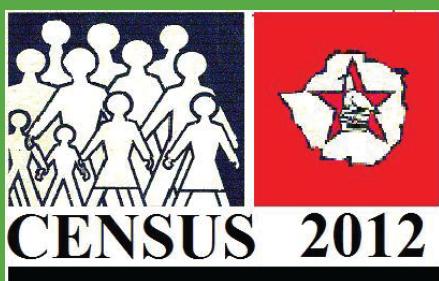


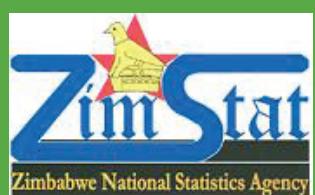


ZIMBABWE



## Mortality Thematic Report

AUGUST 2015



# ZIMBABWE POPULATION CENSUS 2012

## MORTALITY THEMATIC REPORT

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## **Foreword**

The Zimbabwe 2012 Population Census Mortality Thematic Report is the first such comprehensive report in the country and one of the several census thematic reports to be prepared by the Zimbabwe National Statistics Agency (ZimStat) based on the final results of the 2012 Population Census. In preparing the Mortality Thematic Report, ZimStat seeks to put at the disposal of planners, decision makers and development partners reliable data on mortality.

ZIMSTAT is appreciative of the significant funding and material provisions availed to the Agency by the Government of Zimbabwe through Treasury, given the prevailing budgetary constraints.

In addition, ZimStat would also like to thank the following development partners and donors for their financial, material and technical assistance:

- Australian Agency for International Development
- Danish International Development Agency
- United Kingdom Department for International Development
- European Union
- Swedish International Development Agency
- United Nations Development Programme
- United Nations Children's Fund
- United Nations Population Fund.

The financial, material and technical assistance given by the Government of Zimbabwe and various development partners enabled ZimStat to execute this mammoth task of enumerating the population of Zimbabwe successfully.

Finally, ZimStat would also like to thank all persons who were engaged in 2012 Population Census operations and the general public for its cooperation.



M. Dzinotizei

**DIRECTOR-GENERAL, Zimbabwe National Statistics Agency**

**HARARE**

*August, 2015*

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Special gratitude goes to Dr. Henry Chikova for authoring this comprehensive report and to Dr. Griffith Feeney and Mr Piason Maduku Mlambo for valuable comments.

## **Executive Summary**

In Zimbabwe data from civil registration is incomplete. As a result the country has relied on surveys to estimate its mortality indicators. This analysis estimated maternal mortality, childhood mortality and constructed life tables using the 2012 Zimbabwe Population Census data. Since survey data, including censuses, is often unreliable due to reporting errors, indirect techniques were used to estimate childhood mortality.

Mortality in Zimbabwe worsened between 1992 and 2002 and its trend follows that of HIV prevalence rates, showing that AIDS-related deaths dominated deaths during this period. A comparison of the 2002 and 2012 Population censuses shows that mortality in Zimbabwe significantly improved between the two censuses; so did maternal mortality, which reduced by half. This is mainly attributed to the availability of ARTs during the first decade of the millennium.

The trend of under 5 mortality was derived from various sources. These sources agree that under-five mortality has been declining in Zimbabwe during the past three decades. This decline is discernible up to the mid-1990s and it starts to increase thereafter due to the impact of HIV and AIDS on the population and the general deterioration of health services during the hyperinflationary period when the health sector suffered from a lack of resources and a shortage of staff. Under 5 mortality vary by background characteristics of the mother. Children born to women resident in urban areas had lower mortality rates than those born to women resident in rural areas. Children of widowed women experienced the highest mortality among the other marriage groups, the higher the educational attainment of the mother, the lower the infant mortality, mortality of children born to employed mothers were slightly higher than that of children born to mothers who were not employed, and children born to mothers with a disability had higher mortality than children born to mothers without a disability.

Life expectancy at birth declined between 1992 and 2002 and then increased between 2002 and 2012. The decline in life expectancy during the intercensus period 1992 to 2002 is attributed to AIDS-related deaths and the improvement between 2002 and 2012 is attributed to the availability of ARTs, which meant that people could live longer with the virus than before. In fact life expectancy increased by 16.5 years between the two censuses.

## List of Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ART	Anti-Retroviral Therapy
ASDR	Age Specific Death Rate
CDR	Crude Death Rate
CEB	Children Ever Born
CS	Children Syrviving
CSO	Central Statistical Office
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
IMR	Infant Mortality Rate
LTR	Life Time Risk
MDG	Millenium Development Goal
MMR	Maternal Mortality Ratio
OVC	Orphans and Vulnerable Children
UN	United Nations
UNAIDS	United Nations Joint Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
WHO	World Health Organisation
ZDHS	Zimbabwe Demographic and Health Survey
ZIMSTAT	Zimbabwe National Statistics Agency
ZMPMS	Zimbabwe Maternal and Peri-natal Mortality Study

# **1. Introduction**

## ***1.1. Background and Context***

Mortality is one of the three components of population change, the others being fertility and migration. Mortality is therefore an important input into population projections. Mortality indicators have found application as descriptors of the general welfare of the national population and its subgroups. As a result mortality indicators such as infant mortality and life expectancy at birth are included in indices of quality of life. Two of the Millennium Development Goals indicators relate to mortality i.e. goals 4 and 5. Additionally, infant mortality rates are an important indicator of health for entire populations since infants are most sensitive to environmental and health changes. Mortality by age and sex (including life cycle and cohort studies) and by socio-economic groups gives a deeper analysis of conditions of various socio-economic sub-groups.

Mortality analysis, especially by region, is useful in the health sector. It helps to identify high mortality areas, which aids the targeting of health resources. Observed changes in mortality over time may also be useful as an evaluation measure of various preventive and curative health measures. Epidemiologically, use of mortality differentials suggests links between risk factors and diseases thereby indicating the magnitude of risks. Lastly, mortality indicators from this analysis will be used as inputs in the population projections and in the analysis of other themes.

## ***1.2. Sources of Data***

Measurement of mortality requires information on the number of deaths and on the population subject to the risk of dying. Where the registration system is reliable the number of deaths is obtained from death registers while the population at risk is derived from censuses and sample surveys. The registration of deaths in Zimbabwe, like most developing countries, is incomplete. Because data on death obtained from the civil registration system is unreliable countries such as Zimbabwe have collected data on deaths in censuses and surveys, and used it to estimate the level of mortality in the country. Post-Independence, Zimbabwe has carried out population censuses in 1982, 1992, 2002 and 2012. In the period intermediate to the censuses, Intercensal demographic surveys have also been carried out.

Data used in the estimation of under-5 mortality rates in this chapter were derived from the fertility and mortality sections of the 2012 Population Census questionnaire. The specific questions were on “births and deaths in the last 12 months” and “children ever born and children surviving”. Data on deaths was obtained from questions on deaths in the last 12 months.

## ***1.3. Definitions of Concepts***

The mortality estimates used in this chapter are childhood and maternal mortality ratio and rate, crude death rate, infant death rate, age-specific death rate and life expectancy at birth.

Childhood mortality measures the risk of dying from birth to exact age five years. The specific measures considered are infant, child and under-five mortality rates (in years).

**Infant Mortality (1q0 or q1)** is the probability of dying between birth and age one. This is expressed per 1,000 live births

**Child Mortality (4q1 or q4)** is the probability of dying between age one and five.

**Under-five Mortality (5q0 or q5)** is a combination of infant and child mortality and is defined as the probability of dying between birth and exact age five. The rate is expressed per 1,000 children.

**Maternal Mortality Ratio** is the number of maternal deaths per live birth, multiplied by a conventional factor of 100,000.

**Maternal Mortality Rate** is the number of maternal deaths divided by the number of women aged 15-49 years.

**Crude Death Rate** is the number of deaths per 1,000 population in a given year.

**Age-Specific Death Rate** is the number of deaths of people in a specified age group per 1,000 population of that age group.

**Life Expectancy ( $e_x$ )** is an estimate of the *average* number of additional years a person could expect to live if the age-specific death rates for a given year prevailed for the rest of a person's life.

#### **1.4. Methods of Analysis**

When mortality data is reliable direct procedures are used to estimate childhood mortality. Other mortality rates that are derived from direct estimation include the crude death rates and age-specific death rates. The latter is also used to construct life tables to derive life expectancies at birth. Indirect procedures are used to estimate childhood mortality when reliable birth and death registration data are not available. The Brass et al. (1968) indirect estimation technique is employed. This technique uses data on children ever born (CEB) and children surviving (CS) by age of mother to derive the proportion dead among children ever born. In the 2012 Population Census such data were collected.

## **2. Quality of Data**

### ***2.1. Introduction***

The quality of mortality data is affected by several reporting measurement biases. These include respondents' reluctance to report recent death of a household member. Bias may also vary according to the age of the deceased as well as other individual characteristics. In addition how the question on death is asked and probed affects death reporting.

Generally measurement and reporting biases are inherent in censuses making it difficult to estimate mortality directly from them. In such circumstances, the mortality indicators are estimated by applying indirect estimation techniques, and adjusting the data for inconsistencies and errors. This is often the case in virtually all African censuses.

Sources of error in mortality data include:

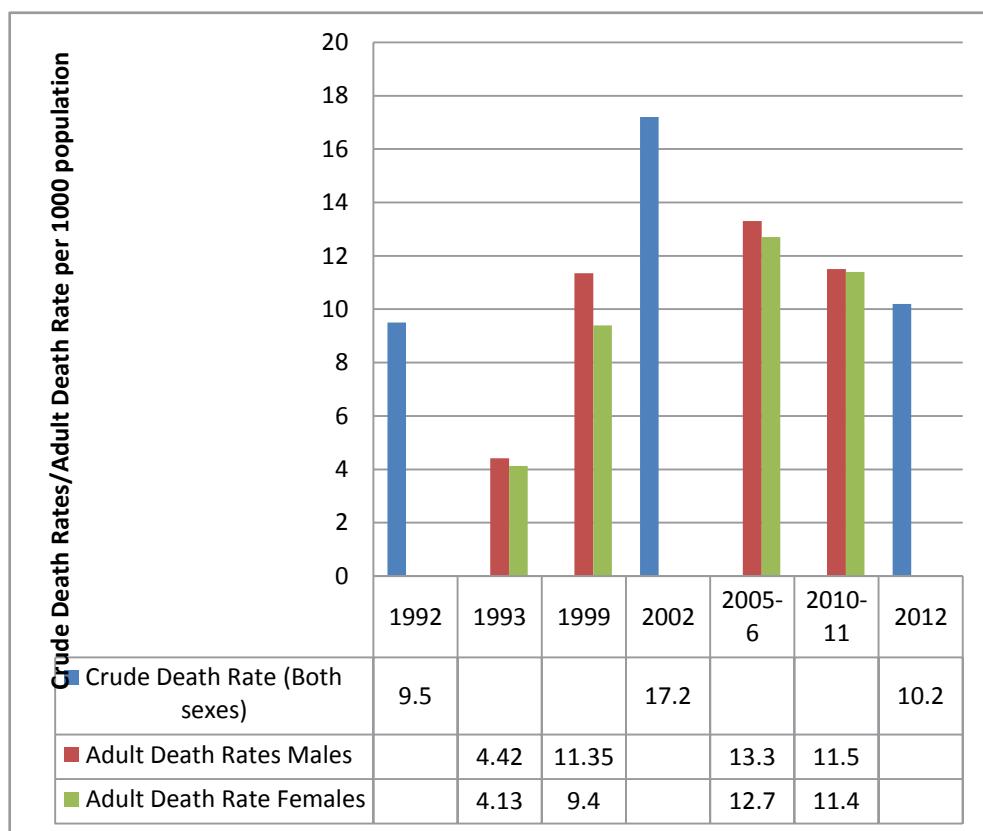
- *Under and over-reporting of deaths:* This may arise from misunderstanding of the reference period and lack of judgment between a stillbirth and a live birth.
- *Error in the declaration of age:* Misclassification of the deceased and the population by age may bias the observed age-structure of mortality (i.e. the mortality pattern).

### ***2.2. Assessing trends of death rates***

One way of evaluating the completeness of death reporting is to compute the Crude Death Rate (CDR) and compare it with rates from previous censuses, other sources of mortality data, and other countries in the region and beyond. The Crude Death Rate (CDR) is the number of deaths per 1 000 population in a given period, usually a year. A comparison of unadjusted CDRs with previous censuses shows that in 1992 it was 9.5 per 1000 rising to 17.2 in 2002 and slowing down to 10.2 in 2012. The trend in adult mortality rates from the Zimbabwe Demographic and Health Surveys (1999, 2005-2006 & 2010-11) support the observed trend of CDRs from the censuses as shown in Figure 1 below.

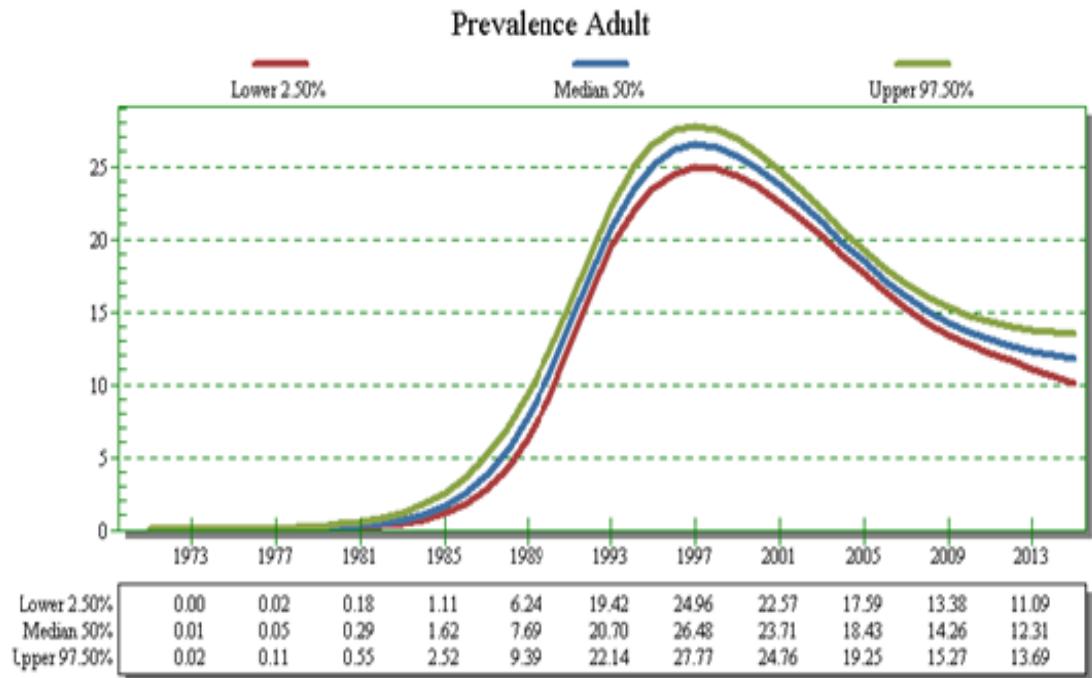
HIV and AIDS have been the leading cause of death in Zimbabwe (WHO, 2010). Figures 1 and 2 show that the prevalence of HIV and AIDS has been mirroring both adult mortality and Crude Death rates, reflecting the trends in the CDR. In terms of death trend, the censuses have been providing a plausible trend, which may point to the accuracy of reporting of death data in the 2012 Zimbabwe Population Census.

**Figure 1 Crude Death Rates and Adult Deaths Rates per 1000 Population (Population Aged 15-49 years).**



Sources: ZIMSTAT, ZDHS (1999, 2005-6, 2010-11) & Zimbabwe Population Censuses (1992, 2002, 2012)

**Figure 2 Trend in adult HIV and AIDS prevalence rates.**



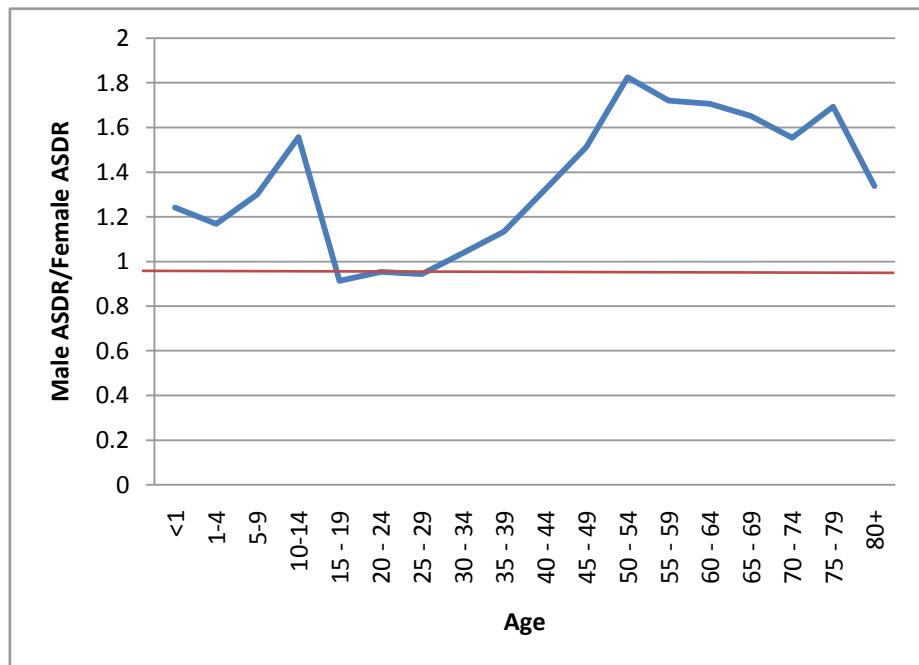
Source: (Duri & Babill, 2013)

A comparison of age-specific death rates from the 2002 and 2012 censuses shows that AIDS deaths had a more pronounced impact on the adult population in the 2002 census compared to the 2012 population census (Figure 6). This, again, is consistent with lower CDR in 2012 compared to 2002.

It is expected that the sex ratio at death curve follows a classical well-known pattern that reflects the differences in mortality risk by sex and age group. Boys below the age of 1 are at a higher risk of dying than girls, women in child bearing ages are at a higher risk of dying than males of the same age group, and in higher ages the risk of dying among males is higher than that of females. Figure 3 compares the risk of dying between males and females using the mortality sex ratio by age. Mortality sex ratio is the age-specific death rate for males divided by that for females. The risk of dying is higher among males from birth to age 14 years. It is higher among females from age 15-29, reflecting high risk of maternal death in these ages<sup>1</sup>. Above age 29 males have a higher risk of dying than females. This pattern reflects the expected pattern of mortality between males and females.

<sup>1</sup> This may also reflect the impact of AIDS deaths, which has an age lag for women compared to males.

**Figure 3 ASDR Sex Ratios, Zimbabwe 2012 Population Census**

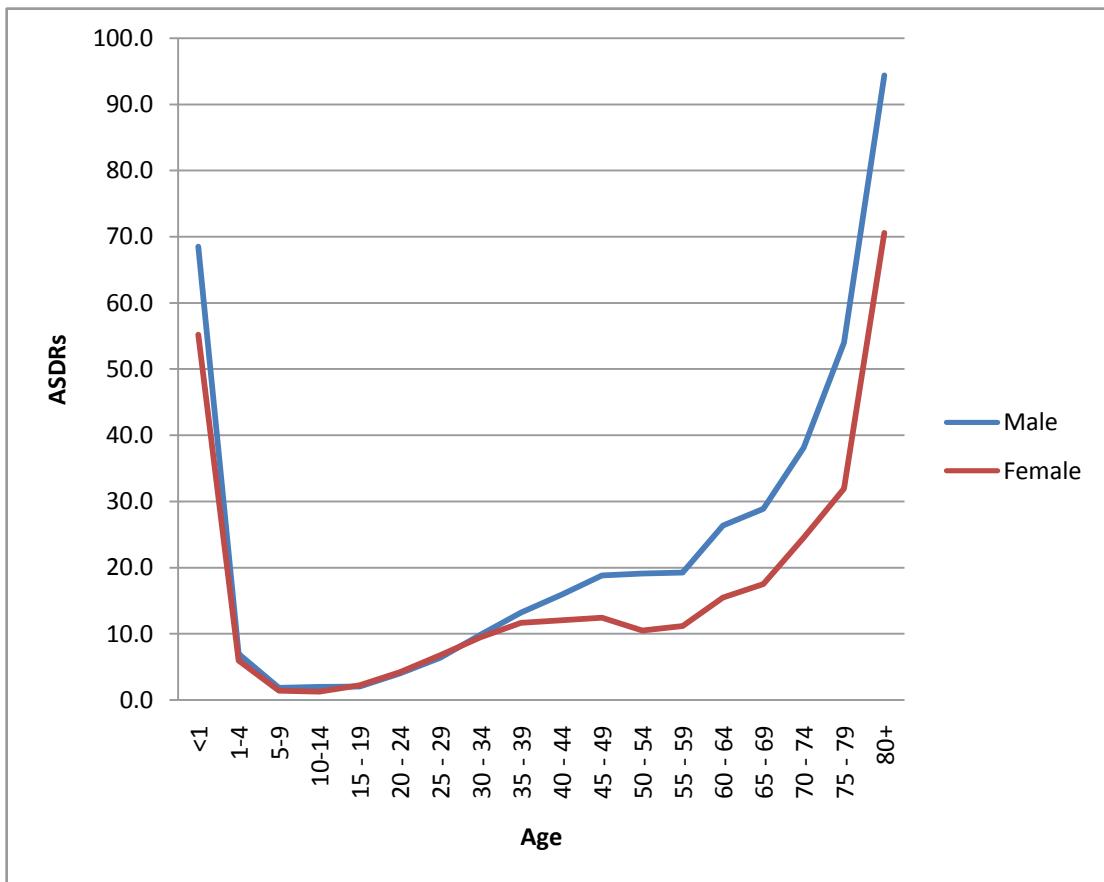


**Source:** ZIMSTAT, 2012 Population Census

Another method of evaluating the completeness and accuracy of the deaths reporting by age is to look at the age specific death rates as shown in Figure 5 below. In a standard population, the ASDR curve follows a classical shape depending on the general level of mortality in the population. In high mortality populations, the curve follows approximately a “U” - shape, reflecting high childhood and old-age mortality, albeit, with similar levels or lower during the adult ages. In low mortality populations, the shape of the ASDR curve is similar to a “J”-shape -meaning that mortality is low before age 5 and much higher in old-ages. Any discrepancy from these shapes may reflect differences in the completeness of the deaths reporting by age.

Figure 4 plots the observed ASDRs by sex from the 2012 Population Census. The curve is more of a “U” shape reflecting high mortality in childhood and adulthood. An additional feature of the Figure 4 is that there is a hump in ASDRs among the young adult population. These two observations are consistent with Zimbabwe’s mortality experience, which has largely been influenced by AIDS deaths.

**Figure 4 Age Specific Death Rates by Sex, Zimbabwe 2012 Population Census**



**Source:** ZIMSTAT, 2012 Population Census

### **2.3. Completeness and accuracy of the infant death reporting**

Two indicators were used to assess the quality of data on infant deaths. These are the number of infant deaths and the Infant Mortality Rate (IMR). The number of infant deaths can be obtained from the question on deaths in the household in the last twelve months of infants aged 0, and from the Fertility Section by subtracting the survivors from the children born in the last 12 months. Both calculations can be done by sex. The Central Death Rates can be converted into the IMR i.e. into a probability of death before age 1. The Central Death Rate at age 0 is estimated through two ways. It is estimated from the Deaths Record by dividing the number of deaths at age 0 by the enumerated population aged 0. From the Fertility section, the Death Rate is obtained by dividing the number of deaths among the children born in the last 12 months by the difference between number of live births in the 12 months and children born in the last 12 months who are surviving. Then we use the formula below to convert  $1M_0$  into  $1q_0$  (IMR) (Preston et al., 2001)

$$1q_0 = \frac{1M_0}{1 + (1 - a_0) M_0}$$

The value that  $a_0$  assumes varies according to the level of mortality. For developing countries where mortality is high, a value of 0.3 for  $a_0$  is usually used. The value of 0.3 was adopted for this analysis since infant mortality is relatively high in Zimbabwe.

*Table 1* below shows the number of infant deaths by sex obtained through the Deaths Record and the Fertility Section. The sources provide marked difference in the reported number of deaths at age 0 between the two sources, with the death record recording about twice the number of deaths deduced from the Fertility questions. The total number of deaths from the Deaths Record is 26,488 against 14,572 from the Fertility Section. In both sources, as expected, the number of deaths is higher among boys than girls. In relative terms, death of male children tended to be over reported than death of female children from the death record than from the Fertility section. This observation is consistent with findings from the Brass Growth Balance Equation.

From *Table 1* the IMR estimated from the Death Record of 59.2 per 1,000 is higher than that of 34.1 per 1,000 from the Fertility section. This rate, from the Death Record, is however consistent with IMRs obtained from most recent ZDHS surveys.

In conclusion, the result that the IMR obtained from the Fertility section is very low is evidence to suggest that the quality of data on mortality is generally poor to allow any direct estimation of child mortality indicators.

**Table 1 Infant Mortality Rates by Sex from Household Deaths and Children Ever Born/ Surviving**

<b>From the Recorded Death</b>	<b>Both sexes</b>	<b>Male</b>	<b>Female</b>
Mid-year population aged 0	428,610	213,468	215,142
Number of deaths at age 0 year	26,488	14,619	11,869
Central Death Rate ( ${}_1M_0$ ) – per 1,000	61.8	68.5	55.1
Infant Mortality Rate, IMR: ( ${}_1q_0$ ) - per 1,000	59.2	65.4	53.1
<b>From the Fertility Section</b>			
Number of births during the last 12 months	416,988	208,716	208,272
Number of deaths at age 0 year	14,572	7,712	6,860
Central Death Rate: ( ${}_1M_0$ ) - per 1,000	34.9	36.9	32.9
Infant Mortality Rate, IMR: ( ${}_1q_0$ ) - per 1,000	34.1	36.0	32.2
ZDHS 2010-11	57		
ZDHS 2005-06	60		

Sources: ZIMSTAT, 2012 Population Census; ZDHS 2005-06 and ZDHS 2010-11

### **3. Levels of Mortality**

#### ***3.1. Crude death rate***

The Crude Death Rate (CDR) in the year preceding the census was 10.2 deaths per 1000 population. The trend shows that this rate is higher than the 1992 rate of 9.5 but lower than the 2002 rate of 17.2. The closest ZDHS of 2010-11 gives an average CDR of 11 per 1,000 for both sexes. The United Nations Population Division estimates that the CDR for Zimbabwe in 2012 was 10 per 1,000.

#### ***3.2. Age-sex specific death rates (ASDRs)***

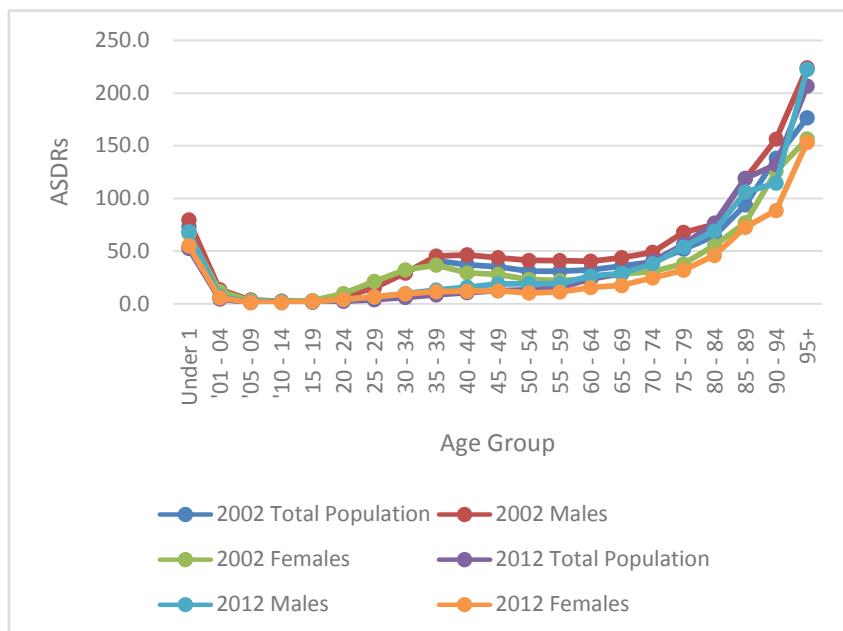
Death rates can be used to compare mortality at different age groups and the same age groups over time. They show the risk associated with death for particular ages. The ASDR is calculated as a ratio of deaths in a particular age group to the population in that age group. For example deaths among the 30-34 year-age group to the population in that age group multiplied by 1,000. ASDRs from the Zimbabwe 2002 and 2012 Population Census are presented in Table 2 and plotted in Figures 5 and 6. The rates were higher among females aged 15-30 years compared to rates of males in the same age group. This could be indicative of relatively high maternal mortality in this age group or the impact of AIDS death which is more pronounced in younger ages for females than males. For the rest of the age groups males experienced relatively higher mortality than females.

The age pattern of mortality for Zimbabwe is similar to that of selected regional countries as shown in Figure 7 below. Notably the pattern reflects populations affected by HIV and AIDS, with high mortality among infants and older age groups<sup>2</sup>.

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<sup>2</sup> For Lesotho and Malawi the figures are for 2006 and 2008 respectively.

**Figure 5 Age Specific Death Rates by Sex and Age, 2002 and 2012 Zimbabwe Population Censuses**



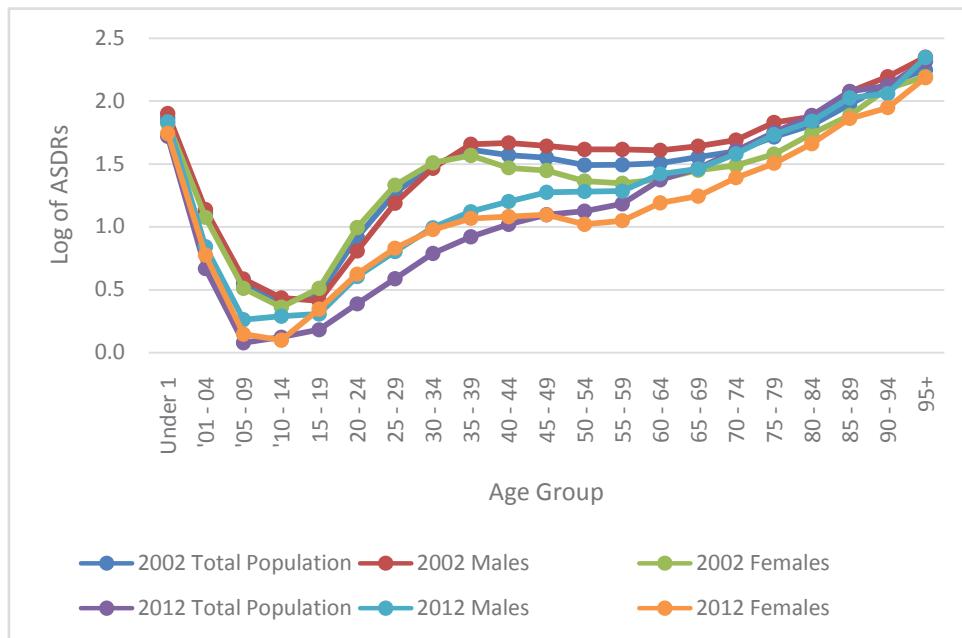
**Source:** ZIMSTAT, 2002 and 2012 Population Censuses

**Table 2 Age Specific Death Rates Per 1,000 Population, by Sex**

Age Group	2002 Both sexes	2002 Male Population	2002 Females Population	2012 Both sexes	2012 Male Population	2012 Female Population
<b>Under 1</b>	73.2	79.8	66.7	52.5	68.5	55.2
<b>'01 - 04</b>	12.8	13.7	11.9	4.7	7.0	6.0
<b>'05 - 09</b>	3.5	3.8	3.2	1.2	1.8	1.4
<b>'10 - 14</b>	2.5	2.7	2.3	1.3	1.9	1.3
<b>15 - 19</b>	2.9	2.6	3.2	1.5	2.0	2.2
<b>20 - 24</b>	8.3	6.4	9.9	2.4	4.0	4.2
<b>25 - 29</b>	18.6	15.4	21.5	3.9	6.4	6.7
<b>30 - 34</b>	30.8	29.3	32.4	6.1	9.8	9.5
<b>35 - 39</b>	40.9	45.4	37.0	8.3	13.2	11.6
<b>40 - 44</b>	37.1	46.5	29.5	10.5	15.9	12.0
<b>45 - 49</b>	35.4	43.9	28.0	12.5	18.8	12.4
<b>50 - 54</b>	30.9	41.3	23.2	13.3	19.1	10.5
<b>55 - 59</b>	31.1	41.3	22.2	15.2	19.2	11.2
<b>60 - 64</b>	32.1	40.7	24.0	23.6	26.3	15.5
<b>65 - 69</b>	35.9	43.9	28.3	29.2	28.9	17.5
<b>70 - 74</b>	39.8	49.0	30.8	40.3	38.1	24.5
<b>75 - 79</b>	51.8	67.8	38.0	56.2	54.0	31.9
<b>80 - 84</b>	64.4	75.4	55.2	76.5	69.1	45.8
<b>85 - 89</b>	94.0	118.9	77.0	119.0	106.0	72.5
<b>90 - 94</b>	138.2	156.3	125.8	132.2	114.5	88.6
<b>95+</b>	176.4	223.8	156.4	206.6	222.3	153.3

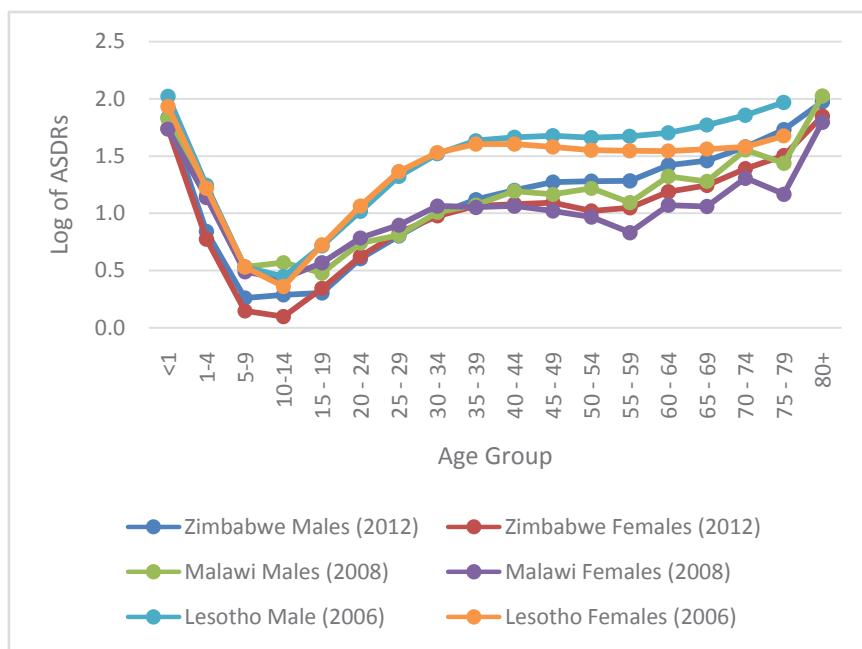
Sources: ZIMSTAT, 2002 and 2012 Zimbabwe Population Censuses: also see Appendix Tables A4a and A4b.

**Figure 6 Log of Age Specific Death Rates by Sex and Age, 2002 and 2012 Zimbabwe Population Censuses**



**Source:** ZIMSTAT, 2002 and 2012 Population Censuses

**Figure 7A Comparison of ASDRs Among Zimbabwe, Malawi and Lesotho.**



**Sources;** (i) ZIMSTAT, 2012 Zimbabwe Population Census (ii) Malawi 2008 National Statistical Office. Malawi Population Census 2008 Main Report, Government of Malawi (iii) Lesotho Bureau of Statistics. Lesotho 2006 Population Census Analytical Report Vol IIIA, Population Dynamics, Ministry of Finance and Economic Development.

### **3.3. Maternal Mortality Indicators**

The (World Health Organization, 1993) defines maternal death as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental causes. The census question on the number of days the death occurred after termination of pregnancy is imprecise; it refers to a period of about one month after giving birth. It is stricter compared to the definition of the WHO. Four indicators of maternal mortality will be computed:

- (i) **Maternal Mortality Ratio:** This is the most commonly used indicator of maternal mortality, which refers to the number of maternal deaths per live birth, multiplied by a conventional factor of 100,000:

$$\text{MM Ratio} = \frac{\text{Number of maternal deaths} \times 100,000}{\text{Number of live births}}$$

- (ii) **Maternal Mortality Rate:** This is an indicator of the risk of maternal death among women of reproductive age. The MM Rate is usually multiplied by a factor of 1,000:

$$\text{MM Rate} = \frac{\text{Number of maternal deaths} \times 1000}{\text{Number of women aged 15-49}}$$

- (iii) The third indicator is the proportion of adult female deaths due to maternal causes (PMFD):

$$\text{PMFD} = \frac{\text{Number of maternal deaths}}{\text{Number of deaths among women 15-49}}$$

- (iv) Fourthly, an indicator of the life time risk (LTR) indicator of maternal mortality will be calculated. It reflects the chances of a woman dying from maternal causes over the course of her 35-year reproductive life span. This indicator takes into account the probability of a death due to maternal causes each time a woman becomes pregnant.

$$\text{LTR} = 35 * \text{MM Rate}$$

The census reported a total of 22,739 deaths to females aged 15-49 years of which 2,230 (9.8%) were pregnancy-related. Respondents were asked whether there was any death in the household during the last twelve months. The next two questions asked whether the deceased was male or female and the age of the deceased at death, respectively. If the deceased was female a further question was asked if she died while giving birth or within about one month after giving birth.

**Table 3 National Data on Maternal Mortality by Women's Age Group, Zimbabwe, 2012 Census**

Age Group	Number of Women	Number of Deaths in the Last 12 Months	Number of Deaths Due to maternal causes	Number of Live Births in the Last 12 Months	Maternal Mortality Ratio (Per 100,000 live Births)	Maternal Mortality Rate per 1,000 Women	Proportion of Death Due to Maternal Causes	Life Time Risk of Maternal Death (per 1,000 Women)
15-19	712803	1577	266	50690	525	0.373	0.1687	1.865
20-24	652198	2743	493	122802	401	0.756	0.1797	3.780
25-29	611857	4130	548	111952	489	0.896	0.1327	4.480
30-34	477208	4527	434	72203	601	0.909	0.0959	4.545
35-39	374244	4358	329	39620	830	0.879	0.0755	4.395
40-44	256326	3083	120	10827	1108	0.468	0.0389	2.340
45-49	186757	2321	40	1690	2367	0.214	0.0172	1.070
<b>Total</b>	<b>3271393</b>	<b>22739</b>	<b>2230</b>	<b>409784</b>	<b>544</b>	<b>0.682</b>	<b>0.0981</b>	<b>23.87</b>

Source: ZIMSTAT, 2012 Zimbabwe Population Census

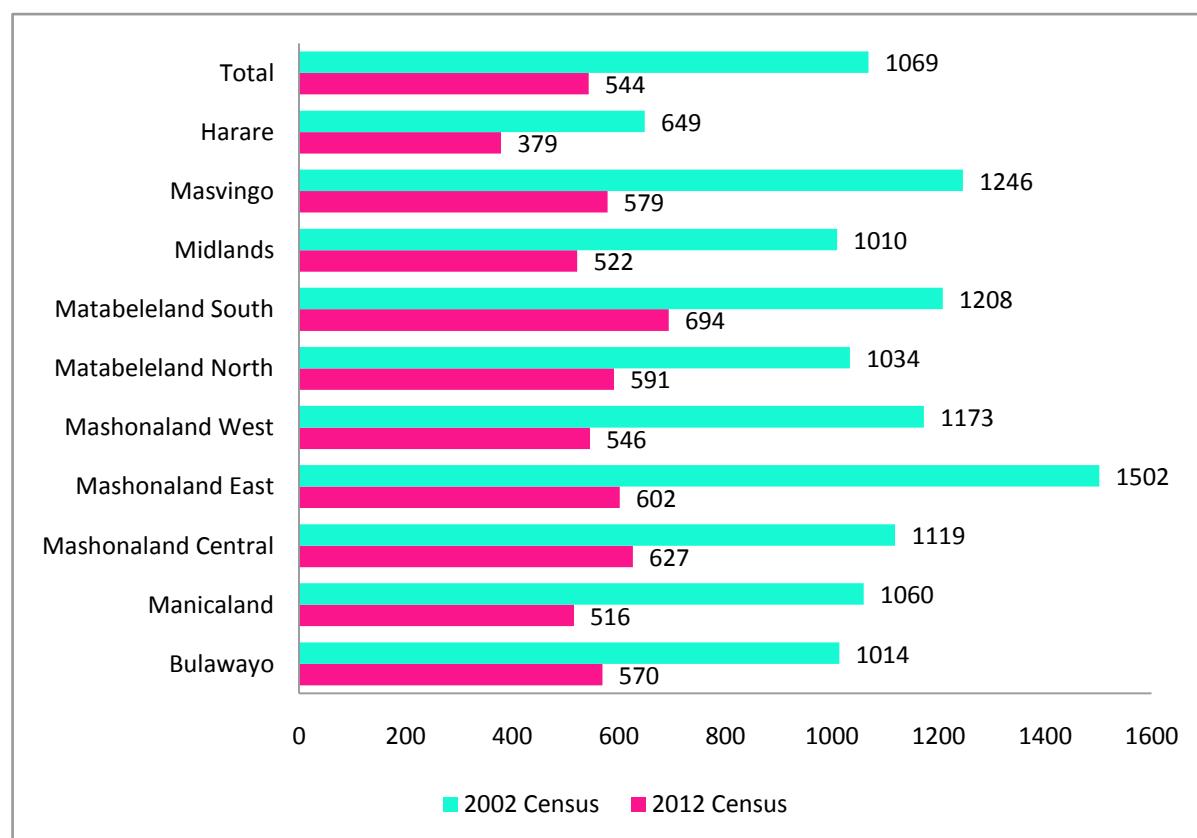
The computed maternal mortality ratio (MMR) was 544 deaths per 100,000 live births<sup>3</sup>, as shown in Table 3 above. The maternal mortality rate was 0.682 deaths per 1,000 women. The maternal mortality ratio for Zimbabwe estimated by the 2010-11 ZDHS was 960 per 100,000 live births with a 95% confidence interval ranging from 778 to 1,142 deaths per 100,000 live births. A more comparable ratio was estimated by the World Bank, which put the Maternal Mortality ratio for Zimbabwe at 570 for 2010. The ratio computed for Ghana using the Ghana 2010 Population and Housing Census is 485 deaths per 100,000 live births. If the estimate from the ZDHS 2010-11 is disregarded, due to sampling errors, the ratio of 544 based on the 2012 census data appears to be a satisfactory indicator of the level of maternal mortality in the country.

<sup>3</sup> The MMR of 544 per 100,000 life births is different from the one computed in the 2012 Census Report of 525 per 100,000 live births (Census 2012 National Report, ZimStat)

The pattern of maternal mortality by age depicts high maternal mortality among teenagers (525 for those aged 15-19 years), declining to 401 among those aged 20-24 years, and rising to 489 for females in the age group 25-29 years. It then further rises to 1108 among women aged 40-44 years and to 2367 among those aged 45-49 years. Various studies have outlined the causes of maternal mortality in Zimbabwe. The Zimbabwe Maternal and Perinatal Mortality Study (ZMPMS) of 2007 (Munjanja, et al., 2007) identified the leading direct causes of maternal mortality in Zimbabwe as post-partum haemorrhage, pregnancy induced hypertension and puerperal sepsis. Leading indirect causes include HIV and AIDS which account for about 26% of all maternal deaths. The United Nations (2013) attributes about 39% of maternal deaths to AIDS related indirect causes.

Figure 8 presents Maternal Mortality Ratios by province for 2002 and 2012 censuses. The figure shows that overall, the maternal mortality ratio in Zimbabwe improved by more than 100 percent from 2002 to 2012.

**Figure 8 Maternal Mortality Ratios by Province, Zimbabwe, 2002 and 2012 Population Census**



**Source:** ZIMSTAT, 2012 Population Census

## **4. Indirect Estimation of Childhood Mortality**

### ***4.1. Indirect Estimation of Child Mortality***

The most well-known and widely used indirect estimation technique is the Brass's technique. Brass (1964) was the first to develop a procedure for converting proportions dead of CEB reported by women in age groups 15-19, 20-24 etc. into estimates of the probability of dying before attaining certain exact childhood ages. The Brass method shows that the relation between the proportion of children dead ( $D_i$ ) and a life-table mortality measure ( ${}_nq_x$ ) is primarily influenced by the age pattern of fertility because it is this pattern that determines the distribution of the children of a group of women by length of exposure to the risk of dying. The Brass method depends on the assumption that information on children dead is accurate because reporting them as living or omitting them relative to living children; result in low derived mortality estimates.

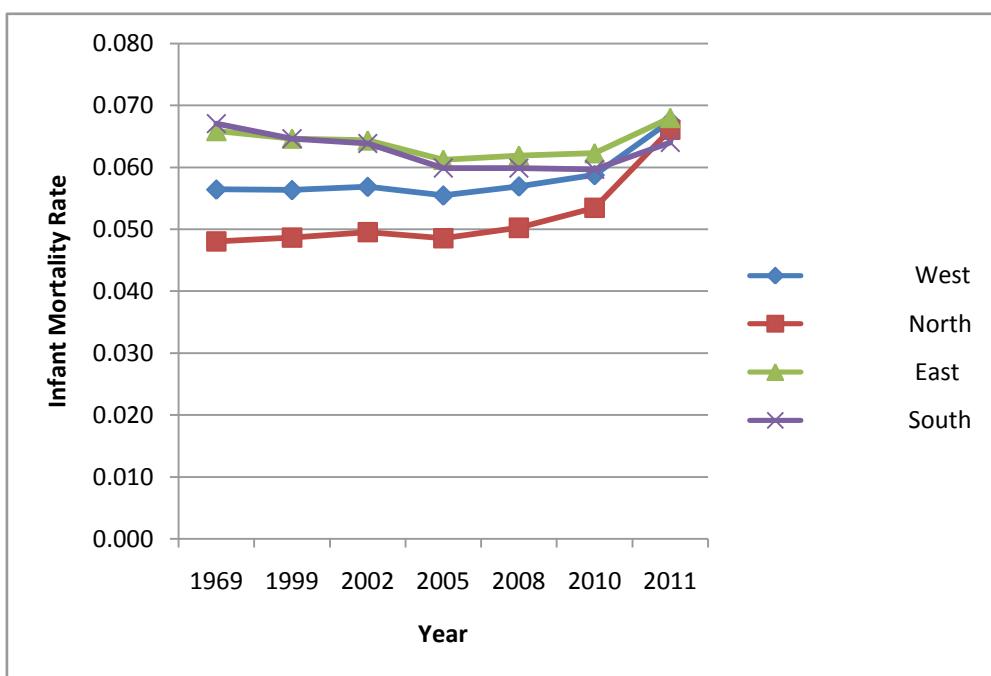
The Brass method was further developed by T.J. Trussells (United Nations, 1983) based on the Coale-Demeny model life tables and has an advantage over earlier versions in that it estimates probabilities of dying and time locates these probabilities. Coale and Demeny Regional Model Life were developed using mortality exhibited by populations of developed countries during the period 1850 - 1960.

The first and second steps of the method are to calculate average parity per woman and the proportions dead among children ever born, respectively. Thirdly the method involves the calculation of multipliers that are multiplied with the proportion of children dead to give the  $q(x)$  values. The multiplying factor is determined by the parity ratios  $P(1)/P(2)$  and  $P(2)/P(3)$  and coefficients estimated by regression analysis of simulated models. Fourthly  $q(x)$  values are calculated by multiplying the proportion of children dead  $D(i)$  by the multiplying factors to give estimates of  $q(x)$ . The reference time  $t(i)$  is then calculated from regression analysis of simulated model cases. Once the reference time has been estimated, it can be converted to a reference date by subtracting it from the reference date of the survey. The last step involves the conversion of estimated  $q(x)$  values for ages 1, 2, 3, 5, 10, 15 and 20, obtained from the fourth step above, into a single measure in order to analyse trends and facilitate comparison both within and between data sets.

United Nations (1990) suggests that a measure of mortality in childhood that is not particularly sensitive to the pattern of mortality be selected. The common index therefore recommended is the probability of dying by age 5,  $q(5)$ , that is, under five mortality. Using the Brass method, the  $q(5)$  estimate of mortality is more robust to the choice of mortality model than  $q(1)$ . An estimate is said to be robust when its value is not severely affected by deviations from the assumptions on which it is based. Under-5 mortality is therefore used for the determination of the mortality trend. In other words regardless of the mortality model chosen to apply the Brass method to, the errors are smaller in the estimation of  $q(5)$  than  $q(1)$ .

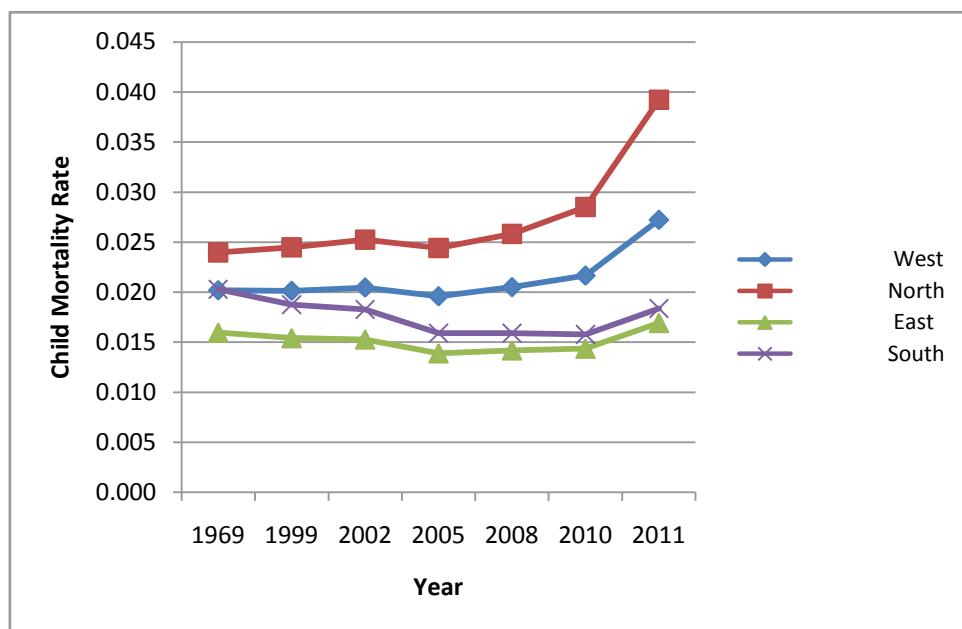
or 4q1 in both absolute and relative terms. Put differently, based on mortality models for the same levels of mortality, the q(5) fluctuates less than the infant or child mortality rate, as illustrated in Figures 9a to 9c below, using the Zimbabwe 2012 Population Census data. The figures underscore the robustness of q(5) as an indicator of mortality in childhood when it is estimated using the Brass method (United Nations , 1990).

**Figure 9a Infant Mortality for both Sexes in Zimbabwe, estimated using the four Coale Demeny Mortality Models, Zimbabwe 2012 Population Census**



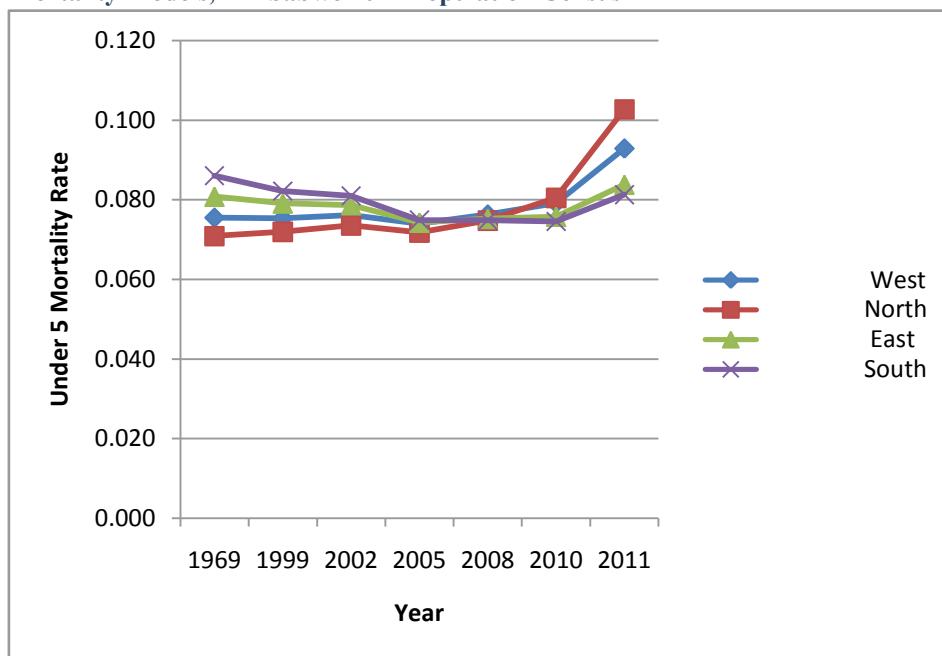
**Source:** ZIMSTAT, 2012 Population Census

**Figure 9b Child Mortality for both Sexes in Zimbabwe, Estimated Using the four Coale-Demeyen Mortality Models, Zimbabwe 2012 Population Census**



**Source:** ZIMSTAT, 2012 Population Census

**Figure 9c Under-five mortality for both Sexes in Zimbabwe, Estimated Using the four Coale-Demeyen Mortality Models, Zimbabwe 2012 Population Census**



**Source:** ZIMSTAT, 2012 Population Census

Brass' (1964) method is based on a number of assumptions. One of them is that the survivorship of children is independent of that of their mothers and that the mortality risks of children born to women who do not report their child bearing experience is similar to those of

children whose mothers do. The method also assumes constant fertility during the 30 or 35 years preceding the survey. It also assumes that the proportions of children dead are correct. One of the most important assumptions of the Brass method is that mortality risks among children depend solely on their age and not on other factors, such as age of mother or birth order of the child. However mortality estimates based on reports of women aged 15-19 and 20-24 (since a significant proportion of the children reported by women 20-24 would have been born when they were 15-19), which reflect the most recent mortality, are generally unreliable and often higher than estimates based on reports of older women (United Nations, 1990). Estimates based on the oldest age group, 45-49 years, are also fraught with omission of life time births and deaths of children due to memory lapse. The United Nations (1990) advises that the most reliable estimates are those associated with age groups 25-29 to 35-39 years. For Tables 5 and 6 below childhood mortality indicators were therefore time referenced by selecting indicators relating to years which correspond to mother's age groups of 25-29 and 30-35 years. For Table 7 time references associated with age groups 25-29 and 30-34 were averaged to give a single reference year. Childhood mortality indicators were also averaged in the same manner to give a single indicator corresponding to the single reference year.

#### ***4.2. Selecting the best fit model life table***

The Coale-Demeny life table system has four sets of models each representing a distinct mortality pattern. The challenge is to select the model life table that best fits a particular country.

The United Nations (1990) suggests various ways of selecting the best fitting model life table. One method involves plotting the  $q(1)$  against  $4q_1$  indicators of the four sets of the Coale-Demeny life tables and then plot the co-ordinate of  $q(1)$  and  $4q_1$  from the most recent survey. The Coale-Demeny life tables to which the co-ordinate from the most recent survey closely plots will be the most appropriate model life table. Another method assesses the adequacy of mortality models in representing mortality in a country by finding the  $q(5)$  values associated with the estimated  $q(1)$  for each of the mortality tables available. This is called the algebraic approach. The  $q(5)$  values corresponding to the estimated  $q(1)$  for all the mortality models are then compared to the  $q(5)$  values, from the most recent survey, by way of ratios. The model life table with  $q(5)$  values closest to estimated  $q(5)$  values is selected.

Under five and infant mortality for the four-year period preceding the 2010-11 ZDHS was 84 and 57 per 1,000, respectively. Using this information Table 6 below was generated from the algebraic approach. A ratio of 1.0 indicates a perfect fit. The North model gives a ratio closest to 1.0 i.e. 1.04, and will be selected (Table 4)

**Table 4 Comparison of ratios of model q(5) associated with estimated infant mortality to estimated q(5) using the Coale Demeny mortality models.**

Model	Model q(5) associated with estimated q(1) = 0.570 (ZDHS 2010-11)	Ratio of model q(5) to estimated q(5) using the Coale Demeny models
North	.0870	1.04
South	.0710	0.85
East	.0679	0.81
West	.0761	0.91

Source: ZIMSTAT, 2012 Zimbabwe Population Census, 2010-11 ZDHS

### ***4.3. Estimates and trends of childhood Mortality***

In order to estimate early age mortality indirectly data on the average number of children ever born and the average number of children surviving, tabulated by age group of mother is required. The 2012 Zimbabwe Population census collected information on

- the total number of female children ever borne
- the total number of male children ever borne
- the number of female children who are surviving
- the number of male children who are surviving

To complete the estimation, the mean age of mother at childbearing in the population would also be required. Using the 2012 Zimbabwe Census data the mean age at childbearing was 26.6 years.

#### **4.3.1 Levels of infant and under-five mortality rates (1 q0 and 5q0)**

Considering only the most reliable estimates – those associated with age groups 25-29 and 30-34 (United Nations, 1990; pp 54), as presented in Table 5, under-five mortality was 75 per 1,000 in 2008 and 72 per 1,000 in 2005. For the same period, infant mortality was 50 and 49 per 1,000 respectively.

**Table 5 Infant, Child and Under-five Mortality based on the Coale-Demeny North Model Life Table, Zimbabwe 2012 Population Census, both sexes**

Age	1q0	4q1	5q0	Year
15-19	66	39	103	2011
20-24	53	29	80	2010
25-29	50	26	75	2008
30-34	49	24	72	2005
35-39	50	25	74	2003
40-44	49	24	72	2000
45-49	48	24	71	1997

*Source:* ZIMSTAT 2012 Zimbabwe Population Census

Table 6 further presents infant and under-five mortality by sex of child. It shows that in 2005 and 2008 the risk of a male child dying was about 20% higher than that of a female child.

**Table 6 Infant and Under-five mortality by sex of child, 2012 Zimbabwe Population Census**

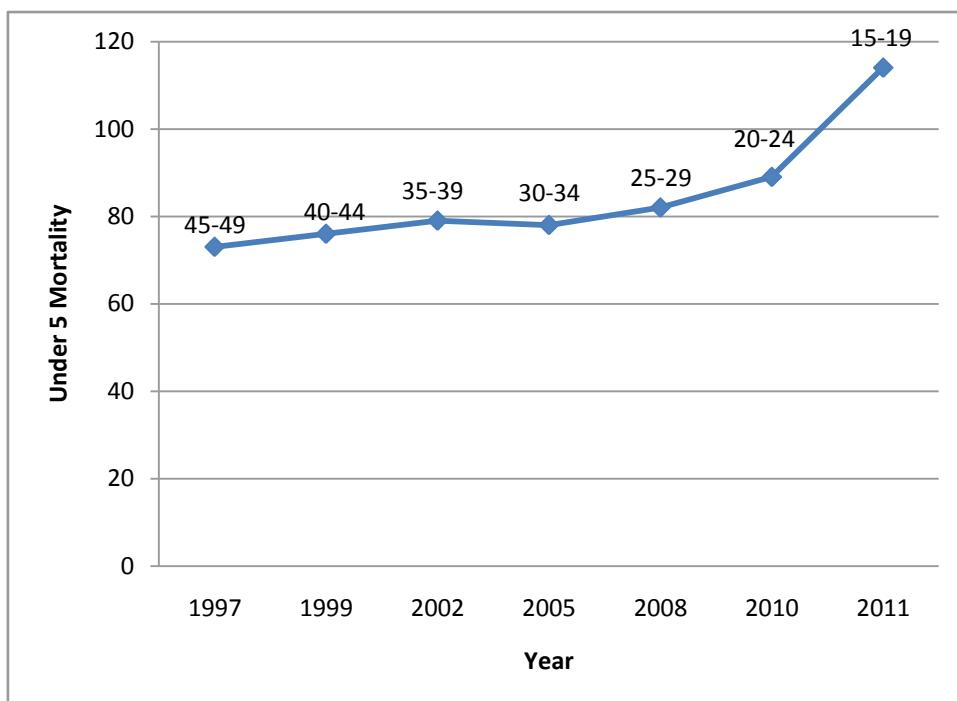
Sex	1q0	4q0	5q0	Ref.
Male	54	29	82	2008
	52	27	78	2005
Female	46	23	68	2008
	45	22	66	2005

*Source:* ZIMSTAT, 2012 Zimbabwe Censuses

In Figure 10 the values of the common index  $q(5)$  are plotted against the reference date of each estimate. The figure clearly shows that under-five mortality has been fairly stable for most of the period 1997-2008, within the range 70 to 80 per 1,000, but increase markedly after 2008. One would conclude that mortality in childhood increased during the year 2010 after varying within a narrow range during the preceding decade. However, as noted above, estimates referring to recent periods relate to women aged 20-24 and 15-19, which simply reflects the higher than average risk of dying of children born to mothers in these age groups. Estimates referring to years in the past could also be understated due to omissions of reporting by elderly women. What can be established with high degree of confidence though is that during the 2003-2008 period, under-five mortality was approximately 74 per 1,000,

that is, during the mid of the decade 2000-2010 one out of every 14 children born would die before celebrating their fifth birthday.

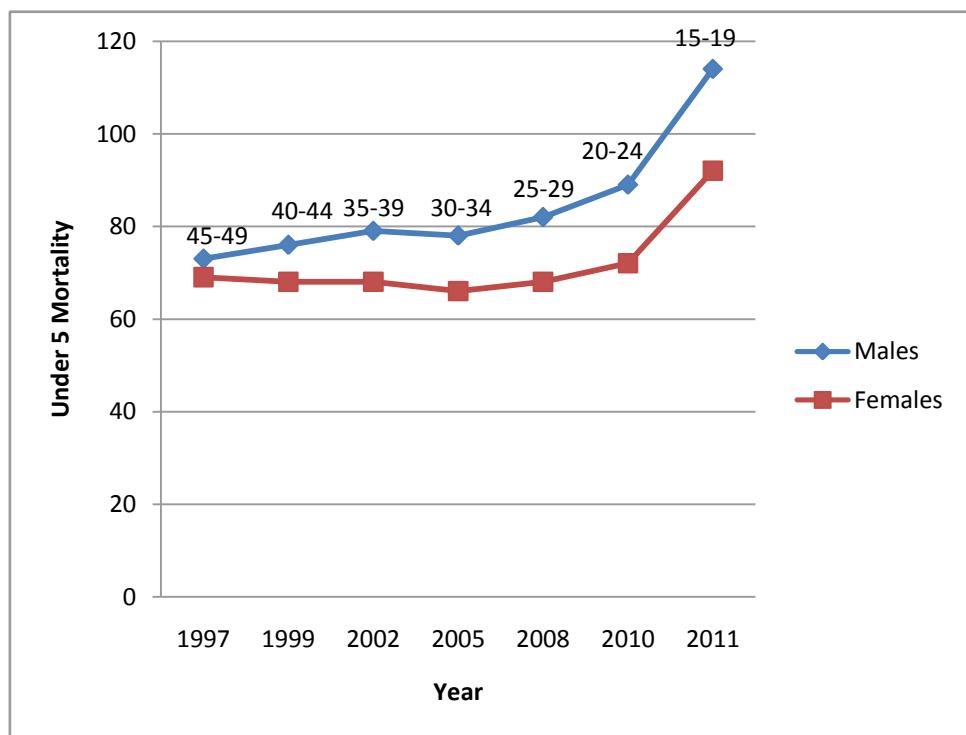
**Figure 10 Under-5 Mortality, q(5) for both Sexes in Zimbabwe, Estimated Using the Model North and the Trussell Version of the Brass method; Zimbabwe 2012 Population Census**



**Source:** ZIMSTAT, 2012 Population Census

Figure 11 plots the Trussell version of the Brass method to the Zimbabwe 2012 Population Census data classified by sex of child. Higher male than female mortality is the general rule for all countries, rendering credence to the estimates for Zimbabwe, from year 2000 (United Nations, 1990). However under five mortality derived from the age group 45-49 seems out of the norm as the two estimates are almost equal. This could have resulted from errors in the data. In such circumstances, the United Nations (1990) advises that estimates derived from women aged 45-49 should be disregarded.

**Figure 11 Under-5 Mortality, q(5) for Males and Females in Zimbabwe, Estimated Using the Model North and the Trussell Version of the Brass Method; Zimbabwe 2012 Population Census**



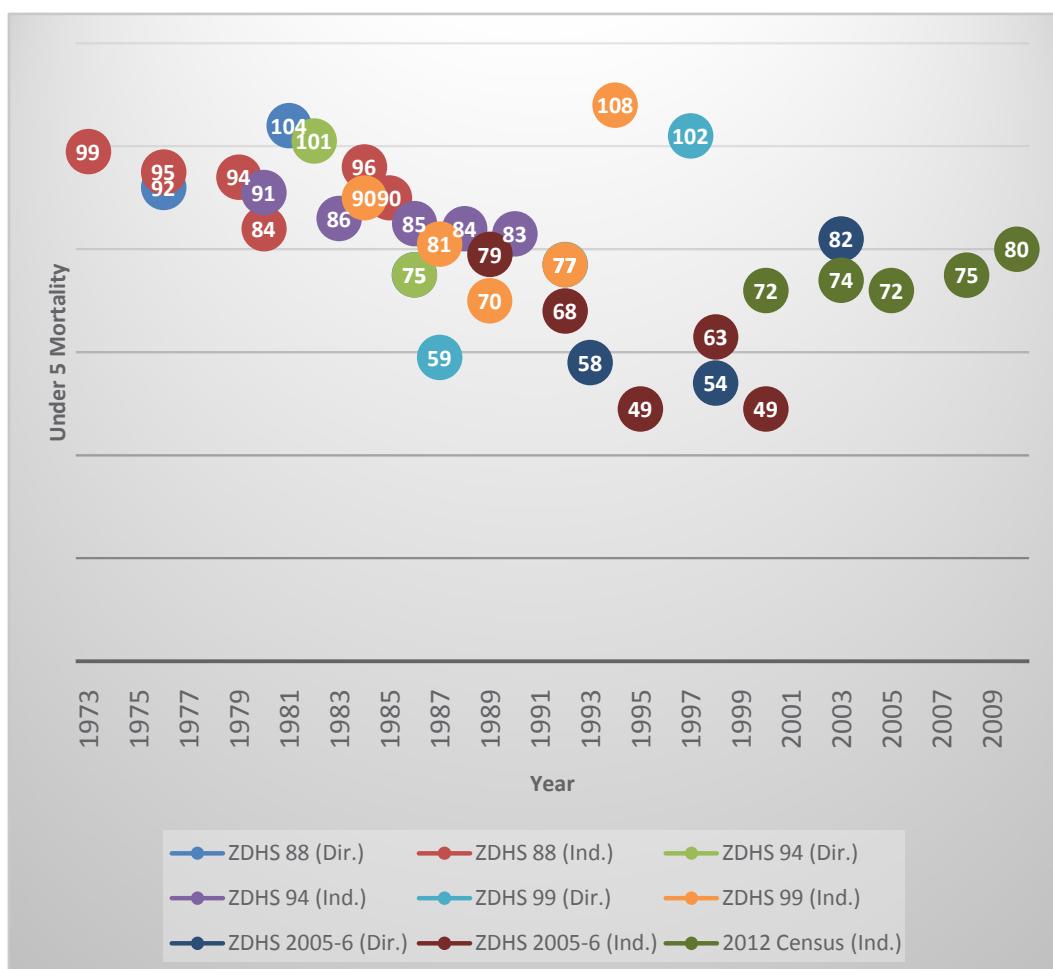
*Source:* ZIMSTAT, 2012 Population Census

Estimates of under-five mortality for both sexes provided by younger women are biased upwards, hence should not be considered. From the remaining estimates we can conclude that during the period 2000 to 2008 under-five mortality among males in Zimbabwe ranged from 76 deaths per 1,000 births in 2000 to 82 in 2008, averaging 78.5 for the period. For females the trend for the period remained almost constant at 68 deaths per 1,000 births. 9

#### 4.3.2 Trend in Under-five mortality

Trends in under-five mortality can be deduced from various data sources which collected information on children ever-born and children surviving. Such information, obtained from previous Demographic and Health Surveys carried out in Zimbabwe, with overlapping periods for the estimate (see Figure 12 below). Generally the various data sources combined display declining under 5 mortality trend over time. While there is a great deal of disparity in the estimated rates for some overlapping periods in certain cases, the observation is that there is fairly good agreement among the various estimates that under-five mortality has been declining in Zimbabwe during the past three decades.

**Figure 12 Under-5 Mortality Data and Estimated Trend, 1973- 2009 (Direct and Indirect Estimates), Zimbabwe**



Source: (Kembo, 2009), ZIMSTAT 2012 Zimbabwe Population Census

#### **4.4. Differentials in mortality**

This section considers socio-economic differentials of infant and under-5 mortality by background characteristics of the mother. These indicators are affected by the nexus of environmental, economic, cultural, social, political and demographic factors. Factors considered in this analysis place of residence - rural-urban, province, educational attainment and marital status of mother. Table 7 below gives a summary of the indicators by socio-economic variable.

##### **4.4.1 Province of residence**

The province of residence of mothers influences the mortality experiences of their children. This arises from differences in environmental and socio-cultural settings of the provinces, which can affect the survival chances of children under five years. As shown in Table 7 in the five years preceding the 2012 Census, infant mortality ranged from 36 deaths per 1000 live births in Bulawayo province to 58 deaths per 1000 live births in Manicaland province. During

the same period, under-five mortality rates ranged from 49 deaths per 1000 children in Bulawayo province to 87 deaths per 1000 children in Manicaland province. Children in the urban provinces and the two Matebeleland provinces were less exposed to the risk of dying in childhood than their counterparts in other provinces.

#### **4.4.2 Rural-Urban Residence**

Residing in a rural or urban area influences levels of childhood mortality through living conditions, behaviour patterns of people mainly influenced by some cultural practices and beliefs. Access to health services also plays a part in influencing the levels of childhood mortality between the two areas. In Zimbabwe rural areas compared to urban areas have poor access to water and sanitary facilities. Table 7 shows that in 2007 infant and under-five mortality rates were higher in rural than in urban areas. Infant mortality in rural areas was 53 deaths per 1,000 live births compared with 43 deaths per 1,000 live births in urban areas. The under-five mortality rate during the same period was 80 deaths per 1,000 live births in rural areas compared with 62 deaths per 1,000 live births in urban areas.

#### **4.4.3 Marital status**

The 2012 Population Census collected information on the current marital status of persons aged 15 years and above. This information has been categorised into never married, married, divorced/separated and widowed. Children of women who were widowed experienced the highest infant and under-five mortality rates of 63 and 97 respectively, followed by those of divorced (53 and 79 respectively), and married (49 and 72, respectively). Infant and under-five mortality rates of children born to women who responded as never married at the time of the Census were at 49 per 1,000 live births and 73 per 1,000 children respectively. The fact that children of widowed women experienced highest mortality may not be surprising as it may be reflecting the high correlation between mortality of their husbands and children likely caused by HIV/AIDS.

#### **4.4.4 Level of education**

Education is considered a pervasive factor in demographic analysis. Research has established relationships between the educational level of the mother and the mortality of the children. Research has found that infant mortality falls as the educational attainment of the mother increases. Education, for example, helps to unlock benefits that can be derived from health education by enabling mothers to read and interpret health messages. In 2007 infant and under five mortality among children of mothers with no education were highest (66 and 103 respectively) compared to the rest of the mothers. What is evident is that as educational attainment of the mother increased, infant and under five mortality of children born to them decreased.

#### **4.4.5 Employment status**

Infant and under-five mortality of children born to employed mothers were slightly higher than that of children born to mothers who were not employed.

**Table 7 Infant and under 5-mortality by socio-economic background of mother**

<b>Background Factor</b>	<b>Infant Mortality Rate</b>	<b>Child Mortality Rate</b>	<b>Under 5 Mortality Rate</b>	<b>Reference Date</b>
<b>Province</b>				
Bulawayo	36	14	49	2008
Manicaland	58	32	87	2007
Mashonaland East	54	29	81	2007
Mashonaland West	53	29	80	2007
Matebeland North	43	20	62	2007
Matebeleland South	43	20	61	2007
Midlands	50	25	74	2007
Masvingo	47	23	70	2007
Harare	42	19	61	2007
<b>Residence</b>				
Rural	53	28	80	2007
Urban	43	20	62	2007
<b>Marital Status</b>				
Never Married	49	25	73	2008
Married	49	24	72	2006
Divorced/Separated	53	28	79	2006
Widowed	63	37	97	2006
<b>Educational Level</b>				
No Education	66	39	102	2007
Primary	61	35	93	2007
Secondary	45	22	66	2007
Tertiary	33	12	45	2008
<b>Employment Status</b>				
Employed	51	26	75	2007
Not Employed	49	25	72	2007
<b>Disability Status</b>				
With disability	68	41	107	2007
Without Disability	49	25	73	2007
<b>Total</b>	<b>50</b>	<b>25</b>	<b>74</b>	<b>2007</b>

*Source:* ZIMSTAT, 2012 Zimbabwe Population Census

#### **4.4.6 Disability Status of Mother**

Infant and under five mortality of children born to mothers with a disability was higher than of children born to mother without a disability. Infant mortality of children born to mothers with a disability was 68 per 1000 births compared to 49 per for children of mothers without a disability. Likewise, under five mortality of children born to mothers with a disability was 107 per 1000 children compared to 73 for children born to mothers without a disability.

## 5. Life Tables

Life tables for males, females and both sexes were constructed based on the empirical sets of age-specific central death rates  $n m_x$ . As noticed in the evaluation of data, age specific central death rates from the Census show the impact of HIV/AIDS deaths in the middle ages. Applying model life tables will mask the impact of HIV/AIDS deaths on the life table. The Mortpak procedure LIFTB was used. Based on a given set of  $n m_x$  values for age groups 0-1, 1-5, 5-10, ..., up to the last closed age group available (maximum of 95-100 is allowed; value for the final open age group is not given), an abridged life table is constructed. The usual life table columns are then calculated and labelled. This procedure is based on a method developed by (Greville, 1943). Household death and population data used to calculate age-specific central death rates,  $n m_x$ , is provided in Appendix Tables A4a and A4b.

Life tables based on the procedure described above are presented in Tables 9 to Table 11. The rest of the Life tables are presented in the Appendix, including life tables for 2002, which have been included for comparison purposes.

In 2012 life expectancy at birth in Zimbabwe was 60.7 years for both sexes combined. Males had a life expectancy of 57.4 compared to 64.0 for females. This marks a big improvement in life expectancy when compared to the 2002 Population Census.

**Table 8 Estimated Life Expectancy at Birth**

	Life Expectancy at Birth		
	Male	Female	Both Sexes
2012 Population Census	57.4	64.0	60.7
2002 Population Census	42.2	46.5	44.2

**Source:** ZIMSTAT, 2012 Zimbabwe Population Censuses

**Table 9 Estimated Life Tables for Zimbabwe, 2012 Population Census, Males**

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0685	0.0651	100000	6505	94988	5743727	57.4
1	0.007	0.0273	93495	2557	367478	5648739	60.4
5	0.0018	0.0091	90938	825	452629	5281261	58.1
10	0.0019	0.0097	90113	874	448383	4828632	53.6
15	0.002	0.0101	89240	897	444087	4380249	49.1
20	0.004	0.0199	88342	1757	437726	3936162	44.6
25	0.0064	0.0314	86586	2717	426608	3498437	40.4
30	0.0098	0.0481	83869	4035	409786	3071829	36.6
35	0.0132	0.064	79834	5105	386776	2662043	33.3
40	0.0159	0.0766	74728	5721	359571	2275268	30.4
45	0.0188	0.0897	69008	6190	329556	1915697	27.8
50	0.0191	0.091	62818	5718	299592	1586140	25.2
55	0.0192	0.0918	57099	5240	272539	1286548	22.5
60	0.0263	0.1237	51860	6415	243453	1014009	19.6
65	0.0289	0.1347	45445	6124	212017	770556	17
70	0.0381	0.1742	39321	6849	179833	558539	14.2
75	0.054	0.2379	32472	7727	143136	378706	11.7
80	0.0691	0.2947	24746	7291	105474	235569	9.5
85	0.106	0.4148	17454	7240	68334	130095	7.5
90	0.1145	0.4418	10214	4512	39410	61761	6
95	0.2551	...	5702	5702	22351	22351	3.9

*Source:* ZIMSTAT, 2012 Zimbabwe Population Censuses

**Table 10 Estimated Life Tables for Zimbabwe, 2012 Population Census, Females**

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	(x,n)	T(x)	e(x)
0	0.0552	0.0528	100000	5282	95745	6396184	64
1	0.006	0.0235	94718	2223	373301	6300440	66.5
5	0.0014	0.007	92495	646	460861	5927139	64.1
10	0.0013	0.0062	91849	573	457813	5466278	59.5
15	0.0022	0.011	91276	1005	454118	5008465	54.9
20	0.0042	0.0208	90271	1880	447077	4554347	50.5
25	0.0067	0.0332	88391	2937	435070	4107271	46.5
30	0.0095	0.0464	85454	3963	417737	3672200	43
35	0.0116	0.0566	81492	4612	396044	3254464	39.9
40	0.012	0.0584	76880	4488	373127	2858419	37.2
45	0.0124	0.0602	72392	4360	350820	2485292	34.3
50	0.0105	0.051	68032	3467	331339	2134472	31.4
55	0.0112	0.0544	64564	3513	314244	1803133	27.9
60	0.0155	0.0745	61052	4546	294172	1488889	24.4
65	0.0175	0.0839	56506	4742	270958	1194717	21.1
70	0.0245	0.1157	51764	5992	244285	923758	17.8
75	0.0319	0.148	45772	6776	212354	679473	14.8
80	0.0458	0.2061	38997	8039	175494	467119	12
85	0.0725	0.3067	30958	9494	130925	291626	9.4
90	0.0886	0.3618	21464	7766	87684	160700	7.5
95	0.1876	...	13698	13698	73017	73017	5.3

*Source:* ZIMSTAT, 2012 Zimbabwe Population Censuses

**Table 11 Estimated Life Tables for Zimbabwe, 2012 Population Census, Both Sexes**

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0618	0.0589	100000	5893	95356	6069597	60.7
1	0.0065	0.0256	94107	2407	370351	5974241	63.5
5	0.0016	0.008	91700	731	456672	5603891	61.1
10	0.0016	0.008	90969	725	453033	5147219	56.6
15	0.0021	0.0104	90244	943	449044	4694185	52
20	0.0041	0.0203	89301	1814	442389	4245141	47.5
25	0.0066	0.0325	87487	2843	430800	3802752	43.5
30	0.0097	0.0474	84644	4012	413636	3371953	39.8
35	0.0124	0.0602	80632	4852	391275	2958317	36.7
40	0.014	0.0676	75780	5126	366166	2567041	33.9
45	0.0154	0.0741	70654	5236	340003	2200875	31.2
50	0.0139	0.0671	65418	4391	315934	1860872	28.4
55	0.0146	0.0705	61026	4301	294579	1544938	25.3
60	0.0201	0.0958	56725	5433	270306	1250360	22
65	0.0225	0.1066	51292	5468	243017	980054	19.1
70	0.0307	0.1428	45824	6545	213189	737037	16.1
75	0.0419	0.1899	39279	7459	178029	523848	13.3
80	0.0559	0.2456	31820	7816	139822	345819	10.9
85	0.0861	0.3527	24004	8467	98343	205997	8.6
90	0.0991	0.3952	15537	6140	61957	107654	6.9
95	0.2056	...	9397	9397	45697	45697	4.9

*Source:* ZIMSTAT, 2012 Zimbabwe Population Censuses

## **6. Conclusion**

In the absence of reliable vital registration, birth and death data reported for the past 12 months before the survey and information on children ever born and children surviving are used to estimate mortality levels in a population. However due to errors in reporting of these events, careful treatment of data is necessary. A historical analysis of death trends in relation to HIV/AIDS deaths shows that the death trend conforms to developments of the HIV/AIDS condition in Zimbabwe. A cursory look at the ASDRs showed a bulge in the middle age groups – reflecting the impact of HIV/AIDS deaths on the population.

When compared to the 2002 population census, the Crude Death Rate showed a declining trend and was lower than the Crude Death rate from the 2002 Population Census. The Maternal Mortality Ratio (MMR) was estimated at 544 per 100,000 life birth; less than half of the ratio from the 2002 Population Census. Ten percent of the reported deaths of females aged 15-49 years were pregnancy-related deaths. The indirect method (Brass, as modified by Trussells) was also used to estimate childhood mortality. The Coale-Demeny North model was assessed as most suitable for Zimbabwe. Results show that in 2007 the Infant and Under 5 Mortality rates were 50 per 1,000 births and 74 per 1,000 children, respectively. Childhood mortality was comparatively higher for children of women who were widowed. The higher the educational level of mothers, the lower the mortality experience of their children. Children born to mothers residing in rural areas experienced higher mortality than children born to mother in urban areas; so were children born to mothers with a disability compared to children born to mothers without a disability. Provincial variations in childhood mortality are also evident. Under five mortality has generally been on the decline since the 1970s. Life expectancy at birth, for both sexes combined, increased from 44.2 to 60.7 from 2002 to 2012, i.e. adding 16.5 years in a decade.

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## 8. Appendix Tables

Table A1a National Data on Maternal Mortality by Women's Age Group, Zimbabwe, 2012 Census:  
Rural

Age Group	Number of Women	Number of Women Deaths in the Last 12 Months	Number of Deaths Due to maternal causes	Number of Live Births in the Last 12 Months	Maternal Mortality Ratio (Per 100,000 live Births)	Maternal Mortality Rate per 1,000 Women	Proportion of Death Due to Maternal Causes	Life Time Risk of Maternal Death (per 1,000 Women)
15-19	446207	1195	207	38543	537	0.464	0.173	2.320
20-24	374794	2092	356	80487	442	0.950	0.170	4.749
25-29	349232	3087	386	69653	554	1.105	0.125	5.526
30-34	281387	3334	313	46218	677	1.112	0.094	5.562
35-39	232949	3205	246	27195	905	1.056	0.077	5.280
40-44	160838	2165	90	8045	1119	0.560	0.042	2.798
45-49	122199	1586	29	1377	2106	0.237	0.018	1.187
<b>Total</b>	<b>1967606</b>	<b>16664</b>	<b>1627</b>	<b>271518</b>	<b>599</b>	<b>0.827</b>	<b>0.098</b>	<b>28.94</b>

Table A1b National Data on Maternal Mortality by Women's Age Group, Zimbabwe, 2012 Census:  
Urban

Age Group	Number of Women	Number of Women Deaths in the Last 12 Months	Number of Deaths Due to maternal causes	Number of Live Births in the Last 12 Months	Maternal Mortality Ratio (Per 100,000 live Births)	Maternal Mortality Rate per 1,000 Women	Proportion of Death Due to Maternal Causes	Life Time Risk of Maternal Death (per 1,000 Women)
15-19	266596	382	55	11958	460	0.206	0.144	1.032
20-24	277404	651	127	42005	302	0.458	0.195	2.289
25-29	262625	1043	151	42069	359	0.575	0.145	2.875
30-34	195821	1193	116	25852	449	0.592	0.097	2.962
35-39	141295	1153	76	12347	616	0.538	0.066	2.689
40-44	95488	918	27	2762	978	0.283	0.029	1.414
45-49	64558	735	11	308	3571	0.170	0.015	0.852
<b>Total</b>	<b>1303787</b>	<b>6075</b>	<b>563</b>	<b>137301</b>	<b>410</b>	<b>0.432</b>	<b>0.093</b>	<b>15.11</b>

Table A2a: Estimated Life Tables for Zimbabwe 2012: Rural, Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0738	0.0699	100000	6990	94712	5501245	55
1	0.0078	0.0306	93010	2845	364764	5406533	58.1
5	0.002	0.01	90165	897	448583	5041769	55.9
10	0.002	0.01	89268	888	444119	4593186	51.5
15	0.0022	0.0109	88380	967	439661	4149067	46.9
20	0.005	0.0247	87412	2161	432240	3709407	42.4
25	0.0084	0.0412	85251	3512	418091	3277167	38.4
30	0.0126	0.0612	81739	4999	396776	2859076	35
35	0.0166	0.0798	76740	6121	368729	2462299	32.1
40	0.0193	0.0921	70619	6503	336969	2093570	29.6
45	0.0222	0.1051	64115	6739	303551	1756602	27.4
50	0.0212	0.1005	57377	5768	272088	1453051	25.3
55	0.0201	0.0957	51608	4939	245717	1180962	22.9
60	0.0265	0.1243	46669	5801	218899	935245	20
65	0.0274	0.1282	40869	5240	191259	716346	17.5
70	0.0354	0.1629	35628	5804	163950	525087	14.7
75	0.0508	0.2256	29824	6727	132428	361137	12.1
80	0.0643	0.2771	23097	6399	99525	228709	9.9
85	0.0995	0.3953	16698	6601	66338	129184	7.7
90	0.1086	0.4246	10097	4288	39481	62845	6.2
95	0.2486	...	5809	5809	23365	23365	4

Table A2b: Estimated Life Tables for Zimbabwe 2012: Rural, Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0591	0.0564	100000	5645	95511	6233022	62.3
1	0.0067	0.0264	94355	2487	371162	6137511	65
5	0.0015	0.0075	91869	686	457626	5766349	62.8
10	0.0013	0.0065	91182	591	454433	5308722	58.2
15	0.0027	0.0134	90591	1216	450280	4854289	53.6
20	0.0056	0.0276	89376	2471	441279	4404009	49.3
25	0.0088	0.0431	86904	3746	425670	3962730	45.6
30	0.0118	0.0574	83158	4770	404198	3537060	42.5
35	0.0138	0.0667	78389	5228	378870	3132861	40
40	0.0135	0.0653	73161	4775	353673	2753991	37.6
45	0.013	0.0629	68386	4300	330794	2400319	35.1
50	0.01	0.0487	64086	3124	312414	2069525	32.3
55	0.0105	0.0512	60962	3120	297148	1757111	28.8
60	0.0138	0.0667	57841	3861	279768	1459963	25.2
65	0.0157	0.0756	53981	4082	259988	1180195	21.9
70	0.0227	0.1076	49899	5369	236501	920207	18.4
75	0.0289	0.135	44530	6013	208057	683705	15.4
80	0.043	0.1948	38517	7502	174473	475648	12.3
85	0.067	0.287	31015	8900	132841	301175	9.7
90	0.0848	0.3496	22115	7732	91179	168334	7.6
95	0.1864	...	14383	14383	77155	77155	5.4

Table A2c: Estimated Life Tables for Zimbabwe 2012: Rural, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0664	0.0631	100000	6315	95100	5873722	58.7
1	0.0072	0.0283	93685	2650	368018	5778621	61.7
5	0.0018	0.009	91036	816	453139	5410603	59.4
10	0.0017	0.0085	90220	764	449191	4957464	54.9
15	0.0024	0.0119	89456	1068	444860	4508273	50.4
20	0.0053	0.0262	88389	2315	436746	4063413	46
25	0.0086	0.0422	86074	3628	421865	3626667	42.1
30	0.0122	0.0593	82446	4886	400464	3204802	38.9
35	0.0151	0.0728	77560	5645	373851	2804338	36.2
40	0.0163	0.0783	71915	5631	345453	2430487	33.8
45	0.0171	0.0819	66284	5429	317491	2085034	31.5
50	0.0141	0.068	60855	4141	293654	1767543	29
55	0.0144	0.0695	56715	3943	273841	1473889	26
60	0.019	0.0908	52771	4789	252061	1200047	22.7
65	0.0208	0.0989	47982	4747	228237	947987	19.8
70	0.0285	0.1333	43235	5762	202178	719749	16.6
75	0.0389	0.1775	37473	6653	171033	517571	13.8
80	0.0523	0.2317	30820	7141	136546	346538	11.2
85	0.0804	0.3337	23678	7902	98287	209992	8.9
90	0.0946	0.3813	15776	6015	63584	111705	7.1
95	0.2028	...	9761	9761	48122	48122	4.9

Table A2d: Estimated Life Tables for Zimbabwe 2012: Urban, Males

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0577	0.0552	100000	5516	95593	6094618	60.9
1	0.005	0.0198	94484	1866	373247	5999024	63.5
5	0.0013	0.0065	92618	600	461590	5625777	60.7
10	0.0016	0.008	92018	733	458257	5164187	56.1
15	0.0016	0.008	91285	727	454676	4705931	51.6
20	0.0026	0.0129	90557	1170	450059	4251254	46.9
25	0.0037	0.0183	89387	1640	443121	3801195	42.5
30	0.0062	0.0306	87748	2681	432465	3358074	38.3
35	0.0085	0.0417	85066	3543	416847	2925610	34.4
40	0.0112	0.0545	81523	4445	396836	2508763	30.8
45	0.0136	0.0658	77079	5071	372893	2111927	27.4
50	0.0152	0.0732	72007	5274	346955	1739034	24.2
55	0.0174	0.0835	66733	5571	320161	1392079	20.9
60	0.026	0.1223	61163	7482	287770	1071917	17.5
65	0.0345	0.1591	53681	8543	247614	784147	14.6
70	0.0505	0.2246	45138	10139	200765	536533	11.9
75	0.0698	0.297	34999	10396	148936	335768	9.6
80	0.0982	0.3926	24604	9661	98377	186833	7.6
85	0.1461	0.5237	14943	7826	53566	88456	5.9
90	0.1602	0.5596	7117	3983	24861	34890	4.9
95	0.3125	...	3134	3134	10029	10029	3.2

Table A2e: Estimated Life Tables for Zimbabwe 2012: Urban, Females

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0473	0.0455	100000	4552	96237	6539607	65.4
1	0.0043	0.017	95448	1624	377757	6443370	67.5
5	0.0011	0.0055	93824	515	467832	6065613	64.6
10	0.001	0.005	93309	465	465382	5597781	60
15	0.0014	0.007	92844	648	462709	5132400	55.3
20	0.0023	0.0114	92196	1055	458568	4669691	50.6
25	0.004	0.0198	91141	1806	451542	4211123	46.2
30	0.0061	0.0301	89335	2686	440327	3759580	42.1
35	0.0082	0.0402	86649	3483	424806	3319253	38.3
40	0.0096	0.0469	83166	3900	406267	2894447	34.8
45	0.0114	0.0554	79265	4394	385412	2488180	31.4
50	0.0116	0.0564	74872	4220	363834	2102768	28.1
55	0.0132	0.064	70651	4520	342413	1738934	24.6
60	0.0215	0.1022	66131	6758	314341	1396521	21.1
65	0.0247	0.1164	59373	6912	279821	1082180	18.2
70	0.0324	0.1501	52461	7876	243095	802359	15.3
75	0.0457	0.2054	44585	9157	200377	559265	12.5
80	0.0613	0.2663	35428	9436	153932	358887	10.1
85	0.1025	0.4052	25992	10533	102757	204955	7.9
90	0.1149	0.4413	15459	6823	59378	102197	6.6
95	0.2017	...	8637	8637	42819	42819	5

Table A2f: Estimated Life Tables for Zimbabwe 2012: Urban, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0525	0.0504	100000	5035	95908	6314124	63.1
1	0.0047	0.0186	94965	1765	375450	6218216	65.5
5	0.0012	0.006	93200	558	464607	5842766	62.7
10	0.0013	0.0065	92643	600	461713	5378158	58.1
15	0.0015	0.0075	92042	688	458578	4916445	53.4
20	0.0024	0.0119	91355	1090	454259	4457867	48.8
25	0.0039	0.0193	90264	1744	447286	4003608	44.4
30	0.0061	0.0301	88520	2662	436331	3556322	40.2
35	0.0083	0.0407	85858	3493	420893	3119991	36.3
40	0.0105	0.0512	82365	4216	401551	2699098	32.8
45	0.0125	0.0606	78149	4738	379009	2297547	29.4
50	0.0133	0.0644	73411	4726	355303	1918538	26.1
55	0.0152	0.0733	68686	5035	331281	1563235	22.8
60	0.0236	0.1116	63650	7106	301102	1231954	19.4
65	0.0292	0.1363	56544	7704	263849	930852	16.5
70	0.0403	0.1834	48840	8958	222274	667002	13.7
75	0.0562	0.2466	39882	9834	174986	444728	11.2
80	0.0765	0.321	30048	9646	126094	269742	9
85	0.119	0.453	20402	9242	77665	143649	7
90	0.1322	0.489	11159	5457	41279	65984	5.9
95	0.2308	...	5702	5702	24705	24705	4.3

Table A2g: Estimated Life Tables for Zimbabwe 2002: Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0798	0.0753	100000	7535	94418	4219089	42.2
1	0.0137	0.0529	92465	4895	357263	4124671	44.6
5	0.0038	0.0188	87571	1648	433734	3767408	43
10	0.0027	0.0134	85923	1152	426733	3333673	38.8
15	0.0026	0.0129	84771	1095	421305	2906940	34.3
20	0.0064	0.0316	83675	2641	412716	2485635	29.7
25	0.0154	0.0745	81034	6034	391803	2072919	25.6
30	0.0293	0.1371	75000	10284	350979	1681115	22.4
35	0.0454	0.2039	64716	13194	290618	1330136	20.6
40	0.0465	0.2074	51522	10685	229789	1039518	20.2
45	0.0439	0.1969	40837	8040	183151	809729	19.8
50	0.0413	0.1865	32797	6116	148090	626578	19.1
55	0.0413	0.1866	26681	4977	120517	478489	17.9
60	0.0407	0.1842	21703	3998	98233	357972	16.5
65	0.0439	0.1974	17705	3495	79605	259739	14.7
70	0.049	0.2182	14211	3100	63267	180134	12.7
75	0.0678	0.289	11111	3211	47360	116867	10.5
80	0.0754	0.3164	7900	2499	33149	69507	8.8
85	0.1189	0.4543	5400	2453	20632	36358	6.7
90	0.1563	0.5499	2947	1621	10369	15726	5.3
95	0.2476	...	1326	1326	5357	5357	4

Table A2h: Estimated Life Tables for Zimbabwe 2002: Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0667	0.0634	100000	6344	95083	4651879	46.5
1	0.0119	0.0462	93656	4327	363642	4556796	48.7
5	0.0032	0.0161	89329	1440	443046	4193155	46.9
10	0.0023	0.0114	87889	1004	436936	3750109	42.7
15	0.0032	0.0161	86885	1400	431342	3313172	38.1
20	0.0099	0.0484	85485	4138	418625	2881830	33.7
25	0.0215	0.1024	81347	8331	387593	2463205	30.3
30	0.0324	0.1499	73016	10948	338209	2075611	28.4
35	0.037	0.1687	62068	10470	283157	1737403	28
40	0.0295	0.1369	51598	7065	239486	1454246	28.2
45	0.028	0.1306	44533	5815	207497	1214760	27.3
50	0.0232	0.1094	38718	4237	182588	1007262	26
55	0.0222	0.1051	34481	3625	163200	824674	23.9
60	0.024	0.113	30856	3487	145566	661474	21.4
65	0.0283	0.1321	27369	3615	127787	515908	18.8
70	0.0308	0.1431	23755	3399	110265	388121	16.3
75	0.038	0.1736	20356	3533	93095	277855	13.7
80	0.0552	0.2431	16822	4089	74021	184760	11
85	0.077	0.323	12733	4113	53428	110739	8.7
90	0.1258	0.4732	8620	4079	32436	57311	6.6
95	0.1825	...	4541	4541	24875	24875	5.5

Table A2i: Estimated Life Tables for Zimbabwe 2002: Both Sexes

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0732	0.0694	100000	6935	94742	4423566	44.2
1	0.0128	0.0496	93065	4614	360466	4328824	46.5
5	0.0035	0.0173	88451	1534	438418	3968358	44.9
10	0.0025	0.0124	86916	1080	431883	3529939	40.6
15	0.0029	0.0144	85837	1237	426394	3098056	36.1
20	0.0083	0.0408	84600	3450	415652	2671663	31.6
25	0.0186	0.0892	81150	7242	389344	2256010	27.8
30	0.0308	0.1434	73908	10598	344106	1866666	25.3
35	0.0409	0.1852	63310	11726	286691	1522560	24
40	0.0371	0.1691	51584	8725	235172	1235869	24
45	0.0354	0.162	42859	6944	196160	1000696	23.3
50	0.0309	0.143	35915	5138	166264	804536	22.4
55	0.0311	0.144	30778	4433	142553	638272	20.7
60	0.0321	0.1484	26344	3910	121803	495719	18.8
65	0.0359	0.1646	22435	3692	102833	373916	16.7
70	0.0398	0.1809	18743	3391	85213	271084	14.5
75	0.0518	0.2292	15351	3519	67933	185870	12.1
80	0.0644	0.2772	11832	3280	50930	117938	10
85	0.094	0.3795	8553	3246	34529	67008	7.8
90	0.1382	0.5054	5307	2682	19408	32479	6.1
95	0.2008	...	2625	2625	13071	13071	5

Table A2j: Estimated Life Tables for Zimbabwe 2002: Urban, Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0637	0.0607	100000	6067	95249	4933613	49.3
1	0.0095	0.0371	93933	3486	366912	4838364	51.5
5	0.0032	0.0159	90447	1436	448646	4471451	49.4
10	0.0028	0.0139	89011	1237	441963	4022806	45.2
15	0.002	0.01	87774	873	436722	3580843	40.8
20	0.0035	0.0174	86900	1509	431142	3144120	36.2
25	0.0077	0.0379	85391	3233	419851	2712978	31.8
30	0.0161	0.0777	82159	6381	396324	2293128	27.9
35	0.0276	0.1293	75778	9800	355075	1896804	25
40	0.0297	0.1381	65978	9110	306745	1541729	23.4
45	0.0306	0.1419	56867	8068	263669	1234984	21.7
50	0.03	0.1393	48799	6800	226661	971316	19.9
55	0.0326	0.1507	41999	6327	194094	744655	17.7
60	0.039	0.1776	35672	6336	162469	550562	15.4
65	0.0464	0.2077	29335	6094	131343	388092	13.2
70	0.0574	0.2511	23241	5836	101675	256749	11
75	0.0865	0.3542	17405	6165	71266	155074	8.9
80	0.104	0.409	11241	4598	44207	83808	7.5
85	0.1449	0.5212	6643	3462	23895	39601	6
90	0.1765	0.5932	3181	1887	10689	15706	4.9
95	0.2579	...	1294	1294	5016	5016	3.9

Table A2k: Estimated Life Tables for Zimbabwe 2002: Urban, Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.054	0.0517	100000	5174	95816	5227122	52.3
1	0.0076	0.0298	94826	2829	372223	5131307	54.1
5	0.0025	0.0124	91997	1143	457128	4759083	51.7
10	0.0021	0.0104	90854	949	451899	4301955	47.4
15	0.0018	0.009	89905	806	447651	3850056	42.8
20	0.0049	0.0242	89099	2161	440924	3402405	38.2
25	0.0119	0.058	86939	5039	423412	2961481	34.1
30	0.0193	0.0923	81900	7555	391472	2538069	31
35	0.0249	0.1172	74345	8711	349837	2146597	28.9
40	0.0233	0.11	65634	7217	309723	1796760	27.4
45	0.024	0.1131	58417	6610	275405	1487037	25.5
50	0.0264	0.1237	51808	6409	242775	1211632	23.4
55	0.0261	0.1224	45398	5558	212936	968857	21.3
60	0.0298	0.1387	39841	5525	185412	755921	19
65	0.0358	0.1642	34316	5635	157404	570509	16.6
70	0.0396	0.18	28681	5161	130334	413105	14.4
75	0.0456	0.2051	23519	4823	105762	282772	12
80	0.078	0.3259	18697	6094	78125	177009	9.5
85	0.0903	0.3672	12603	4628	51246	98884	7.8
90	0.1566	0.5501	7975	4387	28013	47637	6
95	0.1829	...	3588	3588	19625	19625	5.5

Table A2l: Estimated Life Tables for Zimbabwe 2002: Urban, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0589	0.0563	100000	5626	95523	5060303	50.6
1	0.0086	0.0337	94374	3178	369498	4964780	52.6
5	0.0029	0.0144	91196	1313	452698	4595282	50.4
10	0.0025	0.0124	89883	1117	446625	4142584	46.1
15	0.0019	0.0095	88767	839	441826	3695960	41.6
20	0.0043	0.0213	87927	1873	435577	3254134	37
25	0.0098	0.048	86054	4127	421077	2818557	32.8
30	0.0175	0.0841	81928	6888	393584	2397480	29.3
35	0.0263	0.1235	75040	9266	352334	2003896	26.7
40	0.0266	0.1246	65774	8193	308013	1651562	25.1
45	0.0276	0.1289	57580	7425	269014	1343549	23.3
50	0.0284	0.1324	50156	6642	233881	1074534	21.4
55	0.0297	0.1382	43513	6012	202420	840654	19.3
60	0.0348	0.1601	37501	6002	172482	638234	17
65	0.0414	0.1875	31499	5905	142639	465752	14.8
70	0.0488	0.2174	25594	5564	114024	323113	12.6
75	0.0655	0.2813	20029	5634	86008	209089	10.4
80	0.0896	0.364	14396	5239	58476	123081	8.5
85	0.1107	0.4297	9157	3934	35540	64605	7.1
90	0.1651	0.5685	5222	2969	17983	29064	5.6
95	0.2033	..	2253	2253	11081	11081	4.9

Table A2m: Estimated Life Tables for Zimbabwe 2002: Rural, Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0087	0.0824	100000	8240	94062	3820307	38.2
1	0.0154	0.05923	91760	5435	352935	3726245	40.6
5	0.0041	0.02029	86325	1752	427245	3373310	39.1
10	0.0027	0.01341	84573	1134	420031	2946065	34.8
15	0.0028	0.01391	83439	1161	414567	2526034	30.3
20	0.0086	0.04224	82278	3476	404149	2111467	25.7
25	0.0225	0.10715	78803	8444	375285	1707317	21.7
30	0.0417	0.18968	70359	13346	320039	1332032	18.9
35	0.0609	0.26349	57013	15022	246669	1011993	17.8
40	0.0586	0.25359	41991	10648	181713	765324	18.2
45	0.0527	0.23117	31343	7245	137484	583611	18.6
50	0.0474	0.21071	24097	5078	107121	446127	18.5
55	0.0449	0.20085	19020	3820	85079	339006	17.8
60	0.0412	0.18611	15200	2829	68660	253927	16.7
65	0.0432	0.19448	12371	2406	55693	185266	15
70	0.0474	0.21174	9965	2110	44514	129573	13
75	0.0641	0.2755	7855	2164	33761	85058.9	10.8
80	0.0715	0.30279	5691	1723	24100	51298.3	9
85	0.1152	0.44398	3968	1762	15292	27198.3	6.9
90	0.1533	0.54313	2206	1198	7816	11906.8	5.4
95	0.24638	...	1008	1008	4091	4090.84	4.1

Table A2n: Estimated Life Tables for Zimbabwe 2002: Rural, Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0728	0.069	100000	6899	94763	4316784	43.2
1	0.0137	0.0529	93101	4929	359811	4222021	45.3
5	0.0035	0.0173	88172	1530	437035	3862210	43.8
10	0.0024	0.0119	86642	1034	430627	3425175	39.5
15	0.0041	0.0203	85609	1740	424314	2994547	35
20	0.0138	0.067	83869	5622	407403	2570234	30.6
25	0.0286	0.1341	78247	10490	366775	2162831	27.6
30	0.0412	0.1868	67757	12657	307199	1796055	26.5
35	0.0441	0.1975	55100	10882	246753	1488856	27
40	0.0324	0.1492	44219	6597	203612	1242103	28.1
45	0.0297	0.1377	37622	5181	174433	1038490	27.6
50	0.0223	0.1054	32441	3418	153262	864058	26.6
55	0.0212	0.1006	29023	2919	137697	710796	24.5
60	0.0226	0.107	26104	2792	123543	573098	22
65	0.0267	0.1251	23312	2917	109262	449556	19.3
70	0.0293	0.1365	20395	2784	95026	340293	16.7
75	0.0366	0.1679	17610	2957	80789	245268	13.9
80	0.0521	0.2309	14654	3384	64945	164479	11.2
85	0.0748	0.3155	11270	3556	47535	99533	8.8
90	0.1217	0.4622	7714	3566	29298	51999	6.7
95	0.1828	...	4149	4149	22701	22701	5.5

Table A2o: Estimated Life Tables for Zimbabwe 2002: Rural, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0802	0.0757	100000	7571	94399	4062039	40.6
1	0.0146	0.0563	92429	5202	356320	3967640	42.9
5	0.0038	0.0188	87227	1642	432030	3611320	41.4
10	0.0025	0.0124	85585	1063	425268	3179289	37.1
15	0.0034	0.0169	84522	1426	419485	2754021	32.6
20	0.0114	0.0557	83096	4626	405758	2334536	28.1
25	0.0258	0.1218	78470	9559	370512	1928778	24.6
30	0.0415	0.1884	68911	12983	312835	1558266	22.6
35	0.0513	0.2263	55928	12658	246744	1245431	22.3
40	0.0431	0.1934	43270	8371	194213	998687	23.1
45	0.0394	0.1784	34900	6226	158031	804474	23.1
50	0.0319	0.1472	28673	4222	132338	646443	22.5
55	0.0316	0.1461	24452	3573	113079	514105	21
60	0.0314	0.1454	20878	3035	96663	401026	19.2
65	0.0346	0.1591	17843	2838	82030	304363	17.1
70	0.0381	0.1739	15005	2609	68487	222333	14.8
75	0.0493	0.2194	12396	2720	55165	153846	12.4
80	0.0609	0.2643	9676	2557	41991	98680	10.2
85	0.0913	0.371	7119	2641	28925	56690	8
90	0.1345	0.4961	4478	2221	16516	27764	6.2
95	0.2006	...	2257	2257	11249	11249	5

## BULAWAYO

Table A2p1: Estimated Life Tables for Zimbabwe 2012: Bulawayo, Males

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0154	0.0152	100000	1516	98614	5551108	55.5
1	0.0013	0.0052	98484	509	392719	5452494	55.4
5	0.0019	0.0096	97975	940	487526	5059775	51.6
10	0.0018	0.0090	97035	873	482992	4572249	47.1
15	0.0038	0.0188	96162	1806	476749	4089257	42.5
20	0.0063	0.0311	94356	2934	465018	3612508	38.3
25	0.0103	0.0505	91422	4614	446148	3147490	34.4
30	0.0127	0.0617	86808	5354	421044	2701342	31.1
35	0.0167	0.0800	81454	6519	391217	2280298	28.0
40	0.0180	0.0860	74935	6446	358403	1889081	25.2
45	0.0177	0.0849	68489	5815	327920	1530678	22.3
50	0.0217	0.1029	62675	6446	297711	1202759	19.2
55	0.0309	0.1435	56228	8069	261335	905047.5	16.1
60	0.0367	0.1681	48159	8095	220745	643712.5	13.4
65	0.0498	0.2220	40064	8893	178631	422967.8	10.6
70	0.0810	0.3378	31170	10529	130025	244336.7	7.8
75	0.1402	0.5150	20642	10630	75822	114311.7	5.5
80	0.2601	...	10012	10012	38490	38489.98	3.8

Table A2p2: Estimated Life Tables for Zimbabwe 2012: Bulawayo, females

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0128	0.0127	100000	1266	98845	6017846	60.2
1	0.0010	0.0040	98734	395	393950	5919001	59.9
5	0.0009	0.0043	98339	423	490639	5525051	56.2
10	0.0013	0.0064	97916	623	488025	5034412	51.4
15	0.0031	0.0156	97294	1520	483143	4546387	46.7
20	0.0059	0.0292	95773	2796	472548	4063243	42.4
25	0.0106	0.0516	92977	4794	453461	3590696	38.6
30	0.0115	0.0559	88184	4933	428680	3137235	35.6
35	0.0130	0.0629	83251	5237	403198	2708554	32.5
40	0.0135	0.0654	78014	5099	377052	2305356	29.6
45	0.0115	0.0559	72915	4077	354248	1928304	26.4
50	0.0129	0.0626	68838	4310	333784	1574056	22.9
55	0.0197	0.0940	64529	6065	307995	1240272	19.2
60	0.0236	0.1117	58463	6528	276303	932277.4	15.9
65	0.0313	0.1455	51935	7556	241717	655974.3	12.6
70	0.0584	0.2564	44379	11379	194931	414256.8	9.3
75	0.1046	0.4159	33001	13725	131155	219326	6.6
80	0.2186	...	19276	19276	88171	88171.23	4.6

Table A2p3: Estimated Life Tables for Zimbabwe 2012: Bulawayo, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0141	0.0139	100000	1390	98725	5787680	57.9
1	0.0011	0.0046	98610	450	393364	5688955	57.7
5	0.0014	0.0068	98160	668	489129	5295591	53.9
10	0.0015	0.0075	97492	732	485629	4806462	49.3
15	0.0034	0.0170	96760	1645	480154	4320833	44.7
20	0.0061	0.0301	95115	2859	469053	3840679	40.4
25	0.0105	0.0511	92255	4711	450067	3371625	36.5
30	0.0121	0.0587	87544	5139	425113	2921558	33.4
35	0.0148	0.0713	82405	5877	397460	2496446	30.3
40	0.0155	0.0747	76528	5718	368122	2098986	27.4
45	0.0143	0.0690	70810	4888	341784	1730864	24.4
50	0.0171	0.0823	65922	5423	316493	1389080	21.1
55	0.0251	0.1181	60499	7146	285058	1072587	17.7
60	0.0294	0.1369	53353	7306	248719	787528.6	14.8
65	0.0389	0.1778	46047	8188	210526	538809.3	11.7
70	0.0678	0.2912	37859	11026	162733	328283.8	8.7
75	0.1186	0.4567	26832	12255	103344	165551.3	6.2
80	0.2343	...	14578	14578	62208	62207.53	4.3

## MANICALAND

Table A2q1: Estimated Life Tables for Zimbabwe 2012: Manicaland, Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0230	0.0225	100000	2251	97991	5628642	56.3
1	0.0018	0.0073	97749	718	389264	5530651	56.6
5	0.0019	0.0093	97031	900	482907	5141388	53.0
10	0.0020	0.0098	96131	938	478312	4658481	48.5
15	0.0041	0.0204	95193	1939	471607	4180169	43.9
20	0.0068	0.0336	93254	3135	458970	3708562	39.8
25	0.0100	0.0488	90119	4396	440104	3249593	36.1
30	0.0130	0.0630	85723	5397	415502	2809488	32.8
35	0.0159	0.0766	80326	6154	386564	2393987	29.8
40	0.0195	0.0931	74172	6905	353566	2007423	27.1
45	0.0189	0.0903	67267	6075	320728	1653857	24.6
50	0.0169	0.0813	61192	4976	293687	1333129	21.8
55	0.0263	0.1237	56217	6951	264212	1039442	18.5
60	0.0313	0.1452	49265	7151	228581	775230.8	15.7
65	0.0394	0.1793	42114	7550	191861	546649.6	13.0
70	0.0516	0.2291	34564	7917	153531	354788.7	10.3
75	0.0896	0.3655	26646	9739	108737	201257.4	7.6
80	0.1827	...	16908	16908	92521	92520.6	5.5

Table A2q2: Estimated Life Tables for Zimbabwe 2012: Manicaland, Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0191	0.0188	100000	1878	98322	6329538	63.3
1	0.0015	0.0058	98122	569	391062	6231216	63.5
5	0.0013	0.0065	97553	636	486175	5840154	59.9
10	0.0021	0.0106	96917	1026	482021	5353979	55.2
15	0.0047	0.0232	95891	2227	474387	4871958	50.8
20	0.0065	0.0321	93664	3009	461094	4397572	47.0
25	0.0080	0.0394	90655	3568	444615	3936477	43.4
30	0.0100	0.0487	87088	4245	424891	3491863	40.1
35	0.0096	0.0467	82842	3865	404508	3066972	37.0
40	0.0105	0.0509	78977	4021	384618	2662464	33.7
45	0.0082	0.0402	74956	3015	367097	2277847	30.4
50	0.0090	0.0440	71941	3169	351967	1910750	26.6
55	0.0119	0.0577	68772	3967	334265	1558783	22.7
60	0.0149	0.0721	64805	4674	312858	1224517	18.9
65	0.0234	0.1107	60132	6656	284507	911659.3	15.2
70	0.0268	0.1263	53476	6752	251575	627152.3	11.7
75	0.0657	0.2836	46724	13250	201529	375577.2	8.0
80	0.1923	...	33473	33473	174048	174047.9	5.2

Table A2q3: Estimated Life Tables for Zimbabwe 2012: Manicaland, Both Sexes

<b>Age</b>	<b>m(x,n)</b>	<b>q(x,n)</b>	<b>l(x)</b>	<b>d(x,n)</b>	<b>L(x,n)</b>	<b>T(x)</b>	<b>e(x)</b>
0	0.0210	0.0206	100000	2063	98147	6006062	60.1
1	0.0016	0.0066	97937	644	390197	5907915	60.3
5	0.0016	0.0079	97293	769	484543	5517718	56.7
10	0.0020	0.0102	96524	981	480168	5033175	52.1
15	0.0044	0.0219	95543	2096	472973	4553007	47.7
20	0.0067	0.0328	93447	3064	459980	4080035	43.7
25	0.0089	0.0437	90383	3946	442418	3620055	40.1
30	0.0114	0.0554	86437	4789	420443	3177637	36.8
35	0.0126	0.0611	81647	4992	395876	2757194	33.8
40	0.0145	0.0698	76656	5352	369684	2361318	30.8
45	0.0120	0.0583	71304	4158	345864	1991634	27.9
50	0.0121	0.0586	67146	3936	326097	1645770	24.5
55	0.0175	0.0838	63210	5296	303261	1319673	20.9
60	0.0217	0.1029	57914	5958	275092	1016412	17.6
65	0.0304	0.1414	51955	7346	241798	741320.7	14.3
70	0.0377	0.1731	44610	7720	204609	499523	11.2
75	0.0756	0.3186	36890	11754	155445	294914.5	8.0
80	0.1802	...	25136	25136	139469	139469.3	5.5

## MASHONALAND CENTRAL

Table A2r1: Estimated Life Tables for Zimbabwe 2012: Mashonaland Central, Males

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0246	0.0241	100000	2407	97862	5488004	54.9
1	0.0023	0.0090	97593	880	388245	5390142	55.2
5	0.0023	0.0112	96714	1083	480860	5001897	51.7
10	0.0021	0.0105	95630	1003	475644	4521037	47.3
15	0.0048	0.0239	94627	2264	468014	4045393	42.8
20	0.0069	0.0341	92363	3147	454384	3577379	38.7
25	0.0101	0.0493	89216	4394	435594	3122995	35.0
30	0.0132	0.0640	84822	5428	411037	2687401	31.7
35	0.0179	0.0856	79394	6798	380493	2276364	28.7
40	0.0228	0.1077	72596	7819	343409	1895871	26.1
45	0.0221	0.1046	64777	6775	306458	1552462	24.0
50	0.0201	0.0956	58002	5543	276340	1246005	21.5
55	0.0317	0.1471	52460	7716	243120	969664	18.5
60	0.0295	0.1374	44744	6146	208122	726544	16.2
65	0.0355	0.1635	38598	6310	177610	518423	13.4
70	0.0568	0.2494	32289	8053	141758	340812	10.6
75	0.0819	0.3399	24235	8237	100611	199055	8.2
80	0.1625	...	15998	15998	98444	98444.1	6.2

Table A2r2: Estimated Life Tables for Zimbabwe 2012: Mashonaland Central, Females

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0199	0.0195	100000	1954	98259	5894061	58.9
1	0.0018	0.0072	98046	709	390407	5795802	59.1
5	0.0015	0.0075	97337	728	484866	5405395	55.5
10	0.0032	0.0160	96609	1549	479174	4920529	50.9
15	0.0059	0.0289	95060	2743	468918	4441355	46.7
20	0.0079	0.0386	92317	3565	453100	3972437	43.0
25	0.0113	0.0548	88752	4862	432051	3519337	39.7
30	0.0137	0.0661	83890	5547	405658	3087286	36.8
35	0.0138	0.0666	78343	5217	378602	2681627	34.2
40	0.0147	0.0710	73126	5189	352365	2303025	31.5
45	0.0122	0.0591	67937	4013	329301	1950660	28.7
50	0.0109	0.0531	63924	3396	311243	1621359	25.4
55	0.0159	0.0764	60529	4625	291506	1310116	21.6
60	0.0199	0.0949	55903	5306	266592	1018610	18.2
65	0.0263	0.1235	50598	6251	237511	752018	14.9
70	0.0290	0.1359	44347	6025	207477	514507	11.6
75	0.0669	0.2874	38321	11012	164681	307030	8.0
80	0.1918	...	27309	27309	142349	142349	5.2

Table A2r3: Estimated Life Tables for Zimbabwe 2012: Mashonaland Central, Both Sexes

<b>Age</b>	<b>m(x,n)</b>	<b>q(x,n)</b>	<b>l(x)</b>	<b>d(x,n)</b>	<b>L(x,n)</b>	<b>T(x)</b>	<b>e(x)</b>
0	0.0222	0.0218	100000	2180	98049	5707082	57.1
1	0.0020	0.0081	97820	795	389361	5609032	57.3
5	0.0019	0.0094	97025	909	482852	5219671	53.8
10	0.0026	0.0131	96116	1262	477424	4736819	49.3
15	0.0054	0.0265	94854	2513	468496	4259396	44.9
20	0.0074	0.0364	92340	3365	453719	3790899	41.1
25	0.0107	0.0520	88975	4630	433774	3337180	37.5
30	0.0134	0.0651	84346	5488	408310	2903406	34.4
35	0.0159	0.0765	78857	6036	379398	2495096	31.6
40	0.0185	0.0884	72821	6440	347759	2115698	29.1
45	0.0160	0.0767	66380	5089	318765	1767939	26.6
50	0.0147	0.0709	61292	4346	295778	1449174	23.6
55	0.0227	0.1075	56945	6124	269772	1153396	20.3
60	0.0244	0.1149	50821	5839	239578	883624	17.4
65	0.0307	0.1426	44982	6414	209190	644047	14.3
70	0.0419	0.1903	38568	7338	175195	434857	11.3
75	0.0737	0.3117	31230	9733	132099	259662	8.3
80	0.1685	...	21496	21496	127563	127563	5.9

## MASHONALAND EAST

Table A2s1: Estimated Life Tables for Zimbabwe 2012: Mashonaland East, Males

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0230	0.0226	100000	2257	97986	5473651	54.7
1	0.0021	0.0083	97743	815	389005	5375665	55.0
5	0.0021	0.0104	96928	1006	482126	4986659	51.4
10	0.0023	0.0113	95922	1083	476902	4504534	47.0
15	0.0044	0.0219	94839	2080	469437	4027632	42.5
20	0.0066	0.0326	92759	3020	456776	3558195	38.4
25	0.0111	0.0539	89738	4835	437316	3101418	34.6
30	0.0150	0.0722	84904	6129	409644	2664103	31.4
35	0.0182	0.0873	78775	6875	376830	2254458	28.6
40	0.0198	0.0945	71900	6793	342398	1877628	26.1
45	0.0204	0.0973	65107	6332	309643	1535230	23.6
50	0.0232	0.1097	58775	6449	277974	1225587	20.9
55	0.0304	0.1411	52326	7382	243091	947613	18.1
60	0.0297	0.1384	44944	6221	209132	704522	15.7
65	0.0398	0.1811	38723	7012	176338	495391	12.8
70	0.0526	0.2331	31711	7393	140522	319053	10.1
75	0.0900	0.3670	24318	8926	99122	178531	7.3
80	0.1938	...	15392	15392	79409	79409	5.2

Table A2s2: Estimated Life Tables for Zimbabwe 2012: Mashonaland East, Females

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0191	0.0188	100000	1881	98319	5969116	59.7
1	0.0017	0.0067	98119	656	390832	5870796	59.8
5	0.0016	0.0079	97463	765	485401	5479965	56.2
10	0.0031	0.0153	96697	1481	479785	4994564	51.7
15	0.0055	0.0271	95216	2584	470172	4514779	47.4
20	0.0091	0.0444	92632	4112	453410	4044607	43.7
25	0.0112	0.0543	88520	4808	430774	3591197	40.6
30	0.0123	0.0597	83712	4998	406131	3160423	37.8
35	0.0135	0.0651	78714	5120	380643	2754292	35.0
40	0.0125	0.0606	73594	4460	356574	2373649	32.3
45	0.0117	0.0569	69134	3931	335696	2017075	29.2
50	0.0117	0.0571	65204	3720	316822	1681379	25.8
55	0.0151	0.0726	61484	4464	296478	1364557	22.2
60	0.0173	0.0831	57019	4738	273535	1068079	18.7
65	0.0239	0.1129	52281	5904	247166	794543	15.2
70	0.0336	0.1555	46377	7211	214879	547378	11.8
75	0.0659	0.2841	39166	11128	168836	332499	8.5
80	0.1713	...	28038	28038	163663	163663	5.8

Table A2s3: Estimated Life Tables for Zimbabwe 2012: Mashonaland East, Both Sexes

<b>Age</b>	<b>m(x,n)</b>	<b>q(x,n)</b>	<b>l(x)</b>	<b>d(x,n)</b>	<b>L(x,n)</b>	<b>T(x)</b>	<b>e(x)</b>
0	0.0211	0.0207	100000	2068	98143	5734966	57.3
1	0.0019	0.0075	97932	736	389953	5636824	57.6
5	0.0018	0.0091	97196	889	483757	5246870	54.0
10	0.0027	0.0132	96307	1272	478356	4763114	49.5
15	0.0050	0.0247	95035	2346	469822	4284758	45.1
20	0.0079	0.0389	92690	3604	454980	3814936	41.2
25	0.0111	0.0541	89086	4820	433809	3359956	37.7
30	0.0136	0.0657	84266	5534	407747	2926147	34.7
35	0.0159	0.0763	78732	6004	378646	2518400	32.0
40	0.0159	0.0763	72728	5547	349528	2139754	29.4
45	0.0150	0.0725	67181	4868	323611	1790225	26.6
50	0.0163	0.0785	62313	4891	299521	1466614	23.5
55	0.0212	0.1008	57422	5790	272779	1167093	20.3
60	0.0227	0.1077	51632	5559	244442	894314	17.3
65	0.0310	0.1443	46074	6649	214182	649872	14.1
70	0.0425	0.1927	39425	7595	178884	435691	11.1
75	0.0761	0.3202	31830	10193	133954	256806	8.1
80	0.1761	...	21637	21637	122852	122852	5.7

## MASHONALAND WEST

Table A2t1: Estimated Life Tables for Zimbabwe 2012: Mashonaland West, Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0221	0.0217	100000	2171	98057	5620453	56.2
1	0.0023	0.0093	97829	911	389119	5522396	56.4
5	0.0022	0.0110	96918	1069	481918	5133276	53.0
10	0.0026	0.0129	95849	1238	476151	4651359	48.5
15	0.0040	0.0198	94611	1871	468683	4175208	44.1
20	0.0059	0.0290	92741	2688	457419	3706525	40.0
25	0.0092	0.0451	90053	4063	440702	3249106	36.1
30	0.0130	0.0632	85990	5432	416850	2808404	32.7
35	0.0161	0.0773	80558	6224	387489	2391554	29.7
40	0.0187	0.0893	74334	6639	355032	2004066	27.0
45	0.0189	0.0900	67694	6093	323095	1649033	24.4
50	0.0202	0.0962	61601	5926	293355	1325938	21.5
55	0.0264	0.1240	55674	6903	261259	1032583	18.5
60	0.0291	0.1356	48771	6613	227379	771325	15.8
65	0.0368	0.1687	42158	7110	193370	543946	12.9
70	0.0533	0.2362	35048	8278	155199	350575	10.0
75	0.0915	0.3722	26771	9965	108934	195377	7.3
80	0.1944	...	16806	16806	86443	86443.4	5.1

Table A2t2: Estimated Life Tables for Zimbabwe 2012: Mashonaland West, Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0169	0.0166	100000	1664	98502	5887690	58.9
1	0.0016	0.0065	98336	637	391750	5789188	58.9
5	0.0016	0.0078	97699	763	486588	5397438	55.2
10	0.0027	0.0134	96936	1302	481425	4910851	50.7
15	0.0047	0.0234	95634	2240	473041	4429426	46.3
20	0.0078	0.0384	93393	3587	458544	3956384	42.4
25	0.0106	0.0518	89806	4653	437790	3497840	38.9
30	0.0131	0.0633	85153	5387	412441	3060050	35.9
35	0.0138	0.0667	79765	5322	385580	2647609	33.2
40	0.0158	0.0760	74443	5659	357897	2262029	30.4
45	0.0140	0.0674	68785	4636	332084	1904132	27.7
50	0.0140	0.0678	64149	4350	309984	1572047	24.5
55	0.0182	0.0872	59799	5216	286008	1262064	21.1
60	0.0177	0.0848	54583	4631	261571	976055.9	17.9
65	0.0277	0.1300	49952	6495	234177	714484.5	14.3
70	0.0379	0.1738	43457	7554	199378	480307.2	11.1
75	0.0754	0.3183	35903	11428	151530	280929.4	7.8
80	0.1891	...	24475	24475	129399	129399.1	5.3

Table A2t3: Estimated Life Tables for Zimbabwe 2012: Mashonaland West, Both Sexes

<b>Age</b>	<b><math>m(x,n)</math></b>	<b><math>q(x,n)</math></b>	<b><math>l(x)</math></b>	<b><math>d(x,n)</math></b>	<b><math>L(x,n)</math></b>	<b><math>T(x)</math></b>	<b><math>e(x)</math></b>
0	0.0195	0.0192	100000	1918	98269	5755536	57.6
1	0.0020	0.0079	98082	775	390464	5657267	57.7
5	0.0019	0.0094	97307	919	484239	5266802	54.1
10	0.0027	0.0132	96389	1269	478770	4782563	49.6
15	0.0044	0.0217	95119	2060	470836	4303793	45.2
20	0.0069	0.0338	93059	3150	457911	3832958	41.2
25	0.0099	0.0484	89909	4353	439153	3375046	37.5
30	0.0130	0.0632	85556	5409	414579	2935894	34.3
35	0.0150	0.0725	80147	5808	386370	2521315	31.5
40	0.0172	0.0826	74339	6137	356213	2134945	28.7
45	0.0160	0.0769	68202	5243	327705	1778731	26.1
50	0.0169	0.0810	62959	5098	302208	1451026	23.0
55	0.0220	0.1043	57861	6038	274326	1148818	19.9
60	0.0231	0.1091	51823	5656	245151	874491.7	16.9
65	0.0322	0.1494	46167	6897	214106	629340.6	13.6
70	0.0456	0.2054	39270	8067	177001	415234.8	10.6
75	0.0828	0.3434	31203	10715	129485	238233.4	7.6
80	0.1884	...	20488	20488	108748	108747.9	5.3

## MATABELELAND NORTH

Table A2u1: Estimated Life Tables for Zimbabwe 2012: Matabeleland North, Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0156	0.0154	100000	1538	98596	5516708	55.2
1	0.0014	0.0057	98462	557	392517	5418112	55.0
5	0.0015	0.0072	97905	709	487756	5025596	51.3
10	0.0017	0.0084	97197	818	483939	4537840	46.7
15	0.0039	0.0195	96379	1882	477834	4053901	42.1
20	0.0091	0.0446	94497	4214	463058	3576066	37.8
25	0.0152	0.0735	90283	6632	435631	3113008	34.5
30	0.0188	0.0900	83651	7529	399544	2677376	32.0
35	0.0197	0.0939	76122	7150	362195	2277833	29.9
40	0.0160	0.0769	68971	5301	331285	1915638	27.8
45	0.0173	0.0830	63671	5285	305119	1584353	24.9
50	0.0186	0.0891	58386	5202	279109	1279234	21.9
55	0.0248	0.1167	53183	6207	250531	1000125	18.8
60	0.0264	0.1240	46976	5826	220292	749594.1	16.0
65	0.0316	0.1467	41151	6038	190932	529301.8	12.9
70	0.0451	0.2037	35113	7152	158710	338370.1	9.6
75	0.0987	0.3968	27961	11094	112421	179660.2	6.4
80	0.2509	...	16867	16867	67239	67238.99	4.0

Table A2u2: Estimated Life Tables for Zimbabwe 2012: Matabeleland North, Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0126	0.0125	100000	1245	98863	6169502	61.7
1	0.0011	0.0044	98755	435	393933	6070639	61.5
5	0.0010	0.0048	98320	467	490431	5676705	57.7
10	0.0023	0.0115	97852	1121	486460	5186275	53.0
15	0.0054	0.0269	96732	2600	477885	4699814	48.6
20	0.0093	0.0455	94132	4284	460624	4221930	44.9
25	0.0127	0.0618	89848	5549	435681	3761306	41.9
30	0.0139	0.0670	84299	5645	407010	3325625	39.5
35	0.0107	0.0519	78653	4086	382667	2918615	37.1
40	0.0098	0.0478	74568	3563	363574	2535948	34.0
45	0.0073	0.0358	71005	2540	348631	2172374	30.6
50	0.0097	0.0476	68465	3256	334441	1823743	26.6
55	0.0117	0.0571	65209	3721	316967	1489302	22.8
60	0.0146	0.0707	61488	4349	296878	1172335	19.1
65	0.0192	0.0915	57139	5229	272926	875457.5	15.3
70	0.0234	0.1112	51910	5773	246265	602531	11.6
75	0.0629	0.2735	46137	12618	200610	356265.7	7.7
80	0.2153	...	33519	33519	155656	155655.8	4.6

Table A2u3: Estimated Life Tables for Zimbabwe 2012: Matabeleland North, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0141	0.0139	100000	1392	98723	5855798	58.6
1	0.0013	0.0050	98608	496	393247	5757075	58.4
5	0.0012	0.0060	98112	590	489084	5363828	54.7
10	0.0020	0.0099	97522	963	485202	4874744	50.0
15	0.0047	0.0235	96559	2265	477833	4389541	45.5
20	0.0092	0.0451	94294	4252	461710	3911708	41.5
25	0.0139	0.0673	90041	6062	435593	3449998	38.3
30	0.0162	0.0780	83980	6547	403414	3014405	35.9
35	0.0150	0.0723	77433	5598	372690	2610991	33.7
40	0.0125	0.0605	71835	4349	347922	2238300	31.2
45	0.0112	0.0543	67486	3666	328242	1890378	28.0
50	0.0135	0.0655	63821	4178	308924	1562136	24.5
55	0.0174	0.0833	59642	4968	285998	1253212	21.0
60	0.0196	0.0936	54675	5115	260752	967214.1	17.7
65	0.0247	0.1164	49560	5768	233708	706462.1	14.3
70	0.0330	0.1531	43792	6706	203322	472754.5	10.8
75	0.0769	0.3242	37086	12024	156289	269432.7	7.3
80	0.2215	...	25062	25062	113144	113143.8	4.5

## MATABELELAND SOUTH

Table A2v1: Estimated Life Tables for Zimbabwe 2012: Matabeleland South, Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0140	0.0138	100000	1382	98731	4978432	49.8
1	0.0015	0.0061	98618	597	393043	4879701	49.5
5	0.0019	0.0092	98020	904	487842	4486658	45.8
10	0.0023	0.0116	97116	1124	482774	3998816	41.2
15	0.0064	0.0314	95993	3019	473437	3516042	36.6
20	0.0125	0.0610	92974	5667	451793	3042605	32.7
25	0.0182	0.0872	87307	7616	418370	2590813	29.7
30	0.0262	0.1229	79690	9793	374287	2172442	27.3
35	0.0276	0.1291	69897	9027	326475	1798155	25.7
40	0.0273	0.1275	60870	7758	284596	1471680	24.2
45	0.0291	0.1352	53112	7182	247059	1187084	22.4
50	0.0253	0.1190	45930	5464	215748	940025.5	20.5
55	0.0304	0.1410	40465	5706	187902	724277.2	17.9
60	0.0300	0.1395	34759	4850	161584	536375.5	15.4
65	0.0377	0.1722	29909	5151	136789	374791.3	12.5
70	0.0490	0.2193	24758	5429	110733	238002.4	9.6
75	0.0971	0.3906	19329	7549	77733	127269.1	6.6
80	0.2378	...	11780	11780	49536	49535.73	4.2

Table A2v2: Estimated Life Tables for Zimbabwe 2012: Matabeleland South, Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0126	0.0125	100000	1248	98861	5681115	56.8
1	0.0011	0.0045	98752	445	393897	5582254	56.5
5	0.0012	0.0058	98307	569	490113	5188357	52.8
10	0.0020	0.0098	97738	957	486299	4698243	48.1
15	0.0056	0.0276	96781	2676	478191	4211945	43.5
20	0.0120	0.0582	94105	5481	458016	3733754	39.7
25	0.0179	0.0859	88624	7610	424778	3275738	37.0
30	0.0220	0.1042	81014	8439	383608	2850960	35.2
35	0.0181	0.0865	72576	6278	346428	2467351	34.0
40	0.0148	0.0712	66297	4723	319017	2120924	32.0
45	0.0107	0.0521	61574	3209	299539	1801907	29.3
50	0.0104	0.0506	58365	2951	284597	1502368	25.7
55	0.0152	0.0730	55414	4047	267116	1217771	22.0
60	0.0146	0.0706	51367	3628	247796	950654.3	18.5
65	0.0183	0.0876	47739	4182	228689	702858	14.7
70	0.0294	0.1379	43557	6005	204169	474169.1	10.9
75	0.0749	0.3181	37552	11944	159544	270000	7.2
80	0.2318	...	25608	25608	110456	110455.7	4.3

Table A2v3: Estimated Life Tables for Zimbabwe 2012: Matabeleland South, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0133	0.0132	100000	1315	98790	5348508	53.5
1	0.0013	0.0053	98685	521	393495	5249717	53.2
5	0.0015	0.0075	98164	740	488968	4856222	49.5
10	0.0022	0.0107	97424	1045	484506	4367254	44.8
15	0.0060	0.0294	96379	2837	475793	3882747	40.3
20	0.0122	0.0595	93542	5565	454941	3406954	36.4
25	0.0181	0.0865	87977	7611	421634	2952013	33.6
30	0.0239	0.1128	80366	9067	379120	2530379	31.5
35	0.0224	0.1061	71299	7563	336948	2151259	30.2
40	0.0200	0.0950	63736	6052	303003	1814311	28.5
45	0.0178	0.0850	57684	4904	275771	1511308	26.2
50	0.0163	0.0785	52779	4144	253553	1235537	23.4
55	0.0213	0.1012	48636	4921	230913	981984	20.2
60	0.0209	0.0995	43715	4348	207713	751071.2	17.2
65	0.0265	0.1244	39367	4896	184921	543358.7	13.8
70	0.0376	0.1728	34471	5957	158414	358437.5	10.4
75	0.0832	0.3458	28514	9859	118563	200023.7	7.0
80	0.2290	...	18655	18655	81461	81460.8	4.4

## MIDLANDS

Table A2w1: Estimated Life Tables for Zimbabwe 2012: Midlands, Males

Age	m(x,n)	q(x,n)	I(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0214	0.0210	100000	2102	98115	5708704	57.1
1	0.0018	0.0071	97898	692	389926	5610589	57.3
5	0.0019	0.0092	97206	897	483791	5220663	53.7
10	0.0017	0.0084	96310	812	479519	4736872	49.2
15	0.0036	0.0181	95498	1728	473666	4257353	44.6
20	0.0070	0.0344	93770	3224	461429	3783687	40.4
25	0.0102	0.0496	90546	4488	442034	3322257	36.7
30	0.0136	0.0656	86058	5645	416528	2880224	33.5
35	0.0157	0.0754	80413	6059	387167	2463696	30.6
40	0.0193	0.0920	74354	6843	354640	2076529	27.9
45	0.0187	0.0891	67511	6018	322132	1721889	25.5
50	0.0172	0.0825	61493	5071	294691	1399757	22.8
55	0.0203	0.0965	56422	5445	268648	1105065	19.6
60	0.0240	0.1135	50977	5788	240716	836417.8	16.4
65	0.0331	0.1531	45189	6920	209221	595701.9	13.2
70	0.0500	0.2231	38268	8538	170900	386481.2	10.1
75	0.0906	0.3699	29730	10999	121387	215581.2	7.3
80	0.1989	...	18731	18731	94195	94194.71	5.0

Table A2w2: Estimated Life Tables for Zimbabwe 2012: Midlands, Females

Age	m(x,n)	q(x,n)	I(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0177	0.0174	100000	1741	98437	6186506	61.9
1	0.0012	0.0048	98259	467	391869	6088069	62.0
5	0.0012	0.0057	97793	561	487561	5696200	58.2
10	0.0022	0.0110	97232	1066	483495	5208639	53.6
15	0.0039	0.0194	96166	1870	476544	4725145	49.1
20	0.0062	0.0305	94297	2880	464746	4248601	45.1
25	0.0090	0.0442	91417	4039	447417	3783855	41.4
30	0.0113	0.0551	87377	4816	425069	3336438	38.2
35	0.0126	0.0611	82562	5041	400099	2911369	35.3
40	0.0116	0.0563	77521	4361	376389	2511270	32.4
45	0.0100	0.0488	73160	3571	356729	2134880	29.2
50	0.0106	0.0514	69589	3579	339261	1778152	25.6
55	0.0158	0.0763	66010	5033	317670	1438891	21.8
60	0.0150	0.0725	60976	4419	294051	1121221	18.4
65	0.0233	0.1103	56557	6240	267673	827170.6	14.6
70	0.0276	0.1298	50317	6529	236411	559497.7	11.1
75	0.0715	0.3048	43788	13347	186700	323086.7	7.4
80	0.2232	...	30441	30441	136387	136386.6	4.5

Table A2w3: Estimated Life Tables for Zimbabwe 2012: Midlands, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0195	0.0192	100000	1921	98267	5965537	59.7
1	0.0015	0.0059	98079	579	390925	5867270	59.8
5	0.0015	0.0075	97500	731	485674	5476346	56.2
10	0.0019	0.0097	96769	937	481504	4990672	51.6
15	0.0038	0.0188	95832	1804	475092	4509168	47.1
20	0.0066	0.0323	94028	3036	463092	4034076	42.9
25	0.0096	0.0468	90992	4254	444806	3570985	39.2
30	0.0124	0.0602	86738	5224	420920	3126179	36.0
35	0.0141	0.0682	81514	5562	393728	2705259	33.2
40	0.0151	0.0726	75952	5514	365744	2311531	30.4
45	0.0134	0.0649	70438	4570	340523	1945786	27.6
50	0.0134	0.0647	65868	4264	318807	1605263	24.4
55	0.0177	0.0849	61604	5229	295132	1286456	20.9
60	0.0189	0.0905	56374	5102	269393	991324.6	17.6
65	0.0277	0.1300	51273	6666	240270	721931.8	14.1
70	0.0377	0.1732	44607	7724	204806	481661.5	10.8
75	0.0792	0.3317	36883	12234	154485	276855.3	7.5
80	0.2014	...	24649	24649	122371	122370.6	5.0

## MASVINGO

Table A2x1: Estimated Life Tables for Zimbabwe 2012: Masvingo, Males

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0188	0.0185	100000	1845	98331	5410578	54.1
1	0.0019	0.0077	98155	753	390811	5312246	54.1
5	0.0022	0.0110	97402	1070	484335	4921436	50.5
10	0.0021	0.0107	96332	1027	479093	4437101	46.1
15	0.0058	0.0285	95305	2712	470531	3958008	41.5
20	0.0091	0.0446	92593	4128	453284	3487478	37.7
25	0.0133	0.0643	88465	5688	428736	3034194	34.3
30	0.0177	0.0849	82777	7025	396542	2605459	31.5
35	0.0184	0.0881	75751	6675	362273	2208917	29.2
40	0.0247	0.1160	69077	8016	325167	1846644	26.7
45	0.0212	0.1005	61061	6135	289371	1521477	24.9
50	0.0191	0.0912	54926	5008	261992	1232107	22.4
55	0.0230	0.1086	49917	5421	236036	970114.8	19.4
60	0.0241	0.1137	44496	5061	209952	734078.4	16.5
65	0.0328	0.1522	39435	6001	182682	524126.6	13.3
70	0.0502	0.2240	33435	7491	149193	341445	10.2
75	0.0876	0.3599	25944	9338	106578	192251.6	7.4
80	0.1938	...	16606	16606	85673	85673.28	5.2

Table A2x2: Estimated Life Tables for Zimbabwe 2012: Masvingo, Females

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0158	0.0156	100000	1556	98595	6140377	61.4
1	0.0014	0.0055	98444	543	392420	6041782	61.4
5	0.0011	0.0054	97902	524	488197	5649362	57.7
10	0.0023	0.0115	97377	1122	484081	5161166	53.0
15	0.0050	0.0245	96256	2356	475966	4677084	48.6
20	0.0079	0.0389	93899	3650	460918	4201119	44.7
25	0.0110	0.0536	90250	4834	439527	3740200	41.4
30	0.0127	0.0615	85415	5257	413920	3300673	38.6
35	0.0123	0.0597	80158	4789	388635	2886753	36.0
40	0.0119	0.0580	75369	4368	365553	2498118	33.1
45	0.0092	0.0450	71001	3196	346842	2132564	30.0
50	0.0101	0.0491	67806	3328	330849	1785722	26.3
55	0.0125	0.0606	64477	3908	312900	1454872	22.6
60	0.0162	0.0777	60569	4709	291461	1141972	18.9
65	0.0218	0.1036	55860	5787	265233	850511.4	15.2
70	0.0280	0.1314	50073	6581	235035	585278.1	11.7
75	0.0654	0.2824	43492	12283	187890	350243	8.1
80	0.1922	...	31210	31210	162353	162353	5.2

Table A2x3: Estimated Life Tables for Zimbabwe 2012: Masvingo, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0173	0.0170	100000	1700	98455	5806762.2	58.1
1	0.0017	0.0066	98300	648	391647	5708306.8	58.1
5	0.0016	0.0082	97652	801	486259	5316659.8	54.4
10	0.0022	0.0111	96851	1074	481572	4830400.5	49.9
15	0.0053	0.0261	95777	2502	473295	4348828.7	45.4
20	0.0084	0.0412	93275	3842	457358	3875533.8	41.5
25	0.0120	0.0583	89433	5210	434637	3418175.5	38.2
30	0.0150	0.0722	84223	6079	406031	2983538.4	35.4
35	0.0152	0.0734	78144	5734	376377	2577507.7	33.0
40	0.0173	0.0830	72410	6012	346639	2201130.8	30.4
45	0.0134	0.0647	66398	4295	320922	1854491.8	27.9
50	0.0137	0.0662	62103	4114	300304	1533569.7	24.7
55	0.0167	0.0803	57989	4655	278492	1233265.5	21.3
60	0.0196	0.0933	53334	4979	254508	954773.6	17.9
65	0.0267	0.1254	48356	6063	227114	700265.73	14.5
70	0.0378	0.1733	42292	7330	194112	473151.61	11.2
75	0.0738	0.3125	34962	10927	148130	279039.31	8.0
80	0.1836	...	24036	24036	130910	130909.77	5.4

## HARARE

Table A2y1: Estimated Life Tables for Zimbabwe 2012: Harare, Males

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0175	0.0172	100000	1725	98434	5988035	59.9
1	0.0012	0.0050	98275	489	391928	5889600.9	59.9
5	0.0016	0.0081	97786	789	486957	5497673.3	56.2
10	0.0017	0.0083	96997	807	482967	5010715.9	51.7
15	0.0024	0.0122	96190	1170	478179	4527749.4	47.1
20	0.0033	0.0162	95019	1535	471510	4049570.2	42.6
25	0.0056	0.0274	93484	2563	461425	3578060.1	38.3
30	0.0074	0.0365	90922	3322	446671	3116634.9	34.3
35	0.0102	0.0498	87599	4364	427470	2669963.6	30.5
40	0.0126	0.0610	83235	5074	403729	2242493.6	26.9
45	0.0145	0.0700	78161	5473	377276	1838764.1	23.5
50	0.0166	0.0798	72688	5802	349436	1461488.4	20.1
55	0.0259	0.1217	66887	8142	314880	1112052.3	16.6
60	0.0345	0.1590	58745	9343	271146	797172.53	13.6
65	0.0544	0.2399	49402	11853	217871	526026.4	10.6
70	0.0724	0.3072	37550	11537	159346	308155.71	8.2
75	0.1347	0.4992	26013	12986	96409	148809.45	5.7
80	0.2486	...	13027	13027	52400	52400.096	4.0

Table A2y2: Estimated Life Tables for Zimbabwe 2012: Harare, Females

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0144	0.0142	100000	1418	98713	6289359.1	62.9
1	0.0013	0.0051	98582	499	393082	6190645.8	62.8
5	0.0011	0.0054	98083	532	489088	5797563.7	59.1
10	0.0014	0.0069	97552	671	486082	5308476	54.4
15	0.0020	0.0101	96881	980	482136	4822393.9	49.8
20	0.0034	0.0169	95901	1617	475769	4340258	45.3
25	0.0052	0.0257	94284	2427	465725	3864488.5	41.0
30	0.0075	0.0367	91857	3371	451207	3398763.6	37.0
35	0.0092	0.0451	88486	3994	432742	2947556.1	33.3
40	0.0117	0.0567	84493	4793	410552	2514813.8	29.8
45	0.0111	0.0542	79699	4321	387750	2104262.2	26.4
50	0.0139	0.0672	75379	5064	364858	1716511.7	22.8
55	0.0231	0.1096	70315	7703	333044	1351653.6	19.2
60	0.0275	0.1289	62612	8068	293165	1018609.5	16.3
65	0.0359	0.1648	54544	8990	250591	725444.38	13.3
70	0.0474	0.2127	45554	9688	204386	474853.18	10.4
75	0.0872	0.3582	35866	12847	147253	270467.65	7.5
80	0.1868	...	23018	23018	123215	123214.56	5.4

Table A2y3: Estimated Life Tables for Zimbabwe 2012: Harare, Both Sexes

Age	$m(x,n)$	$q(x,n)$	$I(x)$	$d(x,n)$	$L(x,n)$	$T(x)$	$e(x)$
0	0.0159	0.0157	100000	1571	98567	6138464	61.4
1	0.0013	0.0050	98429	494	392534	6039897.1	61.4
5	0.0013	0.0067	97935	655	488038	5647363.6	57.7
10	0.0015	0.0075	97280	729	484579	5159325.4	53.0
15	0.0022	0.0110	96551	1064	480269	4674746.5	48.4
20	0.0033	0.0165	95488	1578	473774	4194477.4	43.9
25	0.0054	0.0266	93909	2497	463695	3720703.7	39.6
30	0.0075	0.0366	91412	3347	449059	3257008.5	35.6
35	0.0098	0.0478	88065	4208	430149	2807949.4	31.9
40	0.0121	0.0589	83857	4941	407080	2377800.4	28.4
45	0.0127	0.0617	78916	4869	382509	1970719.9	25.0
50	0.0152	0.0734	74047	5436	357212	1588211.3	21.4
55	0.0245	0.1155	68611	7922	324007	1230999.5	17.9
60	0.0308	0.1430	60689	8680	282272	906992.63	14.9
65	0.0445	0.2007	52009	10439	234401	624720.34	12.0
70	0.0592	0.2585	41570	10744	181608	390319.31	9.4
75	0.1062	0.4181	30825	12887	121391	208710.94	6.8
80	0.2054	...	17938	17938	87320	87320.105	4.9

Table A3 Number of Women Age 15 - 49 by Age Group, Children Ever Born, Children Surviving, Sex and Background Characteristic of Mother

<b>Age Group</b>	<b>Women</b>	<b>Males ever born</b>	<b>Females ever born</b>	<b>Males surviving</b>	<b>Females surviving</b>
<b>Bulawayo</b>					
15 – 19	44282	1987	2367	1902	2291
20 – 24	41436	14096	15493	13432	14920
25 – 29	35261	26488	27855	25109	26651
30 – 34	26829	28878	30125	27323	28782
35 – 39	20304	27173	27721	25655	26387
40 – 44	15729	23227	23913	21937	22734
45 – 49	12776	21307	21770	20034	20560
<b>Total</b>	<b>196617</b>	<b>143156</b>	<b>149244</b>	<b>135392</b>	<b>142325</b>
<b>Manicaland</b>					
15 – 19	92033	9571	9260	8775	8565
20 – 24	78338	48096	48022	43918	44412
25 – 29	74276	84016	86093	76087	79208
30 – 34	60523	94779	95658	85743	87863
35 – 39	48409	95090	94072	84858	85368
40 – 44	33883	74263	72735	65746	65330
45 – 49	24949	61066	58780	53405	52078
Total	412411	466881	464620	418532	422824
<b>Mashonaland Central</b>					
15 – 19	56879	7839	7577	7255	7112
20 – 24	53125	37314	36896	34226	34427
25 – 29	51315	61474	62472	55837	57849
30 – 34	39517	63748	63437	57715	58308
35 – 39	33251	66443	65203	59341	59236
40 – 44	21249	46809	45942	41428	41194
45 – 49	14794	36488	35060	31794	30831
Total	270130	320115	316587	287596	288957
<b>Mashonaland East</b>					
15 – 19	67662	7417	7466	6846	6985
20 – 24	59998	36956	37095	33834	34576
25 – 29	58402	64457	65818	58752	60896
30 – 34	46644	69186	70049	62966	64735
35 – 39	38574	70723	70250	64007	64502
40 – 44	26892	54470	54043	48968	49219
45 – 49	19976	45480	44614	40908	40288
<b>Total</b>	<b>318148</b>	<b>348689</b>	<b>349335</b>	<b>316281</b>	<b>321201</b>
<b>Mashonaland West</b>					
15 – 19	78315	9314	9169	8643	8623
20 – 24	73847	46371	45955	42634	42889
25 – 29	70637	79408	79208	72507	73561
30 – 34	54813	82237	81785	74805	75611
35 – 39	42613	78590	77206	71053	70729
40 – 44	27731	56764	55100	51233	50094
45 – 49	20036	46388	44734	41291	39988
<b>Total</b>	<b>367992</b>	<b>399072</b>	<b>393157</b>	<b>362166</b>	<b>361495</b>

Table A3 Number of Women Age 15 - 49 by Age Group, Children Ever Born, Children Surviving, Sex and Background Characteristic of Mother (Cont.)

<b>Age Group</b>	<b>Women</b>	<b>Males ever born</b>	<b>Females ever born</b>	<b>Males surviving</b>	<b>Females surviving</b>
<b>Matabeleland North</b>					
15 – 19	39911	4055	4440	3880	4282
20 – 24	33426	19019	19657	18032	18811
25 – 29	28689	30295	30780	28361	29057
30 – 34	22128	32489	32910	30174	30921
35 – 39	18588	35544	35713	32880	33303
40 – 44	13759	29993	30001	27704	27774
45 – 49	11828	29083	28300	26385	25721
<b>Total</b>	<b>168329</b>	<b>180478</b>	<b>181801</b>	<b>167416</b>	<b>169869</b>
<b>Matabeleland South</b>					
15 – 19	38585	3718	4049	3573	3927
20 – 24	30181	16639	17523	15761	16803
25 – 29	25554	25577	26421	23863	24950
30 – 34	19802	27324	27882	25478	26192
35 – 39	16127	28629	28563	26597	26861
40 – 44	12793	26004	26312	24150	24558
45 – 49	10800	24640	24357	22828	22557
<b>Total</b>	<b>153842</b>	<b>152531</b>	<b>155107</b>	<b>142250</b>	<b>145848</b>
<b>Midlands</b>					
15 – 19	88871	8394	8248	7838	7772
20 – 24	78962	44191	44269	40908	41558
25 – 29	71603	76602	77713	70510	72522
30 – 34	56123	83050	83954	76346	78250
35 – 39	43840	83331	82485	75768	76045
40 – 44	30698	64492	63039	58502	57749
45 – 49	22165	52255	50752	47087	45887
<b>Total</b>	<b>392262</b>	<b>412315</b>	<b>410460</b>	<b>376959</b>	<b>379783</b>
<b>Masvingo</b>					
15 – 19	80226	6847	7002	6401	6648
20 – 24	65199	37372	37335	34895	35308
25 – 29	62347	66700	67775	61768	63622
30 – 34	51881	77861	78464	71717	73167
35 – 39	42175	79857	79527	72902	73531
40 – 44	28221	59625	59008	53921	54009
45 – 49	19989	48185	46735	42992	42131
<b>Total</b>	<b>350038</b>	<b>376447</b>	<b>375846</b>	<b>344596</b>	<b>348416</b>
<b>Harare</b>					
15 – 19	126039	7197	7364	6718	6944
20 – 24	137686	54104	54273	50644	51521
25 – 29	133773	108781	109121	101831	103193
30 – 34	98948	115340	115824	107734	109489
35 – 39	70363	98879	99510	92050	93677
40 – 44	45371	69882	69736	64726	65466
45 – 49	29444	50970	50539	47100	47213
<b>Total</b>	<b>641624</b>	<b>505153</b>	<b>506367</b>	<b>470803</b>	<b>477503</b>

Table A3 Number of Women Age 15 - 49 by Age Group, Children Ever Born, Children Surviving, Sex and Background Characteristic of Mother (Cont.)

<b>Age Group</b>	<b>Women</b>	<b>Males ever born</b>	<b>Females ever born</b>	<b>Males surviving</b>	<b>Females surviving</b>
<b>Rural</b>					
15 – 19	446207	51268	51165	47708	48169
20 – 24	374794	244510	244335	225546	228740
25 – 29	349232	408603	414611	373523	384755
30 – 34	281387	446989	449024	407295	415160
35 – 39	232949	465315	458845	419935	420072
40 – 44	160838	357954	351450	321335	318911
45 – 49	122199	303029	292932	269297	262008
<b>Total</b>	<b>1967606</b>	<b>2277668</b>	<b>2262362</b>	<b>2064639</b>	<b>2077815</b>
<b>Urban</b>					
15 – 19	266596	15071	15777	14123	14980
20 – 24	277404	109648	112183	102738	106485
25 – 29	262625	215195	218645	201102	206754
30 – 34	195821	227903	231064	212706	218158
35 – 39	141295	198944	201405	185176	189567
40 – 44	95488	147575	148379	136980	139216
45 – 49	64558	112833	112709	104527	105246
<b>Total</b>	<b>1303787</b>	<b>1027169</b>	<b>1040162</b>	<b>957352</b>	<b>980406</b>
<b>Never Married</b>					
15 – 19	530790	7403	9331	7034	8991
20 – 24	184982	21488	25913	20227	24845
25 – 29	70802	21834	25416	20286	24021
30 – 34	31465	16074	17948	14717	16771
35 – 39	17067	11292	12712	10256	11820
40 – 44	10201	7593	8367	6917	7750
45 – 49	5694	5224	5524	4782	5096
<b>Total</b>	<b>851001</b>	<b>90908</b>	<b>105211</b>	<b>84219</b>	<b>99294</b>
<b>Married</b>					
15 – 19	156396	53853	51269	50030	48086
20 – 24	420707	303615	296652	281253	278275
25 – 29	477680	543601	542723	501353	506976
30 – 34	377389	579894	576544	534507	538151
35 – 39	285231	550523	540183	503676	500507
40 – 44	179519	388832	378462	354412	348471
45 – 49	123603	298303	287628	269228	261450
<b>Total</b>	<b>2020525</b>	<b>2718621</b>	<b>2673461</b>	<b>2494459</b>	<b>2481916</b>
<b>Divorced/Separated</b>					
15 – 19	11754	4565	5768	4276	5521
20 – 24	39958	25716	30277	23775	28658
25 – 29	51303	46153	51985	42071	48515
30 – 34	45047	49006	53878	44199	49722
35 – 39	35078	44164	48311	39654	44266
40 – 44	23832	33066	36119	29580	32957
45 – 49	15841	25353	26418	22645	23822
<b>Total</b>	<b>222813</b>	<b>228023</b>	<b>252756</b>	<b>206200</b>	<b>233461</b>
15 – 19	783	249	262	234	250
20 – 24	3658	2590	2913	2323	2723
25 – 29	10699	11388	12208	10139	11130
30 – 34	22274	29176	30939	25890	27952
35 – 39	36304	57662	58437	50975	52489
40 – 44	42302	75565	76373	66981	68492
45 – 49	41297	86523	85591	76762	76456
<b>Total</b>	<b>157317</b>	<b>263153</b>	<b>266723</b>	<b>233304</b>	<b>239492</b>

Table A3 Number of Women Age 15 - 49 by Age Group, Children Ever Born, Children Surviving, Sex and Background Characteristic of Mother (Cont.)

<b>Age Group</b>	<b>Women</b>	<b>Males ever born</b>	<b>Females ever born</b>	<b>Males surviving</b>	<b>Females surviving</b>
<b>No Education</b>					
15 – 19	11037	1182	1194	1080	1118
20 – 24	10214	5522	5492	5043	5114
25 – 29	10637	11607	11829	10379	10806
30 – 34	10647	15967	16106	14269	14559
35 – 39	11035	22630	21961	19781	19505
40 – 44	13514	31811	30549	27527	26674
45 – 49	23368	62394	59510	53495	51313
Total	90452	151113	146641	131574	129089
<b>Primary Education</b>					
15 – 19	128698	26347	26450	24247	24660
20 – 24	144229	109038	108886	98843	100421
25 – 29	143076	186567	188857	167701	172783
30 – 34	123850	213666	215259	191889	196380
35 – 39	110321	237036	232618	211259	210400
40 – 44	78376	187826	183182	166841	164626
45 – 49	81589	205175	198840	182822	178037
Total	810139	1165655	1154092	1043602	1047307
<b>Secondary Education</b>					
15 – 19	571068	38606	39092	36317	37177
20 – 24	473646	234325	236585	219382	224331
25 – 29	408859	399388	405144	371495	381533
30 – 34	300743	406231	408820	376677	384025
35 – 39	219761	364546	364939	335986	340640
40 – 44	138250	250413	250486	230316	232762
45 – 49	63318	120881	119707	111542	111503
Total	<b>2175645</b>	<b>1814390</b>	<b>1824773</b>	<b>1681715</b>	<b>1711971</b>
<b>Tertiary</b>					
15 – 19	1546	122	132	114	123
20 – 24	23349	4894	5111	4659	4947
25 – 29	48383	25354	26545	24241	25606
30 – 34	41263	38016	38931	36238	37447
35 – 39	32507	39014	39629	37149	38067
40 – 44	25581	34270	34455	32527	33037
45 – 49	17765	25809	26027	24511	24994
Total	<b>190394</b>	<b>167479</b>	<b>170830</b>	<b>159439</b>	<b>164221</b>
<b>Employed</b>					
15 – 19	164551	32586	32408	30230	30443
20 – 24	300852	183650	183855	169303	172262
25 – 29	349479	361729	369105	332219	343923
30 – 34	302300	429643	434146	394049	403816
35 – 39	254176	453635	450696	412546	415423
40 – 44	181018	359103	354820	324989	324674
45 – 49	131458	294421	287089	264155	259372
Total	<b>1683834</b>	<b>2114767</b>	<b>2112119</b>	<b>1927491</b>	<b>1949913</b>
<b>Unemployed</b>					
15 – 19	548252	33753	34534	31601	32706
20 – 24	351346	170508	172663	158981	162963
25 – 29	262378	262069	264151	242406	247586
30 – 34	174908	245249	245942	225952	229502
35 – 39	120068	210624	209554	192565	194216
40 – 44	75308	146426	145009	133326	133453
45 – 49	55299	121441	118552	109669	107882
Total	<b>1587559</b>	<b>1190070</b>	<b>1190405</b>	<b>1094500</b>	<b>1108308</b>

Table A3 Number of Women Age 15 - 49 by Age Group, Children Ever Born, Children Surviving, Sex and Background Characteristic of Mother (Cont.)

<b>Age Group</b>	<b>Women</b>	<b>Males ever born</b>	<b>Females ever born</b>	<b>Males surviving</b>	<b>Females surviving</b>
<b>With Disability</b>					
15 – 19	19524	1362	1447	1239	1343
20 – 24	15991	7401	7841	6631	7186
25 – 29	17168	15458	15876	13659	14383
30 – 34	17364	21964	22470	19387	20270
35 – 39	17259	28896	28611	25457	25488
40 – 44	18450	34469	34888	30528	31299
45 – 49	19545	42520	41852	37635	37276
<b>Total</b>	<b>125301</b>	<b>152070</b>	<b>152985</b>	<b>134536</b>	<b>137245</b>
<b>Without Disability</b>					
15 – 19	693279	64977	65495	60592	61806
20 – 24	636207	346757	348677	321653	328039
25 – 29	594689	608340	617380	560966	577126
30 – 34	459844	652928	657618	600614	613048
35 – 39	356985	635363	631639	579654	584151
40 – 44	237876	471060	464941	427787	426828
45 – 49	167212	373342	363789	336189	329978
<b>Total</b>	<b>3146092</b>	<b>3152767</b>	<b>3149539</b>	<b>2887455</b>	<b>2920976</b>
<b>Total</b>					
15 – 19	712803	66339	66942	61831	63149
20 – 24	652198	354158	356518	328284	335225
25 – 29	611857	623798	633256	574625	591509
30 – 34	477208	674892	680088	620001	633318
35 – 39	374244	664259	660250	605111	609639
40 – 44	256326	505529	499829	458315	458127
45 – 49	186757	415862	405641	373824	367254
<b>Total</b>	<b>3271393</b>	<b>3304837</b>	<b>3302524</b>	<b>3021991</b>	<b>3058221</b>

Table A4a Population and Deaths by Age, Sex and Place of Residence, 2002 Zimbabwe Population Census

Age Group	Male		Female		Total	
	Population	Deaths	Population	Deaths	Population	Deaths
<b>Rural</b>						
Under 1	114917	10063	115763	8428	230685	18492
'01 - 04	472565	7297	470940	6463	943530	13760
'05 - 09	572065	2324	569321	2001	1141417	4326
'10 - 14	588467	1575	572700	1352	1161208	2927
15 - 19	534977	1490	491001	2008	1026034	3497
20 - 24	320484	2765	369632	5098	690102	7860
25 - 29	246629	5560	296350	8478	542959	14035
30 - 34	190927	7966	215906	8899	406827	16863
35 - 39	126713	7716	170070	7498	296762	15213
40 - 44	113670	6664	164906	5339	278549	12005
45 - 49	100250	5283	137239	4070	237470	9353
50 - 54	83678	3969	136741	3052	220390	7022
55 - 59	69689	3127	89920	1908	159599	5036
60 - 64	72826	2998	81658	1849	154482	4848
65 - 69	50982	2204	56217	1500	107198	3705
70 - 74	50522	2394	53498	1568	104021	3963
75 - 79	25202	1615	29448	1078	54649	2694
80 - 84	23684	1694	28482	1483	52165	3177
85 - 89	6786	782	9786	732	16570	1513
90 - 94	3293	505	4821	587	8114	1091
95+	3295	731	7763	1208	11056	1939
<b>Urban</b>						
Under 1	55774	3552	55381	2991	111158	6543
'01 - 04	197944	1882	200193	1524	398146	3405
'05 - 09	195250	627	203847	511	399102	1138
'10 - 14	168945	481	188819	398	357760	879
15 - 19	204468	414	279798	493	484227	907
20 - 24	245661	869	292599	1448	538242	2317
25 - 29	229130	1761	220062	2621	449209	4382
30 - 34	180294	2901	146221	2824	326546	5725
35 - 39	109862	3035	100097	2491	209970	5527
40 - 44	81761	2430	76043	1769	157812	4200
45 - 49	65806	2015	54903	1315	120720	3330
50 - 54	44830	1344	37371	988	82208	2332
55 - 59	29097	948	23151	603	52253	1551
60 - 64	21975	857	18269	545	40247	1402
65 - 69	13560	630	11980	429	25541	1059
70 - 74	10014	575	9284	367	19299	942
75 - 79	4907	425	5200	237	10108	662
80 - 84	3180	331	3963	309	7143	640
85 - 89	970	141	1629	147	2599	288
90 - 94	473	83	642	101	1115	184
95+	429	102	1045	169	1474	272

Table A4a Population and Deaths by Age, Sex and Place of Residence, 2002 Zimbabwe Population Census  
(Cont.)

<b>Age Group</b>	<b>Population</b>	<b>Deaths</b>
<b>Total</b>		
Under 1	341843	25035
'01 - 04	1341677	17166
'05 - 09	1540519	5464
'10 - 14	1518967	3806
15 - 19	1510261	4405
20 - 24	1228344	10177
25 - 29	992169	18417
30 - 34	733373	22588
35 - 39	506732	20740
40 - 44	436360	16204
45 - 49	358190	12684
50 - 54	302597	9354
55 - 59	211853	6588
60 - 64	194729	6250
65 - 69	132740	4763
70 - 74	123321	4905
75 - 79	64757	3356
80 - 84	59308	3817
85 - 89	19169	1801
90 - 94	9229	1275
95+	12529	2210

Table A4b Population and Deaths by age, sex and residence, 2012 Zimbabwe Population Census

Age Group	Male		Female		Total	
	Population	Deaths	Population	Deaths	Population	Deaths
<b>Rural</b>						
Under 1	152026	11222	155210	9172	307103	20399
'01 - 04	582313	4518	590499	3930	1172330	8449
'05 - 09	669406	1337	674753	1024	1343632	2362
'10 - 14	684964	1400	664915	886	1349508	2288
15 - 19	533038	1159	481472	1289	1014460	2447
20 - 24	350665	1739	404415	2257	754466	3992
25 - 29	314403	2634	376832	3331	690591	5959
30 - 34	267993	3389	303626	3597	571186	6982
35 - 39	224182	3719	251359	3458	475197	7176
40 - 44	165510	3199	173549	2336	338885	5538
45 - 49	103532	2300	131857	1711	235125	4013
50 - 54	95881	2031	167618	1684	262954	3716
55 - 59	86925	1749	130466	1370	217038	3120
60 - 64	76646	2029	110616	1531	186981	3562
65 - 69	61322	1678	81288	1276	142433	2956
70 - 74	54709	1939	66356	1510	120948	3450
75 - 79	35704	1814	43248	1251	78876	3067
80 - 84	28342	1823	37099	1595	65362	3418
85 - 89	12194	1214	17675	1185	29823	2398
90 - 94	8083	878	11763	997	19815	1874
95+	3375	724	8574	1288	11912	2008
<b>Urban</b>						
Under 1	75447	4356	76935	3635	152317	7993
'01 - 04	241538	1214	247624	1061	488944	2275
'05 - 09	231098	304	245767	267	476598	570
'10 - 14	220241	363	248134	257	468029	621
15 - 19	212066	346	287666	412	499076	758
20 - 24	228457	585	299328	702	527147	1286
25 - 29	239536	894	283381	1125	522450	2017
30 - 34	204646	1265	211297	1287	415748	2551
35 - 39	162097	1380	152462	1244	314504	2624
40 - 44	120563	1352	103035	991	223625	2344
45 - 49	68304	928	69660	793	137905	1721
50 - 54	52346	798	60871	707	113122	1505
55 - 59	41775	726	43871	578	85602	1304
60 - 64	26482	688	29590	636	56033	1324
65 - 69	16525	570	20204	500	36693	1070
70 - 74	11603	586	15075	488	26647	1074
75 - 79	7211	503	9405	429	16596	933
80 - 84	4676	459	6740	413	11398	873
85 - 89	1947	285	3233	331	5170	615
90 - 94	1038	166	1699	195	2732	361
95+	411	118	1114	196	1520	314

Table A4b Population and Deaths by age, sex and residence, 2012 Zimbabwe Population Census (Cont.)

<b>Age Group</b>	<b>Population</b>	<b>Deaths</b>
<b>Total</b>		
Under 1	459420	28392
'01 - 04	1661275	10723
'05 - 09	1820231	2933
'10 - 14	1817537	2909
15 - 19	1513536	3205
20 - 24	1281613	5278
25 - 29	1213042	7976
30 - 34	986934	9533
35 - 39	789701	9800
40 - 44	562510	7883
45 - 49	373031	5735
50 - 54	376076	5221
55 - 59	302640	4425
60 - 64	243013	4886
65 - 69	179126	4026
70 - 74	147595	4524
75 - 79	95472	3999
80 - 84	76761	4291
85 - 89	34993	3013
90 - 94	22547	2235
95+	13432	2322







