088,524**	**1,131,208**	**1,105,889**	**1,148,132**	**1,123,369**	**1,165,282**

Age (years)	2019 Males	2019 Females	2020 Males	2020 Females	2021 Males	2021 Females	2022 Males	2022 Females
0-4	113,253	112,091	112,631	111,457	113,504	112,308	114,248	113,028
5-9	125,058	124,059	124,115	123,403	121,181	120,716	116,536	116,062
10-14	113,052	111,281	115,071	113,302	117,383	115,676	121,236	119,866
15-19	106,202	104,470	107,297	105,586	108,570	106,865	110,042	108,306
20-24	104,619	103,703	104,255	102,972	104,180	102,627	104,458	102,737
25-29	101,482	104,180	103,286	104,933	104,459	105,190	104,877	104,857
30-34	98,795	104,471	97,492	102,993	97,024	102,100	97,614	102,003
35-39	95,232	98,997	98,110	102,556	99,787	104,778	100,067	105,468
40-44	76,440	76,564	79,299	80,279	82,426	84,276	85,948	88,666
45-49	58,454	58,245	62,245	61,676	65,770	65,154	68,915	68,572
50-54	41,693	46,212	43,791	47,374	46,339	49,054	49,401	51,321
55-59	32,475	40,289	33,950	41,667	35,455	42,847	36,949	43,780
60-64	25,526	32,585	26,310	33,710	27,217	34,925	28,284	36,273
65-69	19,116	24,069	20,199	25,809	21,181	27,390	22,018	28,749
70-74	12,413	15,853	13,145	16,680	13,953	17,744	14,856	19,076
75-79	8,368	11,986	8,587	12,256	8,908	12,608	9,321	13,023
80+	8,728	13,533	8,665	13,345	8,611	13,193	8,583	13,100
Total	**1,140,905**	**1,182,589**	**1,158,449**	**1,199,996**	**1,175,947**	**1,217,449**	**1,193,352**	**1,234,888**

Appendix 5 cont'd: Age-Sex, Low Scenario Projections

Age (years)	2023 Males	2023 Females	2024 Males	2024 Females	2025 Males	2025 Females	2026 Males	2026 Females
0-4	114,884	113,640	115,438	114,169	115,941	114,646	116,423	115,100
5-9	113,156	112,673	111,114	110,618	110,484	109,968	111,337	110,794
10-14	123,966	122,859	124,980	124,142	124,029	123,472	121,096	120,777
15-19	111,335	109,622	112,917	111,213	114,913	113,210	117,199	115,559
20-24	105,044	103,259	105,903	104,121	106,971	105,213	108,214	106,465
25-29	104,762	104,136	104,338	103,242	103,943	102,494	103,833	102,124
30-34	99,068	102,544	100,968	103,410	102,685	104,118	103,784	104,336
35-39	99,144	104,797	97,617	103,329	96,319	101,863	95,830	100,966
40-44	89,700	93,289	93,250	97,661	96,012	101,141	97,612	103,307
45-49	71,722	71,946	74,371	75,376	77,121	79,013	80,129	82,928
50-54	52,887	54,106	56,593	57,278	60,241	60,642	63,635	64,051
55-59	38,475	44,556	40,163	45,379	42,180	46,520	44,627	48,168
60-64	29,507	37,723	30,848	39,184	32,250	40,526	33,681	41,673
65-69	22,745	29,927	23,428	30,999	24,160	32,078	25,005	33,242
70-74	15,842	20,631	16,853	22,294	17,817	23,913	18,691	25,383
75-79	9,804	13,489	10,356	14,060	10,978	14,805	11,663	15,763
80+	8,602	13,089	8,675	13,149	8,808	13,271	9,007	13,453
Total	**1,210,645**	**1,252,285**	**1,227,812**	**1,269,623**	**1,244,851**	**1,286,892**	**1,261,764**	**1,304,090**

Appendix 6: Age-Sex, HIV/Aids Scenario Projections

Age (years)	2011 Males	2011 Females	2012 Males	2012 Females	2013 Males	2013 Females	2014 Males	2014 Females
0-4	134,464	131,200	133,337	130,097	131,611	128,411	129,007	125,870
5-Sep	130,278	127,077	131,466	128,225	132,092	128,826	132,517	129,232
Oct-14	119,748	116,905	122,272	119,365	124,553	121,583	126,460	123,434
15-19	105,168	102,775	107,941	105,456	110,617	108,055	113,347	110,722
20-24	100,170	97,917	99,664	97,381	99,815	97,505	100,692	98,337
25-29	101,533	98,741	102,062	99,255	102,333	99,556	102,210	99,456
30-34	85,984	82,932	89,929	86,695	93,775	90,373	97,512	93,901
35-39	70,608	65,616	74,233	69,258	77,349	72,560	79,891	75,352
40-44	52,237	47,344	55,643	50,306	59,078	53,435	62,498	56,641
45-49	36,246	34,200	38,841	35,835	41,675	37,914	44,662	40,271
50-54	26,777	31,606	27,857	31,252	29,137	30,944	30,678	30,963
55-59	21,424	27,250	22,147	28,394	22,822	29,313	23,491	29,871
60-64	15,189	19,078	16,047	20,300	16,938	21,603	17,802	22,908
65-69	10,259	13,623	10,642	14,080	11,095	14,635	11,615	15,321
70-74	7,195	10,389	7,286	10,548	7,382	10,723	7,515	10,940
75-79	4,356	7,273	4,500	7,478	4,637	7,665	4,758	7,835
80+	3,221	6,697	3,316	6,924	3,419	7,165	3,527	7,413
Total	**1,024,858**	**1,020,625**	**1,047,183**	**1,040,847**	**1,068,328**	**1,060,268**	**1,088,182**	**1,078,468**

Appendix 6 cont'd: Age-Sex, HIV/Aids Scenario Projections

Age (years)	2015 Males	2015 Females	2016 Males	2016 Females	2017 Males	2017 Females	2018 Males	2018 Females
0-4	125,135	122,093	120,479	117,551	116,714	113,882	113,972	111,211
5-9	132,967	129,666	132,840	129,538	132,081	128,796	130,653	127,404
10-14	127,927	124,853	128,959	125,847	129,967	126,818	130,814	127,635
15-19	116,200	113,511	119,104	116,360	121,601	118,804	123,875	121,023
20-24	102,411	99,998	105,103	102,605	107,813	105,237	110,389	107,746
25-29	101,581	98,837	100,438	97,701	99,861	97,115	99,937	97,166
30-34	101,143	97,276	101,752	97,928	102,149	98,356	102,287	98,520
35-39	81,878	77,606	85,685	81,337	89,408	84,933	93,027	88,378
40-44	65,897	59,912	69,798	63,799	73,217	67,319	76,132	70,424
45-49	47,752	42,818	50,913	45,525	54,135	48,395	57,389	51,389
50-54	32,500	31,484	34,614	32,540	37,000	34,074	39,621	36,013
55-59	24,224	30,048	25,053	29,890	26,005	29,514	27,138	29,169
60-64	18,598	24,147	19,306	25,307	19,936	26,357	20,524	27,192
65-69	12,199	16,154	12,855	17,135	13,575	18,233	14,320	19,398
70-74	7,706	11,219	7,955	11,557	8,255	11,953	8,609	12,431
75-79	4,858	7,990	4,937	8,129	5,004	8,263	5,076	8,410
80+	3,639	7,661	3,757	7,911	3,880	8,166	4,002	8,418
Total	**1,106,614**	**1,095,273**	**1,123,548**	**1,110,659**	**1,140,602**	**1,126,214**	**1,157,764**	**1,141,927**

Appendix 6 cont'd: Age-Sex, HIV/Aids Scenario Projections

Age (years)	2019 Males	2019 Females	2020 Males	2020 Females
0-4	112,222	109,507	111,904	109,200
5-9	128,249	125,060	124,682	121,584
10-14	131,675	128,467	132,399	129,168
15-19	125,850	122,940	127,445	124,480
20-24	113,091	110,393	115,893	113,143
25-29	100,737	97,924	102,370	99,505
30-34	102,068	98,321	101,368	97,639
35-39	96,556	91,689	99,997	94,872
40-44	78,534	73,080	80,414	75,239
45-49	60,656	54,480	63,925	57,662
50-54	42,419	38,255	45,336	40,704
55-59	28,515	29,137	30,160	29,594
60-64	21,109	27,696	21,748	27,841
65-69	15,042	20,567	15,707	21,677
70-74	9,014	13,021	9,470	13,738
75-79	5,174	8,591	5,311	8,821
80+	4,115	8,662	4,219	8,894
Total	**1,175,027**	**1,157,790**	**1,192,346**	**1,173,762**

Appendix 6 cont'd: Age-Sex, HIV/Aids Scenario Projections

Age (years)	2023 Males	2023 Females	2024 Males	2024 Females
0-4	115,869	113,081	117,260	114,444
5-9	113,918	111,096	112,259	109,481
10-14	130,754	127,558	128,428	125,290
15-19	130,708	127,610	131,619	128,489
20-24	123,426	120,545	125,377	122,440
25-29	110,044	106,965	112,645	109,520
30-34	99,511	95,799	100,211	96,471
35-39	100,885	95,883	100,591	95,622
40-44	91,041	85,513	94,392	88,658
45-49	73,778	67,892	76,082	70,473
50-54	54,491	48,983	57,605	51,974
55-59	36,673	33,821	39,256	35,941
60-64	24,264	26,937	25,459	26,875
65-69	17,310	24,397	17,796	24,841
70-74	11,119	16,516	11,677	17,512
75-79	5,948	9,804	6,232	10,278
80+	4,500	9,580	4,608	9,834
Total	**1,244,239**	**1,221,978**	**1,261,497**	**1,238,142**

Appendix 7: Single Year-Age Distributions, (0-30 Years, Both Sexes), High Scenario 1a Projections

Year	Age in single years 0	1	2	3	4	5	6	7	8	9	10
2011	50,649	48,701	47,138	45,900	44,926	44,154	43,523	42,980	42,483	42,022	41,623
2012	49,999	50,227	48,625	47,055	45,357	44,954	44,188	43,558	43,015	42,518	42,048
2013	49,466	49,588	50,143	48,534	46,500	45,384	44,986	44,220	43,591	43,049	42,543
2014	48,793	49,063	49,505	50,044	47,962	46,524	45,414	45,016	44,251	43,622	43,071
2015	47,981	48,399	48,981	49,408	49,456	47,983	46,551	45,442	45,045	44,280	43,643
2016	47,039	47,599	48,318	48,885	48,832	49,474	48,007	46,577	45,468	45,072	44,299
2017	47,545	46,669	47,520	48,223	48,320	48,850	49,496	48,030	46,601	45,494	45,089
2018	47,976	47,172	46,591	47,426	47,671	48,337	48,871	49,516	48,052	46,624	45,509
2019	48,342	47,602	47,091	46,500	46,889	47,687	48,356	48,890	49,535	48,072	46,637
2020	48,653	47,967	47,518	46,996	45,979	46,904	47,705	48,374	48,908	49,552	48,083
2021	48,920	48,276	47,879	47,419	46,472	45,992	46,921	47,722	48,391	48,924	49,560
2022	49,153	48,543	48,186	47,779	46,894	46,484	46,009	46,937	47,737	48,406	48,931
2023	49,355	48,776	48,450	48,083	47,252	46,903	46,498	46,023	46,951	47,751	48,412
2024	49,548	48,978	48,680	48,344	47,556	47,259	46,916	46,511	46,036	46,963	47,756
2025	49,751	49,171	48,880	48,572	47,818	47,562	47,270	46,926	46,522	46,048	46,968
2026	49,979	49,375	49,071	48,769	48,046	47,821	47,570	47,279	46,935	46,531	46,052

Appendix 7 cont'd : Single Year-Age Distributions, (0-30 Years, Both Sexes), High Scenario 1a Projections

Year	Age in single years										
	11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
2011	41,345	41,257	41,393	41,675	42,107	42,484	42,545	42,153	41,457	40,531	39,744
2012	41,653	41,374	41,287	41,423	41,696	42,108	42,484	42,545	42,154	41,498	40,527
2013	42,075	41,680	41,402	41,315	41,443	41,696	42,108	42,483	42,544	42,191	41,489
2014	42,568	42,102	41,707	41,429	41,334	41,442	41,696	42,106	42,481	42,579	42,180
2015	43,095	42,593	42,126	41,732	41,447	41,333	41,441	41,694	42,104	42,514	42,565
2016	43,665	43,118	42,616	42,150	41,749	41,445	41,330	41,438	41,691	42,135	42,499
2017	44,320	43,686	43,140	42,638	42,165	41,745	41,441	41,327	41,435	41,721	42,119
2018	45,108	44,339	43,706	43,160	42,652	42,160	41,740	41,437	41,323	41,463	41,704
2019	45,526	45,125	44,357	43,724	43,172	42,645	42,154	41,735	41,432	41,349	41,445
2020	46,652	45,542	45,141	44,374	43,735	43,164	42,638	42,147	41,728	41,455	41,330
2021	48,095	46,666	45,557	45,156	44,383	43,726	43,155	42,629	42,139	41,749	41,434
2022	49,571	48,107	46,679	45,570	45,164	44,372	43,715	43,145	42,620	42,158	41,726
2023	48,941	49,580	48,117	46,690	45,576	45,151	44,359	43,703	43,134	42,636	42,132
2024	48,421	48,949	49,588	48,126	46,694	45,562	45,136	44,346	43,690	43,147	42,607
2025	47,764	48,428	48,956	49,595	48,129	46,677	45,546	45,121	44,331	43,701	43,115

Appendix 7 cont'd: Single Year-Age Distributions, (0-30 Years, Both Sexes), High Scenario 1a Projections

Year	Age in single years								
	22	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
2011	39,455	39,875	40,745	41,797	42,501	42,476	41,436	39,641	37,570
2012	39,741	39,453	39,873	40,833	41,833	42,534	42,510	41,473	39,673
2013	40,521	39,737	39,449	39,958	40,869	41,864	42,564	42,539	41,495
2014	41,479	40,513	39,731	39,531	39,993	40,900	41,893	42,589	42,554
2015	42,167	41,468	40,504	39,808	39,564	40,024	40,928	41,917	42,601
2016	42,549	42,152	41,455	40,575	39,836	39,593	40,051	40,952	41,927
2017	42,482	42,532	42,136	41,520	40,596	39,860	39,617	40,074	40,962
2018	42,101	42,463	42,513	42,195	41,534	40,614	39,880	39,638	40,084
2019	41,685	42,082	42,443	42,567	42,203	41,545	40,627	39,896	39,645
2020	41,426	41,665	42,061	42,493	42,571	42,208	41,552	40,637	39,899
2021	41,308	41,404	41,644	42,107	42,493	42,570	42,209	41,555	40,634
2022	41,411	41,286	41,381	41,686	42,104	42,489	42,566	42,206	41,545
2023	41,700	41,386	41,261	41,420	41,681	42,098	42,481	42,558	42,191
2024	42,104	41,673	41,360	41,296	41,412	41,672	42,087	42,469	42,538
2025	42,576	42,074	41,645	41,390	41,284	41,399	41,658	42,073	42,446
2026	43,082	42,544	42,043	41,670	41,374	41,268	41,383	41,641	42,047

Appendix 8: Single Year-Age Distributions (0-30 Years, Both Sexes), High Scenario 1b Projections

Year	0	1	2	3	4	5	6	7	8	9	10
					Age in single years						
2011	50,649	48,701	47,138	45,900	44,926	44,154	43,523	42,980	42,483	42,022	41,623
2012	49,442	50,589	48,726	47,196	45,974	44,942	44,202	43,571	43,029	42,532	42,061
2013	48,984	49,386	50,608	48,779	47,266	45,987	44,987	44,248	43,617	43,075	42,569
2014	48,381	48,928	49,405	50,656	48,845	47,276	46,030	45,031	44,292	43,662	43,111
2015	47,637	48,326	48,946	49,453	50,718	48,852	47,317	46,072	45,073	44,334	43,696
2016	46,759	47,584	48,344	48,992	49,512	50,722	48,891	47,356	46,112	45,114	44,367
2017	47,316	46,708	47,601	48,387	49,049	49,516	50,758	48,928	47,394	46,150	45,144
2018	47,796	47,261	46,724	47,643	48,442	49,052	49,551	50,792	48,963	47,430	46,179
2019	48,208	47,739	47,275	46,764	47,696	48,445	49,086	49,585	50,825	48,996	47,456
2020	48,562	48,149	47,749	47,312	46,815	47,698	48,477	49,118	49,616	50,856	49,021
2021	48,870	48,500	48,156	47,783	47,360	46,817	47,729	48,508	49,148	49,646	50,878
2022	49,140	48,806	48,505	48,187	47,828	47,360	46,847	47,758	48,536	49,176	49,667
2023	49,385	49,074	48,808	48,533	48,229	47,826	47,387	46,874	47,785	48,563	49,196
2024	49,620	49,317	49,074	48,833	48,571	48,226	47,852	47,413	46,900	47,811	48,582
2025	49,863	49,551	49,314	49,096	48,869	48,567	48,249	47,876	47,437	46,924	47,829
2026	50,131	49,792	49,545	49,334	49,128	48,862	48,588	48,271	47,898	47,459	46,941

Year	11	12	13	14	15	16	17	18	19	20	21
2011	41,345	41,257	41,393	41,675	42,107	42,484	42,545	42,153	41,457	40,531	39,744
2012	41,658	41,379	41,292	41,428	41,702	42,117	42,492	42,553	42,163	41,506	40,568
2013	42,094	41,691	41,413	41,325	41,453	41,710	42,125	42,500	42,561	42,209	41,540
2014	42,600	42,125	41,722	41,444	41,349	41,461	41,718	42,132	42,507	42,605	42,239
2015	43,140	42,630	42,155	41,752	41,467	41,356	41,468	41,725	42,139	42,549	42,633
2016	43,724	43,168	42,658	42,183	41,774	41,473	41,363	41,474	41,731	42,179	42,576
2017	44,392	43,750	43,195	42,685	42,204	41,779	41,479	41,368	41,480	41,769	42,204
2018	45,168	44,417	43,775	43,220	42,703	42,207	41,783	41,483	41,372	41,516	41,793
2019	46,201	45,191	44,440	43,798	43,237	42,705	42,210	41,786	41,486	41,407	41,538
2020	47,476	46,221	45,212	44,461	43,814	43,238	42,707	42,211	41,788	41,518	41,427
2021	49,039	47,495	46,241	45,232	44,476	43,813	43,237	42,707	42,212	41,818	41,536
2022	50,893	49,055	47,512	46,259	45,245	44,473	43,811	43,236	42,706	42,239	41,833
2023	49,682	50,907	49,070	47,528	46,270	45,241	44,470	43,808	43,234	42,731	42,252
2024	49,210	49,695	50,920	49,083	47,537	46,264	45,236	44,466	43,805	43,256	42,742
2025	48,595	49,222	49,707	50,931	49,091	47,529	46,257	45,230	44,460	43,824	43,264
2026	47,840	48,606	49,233	49,718	50,936	49,081	47,520	46,249	45,223	44,478	43,830

Appendix 8 cont'd: Single Year-Age Distributions (0-30 Years, Both Sexes), High Scenario 1b Projections

Year	Age in single years								
	22	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
2011	39,455	39,875	40,745	41,797	42,501	42,476	41,436	39,641	37,570
2012	39,781	39,493	39,913	40,875	41,912	42,615	42,591	41,552	39,749
2013	40,602	39,817	39,529	40,039	40,987	42,023	42,725	42,700	41,652
2014	41,571	40,635	39,851	39,651	40,148	41,095	42,129	42,830	42,794
2015	42,268	41,601	40,666	39,968	39,756	40,253	41,198	42,230	42,919
2016	42,660	42,295	41,629	40,777	40,068	39,857	40,353	41,297	42,317
2017	42,600	42,684	42,320	41,734	40,872	40,164	39,953	40,449	41,381
2018	42,227	42,622	42,706	42,419	41,823	40,962	40,255	40,045	40,530
2019	41,814	42,248	42,643	42,801	42,503	41,907	41,047	40,342	40,123
2020	41,558	41,834	42,267	42,733	42,879	42,581	41,986	41,128	40,415
2021	41,445	41,576	41,851	42,353	42,807	42,953	42,655	42,061	41,196
2022	41,552	41,461	41,592	41,933	42,423	42,876	43,022	42,725	42,123
2023	41,847	41,566	41,475	41,669	41,999	42,488	42,941	43,086	42,782
2024	42,264	41,859	41,578	41,548	41,731	42,060	42,548	43,001	43,138
2025	42,750	42,273	41,868	41,646	41,605	41,788	42,117	42,604	43,049
2026	43,270	42,757	42,280	41,932	41,699	41,658	41,841	42,169	42,649

Appendix 9: Single Year-Age Distributions (0-30 Years, Both Sexes), Medium Scenario Projections

Year	Age in single years										
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2011	50,649	48,701	47,138	45,900	44,926	44,154	43,523	42,980	42,483	42,022	41,623
2012	57,364	50,021	48,542	46,998	45,115	44,935	44,171	43,541	42,999	42,502	42,032
2013	54,974	56,662	49,861	48,398	46,218	45,124	44,952	44,188	43,558	43,017	42,511
2014	52,306	54,330	56,474	49,714	47,619	46,226	45,140	44,968	44,205	43,576	43,026
2015	49,400	51,720	54,162	56,298	48,938	47,626	46,241	45,156	44,984	44,222	43,585
2016	46,290	48,873	51,573	54,002	55,438	48,944	47,639	46,256	45,172	45,000	44,230
2017	46,495	45,807	48,740	51,425	53,189	55,435	48,955	47,652	46,270	45,187	45,007
2018	46,637	46,014	45,688	48,604	50,662	53,188	55,439	48,965	47,663	46,283	45,193
2019	46,732	46,158	45,893	45,565	47,895	50,663	53,192	55,441	48,973	47,673	46,286
2020	46,801	46,256	46,037	45,769	44,913	47,898	50,669	53,196	55,442	48,981	47,674
2021	46,863	46,328	46,134	45,911	45,119	44,918	47,905	50,673	53,198	55,442	48,979
2022	46,923	46,392	46,205	46,006	45,262	45,122	44,926	47,911	50,676	53,198	55,434
2023	46,990	46,453	46,267	46,074	45,359	45,264	45,129	44,933	47,915	50,678	53,191
2024	47,085	46,521	46,327	46,134	45,430	45,359	45,269	45,134	44,938	47,917	50,671
2025	47,223	46,617	46,393	46,192	45,493	45,429	45,362	45,272	45,138	44,942	47,913
2026	47,415	46,756	46,488	46,256	45,554	45,490	45,431	45,364	45,274	45,140	44,938

Appendix 9 cont'd: Single Year-Age Distributions (0-30 Years, Both Sexes), Medium Scenario Projections

Year	Age in single years										
	11	12	13	14	15	16	17	18	19	20	21
2011	41,345	41,257	41,393	41,675	42,107	42,484	42,545	42,153	41,457	40,531	39,744
2012	41,642	41,364	41,276	41,412	41,686	42,088	42,464	42,524	42,134	41,478	40,489
2013	42,049	41,660	41,382	41,295	41,423	41,668	42,070	42,445	42,505	42,153	41,435
2014	42,528	42,067	41,678	41,400	41,305	41,406	41,651	42,052	42,427	42,524	42,110
2015	43,042	42,545	42,083	41,695	41,410	41,290	41,391	41,635	42,036	42,445	42,482
2016	43,600	43,057	42,560	42,100	41,705	41,396	41,275	41,376	41,620	42,054	42,405
2017	44,243	43,614	43,072	42,575	42,108	41,689	41,380	41,260	41,361	41,638	42,015
2018	45,018	44,255	43,626	43,084	42,582	42,091	41,672	41,364	41,244	41,377	41,598
2019	45,202	45,028	44,266	43,637	43,089	42,563	42,073	41,654	41,347	41,258	41,337
2020	46,294	45,211	45,037	44,275	43,640	43,069	42,543	42,054	41,636	41,359	41,217
2021	47,679	46,300	45,218	45,044	44,277	43,619	43,048	42,523	42,034	41,646	41,317
2022	48,982	47,683	46,305	45,224	45,044	44,253	43,596	43,027	42,502	42,042	41,602
2023	55,430	48,983	47,685	46,308	45,222	45,019	44,229	43,573	43,004	42,507	41,995
2024	53,187	55,424	48,983	47,686	46,305	45,196	44,992	44,204	43,549	43,006	42,457
2025	50,668	53,182	55,417	48,981	47,680	46,276	45,168	44,965	44,178	43,548	42,953
2026	47,910	50,664	53,176	55,409	48,973	47,648	46,246	45,140	44,937	44,174	43,492

Year	22	23	24	25	26	27	28	29	30
2011	39,455	39,875	40,745	41,797	42,501	42,476	41,436	39,641	37,570
2012	39,704	39,416	39,836	40,796	41,773	42,474	42,449	41,414	39,617
2013	40,449	39,667	39,379	39,888	40,778	41,751	42,449	42,424	41,383
2014	41,394	40,411	39,631	39,432	39,877	40,763	41,731	42,426	42,391
2015	42,069	41,355	40,375	39,682	39,425	39,867	40,749	41,713	42,394
2016	42,442	42,031	41,319	40,424	39,675	39,418	39,859	40,737	41,687
2017	42,365	42,401	41,991	41,361	40,410	39,665	39,409	39,847	40,713
2018	41,974	42,323	42,359	42,027	41,340	40,394	39,651	39,397	39,824
2019	41,557	41,932	42,280	42,391	42,001	41,317	40,374	39,635	39,372
2020	41,295	41,516	41,889	42,308	42,360	41,972	41,291	40,352	39,606
2021	41,175	41,253	41,473	41,914	42,275	42,327	41,940	41,261	40,318
2022	41,273	41,132	41,209	41,495	41,879	42,238	42,290	41,905	41,220
2023	41,556	41,228	41,087	41,228	41,458	41,841	42,198	42,250	41,858
2024	41,946	41,508	41,181	41,102	41,188	41,417	41,799	42,155	42,199
2025	42,406	41,896	41,459	41,191	41,059	41,145	41,373	41,753	42,101
2026	42,899	42,353	41,845	41,465	41,145	41,013	41,099	41,326	41,698

Appendix 10: Single Year-Age Distributions (0-30 Years, Both Sexes), Low Scenario Projections

Year	Age in single years										
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2011	50,649	48,701	47,138	45,900	44,926	44,154	43,523	42,980	42,483	42,022	41,623
2012	54,947	50,010	48,542	46,992	45,106	44,935	44,170	43,540	42,998	42,501	42,031
2013	52,670	54,265	49,850	48,391	46,199	45,114	44,950	44,186	43,557	43,016	42,510
2014	50,188	52,040	54,088	49,694	47,595	46,206	45,129	44,965	44,202	43,574	43,024
2015	47,511	49,610	51,880	53,913	48,898	47,600	46,219	45,143	44,979	44,218	43,581
2016	44,654	46,983	49,467	51,720	53,062	48,901	47,611	46,232	45,157	44,994	44,224
2017	45,118	44,169	46,853	49,318	50,917	53,059	48,910	47,621	46,244	45,170	44,998
2018	45,513	44,633	44,054	46,718	48,567	50,916	53,063	48,918	47,631	46,254	45,174
2019	45,848	45,029	44,515	43,931	46,020	48,567	50,921	53,065	48,924	47,639	46,256
2020	46,134	45,366	44,910	44,390	43,288	46,022	48,574	50,925	53,067	48,930	47,638
2021	46,382	45,654	45,246	44,782	43,748	43,293	46,030	48,579	50,928	53,068	48,928
2022	46,591	45,901	45,531	45,115	44,138	43,750	43,301	46,036	48,582	50,929	53,061
2023	46,770	46,111	45,776	45,397	44,469	44,138	43,757	43,309	46,040	48,585	50,923
2024	46,941	46,291	45,985	45,640	44,751	44,468	44,143	43,762	43,314	46,044	48,579
2025	47,122	46,463	46,162	45,846	44,994	44,749	44,471	44,147	43,766	43,319	46,039
2026	47,324	46,644	46,332	46,021	45,201	44,990	44,750	44,473	44,149	43,769	43,316

Year	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
2011	41,345	41,257	41,393	41,675	42,107	42,484	42,545	42,153	41,457	40,531	39,744
2012	41,641	41,363	41,276	41,412	41,685	42,089	42,464	42,525	42,134	41,479	40,491
2013	42,048	41,658	41,381	41,293	41,421	41,668	42,070	42,445	42,506	42,154	41,437
2014	42,525	42,064	41,675	41,397	41,302	41,404	41,650	42,052	42,427	42,524	42,111
2015	43,038	42,540	42,079	41,690	41,406	41,286	41,388	41,633	42,035	42,444	42,481
2016	43,594	43,051	42,554	42,093	41,698	41,389	41,270	41,371	41,616	42,052	42,402
2017	44,235	43,606	43,063	42,567	42,100	41,680	41,372	41,253	41,354	41,633	42,010
2018	45,008	44,245	43,616	43,075	42,572	42,081	41,662	41,355	41,235	41,369	41,591
2019	45,182	45,016	44,254	43,625	43,078	42,552	42,062	41,644	41,337	41,249	41,328
2020	46,262	45,189	45,023	44,262	43,628	43,057	42,531	42,042	41,625	41,348	41,207
2021	47,642	46,267	45,194	45,029	44,262	43,605	43,035	42,510	42,022	41,634	41,305
2022	48,929	47,644	46,270	45,199	45,027	44,238	43,582	43,013	42,489	42,029	41,589
2023	53,057	48,929	47,645	46,272	45,196	45,001	44,213	43,558	42,989	42,493	41,981
2024	50,919	53,052	48,927	47,644	46,267	45,169	44,974	44,187	43,533	42,991	42,442
2025	48,577	50,915	53,046	48,924	47,638	46,238	45,141	44,946	44,160	43,531	42,937
2026	46,038	48,573	50,909	53,038	48,915	47,605	46,208	45,112	44,918	44,156	43,475

Appendix 10 cont'd: Single Year-Age Distributions (0-30 Years, Both Sexes), Low Scenario Projections

Year	Age in single years								
	22	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
2011	39,455	39,875	40,745	41,797	42,501	42,476	41,436	39,641	37,570
2012	39,706	39,418	39,837	40,797	41,775	42,476	42,451	41,416	39,619
2013	40,452	39,669	39,382	39,891	40,781	41,754	42,451	42,427	41,385
2014	41,396	40,414	39,634	39,435	39,878	40,764	41,733	42,427	42,392
2015	42,069	41,356	40,377	39,684	39,425	39,866	40,748	41,712	42,392
2016	42,439	42,028	41,317	40,423	39,672	39,414	39,853	40,731	41,681
2017	42,359	42,396	41,986	41,357	40,405	39,658	39,400	39,838	40,702
2018	41,968	42,316	42,353	42,021	41,332	40,385	39,640	39,384	39,810
2019	41,549	41,924	42,272	42,383	41,991	41,306	40,362	39,621	39,356
2020	41,285	41,506	41,881	42,298	42,349	41,959	41,276	40,337	39,590
2021	41,164	41,242	41,462	41,905	42,263	42,313	41,925	41,245	40,301
2022	41,260	41,120	41,198	41,484	41,867	42,223	42,273	41,887	41,202
2023	41,542	41,214	41,074	41,216	41,444	41,826	42,181	42,231	41,838
2024	41,931	41,494	41,167	41,088	41,174	41,401	41,782	42,135	42,177
2025	42,390	41,881	41,444	41,176	41,043	41,128	41,355	41,734	42,079
2026	42,883	42,337	41,828	41,449	41,128	40,995	41,080	41,306	41,676

Appendix 11: Single Year-Age Distributions (0-30 Years, Both Sexes), HIV/AIDS Scenario Projections

Year	Age in single years										
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2011	53,047	53,372	53,383	52,979	52,882	52,515	52,122	51,591	50,820	50,305	49,817
2012	51,142	52,615	53,296	53,380	53,002	52,858	52,475	52,073	51,535	50,750	50,228
2013	49,655	51,290	52,428	53,237	53,413	52,731	52,611	52,272	51,902	51,401	50,641
2014	47,905	50,230	51,205	52,306	53,231	53,124	52,452	52,367	52,071	51,735	51,265
2015	45,565	48,318	49,953	51,128	52,264	53,090	52,993	52,331	52,252	51,967	51,639
2016	42,937	45,956	48,274	49,775	51,087	52,132	52,971	52,886	52,231	52,159	51,884
2017	43,649	43,247	45,867	48,173	49,660	50,995	52,031	52,885	52,807	52,158	52,093
2018	44,346	43,888	43,111	45,727	48,112	49,580	50,928	51,964	52,829	52,755	52,111
2019	44,989	44,448	43,581	43,021	45,691	48,081	49,554	50,912	51,947	52,816	52,744
2020	45,351	44,878	44,280	43,552	43,043	45,711	48,096	49,569	50,928	51,962	52,832
2021	45,865	45,174	44,787	44,273	43,583	43,078	45,736	48,118	49,588	50,947	51,983
2022	46,576	45,703	45,019	44,764	44,295	43,614	43,104	45,758	48,136	49,603	50,964
2023	47,249	46,419	45,529	44,971	44,782	44,322	43,639	43,126	45,776	48,150	49,617
2024	47,928	47,095	46,244	45,464	44,974	44,802	44,343	43,660	43,145	45,790	48,162
2025	48,615	47,773	46,912	46,176	45,458	44,983	44,819	44,361	43,676	43,160	45,802
2026	49,259	48,456	47,584	46,837	46,165	45,461	44,994	44,833	44,375	43,689	43,172

Appendix 11 cont'd: Single Year-Age Distributions (0-30 Years, Both Sexes), HIV/AIDS Scenario Projections

	Age in single years								
Year	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
2011	39,869	40,259	40,458	40,495	40,360	40,104	39,806	39,509	39,117
2012	39,177	39,864	40,262	40,474	40,518	40,387	40,126	39,814	39,500
2013	38,311	39,176	39,872	40,282	40,502	40,550	40,415	40,141	39,813
2014	39,412	38,307	39,179	39,883	40,296	40,517	40,560	40,411	40,121
2015	40,512	39,399	38,305	39,182	39,887	40,298	40,512	40,540	40,374
2016	41,564	40,494	39,390	38,305	39,181	39,883	40,286	40,483	40,494
2017	42,557	41,540	40,478	39,382	38,302	39,174	39,866	40,252	40,431
2018	43,618	42,528	41,518	40,461	39,369	38,292	39,154	39,828	40,194
2019	44,757	43,583	42,500	41,493	40,439	39,349	38,269	39,112	39,766
2020	45,603	44,717	43,548	42,467	41,461	40,408	39,314	38,225	39,048
2021	46,916	45,559	44,675	43,507	42,425	41,420	40,362	39,258	38,159
2022	48,111	46,865	45,513	44,626	43,457	42,374	41,362	40,294	39,180
2023	49,279	48,055	46,812	45,457	44,566	43,395	42,306	41,284	40,204
2024	49,623	49,218	47,995	46,747	45,391	44,494	43,317	42,217	41,182
2025	50,038	49,559	49,152	47,923	46,670	45,311	44,405	43,216	42,105
2026	50,774	49,972	49,490	49,072	47,836	46,578	45,213	44,294	43,093

Appendix 12: Demographic Indicators: High Scenario 1a Projections*

			Age			
Year	**RNI %**	**GR %**	**Annual births**	**Annual deaths**	**Dependency ratio**	**Median age**
2011	1.75	2.03	50,754	15,251	0.6	24
2012	1.71	1.98	50,363	14,956	0.59	24
2013	1.67	1.92	49,826	14,667	0.58	24
2014	1.61	1.85	49,146	14,468	0.57	24
2015	1.55	1.78	48,326	14,324	0.56	25
2016	1.49	1.71	47,372	14,203	0.56	25
2017	1.49	1.69	47,895	14,160	0.55	25
2018	1.48	1.68	48,341	14,140	0.54	26
2019	1.47	1.66	48,719	14,176	0.54	26
2020	1.46	1.63	49,043	14,267	0.53	26
2021	1.44	1.61	49,322	14,403	0.53	27
2022	1.42	1.58	49,567	14,550	0.53	27
2023	1.4	1.55	49,781	14,718	0.52	27
2024	1.38	1.52	49,986	14,910	0.52	28
2025	1.36	1.49	50,201	15,124	0.51	28
2026	1.34	1.46	50,441	15,357	0.5	28

RNI % = Rate of natural increase per cent
GR % = Growth rate per cent
*Projected mortality and fertility indicators are given in an earlier section above for all projection scenarios

Appendix 13: Demographic Indicators: High Scenario 1b Projections

			Age				
Year	**RNI %**	**GR %**	**Annual births**	**Annual deaths**	**Dependency ratio**	**Median age**	**Overall sex ratio**
2011	1.7	2	50,754	16,255	0.6	24	95.46
2012	1.66	1.9	50,433	16,126	0.59	24	95.71
2013	1.61	1.9	49,961	15,999	0.58	24	95.93
2014	1.56	1.8	49,341	15,914	0.57	24	96.14
2015	1.5	1.7	48,576	15,858	0.56	25	96.34
2016	1.43	1.7	47,672	15,829	0.55	25	96.52
2017	1.43	1.6	48,249	15,876	0.55	25	96.69
2018	1.43	1.6	48,746	15,953	0.54	26	96.84
2019	1.42	1.6	49,172	16,062	0.53	26	96.99
2020	1.41	1.6	49,539	16,214	0.53	26	97.12
2021	1.39	1.6	49,858	16,394	0.52	26	97.24
2022	1.37	1.5	50,139	16,598	0.52	27	97.36
2023	1.35	1.5	50,394	16,836	0.51	27	97.46
2024	1.33	1.5	50,639	17,105	0.5	27	97.56
2025	1.31	1.4	50,891	17,401	0.5	27	97.64
2026	1.29	1.4	51,170	17,722	0.49	28	97.72

Appendix 14: Demographic Indicators: Medium Scenario Projections

			Age				
Year	**RNI %**	**GR %**	**Annual births**	**Annual deaths**	**Dependency ratio**	**Median age**	**Overall sex ratio**
2011	2.05	2.33	60,405	18,849	0.6	24	95.46
2012	1.93	2.19	58,327	18,341	0.6	24	95.8
2013	1.8	2.05	55,836	17,848	0.59	24	96.09
2014	1.66	1.9	53,064	17,332	0.58	24	96.35
2015	1.51	1.74	50,054	16,855	0.58	25	96.57
2016	1.36	1.58	46,841	16,463	0.57	25	96.76
2017	1.36	1.56	47,053	16,320	0.56	25	96.94
2018	1.35	1.54	47,200	16,223	0.55	26	97.1
2019	1.33	1.52	47,300	16,195	0.55	26	97.25
2020	1.31	1.49	47,372	16,219	0.54	26	97.39
2021	1.29	1.46	47,438	16,315	0.53	27	97.51
2022	1.27	1.43	47,506	16,466	0.53	27	97.62
2023	1.25	1.4	47,580	16,635	0.52	27	97.72
2024	1.23	1.37	47,684	16,835	0.52	28	97.8
2025	1.21	1.34	47,832	17,055	0.51	28	97.93
2026	1.19	1.31	48,034	17,299	0.5	28	98.04

Appendix 15: Demographic Indicators: Low Scenario Projections

Year	RNI %	GR %	Annual births	Annual deaths	Dependency ratio	Median age	Overall sex ratio
2011	1.94	2.22	58,004	18,776	0.6	24	95.46
2012	1.81	2.08	55,859	18,329	0.59	24	95.67
2013	1.69	1.94	53,495	17,893	0.59	24	95.84
2014	1.56	1.8	50,924	17,463	0.58	24	95.99
2015	1.42	1.65	48,159	17,079	0.57	25	96.12
2016	1.28	1.5	45,215	16,780	0.56	25	96.23
2017	1.29	1.5	45,690	16,619	0.55	25	96.32
2018	1.29	1.49	46,093	16,506	0.54	26	96.4
2019	1.29	1.48	46,435	16,461	0.54	26	96.48
2020	1.28	1.46	46,726	16,467	0.53	26	96.54
2021	1.27	1.44	46,977	16,544	0.53	27	96.59
2022	1.26	1.41	47,197	16,695	0.52	27	96.64
2023	1.24	1.39	47,384	16,862	0.51	27	96.67
2024	1.22	1.36	47,564	17,051	0.51	28	96.71
2025	1.2	1.34	47,753	17,263	0.5	28	96.73
2026	1.19	1.31	47,965	17,495	0.49	28	96.75

Appendix 16: Demographic Indicators: HIV/AIDS Scenario Projections

Year	RNI %	GR %	Annual births	Annual deaths	Dependency ratio	Median age	Overall sex ratio	HIV population	HIV new infections	Annual AIDS-related deaths
2011	1.89	2.17	54,643	15,892	0.67	21	100.41	322,972	14,131	6,256
2012	1.78	2.04	52,620	15,537	0.66	22	100.61	331,159	13,754	5,778
2013	1.66	1.91	50,506	15,243	0.64	22	100.76	340,065	14,156	5,362
2014	1.52	1.76	48,277	15,365	0.63	22	100.9	350,500	15,773	5,356
2015	1.37	1.6	45,896	15,639	0.61	23	101.04	361,171	16,253	5,500
2016	1.23	1.45	43,319	15,816	0.59	23	101.16	370,850	15,392	5,528
2017	1.24	1.44	44,025	16,072	0.57	23	101.28	380,796	15,797	5,556
2018	1.23	1.43	44,738	16,357	0.56	24	101.38	390,987	16,190	5,590
2019	1.23	1.42	45,467	16,673	0.54	24	101.49	401,619	16,803	5,643
2020	1.23	1.41	46,219	17,099	0.53	24	101.58	412,220	17,046	5,795
2021	1.22	1.39	46,940	17,617	0.51	25	101.67	422,820	17,387	6,013
2022	1.21	1.37	47,615	18,086	0.5	25	101.75	433,328	17,584	6,170
2023	1.21	1.36	48,283	18,567	0.49	25	101.82	443,802	17,843	6,326
2024	1.2	1.34	48,960	19,062	0.48	26	101.88	453,830	17,696	6,485
2025	1.19	1.32	49,651	19,564	0.47	26	101.94	463,603	17,739	6,636
2026	1.18	1.3	50,308	20,149	0.46	26	101.99	472,944	17,618	6,782

Appendix 17: District Projections: High Scenario

District	2011	2012	2013	2014	2015	2016
Gaborone	231,592	237,105	242,601	248,051	253,432	258,726
Francistown	98,961	100,882	102,777	104,637	106,450	108,211
Lobatse	29,007	28,912	28,783	28,618	28,415	28,173
Selibe Phikwe	49,411	49,338	49,211	49,026	48,780	48,470
Orapa	9,531	9,574	9,609	9,635	9,651	9,657
Jwaneng	18,008	18,349	18,685	19,013	19,334	19,644
Sowa Town	3,598	3,685	3,772	3,858	3,943	4,027
Southern						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Kanye/Moshupa	129,247	131,107	132,909	134,638	136,284	137,836
Barolong	54,831	55,714	56,575	57,410	58,212	58,978
Ngwaketse West	13,689	14,079	14,471	14,863	15,252	15,640
South East	85,014	87,979	90,975	93,991	97,017	100,045
Kweneng						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Kweneng East	256,752	264,886	273,080	281,302	289,524	297,721
Kweneng West	47,797	48,668	49,524	50,361	51,173	51,958
Kgatleng	91,660	93,856	96,045	98,217	100,362	102,473
Central						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Central Serowe	180,500	183,806	187,058	190,237	193,324	196,308
Central Mahalapye	118,875	119,943	120,931	121,828	122,623	123,311
Central Bobonong	71,936	72,519	73,052	73,526	73,937	74,281
Central Boteti	57,376	58,499	59,608	60,697	61,759	62,791
Central Tutume	147,377	150,253	153,092	155,878	158,597	161,237
North East	60,264	61,576	62,879	64,165	65,428	66,665
North West						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Ngamiland East	90,334	92,506	94,671	96,819	98,942	101,031
Ngamiland West	59,421	60,600	61,765	62,909	64,027	65,114
Chobe	23,347	23,963	24,581	25,195	25,806	26,409
Delta	2,529	2,508	2,485	2,457	2,426	2,390
Ghanzi						
Ghanzi	43,095	44,383	45,678	46,975	48,269	49,556
Kgalagadi						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Kgalagadi South	30,016	30,506	30,984	31,448	31,894	32,321
Kgalagadi North	20,476	21,005	21,533	22,059	22,581	23,097
Total	**2,024,904**	**2,066,406**	**2,107,484**	**2,147,906**	**2,187,477**	**2,226,040**

Appendix 17 cont'd: District Projections: High Scenario

District	2017	2018	2019	2020	2021	2022
Gaborone	264,094	269,524	275,004	280,519	286,060	291,621
Francistown	109,986	111,772	113,562	115,350	117,133	118,907
Lobatse	27,910	27,625	27,315	26,979	26,617	26,228
Selibe Phikwe	48,128	47,751	47,336	46,881	46,383	45,843
Orapa	9,659	9,656	9,649	9,636	9,616	9,591
Jwaneng	19,957	20,271	20,585	20,899	21,212	21,523
Sowa Town	4,112	4,198	4,284	4,372	4,460	4,548
Southern						
District	2017	2018	2019	2020	2021	2022
Barolong	59,746	60,512	61,274	62,027	62,771	63,503
Ngwaketse West	16,033	16,434	16,839	17,249	17,663	18,081
South East	103,136	106,287	109,491	112,745	116,045	119,387
Kweneng						
District	2017	2018	2019	2020	2021	2022
Kweneng West	52,748	53,540	54,333	55,122	55,907	56,685
Kgatleng	104,614	106,780	108,966	111,166	113,378	115,598
Central						
District	2017	2018	2019	2020	2021	2022
Central Mahalapye	123,968	124,590	125,169	125,698	126,174	126,593
Central Bobonong	74,603	74,902	75,172	75,410	75,613	75,780
Central Boteti	63,832	64,879	65,929	66,978	68,025	69,067
Central Tutume	163,900	166,578	169,263	171,947	174,622	177,287
North East	67,915	69,178	70,448	71,724	73,001	74,278
North West						
District	2017	2018	2019	2020	2021	2022
Ngamiland West	66,210	67,314	68,421	69,528	70,633	71,735
Chobe	27,023	27,645	28,274	28,909	29,549	30,194
Delta	2,353	2,313	2,270	2,225	2,177	2,126
Ghanzi						
Ghanzi	50866	52199	53551	54919	56303	57699
Kgalagadi						
District	2017	2018	2019	2020	2021	2022
Kgalagadi South	32749	33176	33601	34022	34438	34848
Kgalagadi North	23620	24151	24687	25229	25774	26323
Total	**2,264,993**	**2,304,238**	**2,343,649**	**2,383,117**	**2,422,555**	**2,461,915**

Appendix 17 cont'd: District Projections: High Scenario

District	2023	2024	2025	2026
Gaborone	297,196	302,781	308,374	313,976
Francistown	120,672	122,424	124,164	125,892
Lobatse	25,811	25,366	24,894	24,394
Selibe Phikwe	45,259	44,632	43,960	43,244
Orapa	9,560	9,522	9,477	9,427
Jwaneng	21,831	22,138	22,441	22,742
Sowa Town	4,636	4,725	4,814	4,903
Southern				
District	**2023**	**2024**	**2025**	**2026**
Barolong	64,223	64,930	65,623	66,303
Ngwaketse West	18,502	18,925	19,352	19,782
South East	122,770	126,191	129,649	133,145
Kweneng				
District	**2023**	**2024**	**2025**	**2026**
Kweneng West	57,457	58,220	58,976	59,723
Kgatleng	117,824	120,054	122,288	124,526
Central				
District	**2023**	**2024**	**2025**	**2026**
Central Serowe	217,233	220,142	223,022	225872
Central Mahalapye	126,953	127,254	127,494	127,674
Central Bobonong	75,909	75,999	76,050	76,062
Central Boteti	70,104	71,134	72,157	73,173
Central Tutume	179,937	182,570	185,185	187,782
North East	75,555	76,830	78,102	79,373
North West				
District	**2023**	**2024**	**2025**	**2026**
Ngamiland East	116,229	118,438	120,651	122,868
Ngamiland West	72,830	73,920	75,003	76,080
Chobe	30,842	31,493	32,148	32,805
Delta	2,073	2,016	1,957	1,894
Ghanzi				
Ghanzi	59,109	60,530	61,961	63,405
Kgalagadi				
District	**2023**	**2024**	**2025**	**2026**
Kgalagadi South	352,51	35,647	36,036	36,418
Kgalagadi North	268,74	27,428	27,983	28,542
Total*	**2,501,145**	**2,540,215**	**2,579,109**	**2,617,834**

Note that figures may not sum exactly to projected national total due to rounding errors.

Appendix 18: District Projections: Medium Scenario

District	2011	2012	2013	2014	2015	2016
Gaborone	231,592	237,631	243,453	249,028	254,319	259,291
Francistown	98,961	101,105	103,138	105,049	106,823	108,447
Lobatse	29,007	28,976	28,884	28,731	28,515	28,235
Selibe Phikwe	49,411	49,447	49,384	49,219	48,951	48,576
Orapa	9,531	9,595	9,643	9,673	9,685	9,678
Jwaneng	18,008	18,389	18,750	19,088	19,401	19,687
Sowa Town	3,598	3,693	3,785	3,873	3,957	4,035
Southern						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Kanye/Moshupa	129,247	131,398	133,376	135,168	136,761	138,138
Barolong	54,831	55,837	56,774	57,636	58,416	59,107
Ngwaketse West	13,689	14,110	14,522	14,921	15,306	15,674
South East	85,014	88,174	91,295	94,361	97,357	100,264
Kweneng						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Kweneng East	256,752	265,472	274,039	282,410	290,537	298,372
Kweneng West	47,797	48,776	49,698	50,559	51,352	52,072
Kgatleng	91,660	94,064	96,382	98,604	100,713	102,697
Central						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Central Serowe	180,500	184,213	187,715	190,986	194,001	196,737
Central Mahalapye	118,875	120,208	121,356	122,308	123,053	123,580
Central Bobonong	71,936	72,680	73,308	73,816	74,196	74,443
Central Boteti	57,376	58,629	59,818	60,936	61,975	62,928
Central Tutume	147,377	150,586	153,630	156,492	159,152	161,589
North East	60,264	61,713	63,100	64,417	65,657	66,810
North West						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Ngamiland East	90,334	92,711	95,004	97,201	99,288	101,252
Ngamiland West	59,421	60,734	61,982	63,157	64,251	65,256
Chobe	23,347	24,017	24,667	25,295	25,896	26,467
Delta	2,529	2,514	2,493	2,467	2,434	2,396

Appendix 18 Cont'd: District Projections: Medium Scenario

Kgalagadi						
District	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Kgalagadi South	30,016	30,573	31,093	31,571	32,006	32,392
Kgalagadi North	20,476	21,051	21,609	22,146	22,660	23,147
Total	**2,024,904**	**2,070,984**	**2,114,890**	**2,156,366**	**2,195,134**	**2,230,905**

District	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Gaborone	264,311	269,365	274,441	279,528	284,618	289,703
Francistown	110,077	111,706	113,329	114,942	116,542	118,125
Lobatse	27,933	27,608	27,259	26,884	26,483	26,056
Selibe Phikwe	48,167	47,723	47,239	46,715	46,150	45,542
Orapa	9,667	9,651	9,629	9,602	9,568	9,528
Jwaneng	19,973	20,259	20,543	20,826	21,105	21,381
Sowa Town	4,115	4,195	4,276	4,356	4,437	4,518

Southern						
District	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Kanye/Moshupa	139,498	140,836	142,143	143,415	144,647	145,837
Barolong	59,795	60,476	61,148	61,808	62,454	63,086
Ngwaketse West	16,047	16,424	16,805	17,188	17,574	17,962
South East	103,221	106,224	109,267	112,347	115,460	118,602

Kweneng						
District	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Kweneng East	306,330	314,397	322,558	330,802	339,116	347,492
Kweneng West	52,791	53,509	54,221	54,927	55,625	56,312
Kgatleng	104,700	106,717	108,743	110,774	112,806	114,837

Central						
District	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Central Serowe	199,476	202,207	204,920	207,608	210,265	212,885
Central Mahalapye	124,070	124,516	124,912	125,254	125,537	125,760
Central Bobonong	74,665	74,858	75,018	75,144	75,232	75,281
Central Boteti	63,884	64,841	65,794	66,741	67,681	68,613
Central Tutume	164,034	166,480	168,916	171,339	173,742	176,121
North East	67,971	69,137	70,304	71,470	72,633	73,790

North West						
District	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Ngamiland East	103,235	105,232	107,238	109,250	111,263	113,275
Ngamiland West	66,265	67,274	68,281	69,283	70,277	71,263
Chobe	27,045	27,628	28,216	28,807	29,400	29,995
Delta	2,355	2,312	2,266	2,217	2,166	2,112
Ghanzi						
Ghanzi	50,908	52,168	53,441	54,725	56,019	57,320

Appendix 18 : District Projections: Medium Scenario

Kgalagadi						
District	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Kgalagadi South	32,776	33,157	33,532	33,902	34,264	34,618
Kgalagadi North	23,640	24,137	24,637	25,140	25,644	26,149
Total	**2,266,857**	**2,302,878**	**2,338,851**	**2,374,698**	**2,410,338**	**2,445,720**

District	**2023**	**2024**	**2025**	**2026**
Gaborone	294,783	299,856	304,926	309,995
Francistown	119,692	121,242	122,776	124,296
Lobatse	25,602	25,121	24,616	24,085
Selibe Phikwe	44,892	44,200	43,468	42,696
Orapa	9,482	9,430	9,371	9,307
Jwaneng	21,654	21,924	22,190	22,454
Sowa Town	4,599	4,680	4,760	4,841

Southern				
District	**2023**	**2024**	**2025**	**2026**
Kanye/Moshupa	146,984	148,088	149,150	150,174
Barolong	63,702	64,303	64,889	65,462
Ngwaketse West	18,351	18,743	19,136	19,531
South East	121,773	124,971	128,199	131,457

Kweneng				
District	**2023**	**2024**	**2025**	**2026**
Kweneng East	355,928	364,422	372,977	381,596
Kweneng West	56,990	57,658	58,316	58,966
Kgatleng	116,867	118,894	120,921	122,947

Central				
District	**2023**	**2024**	**2025**	**2026**
Central Serowe	215,469	218,016	220,528	223,008
Central Mahalapye	125,922	126,025	126,068	126,056
Central Bobonong	75,292	75,264	75,199	75,098
Central Boteti	69,534	70,446	71,350	72,246
Central Tutume	178,476	180,806	183,114	185,401
North East	74,942	76,088	77,229	78,366

North West				
District	**2023**	**2024**	**2025**	**2026**
Ngamiland East	115,285	117,294	119,302	121,311
Ngamiland West	72,239	73,206	74,165	75,116
Chobe	30,591	31,189	31,788	32,389
Delta	2,056	1,997	1,935	1,870
Ghanzi				
Ghanzi	58,629	59,945	61,269	62,601
Kgalagadi				
Kgalagadi South	34,965	35,303	35,633	35,956
Kgalagadi North	26,656	27,163	27,671	28,180
Total*	**2,480,833**	**2,515,674**	**2,550,268**	**2,584,645**

Note that figures may not sum exactly to projected national total due to rounding errors.

Appendix 19: District Projections: Low Scenario

District	2011	2012	2013	2014	2015	2016
Gaborone	231,592	237,349	242,896	248,207	253,250	257,993
Francistown	98,961	100,985	102,902	104,702	106,374	107,904
Lobatse	29,007	28,941	28,818	28,636	28,395	28,093
Selibe Phikwe	49,411	49,388	49,271	49,057	48,745	48,333
Orapa	9,531	9,584	9,621	9,641	9,644	9,630
Jwaneng	18,008	18,368	18,707	19,025	19,320	19,588
Sowa Town	3,598	3,689	3,776	3,860	3,940	4,015
Southern						
Kanye/Moshupa	129,247	131,242	133,071	134,723	136,185	137,446
Barolong	54,831	55,771	56,644	57,446	58,170	58,811
Ngwaketse West	13,689	14,094	14,489	14,872	15,242	15,595
South East	85,014	88,070	91,086	94,050	96,948	99,761
Kweneng						
Kweneng East	256,752	265,158	273,412	281,479	289,315	296,877
Kweneng West	47,797	48,718	49,584	50,392	51,136	51,811
Kgatleng	91,660	93,952	96,162	98,278	100,290	102,182
Central						
Central Serowe	180,500	183,995	187,286	190,356	193,185	195,752
Central Mahalapye	118,875	120,066	121,078	121,904	122,535	122,961
Central Bobonong	71,936	72,594	73,141	73,572	73,884	74,070
Central Boteti	57,376	58,559	59,681	60,735	61,715	62,613
Central Tutume	147,377	150,407	153,279	155,976	158,483	160,780
North East	60,264	61,639	62,955	64,205	65,381	66,476
North West						
Ngamiland East	90,334	92,601	94,786	96,880	98,871	100,745
Ngamiland,West	59421	60662	61840	62949	63981	64929
Chobe	23347	23988	24610	25211	25787	26334
Delta	2529	2511	2488	2458	2424	2384
Ghanzi						
Ghanzi	43095	44429	45734	47004	48234	49415
Kgalagadi						
Kgalagadi,,South	30016	30537	31022	31467	31871	32229
Kgalagadi,North	20476	21026	21559	22073	22565	23031
Total	**2,024,904**	**2,068,529**	**2,110,050**	**2,149,255**	**2,185,903**	**2,219,732**

District	2017	2018	2019	2020	2021	2022
Gaborone	262,814	267,701	272,639	277,615	282,617	287,633
Francistown	109,454	111,016	112,585	114,156	115,723	117,281
Lobatse	27,775	27,438	27,080	26,700	26,297	25,869
Selibe,Phikwe	47,895	47,428	46,929	46,395	45,825	45,216
Orapa	9,612	9,591	9,566	9,536	9,501	9,460
Jwaneng	19,860	20,134	20,408	20,683	20,957	21,228
Sowa,Town	4,092	4,169	4,248	4,327	4,406	4,486

Appendix 19: District Projections: Low Scenario

District	2017	2018	2019	2020	2021	2022
Southern						
Kanye/Moshupa	138,708	139,966	141,210	142,433	143,631	144,795
Barolong	59,456	60,103	60,747	61,385	62,015	62,635
Ngwaketse West	15,956	16,322	16,694	17,070	17,450	17,833
South East	102,636	105,568	108,550	111,578	114,648	117,754
Kweneng						
Kweneng East	304,595	312,455	320,440	328,538	336,732	345,008
Kweneng West	52,492	53,178	53,865	54,551	55,234	55,910
Kgatleng	104,107	106,057	108,029	110,016	112,013	114,017
Central						
Central Serowe	198,347	200,958	203,574	206,187	208,787	211,364
Central Mahalapye	123,368	123,747	124,092	124,397	124,655	124,861
Central Bobonong	74,242	74,395	74,526	74,630	74,703	74,743
CentralBoteti	63,523	64,440	65,362	66,285	67,206	68,122
Central Tutume	163,106	165,451	167,807	170,166	172,521	174,862
North East	67,586	68,710	69,843	70,981	72,122	73,262
North West						
Ngamiland,East	102,650	104,582	106,534	108,502	110,481	112,465
Ngamiland West	65,889	66,859	67,833	68,809	69,783	70,753
Chobe	26,892	27,458	28,031	28,610	29,194	29,781
Delta	2,341	2,297	2,251	2,202	2,151	2,097
Ghanzi						
Ghanzi	50,620	51,846	53,090	54,351	55,625	56,910
Kgalagadi						
Kgalagadi South	32,590	32,952	33,312	33,670	34,023	34,371
Kgalagadi North	23,506	23,988	24,475	24,968	25,464	25,963
Total	**2,254,021**	**2,288,651**	**2,323,493**	**2,358,445**	**2,393,396**	**2,428,241**

District	2023	2024	2025	2026
Gaborone	292,656	297,682	302,711	307,741
Francistown	118,828	120,363	121,884	123,393
Lobatse	25,417	24,939	24,437	23,910
Selibe Phikwe	44,568	43,880	43,152	42,385
Orapa	9,414	9,361	9,303	9,239
Jwaneng	21,498	21,765	22,029	22,291
Sowa Town	4,566	4,646	4,726	4,806
Southern				
Kanye/Moshupa	145,923	147,014	148,067	149,082
Barolong	63,242	63,837	64,418	64,986
Ngwaketse West	18,219	18,607	18,997	19,389
South East	120,894	124,065	127,268	130,501
Kweneng				
Kweneng East	353,359	361,780	370,268	378,822
Kweneng West	56,579	57,240	57,893	58,537

Appendix 19 cont'd: District Projections: Low Scenario

District	2023	2024	2025	2026
Kgatleng	116,023	118,032	120,042	122,053
Central				
Central Serowe	213,914	216,435	218,926	221,387
Central Mahalapye	125,014	125,111	125,153	125,139
Central Bobonong	74,749	74,719	74,653	74,552
Central Boteti	69,032	69,936	70,832	71,721
Central Tutume	177,188	179,495	181,784	184,053
North East	74,401	75,536	76,668	77,797
North West				
Ngamiland East	114,453	116,444	118,436	120,429
Ngamiland West	71,718	72,675	73,626	74,570
Chobe	30,371	30,963	31,557	32,154
Delta	2,041	1,982	1,921	1,857
Ghanzi				
Ghanzi	58,206	59,510	60,824	62,146
Kgalagadi				
Kgalagadi South	34,712	35,047	35,374	35,695
Kgalagadi North	26,463	26,966	27,470	27,975
Total*	**2,462,930**	**2,497,435**	**2,531,743**	**2,565,855**

Note that figures may not sum exactly to projected national total due to rounding errors.

Appendix 20: Urban Rural Projections, Botswana: High Scenario

Year	Total population	Urban population	Rural population
2011	2,024,904	1,297,287	727,617
2012	2,066,406	1,358,689	707,717
2013	2,107,484	1,406,493	700,991
2014	2,147,906	1,454,654	693,252
2015	2,187,477	1,503,016	684,461
2016	2,226,040	1,551,445	674,595
2017	2,264,993	1,600,899	664,094
2018	2,304,238	1,651,317	652,921
2019	2,343,649	1,702,618	641,031
2020	2,383,117	1,754,724	628,393
2021	2,422,555	1,807,572	614,983
2022	2,461,915	1,861,125	600,790
2023	2,501,145	1,915,339	585,806
2024	2,540,215	1,970,187	570,028
2025	2,579,109	2,025,651	553,458
2026	2,617,834	2,081,732	536,102

Appendix 21: Urban Rural Projections, Botswana: Medium Scenario

Year	Total population	Urban population	Rural population
2011	2,024,904	1,297,287	727,617
2012	2,070,984	1,361,699	709,285
2013	2,114,890	1,411,436	703,454
2014	2,156,366	1,460,383	695,983
2015	2,195,134	1,508,277	686,857
2016	2,230,905	1,554,836	676,069
2017	2,266,857	1,602,216	664,641
2018	2,302,878	1,650,343	652,535
2019	2,338,851	1,699,132	639,719
2020	2,374,698	1,748,525	626,173
2021	2,410,338	1,798,457	611,881
2022	2,445,720	1,848,882	596,838
2023	2,480,833	1,899,784	581,049
2024	2,515,674	1,951,153	564,521
2025	2,550,268	2,002,999	547,269
2026	2,584,645	2,055,339	529,306

Appendix 22: Urban Rural Projections, Botswana: Low Scenario

Year	Total population	Urban population	Rural population
2011	2,024,904	1,297,287	727,617
2012	2,068,529	1,360,085	708,444
2013	2,110,050	1,408,206	701,844
2014	2,149,255	1,455,567	693,688
2015	2,185,903	1,501,935	683,968
2016	2,219,732	1,547,049	672,683
2017	2,254,021	1,593,144	660,877
2018	2,288,651	1,640,147	648,504
2019	2,323,493	1,687,975	635,518
2020	2,358,445	1,736,558	621,887
2021	2,393,396	1,785,816	607,580
2022	2,428,241	1,835,669	592,572
2023	2,462,930	1,886,075	576,855
2024	2,497,435	1,937,007	560,428
2025	2,531,743	1,988,450	543,293
2026	2,565,855	2,040,397	525,458

Appendix 23: Urban Rural Projections, Gaborone: High Scenario

Year	Total population	Urban population	Rural population
2011	231,592	231,592	-
2012	237,105	237,105	-
2013	242,601	242,601	-
2014	248,051	248,051	-
2015	253,432	253,432	-
2016	258,726	258,726	-
2017	264,094	264,094	-
2018	269,524	269,524	-
2019	275,004	275,004	-
2020	280,519	280,519	-
2021	286,060	286,060	-
2022	291,621	291,621	-
2023	297,196	297,196	-
2024	302,781	302,781	-
2025	308,374	308,374	-
2026	313,976	313,976	-

Appendix 24: Urban Rural Projections, Gaborone: Medium Scenario

Year	Total population	Urban population	Rural population
2011	231,592	231,592	-
2012	237,631	237,631	-
2013	243,453	243,453	-
2014	249,028	249,028	-
2015	254,319	254,319	-
2016	259,291	259,291	-
2017	264,311	264,311	-
2018	269,365	269,365	-
2019	274,441	274,441	-
2020	279,528	279,528	-
2021	284,618	284,618	-
2022	289,703	289,703	-
2023	294,783	294,783	-
2024	299,856	299,856	-
2025	304,926	304,926	-
2026	309,995	309,995	-

Appendix 25: Urban Rural Projections, Gaborone: Low Scenario

Year	Total population	Urban population	Rural population
2011	231,592	231,592	-
2012	237,349	237,349	-
2013	242,896	242,896	-
2014	248,207	248,207	-
2015	253,250	253,250	-
2016	257,993	257,993	-
2017	262,814	262,814	-
2018	267,701	267,701	-
2019	272,639	272,639	-
2020	277,615	277,615	-
2021	282,617	282,617	-
2022	287,633	287,633	-
2023	292,656	292,656	-
2024	297,682	297,682	-
2025	302,711	302,711	-
2026	307,741	307,741	-

Appendix 26: Urban Rural Projections, Francistown: High Scenario

Year	Total population	Urban population	Rural population
2011	98,961	98,961	-
2012	100,882	100,882	-
2013	102,777	102,777	-
2014	104,637	104,637	-
2015	106,450	106,450	-
2016	108,211	108,211	-
2017	109,986	109,986	-
2018	111,772	111,772	-
2019	113,562	113,562	-
2020	115,350	115,350	-
2021	117,133	117,133	-
2022	118,907	118,907	-
2023	120,672	120,672	-
2024	122,424	122,424	-
2025	124,164	124,164	-
2026	125,892	125,892	-

Appendix 27: Urban Rural Projections, Francistown: Medium Scenario

Year	Total population	Urban population	Rural population
2011	98,961	98,961	-
2012	101,105	101,105	-
2013	103,138	103,138	-
2014	105,049	105,049	-
2015	106,823	106,823	-
2016	108,447	108,447	-
2017	110,077	110,077	-
2018	111,706	111,706	-
2019	113,329	113,329	-
2020	114,942	114,942	-
2021	116,542	116,542	-
2022	118,125	118,125	-
2023	119,692	119,692	-
2024	121,242	121,242	-
2025	122,776	122,776	-
2026	124,296	124,296	-

Appendix 28: Urban Rural Projections, Francistown: Low Scenario

Year	Total population	Urban population	Rural population
2011	98,961	98,961	-
2012	100,985	100,985	-
2013	102,902	102,902	-
2014	104,702	104,702	-
2015	106,374	106,374	-
2016	107,904	107,904	-
2017	109,454	109,454	-
2018	111,016	111,016	-
2019	112,585	112,585	-
2020	114,156	114,156	-
2021	115,723	115,723	-
2022	117,281	117,281	-
2023	118,828	118,828	-
2024	120,363	120,363	-
2025	121,884	121,884	-
2026	123,393	123,393	-

Appendix 29: Urban Rural Projections, Lobatse: High Scenario

Year	Total population	Urban population	Rural population
2011	29,007	29,007	-
2012	28,912	28,912	-
2013	28,783	28,783	-
2014	28,618	28,618	-
2015	28,415	28,415	-
2016	28,173	28,173	-
2017	27,910	27,910	-
2018	27,625	27,625	-
2019	27,315	27,315	-
2020	26,979	26,979	-
2021	26,617	26,617	-
2022	26,228	26,228	-
2023	25,811	25,811	-
2024	25,366	25,366	-
2025	24,894	24,894	-
2026	24,394	24,394	-

Appendix 30: Urban Rural Projections, Lobatse: Medium Scenario

Year	Total population	Urban population	Rural population
2011	29,007	29,007	-
2012	28,976	28,976	-
2013	28,884	28,884	-
2014	28,731	28,731	-
2015	28,515	28,515	-
2016	28,235	28,235	-
2017	27,933	27,933	-
2018	27,608	27,608	-
2019	27,259	27,259	-
2020	26,884	26,884	-
2021	26,483	26,483	-
2022	26,056	26,056	-
2023	25,602	25,602	-
2024	25,121	25,121	-
2025	24,616	24,616	-
2026	24,085	24,085	-

Appendix 31: Urban Rural Projections, Lobatse: Low Scenario

Year	Total population	Urban population	Rural population
2011	29,007	29,007	-
2012	28,941	28,941	-
2013	28,818	28,818	-
2014	28,636	28,636	-
2015	28,395	28,395	-
2016	28,093	28,093	-
2017	27,775	27,775	-
2018	27,438	27,438	-
2019	27,080	27,080	-
2020	26,700	26,700	-
2021	26,297	26,297	-
2022	25,869	25,869	-
2023	25,417	25,417	-
2024	24,939	24,939	-
2025	24,437	24,437	-
2026	23,910	23,910	-

Appendix 32: Urban Rural Projections, Selibe-Phikwe: High Scenario

Year	Total population	Urban population	Rural population
2011	49,411	49,411	-
2012	49,338	49,338	-
2013	49,211	49,211	-
2014	49,026	49,026	-
2015	48,780	48,780	-
2016	48,470	48,470	-
2017	48,128	48,128	-
2018	47,751	47,751	-
2019	47,336	47,336	-
2020	46,881	46,881	-
2021	46,383	46,383	-
2022	45,843	45,843	-
2023	45,259	45,259	-
2024	44,632	44,632	-
2025	43,960	43,960	-
2026	43,244	43,244	-

Appendix 33: Urban Rural Projections, Selibe-Phikwe: Medium Scenario

Year	Total population	Urban population	Rural population
2011	49,411	49,411	-
2012	49,447	49,447	-
2013	49,384	49,384	-
2014	49,219	49,219	-
2015	48,951	48,951	-
2016	48,576	48,576	-
2017	48,167	48,167	-
2018	47,723	47,723	-
2019	47,239	47,239	-
2020	46,715	46,715	-
2021	46,150	46,150	-
2022	45,542	45,542	-
2023	44,892	44,892	-
2024	44,200	44,200	-
2025	43,468	43,468	-
2026	42,696	42,696	-

Appendix 34: Urban Rural Projections, Selibe-Phikwe: Low Scenario

Year	Total population	Urban population	Rural population
2011	49,411	49,411	-
2012	49,388	9,388	-
2013	49,271	49,271	-
2014	49,057	49,057	-
2015	48,745	48,745	-
2016	48,333	48,333	-
2017	47,895	47,895	-
2018	47,428	47,428	-
2019	46,929	46,929	-
2020	46,395	46,395	-
2021	45,825	45,825	-
2022	45,216	45,216	-
2023	44,568	44,568	-
2024	43,880	43,880	-
2025	3,152	43,152	-
2026	42,385	42,385	-

Appendix 35: Urban Rural Projections, Orapa: High Scenario

Year	Total population	Urban population	Rural population
2011	9,531	9,531	-
2012	9,574	9,574	-
2013	9,609	9,609	-
2014	9,635	9,635	-
2015	9,651	9,651	-
2016	9,657	9,657	-
2017	9,659	9,659	-
2018	9,656	9,656	-
2019	9,649	9,649	-
2020	9,636	9,636	-
2021	9,616	9,616	-
2022	9,591	9,591	-
2023	9,560	9,560	-
2024	9,522	9,522	-
2025	9,477	9,477	-
2026	9,427	9,427	-

Appendix 36: Urban Rural Projections, Orapa: Medium Scenario

Year	Total population	Urban population	Rural population
2011	9,531	9,531	-
2012	9,595	9,595	-
2013	9,643	9,643	-
2014	9,673	9,673	-
2015	9,685	9,685	-
2016	9,678	9,678	-
2017	9,667	9,667	-
2018	9,651	9,651	-
2019	9,629	9,629	-
2020	9,602	9,602	-
2021	9,568	9,568	-
2022	9,528	9,528	-
2023	9,482	9,482	-
2024	9,430	9,430	-
2025	9,371	9,371	-
2026	9,307	9,307	-

Appendix 37: Urban Rural Projections, Orapa: Low Scenario

Year	Total population	Urban population	Rural population
2011	9,531	9,531	-
2012	9,584	9,584	-
2013	9,621	9,621	-
2014	9,641	9,641	-
2015	9,644	9,644	-
2016	9,630	9,630	-
2017	9,612	9,612	-
2018	9,591	9,591	-
2019	9,566	9,566	-
2020	9,536	9,536	-
2021	9,501	9,501	-
2022	9,460	9,460	-
2023	9,414	9,414	-
2024	9,361	9,361	-
2025	9,303	9,303	-
2026	9,239	9,239	-

Appendix 38: Urban Rural Projections, Jwaneng: High Scenario

Year	Total population	Urban population	Rural population
2011	18,008	18,008	-
2012	18,349	18,349	-
2013	18,685	18,685	-
2014	19,013	19,013	-
2015	19,334	19,334	-
2016	19,644	19,644	-
2017	19,957	19,957	-
2018	20,271	20,271	-
2019	20,585	20,585	-
2020	20,899	20,899	-
2021	21,212	21,212	-
2022	21,523	21,523	-
2023	21,831	21,831	-
2024	22,138	22,138	-
2025	22,441	22,441	-
2026	22,742	22,742	-

Appendix 39: Urban Rural Projections, Jwaneng: Medium Scenario

Year	Total population	Urban population	Rural population
2011	18,008	18,008	-
2012	18,389	18,389	-
2013	18,750	18,750	-
2014	19,088	19,088	-
2015	19,401	19,401	-
2016	19,687	19,687	-
2017	19,973	19,973	-
2018	20,259	20,259	-
2019	20,543	20,543	-
2020	20,826	20,826	-
2021	21,105	21,105	-
2022	21,381	21,381	-
2023	21,654	21,654	-
2024	21,924	21,924	-
2025	22,190	22,190	-
2026	22,454	22,454	-

Appendix 40: Urban Rural Projections, Jwaneng: Low Scenario

Year	Total population	Urban population	Rural population
2011	18,008	18,008	-
2012	18,368	18,368	-
2013	18,707	18,707	-
2014	19,025	19,025	-
2015	19,320	19,320	-
2016	19,588	19,588	-
2017	19,860	19,860	-
2018	20,134	20,134	-
2019	20,408	20,408	-
2020	20,683	20,683	-
2021	20,957	20,957	-
2022	21,228	21,228	-
2023	21,498	21,498	-
2024	21,765	21,765	-
2025	22,029	22,029	-
2026	22,291	22,291	-

Appendix 41: Urban Rural Projections, Sowa Town: High Scenario

Year	Total population	Urban population	Rural population
2011	3,598	3,598	-
2012	3,685	3,685	-
2013	3,772	3,772	-
2014	3,858	3,858	-
2015	3,943	3,943	-
2016	4,027	4,027	-
2017	4,112	4,112	-
2018	4,198	4,198	-
2019	4,284	4,284	-
2020	4,372	4,372	-
2021	4,460	4,460	-
2022	4,548	4,548	-
2023	4,636	4,636	-
2024	4,725	4,725	-
2025	4,814	4,814	-
2026	4,903	4,903	-

Appendix 42: Urban Rural Projections, Sowa Town: Medium Scenario

Year	Total population	Urban population	Rural population
2011	3,598	3,598	-
2012	3,693	3,693	-
2013	3,785	3,785	-
2014	3,873	3,873	-
2015	3,957	3,957	-
2016	4,035	4,035	-
2017	4,115	4,115	-
2018	4,195	4,195	-
2019	4,276	4,276	-
2020	4,356	4,356	-
2021	4,437	4,437	-
2022	4,518	4,518	-
2023	4,599	4,599	-
2024	4,680	4,680	-
2025	4,760	4,760	-
2026	4,841	4,841	-

Appendix 43: Urban Rural Projections, Sowa Town: Low Scenario

Year	Total population	Urban population	Rural population
2011	3,598	3,598	-
2012	3,689	3,689	-
2013	3,776	3,776	-
2014	3,860	3,860	-
2015	3,940	3,940	-
2016	4,015	4,015	-
2017	4,092	4,092	-
2018	4,169	4,169	-
2019	4,248	4,248	-
2020	4,327	4,327	-
2021	4,406	4,406	-
2022	4,486	4,486	-
2023	4,566	4,566	-
2024	4,646	4,646	-
2025	4,726	4,726	-
2026	4,806	4,806	-

Appendix 44: Urban Rural Projections, Ngwaketse: High Scenario

Year	Total population	Urban population	Rural population
2011	129,247	82,804	46,443
2012	131,107	86,205	44,902
2013	132,909	88,701	44,208
2014	134,638	91,183	43,455
2015	136,284	93,640	42,643
2016	137,836	96,065	41,771
2017	139,384	98,516	40,867
2018	140,919	100,989	39,930
2019	142,435	103,476	38,958
2020	143,923	105,973	37,951
2021	145,380	108,475	36,906
2022	146,803	110,978	35,825
2023	148,187	113,479	34,708
2024	149,532	115,977	33,555
2025	150,837	118,469	32,369
2026	152,103	120,954	31,149

Appendix 45: Urban Rural Projections, Ngwaketse: Medium Scenario

Year	Total population	Urban population	Rural population
2011	129,247	82,804	46,443
2012	131,398	86,396	45,002
2013	133,376	89,013	44,363
2014	135,168	91,542	43,627
2015	136,761	93,968	42,792
2016	138,138	96,275	41,862
2017	139,498	98,598	40,901
2018	140,836	100,929	39,907
2019	142,143	103,264	38,879
2020	143,415	105,599	37,816
2021	144,647	107,928	36,720
2022	145,837	110,248	35,589
2023	146,984	112,558	34,426
2024	148,088	114,857	33,231
2025	149,150	117,144	32,007
2026	150,174	119,420	30,754

Appendix 46: Urban Rural Projections, Ngwaketse: Low Scenario

Year	Total population	Urban population	Rural population
2011	129,247	82,619	46,628
2012	131,242	86,122	45,120
2013	133,071	89,088	43,983
2014	134,723	91,980	42,743
2015	136,185	94,784	41,402
2016	137,446	97,482	39,964
2017	138,708	100,214	38,495
2018	139,966	102,974	36,991
2019	141,210	105,757	35,452
2020	142,433	108,557	33,877
2021	143,631	111,367	32,263
2022	144,795	114,182	30,612
2023	145,923	116,998	28,925
2024	147,014	119,813	27,201
2025	148,067	122,624	25,443
2026	149,082	125,430	23,653

Appendix 47: Urban Rural Projections, Barolong: High Scenario

Year	Total population	Urban population	Rural population
2011	54,831	-	54,831
2012	55,714	-	55,714
2013	56,575	-	56,575
2014	57,410	-	57,410
2015	58,212	-	58,212
2016	58,978	-	58,978
2017	59,746	-	59,746
2018	60,512	-	60,512
2019	61,274	-	61,274
2020	62,027	-	62,027
2021	62,771	-	62,771
2022	63,503	-	63,503
2023	64,223	-	64,223
2024	64,930	-	64,930
2025	65,623	-	65,623
2026	66,303	-	66,303

Appendix 48: Urban Rural Projections, Barolong: Medium Scenario

Year	Total population	Urban population	Rural population
2011	54,831	-	54,831
2012	55,837	-	55,837
2013	56,774	-	56,774
2014	57,636	-	57,636
2015	58,416	-	58,416
2016	59,107	-	59,107
2017	59,795	-	59,795
2018	60,476	-	60,476
2019	61,148	-	61,148
2020	61,808	-	61,808
2021	62,454	-	62,454
2022	63,086	-	63,086
2023	63,702	-	63,702
2024	64,303	-	64,303
2025	64,889	-	64,889
2026	65,462	-	65,462

Appendix 49: Urban Rural Projections, Barolong: Low Scenario

Year	Total population	Urban population	Rural population
2011	54,831	-	54,831
2012	55,771	-	55,771
2013	56,644	-	56,644
2014	57,446	-	57,446
2015	58,170	-	58,170
2016	58,811	-	58,811
2017	59,456	-	59,456
2018	60,103	-	60,103
2019	60,747	-	60,747
2020	61,385	-	61,385
2021	62,015	-	62,015
2022	62,635	-	62,635
2023	63,242	-	63,242
2024	63,837	-	63,837
2025	64,418	-	64,418
2026	64,986	-	64,986

Appendix 50: Urban Rural Projections, Ngwaketse West: High Scenario

Year	Total population	Urban population	Rural population
2011	13,689	11,323	2,366
2012	14,079	12,817	1,262
2013	14,471	14,367	104
2014	14,863	14,863	-
2015	15,252	15,252	-
2016	15,640	15,640	-
2017	16,033	16,033	-
2018	16,434	16,434	-
2019	16,839	16,839	-
2020	17,249	17,249	-
2021	17,663	17,663	-
2022	18,081	18,081	-
2023	18,502	18,502	-
2024	18,925	18,925	-
2025	19,352	19,352	-
2026	19,782	19,782	-

Appendix 51: Urban Rural Projections, Ngwaketse West: Medium Scenario

Year	Total population	Urban population	Rural population
2011	13,689	11,323	2,366
2012	14,110	12,845	1,265
2013	14,522	14,417	105
2014	14,921	14,921	-
2015	15,306	15,306	-
2016	15,674	15,674	-
2017	16,047	16,047	-
2018	16,424	16,424	-
2019	16,805	16,805	-
2020	17,188	17,188	-
2021	17,574	17,574	-
2022	17,962	17,962	-
2023	18,351	18,351	-
2024	18,743	18,743	-
2025	19,136	19,136	-
2026	9,531	19,531	-

Appendix 52: Urban Rural Projections, Ngwaketse West: Low Scenario

Year	Total population	Urban population	Rural population
2011	13,689	11,323	2,366
2012	14,094	12,830	1,26
2013	14,489	14,384	104
2014	14,872	14,872	-
2015	15,242	15,242	-
2016	15,595	15,595	-
2017	15,956	15,956	-
2018	16,322	16,322	-
2019	16,694	16,694	-
2020	17,070	17,070	-
2021	17,450	17,450	-
2022	17,833	17,833	-
2023	18,219	18,219	-
2024	18,607	18,607	-
2025	18,997	18,997	-
2026	19,389	19,389	

Appendix 53: Urban Rural Projections, South East: High Scenario

Year	Total population	Urban population	Rural population
2011	85,014	72,915	12,099
2012	87,979	77,313	10,667
2013	90,975	81,469	9,507
2014	93,991	85,742	8,249
2015	97,017	90,125	6,892
2016	100,045	94,610	5,435
2017	103,136	99,257	3,879
2018	106,287	104,064	2,223
2019	109,491	109,029	462
2020	112,745	112,745	-
2021	116,045	116,045	-
2022	119,387	119,387	-
2023	122,770	122,770	-
2024	126,191	126,191	-
2025	129,649	129,649	-
2026	133,145	133,145	-

Appendix 54: Urban Rural Projections, South East: Medium Scenario

Year	Total population	Urban population	Rural population
2011	85,014	72,915	12,099
2012	88,174	77,484	10,690
2013	91,295	81,755	9,540
2014	94,361	86,080	8,282
2015	97,357	90,441	6,916
2016	100,264	94,817	5,447
2017	103,221	99,338	3,882
2018	106,224	104,002	2,221
2019	109,267	108,806	461
2020	112,347	112,347	-
2021	115,460	115,460	-
2022	118,602	118,602	-
2023	121,773	121,773	-
2024	124,971	124,971	-
2025	128,199	128,199	-
2026	131,457	131,457	-

Appendix 55: Urban Rural Projections, South East: Low Scenario

Year	Total population	Urban population	Rural population
2011	85,014	72,915	12,099
2012	88,070	77,392	10,678
2013	91,086	81,568	9,518
2014	94,050	85,796	8,254
2015	96,948	90,061	6,887
2016	99,761	94,342	5,419
2017	102,636	98,776	3,860
2018	105,568	103,360	2,208
2019	108,550	108,092	458
2020	111,578	111,578	-
2021	114,648	114,648	-
2022	117,754	117,754	-
2023	120,894	120,894	-
2024	124,065	124,065	-
2025	127,268	127,268	-
2026	130,501	130,501	-

Appendix 56: Urban Rural Projections, Kweneng East: High Scenario

Year	Total population	Urban population	Rural population
2011	256,752	207,252	49,500
2012	264,886	218,121	46,765
2013	273,080	229,414	43,665
2014	281,302	241,002	40,300
2015	289,524	252,861	36,662
2016	297,721	264,969	32,751
2017	306,078	277,492	28,585
2018	314,583	290,427	24,156
2019	323,220	303,766	19,454
2020	331,974	317,501	14,474
2021	340,834	331,626	9,208
2022	349,793	346,140	3,653
2023	358,842	358,842	-
2024	367,977	367,977	-
2025	377,195	377,195	-
2026	386,496	386,496	-

Appendix 57: Urban Rural Projections, Kweneng East: Medium Scenario

Year	Total population	Urban population	Rural population
2011	256,752	207,252	49,500
2012	265,472	218,604	46,869
2013	274,039	230,220	43,819
2014	282,410	241,952	40,458
2015	290,537	253,747	36,791
2016	298,372	265,548	32,823
2017	306,330	277,721	28,609
2018	314,397	290,256	24,142
2019	322,558	303,144	19,414
2020	330,802	316,379	14,423
2021	339,116	329,954	9,162
2022	347,492	343,863	3,629
2023	355,928	355,928	-
2024	364,422	364,422	-
2025	372,977	372,977	-
2026	381,596	381,596	-

Appendix 58: Urban Rural Projections, Kweneng East: Low Scenario

Year	Total population	Urban population	Rural population
2011	256,752	207,252	49,500
2012	265,158	218,345	46,813
2013	273,412	229,693	43,719
2014	281,479	241,154	40,325
2015	289,315	252,679	36,636
2016	296,877	264,219	32,659
2017	304,595	276,148	28,447
2018	312,455	288,463	23,992
2019	320,440	301,153	19,287
2020	328,538	314,214	14,324
2021	336,732	327,634	9,098
2022	345,008	341,405	3,603
2023	353,359	353,359	-
2024	361,780	361,780	-
2025	370,268	370,268	-
2026	378,822	378,822	-

Appendix 59: Urban Rural Projections, Kweneng West: High Scenario

Year	Total population	Urban population	Rural population
2011	47,797	7,244	40,553
2012	48,668	7,387	41,280
2013	49,524	7,531	41,993
2014	50,361	7,673	42,688
2015	51,173	7,811	43,362
2016	51,958	7,946	44,012
2017	52,748	8,081	44,666
2018	53,540	8,218	45,322
2019	54,333	8,355	45,978
2020	55,122	8,492	46,630
2021	55,907	8,629	47,278
2022	56,685	8,765	47,920
2023	57,457	8,900	48,556
2024	58,220	9,035	49,185
2025	58,976	9,169	49,807
2026	59,723	9,302	50,421

Appendix 60: Urban Rural Projections, Kweneng West: Medium Scenario

Year	Total population	Urban population	Rural population
2011	47,797	7,244	40,553
2012	48,776	7,404	41,372
2013	49,698	7,558	42,140
2014	50,559	7,703	42,856
2015	51,352	7,839	43,514
2016	52,072	7,963	44,109
2017	52,791	8,088	44,703
2018	53,509	8,213	45,296
2019	54,221	8,338	45,883
2020	54,927	8,462	46,465
2021	55,625	8,585	47,039
2022	56,312	8,707	47,605
2023	56,990	8,828	48,162
2024	57,658	8,948	48,710
2025	58,316	9,066	49,250
2026	58,966	9,184	49,782

Appendix 61: Urban Rural Projections, Kweneng West: Low Scenario

Year	Total population	Urban population	Rural population
2011	47,797	7,244	40,553
2012	48,718	7,395	41,323
2013	49,584	7,541	42,044
2014	50,392	7,678	42,715
2015	51,136	7,806	43,331
2016	51,811	7,923	43,888
2017	52,492	8,042	44,450
2018	53,178	8,162	45,016
2019	53,865	8,283	45,582
2020	54,551	8,404	46,147
2021	55,234	8,525	46,709
2022	55,910	8,645	47,265
2023	56,579	8,764	47,814
2024	57,240	8,883	48,357
2025	57,893	9,001	48,892
2026	58,537	9,117	49,420

Appendix 62: Urban Rural Projections, Kgatleng: High Scenario

Year	Total population	Urban population	Rural population
2011	91,660	56,170	35,490
2012	93,856	57,991	35,865
2013	96,045	60,396	35,649
2014	98,217	62,838	35,379
2015	100,362	65,310	35,052
2016	102,473	67,805	34,668
2017	104,614	70,366	34,248
2018	106,780	72,990	33,789
2019	108,966	75,676	33,290
2020	111,166	78,418	32,748
2021	113,378	81,216	32,162
2022	115,598	84,068	31,530
2023	117,824	86,972	30,852
2024	120,054	89,927	30,127
2025	122,288	92,933	29,355
2026	124,526	95,990	28,536

Appendix 63: Urban Rural Projections, Kgatleng: Medium Scenario

Year	Total population	Urban population	Rural population
2011	91,660	56,170	35,490
2012	94,064	58,119	35,944
2013	96,382	60,609	35,774
2014	98,604	63,086	35,518
2015	100,713	65,538	35,175
2016	102,697	67,953	34,744
2017	104,700	70,424	34,276
2018	106,717	72,947	33,769
2019	108,743	75,521	33,222
2020	110,774	78,141	32,633
2021	112,806	80,807	32,000
2022	114,837	83,515	31,323
2023	116,867	86,265	30,602
2024	118,894	89,058	29,836
2025	120,921	91,893	29,027
2026	122,947	94,773	28,175

Appendix 64: Urban Rural Projections, Kgatleng: Low Scenario

Year	Total population	Urban population	Rural population
2011	91,660	56,170	35,490
2012	93,952	58,050	35,902
2013	96,162	60,470	35,692
2014	98,278	62,878	35,401
2015	100,290	65,263	35,027
2016	102,182	67,613	34,570
2017	104,107	70,025	34,082
2018	106,057	72,497	33,561
2019	108,029	75,025	33,004
2020	110,016	77,606	32,409
2021	112,013	80,239	31,775
2022	114,017	82,918	31,099
2023	116,023	85,643	30,381
2024	118,032	88,412	29,620
2025	120,042	91,226	28,816
2026	122,053	94,084	27,970

Appendix 65: Urban Rural Projections, Central Serowe Palapye: High Scenario

Year	Total population	Urban population	Rural population
2011	180,500	94,945	85,555
2012	183,806	97,298	86,508
2013	187,058	99,752	87,306
2014	190,237	102,192	88,044
2015	193,324	104,608	88,717
2016	196,308	106,990	89,318
2017	199,312	109,406	89,906
2018	202,326	111,851	90,475
2019	205,340	114,320	91,021
2020	208,344	116,805	91,539
2021	211,331	119,304	92,027
2022	214,295	121,813	92,482
2023	217,233	124,330	92,903
2024	220,142	126,853	93,290
2025	223,022	129,380	93,641
2026	225,872	131,913	93,959

Appendix 66: Urban Rural Projections, Central Serowe Palapye: Medium Scenario

Year	Total population	Urban population	Rural population
2011	180,500	94,945	85,555
2012	184,213	97,514	86,699
2013	187,715	100,103	87,612
2014	190,986	102,595	88,391
2015	194,001	104,974	89,027
2016	196,737	107,224	89,514
2017	199,476	109,496	89,980
2018	202,207	111,785	90,422
2019	204,920	114,086	90,834
2020	207,608	116,393	91,216
2021	210,265	118,702	91,562
2022	212,885	121,012	91,873
2023	215,469	123,320	92,149
2024	218,016	125,627	92,388
2025	220,528	127,934	92,594
2026	223,008	130,240	92,768

Appendix 67: Urban Rural Projections, Central Serowe Palapye: Low Scenario

Year	Total population	Urban population	Rural population
2011	180,500	94,945	85,555
2012	183,995	97,398	86,597
2013	187,286	99,874	87,412
2014	190,356	102,256	88,100
2015	193,185	104,532	88,653
2016	195,752	106,687	89,065
2017	198,347	108,876	89,470
2018	200,958	111,095	89,863
2019	203,574	113,336	90,238
2020	206,187	115,596	90,591
2021	208,787	117,868	90,919
2022	211,364	120,147	91,217
2023	213,914	122,430	91,484
2024	216,435	124,717	91,718
2025	218,926	127,004	91,922
2026	221,387	129,294	92,093

Appendix 68: Urban Rural Projections, Central Mahalapye: High Scenario

Year	Total population	Urban population	Rural population
2011	118,875	52,977	65,898
2012	119,943	53,737	66,206
2013	120,931	54,369	66,562
2014	121,828	54,964	66,864
2015	122,623	55,515	67,109
2016	123,311	56,019	67,292
2017	123,968	56,512	67,456
2018	124,590	56,990	67,600
2019	125,169	57,451	67,718
2020	125,698	57,890	67,808
2021	126,174	58,307	67,867
2022	126,593	58,698	67,895
2023	126,953	59,063	67,890
2024	127,254	59,402	67,852
2025	127,494	59,713	67,781
2026	127,674	59,996	67,678

Appendix 68: Urban Rural Projections, Central Mahalapye: High Scenario

Year	Total population	Urban population	Rural population
2011	118,875	52,977	65,898
2012	119,943	53,737	66,206
2013	120,931	54,369	66,562
2014	121,828	54,964	66,864
2015	122,623	55,515	67,109
2016	123,311	56,019	67,292
2017	123,968	56,512	67,456
2018	124,590	56,990	67,600
2019	125,169	57,451	67,718
2020	125,698	57,890	67,808
2021	126,174	58,307	67,867
2022	126,593	58,698	67,895
2023	126,953	59,063	67,890
2024	127,254	59,402	67,852
2025	127,494	59,713	67,781
2026	127,674	59,996	67,678

Appendix 69: Urban Rural Projections, Central Mahalapye: Medium Scenario

Year	Total population	Urban population	Rural population
2011	118,875	52,977	65,898
2012	120,208	53,856	66,353
2013	121,356	54,560	66,796
2014	122,308	55,180	67,128
2015	123,053	55,709	67,344
2016	123,580	56,141	67,439
2017	124,070	56,558	67,512
2018	124,516	56,957	67,560
2019	124,912	57,333	67,579
2020	125,254	57,686	67,568
2021	125,537	58,013	67,525
2022	125,760	58,312	67,448
2023	125,922	58,584	67,339
2024	126,025	58,828	67,197
2025	126,068	59,045	67,023
2026	126,056	59,236	66,820

Appendix 70: Urban Rural Projections, Central Mahalapye: Low Scenario

Year	Total population	Urban population	Rural population
2011	118,875	52,977	65,898
2012	120,066	53,792	66,274
2013	121,078	54,436	66,643
2014	121,904	54,998	66,906
2015	122,535	55,475	67,060
2016	122,961	55,860	67,101
2017	123,368	56,238	67,130
2018	123,747	56,605	67,142
2019	124,092	56,957	67,135
2020	124,397	57,291	67,106
2021	124,655	57,605	67,050
2022	124,861	57,895	66,966
2023	125,014	58,161	66,853
2024	125,111	58,401	66,709
2025	125,153	58,616	66,536
2026	125,139	58,805	66,334

Appendix 71: Urban Rural Projections, Central Bobonong: High Scenario

Year	Total population	Urban population	Rural population
2011	71,936	37,537	34,399
2012	72,519	39,386	33,133
2013	73,052	40,698	32,354
2014	73,526	41,991	31,535
2015	73,937	43,260	30,678
2016	74,281	44,498	29,782
2017	74,603	45,734	28,869
2018	74,902	46,963	27,939
2019	75,172	48,181	26,991
2020	75,410	49,385	26,025
2021	75,613	50,573	25,041
2022	75,780	51,740	24,040
2023	75,909	52,885	23,024
2024	75,999	54,006	21,993
2025	76,050	55,100	20,950
2026	76,062	56,167	19,896

Appendix 72: Urban Rural Projections, Central Bobonong: Medium Scenario

Year	Total population	Urban population	Rural population
2011	71,936	37,537	34,399
2012	72,680	39,474	33,206
2013	73,308	40,841	32,467
2014	73,816	42,156	31,660
2015	74,196	43,411	30,785
2016	74,443	44,596	29,847
2017	74,665	45,772	28,893
2018	74,858	46,935	27,923
2019	75,018	48,083	26,936
2020	75,144	49,211	25,933
2021	75,232	50,317	24,914
2022	75,281	51,399	23,882
2023	75,292	52,455	22,837
2024	75,264	53,484	21,781
2025	75,199	54,484	20,716
2026	75,098	55,455	19,643

Appendix 73: Urban Rural Projections, Central Bobonong: Low Scenario

Year	Total population	Urban population	Rural population
2011	71,936	37,537	34,399
2012	72,594	39,427	33,167
2013	73,141	40,748	32,393
2014	73,572	42,017	31,555
2015	73,884	43,228	30,656
2016	74,070	44,372	29,698
2017	74,242	45,512	28,730
2018	74,395	46,645	27,750
2019	74,526	47,767	26,759
2020	74,630	48,874	25,755
2021	74,703	49,964	24,739
2022	74,743	51,032	23,711
2023	74,749	52,077	22,672
2024	74,719	53,096	21,623
2025	74,653	54,088	20,565
2026	74,552	55,052	19,501

Appendix 74: Urban Rural Projections, Central Boteti: High Scenario

Year	Total population	Urban population	Rural population
2011	57,376	29,307	28,069
2012	58,499	31,089	27,410
2013	59,608	32,864	26,744
2014	60,697	34,670	26,027
2015	61,759	36,503	25,256
2016	62,791	38,360	24,431
2017	63,832	40,262	23,570
2018	64,879	42,209	22,670
2019	65,929	44,199	21,730
2020	66,978	46,230	20,748
2021	68,025	48,299	19,726
2022	69,067	50,406	18,661
2023	70,104	52,549	17,554
2024	71,134	54,728	16,406
2025	72,157	56,941	15,216
2026	73,173	59,189	13,985

Appendix 75: Urban Rural Projections, Central Boteti: Medium Scenario

Year	Total population	Urban population	Rural population
2011	57,376	29,307	28,069
2012	58,629	31,158	27,471
2013	59,818	32,979	26,838
2014	60,936	34,807	26,129
2015	61,975	36,631	25,344
2016	62,928	38,444	24,484
2017	63,884	40,295	23,589
2018	64,841	42,184	22,656
2019	65,794	44,109	21,685
2020	66,741	46,066	20,675
2021	67,681	48,055	19,626
2022	68,613	50,074	18,538
2023	69,534	52,123	17,412
2024	70,446	54,199	16,247
2025	71,350	56,305	15,045
2026	72,246	58,439	13,807

Appendix 76: Urban Rural Projections, Central Boteti: Low Scenario

Year	Total population	Urban population	Rural population
2011	57376	29,307	28,069
2012	58559	31,121	27,438
2013	59681	32,904	26,777
2014	60735	34,692	26,043
2015	61715	36,477	25,237
2016	62613	38,251	24,362
2017	63523	40,067	23,455
2018	64440	41,924	22,516
2019	65362	43,819	21,543
2020	66285	45,751	20,534
2021	67206	47,718	19,488
2022	68122	49,717	18,406
2023	69032	51,746	17,286
2024	69936	53,806	16,129
2025	70832	55,896	14,936
2026	71721	58,014	13,707

Appendix 77: Urban Rural Projections, Central Tutume: High Scenario

Year	Total population	Urban population	Rural population
2011	147,377	61,651	85,726
2012	150,253	64,765	85,488
2013	153,092	68,091	85,001
2014	155,878	71,469	84,409
2015	158,597	74,891	83,705
2016	161,237	78,348	82,888
2017	163,900	81,888	82,011
2018	166,578	85,508	81,070
2019	169,263	89,204	80,059
2020	171,947	92,971	78,976
2021	174,622	96,806	77,817
2022	177,287	100,706	76,581
2023	179,937	104,670	75,267
2024	182,570	108,695	73,875
2025	185,185	112,779	72,406
2026	187,782	116,923	70,859

Appendix 78: Urban Rural Projections, Central Tutume: High Scenario

Year	Total population	Urban population	Rural population
2011	147,377	61,651	85,726
2012	150,586	64,909	85,677
2013	153,630	68,330	85,300
2014	156,492	71,751	84,741
2015	159,152	75,153	83,998
2016	161,589	78,520	83,069
2017	164,034	81,956	82,079
2018	166,480	85,458	81,022
2019	168,916	89,021	79,895
2020	171,339	92,642	78,697
2021	173,742	96,318	77,424
2022	176,121	100,044	76,077
2023	178,476	103,820	74,656
2024	180,806	107,645	73,161
2025	183,114	111,518	71,596
2026	185,401	115,440	69,961

Appendix 79: Urban Rural Projections, Central Tutume: Low Scenario

Year	Total population	Urban population	Rural population
2011	147,377	61,651	85,726
2012	150,407	64,832	85,576
2013	153,279	68,174	85,105
2014	155,976	71,514	84,462
2015	158,483	74,837	83,645
2016	160,780	78,126	82,653
2017	163,106	81,492	81,614
2018	165,451	84,930	80,521
2019	167,807	88,436	79,371
2020	170,166	92,008	78,158
2021	172,521	95,641	76,880
2022	174,862	99,329	75,533
2023	177,188	103,071	74,117
2024	179,495	106,864	72,631
2025	181,784	110,708	71,076
2026	84,053	114,601	69,452

Appendix 80: Urban Rural Projections, North East: High Scenario

Year	Total population	Urban population	Rural population
2011	60,264	13,778	46,486
2012	61,576	15,674	45,902
2013	62,879	17,438	45,440
2014	64,165	19,257	44,908
2015	65,428	21,125	44,303
2016	66,665	23,042	43,623
2017	67,915	25,019	42,897
2018	69,178	27,056	42,122
2019	70,448	29,154	41,295
2020	71,724	31,310	40,413
2021	73,001	33,525	39,476
2022	74,278	35,797	38,482
2023	75,555	38,125	37,430
2024	76,830	40,510	36,320
2025	78,102	42,950	35,152
2026	79,373	45,446	33,926

Appendix 81: Urban Rural Projections, North East: Medium Scenario

Year	Total population	Urban population	Rural population
2011	60,264	13,778	46,486
2012	61,576	15,674	45,902
2013	62,879	17,438	45,440
2014	64,165	19,257	44,908
2015	65,428	21,125	44,303
2016	66,665	23,042	43,623
2017	67,915	25,019	42,897
2018	69,178	27,056	42,122
2019	70,448	29,154	41,295
2020	71,724	31,310	40,413
2021	73,001	33,525	39,476
2022	74,278	35,797	38,482
2023	75,555	38,125	37,430
2024	76,830	40,510	36,320
2025	78,102	42,950	35,152
2026	79,373	45,446	33,926

Appendix 82: Urban Rural Projections, North East: Low Scenario

Year	Total population	Urban population	Rural population
2011	60,264	13,778	46,486
2012	61,639	15,690	45,949
2013	62,955	17,460	45,496
2014	64,205	19,269	44,936
2015	65,381	21,110	44,271
2016	66,476	22,976	43,499
2017	67,586	24,897	42,689
2018	68,710	26,873	41,837
2019	69,843	28,903	40,939
2020	70,981	30,986	39,995
2021	72,122	33,121	39,001
2022	73,262	35,307	37,955
2023	74,401	37,543	36,858
2024	75,536	39,828	35,708
2025	76,668	42,162	34,506
2026	77,797	44,544	33,253

Appendix 83: Urban Rural Projections, Ngamiland East: High Scenario

Year	Total population	Urban population	Rural population
2011	90,334	60,257	30,077
2012	92,506	61,958	30,548
2013	94,671	63,996	30,675
2014	96,819	66,048	30,771
2015	98,942	68,110	30,832
2016	101,031	70,174	30,857
2017	103,150	72,284	30,866
2018	105,294	74,439	30,855
2019	107,458	76,633	30,825
2020	109,637	78,865	30,772
2021	111,827	81,131	30,695
2022	114,025	83,431	30,594
2023	116,229	85,761	30,468
2024	118,438	88,122	30,316
2025	120,651	90,513	30,138
2026	122,868	92,934	29,935

Appendix 84: Urban Rural Projections, Ngamiland East: Medium Scenario

Year	Total population	Urban population	Rural population
2011	90,334	60,257	30,077
2012	92,711	62,095	30,615
2013	95,004	64,220	30,783
2014	97,201	66,309	30,892
2015	99,288	68,348	30,940
2016	101,252	70,327	30,925
2017	103,235	72,344	30,891
2018	105,232	74,395	30,837
2019	107,238	76,476	30,762
2020	109,250	78,586	30,663
2021	111,263	80,722	30,540
2022	113,275	82,882	30,393
2023	115,285	85,065	30,221
2024	117,294	87,271	30,023
2025	119,302	89,501	29,801
2026	121,311	91,755	29,555

Appendix 85: Urban Rural Projections, Ngamiland East: Medium Scenario

Year	Total population	Urban population	Rural population
2011	90,334	60,257	30,077
2012	92,601	62,021	30,579
2013	94,786	64,074	30,713
2014	96,880	66,090	30,790
2015	98,871	68,061	30,810
2016	100,745	69,975	30,770
2017	102,650	71,934	30,716
2018	104,582	73,935	30,647
2019	106,534	75,974	30,560
2020	108,502	78,049	30,453
2021	110,481	80,155	30,326
2022	112,465	82,289	30,176
2023	114,453	84,451	30,003
2024	116,444	86,638	29,806
2025	118,436	88,851	29,585
2026	120,429	91,088	29,340

Appendix 86: Urban Rural Projections, Ngamiland West: High Scenario

Year	Total population	Urban population	Rural population
2011	59,421	15,225	44,196
2012	60,600	16,257	44,343
2013	61,765	17,395	44,370
2014	62,909	18,557	44,352
2015	64,027	19,741	44,286
2016	65,114	20,944	44,169
2017	66,210	22,180	44,030
2018	67,314	23,447	43,867
2019	68,421	24,743	43,678
2020	69,528	26,069	43,459
2021	70,633	27,423	43,210
2022	71,735	28,805	42,930
2023	72,830	30,213	42,618
2024	73,920	31,647	42,273
2025	75,003	33,107	41,897
2026	76,080	34,592	41,489

Appendix 87: Urban Rural Projections, Ngamiland West: Medium Scenario

Year	Total population	Urban population	Rural population
2011	59,421	15,225	44,196
2012	60,734	16,293	44,441
2013	61,982	17,456	44,526
2014	63,157	18,630	44,527
2015	64,251	19,810	44,441
2016	65,256	20,990	44,266
2017	66,265	22,198	44,067
2018	67,274	23,433	43,842
2019	68,281	24,693	43,588
2020	69,283	25,977	43,306
2021	70,277	27,285	42,992
2022	71,263	28,615	42,647
2023	72,239	29,968	42,271
2024	73,206	31,341	41,865
2025	74,165	32,736	41,428
2026	75,116	34,153	40,963

Appendix 88: Urban Rural Projections, Ngamiland West: Low Scenario

Year	Total population	Urban population	Rural population
2011	59,421	15,225	44,196
2012	60,662	16,274	44,388
2013	61,840	17,416	44,424
2014	62,949	18,568	44,380
2015	63,981	19,727	44,254
2016	64,929	20,885	44,044
2017	65,889	22,072	43,817
2018	66,859	23,288	43,571
2019	67,833	24,531	43,302
2020	68,809	25,799	43,009
2021	69,783	27,093	42,690
2022	70,753	28,411	42,343
2023	71,718	29,751	41,966
2024	72,675	31,114	41,561
2025	73,626	32,499	41,127
2026	74,570	33,905	40,665

Appendix 89: Urban Rural Projections, Chobe: High Scenario

Year	Total population	Urban population	Rural population
2011	23,347	9,008	14,339
2012	23,963	9,118	14,845
2013	24,581	9,273	15,307
2014	25,195	9,424	15,772
2015	25,806	9,568	16,237
2016	26,409	9,707	16,702
2017	27,023	9,845	17,178
2018	27,645	9,982	17,662
2019	28,274	10,118	18,156
2020	28,909	10,252	18,657
2021	29,549	10,384	19,166
2022	30,194	10,513	19,681
2023	30,842	10,639	20,203
2024	31,493	10,762	20,731
2025	32,148	10,882	21,265
2026	32,805	10,999	21,806

Appendix 90: Urban Rural Projections, Chobe: Medium Scenario

Year	Total population	Urban population	Rural population
2011	23,347	9,008	14,339
2012	24,017	9,138	14,878
2013	24,667	9,306	15,361
2014	25,295	9,461	15,834
2015	25,896	9,602	16,294
2016	26,467	9,728	16,739
2017	27,045	9,853	17,192
2018	27,628	9,976	17,652
2019	28,216	10,097	18,119
2020	28,807	10,216	18,591
2021	29,400	10,331	19,069
2022	29,995	10,444	19,552
2023	30,591	10,553	20,039
2024	31,189	10,658	20,531
2025	31,788	10,761	21,028
2026	32,389	10,860	21,530

Appendix 91: Urban Rural Projections, Chobe: Medium Scenario

Year	Total population	Urban population	Rural population
2011	23,347	9,008	14,339
2012	23,988	9,128	14,860
2013	24,610	9,285	15,326
2014	25,211	9,430	15,782
2015	25,787	9,562	16,225
2016	26,334	9,679	16,655
2017	26,892	9,797	17,094
2018	27,458	9,915	17,543
2019	28,031	10,031	18,000
2020	28,610	10,146	18,464
2021	29,194	10,259	18,935
2022	29,781	10,369	19,412
2023	30,371	10,476	19,894
2024	30,963	10,581	20,382
2025	31,557	10,682	20,875
2026	32,154	10,781	21,373

Appendix 92: Urban Rural Projections, Okavango Delta: High Scenario

Year	Total population	Urban population	Rural population
2011	2,529	668	1,861
2012	2,508	748	1,760
2013	2,485	807	1,678
2014	2,457	862	1,594
2015	2,426	915	1,510
2016	2,390	965	1,426
2017	2,353	1,011	1,341
2018	2,313	1,055	1,258
2019	2,270	1,095	1,175
2020	2,225	1,132	1,093
2021	2,177	1,165	1,013
2022	2,126	1,193	933
2023	2,073	1,217	855
2024	2,016	1,237	779
2025	1,957	1,252	705
2026	1,894	1,261	633

Appendix 93: Urban Rural Projections, Okavango Delta: Medium Scenario

Year	Total population	Urban population	Rural population
2011	2,529	668	1,861
2012	2,514	750	1,764
2013	2,493	810	1,684
2014	2,467	866	1,601
2015	2,434	918	1,516
2016	2,396	967	1,429
2017	2,355	1,012	1,343
2018	2,312	1,054	1,257
2019	2,266	1,093	1,173
2020	2,217	1,128	1,090
2021	2,166	1,159	1,008
2022	2,112	1,185	927
2023	2,056	1,207	848
2024	1,997	1,225	772
2025	1,935	1,238	697
2026	1,870	1,245	625

Appendix 94: Urban Rural Projections, Okavango Delta: Low Scenario

Year	Total population	Urban population	Rural population
2011	2,529	668	1,861
2012	2,511	749	1,762
2013	2,488	808	1,680
2014	2,458	863	1,595
2015	2,424	915	1,509
2016	2,384	962	1,422
2017	2,341	1,007	1,335
2018	2,297	1,048	1,249
2019	2,251	1,086	1,165
2020	2,202	1,120	1,082
2021	2,151	1,150	1,000
2022	2,097	1,177	921
2023	2,041	1,199	842
2024	1,982	1,216	766
2025	1,921	1,229	692
2026	1,857	1,236	621

Appendix 95: Urban Rural Projections, Ghanzi: High Scenario

Year	Total population	Urban population	Rural population
2011	43,095	14,809	28,286
2012	44,383	15,395	28,988
2013	45,678	16,017	29,661
2014	46,975	16,648	30,326
2015	48,269	17,289	30,980
2016	49,556	17,936	31,620
2017	50,866	18,602	32,265
2018	52,199	19,285	32,914
2019	53,551	19,986	33,565
2020	54,919	20,703	34,217
2021	56,303	21,435	34,867
2022	57,699	22,184	35,516
2023	59,109	22,947	36,162
2024	60,530	23,725	36,804
2025	61,961	24,519	37,443
2026	63,405	25,327	38,078

Appendix 96: Urban Rural Projections, Ghanzi: Medium Scenario

Year	Total population	Urban population	Rural population
2011	43,09	14,809	28,286
2012	44,481	15,430	29,052
2013	45,839	16,073	29,765
2014	47,160	16,714	30,446
2015	48,438	17,349	31,089
2016	49,664	17,975	31,689
2017	50,908	18,617	32,291
2018	52,168	19,274	32,894
2019	53,441	19,945	33,496
2020	54,725	20,629	34,096
2021	56,019	21,327	34,691
2022	57,320	22,038	35,282
2023	58,629	22,761	35,868
2024	59,945	23,496	36,449
2025	61,269	24,244	37,024
2026	62,601	25,006	37,595

Appendix 97: Urban Rural Projections, Ghanzi: Low Scenario

Year	Total population	Urban population	Rural population
2011	43,09	14,809	28,286
2012	44,481	15,430	29,052
2013	45,839	16,073	29,765
2014	47,160	16,714	30,446
2015	48,438	17,349	31,089
2016	49,664	17,975	31,689
2017	50,908	18,617	32,291
2018	52,168	19,274	32,894
2019	53,441	19,945	33,496
2020	54,725	20,629	34,096
2021	56,019	21,327	34,691
2022	57,320	22,038	35,282
2023	58,629	22,761	35,868
2024	59,945	23,496	36,449
2025	61,269	24,244	37,024
2026	62,601	25,006	37,595

Appendix 98: Urban Rural Projections, Kgalagadi South: High Scenario

Year	Total population	Urban population	Rural population
2011	43,09	14,809	28,286
2012	44,481	15,430	29,052
2013	45,839	16,073	29,765
2014	47,160	16,714	30,446
2015	48,438	17,349	31,089
2016	49,664	17,975	31,689
2017	50,908	18,617	32,291
2018	52,168	19,274	32,894
2019	53,441	19,945	33,496
2020	54,725	20,629	34,096
2021	56,019	21,327	34,691
2022	57,320	22,038	35,282
2023	58,629	22,761	35,868
2024	59,945	23,496	36,449
2025	61,269	24,244	37,024
2026	62,601	25,006	37,595

Appendix 99: Urban Rural Projections, Kgalagadi South: Medium Scenario

Year	Total population	Urban population	Rural population
2011	30,016	8,921	21,095
2012	30,573	9,215	21,358
2013	31,093	9,505	21,588
2014	31,571	9,787	21,784
2015	32,006	10,059	21,947
2016	32,392	10,319	22,072
2017	32,776	10,582	22,194
2018	33,157	10,847	22,309
2019	33,532	11,114	22,418
2020	33,902	11,381	22,520
2021	34,264	11,650	22,614
2022	34,618	11,918	22,700
2023	34,965	12,187	22,778
2024	35,303	12,456	22,847
2025	35,633	12,724	22,909
2026	35,956	12,993	22,963

Appendix 100: Urban Rural Projections, Kgalagadi South: Low Scenario

Year	Total population	Urban population	Rural population
2011	30,016	8,921	21,095
2012	30,537	9,204	21,333
2013	31,022	9,483	21,538
2014	31,467	9,755	21,713
2015	31,871	10,017	21,854
2016	32,229	10,268	21,962
2017	32,590	10,522	22,068
2018	32,952	10,780	22,171
2019	33,312	11,041	22,271
2020	33,670	11,304	22,366
2021	34,023	11,568	22,456
2022	34,371	11,833	22,538
2023	34,712	12,099	22,613
2024	35,047	12,365	22,682
2025	35,374	12,632	22,742
2026	35,695	12,899	22,796

Appendix 101: Urban Rural Projections, Kgalagadi North: High Scenario

Year	Total population	Urban population	Rural population
2011	20,476	12,907	7,569
2012	21,005	14,925	6,080
2013	21,533	16,653	4,880
2014	22,059	18,446	3,614
2015	22,581	20,299	2,282
2016	23,097	22,212	885
2017	23,620	23,620	0
2018	24,151	24,151	0
2019	24,687	24,687	0
2020	25,229	25,229	0
2021	25,774	25,774	0
2022	26,323	26,323	0
2023	26,874	26,874	0
2024	27,428	27,428	0
2025	27,983	27,983	0
2026	28,542	28,542	0

Appendix 102: Urban Rural Projections, Kgalagadi North: Medium Scenario

Year	Total population	Urban population	Rural population
2011	20,476	12,907	7,569
2012	21,051	14,958	6,093
2013	21,609	16,712	4,897
2014	22,146	18,518	3,628
2015	22,660	20,370	2,290
2016	23,147	22,260	887
2017	23,640	23,640	0
2018	24,137	24,137	0
2019	24,637	24,637	0
2020	25,140	25,140	0
2021	25,644	25,644	0
2022	26,149	26,149	0
2023	26,656	26,656	0
2024	27,163	27,163	0
2025	27,671	27,671	0
2026	28,180	28,180	0

Appendix 103: Urban Rural Projections, Kgalagadi North: Low Scenario

Year	Total population	Urban population	Rural population
2011	20,476	12,907	7,569
2012	21,026	14,940	6,086
2013	21,559	16,674	4,886
2014	22,073	18,457	3,616
2015	22,565	20,285	2,280
2016	23,031	22,149	882
2017	23,506	23,506	0
2018	23,988	23,988	0
2019	24,475	24,475	0
2020	24,968	24,968	0
2021	25,464	25,464	0
2022	25,963	25,963	0
2023	26,463	26,463	0
2024	26,966	26,966	0
2025	27,470	27,470	0
2026	27,975	27,975	0

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