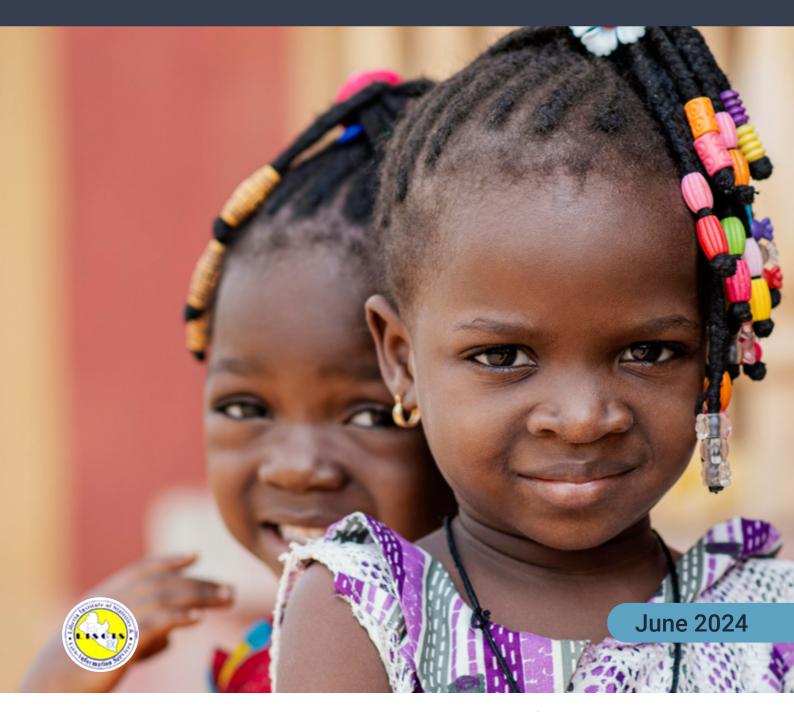
## Thematic report on

# **Population projections**











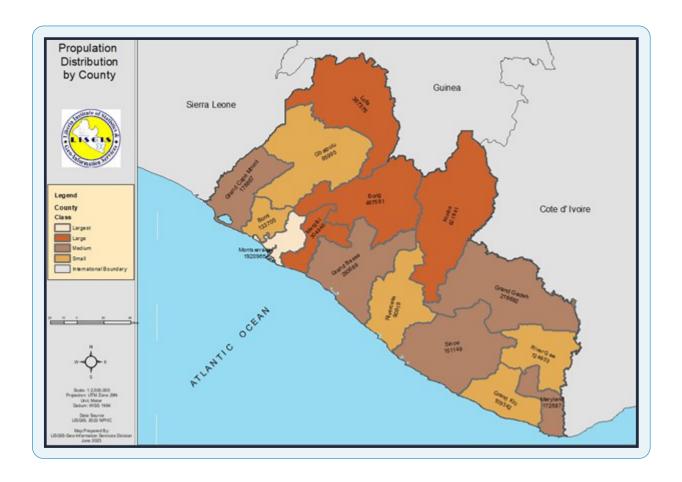








# **Administrative map of Liberia**



## **Foreword**



The 2022 National Population and Housing Census is the fifth and first digital census with the full deployment of ICT techniques and followed the UN Recommended Principles for the 2020 round of censuses. The basis for the conduct of the census is Article 39 of the 1986 Constitution of the Republic of Liberia. On October 10, 2022, the Government of Liberia initiated "an Act Authorizing the Executive Branch of Government to conduct the 2022 Liberia Population and Housing Census".

Hence, following the successful implementation of the 2022 Liberia Population and Housing Census, the Liberia Institute of Statistics & Geo-Information Services (LISGIS) produced 14 thematic reports. These reports summarized the country's demographic, social, and economic sectors. The publication of the thematic reports is consistent with the United Nations (UN) International Standards of releasing National Census results and thematic reports.

The 14 thematic reports form a primary source of socio-economic and demographic data at various levels and provide relevant information to foster national development, good governance, and resource distribution. The results presented in this thematic report will form a solid basis for the successes and challenges in the implementation of the Sustainable Development Goals (SDGs) as well as support the implementation of the development of the Africa Union Agenda 2063: The Africa We Want; Transforming Our World and other national and international programs.

I am pleased that the thematic reports helped to guide our national development plan. I would like to appreciate the support received from development partners and individuals during the entire process of writing the thematic report.

On behalf of the Census Commission and Board of Directors of LISGIS, I thank the Government of Liberia and our development partners for providing the required resources for conducting the census. Thanks also go to the national and international experts who worked very hard to complete these thematic reports.

Special appreciation for the success of the census goes to Hon. Samuel D. Tweah, Jr., former Chairman of the Census Commission, the Census Commission, the Steering Committee, the Census Secretariat, other national and international experts, census staff, and all respondents who provided the required information as well as all stakeholders for their commitment, motivation, and support to the National Population and Housing Census process.

I look forward to the continued support and guidance of development partners to engender sustainable development in our country.

Hon. Dehoue Y. Zuo

**Deputy Minister for Economic Management** 

& Chairman of the Board

Ministry of Finance and Development Planning

## **Preface**

The Liberia Institute of Statistics & Geo-Information Services (LISGIS) conducted the fifth and first fully digital census in November 2022. The 2022 National Population and Housing Census data was collected using Computer Assisted Personal Interviewing (CAPI) technology. Data were collected using tablets and later transmitted to LISGIS's server electronically.

The 14 thematic areas identified provide a comprehensive understanding of the population. These thematic areas are a) Population Distribution and Size b) Children, Adolescents, and Youth c) People with disabilities and older people d) Migration and Urbanization e) Labor force and Employment, f) Education, and Literacy g) Agricultural Population, h) Non-monetary poverty i) Housing conditions and facilities j) Mortality, k) Fertility, l) Marriages/Nuptiality, m) Gender Dimensions, and n) Population Projections. I would also like to thank the national and international experts for preparing the thematic reports.

Though the Government contributed immense resources to the 2022 National Census exercise, the requirements were enormous and beyond the capacity of the Government and LISGIS. It is with pleasure that we recognize and appreciate the support of the United Nations Population Fund (UNFPA), the Swedish Government, the World Bank, the United States Aid for International Development (USAID), the Irish Government, the Government of Ghana, Economic Community of West African States (ECOWAS) and the United Nations Children's Fund (UNICEF) and other partners whose timely and continuous interventions gave stimulus to the execution of the 2022 Liberia Population and Housing Census including the preparation of the reports.

Special gratitude goes to the general public for their cooperation and support. We are indebted to personnel and the management of LISGIS, national and international experts, supervisors, and enumerators for successfully conducting the 2022 National Population and Housing Census.

Director General

LISGIS

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## **Acronyms**

ARREST Agenda Agriculture, Roads, Rule of Law, Education, Sanitation and Tourism

**ECOWAS** Economic Community of West African States

**LDHS** Liberia Demographic and Health Survey

**LISGIS** Liberia Institute of Statistics and Geo-Information Services

NHP Liberia's National Health Policy
 LNPP Liberia National Population Policy
 NPC National Population Commission
 PHC Population and Housing Census

**TFR** Total fertility rate

**UN DESA** United Nations Department of Economic and Social Affairs

**URGD** Urban-Rural Growth Differential

## **Executive summary**

The future trends in the size and composition of the population of any country is key in the planning of developmental policies. Population projections are key features of many planning policy studies. Understanding population patterns and trends and anticipating changes in population dynamics are key for national development planning and for implementing the 2030 Agenda for Sustainable Development (SDGs). The 2030 Agenda highlights that people are at the centre of sustainable development, which echoes the ideals outlined in the Programme of Action of the International Conference on Population and Development adopted in Cairo in 1994 (UN DESA, 2022).

Errors in the age-sex distribution have effects on both developing population assumptions and the results of population projections. Given this, it is prudent to subject the 2022 LPHC data to rigorous evaluation in determining the extent of errors in establishing the reliability and validity of the data being used to compute population projections. Again, evaluating the 2022 Liberia PHC provides basic information for dealing with some errors and the basis for adjusting or correcting the raw data.

The component method was used to project the national population which takes account of population dynamics - fertility, mortality and migration assumptions. Series of data on fertility and mortality collected in censuses and surveys for the past five decades (1974-2022) were put together as input data in the development of the population projection assumptions. Also, key policy orientation in the national development agenda such as the Agenda for Transformation (AfT) of Liberia were considered. AfT become the roadmap to take Liberia from recovery toward middle-income country status by 2030.

The main data used are the 2022 LPHC data for the population projections at national, urban-rural and county levels. Population projections provide disaggregated indicators of possible population size, age and sex structure of future population of the counties. The population projection covers all the 15 counties in Liberia will provide to policy implementers for resource allocation, healthcare and education allocation, service provision, local authorities, etc. The following are the key results from the population projection:

The population of Liberia, is projected to grow from 5,250,187 in 2022 to 6,618,852 in 2032, which shows an increase of 26.6 per cent in 10 years. It also projected that that by 2065, the population of

Liberia will increase to 12,051,182 in 2065, more than two times in 43 years. It is projected that Liberia's population will increase but at a decreasing rate. The current growth rate of 3.0 per cent is expected to decline to 2.3 per cent in 2032 and further decline to 1.9 per cent by 2065.

The urban population share in Liberia is expected to increase from 2,862,154 in 2022 to 5,106,454 in 2045, thus, an increase of 2,244,300 persons. On the other hand, the share of the population in rural areas will decrease from 45.5 per cent to about 40 per cent in 2045.

More than a third of the population (1,920,965) of Liberia live in the Montserrado County which has the national capital, Monrovia and the counties with the second and third largest population sizes are Nimba (621,841) and Bong (467,561), respectively. More than half of the total population of Liberia continue to live in Montserrado (3,387,634), Nimba (913,841) and Bong (712,541,384) through to 2065.

The proportion of the population 65 years and older (elderly), which is a common measure of ageing is projected grow from 2.8 per cent in 2022 to 7.6 per cent in 2065 and due to increase in expectation of life. Within a period of 43 years (2022-2065), the size of the elderly population will increase by 2.4 times.

The population of those under 18 years old is projected to rise from 2,181,108 in 2022 to 3,470,788 in 2042, then to a peak of 4,569,159 in 2065. Between 2022 and 2065, the population of less than 18 in Liberia is expected to grow by more than two (2.4) times. The adolescent population (10-19 years) is projected as 2,270,670 persons in 2065, which is about two times higher than that of 2022 (1,271,083).

The population of the youth (15-24 years) in 2022 is about 1.2 million and it is projected to reach 1.3 million in the next 20 years (2042), before getting to a peak of 2.0 million in 2065. Between the period of 2022 and 2065, an additional 1 million youth will be added the youth population.

The proportion of the elderly will grow from 2.8 per cent in 2022 to 7.6 per cent in 2065 and during the period, the size of the elderly population will increase by 2.4 times and this fast expansion of the elderly population in Liberia many be due to mortality decline in the populations.

## **Chapter 1: Background**

#### 1.1 Introduction

The future trends in the size and composition of the population of any country is key in the planning of developmental policies. Again, the understanding of the growth, trends and demographic changes of a country are very crucial for national development. Thus, population projections are key features of many planning policy studies (Wilson and Rees, 2005). The population size, distribution and structure of any population, in terms of age, sex, urban-rural and county has implications of resources which are essential to development policy implementers. For example, the number of school-going children and accessing healthcare facilities are affected by how population growth. Obtaining the future population of a country done by projecting the population, which is a scientific attempt to peep into the future population scenario, based on certain assumptions using observed past trends of components of growth and policy orientations.

Understanding population patterns, and trends and anticipating changes in population dynamics are key for national development planning and for implementing the 2030 Agenda for Sustainable Development (SDGs). Above all, these are key for the follow-up for the specific national planning and development agenda which must certainly be aligned with the SDGs. The 2030 Agenda highlights that people are at the centre of sustainable development, which echoes the ideals set forth in the Programme of Action of the International Conference on Population and Development adopted in Cairo in 1994 (UN DESA, 2022). The main reason for projecting the population to 2065 is to provide data for implementation of national policies such as the ARREST Agenda, the Agenda 2063 and the Global goal of the Sustainable Development Goals (SDGs).

This report which is the estimations of the future population of Liberia is therefore intended to unearth the demographic realities. They provide a tool for analysing the components of growth of the country to understanding of the determinants of population change and serve as a rational basis for decision-making. The report is also to alert policymakers and implementers to major trends that may affect social and economic development to craft appropriate policies and programmes.

The population of Liberia which was just around one million in 1962, increased to 1.5 million in 1974, accounting for an increase of 47.9 per cent. By 1984, the population had grown to 2.1 million, reflecting an intercensal percentage increase of 39.8 per cent. The population continued to grow and by 2008, it had increased to 3.5 million (LISGIS, 2011). Thus, the population has increased more than three times within a period of less than half a century (1962 to 2008). The growth of population size was fuelled by a high intercensal growth rate of 3.3 per cent observed from 1962 to 1974 which continued at a higher rate 3.4 per cent between 1974 and 1984. However, by 2008, the population growth rate had fallen to 2.1 per cent. This may be attributed to the fact that the mass exodus and loss of lives during the Liberian civil war affected the growth of the population negatively.

Liberia is ranked 120th at the global level and thirty-eighth in Africa in terms of population size. The population density of the country has also been increasing over the years from 27 persons per square mile in1962, 39 persons per square miles in 1974, 54.9 persons in 1984, 90.3 in 2008 and 136.4 in 2022 (LISGIS, 2011). The growing population densities over the years are indications of increases in the population over the period.

Liberia had annual population growth rate of 3.3 per cent between 1962 and 1974, and this increased slightly to 3.4 per cent between 1974 and 1984 but fell to 2.1 in 2008. The decline in the population growth rate could be attributed to the civil conflict in the 1990s. However, between 2008 and 2022 the annual growth rate increased to 3.0 per cent which could be attributed to the returned of persons after the civil conflict. The Revised National Population Policy of 2005 which set a population growth rate target of 2.5 per cent in 2020 had been missed. The high population growth rate is an illustration that the population of Liberia will continue to grow at a very fast rate. Liberia also has high total fertility rate (TFR) of 3.9 thereby making TFR a major contributing factor to population growth. The TFR target of 3.0 by 2020 set in the Revised National Population Policy of 2005 had also been missed.

The 2022 PHC shows that Liberia is urbanizing with more than half of the population living in urban areas. The proportion of the urban population increased by

15.7 percentage points between 1984 (38.8 per cent) and 2022 (54.5 per cent). At the county level, urban population was seen largely in Montserrado (91.7 per cent), Maryland (61.5 per cent) and Margibi (55.9 per cent) an indication of these counties gaining population through migration. Grand Kru County is mostly rural (93.4). The spatial spread disparities of the population have led to some counties which are densely populated and while others are virtually uninhabited.

There are 15 administrative counties and the 2022 PHC shows that Montserrado has a share of more than a third (36.6 per cent) of the population, the highest, with Nimba county (11.8 per cent) as the second highest and the county with the least population is River Cess (1.9 per cent). The capital city of Liberia is located in the Montserrado County and gained population through migration for the purpose of employment, access to education, and other social amenities and economic opportunities. All the remaining 13 Counties have a population share of less than 10 per cent. Similarly, Montserrado had the highest share of the population in 1984 (23.4 per cent) and 2008 (32.2 per cent).

The population is predominantly youthful though the proportion of children (0-14 years) fell from 43.1 per cent in 1984 to 33.8 per cent in 2022 which could be as a result of underreporting of the population 0-9 years. The high proportion of youth is an indication of a higher dependency. The census results also show that persons aged 65 years and older is 3.1 per cent. The dependency ratio increased from 81 in 1974, 89.7 in 1984 to 83.0 in 2008 (LISGIS, 2011) before declining to 59 in 2022. The current dependency ratio means that every 100 persons of the working age population would be supporting 59 people of the non-working age population. The dependency ratio is higher in the rural areas where every 100 persons of the working population would be supporting 63 persons of the non-working age population compared to the 56 in the urban areas.

As indicated in the Liberia National Youth Policy and Action Plan for 2019 to 2023 document, the youth constitute a significant segment of the population and have the potential to be the most powerful agents of change. The Government of Liberia has plan on the needs to draw on the strengths and assets of the vast population of the young people in the country. In the youth policy document, harnessing the energy and creativity of this large youth population and ensuring that they are directed towards reconciliation, sustained peace and national development will determine Liberia's future will by key. It is also

envisaged that such plans in developing the youth will require concentrated and holistic attention and investment.

Huge progress has been made in reducing underfive mortality in recent years, yet gaps remain. Globally, the under-five mortality rate fell from 92.8 deaths per 1,000 live births in 1990 to 37.1 in 2021 (UN DESA, 2022). Under-five mortality has decreased consistently from 112 deaths per 1,000 live births to 92.6 in 2022. However, infant mortality rose marginally from 63.0 to 67.7 deaths per 1,000 live births between 2019/2020 to 2022.

#### 1.2 Objectives

The findings of the report will help policymakers to assess the growth and dimensions of the population of Liberia for policy implementers to make decisions into the future. The specific objectives of this report are:

- Examine the status of the population by geographical locations.
- Develop population projection methods and assumptions.
- 3. Project the population of Liberia from 2022 to 2065 by age and sex at national, urban-rural and county levels and examine trends.
- Project the demand needs for social services, particularly in terms of education, health, employment and sanitation; and
- **5.** Prepare policy recommendations on population projections.

#### 1.3 Definition of concepts

**Population projections**: It is the calculation of future population and serve as conditional statements about the future. It is also referred as the numerical outcome of a particular set of assumptions regarding future population trends (Smith, et al, 2005).

**Population size**: It refers to the number of persons residing in a specific area at a specific time.

**Population composition**: It refers to the characteristics of the population, and the most used population characteristics are age, sex, etc.

**Total fertility rate (TFR)**: It is the average number of live births among 1,000 women exposed throughout their childbearing years (15-49 years) to the schedule of a given set of age-specific fertility rates, assuming no women died during the childbearing years.

**Age-specific fertility rate (ASFR)**: It is the number of births to women of a given age group per 1,000 women in that age group.

**Sex ratio at birth (SRB)**: It is defined as the ratio of male to female live births.

**Life expectancy at birth (e°o)**: The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and agespecific death rates prevailing at the time of his or her birth, for a specific year, in a given geographic area.

## 1.4 Justifications in preparing population projection report

Socio-demographic data play a key role in the policy decision-making of countries hence the need to always make these data available and accessible to all users. In countries where administrative data are not effectively enhanced, the only reliable data sources that drive policy decisions are censuses and surveys which are conducted over specific time intervals. Population projection report is therefore needed to provide data that will be used to assess the size and age-sex composition (status) of the population at all levels between the 2022 census and the next census and for planning towards longer-term targets.

#### 1.4.1 Population size

The primary interest in the use of population projections is in the total size of the population. Population size data serves to determine the density in terms of occupation of expected pressure on the available surface area. The total population size can be seen as a basic approximation of the scale of the population-related issues for the purpose of making comparisons. Secondly, total population size serves as an important denominator of many frequently used indicators such as gross domestic product (GDP), GDP per capita (per capita income) educational enrolment, health coverage, civil registration and vital statistics, doctor population ratio. In summary, the denominator is the population size used to compute socio-economic indicators to measure a country's level of development at any given time.

These indicators are also used to track and evaluate the success of developmental and policy intervention programmes over a period.

#### 1.4.2 The urban-rural dimensions

Projecting the population beyond the census year also provide information on the spatial distribution of the population upon which the density could be obtained to inform future settlement patterns in the country. The place of residence (urban or rural) has always been an important dimension of a population as more countries have become urbanized in recent times. Projecting the population by place of residence will guide policymakers and city authorities to put in the needed measures to mitigate the negative effects associated with urbanization. The projection will also help in the efficient, effective and equitable distribution of national resources in the country.

### 1.4.3 Age and sex composition and structure of the population

In recent times, there has been keen interest the population's age structure and composition. Have Policymakers and implementers have interest in the likely future number of school-age children, the proportion of boys and girls in school, the number of young adults trying to join the labour market and the increasing number of the elderly are some of the dominating issues. It also enables the appraisal of the age dependency. These issues are essentially handled by projecting the population by age. The differences between men and women are also a key dimension of population dynamics in addition to the age-specific proportions of men and women in the population.

Projecting the population will lead to direct analysis of the components of population change (fertility, mortality and migration) and subsequently determine the contribution of each component to the changes in the population to guide policy direction. Its results are based on the assumed patterns of change in the evolution of the population components over time depending on the envisaged scenarios.

#### 1.4.4 Derived population

Generating information on derived population will essentially enable appraisal of specific needs for future planning at sectoral level in terms of needs for school, health, housing and other infrastructure and related human resources and funding. It will also

provide the base data upon which to build projections in other sectors of the economy. For instance, the number of children within the school-going age for all the counties in the subsequent years will be readily available in the report to guide the Education Ministry on the number of classrooms and teachers that that will be needed in a particular year. Population projections also provide the basis for projecting doctor or nurse population ratio to inform decisionmaking in the healthcare delivery system. Information on the number of women within the reproductive ages and number of children that are expected to be born between the census year and the next census help to make informed policy decision on population growth. Population projection helps to provide data on the working age population (15-64) and the dependency population, which gives indication of the economic burden of the working population.

#### 1.5 Sources of data

The main source of baseline data is the 2022 Population and Housing Census data. Data on the population size and age distributions are the major source of data used to project the population. Also, data on the levels and trends of fertility and mortality were used to develop assumptions in the computation of the future population. The fertility and mortality trends constitute maps of demographic history and a source of appraisal of the past. The comparison of the historical fertility and mortality rates assists in the analysis of data consistency as well as derivation of plausible population estimates for further research and policy analysis. Again, the possible future trends are largely determined by available policy orientations based on national policies, programmes and targets. Furthermore, the Liberia Population Policy, ARREST Agenda, global goals and regional targets such as the ECOWAS, AU AGENDA 2063, SDGs, etc) are key in examining population estimates.

The different series of fertility and mortality indicators were compiled inform previous censuses and surveys from 1996 to 2022 for analysis. The estimated trends were then used in determining the growth of the population of Liberia. Also, the 2022 PHC data on fertility and mortality were also used in the computation of fertility rates and life expectancy at birth, respectively.

#### 1.6 Data limitations

The 2021 Liberia PHC data did not cover emigrants to facilitate in the development assumption on international net migration. In view of that it was assumed that international net migration was zero, thus, number of immigrants are the same as emigrants. The age-sex structure of the baseline population with a rather low population counts at the young ages (0-9) which may have been an undercount. There was no other plausible information available to explain such a sudden drop in the number and proportion of this subpopulation since the 2008 census. There was no question on data of birth to serve as a validation mechanism to ages given by the respondents. In the absence of any Post Enumeration Survey and other means of verification, it was not possible to modify this structure. This will have obvious consequences in the structure of the projected populations.

The paucity of disaggregated data on labour force participation, health workers (medical doctors, nurses, hospitals, clinics), teachers, education facilities, classified by urban and rural made the derived projections very difficult in analysing.

#### 1.7 Organization of the report

This thematic report on population projections has six chapters which provides detailed information on the future population of Liberia. The Chapter 1 covers a brief background to the chapters, the context of the report and justification to have a thematic report on population projections. Chapter 2 examines the methods used in the projections and the assumptions used in the computation of the population projections at the national level. The Chapter 3 covers urban and rural population projections, including building of assumptions. Chapter 4 is on population projections at the county level. Chapter 5 is devoted to the analysis of derived population based on education, health, labour force, etc. The last chapter is on conclusion, population projections policy implications and recommendations.

# Chapter 2: National-level population projection

#### 2.1 Introduction

Accurate and reliable information about a country's population is important to determine its size, age, sex, composition, residence, education, economic activity status and other attributes (Spoorenberg, 2020). It is also very useful for policy formulation and evidence-based decision-making and to monitor progress made in national and international goals. Evaluation of data in any demographic analysis such as population projections is very crucial. Errors in the age-sex distribution have effects on both developing population assumptions and the results of population projections. In view of this, assessing the quality of the input data by subjecting to rigorous evaluation to determine the extent of error in reporting and such exercise will serve as a way of establishing the reliability and validity (GSS, 2012) of the data being used to compute population projections. Again, evaluating the 2022 Liberia PHC provides basic information for dealing with some errors and the basis for adjusting or correcting the raw data. It will also provide guidelines for data users as well as offering data producing agencies basic information for dealing with some of the deficiencies in the data collection methodology in future operations.

Many governments prepare population projections periodically for the purpose of future planning and making evidence-based decisions. To develop these projections, assumptions about the future trends relating to fertility, mortality and migration are made. Population projections represent the future size of the population based on assumptions (Kaneda and Bremner, 2014) and important users to have a basic understanding of how these assumptions are developed. This report is based on developing multiple population projections of high, medium and low variants to reflect several possible scenarios of future levels of fertility, mortality and migration. The building of different scenarios is for the purpose of presenting better illustration of the range of possible developments or realistic scenarios (Vanella, et al, 2020, 2020)

#### 2.2 Evaluation of base data

#### 2.2.1 Measurement of accuracy indices

Age ratios and sex ratios were be combined to evaluate the accuracy of sex and age reporting in a census. The age ratio score is defined as the mean deviations of the age ratios from 100 per cent, irrespective of sign. The age ratio score for males in 2022 (17.6) was higher compared to 2008 (4.1). Similarly, the age ratio score for females is higher in 2022 (15.1) than 2008 (8.8) Another measure of data evaluation is the sex ratio score, defined as the mean difference between sex ratios for successive age groups and averaged irrespective of sign. Table 2.1 that sex ratio has reduced from 6.3 in 2008 to 4.6 in 2022.

The United Nations (1952) suggests a joint accuracy index based on the empirical relationships between the sex ratio scores and the age ratio scores. The joint score or age accuracy index is defined as the sum of the male and female age ratio scores plus three times the sex ratio scores calculated using data for ages 0-14 through 65-69. The United Nations (1952) suggests that the age and sex structure of a population will be:

Accurate if the joint score index is under 20,

Inaccurate if the index is between 20 and 40; and

Highly inaccurate if the index is over 40

Table 2.1 provides summary measures of the accuracy of age and sex reporting in the 2008 and 2022 censuses computed from the reported age and sex distribution and different demographic measures applied to the reported ages. The age-sex accuracy index of 31.8 in 2008 is better data accuracy than in 2022 (46.6). The accuracy index in 2022 shows that the data is highly inaccurate because it is above the recommended thresholds of 40, but no adjustments have been made to the baseline data. Overall, data accuracy in 2008 is better than that of 2022 which may be due to the sudden change in population structure between 2008 and 2022 with a drop in the proportion of the population 0-9 years.

Table 2.1: Summar	y of indices measuring	the accuracy of data
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Index	2022	2008
Age ratio score for males	17.6	4.1
Age ratio score for females	15.1	8.8
Sex ratio score	4.6	6.3
Age-sex accuracy index	46.6	31.8

Source: Compiled from 2008 and 2022 censuses

#### 2.3 Population projection tools

The cohort-component approach, which includes assumptions on the future evolution of fertility, mortality and migration components of population dynamics, was used for the projection of the population of Liberia. Each demographic subgroup in a cohort-component model is projected separately and these projections are summed up to generate projections of other population groups (Smith et al., 2005). For example, projections of males and females are summed to provide projections of the total population. The cohort-component technique accounts for the individual components of growth and for the impact of changes in demographic composition over time. This method is superior to other methods of projecting the population because it comprises a separate analysis of the changes which affect each component of the population and thereby reduces the risk of errors in the population projections.

The Demography (DemProj) module of the SPECTRUM application was used in projecting the national and rural-urban population. The projections period for both the national and urban-rural was 2022 to 2065 with the reason of provide data to cover national priorities, African Union Agenda 2063 and the SDGs. It is a programme to compute population projections at base population, fertility, mortality and migration rates for a country or region. The DemProj programme requires information on the number of

people by age and sex in the base year, as well as base year data and future assumptions about the TFR, the age distribution of fertility, life expectancy at birth by sex, the most appropriate model life table, and the magnitude and pattern of international migration. The projection period was 2022 to 2065 with the idea of providing data to be able to report on the national programmes, SDGs, Agenda 2063. The cohort-component approach, which includes assumptions on the future evolution of the fertility, mortality and migration components of population dynamics, was used for the projection of the population of Liberia.

#### 2.4 Base population

The population of the country shows a youthful nature as the bulk of the base population are children (0-14 years) and youth (15-24 years), constituting 34.2 per cent and 23.6 per cent, respectively. This may be due to the high TFR of 3.9 among women in the reproductive age group (15-49 years). Generally, there are more males than females, the general sex ratio is 101.5, an indication that there more males than females. There are variations across the age groups with more males among the age groups 10-14 years and 30-74 years. This may be attributed to misreporting of sex or a higher number of males than females returning to Liberia than females after the civil war.

Table 2.2: Population distribution by age and sex and sex ratio, 2022

		Population distribution					
Age		Number			Percent		Sex ratio
	Male	Female	Total	Male	Female	Total	
0-4	271,732	278,220	549,952	10.3	10.7	10.5	97.7
5-9	305,694	308,910	614,604	11.6	11.9	11.7	99.0
10-14	316,719	315,903	632,622	12.0	12.1	12.0	100.3
15 - 19	315,619	322,844	638,463	11.9	12.4	12.2	97.8
20 - 24	293,896	305,640	599,536	11.1	11.7	11.4	96.2
25 - 29	213,502	227,432	440,934	8.1	8.7	8.4	93.9
30 - 34	219,223	218,837	438,060	8.3	8.4	8.3	100.2
35 - 39	170,298	167,434	337,732	6.4	6.4	6.4	101.7
40 - 44	170,868	140,960	311,828	6.5	5.4	5.9	121.2
45 - 49	100,206	85,783	185,989	3.8	3.3	3.5	116.8
50 - 54	95,866	78,708	174,574	3.6	3.0	3.3	121.8
55 - 59	48,307	40,942	89,249	1.8	1.6	1.7	118.0
60 - 64	47,888	41,159	89,047	1.8	1.6	1.7	116.3
65 - 69	26,288	22,497	48,785	1.0	0.9	0.9	116.9
70 - 74	21,094	20,341	41,435	0.8	0.8	0.8	103.7
75 - 79	9,611	9,888	19,499	0.4	0.4	0.4	97.2
80+	17,216	20,662	37,878	0.7	0.8	0.7	83.3
Total	2,644,027	2,606,160	5,250,187	100.0	100.0	100.0	101.5

#### 2.5 Development of assumptions

The component method was used to project the national population. It is a universally accepted method of making population projections by taking into consideration fertility, mortality and migration assumptions and it provides a flexible and efficient approach to population projection (Smith et al., 2005). The use of the cohort-component method is key in population projections as it breaks down by age and sex. The age-group-wise projections have clearly become the state-of-the-art because they allow differentiation between the behavioural components (fertility, mortality and migration) and embedded changes in age-structural effects.

Series of data on fertility and mortality collected in censuses (1974, 1984, 2008 and 2022), and

Demographic and Health Surveys (1986, 2007, 2013 and 2019/2020), Multiple Indicator Cluster Survey and mortality/health related surveys for the past five decades (1974-2022) were put together to serve as historical trends to guide the development of the projection assumptions. In projecting the population, different alternatives or scenarios to provide programme managers an idea of the likely variations in projected population in case of the fertility transition takes a different path. The assumptions developed for this report were based on analysis of time series data on fertility, mortality and migration.

In order to provide guidance about uncertainty, it is important to develop variant projections based on different or alternative scenarios about the future population projection 'drivers' (Wilson and Rees, 2005). The use of alternate scenarios – low,

medium and high variants or developing different assumption would be appropriate to formulate more than one alternative set of projections to give policy implementers and managers ideas on likely variation in projected population. The general norm is for the low variant to be most pessimistic and thus result in minimal changes in the observed levels of the phenomenon. On the other hand, the high variant is usually the most optimistic while the medium variant is considered most realistic.

#### Table 2.3: Fertility levels and trends, 1984–2022

#### 2.5.1 Fertility assumptions

The TFR for Liberia between the period of 1984 and 2022 from the various PHCs, LDHS, MIS indicate gradual downward trend. Data sets spanning a period of 38 years (1984-2022) show that the level of fertility was high during the 1980s through to early 2000s. Data from censuses shows that TFR dropped from 6.9 in 1984 to 5.8 in 2008 and it further fell to a low of 3.9 in 2022.

Period	TFR
1984 PHC	6.9
1986 DHS	6.7
2007 DHS	5.2
2008 PHC	5.8
2009 MIS	5.9
2011 MIS	4.9
2013 DHS	4.7
2016 MIS	4.2
2019-20 DHS	4.2
2022 PHC	3.9

With a low variant fertility assumption, it is projected that TFR will decline from 3.9 children per woman in 2022 to 2.1 children per woman in 2065. This low variant assumes that the TFR target of 2.5 by 2020 set in the Revised Liberia Population Policy of 2005 had been achieved. On the other hand, using the medium variant, it is estimated that based on the pragmatic intervention programme management adopted by the Government of Liberia, TFR will drop

from 3.9 children per woman in 2022 to 3.12 children per woman in 2065. This means that the target set for TFR may not be achieved because decline in fertility is slow. In the last scenario, it is assumed that TFR will remain high at a constant rate of 3.9 children per woman throughout the period of 2022 and 2065 and for that situation, fertility will not change through to the end of projection year of 2065.

Table 2.4: Total fertility rates assumptions for projections, 2022–2065

Year	Low Variant	Medium Variant	High Variant
2022	3.90	3.90	3.90
2025	3.78	3.85	3.90
2030	3.58	3.75	3.90
2035	3.37	3.66	3.90

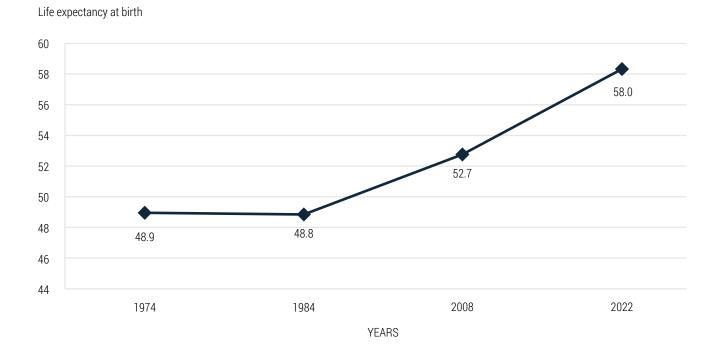
Year	Low Variant	Medium Variant	High Variant
2040	3.17	3.57	3.90
2045	2.97	3.48	3.90
2050	2.77	3.39	3.90
2055	2.56	3.30	3.90
2060	2.36	3.21	3.90
2065	2.16	3.12	3.90

#### 2.5.2 Mortality assumptions

In the preparation of population projections using the component method, the level of mortality is expressed in terms of the female and male expectation of life at birth (e0). The initial life expectancy at birth is based on the 2022 Liberia PHC Thematic Report on Mortality. Historical data shows

that apart from life expectancy at birth almost stalling between 1974 (48.9 years) and 1984 (48.8 years, it has increased to 52.7 years in 2008, then to a peak of 58.0 years 2022. The life expectancy target of 65 years by 2020, which was set in the 2005 Revised Edition of the National Population Policy document had been missed.

Figure 2.1: Trends and levels of life expectancy at birth, 1984–2022



The mortality assumption developed for this report is based on projecting the likely levels of expectation of life at birth (e00), adopting the MorModel working tools developed by the United Nations. The model uses a standard pattern of improvement depending on whether the expectation is likely to improve slowly,

moderately and fast based on historical patterns of life expectancy at birth. There have been substantial increases in life expectancies at birth and being driven by improved living conditions and public health advances. For instance, live expectancy at birth in Liberia has increased from 48.9 years in 1974 to

58.0 in 2022, which has an impact on the size and composition of the population (Smith, et al, 2005). The life expectancy at birth for males (55.6 years) and females (61.2 years) captured in the 2022 PHC Mortality Report were used as the input data. The 2005 Revised Edition of National Population Policy

document had targeted to increase life expectancy at birth from 48 years in 2000 to 65 years by 2020. Furthermore, the population policy had also targeted to reduce child mortality rate from a level of 194 deaths per 1,000 live births to 50/1000 in 2020.

Table 2.5: Mortality assumptions (life expectancy at birth) for projections, 2022-2065

		ariant Medium V		Variant	High \	High Variant	
Year	Male	Female	Male	Female	Male	Female	
2022	55.6	61.2	55.6	61.2	55.6	61.2	
2025	55.9	61.5	56.2	61.9	56.5	62.1	
2030	56.3	61.9	57.2	63.0	57.9	63.5	
2035	56.8	62.4	58.2	64.1	59.3	64.9	
2040	57.3	62.8	59.2	65.2	60.8	66.3	
2045	57.7	63.3	60.2	66.3	62.2	67.7	
2050	58.2	63.7	61.2	67.4	63.6	69.1	
2055	58.7	64.2	62.2	68.5	65.0	70.6	
2060	59.1	64.6	63.2	69.6	66.5	72.0	
2065	59.6	65.1	64.2	70.7	67.9	73.4	

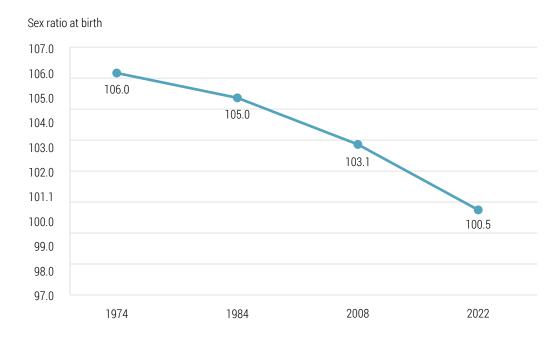
#### 2.5.3 Migration assumptions

Migration forms one of the three components of population dynamics and the growth of population. The DemProj aspect of the SPECTRUM programme required the formulation of net international migration assumption. The 2022 LPHC, asked questions on the immigrant population but conspicuously, there were no questions on emigration for the measurement of net migration, which is usually required. While the 2022 LPHC can estimate the volume of immigrants, it fails to estimate that of emigrants. In the absence of data on emigrants' international migration, the assumption was set at zero.

#### 2.5.4 Sex ratio at birth

One of the assumptions required for population projection using the component method is the sex ratio. The SRB in Liberia was 106.0 in 1974, 105.0 in 1984, 103.1 in 2008 and 100.5 in 2022. The 2022 low SRB compared with previous years may be due to undercounting. The conventional sex ratio of 103 was used for the projection period.

Figure 2.2: SRB



#### 2.6 Population size

This section provides information on actual and projected populations at the national level with different variants: low, medium and high over the period of 2022 to 2065 using different fertility and mortality schedules. The medium variant projections indicate that the country's population will increase by 1.4 million in the decade (2022-2032), by 2.8 million in 2042 and by 4.4 million in 2052. The projection of the population also shows that by 2065, it will increase to a size of about 12 million, thus, taking Liberia about 43 years to double its population. In using the low variant fertility and mortality assumptions to project the population, the population will increase from 5.3 million in 2022 to 6.5 million in 2032, then to 7.7 million in 2042. Furthermore, the population is expected to increase to 9.7 million by 2052 before getting to a peak of 9.9 million in 2065. In a situation where the high variant is used for the population on the assumption that fertility will continue to be high, coupled with high life expectancy at birth, the population will grow to 6.7 million and 8.3 million by 2032 and 2042, respectively. In 2052, it is expected that the population will grow to 10.4 million and with further growth to 14.1 million by 2065.

Table 2.6 also shows that with the medium variant scenario, about 136,867 persons will be added to the population of Liberia between 2022 and 2032

every year and a further 144,516 people during the period of 2032 and 2042; this number will increase to 155,741 between 2042 and 2052 before reaching a peak of 186,265 between 2052 and 2062. This high population growth may be due to the high TFR of 3.9 which is above the targeted rate of 3.0 by 2020. Again, the population structure of Liberia is considered as youth with a high momentum to grow even though there were seemingly undercount of the population 0-9 years. Furthermore, the effect of population momentum could be due to the large number of women entering and moving through their childbearing years as displayed. Using the medium variant, the population would double in 35 years (2057).

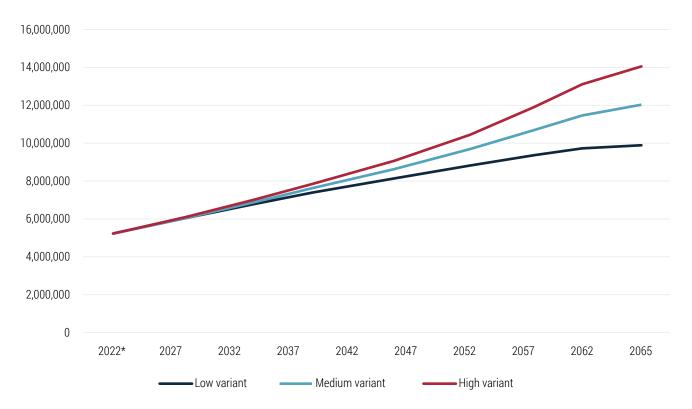
On the other hand, population projections based on the low variant will mean that it will take more than 45 years for the population to double. However, with the high variant where fertility and expectation of life at birth are very high, the population is expected to double in about 30 years; five years earlier than the medium variant and 15 years earlier than the low variant. The high population growth may have serious implications for future population growth and on economic development. Without substantial increase in economic growth and resources, it will be difficult to meet the demands on health, education, housing, etc.

Table 2.6: Projected population by sex and variants, 2022-2065

V		Low Variant			Medium Variant			High Variant		
Year	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females	
2022*	5,250,187	2,644,027	2,606,160	5,250,187	2,644,027	2,606,160	5,250,187	2,644,027	2,606,160	
2027	5,877,566	2,945,501	2,932,065	5,896,851	2,955,172	2,941,679	5,920,178	2,967,126	2,953,052	
2032	6,542,593	3,263,688	3,278,906	6,618,852	3,301,538	3,317,314	6,697,879	3,342,281	3,355,598	
2037	7,178,920	3,565,677	3,613,243	7,356,092	3,653,369	3,702,723	7,526,048	3,741,380	3,784,668	
2042	7,743,991	3,830,951	3,913,041	8,064,012	3,988,863	4,075,149	8,360,788	4,143,289	4,217,500	
2047	8,271,643	4,076,324	4,195,319	8,792,431	4,333,612	4,458,819	9,268,416	4,581,080	4,687,336	
2052	8,805,201	4,324,367	4,480,834	9,621,423	4,727,966	4,893,457	10,365,544	5,113,453	5,252,090	
2057	9,310,779	4,559,079	4,751,701	10,540,409	5,167,015	5,373,394	11,671,136	5,751,317	5,919,819	
2062	9,724,035	4,749,039	4,974,997	11,484,068	5,618,724	5,865,344	13,131,693	6,468,427	6,663,266	
2065	9,917,187	4,837,321	5,079,865	12,051,182	5,891,238	6,159,944	14,078,162	6,935,130	7,143,032	

Note: \* Means actual population

Figure 2.3: Projected population by variants, 2022-2065



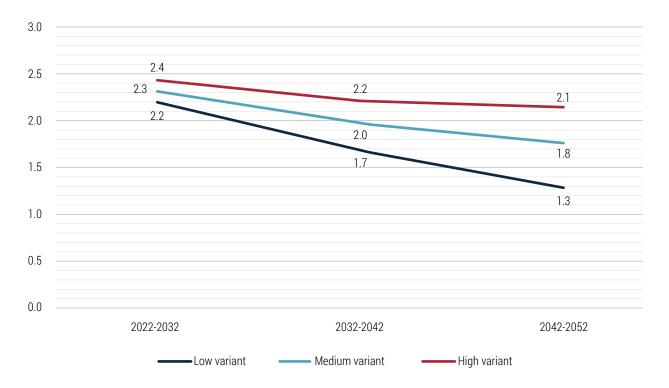
Note: \* means actual population

#### 2.7 Population growth rates

This section provides information on the growth rates of the population based on the different scenarios (low, low and high variants). The general picture of the population projection is that the population size of Liberia will increase but at decreasing rates. Between 2022 and 2032, the low variant yielded a growth rate of 2.2 per cent, while the medium variant is 2.3 per cent and 2.4 per cent for the high variant. It is also projected that between 2032 and 2042,

the growth of the population will be 1.7 per cent, 2.0 per cent and 2.2 per cent for the low, medium and high variants, respectively. The population projections also shows that growth rates will decrease for the period of 2042-2052 for the low variant (1.3 per cent), medium variant (1.8 per cent) and high variant (2.1 per cent). The disparities in the growth rates for the variants could be attributed to the differences in fertility and mortality scenarios which affect the population momentum differently.

Figure 2.4: Projected population growth rates by variant, 2022–2052



Neighbouring countries most often share similar demographic indicators such fertility, mortality, growth rates, etc. However, the 2022 LPHC data shows that the country has very high annual population growth rate of 3.0 per cent compared to her immediate neighbours' projected growth rates based on data from the 2022 United Nations Population Prospects – Cote D'Ivoire (2.5 per cent),

Guinea (2.3 per cent), Sierra Leone (2.1 per cent) and Ghana (1.9 per cent). In the same situation, the growth of Liberia is higher the average annual growth for sub-Saharan Africa. The high growth rates Liberia compared with the neighbouring countries could be the situation of migrants return to Liberia after the civil war.

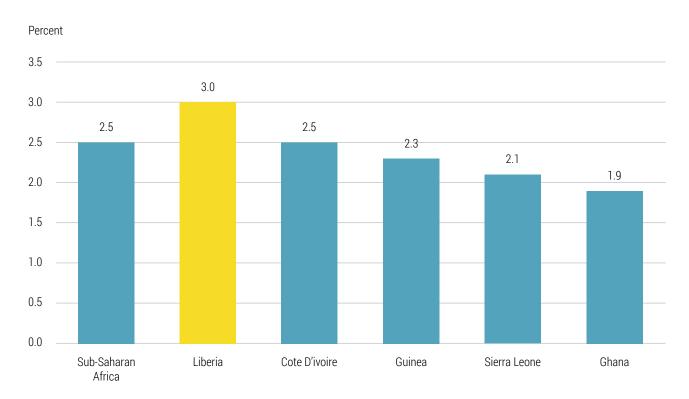


Figure 2.5: Comparison of Liberia's annual growth rates with its neighbours

#### 2.8 Age-sex distribution

The growth of the country's youth population (adolescents and young adults) reflects the underlying high annual growth rate of 3.0 per cent. The rapid growth of the adolescent and youth population has increased the pressure to expand education and health services and employment opportunities. Policymakers must bear in mind that

the period of rapid expansion of the adolescent population will be long. For instance, the medium projections indicate that the number of young people (15-24 years) will grow much more rapidly, rising from 1,237,999 in 2022 to 1,213,322 in 2032 and 1,993,571 in 2020. The decline in the 2032 population of the youth is due to the underrepresentation observed in 5-9 years population observed in 2022.

Table 2.7: Projected population by age and sex distribution for 2022, 2032 and 2065 - medium variant

Vaar	2022			2032			2065			
Year	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
0-4	549,952	271,732	278,220	935,449	468,885	466,564	1,386,427	695,761	690,666	
5-9	614,604	305,694	308,910	810,534	404,113	406,421	1,317,029	657,560	659,469	
10-14	632,622	316,719	315,903	522,706	256,418	266,289	1,212,077	603,960	608,116	
15-19	638,463	315,619	322,844	598,782	296,727	302,055	1,058,593	526,362	532,232	
20-24	599,536	293,896	305,640	614,540	306,039	308,501	934,978	463,096	471,883	
25-29	440,934	213,502	227,432	615,562	301,908	313,654	906,682	447,031	459,651	

v		2022			2032		2065			
Year	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
30-34	438,060	219,223	218,837	575,004	279,528	295,476	881,857	432,997	448,860	
35-39	337,732	170,298	167,434	421,045	202,266	218,779	807,300	394,759	412,541	
40-44	311,828	170,868	140,960	415,242	206,153	209,090	616,923	299,085	317,838	
45-49	185,989	100,206	85,783	316,712	158,161	158,551	486,433	233,110	253,323	
50-54	174,574	95,866	78,708	287,288	155,492	131,796	527,005	254,015	272,990	
55-59	89,249	48,307	40,942	166,643	88,413	78,230	514,395	245,667	268,728	
60-64	89,047	47,888	41,159	149,900	80,610	69,290	481,304	224,248	257,056	
65-69	48,785	26,288	22,497	71,664	37,595	34,068	368,587	167,282	201,305	
70-74	41,435	21,094	20,341	62,923	32,588	30,335	250,453	111,872	138,581	
75-79	19,499	9,611	9,888	28,206	14,475	13,731	178,046	79,322	98,724	
80+	37,878	17,216	20,662	26,643	12,160	14,483	123,090	55,110	67,981	
Total	5,250,187	2,644,027	2,606,160	6,618,843	3,301,531	3,317,313	12,051,182	5,891,237	6,159,945	

#### 2.9 Sex ratio

Biologically, it is expected to have more males than females at birth. Throughout life, it is also expected that at every age mortality rate for females would be lower than that of males. In this situation, the expectation is that sex ratio(s) for any population should decline from one age group to the other with advancing age. The 2022 PHC data indicates that the pattern of steady and gradual decline in the sex ratios is not observed throughout the age groups which

suggests age misreporting, under enumeration or out migration of males in these age groups. The 2032 projected age ratios show gradual decline from age groups 0-4 to 35-39 but from ages 40-44, sex ratio was high and did not follow the normal expectation of gradual decline. This could be the results of age irregularities observed in the 2022 census data. However, in observing the sex ratio for 2065, the pattern that population should decline from one age group to the other with advancing ages is noticed in Table 2.7.

**Table 2.8: Sex ratios by age, 2022 and 2032** 

Age	2022	2032	2065
0-4	97.7	100.5	100.7
5-9	99.0	99.4	99.7
10-14	100.3	96.3	99.3
15-19	97.8	98.2	98.9
20-24	96.2	99.2	98.1
25-29	93.9	96.3	97.3
30-34	100.2	94.6	96.5
35-39	101.7	92.5	95.7

Age	2022	2032	2065
40-44	121.2	98.6	94.1
45-49	116.8	99.8	92.0
50-54	121.8	118.0	93.0
55-59	118.0	113.0	91.4
60-64	116.3	116.3	87.2
65-69	116.9	110.4	83.1
70-74	103.7	107.4	80.7
75-79	97.2	105.4	80.3
80+	83.3	84.0	81.1

#### 2.10 Age structure

The population of Liberia has a youthful structure but did not show the typical broad base structure as seen in many developing countries. The population aged 0-4 and 5-9 were less the age groups 10-14 and 15-19. The ripple-effect from the obvious undercount at the 0-9 age groups as compared to the momentum resulting from the "bulge" observed among the young adult generations in 2022 can be observed in the rather irregular structures of the projected population pyramids of 2032, 2062 and 2065. Compared to

the 2008 age structure where the population 0-4 and 5-9 years showed large population sizes which depicted a broad-based population, in contrast, the observation for the 2022 age structure for the same age groups is different as there was a shrank. This phenomenon may be due to underreporting or age shifting of the population 0-9 years as observed in the rather irregular structures of the projected population pyramids of 2032, 2062 and 2065. However, from age groups 10-14 and 15-19 looks broad and later age groups fell in population sizes to represent a conical top of a smaller number of elderly populations.

Figure 2.6: Population pyramid, 2008

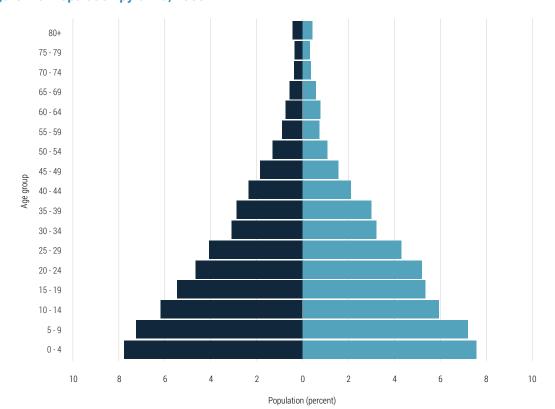


Figure 2.7: Population pyramid, 2022

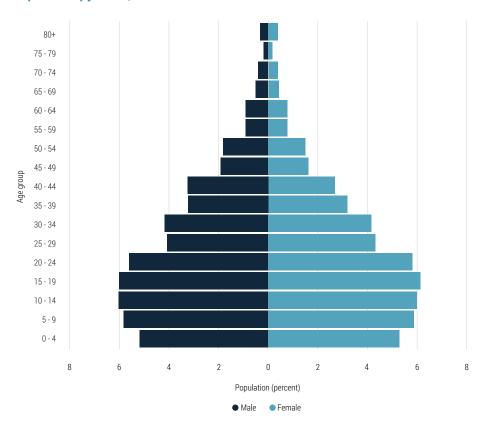


Figure 2.8: Population pyramid, 2032

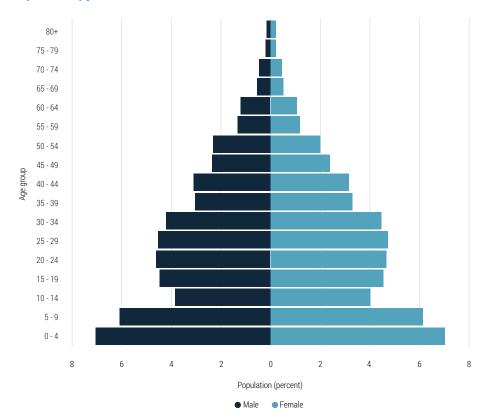


Figure 2.9: Population pyramid, 2062

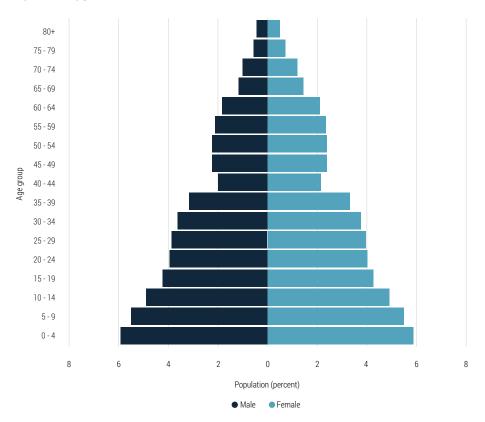
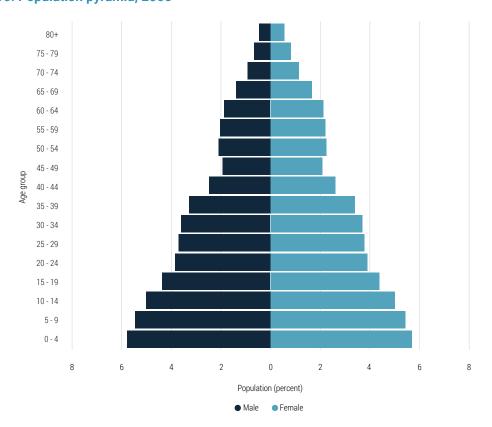


Figure 2.10: Population pyramid, 2065



#### 2.11 Broad age group and dependency ratio

The 2008 Population and Housing Census showed a relatively young age structure, accounting for about 42 per cent of the population (LISGIS, 2011) who are less than 15 years. However, the same population group constitutes about a third (34.2 per cent) of the population in 2022. Table 2.8 also shows that the population aged 0-14 will increase to 36.4 per cent by 2037, then starts declining gradually from 34.8 per cent in 2042 to 32.5 per cent in 2065.

The working age group population (15-64 years) has increased by eight percentage points, compared with 2008 (55.0 per cent) and 2022 (63.0 per cent). The percentage increase of this age group could be attributed to the decrease in the share population 0-9 years over the same period. The increase in size of the population 15-64 years will mean a decline in dependency ratio. In this situation, if job avenues are created it will increase the labour force and which will translate to a decline in economic dependency. Table 2.8 shows that the proportion of the population 15-64 year will increase in 2027 (63.6 per cent) but decline in 2032 (62.9 per cent) until it rises again in 2052 (60.9 per cent) before declining to 59.5 per cent in 2065.

The population of 65 years and older is about three per cent in 2022 but projected to 4.0 in the next two decades (2042). The share of the population 65 years and older will continue to rise to a peak of 7.6 per cent in 2065. The relationship between the populations 0-14 years and 65 years and older and the population 15-64 years constitute age dependency, which is measured per 100 population. The age dependency ratios will decline from 58.8 per cent in 2022 to 57.3 in 2027 but starts to increase in 2032 (59.1) and 2037 (66.6). However, it is projected that age-dependency ratio will decline again from 2042 (63.5) to 2052 (61.2) before rising again between 2057 (64.2), and 2065 (67.0). The low age-dependency ratio in 2022 may be due to the under reporting of the population of 0-4 years and 5-9 years in 2022 LPHC. This phenomenon implies that the burden on the working population will reduce, thus, promoting saving and investments. However, the rising age-dependency ratio of over 60 between 2037 and 2065, means increasing in the burden of the working age population. The higher growth in depending population (less than 15 and 65 years and older) will lower productivity and there could be pressure on government spendings.

Table 2.9: Population by broad age group and dependency ratio

<b>V</b>		Num	ber			Percent		Dependency
Year	0-14	15-64	65+	Total	0-14	15-64	65+	ratio
2022	1,797,176	3,305,411	147,600	5,250,187	34.2	63.0	2.8	58.8
2027	1,975,267	3,748,907	172,677	5,896,851	33.5	63.6	2.9	57.3
2032	2,268,692	4,160,725	189,435	6,618,852	34.3	62.9	2.9	59.1
2037	2,679,217	4,414,687	262,188	7,356,092	36.4	60.0	3.6	66.6
2042	2,809,838	4,932,192	321,982	8,064,012	34.8	61.2	4.0	63.5
2047	2,898,173	5,443,028	451,230	8,792,431	33.0	61.9	5.1	61.5
2052	3,088,774	5,969,281	563,368	9,621,423	32.1	62.0	5.9	61.2
2057	3,411,070	6,418,611	710,728	10,540,409	32.4	60.9	6.7	64.2
2062	3,753,186	6,914,237	816,645	11,484,068	32.7	60.2	7.1	66.1
2065	3,915,533	7,215,471	920,178	12,051,182	32.5	59.9	7.6	67.0

#### 2.12 Youth population

The population of the youth (15-24 years) in 2022 is about 1.2 million and it is protected to reach 1.3 million in the next 20 years (2042), before getting to a peak of about 2.0 million in 2065. Between the period of 2022 and 2065, the youth population will increase by 37.9 per cent. The increasing population of youth will continue to stretch the available education and health facilities as well as make avenues for employing the youth. In 2022, the proportion of youth to total population is 23.6 per cent. The share of the youth population in 2027 however, fell to 21.2 per cent and this my due to the shrinking of the population 5-9 years observed in 2022 have now grown into the youth population. The decline of the proportion of the youth population continued through to 16.1 per cent in

2042. The share increased to 19.0 per cent in 2047 before declining again to 16.5 per cent in 2065. The decline in the share of the youth population is due to the underreporting of the population 0-9 years in 2022 who have grown to the youth ages and decline in fertility. The overall sex ratio across the years (2022-2065) indicates that there more females than males. Table 2.9 also shows that sex ratio is almost uniform ranging from 97.0 in 2022 to 98.5 in 2065.

The drop in the population size of the youth in 2032 is attributed to the small size of the population 5-9 years in 2022 and who have now been included in the youth population. Similarly, the population aged 0-4 and 5-9 in 2022, will be in the age groups 15-19 and 20-24 in 2037, forming the youth population, thus, the decline in the youth population.

Table 2.10: Projected youth population (15-24 years), 2022-2065 - medium variant

V		Number		Proportion per total	Sex ratio	
Year	Both sexes	Male	Female	population		
2022	1,237,999	609,515	628,484	23.6	97.0	
2027	1,252,242	621,314	630,928	21.2	98.5	
2032	1,213,322	602,766	610,556	18.3	98.7	
2037	1,106,605	544,270	562,335	15.0	96.8	
2042	1,302,106	642,215	659,892	16.1	97.3	
2047	1,669,478	827,802	841,677	19.0	98.4	
2052	1,803,402	894,177	909,225	18.7	98.3	
2057	1,844,061	914,481	929,580	17.5	98.4	
2062	1,897,292	941,344	955,947	16.5	98.5	
2065	1,993,571	989,458	1,004,115	16.5	98.5	

#### 2.13 Population of children 0-17 years

The population of children under 18 years old is projected to rise from 2,181,108 in 2022 to 3,301,289 in 2042, then to a peak of 4,569,159 in 2065. Between 2022 and 2065, the population less than 18 in Liberia is expected to grow by more than two (2.4) times. The population size of the females less than 18 years is higher than their males' counterparts between 2022 and 2065. Table 2.10 shows that the population 0-17 fell from 41.5 per cent in 2022

to 39.5 per cent due to the underreporting of the 0-9 years population observed in the age structure. The share of the population less than 18 increased in 2037 (40.7 per cent) and 2042 (40.9 per cent), before declining again in 2047 (39.1 per cent) and with further declines to 2065 (37.9 per cent). Generally, sex ratio is about 99 males to 100 females between 2022 to 2065 i.e. there more females aged 0-17 than males.

Table 2.11: Population 0-17 years by sex, 2022-2065

V		Number		Proportion per total	0	
Year	Both sexes	Males	Females	population	Sex ratio	
2022*	2,181,108	1,084,371	1,096,737	41.5	98.9	
2027	2,348,640	1,168,833	1,179,807	39.8	99.1	
2032	2,623,700	1,305,077	1,318,623	39.6	99.0	
2037	2,990,453	1,490,097	1,500,356	40.7	99.3	
2042	3,301,280	1,646,947	1,654,333	40.9	99.6	
2047	3,440,294	1,716,696	1,723,598	39.1	99.6	
2052	3,647,941	1,821,331	1,826,610	37.9	99.7	
2057	3,968,830	1,982,411	1,986,419	37.7	99.8	
2062	4,355,433	2,175,674	2,179,759	37.9	99.8	
2065	4,569,159	2,282,473	2,286,686	37.9	99.8	

Note: \* means actual population

#### 2.14 Adolescent population

The adolescent population (10-19 years) is projected as 2,525,456 persons in 2065, which is about two times higher than that of 2022 (1,265,456). Across the years, there are more adolescent females than males. The increasing number of the adolescent population should be of concern as this segment of the population are about to enter or are already in their prime reproductive years, which may lead to large numbers of birth even when fertility is low.

Again, with the huge number of adolescents, means that the population of Liberia will continue to expand due to the high potential inherent in the age structure. The adolescent group contributed 24.2 per cent to the total population of Liberia in 2022 and there were declines in 2027 and 2032 (20.9 per cent and 16.9 per cent), respectively. To some extent, the share of the adolescent population has been fluctuating from 2037 to 2065 which may be due to the distortion of age misrepresentation encountered at the younger population.

Table 2.12: Adolescent population (10-19 years) by sex, 2022-2065

V		Number		Proportion per total	0	
Year	Both sexes	Males	Females	population	Sex ratio	
2022*	1,271,083	632,337	638,746	24.2	99.0	
2027	1,230,585	612,997	617,588	20.9	99.3	
2032	1,121,490	553,146	568,344	16.9	97.3	
2037	1,317,755	651,600	666,155	17.9	97.8	
2042	1,688,726	839,575	849,151	20.9	98.9	
2047	1,822,910	906,269	916,641	20.7	98.9	
2052	1,862,697	926,221	936,476	19.4	98.9	
2057	1,914,921	952,662	962,259	18.2	99.0	
2062	2,105,589	1,048,025	1,057,564	18.3	99.1	
2065	2,270,670	1,130,322	1,140,348	18.8	99.1	

Note: \* means actual population

#### 2.15 Elderly population

The elderly population in the least developed countries is expected to experience a significant rise in both the proportion and the number (UN DESA, 2023). The proportion of the population 65 years and older (elderly), which is a common measure of ageing is projected grow from 2.8 per cent in 2022 to 7.6 per cent in 2065 due to increase in expectation of life. Within a period of 43 years (2022-2065), the size of the elderly population will increase by 2.7 times and this fast expansion of the elderly population in Liberia may be due to mortality decline and increase

in expectation of life in the populations. It is important that the population of the elderly are catered for to uphold the promise of the 2030 SDGs that no one is left behind. Table 12 also shows that there will be more elderly males than females between 2922 and 2047. This is a deviation from the phenomenon of females living longer than males at older ages. However, from 2052 to 2065, there are more females than males. The growing in the proportions of the elderly should be given attention and their abilities should be woven into policies and development programmes at all levels.

Table 2.13: Projected elderly population 65 years and older, 2022-2065

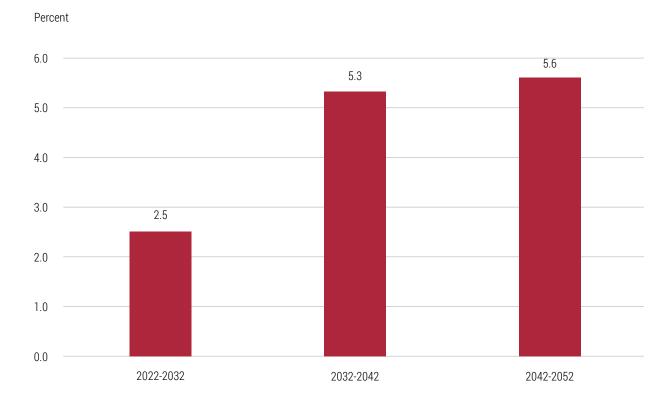
Voor		Number		Proportion per total
Year	Both sexes	Males	Females	population
2022*	147,600	74,211	73,389	2.8
2027	172,677	88,197	84,480	2.9
2032	189,435	96,819	92,616	2.9
2037	262,188	135,029	127,159	3.6
2042	321,982	163,923	158,059	4.0
2047	451,230	229,756	221,474	5.1
2052	563,368	275,142	288,226	5.9
2057	710,728	335,758	374,970	6.7
2062	816,645	371,885	444,760	7.1
2065	920,178	413,587	506,591	7.6

Note: \* means actual population

The growth rate of the elderly population 65 years and older is projected at 2.5 per cent from 2022 to 2032 and it is expected to further increase to 5.3 per cent

between 2032 and 2042. It is also projected that between 2942 and 2052, the annual elderly population will growth by 5.6 per cent.

Figure 2.11: Projected annual growth rates of the elderly population 65 years and older



# Chapter 3: Urban and rural projection

#### 3.1 Introduction

The population of Liberia's for the first time has become more urban (2,862,154) than rural (2,388,033), possibly due to the general movement of the population from the rural to urban areas which affects the process of urbanization in the country. According to Songsore (2009), the driving forces of Liberia's urbanization include rural-urban migration, natural increase in towns and cities and reclassification of communities. The growth of urban areas is also driven by economic opportunities, and social factors such as education and healthcare facilities. This chapter examines the growth of urban and rural populations in Liberia.

#### 3.2 Urban and rural base population

Generally, there are more females than males in urban areas, while in rural areas, the situation is different with more males than females. The sex ratio in urban areas is 97.0 while in the rural areas it is 107.1. This means that in urban areas, there more females than males while the situation in rural areas is different, as there are more males than females. The phenomenon of males dominating in agricultural activities could be the reason there are more males in rural than females. In both urban and rural areas, the distribution of the population by age indicates that there are more females than males in ages 0-34. However, from ages 35 to 69, there more males than females. Between ages 70-80+, the sex ratios show that there are more females than males in both rural and urban localities.

Table 3.1: Population by age, sex, place of residence and sex ratio, 2022

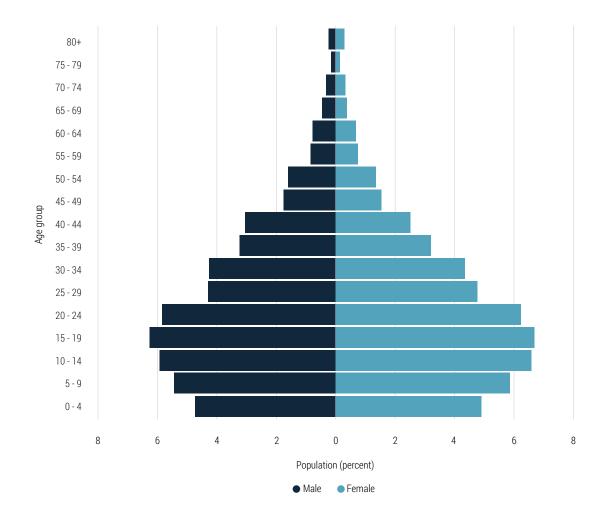
		Urban			Rural		Sex ratio	
Age	Male	Female	Total	Male	Female	Total	Urban	Rural
0-4	135,549	140,528	276,077	136,183	137,692	273,875	96.5	98.9
5-9	156,486	168,221	324,707	149,208	140,689	289,897	93.0	106.1
10-14	170,398	188,906	359,304	146,321	126,997	273,318	90.2	115.2
15 - 19	179,802	191,710	371,512	135,817	131,134	266,951	93.8	103.6
20 - 24	167,518	178,560	346,078	126,378	127,080	253,458	93.8	99.4
25 - 29	123,228	137,178	260,406	90,274	90,254	180,528	89.8	100.0
30 - 34	121,871	124,568	246,439	97,352	94,269	191,621	97.8	103.3
35 - 39	92,611	92,085	184,696	77,687	75,349	153,036	100.6	103.1
40 - 44	87,120	72,198	159,318	83,748	68,762	152,510	120.7	121.8
45 - 49	50,353	44,256	94,609	49,853	41,527	91,380	113.8	120.0
50 - 54	45,919	39,088	85,007	49,947	39,620	89,567	117.5	126.1
55 - 59	23,968	21,799	45,767	24,339	19,143	43,482	109.9	127.1
60 - 64	22,220	20,020	42,240	25,668	21,139	46,807	111.0	121.4

Age		Urban			Rural	Sex ratio		
	Male	Female	Total	Male	Female	Total	Urban	Rural
65 - 69	12,633	11,248	23,881	13,655	11,249	24,904	112.3	121.4
70 - 74	8,930	9,366	18,296	12,164	10,975	23,139	95.3	110.8
75 - 79	3,967	4,400	8,367	5,644	5,488	11,132	90.2	102.8
80+	6,615	8,835	15,450	10,601	11,827	22,428	74.9	89.6
Total	1,409,188	1,452,966	2,862,154	1,234,839	1,153,194	2,388,033	97.0	107.1

The age structure of the urban population shows a narrow base with large size for the youth and narrows at the older ages. This is an indication of a population with a "youth bulge". The narrow base of the population 0-4 years and 5-9 years is more pronounced and attributed to the underreporting and

age shifting. The bulk of the population is seen among the population aged 10-14, 15-19 and 20-24 for both males and females. This phenomenon may be due to the youth migrating to urban areas for education and job opportunities with females outnumbering males.

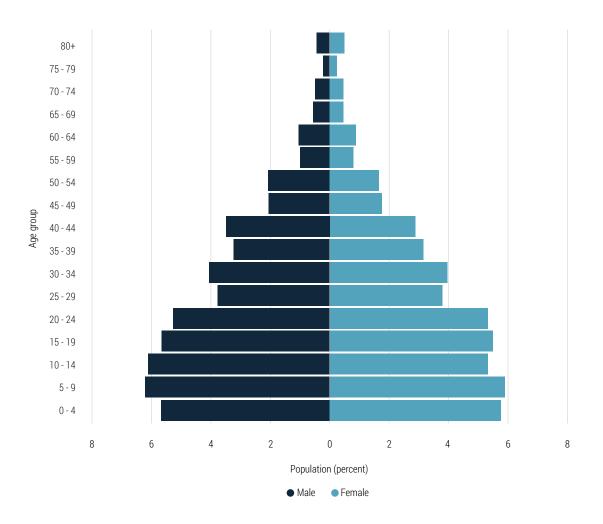
Figure 3.1: Urban population pyramid, 2022



The general picture of the age structure of the population in rural areas shows and irregular pattern. The population size of those who are 0-4 years is smaller, which is a sign of underreporting and age shifting. Figure 3.2 shows that majority of the population in rural areas are between the ages of 5-24. Between ages 25-44, there seems to be erratic

or inconsistent in age reporting. In the rural areas, there seems to be a higher proportion of the elderly (65 years and older) compared with those in urban areas (Figure 3.1). This may be an indication of people returning to their home communities after retirement from active work.

Figure 3.2: Rural population pyramid, 2022



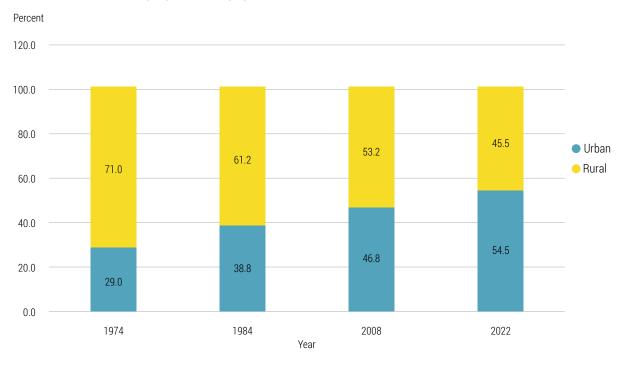


Figure 3.3: Urban and rural proportion of population, 1974-2022

Source: Liberia National Population Policy, Revised edition, 2005; 2022 LPHC data

#### 3.4 Urban and rural assumptions

Sub-national population projections are key to stakeholders in the provision of data to quantify likely needs, allocate resources across different geographical locations and specific segment of the population all of which drive consumptions. In projecting the urban and rural population, the DemProj model of the SPECTRUM application which offers the United Nations urban-rural growth differentials (URGD) method was applied as described in MANUAL VIII Methods for Projections of Rural and Urban Populations. It is based on the difference between urban and rural population growth and its logistic transformation (United Nations, 1974).

The United Nations Method of URGD requires the following input data:

- Base year urban population (2022)
- Base year rural population (2022)
- Urban population growth rate (2008-2022)
- Rural population growth rate (2008-2022)
- Urban-rural growth rate difference

The rural-urban growth rate differential (URGD) is the growth rate of the urban population minus the growth rate of the rural population and is calculated from the rural and urban population counts at the recent and the previous census. Between 2008 and 2022, the annual intercensal growth rate of urban population in Liberia was 4.1 per cent while in rural areas, it was 1.9 per cent. These growth rates of urban and rural population yielded a difference of 2.2 per cent.

Table 3.2: Population by type of residence, annual growth rates and urban-rural growth rate difference

Type of residence	Popu	lation	Annual growth rates	Urban-rural growth	
Type of residence	2008	2022	2008 - 2022	rate difference	
Urban	1,633,824	2,862,154	4.1	2.2	
Rural	1,842,784	2,388,033	1.9		
Total	3,476,608	5,250,187			

#### 3.5 Urban and rural population projections

Table 3.2 shows that in 2022, the urban population of Liberia is 2,862,154, representing 54.5 per cent, while the rural population is 2,388,033, also accounting for 45.5 per cent. According to the medium variant population projection, it is expected that by 2032, the proportion of the population in urban areas will increase to 57.6 per cent, and by 2042, nearly six in 10 (59.7 per cent) Liberians will live in urban areas. Furthermore, the urban population will continue to grow to a peak of 61.2 per cent in 2052 and 62.8 per cent in 2065. The continues urban growth in Liberia mean an increased demand on resources and overcrowding resulting in development of slums and other make-shift structures.

Liberia is becoming more urbanized as the share of the population living in rural areas will decrease from 45.5 per cent in 2022 to about 40 per cent in 2045. Relying heavily on rural agricultural products for food and other exports makes economies vulnerable as the population in rural areas will decrease due to rural-urban migration, especially among the youth. As young people migrate to urban areas in search of better opportunities, rural areas may face a shortage of labour, which can impact negatively on agricultural productivity. Urbanization leads to fierce competition between developers and local farmers for urban fringe lands for different uses that ultimately reduce food production and intensifies the visibility of food insecurity in urban areas (Abdulai, 2022, Chihambakwe et al, 2018).). The growing demand for land for non-agricultural purposes lead to loss of land for agricultural activities and subsequently reduction in agricultural produce.

Table 3.3: Projected urban and rural population by share

V	T-4-14	Hala an	Donal	Share of population (%)		
Year	Total country	Urban	Rural	Urban	Rural	
2022	5,250,187	2,862,154	2,388,033	54.5	45.5	
2027	5,896,852	3,310,016	2,586,836	56.1	43.9	
2032	6,618,845	3,810,047	2,808,798	57.6	42.4	
2037	7,356,092	4,320,643	3,035,449	58.7	41.3	
2042	8,064,009	4,810,926	3,253,083	59.7	40.3	
2047	8,792,431	5,315,411	3,477,020	60.5	39.5	
2052	9,621,423	5,889,547	3,731,876	61.2	38.8	
2057	10,540,409	6,526,010	4,014,399	61.9	38.1	
2062	11,484,068	7,179,561	4,304,507	62.5	37.5	
2065	12,051,182	7,572,328	4,478,854	62.8	37.2	

Note: \* means actual population

# **Chapter 4: County population projection**

#### 4.1 Introduction

Population projections at the county level or sub-national population projections provides disaggregated indicators of possible population size, age and sex structure of future population of the counties. The population projection covers all the 15 counties in Liberia will provide to policy implementers for resource allocation, healthcare and education allocation, service provision, local authorities, etc. The county population projections cover a period of 23 years, from 2022 to 2035.

#### 4.2 Development of county assumptions

The method used in projecting the counties is based on the shift-share method i.e. the population share of each of the 15 counties to the total population of Liberia. In the building of the county shares, considerations were made for county contributions to population in 2008 and 2022. The shift-share method allows for changes in population shares of the smaller areas over time (George et al., 2004). The shift-share method provides the average annual rate of change of the ratio of the population of each county to that of the country between the country's latest two censuses (2008 and 2022) is calculated (Leddy, 2017). This intercensal rate of change is extrapolated to the target year to yield a new ratio. With the projected population for Liberia, population projections for each county are calculated. The shift-share method of population projections is used to estimate the future size and age structure of the population at a more disaggregated level, county,

getting data consistent with those produced at national level. The method also allows for changes in population shares of the sub-nationals over time. The shift-share method is expressed as:

$$CT_P = \{ [((C_2/NT_2) - (CT_1/NT_1)) / (t_2 - t_1)] * (t_P - t_2) + (CT_2/NT_2) \} * NT_P$$

Where:

CT<sub>P</sub> = county population for projection (target) date

CT<sub>2</sub> = county population at latest census

 $CT_1$  = county population at census before latest

NT<sub>P</sub> = national total population for projection (target) date

 $NT_2$  = national total population at latest census

NT<sub>1</sub>= national total population at census before latest

t<sub>P</sub> = date of projected population (target date)

 $t_2$  = date of latest census

 $t_1$  = date of census before lates

Concerning the many extrapolation methods to project sub-national projections, the shift-share method must be used for short-range projections. The method allows for changes in population shares of the smaller areas over time.

Table 4.1: Population distribution by type of residence and county, 2022

Di.	Total			Urban			Rural		
Region	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bomi	68,574	65,131	133,705	17,398	16,768	34,166	51,176	48,363	99,539
Bong	235,208	232,353	467,561	73,466	76,306	149,772	161,742	156,047	317,789
Gbarpolu	51,121	44,874	95,995	4,657	4,170	8,827	46,464	40,704	87,168
Grand Bassa	150,280	143,409	293,689	43,851	45,755	89,606	106,429	97,654	204,083

D		Total			Urban			Rural	
Region	Male	Female	Total	Male	Female	Total	Male	Female	Total
Grand Cape Mount	96,757	82,110	178,867	25,581	21,706	47,287	71,176	60,404	131,580
Grand Gedeh	115,295	101,397	216,692	46,581	45,067	91,648	68,714	56,330	125,044
Grand Kru	56,999	52,343	109,342	3,629	3,629	7,258	53,370	48,714	102,084
Lofa	183,100	184,276	367,376	43,320	43,256	86,576	139,780	141,020	280,800
Margibi	152,699	152,247	304,946	83,711	86,866	170,577	68,988	65,381	134,369
Maryland	86,867	85,720	172,587	52,515	53,578	106,093	34,352	32,142	66,494
Montserrado	942,559	978,406	1,920,965	861,168	899,864	1,761,032	81,391	78,542	159,933
Nimba	312,018	309,823	621,841	102,278	107,328	209,606	209,740	202,495	412,235
River Cess	47,717	43,102	90,819	5,571	5,324	10,895	42,146	37,778	79,924
River Gee	65,471	59,182	124,653	32,007	30,101	62,108	33,464	29,081	62,545
Sinoe	79,362	71,787	151,149	13,455	13,248	26,703	65,907	58,539	124,446
Total C	2,644,027	2,606,160	5,250,187	1,409,188	1,452,966	2,862,154	1,234,839	1,153,194	2,388,033

About a third of the population of Liberia live in the Montserrado County in 2022 (36.6 per cent) and 2008 (32.2 per cent). This is because the county is host to the administrative capital of the country where there are job avenues and resources. Nimba has the second largest population, even though the share of population fell from 13.3 per cent in 2008 to 11.8 per cent in 2022. In 2022, River Cess recorded the least share of the population, accounting for 1.7 per cent while in 2008, it was Grand Kru

(1.7 per cent). At the urban level, more than six in 10 of the population live in Montserrado in 2022 (61.5 per cent) and 2008 (63.4 per cent). The counties with than a tenth share of the population in rural areas in 2022 and 2008 are Nimba (17.3 per cent and 19.4 per cent), Bong (13.3 per cent and 12.5 per cent) Lofa (11.8 per cent and 10.5 per cent), respectively. The population share of two counties – River Cess (0.4 per cent) and Sinoe (0.9 per cent) were less than one per cent.

Table 4.2: Population distribution by residence, percentage share and county, 2008 and 2022

Destan		2008		2022			
Region	Total	Urban	Rural	Total	Urban	Rural	
Bomi	2.4	1.0	3.6	2.5	1.2	4.2	
Bong	9.6	6.3	12.5	8.9	5.2	13.3	
Gbarpolu	2.4	0.5	4.1	1.8	0.3	3.7	
Grand Bassa	6.4	3.6	8.9	5.6	3.1	8.5	
Grand Cape Mount	3.7	0.5	6.5	3.4	1.7	5.5	
Grand Gedeh	3.6	2.6	4.5	4.1	3.2	5.2	
Grand Kru	1.7	0.2	2.9	2.1	0.3	4.3	
Lofa	8.0	5.1	10.5	7.0	3.0	11.8	
Margibi	6.0	5.4	6.6	5.8	6.0	5.6	

Region		2008		2022			
Region	Total	Urban	Rural	Total	Urban	Rural	
Maryland	3.9	2.9	4.8	3.3	3.7	2.8	
Montserrado	32.2	63.4	4.5	36.6	61.5	6.7	
Nimba	13.3	6.4	19.4	11.8	7.3	17.3	
River Cess	2.1	0.1	3.8	1.7	0.4	3.3	
River Gee	1.9	1.1	2.7	2.4	2.2	2.6	
Sinoe	2.9	0.8	4.8	2.9	0.9	5.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	

#### 4.3 County population size

Table 4.2 shows that in 2022, more than a third (1,920,965) of the population of Liberia live in the Montserrado County, which hosts the national capital, Monrovia and it is expected that by 2035 the population will increase to 2,741,396. The huge increase in population may be attributed to migration from less Endowed Counties for access to job opportunities and social amenities. The county with the second highest population is Nimba (621,841) and it is followed by Bong (467,561), as the third highest. Table 4.2 also shows that by 2035, the bulk

of the population will continue to be concentrated in Montserrado (2,741,396), Nimba (785,181) and Bong (604,599), accounting for more than half of the total population of Liberia. The availability of social and economic resources as well as job avenues in these counties may be responsible for the large population size. The large population sizes of these three counties may be receiving population from other counties to have access to social amenities and job openings. In the same period, the county projected to have the least population size is River Cess (126,101), followed by Gbarpolu (119,029) and Grand Kru (179,663).

Table 4.3: Projected population distribution by sex and county, 2022, 2027, 2032 and 2035

	2022			2027		2032			2035			
Region	Total	Male	Female									
Total	5,250,187	2,644,027	2,606,160	5,896,852	2,955,172	2,941,680	6,618,845	3,301,533	3,317,312	7,062,889	3,513,710	3,549,179
Bomi	133,705	68,574	65,131	151,785	77,396	74,389	171,970	87,217	84,753	184,385	93,233	91,152
Bong	467,561	235,208	232,353	516,448	259,419	257,029	571,030	286,370	284,660	604,599	302,880	301,719
Gbarpolu	95,995	51,121	44,874	100,592	53,604	46,988	105,724	56,368	49,356	108,880	58,061	50,819
Grand Bassa	293,689	150,280	143,409	319,939	163,828	156,111	349,248	178,910	170,338	367,273	188,149	179,124
Grand Cape Mount	178,867	96,757	82,110	197,750	107,453	90,297	218,834	119,359	99,475	231,800	126,653	105,147
Grand Gedeh	216,692	115,295	101,397	250,030	132,606	117,424	287,251	151,877	135,374	310,143	163,682	146,461
Grand Kru	109,342	56,999	52,343	128,093	66,412	61,681	149,029	76,890	72,139	161,906	83,309	78,597
Lofa	367,376	183,100	184,276	400,378	200,132	200,246	437,224	219,092	218,132	459,886	230,706	229,180
Margibi	304,946	152,699	152,247	339,592	168,826	170,766	378,275	186,778	191,497	402,065	197,775	204,290
Maryland	172,587	86,867	85,720	185,950	92,378	93,572	200,869	98,512	102,357	210,044	102,270	107,774
Montserrado	1,920,965	942,559	978,406	2,213,646	1,077,752	1,135,894	2,540,421	1,228,247	1,312,174	2,741,396	1,320,439	1,420,957
Nimba	621,841	312,018	309,823	680,111	340,206	339,905	745,169	371,585	373,584	785,181	390,807	394,374

2022 Parisa		2027		2032			2035					
Region	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
River Cess	90,819	47,717	43,102	97,860	51,328	46,532	105,720	55,348	50,372	110,555	57,811	52,744
River Gee	124,653	65,471	59,182	145,751	76,005	69,746	169,306	87,731	81,575	183,793	94,914	88,879
Sinoe	151,149	79,362	71,787	168,927	87,827	81,100	188,775	97,249	91,526	200,983	103,021	97,962

Nationally, the percentage change in the population has been declining from 60.0 per cent between 1984-2008 to 50.5 per cent for 2008-2022. It is also projected that between 2022 and 2035, the percentage increase in the population will be about 35 per cent. This means that the population of Liberia has been increasing but at a decreasing rate. At the county level, there are variation in the percentage change in the population. For instance, between 1984 and 2008, Montserrado, recorded the highest percentage increase of 133.1 per cent in population, followed by Grand Gedeh (100.1 per cent) and Maryland (96.9 per cent). Across the 15 counties, Grand Kru (-9.1 per cent) was the only county to record a negative growth, implying that its population in 1984 was higher than what was observed in 2008. The negative growth recorded in Grand Kru may be due to the war where the inhabitants had moved out of the county to seek protection elsewhere.

Contrary to Grand Kru recording a negative growth between the period of 1984 and 2008, the situation is different between 2008 and 2022, as it observed the largest percentage increase in population across the counties. It is possible that those who were forced to migrate during the war had returned, accounting for the high percentage increase in the population. River Gee had the second highest percentage increase in population, accounting for 85.2 per cent with Montserrado having an increase of 67.8 per cent. The counties with the least population increase are Gbarpolu (14.6 per cent) and Grand Bassa (30.6 per cent).

It is projected that the population of four counties – Grand Kru (48.1 per cent), River Gee (47.2 per cent), Grand Gedeh (43.1 per cent) and Montserrado (42.7 per cent) will increase by more than 40 per cent between 2022 and 2035. During the same period, it is expected that Gbarpolu (13.4 per cent) will have the least population increase, followed by Maryland (21.7 per cent) and River Cess (21.7 per cent). The lack of roads and basic service infrastructure coupled with isolated places in Gbarpolu and River Cess counties could account for the low increase in population over the period.

Table 4.4: Percentage changes in population by county, 1984–2035

County	1984-2008	2008-2022	2022-2035	
Liberia	66.0	50.5	34.5	
Bomi	23.5	63.0	37.9	
Bong	28.6	42.2	29.3	
Gbarpolu	73.1	14.6	13.4	
Grand Bassa	40.8	30.6	25.1	
Grand Cape Mount	62.7	38.6	29.6	
Grand Gedeh	100.1	71.8	43.1	
Grand Kru	-9.1	91.5	48.1	
Lofa	35.6	36.0	25.2	
Margibi	31.6	52.7	31.8	
Maryland	96.9	26.5	21.7	
Montserrado	133.1	67.8	42.7	

County	1984-2008	2008-2022	2022-2035
Nimba	49.5	32.8	26.3
River Cess	74.0	37.9	21.7
River Gee	69.2	85.2	47.4
Sinoe	63.6	44.0	33.0

The population of Montserrado is more than a third (36.6 per cent) of the county's population in 2022 and it is projected to increase by 2.2 percentage points by 2035 (38.8 per cent). The high percentage share of Montserrado is due to migration, particularly, to the administrative capital, Monrovia. The county with the second largest share of population is Nimba, recording 11.8 per cent in 2028 and slightly declining to 11.1 per cent in 2035. The county with the least share of population is River Cess, accounting for 1.7 per cent in 2022 and expecting to even decline slightly to 1.6 per cent in 2035. Migration may account for the low population as River Cess is described as one of Liberia's least developed areas with most isolated places, few roads and little basic services infrastructure. As part of efforts to curb the rural-urban migration and reduce inequalities in Liberia, it is important to embark on developmental

projects using internal growth pole initiatives across counties which have low population size and density but with high potential for development (Apeh et al., 2020). Critical attention should be given to counties such as Gbarpolu, Grand Bassa, Grand Kru in developmental initiatives with simultaneous and coordinated investments in many sectors to support self-sustaining industrialization across counties with rural areas (Speakman and Koivisto, 2013). Transformation in rural areas involves structural, cultural and economic transition of rural areas to a more economically viable society (Apeh et al., 2020). The rural transformation initiatives and actions will attract amenities such as health facilities, educational and clean water infrastructures to boost healthcare delivery, educational attainment and increase the living standards of rural dwellers.

Table 4.5: Population distribution by share of county, 2022, 2027, 2032 and 2035

County	2022	2027	2032	2035
Bomi	2.5	2.6	2.6	2.6
Bong	8.9	8.8	8.6	8.6
Gbarpolu	1.8	1.7	1.6	1.5
Grand Bassa	5.6	5.4	5.3	5.2
Grand Cape Mount	3.4	3.4	3.3	3.3
Grand Gedeh	4.1	4.2	4.3	4.4
Grand Kru	2.1	2.2	2.3	2.3
Lofa	7.0	6.8	6.6	6.5
Margibi	5.8	5.8	5.7	5.7
Maryland	3.3	3.2	3.0	3.0
Montserrado	36.6	37.5	38.4	38.8
Nimba	11.8	11.5	11.3	11.1
River Cess	1.7	1.7	1.6	1.6
River Gee	2.4	2.5	2.6	2.6
Sinoe	2.9	2.9	2.9	2.8
Both Sexes	100.0	100.0	100.0	100.0

#### 4.4 County sex composition

Montserrado County has a ratio of less males than females in 2022(96.3) and it is projected to remain so between 2037 (94.9), 2035 (92.0). This phenomenon of having more females in Montserrado than males is because women migrating to the commercial centre of Liberia for trading activities. Lofa also had

sex ratios indicating lower proportion of males than females in 2022 (99.4) and 2037 (99.9). Apart from 2022 where Lofa County recorded a sex ratio 100.2, indicating more males than females, the projections had more females than males in 2037 (98.9), 2032 (97.5) and 2035 (96.8). Grand Cape Mount recorded sex ratios with the highest proportion of males than females between 2022 (117.8) and 2035 (120.5).

Table 4.6: Population by sex ratio and county, 2022, 2027, 2032 and 2035

County	2022	2027	2032	2035
Bomi	105.3	104.0	102.9	102.3
Bong	101.2	100.9	100.6	100.4
Gbarpolu	113.9	114.1	114.2	114.3
Grand Bassa	104.8	104.9	105.0	105.0
Grand Cape Mount	117.8	119.0	120.0	120.5
Grand Gedeh	113.7	112.9	112.2	111.8
Grand Kru	108.9	107.7	106.6	106.0
Lofa	99.4	99.9	100.4	100.7
Margibi	100.3	98.9	97.5	96.8
Maryland	101.3	98.7	96.2	94.9
Montserrado	96.3	94.9	93.6	92.9
Nimba	100.7	100.1	99.5	99.1
River Cess	110.7	110.3	109.9	109.6
River Gee	110.6	109.0	107.5	106.8
Sinoe	110.6	108.3	106.3	105.2
Total	101.5	100.5	99.5	99.0

#### 4.5 County population density

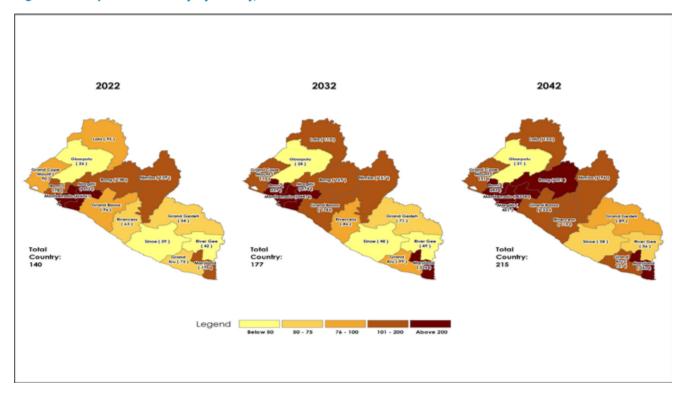
The population density of Liberia in 2022 is 104.1 miles² and it is expected that by 2032, it will increase to 176 persons per square mile (ml²) in 2032 and 215.1 persons per square mile (ml²) in 2042. The population densities continue to vary widely across the counties. Montserrado County recorded the highest densities in 2022 (2,606.5 persons per ml²) and it is expected the density will increase by 66.2 per cent in 2042 (4,334.5 persons per ml²). The

second highest population density in 2022 is Margibi, accounting for 301.9 persons per ml<sup>2</sup> and project to increase to 451.2 persons per ml<sup>2</sup> in 2042. The county with the most sparsely population in 2022 is Gbarpolu (25.7 persons per ml<sup>2</sup>) and it is projected to remain the least by 2042 (31.0 persons per ml<sup>2</sup>). The low population density of Gbarpolu Cess may be due to a lack of social amenities.

Figure 4.1 shows that in 2022, only two counties, Montserrado and Margibi had population densities of more than 200 persons per square mile. However, by 2035, three additional counties – Bomi, Bong and Maryland are expected to have a population density of over 200 persons per square mile. In 2022, Gbarpolu, River Cess and Sinoe were the counties which were sparsely populated in Liberia with

population density of less than 50 persons per square mile. In these counties, there heavy forest cover, poor communications and transport systems, and underdeveloped physical infrastructure. It is expected that by 2035, only one county with a population less than 50 persons per square mile is Gbarpolu.

Figure 4.1: Population density by county, 2022-2035



# Chapter 5: Sectoral population projection

#### 5.1 Introduction

This chapter focuses on projecting the population of specific target groups, including health service personnel and facilities, school-going population, labour force, households and population in agriculture. By utilizing multiple scenarios, a comprehensive range of sectoral population projections was generated, acknowledging the uncertainties and complexities involved. This approach enables policymakers and planners to make informed decisions, anticipate potential challenges and develop targeted interventions to meet the needs of the population.

#### 5.2 Methodology

The constant-share method was used in preparing the sectoral projections and it is a straightforward method that does not need complex calculation or data (United Nations, 2017). This method is commonly employed due to its ease of application and minimal data requirements (World Bank, 2018). It is a method for making sectoral population projections, which involves estimating the population in specific sectors (e.g., health, education, labour force) over time (Eurostat, 2020). It projects population growth for a sub-area using population projections for a larger or parent population.

#### 5.2.1 Assumptions

This method of sectoral projections assumes that there are no significant changes in trends, policies, or external factors that could impact the sectoral population distribution (World Bank, 2018). In using this technique, the smaller area's share of the larger area's population is held constant at a level observed during the base year. The method also assumes that the proportions of the population in each sector are assumed to be static, meaning they do not change over time. This constant-share method requires historical data from only one point in time and it is particularly useful for areas where poor records make it difficult or impossible to construct a reliable historical data series. Secondly, it is simple and

robust in nature because it assumes a constant rate of change for a short range of up to 20 years. While projecting derived populations, the proportion each sector formed to the national total during the 2022 PHC was calculated to give a proportion which each subsector would give to the national total in the subsequent years up to 2042 assuming the number of subsectors will remain as they were in 2022.

In the constant-share method, the sector's share of the larger population is held constant at some historical level, as observed in the base year. A projection of the sector can then be made by applying the share to the projection of the total population:

$$P_{it} = (P_{il} / P_{jl}) P_{jt}$$

where  $P_{it}$  is the population projection for the sector (i) in the target year;  $P_{il}$  is the population of the sector in the launch year;  $P_{jl}$  is the population of the larger area (j) in the launch year; and  $P_{jt}$  is the projection of the larger area in the target year.

#### 5.2.2 Limitations

One main challenge to the use of this constant-share method is that it does not account for potential changes in sectoral trends or policies. Changes in specific sectors (e.g., health, education, labour force) or changes in government policies or regulations that could impact population distribution may not reflect in the sectors in using this approach. It is inflexible and cannot easily adjust to new or changing circumstances in the various sectors. Again, this approach may introduce biases if the actual proportions change over time due to various factors (e.g., urbanization, migration, technological advancements).

The 2022 PHC did not capture some of the indicators used in the sectoral projections. For example, the derived projection on health did not classify population by access to health services (manpower and facilities). Rather, it assumes that the entire population have access to health services. On education, the derived projection did not consider in

and out of school students. It also never considered the qualification of the teachers, in terms of trained or not trained. Instead, the projection assumes that the entire projected population will have access to school, health services until the end of the projection period. The entire projected population is not involved in agriculture activities. Instead, the computation picks the head of household that is into agricultural activities. The sanitation projection is not classified by the types of sanitation. For example, the population without proper sanitation was not distinguished from those with healthier sanitation.

#### 5.3 Education

The official school age for Primary Education or Lower Education is from six (6) to age 11 and constitutes grades 1-6. This level of education consists of full-time formal schooling that is provided for children. Table 5.1 shows that there were about 1.2 million primary school pupils for school enrolment, and it is projected to grow beyond 1.4 million pupils by a decade (2032), then to 1.8 million pupils in 2042. This means that additional education facilities would be needed to cater for about 300,000 pupils in 2032 and 616,476 pupils in 2042. The increase in the number of pupils may be due to the rapid growth of the population, particularly the younger ages.

**Table 5.1: Primary school enrolment** 

Year	Proj	ected primary stud	ents	New primary students required from 2022			
	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant	
2022*	1,150,254	1,150,254	1,150,254	-	-	-	
2027	1,287,705	1,291,930	1,297,041	137,451	141,676	146,787	
2032	1,433,405	1,450,112	1,467,426	283,151	299,858	317,172	
2037	1,572,817	1,611,633	1,648,868	422,563	461,379	498,614	
2042	1,696,617	1,766,730	1,831,750	546,363	616,476	681,496	

In 2022, there were 47,453 primary school teachers in Liberia and based on the population of children aged 6-11 years, the number of teachers is estimated to reach 47,453 teachers in 2022 and to nearly 60,000 teachers in 2032, then to 75,568 teachers by 2042. Furthermore, Table 5.3 shows that with

the growth of primary pupils means that additional 12,370 teachers will be needed to fill the gap by 2032 and 25,432 teachers by 2042. The growing number of primary pupils in Liberia are significant, and the need for additional teachers is demanding and it highlights severe shortage of teachers.

**Table 5.2: Primary school teachers** 

Vaca	Projecte	ed primary school to	eachers	New primary school teachers' requirement from 2022  Low variant Medium variant High variant		
Year	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant
2022*	47,453	47,453	47,453	-	-	-
2027	53,123	53,298	53,509	5,670	5,845	6,056
2032	59,134	59,823	60,538	11,681	12,370	13,085
2037	64,886	66,487	68,023	17,433	19,034	20,570
2042	69,993	72,885	75,568	22,540	25,432	28,115

According to the UNESCO standard, Liberia's primary schools should have had 228,269 teachers, but as of 2022, only 47,453 teachers were available, thus, resulting in a significant gap of 180,816 teachers. The number of new teachers

required is expected to expand significantly requiring an extra 240,323 primary school teachers by 2032 and a peak of 303,156 additional teachers by 2042 to meet the growing demand.

Table 5.3: Primary school enrolment up to 2042 - UNESCO ratios

Vaca		Requirement				
Year	Low	Medium	High	Low	Medium	High
2022*	228,269	228,269	228,269	180,816	180,816	180,816
2027	255,546	256,385	257,399	208,093	208,932	209,946
2032	284,461	287,776	291,212	237,008	240,323	243,759
2037	312,127	319,830	327,219	264,674	272,377	279,766
2042	336,695	350,609	363,513	289,242	303,156	316,060

#### 5.4 Agriculture

Out of a total number of 1,187,272 households, 30.2 per cent (395,075 households) are into agricultural activities. In using the medium variant, agricultural households show a consistent increase across all the years (2022 to 2042). It is projected than the number of households in agricultural will increase to 452,682 households in 2032 and further increase to 551.520 households in 2042. The largest increase of agricultural households occurred between 2037 (514,728 households) and 2042 (551,520 households). It is also projected that households engage in agricultural activities in rural areas will grow at a faster rate than urban agricultural households. For instance, households in agriculture in rural areas will increase by 151,593 households between 2022 and 2042 while over the same period. households in urban areas will increase by 40,852.

The projection shows that households in rural areas who are engaged in agricultural activities will be nearly 4 (3.7) times higher than those in urban areas.

In relation to the number of new households in agriculture, it is projected to increase from 44,227 households in 2027 to 93,607 in 2032, before reaching peak of 192,445 households by 2042. In rural areas, it is projected that new agriculture households will grow from 34,839 households in 2027 to 134,352 households in 2042. Similarly, new households in agriculture in urban areas will increase from 9,388 households in 2027 to 40,852 households in 2042. The continuous growth in the number of agricultural households indicates a sustainable trend, which suggest that the agricultural sector is likely to continue growing. This phenomenon of growth in agricultural households could lead to increased food production and addressing food security issues.

Table 5.4: Future Agriculture households up to 2042

W		Requirement		New agric	88,391 93,607 99,012	
Year	Low	Medium	High	Low	Medium	High
Agricultural households						
2022*	359,075	359,075	359,075	-	-	-
2027	401,983	403,302	404,898	42,908	44,227	45,823
2032	447,466	452,682	458,087	88,391	93,607	99,012
2037	490,986	503,104	514,728	131,911	144,029	155,653
2042	529,633	551,520	571,818	170,558	192,445	212,743

V		Requirement		New agric	18,764     19,871     21,018       28,002     30,574     33,042		
Year	Low	Medium	um High Low Medium		Medium	High	
Urban agricul	tural households						
2022*	76,224	76,224	76,224	-	-	-	
2027	85,333	85,612	85,951	9,109	9,388	9,727	
2032	94,988	96,095	97,242	18,764	19,871	21,018	
2037	104,226	106,798	109,266	28,002	30,574	33,042	
2042	112,430	117,076	121,385	36,206	40,852	45,161	
Rural agricult	ural households						
2022*	282,851	282,851	282,851	-	-	-	
2027	316,651	317,690	318,946	33,800	34,839	36,095	
2032	352,479	356,587	360,845	69,628	73,736	77,994	
2037	386,760	396,305	405,462	103,909	113,454	122,611	
2042	417,203	434,444	450,433	134,352	151,593	167,582	

About 1.8 million population in households engaged in agricultural activities in 2022 and it is expected that by 2032, the figure will rise to 2.3 million in 2032, then further to 959,205 household population in 2042. The size of the new or additional household population required to enter agriculture will increase to 466,564 in

2032 and to a peak of 959,205 in 2042. The rise in the household population is due to the expansion of the population size, and this will require that intervention programmes be initiated to attract the population to venture into agricultural activities.

Table 5.5: Future household population in agriculture

Year	Projected hou	sehold population	in agriculture	New house	213,867 220,441 228,393	
	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant
2022*	1,789,736	1,789,736	1,789,736	-	-	-
2027	2,003,603	2,010,177	2,018,129	213,867	220,441	228,393
2032	2,230,304	2,256,300	2,283,240	440,568	466,564	493,504
2037	2,447,222	2,507,618	2,565,554	657,486	717,882	775,818
2042	2,639,849	2,748,941	2,850,109	850,113	959,205	1,060,373

#### 5.5 Labour force population

The labour force population is expected to increase from about 2 million in 2022 to 2.5 million in 2032, accounting for an increase of 26.1 per cent in a decade. The labour force population will continue to

increase to 3,048,397 in 2042, and this means that for a period of 20 years, there a difference of about 1.1 million. This continuous increase in the size of the labour force population has implications on jobs availability this population group.

Table 5.6: Future	labour force	for Liberia u	p to 2042
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Year		Future labor Force				
Teal	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant
2022*	1,984,701	1,984,701	1,984,701	-	-	-
2027	2,221,866	2,229,156	2,237,974	237,165	244,455	253,273
2032	2,473,263	2,502,090	2,531,965	488,562	517,389	547,264
2037	2,713,810	2,780,785	2,845,033	729,109	796,084	860,332
2042	2,927,421	3,048,397	3,160,585	942,720	1,063,696	1,175,884

#### 5.6 Health

Access to healthcare delivery services is very important in the measurement of health coverage. The number of medical doctors in the country was 295 in 2022, and it is expected to increase to 372 medical doctors in 2032 and rise again to 453

in 2042. This means that by the next 20 years, there is the need to employ additional 158 medical doctors by 2042. In using the medium variant, 158 new medical doctors will be required by 2042, while for the high variant, 175 medical doctors are needed to complement the existing ones.

Table 5.7: Future doctors required for Liberia using Liberia's ratios

Year		Future doctors		Additio	nal future doctors i	required
	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant
2022*	295	295	295	-	-	-
2027	330	331	333	35	36	38
2032	368	372	376	73	77	81
2037	403	413	423	108	118	128
2042	435	453	470	140	158	175

In using the World Health Organization (WHO) ratios, with 525 medical doctors in 2022, it is projected that the number needed to match the population expansion is 670 by 2032 and this will further increase to 806 in 2042. The shortage of medical doctors is expected to worsen over the next two

decades. The gap will increase by 137 doctors (59.6 per cent) between 2022 and 2032, and by another 144 doctors (39.2 per cent) between 2032 and 2042. These projected shortfalls indicate that there is a growing need for medical professionals to meet the healthcare demands of Liberia's population.

Table 5.8: Future doctors required for Liberia up to 2042, using WHO ratios

Year		Requirement		New do	ctors required afte	er 2022
	Low	Medium	High	Low	Medium	High
2022*	525	525	525	230	230	230
2027	588	590	592	293	295	297
2032	654	662	670	359	367	375
2037	718	736	753	423	441	458
2042	774	806	836	479	511	541

The medium projection indicates a steady increase in the requirement for physician assistants, with an average annual increase of 3-4 per cent. The total requirement for physician assistants in 2042 is projected to be 670, which is an increase of 234 from the 2022 baseline presented in Table 5.9. There is a

consistent upward trend in the demand for physician assistants, indicating a growing need. Training and recruitment programmes should be developed to meet the growing demand of the physician assistants and planning for resource allocation and infrastructure development.

Table 5.9: Future physician assistants required for Liberia up to 2042

Year -		Requirement		New physician	n assistants requir	ed after 2022
	Low	Medium	High	Low	Medium	High
2022*	436	436	436	-	-	-
2027	488	490	492	52	54	56
2032	543	550	556	107	114	120
2037	596	611	625	160	175	189
2042	643	670	694	207	234	258

Table 5.10 shows that with the medium variant, the country will require 394 nurses to meet the number of nurses needed by 2027 with additional 1,284 nurses in 2037 and 1,716 in 2042. On the other hand, the country will require 408 nurses in 2027 if the high variant model is used. Again, with this scenario, the

country will require additional 1,388 nurses in 2037 and 1,897 nurses in 2042 considering the population of nurses in 2022. With a low variant, the country will require additional 383 nurses in 2027, 788 nurses in 2032 and 1,520 nurses in 2042.

Table 5.10: Future nurses required for Liberia using Liberia's ratios

Year		Projected Nurses		New n	urses required as o	f 2022
	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant
2022*	3,201	3,201	3,201	-	-	-
2027	3,584	3,595	3,609	383	394	408
2032	3,989	4,035	4,084	788	834	883
2037	4,377	4,485	4,589	1,176	1,284	1,388
2042	4,721	4,917	5,098	1,520	1,716	1,897

Using WHO ratios and the medium variant, it was found that the number of nurses required in Liberia in 2022 exceeded WHO's recommended standard by 2,151 nurses. This indicates that WHO's guidelines suggest fewer nurses than what is already available in Liberia. For instance, by 2032, Liberia is expected to have 1,877 more nurses than the WHO standard, and by 2042, this surplus is projected to be 1,588 nurses.

Even under the low variant scenario, Liberia will exceed WHO's standard by 1,892 nurses in 2032 and 1,652 in 2042. The high variant suggests a shortfall of 1,861 nurses by 2032 and 1,529 by 2042 to fall below WHO's standard, which is unlikely. Overall, Liberia is projected to maintain a nurse workforce above WHO recommendations through 2042 across all scenarios.

Voor		Requirement		New requirement of nurses from 2022			
Year	Low	Medium	High	Low	Medium	High	
2022*	1,050	1,050	1,050	(2,151)	(2,151)	(2,151)	
2027	1,176	1,179	1,184	(2,025)	(2,022)	(2,017)	
2032	1,309	1,324	1,340	(1,892)	(1,877)	(1,861)	
2037	1,436	1,471	1,505	(1,765)	(1,730)	(1,696)	
2042	1,549	1,613	1,672	(1,652)	(1,588)	(1,529)	

The total requirement for midwives in 2042 is projected to be 1,814, which is an increase of 633 from 2022. The medium projection in Table 5.12 indicates an increase in the requirement for midwives, with an average annual increase of about 3 per cent.

The healthcare system should plan for a steady increase in the requirement for midwives. Resource allocation and infrastructure development should be planned accordingly to support the increasing number of midwives.

Table 5.12: Future midwives required for Liberia up to 2065

Year		Requirement		New midwives' requirement from 2022			
	Low	Medium	High	Low	Medium	High	
2022*	1,181	1,181	1,181	-	-	-	
2027	1,322	1,326	1,332	141	145	151	
2032	1,472	1,489	1,507	291	308	326	
2037	1,615	1,655	1,693	434	474	512	
2042	1,742	1,814	1,881	561	633	700	

The number of health facilities available to a designated population can be used to measure health delivery coverage of a country. In the case of Liberia, with 39 hospitals available in 2022, there should be 10 more hospitals in 2032 using the WHO ratio to cater for the population using the medium variant and a further 21 hospitals to be added to the existing

ones. On the other hand, with the low variant, there should be 19 additional hospitals constructed by 2042 and 23 hospitals for the high variant module over the same period. Inability to meet the gap in the number of hospitals will result in overcrowding as it will be difficult for the available hospitals to contain patients.

Table 5.13: Future hospital required for Liberia up to 2042, using Liberia's ratios

Year		Projected hospitals	S	Difference in hospital required from 2022			
	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant	
2022*	39	39	39	-	-	-	
2027	44	44	44	5	5	5	
2032	49	49	50	10	10	11	
2037	53	55	56	14	16	17	
2042	58	60	62	19	21	23	

The WHO standards indicate that there should be a hospital per every 10,000 population. Liberia in 2022 has 53 hospitals and will require to have additional 14 hospitals to meet the standards. It is projected that using the medium variant, an additional 27 hospitals are needed in 2032 with further 42 hospitals needed

in 2042. Table 5.14 shows that with a low variant, 26 additional hospitals are needed in 2032 while the number of hospitals will increase to 38 in 2042. The high variant population will require that there should be additional 28 hospitals in 2032 and 45 hospitals by 2042.

Table 5.14: Future hospitals required for Liberia up to 2065, using WHO's ratios

Year		Projected hospitals	<b>i</b>	New hospitals requirement from 2022			
	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant	
2022*	53	53	53	14	14	14	
2027	59	59	59	20	20	20	
2032	65	66	67	26	27	28	
2037	72	74	75	33	35	36	
2042	77	81	84	38	42	45	

There are 71 health centres in Liberia as of 2022 and it is projected that based on the medium variant population, additional 19 health centres would be required by 2032 and this figure is expected to increase to 38 in 2042. Concerning the low variant population, an additional 17 health centres would be required and in 2042, the country would need

to provide 34 health centres to complement what existed in 2022. Table 5.15 indicates that with a high variant population, characterized by rapid population growth, the country would need 20 more health centres in 2032 and an additional 42 health centres by 2042.

Table 5.15: Future health centres required for Liberia up to 2042, using Liberia's ratios

V	Pro	jected health cent	ers	Difference in health centers required from 2022			
Year	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant	
2022*	71	71	71	-	-	-	
2027	79	80	80	8	9	9	
2032	88	90	91	17	19	20	
2037	97	99	102	26	28	31	
2042	105	109	113	34	38	42	

In 2022, there were 105 health centres in the country and in taking the WHO standards to measure health centres required, there is a gap of 34 health centres needed. The medium variant projections shows that additional 67 health centres would be needed in 2032 while in 2043, it is expected that 90 health centres

would be needed. The low variant model shows that 60 health centres are required by 2032 and 84 health centres in 2042. Table 5.16 shows that with a high variant population growth, there is a gap of 63 health centres in 2032 and an additional 96 health centres needed in 2042

Table 5.16: Future health	centres requi	ed for Liberia u	p to 2042.	using WHO's ratios
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Voor	Pro	ojected health cent	ers	Difference in health centers required from 2022			
Year	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant	
2022*	105	105	105	34	34	34	
2027	118	118	118	47	47	47	
2032	131	132	134	60	61	63	
2037	144	147	151	73	76	80	
2042	155	161	167	84	90	96	

Table 5.17 shows that in 2022 there were 724 clinics in the country. Looking ahead, the medium variant population projection suggests an additional 189 clinics will be needed by 2032, and this number is expected to increase to 388 by 2042. In the long term,

the Government of Liberia and healthcare providers need to plan for investments in clinic infrastructure, staffing and equipment to cover the needs of the growing population.

Table 5.17: Future clinics required for Liberia up to 2042

Year		<b>Projected clinics</b>		New clinics requirement from 2022			
	Low variant	Medium variant	High variant	Low variant	Medium variant	High variant	
2022*	724	724	724	-	-	-	
2027	811	813	816	87	89	92	
2032	902	913	924	178	189	200	
2037	990	1,014	1,038	266	290	314	
2042	1,068	1,112	1,153	344	388	429	

This section provides information on households requiring sanitation facilities which covers households using unimproved toilet facilities (open defecation, uncovered pits, bucket toilets and shared toilet facilities), poor waste management and unimproved water sources. Addressing the needs of households requiring sanitation is crucial in fulfilling SDG 6. Table 5.18 indicates that in 2022, there were 356,182 households who requiring sanitation

facilities and this number is expected to increase to 449,035 households by a decade (2032), then to a peak of 547,211 households in 2042. Additionally, new households requiring sanitation ranges from 43,871 in 2027, 92,853 by 2032 and 190,895 in 2042. Households requiring for sanitation facilities highlights the need for continuous investments in sanitation facilities to improve access to clean water and sanitation facilities.

Table 5.18: Number of households requiring sanitation facilities

Voor		Requirement		New Sanitation requirements as of 2022			
Year	Low	Medium	High	Low	Medium	High	
2022*	356,182	356,182	356,182	-	-	-	
2027	398,745	400,053	401,635	42,563	43,871	45,453	
2032	443,861	449,035	454,396	87,679	92,853	98,214	
2037	487,031	499,050	510,580	130,849	142,868	154,398	
2042	525,366	547,077	567,211	169,184	190,895	211,029	

The number of households without a reliable source or grade of electricity is related to affordable and clean energy of SDG 7. There are 316,752 households in 2022 who are without reliable source or grade of electricity in Liberia. By 2032, the number of households lacking reliable electricity is projected to increase by 105.1 per cent, adding 332,851 households to reach a total of 649,603.

Furthermore, projected households without reliable source/grade of electricity will increase to 791,437 households by 2042. The increasing number of households without reliable electricity suggests a widening gap in access to energy and most likely to affect progress in achieving SDG 7 (Affordable and Clean Energy).

Table 5.19: Number of households without reliable source/grade of electricity (public grade)

Year		Requirement		New requirements reliable electricity as of 2022			
	Low	Medium	High	Low	Medium	High	
2022*	316,752	316,752	316,752	-	-	-	
2027	576,850	578,742	581,032	260,098	261,990	264,280	
2032	642,118	649,603	657,359	325,366	332,851	340,607	
2037	704,570	721,959	738,639	387,818	405,207	421,887	
2042	760,029	791,437	820,564	443,277	474,685	503,812	

### Chapter 6: Conclusions, policy implications and recommendations

#### 6.1 Conclusions

Given the size of the population of Liberia in the age group, the population has a high potential of continuous growth, coupled with high fertility and the youthful nature of the population. The process leads to an ultimate population increase; a phenomenon referred to as positive "population momentum" which means that that population will continue to grow with the advent of fertility decline. The youth who constitute a large size of the population (23.6 per cent) are in their reproductive period and with a tendency to increase the population. Again, the increasing number of the adolescent population should be of concern as this segment of the population are about to enter or are already in their prime reproductive years, which may lead to large numbers of birth even when fertility is low.

Generally, the population size of Liberia will increase but at a decreasing rate. Between 2022 and 2032, the medium variant growth rate is 2.3 per cent compared with 3.0 per cent recorded between 2008-2022. At a transition, fertility will decline from high to low levels, this will result in the populations having large proportions of the population in their reproductive years, and this will lead to large numbers of children being born.

The ripple-effect from the obvious undercount or age shifting of the population 0-4 years and 5-9 years and the "bulge" observed among the young adult generations in 2022, can be observed in the rather irregular structures of the projected population pyramids of 2032, 2062 and 2065. The overall age-sex accuracy index of 2008 (31.8) was better than what was recorded in 2022 (46.6) which may be attributed to preference and avoiding for certain ages.

The age-dependency ratio fell between 2008 and 2022. This phenomenon implies a decrease in the proportion of the population which contributes to the ratio, particularly, the population 0-9 years. The working age group population (15-64 years) has increased by eight percentage points, compared with 2008 (55.0 per cent) and 2022 (63.0 per cent).

Liberia has become more urbanized in 2022 as more than half (54.5) of the population in urban areas compared to less than a third (29.0 per cent) of the population of Liberia live in urban areas in 1974.

The continuous increase in the urban share of the population is an indication of getting to densely populated areas (urbanized). There is high population concentration in the Montserrado County as it contains more than a third of the country's population.

As a result of the rapid population growth among the younger ages of the country, it would need additional education facilities to cater for about 300,000 pupils in 2032 and 616,476 pupils in 2042. With the growing of primary school enrolment, the number of teachers needed will also increase. With the current population in households engaged in population activities, there will be a gap of 466,564 persons in 2032 and by 2042, about a million additional population in households. The projections show that there are gaps in the number of medical doctors, nurses and health facilities due to the increase in the population size.

#### 6.2 Policy implications

The size and growth of the population of Liberia have implications on developmental planning initiatives. Planning strategies depend on the dynamics of the population and as such there is the need to pay particular attention to their growth and distribution.

Results of the 2022 Liberian Population and Housing Census indicates that compared with past censuses (1984 and 2008) the population size has drastically increased which is largely attributable to high fertility. youthful nature of the population and the return of Liberians after the war. The population projections show that the population will continue to grow from 5,250,187 in 2022 to 6,542,593 in 2032, a percentage increase of 26.1 per cent. By 2042, it is projected that population will further increase to 8,064,012 and then to 12,051,182 by 2065. With the current growth of the population, it is expected to double in the next 35 years. The increase in population size will have implications for development unless measures are employed to manage the high population growth. On the other hand, the population of the elderly, which is a common measure of ageing is projected to grow from 2.8 per cent in 2022 to 7.1 per cent in 2062. This is likely to have implications as the number of the elderly population will continue to grow. Currently, there seems to be limited programme of interventions to take care of the welfare of the elderly.

Changes in age structure, largely from the decline of the young population (0-9 years) which has resulted in decline in age dependency ratio. Furthermore, the decline in fertility and improved life expectancy has also influenced the age structure of the population. This change if managed well, with the right investment in education, health, infrastructure, jobs and good governance, can lead to reaping the 'demographic dividend'. Liberia should take advantage of this window of opportunity of demographic divided, though at the initial stage, it will increase savings and investment among the working population.

For the first time, more than half (54.5 per cent) of the population are now living in urban areas than in rural areas. This change in the location of the population has been attributed to natural growth within the urban population itself and the population moving from rural to urban centres (rural-urban migration). The implication of this situation has led to high population concentration in only a few urban areas, which will require resource needs which pose challenges for development planning.

There are four counties containing nearly half of the population but occupying less than 10 per cent of land. The projected growth of urban population would exacerbate pressure on land, settlements, physical infrastructure and social amenities. The urban areas will require critical attention by having urban planning policies which will include resource allocation such as road, water, electricity supply, education, health, among others to accommodate the increase demand for these resources.

The demand for health service delivery is far below the required standards set by the Government of Liberia and WHO. The projected population and the available health facilities mean that they are inadequate taking the future population growth into consideration. There are inadequate functioning health facilities particularly for those in remote areas of the country while at the same time the population size is increasing.

#### 6.3 Recommendations

The annual growth rate increased from 2.1 per cent between 1984 and 2008 to 3.0 per cent during the period 2008-2022. There is a negative relationship between the 2005 Revised Edition of the National Population Policy and the 2022 PHC results. Whereas the National Population Policy had a target of 2.5 by 2020, the census result saw an increase in the annual growth, accounting for 3.0 per cent. Therefore, there is the need to revise the National Population Policy

and set new population growth rate target to address the rapid population growth.

The age-sex irregularities observed in the 2022 census should be seriously addressed to facilitate policy programmes and interventions. There is the need to include questions on date of birth to serve as a check on ages given by respondents. There should also be rigorous training on reporting and estimating ages in order to minimize age misreporting and age shifting to obtain accurate ages from respondents in future surveys and censuses. In planning for the next population and housing census, it is important to provide concrete strategies to address issues to improve data quality and coverage.

It is important that educational facilities are provided to match the expected increase in the number of children of school age. This will also require that allocation of financial resources be reviewed upward to meet the budget of the ministry in charge of education and the size of this segment population continues to grow.

There should be planned policies to consider initiating developmental projects in rural areas to reduce the burden of high concentration in a few cities with high population densities. In the planning for Liberia, it is key to ensure that there is improvement in population distribution by adopting a balanced approach that promotes economic development of rural areas at the same time to reduce rural-urban migration. Such strategy will help take off the pressure on counties such as Montserrado, Nimba, Bong, etc. which are already highly populated.

The 2022 PHC age-sex accuracy index show a decline compared to what was computed for the 2008. This is an indication that the population reporting on their ages has fallen, thus, people do not report their ages accurately. One reason for the rise in the age-sex accuracy index which is a measure of errors in the data could be to the fact that date of birth information and the completed age techniques in the data collection 2022 census were not used. Asking of date of birth could serve as a check on the ages given by respondents during the data collection period.

The developmental disparities across the counties will require urgent attentions in embarking on initiatives to curb the rural-urban migration and reduce inequalities in Liberia. It is important to embark on developmental projects using internal growth pole initiatives across counties which have low population size and density but with high potential for development. Transformation in rural areas involves structural, cultural and economic transition of rural areas to a more economically viable society.

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### **Appendixes**

Table A1: Projected population by age, sex and variant

		Low Variant		ı	Medium Variant			High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
2022									
0-4	549,952	271,732	278,220	549,952	271,732	278,220	549,952	271,732	278,220
5-9	614,604	305,694	308,910	614,604	305,694	308,910	614,604	305,694	308,910
10-14	632,622	316,719	315,903	632,622	316,719	315,903	632,622	316,719	315,903
15-19	638,463	315,619	322,844	638,463	315,619	322,844	638,463	315,619	322,844
20-24	599,536	293,896	305,640	599,536	293,896	305,640	599,536	293,896	305,640
25-29	440,934	213,502	227,432	440,934	213,502	227,432	440,934	213,502	227,432
30-34	438,060	219,223	218,837	438,060	219,223	218,837	438,060	219,223	218,837
35-39	337,732	170,298	167,434	337,732	170,298	167,434	337,732	170,298	167,434
40-44	311,828	170,868	140,960	311,828	170,868	140,960	311,828	170,868	140,960
45-49	185,989	100,206	85,783	185,989	100,206	85,783	185,989	100,206	85,783
50-54	174,574	95,866	78,708	174,574	95,866	78,708	174,574	95,866	78,708
55-59	89,249	48,307	40,942	89,249	48,307	40,942	89,249	48,307	40,942
60-64	89,047	47,888	41,159	89,047	47,888	41,159	89,047	47,888	41,159
65-69	48,785	26,288	22,497	48,785	26,288	22,497	48,785	26,288	22,497
70-74	41,435	21,094	20,341	41,435	21,094	20,341	41,435	21,094	20,341
75-79	19,499	9,611	9,888	19,499	9,611	9,888	19,499	9,611	9,888
80+	37,878	17,216	20,662	37,878	17,216	20,662	37,878	17,216	20,662
Total	5,250,187	2,644,027	2,606,160	5,250,187	2,644,027	2,606,160	5,250,187	2,644,027	2,606,160
2023									
0-4	598,408	296,955	301,453	599,350	297,435	301,915	600,473	298,006	302,467
5-9	594,036	294,554	299,482	594,055	294,564	299,491	594,241	294,656	299,585
10-14	628,699	314,668	314,031	628,711	314,675	314,036	628,882	314,758	314,123
15-19	637,327	315,764	321,563	637,337	315,769	321,568	637,493	315,845	321,647
20-24	616,117	302,366	313,751	616,129	302,372	313,757	616,271	302,442	313,829
25-29	461,734	223,294	238,440	461,744	223,299	238,445	461,871	223,362	238,509
30-34	439,752	218,821	220,931	439,763	218,827	220,936	439,879	218,884	220,996

		Low Variant		N	Medium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
35-39	352,502	176,381	176,121	352,512	176,386	176,125	352,615	176,437	176,178	
40-44	320,902	173,699	147,203	320,912	173,705	147,207	321,002	173,750	147,252	
45-49	203,543	110,211	93,332	203,550	110,216	93,335	203,624	110,252	93,372	
50-54	177,736	97,135	80,600	177,744	97,140	80,604	177,807	97,171	80,637	
55-59	100,690	54,705	45,985	100,696	54,708	45,988	100,746	54,732	46,014	
60-64	87,955	47,119	40,836	87,959	47,122	40,837	87,998	47,141	40,856	
65-69	53,878	29,016	24,862	53,883	29,018	24,865	53,913	29,033	24,880	
70-74	41,199	21,066	20,133	41,205	21,069	20,136	41,228	21,080	20,147	
75-79	20,958	10,287	10,671	20,962	10,289	10,672	20,977	10,297	10,681	
80+	34,668	15,759	18,909	34,675	15,762	18,913	34,689	15,769	18,920	
Total	5,370,103	2,701,800	2,668,303	5,371,185	2,702,356	2,668,829	5,373,708	2,703,615	2,670,093	
2024										
0-4	649,822	323,519	326,302	652,713	324,994	327,719	655,976	326,658	329,319	
5-9	574,660	284,189	290,472	574,718	284,220	290,499	575,110	284,414	290,696	
10-14	624,786	312,263	312,523	624,822	312,282	312,540	625,176	312,457	312,720	
15-19	634,994	315,469	319,525	635,023	315,484	319,539	635,347	315,643	319,704	
20-24	624,989	306,930	318,059	625,025	306,950	318,075	625,325	307,099	318,227	
25-29	492,608	238,594	254,014	492,640	238,611	254,029	492,909	238,744	254,165	
30-34	433,810	214,113	219,696	433,841	214,130	219,711	434,086	214,251	219,836	
35-39	373,473	186,508	186,965	373,504	186,524	186,980	373,724	186,633	187,091	
40-44	322,513	171,471	151,041	322,543	171,489	151,054	322,736	171,586	151,150	
45-49	228,817	124,805	104,012	228,841	124,820	104,021	229,001	124,901	104,100	
50-54	174,928	94,901	80,027	174,952	94,914	80,038	175,088	94,981	80,107	
55-59	117,714	64,206	53,508	117,736	64,217	53,519	117,850	64,271	53,579	
60-64	83,699	44,671	39,028	83,711	44,680	39,030	83,794	44,723	39,070	
65-69	61,170	32,821	28,349	61,186	32,830	28,357	61,255	32,863	28,392	
70-74	39,616	20,417	19,199	39,630	20,425	19,206	39,681	20,450	19,232	
75-79	23,725	11,641	12,084	23,737	11,647	12,090	23,773	11,664	12,108	
80+	31,480	14,261	17,218	31,500	14,271	17,228	31,534	14,287	17,246	
Total	5,492,802	2,760,780	2,732,022	5,496,122	2,762,487	2,733,635	5,502,367	2,765,626	2,736,741	

		Low Variant		I	Medium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
2025										
0-4	704,557	351,703	352,854	710,965	354,941	356,023	716,917	358,001	358,916	
5-9	556,935	274,785	282,150	557,066	274,850	282,216	557,679	275,159	282,521	
10-14	620,278	309,340	310,938	620,355	309,379	310,977	620,899	309,650	311,249	
15-19	631,852	314,773	317,079	631,916	314,803	317,112	632,414	315,051	317,363	
20-24	627,973	308,576	319,397	628,049	308,614	319,435	628,516	308,849	319,668	
25-29	528,371	256,656	271,715	528,446	256,693	271,753	528,867	256,905	271,962	
30-34	425,707	208,132	217,575	425,774	208,164	217,610	426,153	208,353	217,800	
35-39	396,470	198,156	198,314	396,540	198,189	198,351	396,888	198,364	198,524	
40-44	320,672	166,871	153,802	320,736	166,904	153,832	321,040	167,059	153,981	
45-49	257,265	141,064	116,201	257,321	141,097	116,224	257,580	141,232	116,349	
50-54	170,392	91,687	78,705	170,440	91,711	78,729	170,653	91,819	78,834	
55-59	136,728	74,751	61,977	136,784	74,774	62,010	136,973	74,866	62,106	
60-64	79,063	42,081	36,982	79,085	42,098	36,987	79,215	42,167	37,048	
65-69	68,867	36,767	32,100	68,906	36,787	32,119	69,020	36,845	32,176	
70-74	37,917	19,744	18,173	37,946	19,759	18,187	38,028	19,801	18,227	
75-79	26,566	13,045	13,520	26,594	13,059	13,535	26,655	13,090	13,565	
80+	28,910	13,046	15,864	28,949	13,063	15,886	29,005	13,091	15,913	
Total	5,618,522	2,821,176	2,797,346	5,625,874	2,824,888	2,800,986	5,636,501	2,830,301	2,806,200	
2026										
0-4	762,402	381,413	380,989	773,428	386,970	386,459	783,167	391,975	391,193	
5-9	541,521	266,630	274,891	541,762	266,748	275,014	542,628	267,188	275,440	
10-14	614,225	305,604	308,620	614,357	305,669	308,688	615,100	306,042	309,059	
15-19	628,249	313,643	314,606	628,355	313,693	314,662	629,037	314,033	315,004	
20-24	628,070	308,911	319,159	628,198	308,974	319,224	628,844	309,299	319,544	
25-29	561,637	273,568	288,069	561,770	273,634	288,136	562,360	273,934	288,427	
30-34	423,074	205,110	217,964	423,186	205,162	218,024	423,708	205,424	218,284	
35-39	415,580	207,727	207,853	415,704	207,786	207,918	416,193	208,033	208,159	
40-44	321,109	163,704	157,405	321,216	163,758	157,458	321,642	163,976	157,665	
45-49	282,560	154,956	127,603	282,663	155,015	127,648	283,037	155,213	127,823	
50-54	169,939	90,932	79,007	170,015	90,971	79,043	170,313	91,125	79,188	
55-59	152,901	83,592	69,308	153,008	83,636	69,372	153,286	83,773	69,513	

		Low Variant		ı	Medium Variant	:	High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
60-64	77,668	41,319	36,349	77,703	41,346	36,356	77,884	41,445	36,439	
65-69	74,724	39,701	35,023	74,794	39,735	35,059	74,963	39,822	35,141	
70-74	37,569	19,746	17,823	37,617	19,770	17,847	37,734	19,831	17,903	
75-79	28,540	14,046	14,495	28,592	14,070	14,521	28,683	14,118	14,565	
80+	27,172	12,229	14,943	27,235	12,257	14,978	27,317	12,298	15,018	
Total	5,746,940	2,882,830	2,864,110	5,759,600	2,889,193	2,870,407	5,775,897	2,897,529	2,878,368	
2027										
0-4	822,935	412,440	410,494	839,697	420,869	418,827	854,354	428,388	425,966	
5-9	529,125	260,053	269,072	529,540	260,259	269,281	530,718	260,867	269,851	
10-14	605,832	300,784	305,048	606,031	300,880	305,151	606,987	301,361	305,626	
15-19	624,394	312,041	312,353	624,552	312,115	312,437	625,430	312,554	312,876	
20-24	627,502	309,107	318,395	627,690	309,199	318,491	628,527	309,623	318,905	
25-29	587,150	286,557	300,593	587,356	286,659	300,697	588,134	287,056	301,078	
30-34	430,991	207,867	223,124	431,158	207,945	223,214	431,839	208,286	223,553	
35-39	426,955	212,869	214,087	427,143	212,957	214,186	427,787	213,284	214,504	
40-44	327,659	164,533	163,126	327,820	164,612	163,208	328,382	164,901	163,481	
45-49	300,457	163,803	136,654	300,619	163,895	136,725	301,124	164,165	136,958	
50-54	177,336	94,836	82,500	177,447	94,896	82,551	177,844	95,103	82,741	
55-59	163,172	89,007	74,165	163,341	89,076	74,265	163,722	89,265	74,457	
60-64	81,726	43,570	38,156	81,778	43,612	38,166	82,021	43,746	38,275	
65-69	77,467	40,985	36,482	77,573	41,037	36,536	77,804	41,158	36,646	
70-74	39,346	20,776	18,571	39,419	20,812	18,606	39,578	20,896	18,682	
75-79	29,273	14,467	14,806	29,350	14,504	14,846	29,476	14,570	14,906	
80+	26,246	11,805	14,441	26,337	11,845	14,492	26,450	11,903	14,547	
Total	5,877,566	2,945,501	2,932,065	5,896,852	2,955,172	2,941,679	5,920,178	2,967,126	2,953,052	
2028										
0-4	840,376	421,236	419,140	863,179	432,653	430,525	883,033	442,816	440,217	
5-9	574,554	283,475	291,080	576,132	284,263	291,870	578,586	285,538	293,049	
10-14	585,642	289,870	295,772	585,921	290,001	295,920	587,099	290,594	296,505	
15-19	620,567	310,046	310,521	620,792	310,149	310,643	621,877	310,692	311,185	
20-24	626,430	309,279	317,151	626,691	309,403	317,288	627,733	309,931	317,802	
25-29	603,432	294,844	308,588	603,728	294,987	308,741	604,709	295,490	309,219	

		Low Variant		ı	Medium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
30-34	451,382	217,433	233,950	451,629	217,545	234,085	452,487	217,977	234,510	
35-39	428,648	212,498	216,150	428,913	212,618	216,295	429,723	213,030	216,693	
40-44	342,065	170,452	171,613	342,301	170,564	171,737	343,018	170,933	172,085	
45-49	309,231	166,518	142,714	309,467	166,646	142,820	310,112	166,994	143,118	
50-54	194,159	104,364	89,794	194,326	104,455	89,870	194,838	104,727	90,111	
55-59	166,112	90,161	75,951	166,352	90,257	76,095	166,843	90,501	76,342	
60-64	92,308	49,414	42,894	92,392	49,479	42,913	92,709	49,658	43,051	
65-69	76,436	40,282	36,154	76,581	40,353	36,228	76,877	40,509	36,368	
70-74	43,575	22,995	20,580	43,686	23,050	20,636	43,901	23,164	20,737	
75-79	29,020	14,410	14,610	29,128	14,461	14,667	29,292	14,548	14,744	
80+	25,748	11,613	14,135	25,873	11,667	14,206	26,024	11,745	14,279	
Total	6,009,686	3,008,890	3,000,796	6,037,091	3,022,553	3,014,539	6,068,863	3,038,847	3,030,016	
2029										
0-4	855,687	428,962	426,725	884,778	443,495	441,283	910,140	456,458	453,682	
5-9	623,848	308,818	315,030	627,592	310,684	316,908	632,286	313,116	319,170	
10-14	566,595	279,700	286,895	566,971	279,874	287,097	568,386	280,587	287,799	
15-19	616,750	307,701	309,049	617,053	307,838	309,215	618,354	308,490	309,864	
20-24	624,180	309,019	315,161	624,522	309,179	315,343	625,777	309,817	315,961	
25-29	612,172	299,328	312,844	612,568	299,517	313,051	613,767	300,134	313,634	
30-34	481,618	232,363	249,255	481,966	232,520	249,446	483,026	233,056	249,970	
35-39	422,909	207,949	214,960	423,255	208,104	215,151	424,238	208,602	215,636	
40-44	362,477	180,276	182,202	362,808	180,430	182,378	363,700	180,890	182,810	
45-49	310,841	164,394	146,447	311,155	164,560	146,594	311,951	164,989	146,962	
50-54	218,316	118,223	100,093	218,561	118,357	100,203	219,214	118,710	100,504	
55-59	163,505	88,081	75,423	163,815	88,204	75,610	164,421	88,504	75,916	
60-64	107,966	58,034	49,932	108,102	58,134	49,968	108,514	58,372	50,142	
65-69	72,702	38,170	34,532	72,880	38,258	34,623	73,241	38,448	34,793	
70-74	49,538	26,043	23,495	49,703	26,124	23,579	49,989	26,277	23,712	
75-79	27,866	13,954	13,913	28,002	14,018	13,984	28,205	14,126	14,079	
80+	25,866	11,701	14,165	26,034	11,773	14,261	26,229	11,873	14,355	
Total	6,142,836	3,072,715	3,070,121	6,179,764	3,091,069	3,088,695	6,221,438	3,112,448	3,108,990	

		Low Variant		ı	Medium Variant	İ		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
2030									
0-4	868,463	435,376	433,087	903,773	453,008	450,765	935,272	469,112	466,159
5-9	676,831	335,995	340,836	684,244	339,678	344,566	691,775	343,582	348,193
10-14	549,159	270,465	278,693	549,664	270,697	278,967	551,333	271,542	279,791
15-19	612,341	304,840	307,500	612,741	305,021	307,720	614,264	305,787	308,476
20-24	621,128	308,359	312,768	621,570	308,566	313,004	623,044	309,318	313,726
25-29	615,142	300,959	314,183	615,660	301,206	314,454	617,084	301,943	315,141
30-34	516,625	249,978	266,647	517,112	250,199	266,914	518,394	250,853	267,540
35-39	415,069	202,163	212,906	415,512	202,358	213,154	416,669	202,946	213,723
40-44	384,837	191,555	193,282	385,296	191,769	193,527	386,380	192,332	194,048
45-49	309,145	160,004	149,140	309,552	160,215	149,337	310,502	160,726	149,776
50-54	245,462	133,631	111,831	245,823	133,830	111,992	246,639	134,281	112,358
55-59	159,322	85,118	74,204	159,710	85,272	74,438	160,430	85,630	74,801
60-64	125,384	67,553	57,831	125,601	67,705	57,896	126,130	68,017	58,113
65-69	68,714	35,975	32,739	68,927	36,083	32,844	69,349	36,308	33,041
70-74	55,754	29,161	26,593	55,997	29,279	26,717	56,366	29,480	26,887
75-79	26,700	13,514	13,186	26,867	13,594	13,273	27,108	13,724	13,384
80+	26,222	11,894	14,327	26,443	11,990	14,453	26,688	12,117	14,570
Total	6,276,295	3,136,542	3,139,753	6,324,490	3,160,471	3,164,018	6,377,426	3,187,699	3,189,727
2031									
0-4	878,622	440,473	438,149	920,855	461,569	459,286	958,183	480,656	477,527
5-9	733,192	364,856	368,337	745,381	370,901	374,480	756,846	376,833	380,013
10-14	533,999	262,458	271,542	534,668	262,765	271,904	536,622	263,759	272,863
15-19	606,404	301,178	305,227	606,912	301,407	305,506	608,667	302,293	306,375
20-24	617,623	307,274	310,349	618,173	307,531	310,641	619,875	308,403	311,472
25-29	615,286	301,314	313,972	615,933	301,622	314,311	617,595	302,485	315,109
30-34	549,190	266,474	282,715	549,839	266,770	283,069	551,367	267,557	283,810
35-39	412,570	199,256	213,314	413,122	199,498	213,624	414,465	200,181	214,285
40-44	403,416	200,822	202,594	404,019	201,103	202,917	405,313	201,778	203,535
45-49	309,661	157,005	152,656	310,173	157,263	152,910	311,290	157,862	153,428
50-54	269,580	146,777	122,803	270,078	147,054	123,025	271,081	147,615	123,466
55-59	159,000	84,470	74,530	159,478	84,661	74,817	160,326	85,083	75,243

		Low Variant		ı	Medium Variant	t		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
60-64	140,146	75,500	64,646	140,464	75,714	64,751	141,128	76,109	65,019
65-69	67,632	35,396	32,237	67,884	35,527	32,357	68,375	35,792	32,584
70-74	60,412	31,439	28,974	60,741	31,598	29,143	61,204	31,851	29,353
75-79	26,555	13,571	12,985	26,760	13,670	13,090	27,046	13,825	13,220
80+	26,425	12,022	14,403	26,704	12,143	14,561	27,004	12,301	14,703
Total	6,409,715	3,200,283	3,209,432	6,471,184	3,230,794	3,240,390	6,536,387	3,264,384	3,272,003
2032									
0-4	886,174	444,254	441,920	935,449	468,885	466,564	978,791	491,048	487,744
5-9	792,424	395,146	397,278	810,534	404,113	406,421	827,060	412,640	414,419
10-14	521,808	256,000	265,808	522,706	256,418	266,289	525,003	257,598	267,405
15-19	598,157	296,445	301,712	598,782	296,727	302,055	600,779	297,737	303,042
20-24	613,875	305,727	308,148	614,540	306,039	308,501	616,480	307,034	309,446
25-29	614,777	301,533	313,244	615,562	301,908	313,654	617,472	302,903	314,568
30-34	574,178	279,150	295,028	575,004	279,528	295,476	576,797	280,458	296,339
35-39	420,363	201,967	218,395	421,045	202,266	218,779	422,599	203,057	219,542
40-44	414,487	205,802	208,685	415,242	206,153	209,090	416,755	206,945	209,810
45-49	316,075	157,846	158,229	316,712	158,161	158,551	318,018	158,860	159,158
50-54	286,641	155,135	131,506	287,288	155,492	131,796	288,492	156,171	132,321
55-59	166,046	88,172	77,874	166,643	88,413	78,230	167,646	88,915	78,731
60-64	149,471	80,333	69,138	149,900	80,610	69,290	150,708	81,094	69,615
65-69	71,354	37,429	33,925	71,664	37,595	34,068	72,244	37,914	34,330
70-74	62,511	32,387	30,123	62,923	32,588	30,335	63,481	32,893	30,588
75-79	27,950	14,350	13,600	28,206	14,475	13,731	28,551	14,664	13,887
80+	26,305	12,012	14,293	26,643	12,160	14,483	27,001	12,349	14,653
Total	6,542,593	3,263,688	3,278,906	6,618,845	3,301,533	3,317,312	6,697,879	3,342,281	3,355,598
2033									
0-4	890,604	446,461	444,143	947,525	474,944	472,581	997,021	500,248	496,773
5-9	809,495	403,712	405,783	833,771	415,711	418,060	855,597	426,946	428,651
10-14	566,572	279,031	287,541	568,733	280,077	288,656	572,375	281,964	290,411
15-19	578,260	285,702	292,558	579,002	286,036	292,966	581,242	287,170	294,071
20-24	610,161	303,794	306,367	610,951	304,165	306,786	613,139	305,289	307,850
25-29	613,776	301,727	312,049	614,706	302,173	312,533	616,876	303,307	313,570

		Low Variant		ı	Medium Variant	1	High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
30-34	590,149	287,247	302,902	591,161	287,713	303,448	593,233	288,792	304,441	
35-39	440,324	211,295	229,029	441,175	211,669	229,506	442,973	212,586	230,386	
40-44	416,170	205,453	210,717	417,075	205,872	211,203	418,809	206,779	212,030	
45-49	330,063	163,570	166,492	330,856	163,959	166,897	332,379	164,774	167,605	
50-54	295,026	157,689	137,337	295,823	158,124	137,699	297,232	158,918	138,313	
55-59	181,913	97,101	84,812	182,676	97,416	85,260	183,878	98,023	85,855	
60-64	152,093	81,323	70,770	152,630	81,659	70,971	153,581	82,225	71,356	
65-69	80,761	42,544	38,216	81,164	42,767	38,397	81,868	43,161	38,708	
70-74	61,570	31,768	29,802	62,050	32,002	30,048	62,695	32,355	30,340	
75-79	31,080	15,945	15,135	31,414	16,109	15,305	31,840	16,344	15,496	
80+	25,844	11,856	13,989	26,241	12,031	14,210	26,659	12,251	14,407	
Total	6,673,861	3,326,218	3,347,643	6,766,952	3,372,426	3,394,527	6,861,395	3,421,132	3,440,263	
2034										
0-4	892,549	447,436	445,113	957,186	479,770	477,416	1,012,875	508,259	504,616	
5-9	824,496	411,228	413,267	855,253	426,422	428,831	882,667	440,523	442,144	
10-14	615,232	304,001	311,231	619,667	306,172	313,496	625,612	309,256	316,356	
15-19	559,487	275,690	283,797	560,364	276,083	284,281	562,856	277,348	285,508	
20-24	606,458	301,518	304,940	607,387	301,951	305,436	609,826	303,208	306,618	
25-29	611,619	301,500	310,119	612,706	302,019	310,686	615,139	303,296	311,842	
30-34	598,750	291,640	307,110	599,959	292,196	307,762	602,313	293,429	308,884	
35-39	469,881	225,833	244,048	470,948	226,302	244,646	473,025	227,370	245,655	
40-44	410,650	201,070	209,580	411,703	201,551	210,152	413,648	202,569	211,080	
45-49	349,828	173,034	176,794	350,818	173,515	177,302	352,588	174,468	178,120	
50-54	296,615	155,677	140,938	297,563	156,182	141,381	299,167	157,085	142,082	
55-59	204,616	110,035	94,581	205,607	110,453	95,154	207,056	111,196	95,860	
60-64	149,683	79,424	70,259	150,320	79,808	70,512	151,404	80,449	70,955	
65-69	94,532	50,008	44,524	95,081	50,313	44,768	95,947	50,809	45,138	
70-74	58,509	30,069	28,440	59,041	30,328	28,713	59,755	30,719	29,036	
75-79	35,395	18,086	17,309	35,836	18,301	17,535	36,367	18,597	17,770	
80+	25,261	11,651	13,610	25,717	11,853	13,865	26,194	12,106	14,087	
Total	6,803,560	3,387,899	3,415,661	6,915,155	3,443,220	3,471,935	7,026,439	3,500,687	3,525,751	

		Low Variant		ı	Medium Variant	İ		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
2035									
0-4	892,161	447,252	444,909	964,489	483,427	481,061	1,026,440	515,127	511,312
5-9	837,113	417,541	419,572	874,196	435,864	438,332	907,869	453,173	454,696
10-14	667,573	330,802	336,771	675,766	334,826	340,940	684,625	339,427	345,198
15-19	542,309	266,605	275,705	543,344	267,068	276,276	546,106	268,474	277,632
20-24	602,176	298,739	303,436	603,253	299,239	304,014	605,952	300,633	305,319
25-29	608,682	300,889	307,793	609,931	301,486	308,445	612,634	302,909	309,725
30-34	601,719	293,262	308,457	603,126	293,911	309,215	605,770	295,302	310,469
35-39	504,091	242,982	261,108	505,417	243,569	261,849	507,813	244,810	263,002
40-44	403,113	195,505	207,608	404,311	196,046	208,265	406,469	197,173	209,296
45-49	371,459	183,890	187,569	372,678	184,480	188,198	374,727	185,589	189,138
50-54	295,098	151,548	143,550	296,190	152,116	144,075	297,989	153,124	144,866
55-59	230,088	124,385	105,703	231,360	124,932	106,428	233,099	125,839	107,260
60-64	145,906	76,778	69,128	146,636	77,205	69,431	147,854	77,917	69,937
65-69	109,749	58,194	51,555	110,487	58,603	51,884	111,554	59,225	52,329
70-74	55,349	28,366	26,983	55,922	28,646	27,276	56,701	29,073	27,628
75-79	39,816	20,237	19,578	40,387	20,514	19,873	41,041	20,881	20,161
80+	24,876	11,546	13,330	25,396	11,777	13,619	25,937	12,067	13,870
Total	6,931,278	3,448,522	3,482,756	7,062,889	3,513,710	3,549,179	7,192,581	3,580,743	3,611,837
2036									
0-4	889,524	445,941	443,583	969,568	485,977	483,591	1,037,723	520,866	516,858
5-9	847,211	422,591	424,621	891,302	444,392	446,910	930,951	464,772	466,179
10-14	723,254	359,266	363,988	736,315	365,688	370,627	749,183	372,363	376,820
15-19	527,385	258,734	268,651	528,611	259,284	269,327	531,673	260,848	270,825
20-24	596,390	295,174	301,216	597,624	295,744	301,880	600,588	297,278	303,310
25-29	605,303	299,862	305,441	606,720	300,539	306,181	609,700	302,114	307,586
30-34	601,926	293,642	308,284	603,534	294,386	309,149	606,476	295,938	310,538
35-39	535,916	259,043	276,872	537,530	259,760	277,770	540,272	261,192	279,079
40-44	400,776	192,734	208,042	402,138	193,342	208,796	404,527	194,588	209,939
45-49	389,429	192,802	196,627	390,894	193,510	197,384	393,236	194,783	198,453
50-54	295,722	148,756	146,966	296,971	149,392	147,579	298,975	150,512	148,463
55-59	252,699	136,604	116,095	254,280	137,292	116,988	256,326	138,378	117,948

		Low Variant		ı	Medium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
60-64	145,733	76,271	69,462	146,575	76,752	69,823	147,954	77,547	70,407	
65-69	122,560	64,976	57,584	123,508	65,499	58,009	124,795	66,258	58,537	
70-74	54,646	28,002	26,643	55,274	28,313	26,961	56,136	28,787	27,348	
75-79	43,050	21,766	21,284	43,753	22,104	21,649	44,537	22,544	21,992	
80+	25,042	11,701	13,342	25,638	11,967	13,671	26,256	12,299	13,956	
Total	7,056,567	3,507,865	3,548,702	7,210,236	3,583,943	3,626,293	7,359,305	3,661,066	3,698,239	
2037										
0-4	884,641	443,505	441,136	972,311	487,360	484,951	1,046,643	525,431	521,212	
5-9	854,795	426,377	428,419	906,032	451,735	454,296	951,822	475,274	476,548	
10-14	781,799	389,155	392,645	800,874	398,532	402,342	818,876	407,849	411,027	
15-19	515,399	252,397	263,002	516,881	253,068	263,813	520,300	254,828	265,472	
20-24	588,328	290,559	297,770	589,724	291,202	298,522	592,958	292,878	300,079	
25-29	601,689	298,384	303,304	603,280	299,145	304,135	606,542	300,874	305,669	
30-34	601,492	293,890	307,602	603,309	294,733	308,576	606,556	296,453	310,103	
35-39	560,350	271,391	288,959	562,262	272,245	290,017	565,364	273,875	291,489	
40-44	408,443	195,405	213,038	410,012	196,102	213,911	412,669	197,488	215,181	
45-49	400,149	197,592	202,556	401,856	198,414	203,442	404,492	199,849	204,642	
50-54	301,987	149,617	152,370	303,425	150,339	153,086	305,666	151,589	154,077	
55-59	268,697	144,352	124,345	270,583	145,178	125,405	272,923	146,439	126,483	
60-64	152,352	79,724	72,628	153,352	80,287	73,065	154,947	81,195	73,752	
65-69	130,577	69,053	61,524	131,728	69,682	62,046	133,231	70,573	62,658	
70-74	57,897	29,749	28,148	58,627	30,115	28,512	59,611	30,662	28,949	
75-79	44,418	22,352	22,066	45,237	22,745	22,492	46,139	23,251	22,888	
80+	25,906	12,176	13,730	26,597	12,487	14,110	27,310	12,872	14,438	
Total	7,178,920	3,565,677	3,613,243	7,356,092	3,653,369	3,702,723	7,526,048	3,741,380	3,784,668	
2038										
0-4	878,449	440,412	438,037	973,158	487,803	485,355	1,053,656	529,051	524,606	
5-9	859,382	428,660	430,722	918,357	457,876	460,481	970,401	484,640	485,761	
10-14	798,723	397,632	401,091	824,010	410,053	413,957	847,347	422,104	425,243	
15-19	559,662	275,135	284,527	562,495	276,471	286,024	567,318	278,975	288,343	
20-24	568,791	280,038	288,753	570,329	280,745	289,584	573,820	282,556	291,264	
25-29	598,111	296,530	301,581	599,885	297,378	302,507	603,436	299,263	304,172	

		Low Variant		ı	Medium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
30-34	600,575	294,113	306,462	602,606	295,059	307,547	606,168	296,953	309,215	
35-39	575,993	279,291	296,702	578,199	280,280	297,918	581,663	282,111	299,552	
40-44	427,931	204,477	223,453	429,772	205,295	224,477	432,753	206,856	225,897	
45-49	401,815	197,268	204,547	403,741	198,189	205,552	406,654	199,774	206,880	
50-54	315,473	155,106	160,367	317,153	155,944	161,209	319,681	157,356	162,325	
55-59	276,592	146,706	129,887	278,754	147,649	131,105	281,351	149,070	132,281	
60-64	167,047	87,902	79,145	168,281	88,592	79,688	170,173	89,661	80,512	
65-69	132,758	69,832	62,926	134,079	70,546	63,533	135,772	71,549	64,223	
70-74	65,748	33,939	31,809	66,653	34,399	32,254	67,824	35,061	32,764	
75-79	43,634	21,860	21,774	44,533	22,290	22,242	45,527	22,847	22,680	
80+	27,509	12,991	14,517	28,323	13,360	14,963	29,155	13,812	15,343	
Total	7,298,191	3,621,890	3,676,301	7,500,327	3,721,931	3,778,396	7,692,698	3,821,636	3,871,062	
2039										
0-4	870,975	436,707	434,268	972,826	487,634	485,192	1,059,478	532,080	527,399	
5-9	861,548	429,754	431,793	928,321	462,835	465,487	986,676	492,869	493,807	
10-14	813,601	405,077	408,524	845,419	420,703	424,715	874,378	435,648	438,730	
15-19	607,790	299,796	307,994	612,988	302,293	310,695	620,171	306,030	314,141	
20-24	550,366	270,244	280,122	552,070	271,021	281,049	555,822	272,972	282,850	
25-29	594,538	294,339	300,199	596,516	295,277	301,239	600,356	297,323	303,033	
30-34	598,517	293,925	304,592	600,781	294,977	305,803	604,653	297,049	307,605	
35-39	584,443	283,593	300,850	586,950	284,715	302,234	590,769	286,746	304,023	
40-44	456,724	218,587	238,137	458,923	219,560	239,363	462,285	221,334	240,951	
45-49	396,539	193,078	203,461	398,669	194,083	204,586	401,832	195,801	206,031	
50-54	334,445	164,131	170,315	336,442	165,116	171,326	339,304	166,723	172,581	
55-59	278,156	144,833	133,323	280,576	145,871	134,705	283,383	147,429	135,953	
60-64	187,959	99,671	88,287	189,510	100,539	88,972	191,787	101,820	89,967	
65-69	130,617	68,169	62,449	132,079	68,944	63,135	133,928	70,035	63,893	
70-74	77,052	39,949	37,103	78,223	40,546	37,677	79,648	41,366	38,282	
75-79	41,409	20,660	20,749	42,358	21,111	21,247	43,415	21,702	21,713	
80+	29,596	14,025	15,571	30,565	14,464	16,102	31,539	14,997	16,543	
Total	7,414,276	3,676,538	3,737,738	7,643,217	3,789,690	3,853,527	7,859,424	3,901,923	3,957,501	

		Low Variant		N	Medium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
2040										
0-4	862,617	432,557	430,060	971,639	487,049	484,590	1,064,552	534,734	529,818	
5-9	861,451	429,732	431,720	936,007	466,670	469,337	1,000,721	500,001	500,720	
10-14	826,130	411,338	414,792	864,324	430,106	434,218	899,572	448,284	451,288	
15-19	659,559	326,264	333,295	668,601	330,646	337,955	678,759	335,940	342,820	
20-24	533,521	261,367	272,153	535,408	262,223	273,185	539,439	264,323	275,117	
25-29	590,398	291,658	298,740	592,585	292,689	299,897	596,721	294,897	301,824	
30-34	595,696	293,363	302,334	598,193	294,524	303,669	602,383	296,775	305,608	
35-39	587,403	285,205	302,197	590,200	286,457	303,743	594,373	288,687	305,686	
40-44	490,029	235,219	254,810	492,649	236,380	256,269	496,448	238,402	258,047	
45-49	389,338	187,768	201,570	391,663	188,848	202,815	395,069	190,694	204,375	
50-54	355,170	174,457	180,713	357,522	175,616	181,907	360,768	177,445	183,323	
55-59	276,856	141,021	135,835	279,516	142,138	137,378	282,512	143,820	138,692	
60-64	211,343	112,674	98,669	213,286	113,758	99,528	216,011	115,294	100,718	
65-69	127,397	65,930	61,467	128,978	66,755	62,222	130,975	67,924	63,050	
70-74	89,405	46,461	42,944	90,906	47,228	43,679	92,640	48,240	44,400	
75-79	39,229	19,521	19,708	40,213	19,988	20,225	41,324	20,607	20,716	
80+	31,708	15,050	16,658	32,851	15,566	17,285	33,984	16,190	17,794	
Total	7,527,250	3,729,584	3,797,665	7,784,540	3,856,638	3,927,902	8,026,251	3,982,255	4,043,996	
2041										
0-4	853,798	428,173	425,626	970,132	486,318	483,814	1,069,430	537,285	532,145	
5-9	859,169	428,621	430,548	941,521	469,426	472,095	1,012,558	506,044	506,514	
10-14	836,173	416,356	419,817	881,418	438,610	442,808	922,679	459,886	462,792	
15-19	714,610	354,357	360,253	728,607	361,168	367,439	742,840	368,578	374,263	
20-24	518,897	253,685	265,213	521,000	254,635	266,365	525,341	256,901	268,440	
25-29	584,783	288,208	296,575	587,182	289,332	297,850	591,616	291,703	299,913	
30-34	592,445	292,395	300,050	595,177	293,667	301,510	599,689	296,100	303,588	
35-39	587,669	285,611	302,058	590,751	286,993	303,759	595,281	289,422	305,859	
40-44	521,009	250,793	270,216	524,082	252,158	271,923	528,351	254,447	273,904	
45-49	387,181	185,157	202,024	389,731	186,326	203,405	393,407	188,314	205,094	
50-54	372,371	182,923	189,448	375,090	184,260	190,829	378,735	186,318	192,417	
55-59	277,602	138,484	139,119	280,519	139,687	140,831	283,724	141,501	142,223	

		Low Variant		ı	Medium Variant	İ		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
60-64	232,053	123,703	108,350	234,423	125,014	109,409	237,610	126,818	110,792
65-69	127,435	65,598	61,836	129,164	66,493	62,671	131,350	67,761	63,589
70-74	99,689	51,790	47,900	101,534	52,729	48,805	103,591	53,940	49,651
75-79	38,916	19,374	19,543	39,967	19,874	20,094	41,163	20,542	20,621
80+	33,324	15,814	17,510	34,642	16,408	18,234	35,939	17,123	18,815
Total	7,637,127	3,781,040	3,856,087	7,924,939	3,923,098	4,001,841	8,193,302	4,062,682	4,130,620
2042									
0-4	845,049	423,818	421,231	968,892	485,732	483,160	1,074,826	540,081	534,745
5-9	854,706	426,426	428,280	944,780	471,062	473,718	1,022,098	510,950	511,148
10-14	843,736	420,129	423,607	896,167	445,948	450,219	943,605	470,408	473,197
15-19	772,454	383,828	388,627	792,558	393,627	398,931	811,993	403,721	408,272
20-24	507,166	247,507	259,659	509,548	248,588	260,961	514,257	251,055	263,202
25-29	576,934	283,731	293,203	579,542	284,949	294,593	584,275	287,481	296,795
30-34	588,965	290,988	297,978	591,936	292,372	299,564	596,773	294,987	301,786
35-39	587,309	285,888	301,420	590,680	287,404	303,276	595,573	290,037	305,537
40-44	544,806	262,772	282,034	548,328	264,342	283,986	553,072	266,899	286,173
45-49	394,700	187,785	206,915	397,547	189,080	208,467	401,555	191,245	210,310
50-54	382,632	187,470	195,163	385,697	188,970	196,727	389,724	191,242	198,482
55-59	283,657	139,364	144,293	286,877	140,684	146,192	290,355	142,660	147,694
60-64	246,680	130,663	116,017	249,472	132,180	117,292	253,082	134,232	118,849
65-69	133,474	68,718	64,756	135,433	69,730	65,704	137,898	71,148	66,750
70-74	106,018	54,926	51,092	108,172	56,017	52,155	110,523	57,406	53,117
75-79	41,494	20,728	20,765	42,689	21,301	21,388	44,034	22,058	21,977
80+	34,212	16,211	18,001	35,691	16,876	18,815	37,144	17,678	19,466
Total	7,743,991	3,830,951	3,913,041	8,064,009	3,988,863	4,075,146	8,360,788	4,143,289	4,217,500
2043									
0-4	837,908	420,265	417,643	969,767	486,225	483,542	1,082,882	544,203	538,679
5-9	848,959	423,597	425,361	946,202	471,789	474,414	1,029,774	514,933	514,841
10-14	848,341	422,423	425,918	908,541	452,101	456,440	962,267	479,808	482,459
15-19	789,227	392,217	397,010	815,574	405,065	410,510	840,369	417,907	422,462
20-24	550,841	269,884	280,956	554,681	271,679	283,002	560,869	274,936	285,933
25-29	557,820	273,480	284,340	560,592	274,770	285,822	565,591	277,440	288,151

		Low Variant		ı	/ledium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
30-34	585,524	289,213	296,311	588,739	290,712	298,027	593,907	293,508	300,399	
35-39	586,475	286,142	300,333	590,137	287,796	302,341	595,401	290,635	304,766	
40-44	560,064	270,449	289,615	564,011	272,214	291,797	569,216	275,028	294,188	
45-49	413,635	196,566	217,070	416,884	198,039	218,845	421,313	200,436	220,877	
50-54	384,247	187,164	197,083	387,610	188,798	198,812	391,975	191,252	200,723	
55-59	296,484	144,557	151,927	300,084	146,043	154,042	303,926	148,231	155,695	
60-64	253,901	132,744	121,157	257,075	134,426	122,649	261,033	136,684	124,349	
65-69	146,566	75,905	70,662	148,884	77,109	71,775	151,756	78,755	73,001	
70-74	107,628	55,445	52,183	110,014	56,646	53,369	112,601	58,169	54,431	
75-79	47,346	23,775	23,571	48,799	24,478	24,321	50,391	25,383	25,008	
80+	34,318	16,217	18,101	35,936	16,944	18,993	37,532	17,822	19,710	
Total	7,849,283	3,880,042	3,969,241	8,203,532	4,054,831	4,148,701	8,530,802	4,225,130	4,305,671	
2044										
0-4	833,769	418,180	415,590	974,670	488,724	485,946	1,095,809	550,766	545,043	
5-9	841,984	420,157	421,827	946,412	471,916	474,495	1,036,274	518,329	517,944	
10-14	850,559	423,538	427,021	918,577	457,089	461,488	978,651	488,083	490,568	
15-19	803,980	399,582	404,398	836,884	415,645	421,240	867,327	431,393	435,934	
20-24	598,284	294,118	304,166	604,601	297,128	307,474	613,229	301,666	311,563	
25-29	539,802	263,938	275,865	542,757	265,310	277,448	548,025	268,120	279,905	
30-34	582,088	287,102	294,986	585,567	288,725	296,842	591,064	291,702	299,362	
35-39	584,525	285,987	298,538	588,491	287,789	300,702	594,119	290,835	303,284	
40-44	568,337	274,639	293,698	572,697	276,596	296,101	578,342	279,658	298,684	
45-49	441,547	210,172	231,374	445,321	211,888	233,433	450,259	214,574	235,685	
50-54	379,249	183,197	196,052	382,872	184,941	197,932	387,522	187,544	199,978	
55-59	314,438	153,020	161,418	318,513	154,730	163,783	322,803	157,181	165,622	
60-64	255,375	131,025	124,349	258,898	132,834	126,064	263,125	135,253	127,872	
65-69	165,016	86,134	78,882	167,841	87,615	80,226	171,242	89,567	81,675	
70-74	105,828	54,069	51,759	108,383	55,343	53,039	111,140	56,959	54,180	
75-79	55,573	28,032	27,541	57,407	28,926	28,481	59,340	30,040	29,300	
80+	33,995	16,011	17,984	35,743	16,794	18,949	37,467	17,741	19,726	
Total	7,954,350	3,928,902	4,025,448	8,345,636	4,121,992	4,223,644	8,705,737	4,309,412	4,396,325	

		Low Variant		ı	Medium Variant	:		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
2045									
0-4	833,058	417,817	415,241	984,178	493,536	490,642	1,114,491	560,220	554,271
5-9	834,138	416,278	417,860	945,783	471,636	474,147	1,042,016	521,335	520,681
10-14	850,542	423,551	426,991	926,362	460,969	465,393	992,829	495,273	497,556
15-19	816,414	405,781	410,633	855,722	424,995	430,727	892,472	443,984	448,488
20-24	649,278	320,101	329,177	659,552	325,049	334,503	671,243	331,195	340,048
25-29	523,337	255,293	268,045	526,491	256,755	269,736	532,043	259,714	272,329
30-34	578,097	284,513	293,584	581,843	286,260	295,583	587,672	289,417	298,255
35-39	581,829	285,468	296,361	586,096	287,418	298,678	592,091	290,671	301,420
40-44	571,282	276,230	295,052	576,027	278,368	297,659	582,096	281,666	300,430
45-49	473,798	226,192	247,607	478,187	228,196	249,992	483,710	231,217	252,493
50-54	372,451	178,189	194,261	376,309	180,027	196,283	381,227	182,764	198,463
55-59	334,001	162,672	171,329	338,604	164,642	173,962	343,404	167,391	176,013
60-64	254,300	127,601	126,699	258,142	129,507	128,635	262,601	132,058	130,543
65-69	185,522	97,356	88,167	188,964	99,169	89,795	192,983	101,484	91,500
70-74	103,301	52,324	50,978	105,989	53,653	52,337	108,898	55,343	53,555
75-79	64,415	32,561	31,854	66,707	33,684	33,023	69,044	35,045	34,000
80+	33,875	15,915	17,960	35,760	16,760	19,001	37,622	17,781	19,841
Total	8,059,638	3,977,840	4,081,799	8,490,719	4,190,623	4,300,096	8,886,443	4,396,558	4,489,885
2046									
0-4	836,053	419,316	416,738	998,290	500,661	497,629	1,139,717	572,966	566,752
5-9	825,828	412,162	413,667	944,822	471,199	473,623	1,047,541	524,214	523,326
10-14	848,367	422,491	425,876	932,000	463,785	468,215	1,004,821	501,385	503,435
15-19	826,393	410,754	415,639	872,772	433,460	439,311	915,557	455,556	460,002
20-24	703,476	347,658	355,818	718,822	355,090	363,732	734,679	363,404	371,274
25-29	509,052	247,814	261,237	512,438	249,384	263,054	518,304	252,509	265,796
30-34	572,661	281,173	291,488	576,670	283,042	293,628	582,830	286,376	296,454
35-39	578,714	284,554	294,160	583,283	286,655	296,628	589,646	290,113	299,533
40-44	571,611	276,655	294,956	576,727	278,970	297,757	583,215	282,501	300,715
45-49	503,790	241,185	262,605	508,827	243,496	265,330	514,967	246,873	268,095
50-54	370,514	175,767	194,747	374,652	177,720	196,932	379,878	180,614	199,263
55-59	350,221	170,565	179,656	355,345	172,796	182,550	360,666	175,845	184,821

		Low Variant		ı	Medium Variant	i	High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
60-64	255,165	125,376	129,789	259,350	127,391	131,958	264,069	130,085	133,983	
65-69	203,602	106,811	96,791	207,693	108,962	98,731	212,340	111,644	100,696	
70-74	103,566	52,185	51,381	106,441	53,601	52,840	109,561	55,399	54,162	
75-79	71,646	36,190	35,456	74,396	37,540	36,856	77,140	39,145	37,995	
80+	34,683	16,294	18,389	36,751	17,223	19,528	38,791	18,343	20,448	
Total	8,165,343	4,026,950	4,138,394	8,639,279	4,260,974	4,378,305	9,073,723	4,486,972	4,586,751	
2047										
0-4	842,974	422,785	420,189	1,018,636	510,916	507,720	1,172,219	589,369	582,850	
5-9	817,571	408,063	409,508	944,131	470,905	473,226	1,053,578	527,336	526,243	
10-14	844,036	420,361	423,675	935,408	465,494	469,914	1,014,540	506,374	508,165	
15-19	833,922	414,499	419,422	887,504	440,775	446,729	936,488	466,062	470,427	
20-24	760,400	376,550	383,849	781,974	387,027	394,948	803,130	398,082	405,048	
25-29	497,601	241,805	255,796	501,288	243,519	257,769	507,529	246,845	260,684	
30-34	565,034	276,830	288,204	569,297	278,818	290,479	575,783	282,324	293,459	
35-39	575,380	283,213	292,166	580,251	285,463	294,788	586,985	289,126	297,859	
40-44	571,331	276,957	294,374	576,818	279,453	297,365	583,732	283,219	300,513	
45-49	526,835	252,719	274,117	532,498	255,329	277,168	539,248	259,053	280,195	
50-54	377,856	178,334	199,522	382,382	180,460	201,922	388,009	183,568	204,440	
55-59	359,904	174,788	185,116	365,490	177,251	188,239	371,292	180,570	190,722	
60-64	260,929	126,273	134,655	265,531	128,446	137,085	270,599	131,333	139,266	
65-69	216,321	112,718	103,603	221,023	115,165	105,858	226,233	118,173	108,060	
70-74	108,794	54,851	53,942	111,992	56,430	55,563	115,456	58,416	57,040	
75-79	75,979	38,253	37,726	79,116	39,791	39,325	82,212	41,602	40,610	
80+	36,776	17,322	19,454	39,100	18,371	20,729	41,385	19,629	21,755	
Total	8,271,643	4,076,324	4,195,319	8,792,440	4,333,613	4,458,827	9,268,416	4,581,080	4,687,336	
2048										
0-4	852,407	427,523	424,884	1,043,073	523,228	519,845	1,210,471	608,664	601,807	
5-9	810,814	404,695	406,119	945,486	471,641	473,845	1,062,205	531,740	530,465	
10-14	838,435	417,605	420,830	937,000	466,305	470,695	1,022,415	510,452	511,963	
15-19	838,528	416,785	421,742	899,889	446,921	452,968	955,182	475,461	479,721	
20-24	776,966	384,806	392,161	804,814	398,340	406,474	831,361	412,157	419,203	
25-29	540,540	263,717	276,823	545,830	266,221	279,610	553,656	270,399	283,257	

		Low Variant		ı	/ledium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
30-34	546,369	266,851	279,518	550,805	268,918	281,887	557,558	272,557	285,001	
35-39	572,085	281,515	290,570	577,264	283,914	293,350	584,371	287,779	296,593	
40-44	570,587	277,235	293,351	576,446	279,916	296,530	583,791	283,921	299,870	
45-49	541,632	260,118	281,514	547,869	263,005	284,864	555,194	267,052	288,142	
50-54	396,118	186,743	209,375	401,190	189,125	212,065	407,350	192,530	214,820	
55-59	361,471	174,491	186,980	367,414	177,130	190,284	373,619	180,663	192,956	
60-64	272,897	131,079	141,819	278,036	133,485	144,551	283,583	136,642	146,941	
65-69	222,593	114,426	108,166	227,810	117,093	110,717	233,470	120,353	113,117	
70-74	119,745	60,758	58,988	123,465	62,610	60,855	127,456	64,896	62,560	
75-79	76,955	38,502	38,453	80,359	40,163	40,196	83,712	42,116	41,596	
80+	40,219	19,029	21,190	42,895	20,246	22,649	45,506	21,691	23,815	
Total	8,378,360	4,125,877	4,252,482	8,949,646	4,408,262	4,541,384	9,470,897	4,679,071	4,791,826	
2049										
0-4	862,572	432,666	429,906	1,069,715	536,625	533,090	1,252,372	629,796	622,576	
5-9	806,950	402,760	404,190	950,710	474,302	476,407	1,075,588	538,515	537,073	
10-14	831,623	414,255	417,367	937,387	466,525	470,863	1,029,125	513,949	515,176	
15-19	840,774	417,914	422,860	909,962	451,917	458,044	971,624	483,750	487,874	
20-24	791,547	392,064	399,482	825,979	408,815	417,164	858,202	425,549	432,652	
25-29	587,159	287,437	299,723	595,081	291,229	303,852	605,458	296,755	308,703	
30-34	528,776	257,568	271,209	533,404	259,718	273,686	540,425	263,492	276,932	
35-39	568,796	279,496	289,300	574,302	282,045	292,257	581,781	286,110	295,671	
40-44	568,755	277,126	291,629	574,995	279,991	295,003	582,760	284,234	298,526	
45-49	549,690	264,181	285,509	556,463	267,320	289,143	564,321	271,667	292,654	
50-54	422,940	199,729	223,210	428,735	202,450	226,285	435,555	206,234	229,321	
55-59	356,850	170,805	186,045	363,070	173,567	189,503	369,594	177,261	192,333	
60-64	289,535	138,832	150,702	295,338	141,547	153,791	301,480	145,048	156,432	
65-69	223,920	112,913	111,007	229,576	115,724	113,852	235,569	119,161	116,407	
70-74	134,953	69,037	65,916	139,405	71,271	68,134	144,094	73,966	70,127	
75-79	75,602	37,498	38,104	79,176	39,224	39,952	82,694	41,260	41,435	
80+	44,578	21,190	23,387	47,701	22,618	25,083	50,712	24,295	26,417	
Total	8,485,018	4,175,471	4,309,547	9,110,998	4,484,887	4,626,110	9,681,354	4,781,044	4,900,310	

		Low Variant		ı	Medium Variant	:		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
2050									
0-4	873,110	437,993	435,117	1,098,058	550,879	547,179	1,297,494	652,551	644,943
5-9	806,390	402,479	403,912	960,430	479,209	481,221	1,094,632	548,122	546,510
10-14	823,947	410,471	413,475	936,945	466,340	470,605	1,035,087	517,061	518,026
15-19	840,812	417,957	422,856	917,805	455,819	461,987	985,882	490,967	494,915
20-24	803,845	398,179	405,666	844,709	418,083	426,626	883,263	438,065	445,197
25-29	637,249	312,857	324,392	649,284	318,660	330,624	662,850	325,869	336,981
30-34	512,705	249,160	263,545	517,540	251,402	266,138	524,845	255,321	269,524
35-39	564,963	277,009	287,954	570,798	279,707	291,090	578,649	283,970	294,678
40-44	566,196	276,662	289,534	572,811	279,713	293,098	580,997	284,192	296,805
45-49	552,607	265,753	286,854	559,867	269,121	290,746	568,227	273,748	294,480
50-54	453,885	214,990	238,895	460,523	218,113	242,410	468,106	222,340	245,766
55-59	350,583	166,178	184,404	357,043	169,040	188,003	363,857	172,871	190,985
60-64	307,585	147,625	159,961	314,126	150,697	163,430	320,946	154,591	166,355
65-69	223,131	109,997	113,135	229,170	112,908	116,261	235,439	116,478	118,961
70-74	151,692	78,016	73,676	157,017	80,700	76,317	162,519	83,876	78,643
75-79	73,893	36,330	37,563	77,595	38,100	39,495	81,253	40,198	41,055
80+	49,141	23,431	25,710	52,771	25,096	27,675	56,233	27,034	29,199
Total	8,591,736	4,225,087	4,366,649	9,276,491	4,563,586	4,712,905	9,900,278	4,887,254	5,013,024
2051									
0-4	883,630	443,308	440,322	1,127,640	565,755	561,885	1,345,377	676,698	668,679
5-9	809,428	403,998	405,430	974,664	486,370	488,294	1,120,143	560,972	559,171
10-14	815,812	406,453	409,359	936,171	465,999	470,172	1,040,836	520,050	520,786
15-19	838,717	416,940	421,776	923,524	458,668	464,856	997,976	497,119	500,857
20-24	813,729	403,091	410,638	861,681	426,483	435,197	906,297	449,582	456,715
25-29	690,475	339,814	350,661	707,745	348,174	359,571	725,612	357,630	367,982
30-34	498,769	241,892	256,877	503,846	244,242	259,603	511,468	248,325	263,143
35-39	559,717	273,791	285,926	565,868	276,632	289,236	574,086	281,087	292,999
40-44	563,232	275,817	287,415	570,218	279,050	291,168	578,825	283,763	295,061
45-49	553,001	266,208	286,793	560,722	269,796	290,926	569,572	274,694	294,878
50-54	482,642	229,262	253,380	490,158	232,807	257,352	498,539	237,497	261,043
55-59	348,938	163,995	184,943	355,713	166,989	188,724	362,875	170,993	191,882

		Low Variant		ı	Medium Variant			High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
60-64	322,501	154,783	167,719	329,765	158,206	171,559	337,263	162,488	174,775
65-69	224,139	108,181	115,958	230,594	111,208	119,385	237,180	114,930	122,250
70-74	166,335	85,497	80,838	172,551	88,625	83,925	178,868	92,278	86,590
75-79	74,342	36,378	37,965	78,255	38,237	40,018	82,136	40,447	41,689
80+	53,072	25,316	27,756	57,212	27,217	29,996	61,137	29,418	31,718
Total	8,698,479	4,274,723	4,423,756	9,446,327	4,644,459	4,801,868	10,128,190	4,997,971	5,130,219
2052									
0-4	893,719	448,402	445,316	1,158,088	581,063	577,025	1,395,432	701,959	693,473
5-9	816,292	407,435	408,857	995,022	496,588	498,434	1,152,856	577,436	575,420
10-14	807,726	402,451	405,275	935,664	465,797	469,867	1,047,093	523,280	523,813
15-19	834,490	414,868	419,622	927,034	460,424	466,610	1,007,817	502,160	505,657
20-24	821,202	406,800	414,401	876,368	433,753	442,615	927,212	460,054	467,158
25-29	746,373	368,077	378,295	770,039	379,553	390,486	793,350	391,834	401,517
30-34	487,612	236,058	251,554	493,000	238,555	254,446	501,006	242,841	258,165
35-39	552,326	269,595	282,731	558,774	272,570	286,204	567,347	277,210	290,137
40-44	560,057	274,557	285,500	567,413	277,970	289,443	576,441	282,915	293,526
45-49	552,805	266,546	286,259	560,983	270,356	290,628	570,329	275,530	294,799
50-54	504,738	240,241	264,496	513,085	244,185	268,900	522,239	249,320	272,919
55-59	356,060	166,489	189,570	363,319	169,700	193,619	370,967	173,961	197,006
60-64	331,372	158,589	172,783	339,268	162,311	176,957	347,374	166,930	180,444
65-69	229,488	109,096	120,392	236,475	112,312	124,163	243,505	116,260	127,245
70-74	176,558	90,094	86,464	183,577	93,594	89,983	190,613	97,654	92,959
75-79	78,442	38,439	40,003	82,753	40,490	42,264	87,032	42,916	44,116
80+	55,943	26,627	29,316	60,563	28,745	31,818	64,930	31,193	33,737
Total	8,805,201	4,324,367	4,480,834	9,621,425	4,727,966	4,893,459	10,365,544	5,113,453	5,252,090
2053									
0-4	902,589	452,875	449,714	1,188,224	596,211	592,012	1,446,432	727,724	718,708
5-9	825,604	412,112	413,491	1,019,441	508,833	510,608	1,191,278	596,772	594,507
10-14	801,118	399,167	401,951	937,182	466,612	470,570	1,055,918	527,783	528,135
15-19	829,006	412,177	416,829	928,743	461,289	467,453	1,015,830	506,300	509,530
20-24	825,797	409,077	416,720	888,740	439,873	448,866	945,923	469,438	476,485
25-29	762,702	376,187	386,515	792,683	390,728	401,955	821,440	405,799	415,641

		Low Variant		N	/ledium Variant		High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
30-34	529,761	257,488	272,273	536,936	260,859	276,077	546,664	266,079	280,585	
35-39	534,134	259,902	274,232	540,752	262,949	277,803	549,589	267,717	281,871	
40-44	556,923	272,950	283,973	564,651	276,539	288,111	574,104	281,715	292,389	
45-49	552,155	266,859	285,296	560,788	270,893	289,895	570,634	276,348	294,286	
50-54	518,943	247,297	271,647	528,032	251,596	276,436	537,899	257,136	280,763	
55-59	373,463	174,437	199,026	381,441	177,983	203,458	389,768	182,623	207,145	
60-64	332,780	158,295	174,485	341,158	162,227	178,931	349,749	167,098	182,651	
65-69	240,272	113,388	126,883	247,967	116,900	131,066	255,622	121,185	134,437	
70-74	181,566	91,346	90,221	189,230	95,102	94,127	196,825	99,456	97,369	
75-79	86,634	42,760	43,874	91,603	45,140	46,462	96,515	47,929	48,586	
80+	57,678	27,322	30,357	62,723	29,625	33,098	67,500	32,291	35,208	
Total	8,911,126	4,373,639	4,537,487	9,800,293	4,813,361	4,986,932	10,611,692	5,233,394	5,378,298	
2054										
0-4	909,450	456,327	453,123	1,217,022	610,654	606,368	1,497,038	753,317	743,722	
5-9	835,687	417,192	418,495	1,046,024	522,151	523,873	1,233,339	617,946	615,393	
10-14	797,375	397,296	400,079	942,529	469,328	473,201	1,069,468	534,641	534,827	
15-19	822,331	408,900	413,430	929,257	461,569	467,689	1,022,688	509,867	512,821	
20-24	828,076	410,219	417,857	898,830	444,862	453,968	962,413	477,731	484,682	
25-29	777,090	383,323	393,767	813,684	401,082	412,601	848,175	419,100	429,075	
30-34	575,523	280,686	294,837	585,515	285,430	300,084	597,944	292,086	305,858	
35-39	517,001	250,890	266,111	523,798	254,011	269,787	532,898	258,911	273,986	
40-44	553,803	271,032	282,771	561,913	274,794	287,118	571,787	280,198	291,589	
45-49	550,459	266,799	283,660	559,539	271,054	288,486	569,874	276,788	293,086	
50-54	526,722	251,192	275,530	536,472	255,804	280,669	546,986	261,712	285,274	
55-59	398,913	186,640	212,272	407,842	190,637	217,205	417,026	195,772	221,254	
60-64	328,552	154,954	173,598	337,283	159,015	178,268	346,234	164,060	182,174	
65-69	255,097	120,194	134,902	263,678	124,105	139,573	272,118	128,832	143,287	
70-74	182,669	90,085	92,584	190,837	93,991	96,846	198,838	98,535	100,303	
75-79	97,775	48,673	49,102	103,648	51,510	52,138	109,407	54,794	54,613	
80+	58,765	27,658	31,107	64,208	30,126	34,082	69,371	32,994	36,377	
Total	9,015,288	4,422,062	4,593,226	9,982,079	4,900,122	5,081,958	10,865,604	5,357,283	5,508,321	

		Low Variant		ı	Medium Variant	İ		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
2055									
0-4	913,221	458,227	454,994	1,243,900	624,131	619,769	1,546,551	778,383	768,168
5-9	846,147	422,459	423,689	1,074,298	536,308	537,990	1,278,609	640,749	637,860
10-14	796,897	397,056	399,841	952,335	474,265	478,070	1,088,644	544,314	544,330
15-19	814,801	405,194	409,606	928,947	461,447	467,500	1,028,802	513,053	515,748
20-24	828,180	410,295	417,886	906,720	448,773	457,948	976,749	484,971	491,778
25-29	789,241	389,342	399,899	832,293	410,256	422,038	873,166	431,546	441,620
30-34	624,686	305,547	319,140	638,978	312,384	326,594	654,764	320,819	333,945
35-39	501,358	242,733	258,625	508,349	245,936	262,413	517,729	250,979	266,750
40-44	550,153	268,659	281,494	558,640	272,590	286,051	568,934	278,218	290,716
45-49	548,059	266,397	281,662	557,575	270,869	286,706	568,395	276,882	291,513
50-54	529,595	252,730	276,865	539,929	257,617	282,311	551,039	263,861	287,178
55-59	428,207	200,942	227,265	438,244	205,472	232,772	448,426	211,189	237,236
60-64	322,889	150,806	172,082	331,918	154,960	176,958	341,185	160,146	181,039
65-69	271,065	127,841	143,224	280,631	132,212	148,419	289,964	137,445	152,519
70-74	182,199	87,796	94,403	190,789	91,789	99,000	199,123	96,464	102,658
75-79	109,863	54,977	54,886	116,794	58,343	58,451	123,537	62,200	61,336
80+	59,997	28,073	31,924	65,858	30,714	35,144	71,438	33,796	37,642
Total	9,116,557	4,469,073	4,647,484	10,166,199	4,988,066	5,178,134	11,127,054	5,485,016	5,642,038
2056									
0-4	914,331	458,793	455,538	1,268,321	636,382	631,940	1,594,260	802,556	791,703
5-9	856,600	427,719	428,881	1,103,808	551,072	552,736	1,326,619	664,956	661,663
10-14	799,975	398,593	401,383	966,621	481,434	485,187	1,114,249	557,212	557,037
15-19	806,816	401,257	405,559	928,309	461,170	467,139	1,034,704	516,120	518,584
20-24	826,184	409,332	416,852	912,514	451,650	460,864	988,948	491,162	497,786
25-29	799,024	394,187	404,837	849,176	418,580	430,595	896,169	443,016	453,153
30-34	676,920	331,907	345,013	696,643	341,383	355,259	716,912	352,171	364,741
35-39	487,806	235,687	252,119	495,030	238,992	256,037	504,726	244,198	260,528
40-44	545,124	265,575	279,548	553,969	269,663	284,306	564,671	275,508	289,163
45-49	545,268	265,627	279,641	555,214	270,312	284,902	566,517	276,600	289,917
50-54	530,060	253,213	276,848	540,936	258,360	282,576	552,621	264,926	287,695
55-59	455,408	214,300	241,109	466,577	219,382	247,195	477,797	225,704	252,093

		Low Variant		ı	Medium Variant	ı		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
60-64	321,562	148,926	172,636	330,993	153,221	177,772	340,660	158,599	182,061
65-69	284,186	134,019	150,167	294,702	138,833	155,869	304,916	144,559	160,357
70-74	183,322	86,470	96,851	192,389	90,578	101,811	201,115	95,412	105,703
75-79	120,309	60,138	60,171	128,292	64,009	64,283	136,011	68,423	67,588
80+	62,318	29,081	33,238	68,699	31,947	36,752	74,798	35,300	39,498
Total	9,215,213	4,514,823	4,700,390	10,352,192	5,076,967	5,275,225	11,395,692	5,616,423	5,779,269
2057									
0-4	912,507	457,889	454,618	1,289,896	647,214	642,682	1,639,485	825,491	813,994
5-9	866,641	432,769	433,872	1,134,188	566,262	567,925	1,376,816	690,297	686,519
10-14	806,836	402,022	404,814	986,986	491,631	495,355	1,147,025	573,706	573,320
15-19	798,879	397,335	401,544	927,935	461,031	466,904	1,041,111	519,426	521,685
20-24	822,088	407,332	414,756	916,126	453,450	462,676	998,921	496,260	502,662
25-29	806,441	397,856	408,584	863,812	425,798	438,014	917,090	453,463	463,627
30-34	731,765	359,540	372,225	758,091	372,217	385,874	784,000	385,941	398,060
35-39	476,972	230,040	246,932	484,507	233,487	251,019	494,590	238,901	255,690
40-44	538,003	261,542	276,461	547,174	265,773	281,401	558,263	271,821	286,442
45-49	542,278	264,459	277,819	552,648	269,351	283,298	564,433	275,908	288,525
50-54	529,960	253,586	276,374	541,369	258,993	282,376	553,634	265,886	287,748
55-59	476,319	224,572	251,747	488,529	230,167	258,362	500,736	237,059	263,676
60-64	328,358	151,326	177,032	338,426	155,884	182,542	348,691	161,576	187,115
65-69	291,939	137,263	154,676	303,262	142,439	160,823	314,246	148,581	165,665
70-74	188,053	87,380	100,673	197,765	91,700	106,065	207,054	96,797	110,257
75-79	127,517	63,226	64,292	136,416	67,503	68,914	144,983	72,377	72,606
80+	66,222	30,940	35,282	73,282	34,113	39,169	80,057	37,827	42,230
Total	9,310,779	4,559,079	4,751,701	10,540,411	5,167,012	5,373,399	11,671,136	5,751,317	5,919,819
2058									
0-4	907,919	455,564	452,355	1,308,693	656,623	652,070	1,682,211	847,146	835,064
5-9	875,508	437,218	438,289	1,164,341	581,324	583,017	1,428,006	716,166	711,840
10-14	816,114	406,670	409,443	1,011,400	503,840	507,559	1,185,490	593,056	592,434
15-19	792,397	394,117	398,280	929,577	461,899	467,678	1,050,074	523,997	526,076
20-24	816,744	404,716	412,028	917,966	454,374	463,593	1,007,090	500,472	506,619
25-29	811,024	400,116	410,908	876,179	431,890	444,289	935,846	462,847	472,999

		Low Variant		ı	Medium Variant	ı	High Variant			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
30-34	747,849	367,495	380,354	780,555	383,255	397,300	811,985	399,815	412,171	
35-39	518,301	250,974	267,327	527,849	255,398	272,451	539,822	261,846	277,976	
40-44	520,334	252,156	268,178	529,666	256,451	273,216	540,999	262,619	278,380	
45-49	539,322	262,947	276,375	550,136	268,049	282,087	562,394	274,871	287,523	
50-54	529,408	253,923	275,485	541,365	259,603	281,761	554,202	266,827	287,375	
55-59	489,792	231,172	258,620	502,916	237,223	265,694	516,002	244,623	271,379	
60-64	344,609	158,672	185,937	355,657	163,668	191,990	366,780	169,842	196,938	
65-69	293,126	136,948	156,178	305,056	142,374	162,682	316,615	148,810	167,805	
70-74	197,202	90,982	106,220	207,826	95,670	112,156	217,909	101,181	116,728	
75-79	131,003	63,969	67,034	140,626	68,518	72,108	149,831	73,710	76,121	
80+	71,744	33,666	38,078	79,689	37,250	42,439	87,320	41,435	45,885	
Total	9,402,394	4,601,305	4,801,089	10,729,498	5,257,409	5,472,088	11,952,575	5,889,261	6,063,313	
2059										
0-4	901,098	452,122	448,976	1,325,063	664,831	660,232	1,722,881	867,740	855,141	
5-9	882,449	440,694	441,755	1,193,195	595,727	597,468	1,478,864	741,892	736,972	
10-14	826,156	411,717	414,439	1,037,960	517,117	520,842	1,227,585	614,236	613,349	
15-19	788,750	392,294	396,456	935,012	464,650	470,362	1,063,738	530,909	532,829	
20-24	810,227	401,526	408,702	918,621	454,721	463,900	1,014,121	504,122	509,999	
25-29	813,333	401,267	412,066	886,294	436,872	449,422	952,417	471,163	481,254	
30-34	762,032	374,500	387,532	801,404	393,493	407,911	838,648	413,044	425,605	
35-39	563,158	273,627	289,531	575,760	279,531	296,228	590,621	287,525	303,096	
40-44	503,706	243,437	260,269	513,199	247,797	265,403	524,781	254,087	270,694	
45-49	536,379	261,133	275,246	547,639	266,441	281,198	560,372	273,521	286,851	
50-54	527,849	253,904	273,946	540,332	259,852	280,480	553,731	267,400	286,331	
55-59	497,228	234,833	262,395	511,130	241,276	269,854	525,002	249,124	275,878	
60-64	368,216	169,856	198,360	380,547	175,445	205,102	392,787	182,261	210,527	
65-69	289,432	134,038	155,394	301,763	139,601	162,161	313,732	146,222	167,510	
70-74	209,574	96,553	113,021	221,335	101,740	119,595	232,435	107,803	124,632	
75-79	131,803	63,022	68,782	141,961	67,715	74,246	151,631	73,098	78,533	
80+	78,359	36,953	41,407	87,357	41,031	46,325	96,015	45,785	50,230	
Total	9,489,750	4,641,474	4,848,275	10,918,571	5,347,842	5,570,729	12,239,360	6,029,932	6,209,428	

		Low Variant		ı	Medium Variant	İ		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
2060									
0-4	892,821	447,982	444,839	1,339,144	671,895	667,249	1,761,604	887,329	874,275
5-9	886,400	442,681	443,719	1,220,209	609,208	611,001	1,528,682	767,114	761,568
10-14	836,564	416,947	419,617	1,066,206	531,229	534,977	1,272,884	637,038	635,846
15-19	788,328	392,082	396,246	944,875	469,603	475,273	1,083,001	540,617	542,384
20-24	802,862	397,914	404,947	918,460	454,673	463,787	1,020,421	507,402	513,019
25-29	813,499	401,375	412,125	894,243	440,799	453,444	966,869	478,447	488,422
30-34	774,015	380,415	393,600	819,905	402,576	417,329	863,606	425,441	438,165
35-39	611,324	297,894	313,429	628,480	305,999	322,481	646,909	315,897	331,013
40-44	488,530	235,552	252,978	498,208	239,986	258,222	510,057	246,409	263,648
45-49	532,915	258,882	274,033	544,620	264,386	280,233	557,819	271,714	286,105
50-54	525,602	253,559	272,043	538,607	259,769	278,838	552,558	267,636	284,923
55-59	500,047	236,306	263,741	514,623	243,088	271,535	529,201	251,333	277,868
60-64	395,281	182,906	212,375	409,109	189,197	219,912	422,651	196,766	225,885
65-69	284,584	130,498	154,086	297,250	136,151	161,099	309,567	142,913	166,655
70-74	222,739	102,722	120,017	235,770	108,480	127,289	248,020	115,177	132,844
75-79	131,623	61,452	70,171	142,231	66,222	76,010	152,287	71,730	80,557
80+	85,290	40,333	44,958	95,462	44,953	50,509	105,267	50,337	54,930
Total	9,572,423	4,679,500	4,892,922	11,107,404	5,438,215	5,669,190	12,531,404	6,173,299	6,358,104
2061									
0-4	882,657	442,898	439,758	1,351,105	677,902	673,203	1,798,615	906,039	892,576
5-9	887,742	443,362	444,380	1,244,847	621,504	623,343	1,576,735	791,452	785,284
10-14	846,966	422,172	424,794	1,095,692	545,947	549,745	1,320,920	661,237	659,682
15-19	791,424	393,626	397,799	959,187	476,767	482,420	1,108,663	553,529	555,135
20-24	795,048	394,076	400,972	917,977	454,475	463,502	1,026,515	510,566	515,950
25-29	811,602	400,467	411,135	900,127	443,711	456,416	979,217	484,705	494,512
30-34	783,677	385,184	398,493	836,712	410,830	425,882	886,615	436,885	449,730
35-39	662,476	323,614	338,862	685,336	334,472	350,864	708,477	346,856	361,621
40-44	475,398	228,751	246,647	485,304	233,280	252,024	497,459	239,859	257,601
45-49	528,110	255,942	272,168	540,232	261,628	278,604	553,877	269,190	284,687
50-54	522,989	252,864	270,125	536,502	259,329	277,173	550,997	267,506	283,491
55-59	500,603	236,804	263,799	515,796	243,898	271,897	531,042	252,517	278,524

		Low Variant		ı	Medium Variant	İ		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
60-64	420,352	195,062	225,290	435,701	202,073	233,628	450,585	210,418	240,167
65-69	283,683	128,992	154,691	296,825	134,802	162,023	309,611	141,776	167,835
70-74	233,443	107,635	125,808	247,682	113,936	133,747	261,054	121,242	139,812
75-79	132,733	60,652	72,082	143,869	65,534	78,335	154,392	71,210	83,182
80+	91,620	43,249	48,370	102,993	48,405	54,588	113,984	54,427	59,557
Total	9,650,523	4,715,351	4,935,172	11,295,888	5,528,494	5,767,394	12,828,759	6,319,412	6,509,347
2062									
0-4	870,860	437,004	433,855	1,360,430	682,599	677,831	1,834,357	924,109	910,247
5-9	886,191	442,591	443,600	1,266,703	632,410	634,294	1,622,309	814,525	807,785
10-14	856,962	427,190	429,771	1,126,052	561,093	564,959	1,371,140	686,562	684,578
15-19	798,262	397,037	401,225	979,537	486,932	492,604	1,141,461	570,011	571,450
20-24	787,282	390,253	397,028	917,755	454,412	463,343	1,033,115	513,969	519,146
25-29	807,643	398,545	409,098	903,860	445,567	458,294	989,371	489,890	499,481
30-34	791,022	388,805	402,217	851,312	418,001	433,312	907,580	447,330	460,250
35-39	716,163	350,563	365,600	745,914	364,741	381,173	774,944	380,207	394,737
40-44	464,918	223,309	241,609	475,140	227,979	247,161	487,681	234,761	252,920
45-49	521,276	252,087	269,190	533,768	257,933	275,835	547,825	265,706	282,119
50-54	520,194	251,792	268,402	534,205	258,501	275,703	549,239	266,979	282,259
55-59	500,621	237,201	263,420	516,420	244,608	271,812	532,334	253,602	278,731
60-64	439,592	204,397	235,195	456,328	212,065	244,263	472,467	221,128	251,338
65-69	290,021	131,242	158,780	303,965	137,371	166,594	317,494	144,724	172,770
70-74	239,677	110,150	129,527	254,915	116,879	138,036	269,249	124,689	144,560
75-79	136,516	61,471	75,045	148,393	66,587	81,805	159,598	72,563	87,036
80+	96,836	45,402	51,435	109,375	51,048	58,326	121,529	57,671	63,858
Total	9,724,035	4,749,039	4,974,997	11,484,071	5,618,726	5,865,345	13,131,693	6,468,427	6,663,266
2063									
0-4	857,836	430,501	427,336	1,369,391	687,117	682,274	1,869,598	941,931	927,667
5-9	881,990	440,492	441,498	1,285,808	641,938	643,871	1,665,442	836,346	829,095
10-14	865,807	431,625	434,182	1,156,192	576,117	580,075	1,422,365	712,419	709,946
15-19	807,496	401,658	405,838	1,003,906	499,092	504,814	1,179,928	589,335	590,593
20-24	780,956	387,128	393,828	919,530	455,342	464,187	1,042,255	518,628	523,627
25-29	802,465	396,028	406,437	905,848	446,562	459,287	997,745	494,205	503,540

		Low Variant		ı	Medium Variant	:		High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
30-34	795,596	391,058	404,538	863,682	424,069	439,613	926,416	456,734	469,683
35-39	731,984	358,363	373,621	768,199	375,643	392,556	802,853	394,003	408,850
40-44	505,335	243,709	261,626	517,843	249,476	268,367	532,487	257,418	275,069
45-49	504,206	243,063	261,142	516,826	248,948	267,878	531,101	256,818	274,282
50-54	517,447	250,401	267,045	531,964	257,347	274,617	547,526	266,117	281,409
55-59	500,217	237,572	262,645	516,624	245,295	271,329	533,194	254,668	278,526
60-64	451,991	210,408	241,583	469,925	218,635	251,290	487,155	228,324	258,831
65-69	304,701	137,787	166,914	319,896	144,453	175,443	334,526	152,410	182,116
70-74	240,552	109,822	130,729	256,497	116,816	139,682	271,517	124,962	146,555
75-79	143,485	64,189	79,296	156,417	69,708	86,709	168,584	76,166	92,418
80+	100,859	46,756	54,103	114,511	52,831	61,681	127,766	60,002	67,764
Total	9,792,923	4,780,560	5,012,363	11,673,059	5,709,389	5,963,671	13,440,458	6,620,487	6,819,971
2064									
0-4	844,076	423,618	420,458	1,377,828	691,390	686,438	1,905,427	960,052	945,375
5-9	875,601	437,310	438,291	1,302,543	650,305	652,238	1,706,584	857,144	849,440
10-14	872,751	435,102	437,649	1,185,046	590,493	594,553	1,473,280	738,145	735,135
15-19	817,486	406,673	410,814	1,030,410	512,312	518,098	1,222,020	610,483	611,536
20-24	777,429	385,376	392,053	925,062	458,133	466,929	1,056,068	525,607	530,461
25-29	796,134	392,948	403,186	906,667	446,990	459,677	1,004,997	497,969	507,029
30-34	797,941	392,227	405,714	873,836	429,050	444,785	943,102	465,090	478,012
35-39	745,949	365,240	380,709	788,900	385,764	403,136	829,475	407,174	422,300
40-44	549,172	265,767	283,405	565,025	273,141	291,884	582,792	282,766	300,026
45-49	488,157	234,692	253,465	500,906	240,616	260,289	515,404	248,587	266,817
50-54	514,713	248,722	265,990	529,739	255,897	273,842	545,828	264,950	280,878
55-59	498,861	237,608	261,253	515,840	245,638	270,202	533,051	255,383	277,668
60-64	458,855	213,767	245,089	477,798	222,462	255,336	495,981	232,690	263,291
65-69	325,785	147,616	178,169	342,637	155,021	187,616	358,716	163,792	194,924
70-74	237,526	107,466	130,060	253,907	114,580	139,328	269,386	122,920	146,466
75-79	152,695	68,240	84,455	166,947	74,309	92,638	180,337	81,414	98,924
80+	104,124	47,588	56,536	118,856	54,046	64,810	133,184	61,729	71,455
Total	9,857,256	4,809,959	5,047,297	11,861,948	5,800,150	6,061,798	13,755,634	6,775,896	6,979,738

		Low Variant		ı	Medium Variant			High Variant	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
2065									
0-4	829,969	416,555	413,415	1,386,427	695,761	690,666	1,942,871	978,990	963,882
5-9	867,841	433,454	434,386	1,317,029	657,560	659,469	1,745,837	876,970	868,867
10-14	876,747	437,108	439,639	1,212,077	603,960	608,116	1,523,178	763,379	759,799
15-19	827,847	411,869	415,977	1,058,593	526,362	532,232	1,267,314	633,250	634,064
20-24	777,086	385,207	391,878	934,978	463,096	471,883	1,075,446	535,358	540,088
25-29	788,975	389,456	399,519	906,682	447,031	459,651	1,011,530	501,368	510,161
30-34	798,192	392,377	405,814	881,857	432,997	448,860	957,700	472,434	485,267
35-39	757,771	371,054	386,717	807,300	394,759	412,541	854,427	419,534	434,893
40-44	596,219	289,380	306,838	616,923	299,085	317,838	638,523	310,767	327,756
45-49	473,536	227,134	246,402	486,433	233,110	253,323	501,174	241,193	259,982
50-54	511,478	246,624	264,854	527,005	254,015	272,990	543,610	263,339	280,271
55-59	496,867	237,339	259,528	514,395	245,667	268,728	532,233	255,775	276,458
60-64	461,519	215,159	246,360	481,304	224,248	257,056	500,323	234,943	265,380
65-69	349,809	159,004	190,806	368,587	167,282	201,305	386,357	177,011	209,346
70-74	233,733	104,693	129,040	250,453	111,872	138,581	266,309	120,351	145,958
75-79	162,344	72,629	89,714	178,046	79,322	98,724	192,804	87,163	105,642
80+	107,256	48,279	58,977	123,090	55,110	67,981	138,525	63,305	75,220
Total	9,917,187	4,837,321	5,079,865	12,051,180	5,891,235	6,159,944	14,078,162	6,935,130	7,143,032

Table A2: Population by sex, county and residence - 2022

0		Total			Urban			Rural	
County	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bomi	68,574	65,131	133,705	17,398	16,768	34,166	51,176	48,363	99,539
Bong	235,208	232,353	467,561	73,466	76,306	149,772	161,742	156,047	317,789
Gbarpolu	51,121	44,874	95,995	4,657	4,170	8,827	46,464	40,704	87,168
Grand Bassa	150,280	143,409	293,689	43,851	45,755	89,606	106,429	97,654	204,083
Grand Cape Mount	96,757	82,110	178,867	25,581	21,706	47,287	71,176	60,404	131,580
Grand Gedeh	115,295	101,397	216,692	46,581	45,067	91,648	68,714	56,330	125,044
Grand Kru	56,999	52,343	109,342	3,629	3,629	7,258	53,370	48,714	102,084
Lofa	183,100	184,276	367,376	43,320	43,256	86,576	139,780	141,020	280,800

0		Total			Urban			Rural	
County	Male	Female	Total	Male	Female	Total	Male	Female	Total
Margibi	152,699	152,247	304,946	83,711	86,866	170,577	68,988	65,381	134,369
Maryland	86,867	85,720	172,587	52,515	53,578	106,093	34,352	32,142	66,494
Montserrado	942,559	978,406	1,920,965	861,168	899,864	1,761,032	81,391	78,542	159,933
Nimba	312,018	309,823	621,841	102,278	107,328	209,606	209,740	202,495	412,235
River Cess	47,717	43,102	90,819	5,571	5,324	10,895	42,146	37,778	79,924
River Gee	65,471	59,182	124,653	32,007	30,101	62,108	33,464	29,081	62,545
Sinoe	79,362	71,787	151,149	13,455	13,248	26,703	65,907	58,539	124,446
Total Country	2,644,027	2,606,160	5,250,187	1,409,188	1,452,966	2,862,154	1,234,839	1,153,194	2,388,033

Table A3: Population by sex, county and residence - 2008

_		Total			Urban			Rural	
County	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bomi	42,940	41,179	84,119	8,599	8,431	17,030	34,341	32,748	67,089
Bong	164,859	168,622	333,481	49,745	52,964	102,709	115,114	115,658	230,772
Gbarpolu	43,906	39,482	83,388	4,300	3,468	7,768	39,606	36,014	75,620
Grand Bassa	110,913	110,780	221,693	28,701	29,675	58,376	82,212	81,105	163,317
Grand Cape Mount	65,679	61,397	127,076	4,022	4,123	8,145	61,657	57,274	118,931
Grand Gedeh	64,994	60,264	125,258	20,696	20,977	41,673	44,298	39,287	83,585
Grand Kru	29,648	28,265	57,913	1,877	1,822	3,699	27,771	26,443	54,214
Lofa	133,611	143,252	276,863	40,900	42,935	83,835	92,711	100,317	193,028
Margibi	105,840	104,083	209,923	43,723	45,145	88,868	62,117	58,938	121,055
Maryland	70,855	65,083	135,938	23,392	23,589	46,981	47,463	41,494	88,957
Montserrado	549,733	568,508	1,118,241	508,255	527,872	1,036,127	41,478	40,636	82,114
Nimba	230,113	231,913	462,026	50,868	54,467	105,335	179,245	177,446	356,691
River Cess	37,224	34,285	71,509	1,262	1,127	2,389	35,962	33,158	69,120
River Gee	34,863	31,926	66,789	9,053	8,466	17,519	25,810	23,460	49,270
Sinoe	54,767	47,624	102,391	6,698	6,672	13,370	48,069	40,952	89,021
Total	1,739,945	1,736,663	3,476,608	802,091	831,733	1,633,824	937,854	904,930	1,842,784

Table A4: Projected population by county and type of residence, 2022 - 2032

Type of residence	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Liberia	5,250,187	5,371,185	5,496,122	5,625,874	5,759,600	5,896,852	6,037,091	6,179,764	6,324,490	6,471,184	6,618,845
Urban	2,862,154	2,945,954	3,032,482	3,122,344	3,214,959	3,310,016	3,407,141	3,505,952	3,606,185	3,707,782	3,810,047
Rural	2,388,033	2,425,231	2,463,640	2,503,530	2,544,641	2,586,836	2,629,950	2,673,812	2,718,305	2,763,402	2,808,798
Bomi	133,705	137,088	140,581	144,209	147,947	151,785	155,705	159,694	163,740	167,842	171,970
Urban	34,166	35,335	36,542	37,796	39,088	40,414	41,769	43,147	44,546	45,963	47,390
Rural	99,539	101,753	104,039	106,413	108,859	111,371	113,936	116,547	119,194	121,879	124,580
Bong	467,561	476,708	486,153	495,962	506,072	516,448	527,050	537,836	548,777	559,867	571,030
Urban	149,772	152,983	156,298	159,741	163,290	166,932	170,653	174,439	178,279	182,172	186,090
Rural	317,789	323,725	329,855	336,221	342,782	349,516	356,397	363,397	370,498	377,695	384,940
Gbarpolu	95,995	96,855	97,743	98,665	99,616	100,592	101,589	102,602	103,631	104,674	105,724
Urban	8,827	8,899	8,974	9,051	9,131	9,213	9,297	9,382	9,468	9,556	9,644
Rural	87,168	87,956	88,769	89,614	90,485	91,379	92,292	93,220	94,163	95,118	96,080
Grand Bassa	293,689	298,601	303,672	308,940	314,368	319,939	325,632	331,424	337,299	343,254	349,248
Urban	89,606	91,737	93,936	96,221	98,576	100,993	103,462	105,974	108,523	111,106	113,706
Rural	204,083	206,864	209,736	212,719	215,792	218,946	222,170	225,450	228,776	232,148	235,542
Grand Cape Mount	178,867	182,400	186,049	189,838	193,743	197,750	201,846	206,012	210,238	214,522	218,834
Urban	47,287	49,957	52,715	55,579	58,530	61,558	64,654	67,802	70,996	74,234	77,493
Rural	131,580	132,443	133,334	134,259	135,213	136,192	137,192	138,210	139,242	140,288	141,341
Grand Gedeh	216,692	222,930	229,371	236,060	242,954	250,030	257,260	264,615	272,076	279,638	287,251
Urban	91,648	95,057	98,578	102,234	106,002	109,870	113,821	117,841	121,919	126,053	130,213
Rural	125,044	127,873	130,793	133,826	136,952	140,160	143,439	146,774	150,157	153,585	157,038
Grand Kru	109,342	112,851	116,473	120,236	124,114	128,093	132,160	136,297	140,494	144,748	149,029
Urban	7,258	7,501	7,751	8,012	8,280	8,556	8,837	9,123	9,414	9,708	10,004
Rural	102,084	105,350	108,722	112,224	115,834	119,537	123,323	127,174	131,080	135,040	139,025
Lofa	367,376	373,551	379,927	386,549	393,373	400,378	407,535	414,816	422,202	429,688	437,224
Urban	86,576	86,763	86,956	87,157	87,363	87,575	87,792	88,013	88,236	88,463	88,691
Rural	280,800	286,788	292,971	299,392	306,010	312,803	319,743	326,803	333,966	341,225	348,533
Margibi	304,946	311,429	318,122	325,074	332,239	339,592	347,106	354,750	362,504	370,363	378,275
Urban	170,577	176,152	181,907	187,885	194,046	200,369	206,830	213,403	220,070	226,828	233,631
Rural	134,369	135,277	136,215	137,189	138,193	139,223	140,276	141,347	142,434	143,535	144,644
Maryland	172,587	175,087	177,669	180,350	183,113	185,950	188,847	191,796	194,786	197,817	200,869
Urban	106,093	110,125	114,290	118,614	123,071	127,646	132,319	137,076	141,898	146,787	151,710
Rural	66,494	64,962	63,379	61,736	60,042	58,304	56,528	54,720	52,888	51,030	49,159
Montserrado	1,920,965	1,975,729	2,032,276	2,091,001	2,151,526	2,213,646	2,277,119	2,341,693	2,407,196	2,473,590	2,540,421
Urban	1,761,032	1,810,487	1,861,552	1,914,584	1,969,242	2,025,339	2,082,659	2,140,973	2,200,126	2,260,084	2,320,436
Rural	159,933	165,242	170,724	176,417	182,284	188,307	194,460	200,720	207,070	213,506	219,985

Type of residence	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Nimba	621,841	632,744	644,002	655,694	667,744	680,111	692,748	705,604	718,645	731,863	745,169
Urban	209,606	216,720	224,065	231,693	239,555	247,624	255,869	264,257	272,766	281,390	290,071
Rural	412,235	416,024	419,937	424,001	428,189	432,487	436,879	441,347	445,879	450,473	455,098
River Cess	90,819	92,136	93,497	94,909	96,365	97,860	99,386	100,940	102,516	104,113	105,720
Urban	10,895	11,475	12,075	12,697	13,338	13,997	14,669	15,353	16,048	16,751	17,459
Rural	79,924	80,661	81,422	82,212	83,027	83,863	84,717	85,587	86,468	87,362	88,261
River Gee	124,653	128,601	132,677	136,910	141,273	145,751	150,326	154,981	159,703	164,489	169,306
Urban	62,108	65,150	68,291	71,553	74,915	78,366	81,891	85,478	89,117	92,805	96,517
Rural	62,545	63,451	64,386	65,357	66,358	67,385	68,435	69,503	70,586	71,684	72,789
Sinoe	151,149	154,475	157,910	161,477	165,153	168,927	172,782	176,704	180,683	184,716	188,775
Urban	26,703	27,613	28,552	29,527	30,532	31,564	32,619	33,691	34,779	35,882	36,992
Rural	124,446	126,862	129,358	131,950	134,621	137,363	140,163	143,013	145,904	148,834	151,783

Table A5: Projected population by singe age, 2022 - 2032

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	5,250,187	5,371,185	5,496,122	5,625,874	5,759,600	5,896,852	6,037,091	6,179,764	6,324,490	6,471,184	6,618,845
0	114,210	163,484	168,708	174,250	179,044	183,421	187,287	190,587	193,370	196,154	197,955
1	110,935	110,999	158,970	164,165	169,650	174,403	178,753	182,610	185,938	188,746	191,557
2	109,319	109,347	109,440	156,782	161,944	167,392	172,122	176,456	180,313	183,641	186,456
3	108,185	108,203	108,248	108,362	155,257	160,394	165,815	170,526	174,851	178,700	182,026
4	107,303	107,316	107,347	107,408	107,533	154,085	159,201	164,600	169,301	173,614	177,456
5	119,281	106,556	106,580	106,624	106,696	106,830	153,092	158,190	163,575	168,262	172,566
6	121,642	118,708	106,051	106,085	106,135	106,213	106,354	152,419	157,506	162,879	167,557
7	123,481	121,241	118,323	105,714	105,753	105,809	105,892	106,037	151,974	157,055	162,420
8	124,740	123,173	120,944	118,039	105,467	105,509	105,570	105,657	105,808	151,649	156,727
9	125,459	124,377	122,820	120,603	117,712	105,179	105,225	105,289	105,382	105,536	151,265
10	125,787	125,088	124,014	122,469	120,264	117,385	104,891	104,942	105,011	105,107	105,265
11	125,969	125,430	124,738	123,674	122,137	119,943	117,076	104,619	104,674	104,747	104,848
12	126,286	125,629	125,095	124,411	123,354	121,826	119,641	116,786	104,365	104,423	104,500
13	126,909	125,965	125,312	124,786	124,107	123,057	121,536	119,361	116,516	104,128	104,190
14	127,670	126,600	125,661	125,016	124,495	123,821	122,776	121,264	119,097	116,262	103,904
15	128,075	127,362	126,299	125,367	124,727	124,211	123,541	122,503	120,997	118,839	116,014
16	128,018	127,753	127,047	125,990	125,065	124,429	123,917	123,253	122,221	120,722	118,572
17	127,839	127,664	127,403	126,704	125,653	124,733	124,103	123,597	122,939	121,913	120,422
18	127,555	127,439	127,269	127,013	126,319	125,276	124,363	123,739	123,238	122,587	121,569
19	126,975	127,118	127,006	126,842	126,591	125,904	124,868	123,962	123,345	122,851	122,206
20	126,718	126,523	126,670	126,564	126,405	126,159	125,479	124,450	123,552	122,942	122,453
21	125,839	126,258	126,070	126,221	126,120	125,965	125,724	125,049	124,030	123,139	122,535

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
22	122,616	125,362	125,784	125,601	125,757	125,661	125,511	125,275	124,608	123,596	122,714
23	116,334	122,130	124,869	125,296	125,120	125,279	125,188	125,043	124,814	124,154	123,150
24	108,029	115,855	121,632	124,367	124,798	124,626	124,790	124,704	124,565	124,342	123,689
25	98,430	107,568	115,365	121,125	123,852	124,286	124,121	124,289	124,210	124,076	123,859
26	89,825	98,001	107,102	114,872	120,612	123,334	123,771	123,612	123,786	123,711	123,584
27	84,298	89,430	97,574	106,642	114,383	120,103	122,818	123,258	123,106	123,284	123,216
28	83,188	83,927	89,040	97,154	106,186	113,899	119,600	122,309	122,754	122,607	122,791
29	85,192	82,819	83,559	88,655	96,737	105,735	113,420	119,101	121,805	122,254	122,114
30	88,462	84,804	82,446	83,187	88,265	96,315	105,279	112,936	118,599	121,298	121,750
31	90,591	88,047	84,410	82,069	82,812	87,870	95,889	104,817	112,446	118,090	120,782
32	90,517	90,157	87,630	84,017	81,691	82,434	87,473	95,460	104,355	111,955	117,580
33	87,113	90,076	89,723	87,214	83,623	81,312	82,057	87,077	95,034	103,892	111,464
34	81,377	86,679	89,632	89,287	86,796	83,227	80,932	81,676	86,679	94,604	103,427
35	74,731	80,961	86,241	89,184	88,846	86,372	82,826	80,546	81,294	86,277	94,169
36	69,071	74,338	80,538	85,795	88,729	88,397	85,941	82,417	80,155	80,904	85,868
37	65,220	68,695	73,937	80,109	85,344	88,266	87,941	85,503	82,004	79,758	80,507
38	64,041	64,852	68,312	73,530	79,672	84,882	87,794	87,476	85,057	81,582	79,352
39	64,669	63,667	64,477	67,922	73,114	79,226	84,411	87,312	87,003	84,603	81,150
40	66,174	64,273	63,283	64,094	67,523	72,688	78,768	83,929	86,820	86,517	84,136
41	66,737	65,753	63,870	62,891	63,703	67,115	72,252	78,300	83,436	86,316	86,021
42	65,109	66,298	65,326	63,460	62,494	63,305	66,700	71,810	77,827	82,936	85,803
43	60,348	64,665	65,852	64,893	63,045	62,090	62,901	66,279	71,363	77,346	82,429
44	53,460	59,921	64,213	65,397	64,451	62,623	61,679	62,489	65,850	70,905	76,854
45	45,602	53,062	59,480	63,746	64,927	63,993	62,184	61,253	62,064	65,407	70,431
46	38,784	45,247	52,652	59,025	63,262	64,440	63,519	61,729	60,812	61,622	64,946
47	34,269	38,469	44,882	52,230	58,556	62,764	63,938	63,031	61,261	60,358	61,167
48	33,086	33,980	38,146	44,508	51,797	58,073	62,252	63,421	62,528	60,779	59,888
49	34,248	32,793	33,681	37,813	44,121	51,349	57,575	61,720	62,887	62,007	60,280
50	36,419	33,929	32,489	33,372	37,468	43,719	50,884	57,055	61,169	62,331	61,464
51	37,723	36,056	33,593	32,171	33,048	37,105	43,298	50,396	56,513	60,591	61,747
52	37,242	37,313	35,667	33,235	31,832	32,702	36,720	42,851	49,881	55,939	59,982
53	34,088	36,799	36,872	35,252	32,853	31,471	32,334	36,311	42,379	49,335	55,332
54	29,102	33,648	36,330	36,409	34,814	32,450	31,088	31,947	35,882	41,883	48,763
55	23,474	28,696	33,184	35,836	35,920	34,351	32,024	30,686	31,539	35,429	41,361
56	18,787	23,130	28,279	32,707	35,327	35,415	33,874	31,584	30,270	31,117	34,959
57	15,748	18,504	22,784	27,860	32,227	34,813	34,903	33,389	31,138	29,847	30,686
58	15,095	15,508	18,224	22,441	27,443	31,746	34,296	34,389	32,902	30,687	29,418
59	16,145	14,857	15,265	17,939	22,091	27,016	31,254	33,767	33,861	32,398	30,220
60	17,840	15,874	14,609	15,010	17,640	21,724	26,568	30,738	33,210	33,305	31,870

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
61	18,967	17,511	15,583	14,342	14,737	17,320	21,331	26,087	30,184	32,614	32,709
62	19,121	18,578	17,155	15,267	14,053	14,441	16,974	20,905	25,570	29,587	31,971
63	17,766	18,682	18,155	16,766	14,923	13,739	14,120	16,597	20,445	25,008	28,942
64	15,354	17,313	18,210	17,699	16,348	14,554	13,401	13,775	16,195	19,951	24,409
65	12,650	14,931	16,840	17,715	17,222	15,909	14,167	13,046	13,413	15,772	19,432
66	10,439	12,273	14,490	16,345	17,198	16,722	15,451	13,761	12,675	13,033	15,328
67	8,891	10,099	11,876	14,024	15,823	16,652	16,194	14,966	13,332	12,283	12,632
68	8,330	8,574	9,740	11,458	13,532	15,272	16,076	15,637	14,454	12,879	11,869
69	8,474	8,005	8,241	9,364	11,019	13,017	14,693	15,470	15,052	13,917	12,402
70	8,935	8,119	7,672	7,900	8,979	10,567	12,487	14,097	14,846	14,448	13,362
71	9,165	8,530	7,753	7,327	7,545	8,578	10,099	11,936	13,480	14,201	13,824
72	8,915	8,704	8,102	7,365	6,962	7,171	8,155	9,603	11,355	12,827	13,515
73	7,935	8,413	8,215	7,648	6,955	6,576	6,774	7,706	9,077	10,736	12,132
74	6,485	7,439	7,889	7,706	7,176	6,527	6,172	6,360	7,238	8,529	10,090
75	5,572	6,041	6,932	7,355	7,185	6,693	6,089	5,759	5,937	6,758	7,966
76	4,333	5,160	5,596	6,424	6,818	6,663	6,208	5,649	5,345	5,512	6,276
77	3,385	3,989	4,751	5,154	5,919	6,284	6,144	5,726	5,212	4,932	5,088
78	2,951	3,095	3,649	4,348	4,718	5,421	5,758	5,631	5,250	4,779	4,524
79	3,258	2,678	2,809	3,314	3,950	4,288	4,929	5,237	5,124	4,778	4,352
80+	37,882	34,675	31,497	28,949	27,231	26,338	25,870	26,035	26,437	26,702	26,636

Table A6: Projected population by singe age, 2022 - 2032 - Male

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	2,644,027	2,702,356	2,762,487	2,824,888	2,889,193	2,955,172	3,022,553	3,091,069	3,160,471	3,230,794	3,301,533
0	56,794	82,424	85,057	87,841	90,258	92,466	94,417	96,082	97,476	98,881	99,791
1	54,844	54,884	79,712	82,320	85,070	87,459	89,647	91,588	93,254	94,659	96,076
2	53,944	53,960	54,017	78,476	81,065	83,793	86,167	88,344	90,278	91,942	93,349
3	53,316	53,326	53,351	53,417	77,616	80,190	82,901	85,262	87,429	89,357	91,018
4	52,834	52,841	52,857	52,889	52,960	76,961	79,522	82,219	84,571	86,730	88,652
5	59,180	52,415	52,428	52,450	52,487	52,563	76,392	78,941	81,627	83,970	86,122
6	60,392	58,861	52,136	52,153	52,178	52,218	52,297	76,011	78,552	81,230	83,567
7	61,376	60,168	58,646	51,948	51,967	51,995	52,038	52,119	75,756	78,293	80,966
8	62,117	61,203	60,001	58,486	51,810	51,831	51,861	51,906	51,989	75,569	78,104
9	62,628	61,917	61,009	59,813	58,306	51,652	51,675	51,707	51,754	51,839	75,354
10	62,953	62,418	61,712	60,810	59,621	58,121	51,490	51,515	51,549	51,598	51,684
11	63,164	62,750	62,220	61,519	60,622	59,439	57,945	51,336	51,363	51,399	51,450
12	63,344	62,972	62,561	62,035	61,338	60,446	59,268	57,781	51,193	51,221	51,259
13	63,543	63,164	62,794	62,387	61,864	61,171	60,283	59,111	57,629	51,060	51,090

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
14	63,714	63,371	62,994	62,628	62,224	61,704	61,014	60,131	58,963	57,486	50,935
15	63,670	63,543	63,203	62,829	62,466	62,065	61,547	60,861	59,981	58,818	57,347
16	63,417	63,489	63,365	63,027	62,657	62,296	61,897	61,383	60,700	59,824	58,665
17	63,141	63,214	63,287	63,166	62,831	62,463	62,105	61,710	61,199	60,520	59,648
18	62,877	62,906	62,981	63,056	62,937	62,606	62,241	61,887	61,494	60,987	60,313
19	62,514	62,617	62,648	62,725	62,802	62,686	62,358	61,997	61,646	61,258	60,755
20	62,340	62,244	62,349	62,383	62,462	62,541	62,428	62,103	61,746	61,399	61,014
21	61,849	62,066	61,974	62,080	62,116	62,197	62,278	62,167	61,847	61,493	61,150
22	60,163	61,564	61,783	61,693	61,802	61,840	61,923	62,006	61,898	61,581	61,232
23	56,910	59,872	61,269	61,490	61,404	61,514	61,555	61,640	61,725	61,620	61,307
24	52,634	56,625	59,575	60,968	61,191	61,107	61,220	61,263	61,350	61,438	61,336
25	47,690	52,360	56,333	59,271	60,659	60,884	60,803	60,918	60,964	61,053	61,143
26	43,294	47,437	52,084	56,039	58,965	60,349	60,575	60,498	60,615	60,663	60,755
27	40,584	43,065	47,188	51,814	55,751	58,664	60,044	60,271	60,197	60,316	60,367
28	40,275	40,372	42,842	46,946	51,550	55,470	58,371	59,747	59,976	59,904	60,026
29	41,658	40,066	40,164	42,624	46,709	51,292	55,195	58,084	59,455	59,686	59,618
30	43,770	41,438	39,856	39,955	42,404	46,470	51,033	54,918	57,795	59,163	59,395
31	45,271	43,532	41,214	39,643	39,744	42,182	46,229	50,770	54,638	57,503	58,866
32	45,506	45,021	43,293	40,991	39,430	39,532	41,959	45,987	50,507	54,357	57,210
33	43,835	45,252	44,771	43,056	40,768	39,217	39,321	41,737	45,746	50,244	54,077
34	40,841	43,585	44,996	44,520	42,817	40,544	39,004	39,108	41,513	45,503	49,980
35	37,282	40,602	43,333	44,737	44,267	42,575	40,317	38,787	38,894	41,288	45,258
36	34,313	37,058	40,360	43,076	44,475	44,010	42,330	40,087	38,568	38,676	41,059
37	32,539	34,100	36,830	40,114	42,817	44,209	43,749	42,082	39,854	38,346	38,455
38	32,511	32,331	33,884	36,599	39,864	42,552	43,939	43,484	41,829	39,617	38,120
39	33,653	32,296	32,119	33,663	36,363	39,610	42,283	43,664	43,214	41,572	39,375
40	35,366	33,421	32,076	31,902	33,438	36,122	39,349	42,008	43,382	42,937	41,308
41	36,444	35,113	33,184	31,850	31,680	33,207	35,874	39,082	41,725	43,093	42,654
42	36,035	36,174	34,855	32,942	31,620	31,453	32,972	35,622	38,810	41,437	42,798
43	33,506	35,758	35,899	34,593	32,696	31,386	31,222	32,732	35,366	38,533	41,144
44	29,517	33,238	35,475	35,617	34,324	32,445	31,147	30,986	32,486	35,103	38,249
45	24,885	29,269	32,962	35,184	35,327	34,046	32,185	30,899	30,742	32,233	34,831
46	20,894	24,666	29,014	32,677	34,881	35,026	33,759	31,915	30,643	30,489	31,970
47	18,275	20,699	24,438	28,748	32,380	34,567	34,713	33,460	31,634	30,376	30,225
48	17,670	18,095	20,497	24,202	28,472	32,071	34,240	34,387	33,148	31,342	30,097
49	18,482	17,486	17,908	20,287	23,955	28,184	31,750	33,899	34,048	32,823	31,038
50	19,866	18,278	17,294	17,713	20,068	23,698	27,884	31,414	33,544	33,694	32,484
51	20,707	19,634	18,066	17,095	17,511	19,840	23,431	27,572	31,066	33,174	33,325
52	20,518	20,452	19,393	17,846	16,888	17,301	19,604	23,154	27,249	30,704	32,791

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
53	18,785	20,251	20,187	19,144	17,619	16,675	17,083	19,359	22,867	26,913	30,328
54	15,990	18,525	19,974	19,912	18,885	17,382	16,452	16,857	19,105	22,569	26,564
55	12,830	15,754	18,254	19,683	19,625	18,614	17,134	16,219	16,620	18,838	22,256
56	10,203	12,628	15,508	17,970	19,379	19,324	18,331	16,875	15,975	16,372	18,558
57	8,491	10,032	12,418	15,251	17,675	19,063	19,010	18,035	16,605	15,721	16,113
58	8,108	8,340	9,855	12,200	14,985	17,368	18,734	18,684	17,728	16,324	15,457
59	8,675	7,953	8,182	9,670	11,972	14,707	17,048	18,391	18,344	17,407	16,030
60	9,591	8,498	7,792	8,017	9,476	11,734	14,416	16,713	18,032	17,988	17,072
61	10,192	9,380	8,312	7,623	7,844	9,273	11,484	14,110	16,361	17,654	17,613
62	10,277	9,948	9,158	8,116	7,444	7,661	9,058	11,219	13,787	15,988	17,253
63	9,557	10,009	9,691	8,922	7,908	7,255	7,467	8,829	10,938	13,443	15,592
64	8,272	9,286	9,727	9,419	8,673	7,689	7,055	7,262	8,589	10,641	13,081
65	6,839	8,020	9,005	9,434	9,137	8,414	7,461	6,846	7,049	8,338	10,331
66	5,667	6,614	7,758	8,712	9,128	8,842	8,145	7,223	6,629	6,826	8,076
67	4,825	5,464	6,378	7,482	8,404	8,808	8,533	7,861	6,973	6,401	6,592
68	4,476	4,636	5,251	6,131	7,193	8,081	8,471	8,208	7,563	6,710	6,161
69	4,481	4,284	4,438	5,028	5,872	6,891	7,743	8,119	7,869	7,252	6,435
70	4,639	4,275	4,089	4,237	4,801	5,608	6,583	7,398	7,758	7,521	6,933
71	4,684	4,409	4,065	3,888	4,029	4,567	5,336	6,265	7,043	7,388	7,164
72	4,509	4,427	4,168	3,843	3,677	3,812	4,322	5,051	5,932	6,670	6,998
73	3,996	4,233	4,157	3,914	3,611	3,456	3,583	4,064	4,750	5,580	6,277
74	3,266	3,725	3,947	3,877	3,652	3,370	3,226	3,346	3,796	4,439	5,216
75	2,748	3,024	3,450	3,657	3,593	3,386	3,125	2,993	3,105	3,524	4,122
76	2,118	2,528	2,783	3,176	3,368	3,310	3,120	2,881	2,760	2,865	3,252
77	1,648	1,936	2,311	2,545	2,906	3,082	3,031	2,858	2,640	2,530	2,627
78	1,452	1,495	1,757	2,099	2,312	2,641	2,803	2,757	2,601	2,403	2,304
79	1,645	1,307	1,346	1,583	1,891	2,084	2,382	2,529	2,489	2,348	2,171
80+	17,218	15,763	14,269	13,062	12,257	11,845	11,666	11,775	11,986	12,140	12,155

Table A7: Projected population by singe age, 2022 - 2032 - Female

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	2,606,160	2,668,829	2,733,635	2,800,986	2,870,407	2,941,680	3,014,538	3,088,695	3,164,019	3,240,390	3,317,312
0	57,416	81,060	83,651	86,409	88,786	90,955	92,870	94,505	95,894	97,273	98,164
1	56,091	56,115	79,258	81,845	84,580	86,944	89,106	91,022	92,684	94,087	95,481
2	55,375	55,387	55,423	78,306	80,879	83,599	85,955	88,112	90,035	91,699	93,107
3	54,869	54,877	54,897	54,945	77,641	80,204	82,914	85,264	87,422	89,343	91,008
4	54,469	54,475	54,490	54,519	54,573	77,124	79,679	82,381	84,730	86,884	88,804
5	60,101	54,141	54,152	54,174	54,209	54,267	76,700	79,249	81,948	84,292	86,444
6	61,250	59,847	53,915	53,932	53,957	53,995	54,057	76,408	78,954	81,649	83,990

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
7	62,105	61,073	59,677	53,766	53,786	53,814	53,854	53,918	76,218	78,762	81,454
8	62,623	61,970	60,943	59,553	53,657	53,678	53,709	53,751	53,819	76,080	78,623
9	62,831	62,460	61,811	60,790	59,406	53,527	53,550	53,582	53,628	53,697	75,911
10	62,834	62,670	62,302	61,659	60,643	59,264	53,401	53,427	53,462	53,509	53,581
11	62,805	62,680	62,518	62,155	61,515	60,504	59,131	53,283	53,311	53,348	53,398
12	62,942	62,657	62,534	62,376	62,016	61,380	60,373	59,005	53,172	53,202	53,241
13	63,366	62,801	62,518	62,399	62,243	61,886	61,253	60,250	58,887	53,068	53,100
14	63,956	63,229	62,667	62,388	62,271	62,117	61,762	61,133	60,134	58,776	52,969
15	64,405	63,819	63,096	62,538	62,261	62,146	61,994	61,642	61,016	60,021	58,667
16	64,601	64,264	63,682	62,963	62,408	62,133	62,020	61,870	61,521	60,898	59,907
17	64,698	64,450	64,116	63,538	62,822	62,270	61,998	61,887	61,740	61,393	60,774
18	64,678	64,533	64,288	63,957	63,382	62,670	62,122	61,852	61,744	61,600	61,256
19	64,461	64,501	64,358	64,117	63,789	63,218	62,510	61,965	61,699	61,593	61,451
20	64,378	64,279	64,321	64,181	63,943	63,618	63,051	62,347	61,806	61,543	61,439
21	63,990	64,192	64,096	64,141	64,004	63,768	63,446	62,882	62,183	61,646	61,385
22	62,453	63,798	64,001	63,908	63,955	63,821	63,588	63,269	62,710	62,015	61,482
23	59,424	62,258	63,600	63,806	63,716	63,765	63,633	63,403	63,089	62,534	61,843
24	55,395	59,230	62,057	63,399	63,607	63,519	63,570	63,441	63,215	62,904	62,353
25	50,740	55,208	59,032	61,854	63,193	63,402	63,318	63,371	63,246	63,023	62,716
26	46,531	50,564	55,018	58,833	61,647	62,985	63,196	63,114	63,171	63,048	62,829
27	43,714	46,365	50,386	54,828	58,632	61,439	62,774	62,987	62,909	62,968	62,849
28	42,913	43,555	46,198	50,208	54,636	58,429	61,229	62,562	62,778	62,703	62,765
29	43,534	42,753	43,395	46,031	50,028	54,443	58,225	61,017	62,350	62,568	62,496
30	44,692	43,366	42,590	43,232	45,861	49,845	54,246	58,018	60,804	62,135	62,355
31	45,320	44,515	43,196	42,426	43,068	45,688	49,660	54,047	57,808	60,587	61,916
32	45,011	45,136	44,337	43,026	42,261	42,902	45,514	49,473	53,848	57,598	60,370
33	43,278	44,824	44,952	44,158	42,855	42,095	42,736	45,340	49,288	53,648	57,387
34	40,536	43,094	44,636	44,767	43,979	42,683	41,928	42,568	45,166	49,101	53,447
35	37,449	40,359	42,908	44,447	44,579	43,797	42,509	41,759	42,400	44,989	48,911
36	34,758	37,280	40,178	42,719	44,254	44,387	43,611	42,330	41,587	42,228	44,809
37	32,681	34,595	37,107	39,995	42,527	44,057	44,192	43,421	42,150	41,412	42,052
38	31,530	32,521	34,428	36,931	39,808	42,330	43,855	43,992	43,228	41,965	41,232
39	31,016	31,371	32,358	34,259	36,751	39,616	42,128	43,648	43,789	43,031	41,775
40	30,808	30,852	31,207	32,192	34,085	36,566	39,419	41,921	43,438	43,580	42,828
41	30,293	30,640	30,686	31,041	32,023	33,908	36,378	39,218	41,711	43,223	43,367
42	29,074	30,124	30,471	30,518	30,874	31,852	33,728	36,188	39,017	41,499	43,005
43	26,842	28,907	29,953	30,300	30,349	30,704	31,679	33,547	35,997	38,813	41,285
44	23,943	26,683	28,738	29,780	30,127	30,178	30,532	31,503	33,364	35,802	38,605
45	20,717	23,793	26,518	28,562	29,600	29,947	29,999	30,354	31,322	33,174	35,600

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
46	17,890	20,581	23,638	26,348	28,381	29,414	29,760	29,814	30,169	31,133	32,976
47	15,994	17,770	20,444	23,482	26,176	28,197	29,225	29,571	29,627	29,982	30,942
48	15,416	15,885	17,649	20,306	23,325	26,002	28,012	29,034	29,380	29,437	29,791
49	15,766	15,307	15,773	17,526	20,166	23,165	25,825	27,821	28,839	29,184	29,242
50	16,553	15,651	15,195	15,659	17,400	20,021	23,000	25,641	27,625	28,637	28,980
51	17,016	16,422	15,527	15,076	15,537	17,265	19,867	22,824	25,447	27,417	28,422
52	16,724	16,861	16,274	15,389	14,944	15,401	17,116	19,697	22,632	25,235	27,191
53	15,303	16,548	16,685	16,108	15,234	14,796	15,251	16,952	19,512	22,422	25,004
54	13,112	15,123	16,356	16,497	15,929	15,068	14,636	15,090	16,777	19,314	22,199
55	10,644	12,942	14,930	16,153	16,295	15,737	14,890	14,467	14,919	16,591	19,105
56	8,584	10,502	12,771	14,737	15,948	16,091	15,543	14,709	14,295	14,745	16,401
57	7,257	8,472	10,366	12,609	14,552	15,750	15,893	15,354	14,533	14,126	14,573
58	6,987	7,168	8,369	10,241	12,458	14,378	15,562	15,705	15,174	14,363	13,961
59	7,470	6,904	7,083	8,269	10,119	12,309	14,206	15,376	15,517	14,991	14,190
60	8,249	7,376	6,817	6,993	8,164	9,990	12,152	14,025	15,178	15,317	14,798
61	8,775	8,131	7,271	6,719	6,893	8,047	9,847	11,977	13,823	14,960	15,096
62	8,844	8,630	7,997	7,151	6,609	6,780	7,916	9,686	11,783	13,599	14,718
63	8,209	8,673	8,464	7,844	7,015	6,484	6,653	7,768	9,507	11,565	13,350
64	7,082	8,027	8,483	8,280	7,675	6,865	6,346	6,513	7,606	9,310	11,328
65	5,811	6,911	7,835	8,281	8,085	7,495	6,706	6,200	6,364	7,434	9,101
66	4,772	5,659	6,732	7,633	8,070	7,880	7,306	6,538	6,046	6,207	7,252
67	4,066	4,635	5,498	6,542	7,419	7,844	7,661	7,105	6,359	5,882	6,040
68	3,854	3,938	4,489	5,327	6,339	7,191	7,605	7,429	6,891	6,169	5,708
69	3,993	3,721	3,803	4,336	5,147	6,126	6,950	7,351	7,183	6,665	5,967
70	4,296	3,844	3,583	3,663	4,178	4,959	5,904	6,699	7,088	6,927	6,429
71	4,481	4,121	3,688	3,439	3,516	4,011	4,763	5,671	6,437	6,813	6,660
72	4,406	4,277	3,934	3,522	3,285	3,359	3,833	4,552	5,423	6,157	6,517
73	3,939	4,180	4,058	3,734	3,344	3,120	3,191	3,642	4,327	5,156	5,855
74	3,219	3,714	3,942	3,829	3,524	3,157	2,946	3,014	3,442	4,090	4,874
75	2,824	3,017	3,482	3,698	3,592	3,307	2,964	2,766	2,832	3,234	3,844
76	2,215	2,632	2,813	3,248	3,450	3,353	3,088	2,768	2,585	2,647	3,024
77	1,737	2,053	2,440	2,609	3,013	3,202	3,113	2,868	2,572	2,402	2,461
78	1,499	1,600	1,892	2,249	2,406	2,780	2,955	2,874	2,649	2,376	2,220
79	1,613	1,371	1,463	1,731	2,059	2,204	2,547	2,708	2,635	2,430	2,181
80+	20,664	18,912	17,228	15,887	14,974	14,493	14,204	14,260	14,451	14,562	14,481

Table A8: Projected population by age group, 2022–2032 – Both Sexes

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	5,250,187	5,371,185	5,496,122	5,625,874	5,759,600	5,896,852	6,037,091	6,179,764	6,324,490	6,471,184	6,618,845
0-4	549,952	599,349	652,713	710,967	773,428	839,695	863,178	884,779	903,773	920,855	935,450
5-9	614,603	594,055	574,718	557,065	541,763	529,540	576,133	627,592	684,245	745,381	810,535
10-14	632,621	628,712	624,820	620,356	614,357	606,032	585,920	566,972	549,663	534,667	522,707
15-19	638,462	637,336	635,024	631,916	628,355	624,553	620,792	617,054	612,740	606,912	598,783
20-24	599,536	616,128	625,025	628,049	628,200	627,690	626,692	624,521	621,569	618,173	614,541
25-29	440,933	461,745	492,640	528,448	561,770	587,357	603,730	612,569	615,661	615,932	615,564
30-34	438,060	439,763	433,841	425,774	423,187	431,158	451,630	481,966	517,113	549,839	575,003
35-39	337,732	352,513	373,505	396,540	415,705	427,143	428,913	423,254	415,513	413,124	421,046
40-44	311,828	320,910	322,544	320,735	321,216	327,821	342,300	362,807	385,296	404,020	415,243
45-49	185,989	203,551	228,841	257,322	282,663	300,619	309,468	311,154	309,552	310,173	316,712
50-54	174,574	177,745	174,951	170,439	170,015	177,447	194,324	218,560	245,824	270,079	287,288
55-59	89,249	100,695	117,736	136,783	153,008	163,341	166,351	163,815	159,710	159,478	166,644
60-64	89,048	87,958	83,712	79,084	77,701	81,778	92,394	108,102	125,604	140,465	149,901
65-69	48,784	53,882	61,187	68,906	74,794	77,572	76,581	72,880	68,926	67,884	71,663
70-74	41,435	41,205	39,631	37,946	37,617	39,419	43,687	49,702	55,996	60,741	62,923
75-79	19,499	20,963	23,737	26,595	28,590	29,349	29,128	28,002	26,868	26,759	28,206
80+	37,882	34,675	31,497	28,949	27,231	26,338	25,870	26,035	26,437	26,702	26,636
0-14	1,797,176	1,822,116	1,852,251	1,888,388	1,929,548	1,975,267	2,025,231	2,079,343	2,137,681	2,200,903	2,268,692
15-64	3,305,411	3,398,344	3,487,819	3,575,090	3,661,820	3,748,907	3,836,594	3,923,802	4,008,582	4,088,195	4,160,725
65+	147,600	150,725	156,052	162,396	168,232	172,678	175,266	176,619	178,227	182,086	189,428
Population 18+	3,069,079	3,166,290	3,263,122	3,359,425	3,454,607	3,548,212	3,640,299	3,731,068	3,820,652	3,908,807	3,995,145
Mean Age	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25.0	25.1	25.2	25.3
Median Age	21	21	22	22	22	22	22	23	23	23	23
Dependency Ratio	58.8	58.1	57.6	57.4	57.3	57.3	57.4	57.5	57.8	58.3	59.1

Table A9: Projected population by age group, 2022-2032 - Males

Ages	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	2,644,027	2,702,356	2,762,487	2,824,888	2,889,193	2,955,172	3,022,553	3,091,069	3,160,471	3,230,794	3,301,533
0-4	271,732	297,435	324,994	354,943	386,969	420,869	432,654	443,495	453,008	461,569	468,886
5-9	305,693	294,564	284,220	274,850	266,748	260,259	284,263	310,684	339,678	370,901	404,113
10-14	316,718	314,675	312,281	309,379	305,669	300,881	290,000	279,874	270,697	262,764	256,418
15-19	315,619	315,769	315,484	314,803	313,693	312,116	310,148	307,838	305,020	301,407	296,728
20-24	293,896	302,371	306,950	308,614	308,975	309,199	309,404	309,179	308,566	307,531	306,039
25-29	213,501	223,300	238,611	256,694	273,634	286,659	294,988	299,518	301,207	301,622	301,909
30-34	219,223	218,828	214,130	208,165	205,163	207,945	217,546	232,520	250,199	266,770	279,528
35-39	170,298	176,387	186,526	198,189	207,786	212,956	212,618	208,104	202,359	199,499	202,267

Ages	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
40-44	170,868	173,704	171,489	166,904	163,758	164,613	170,564	180,430	191,769	201,103	206,153
45-49	100,206	110,215	124,819	141,098	155,015	163,894	166,647	164,560	160,215	157,263	158,161
50-54	95,866	97,140	94,914	91,710	90,971	94,896	104,454	118,356	133,831	147,054	155,492
55-59	48,307	54,707	64,217	74,774	83,636	89,076	90,257	88,204	85,272	84,662	88,414
60-64	47,889	47,121	44,680	42,097	41,345	43,612	49,480	58,133	67,707	75,714	80,611
65-69	26,288	29,018	32,830	36,787	39,734	41,036	40,353	38,257	36,083	35,527	37,595
70-74	21,094	21,069	20,426	19,759	19,770	20,813	23,050	26,124	29,279	31,598	32,588
75-79	9,611	10,290	11,647	13,060	14,070	14,503	14,461	14,018	13,595	13,670	14,476
80+	17,218	15,763	14,269	13,062	12,257	11,845	11,666	11,775	11,986	12,140	12,155
0-14	894,143	906,674	921,495	939,172	959,386	982,009	1,006,917	1,034,053	1,063,383	1,095,234	1,129,417
15-64	1,675,673	1,719,542	1,761,820	1,803,048	1,843,976	1,884,966	1,926,106	1,966,842	2,006,145	2,042,625	2,075,302
65+	74,211	76,140	79,172	82,668	85,831	88,197	89,530	90,174	90,943	92,935	96,814
Population 18+	1,559,656	1,605,436	1,651,137	1,696,694	1,741,853	1,786,339	1,830,087	1,873,062	1,915,208	1,956,398	1,996,456
Mean Age	24.7	24.8	24.9	24.9	25.0	25.1	25.2	25.2	25.3	25.4	25.5
Median Age	21	22	22	22	22	22	23	23	23	23	23
Dependency Ratio	57.8	57.2	56.8	56.7	56.7	56.8	56.9	57.2	57.5	58.2	59.1

Table A10: Projected population by age group, 2022–2032 – Females

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	2,606,160	2,668,829	2,733,635	2,800,986	2,870,407	2,941,680	3,014,538	3,088,695	3,164,019	3,240,390	3,317,312
0-4	278,220	301,914	327,719	356,024	386,459	418,826	430,524	441,284	450,765	459,286	466,564
5-9	308,910	299,491	290,498	282,215	275,015	269,281	291,870	316,908	344,567	374,480	406,422
10-14	315,903	314,037	312,539	310,977	308,688	305,151	295,920	287,098	278,966	271,903	266,289
15-19	322,843	321,567	319,540	317,113	314,662	312,437	310,644	309,216	307,720	305,505	302,055
20-24	305,640	313,757	318,075	319,435	319,225	318,491	317,288	315,342	313,003	310,642	308,502
25-29	227,432	238,445	254,029	271,754	288,136	300,698	308,742	313,051	314,454	314,310	313,655
30-34	218,837	220,935	219,711	217,609	218,024	223,213	234,084	249,446	266,914	283,069	295,475
35-39	167,434	176,126	186,979	198,351	207,919	214,187	216,295	215,150	213,154	213,625	218,779
40-44	140,960	147,206	151,055	153,831	157,458	163,208	171,736	182,377	193,527	202,917	209,090
45-49	85,783	93,336	104,022	116,224	127,648	136,725	142,821	146,594	149,337	152,910	158,551
50-54	78,708	80,605	80,037	78,729	79,044	82,551	89,870	100,204	111,993	123,025	131,796
55-59	40,942	45,988	53,519	62,009	69,372	74,265	76,094	75,611	74,438	74,816	78,230
60-64	41,159	40,837	39,032	36,987	36,356	38,166	42,914	49,969	57,897	64,751	69,290
65-69	22,496	24,864	28,357	32,119	35,060	36,536	36,228	34,623	32,843	32,357	34,068
70-74	20,341	20,136	19,205	18,187	17,847	18,606	20,637	23,578	26,717	29,143	30,335
75-79	9,888	10,673	12,090	13,535	14,520	14,846	14,667	13,984	13,273	13,089	13,730
80+	20,664	18,912	17,228	15,887	14,974	14,493	14,204	14,260	14,451	14,562	14,481
0-14	903,033	915,442	930,756	949,216	970,162	993,258	1,018,314	1,045,290	1,074,298	1,105,669	1,139,275
15-64	1,629,738	1,678,802	1,725,999	1,772,042	1,817,844	1,863,941	1,910,488	1,956,960	2,002,437	2,045,570	2,085,423

Age	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
65+	73,389	74,585	76,880	79,728	82,401	84,481	85,736	86,445	87,284	89,151	92,614
Population 18+	1,509,423	1,560,854	1,611,985	1,662,731	1,712,754	1,761,873	1,810,212	1,858,006	1,905,444	1,952,409	1,998,689
Mean Age	23.9	24.0	24.1	24.2	24.4	24.5	24.6	24.7	24.8	25.0	25.1
Median Age	21	21	21	22	22	22	22	23	23	23	23
Dependency Ratio	59.9	59.0	58.4	58.1	57.9	57.8	57.8	57.8	58.0	58.4	59.1

Table A11: Urban projected population by county - Total

County	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	2,862,154	2,945,954	3,032,482	3,122,344	3,214,959	3,310,016	3,407,141	3,505,952	3,606,185	3,707,782	3,810,047
Bomi	34,166	35,335	36,542	37,796	39,088	40,414	41,769	43,147	44,546	45,963	47,390
Bong	149,772	152,983	156,298	159,741	163,290	166,932	170,653	174,439	178,279	182,172	186,090
Gbarpolu	8,827	8,899	8,974	9,051	9,131	9,213	9,297	9,382	9,468	9,556	9,644
Grand Bassa	89,606	91,737	93,936	96,221	98,576	100,993	103,462	105,974	108,523	111,106	113,706
Grand Cape Mount	47,287	49,957	52,715	55,579	58,530	61,558	64,654	67,802	70,996	74,234	77,493
Grand Gedeh	91,648	95,057	98,578	102,234	106,002	109,870	113,821	117,841	121,919	126,053	130,213
Grand Kru	7,258	7,501	7,751	8,012	8,280	8,556	8,837	9,123	9,414	9,708	10,004
Lofa	86,576	86,763	86,956	87,157	87,363	87,575	87,792	88,013	88,236	88,463	88,691
Margibi	170,577	176,152	181,907	187,885	194,046	200,369	206,830	213,403	220,070	226,828	233,631
Maryland	106,093	110,125	114,290	118,614	123,071	127,646	132,319	137,076	141,898	146,787	151,710
Montserrado	1,761,032	1,810,487	1,861,552	1,914,584	1,969,242	2,025,339	2,082,659	2,140,973	2,200,126	2,260,084	2,320,436
Nimba	209,606	216,720	224,065	231,693	239,555	247,624	255,869	264,257	272,766	281,390	290,071
River Cess	10,895	11,475	12,075	12,697	13,338	13,997	14,669	15,353	16,048	16,751	17,459
River Gee	62,108	65,150	68,291	71,553	74,915	78,366	81,891	85,478	89,117	92,805	96,517
Sinoe	26,703	27,613	28,552	29,527	30,532	31,564	32,619	33,691	34,779	35,882	36,992

Table A12: Urban projected population by county - Males

County	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	1,425,132	1,465,164	1,506,428	1,549,242	1,593,350	1,638,593	1,684,792	1,731,754	1,779,321	1,827,512	1,875,972
Bomi	17,523	18,102	18,698	19,317	19,954	20,607	21,275	21,952	22,639	23,335	24,035
Bong	75,343	76,939	78,583	80,289	82,048	83,852	85,695	87,568	89,466	91,389	93,324
Gbarpolu	4,701	4,740	4,780	4,822	4,865	4,909	4,955	5,001	5,047	5,095	5,142
Grand Bassa	45,851	46,950	48,082	49,258	50,470	51,714	52,985	54,277	55,587	56,913	58,248
Grand Cape Mount	25,580	27,050	28,569	30,148	31,777	33,449	35,160	36,902	38,669	40,462	42,267
Grand Gedeh	48,763	50,545	52,384	54,291	56,255	58,271	60,328	62,421	64,540	66,688	68,847
Grand Kru	3,784	3,906	4,032	4,163	4,297	4,436	4,577	4,720	4,866	5,013	5,161
Lofa	43,149	43,269	43,391	43,517	43,645	43,775	43,907	44,041	44,174	44,309	44,443
Margibi	85,415	88,080	90,827	93,674	96,606	99,612	102,679	105,796	108,951	112,147	115,358

County	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Maryland	53,399	55,287	57,229	59,238	61,302	63,413	65,562	67,742	69,944	72,170	74,403
Montserrado	864,085	886,951	910,525	934,990	960,202	986,071	1,012,493	1,039,358	1,066,572	1,094,149	1,121,888
Nimba	105,173	108,679	112,293	116,043	119,906	123,867	127,911	132,022	136,187	140,405	144,646
River Cess	5,724	6,027	6,340	6,664	6,998	7,341	7,691	8,047	8,408	8,773	9,140
River Gee	32,621	34,169	35,763	37,417	39,120	40,866	42,647	44,457	46,290	48,147	50,013
Sinoe	14,021	14,470	14,932	15,411	15,905	16,410	16,927	17,450	17,981	18,517	19,057

Table A13: Urban projected population by county - Females

County	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	1,437,022	1,480,790	1,526,054	1,573,102	1,621,609	1,671,423	1,722,349	1,774,198	1,826,864	1,880,270	1,934,075
Bomi	16,643	17,233	17,844	18,479	19,134	19,807	20,494	21,195	21,907	22,628	23,355
Bong	74,429	76,044	77,715	79,452	81,242	83,080	84,958	86,871	88,813	90,783	92,766
Gbarpolu	4,126	4,159	4,194	4,229	4,266	4,304	4,342	4,381	4,421	4,461	4,502
Grand Bassa	43,755	44,787	45,854	46,963	48,106	49,279	50,477	51,697	52,936	54,193	55,458
Grand Cape Mount	21,707	22,907	24,146	25,431	26,753	28,109	29,494	30,900	32,327	33,772	35,226
Grand Gedeh	42,885	44,512	46,194	47,943	49,747	51,599	53,493	55,420	57,379	59,365	61,366
Grand Kru	3,474	3,595	3,719	3,849	3,983	4,120	4,260	4,403	4,548	4,695	4,843
Lofa	43,427	43,494	43,565	43,640	43,718	43,800	43,885	43,972	44,062	44,154	44,248
Margibi	85,162	88,072	91,080	94,211	97,440	100,757	104,151	107,607	111,119	114,681	118,273
Maryland	52,694	54,838	57,061	59,376	61,769	64,233	66,757	69,334	71,954	74,617	77,307
Montserrado	896,947	923,536	951,027	979,594	1,009,040	1,039,268	1,070,166	1,101,615	1,133,554	1,165,935	1,198,548
Nimba	104,433	108,041	111,772	115,650	119,649	123,757	127,958	132,235	136,579	140,985	145,425
River Cess	5,171	5,448	5,735	6,033	6,340	6,656	6,978	7,306	7,640	7,978	8,319
River Gee	29,487	30,981	32,528	34,136	35,795	37,500	39,244	41,021	42,827	44,658	46,504
Sinoe	12,682	13,143	13,620	14,116	14,627	15,154	15,692	16,241	16,798	17,365	17,935

Table A14: Projected population by age and type of residence

Age		2022		2023			
	Total	Urban	Rural	Total	Urban	Rural	
Total	5,250,187	2,862,154	2,388,033	5,371,185	2,945,954	2,425,231	
0-4	549,952	299,809	250,143	599,349	328,728	270,621	
5-9	614,603	335,051	279,552	594,055	325,824	268,231	
10-14	632,621	344,875	287,746	628,712	344,831	283,881	
15-19	638,462	348,059	290,403	637,336	349,562	287,774	
20-24	599,536	326,838	272,698	616,128	337,930	278,198	
25-29	440,933	240,375	200,558	461,745	253,255	208,490	

A		2022		2023			
Age	Total	Urban	Rural	Total	Urban	Rural	
30-34	438,060	238,810	199,250	439,763	241,198	198,565	
35-39	337,732	184,115	153,617	352,513	193,344	159,169	
40-44	311,828	169,994	141,834	320,910	176,011	144,899	
45-49	185,989	101,392	84,597	203,551	111,642	91,909	
50-54	174,574	95,170	79,404	177,745	97,488	80,257	
55-59	89,249	48,654	40,595	100,695	55,229	45,466	
60-64	89,048	48,545	40,503	87,958	48,243	39,715	
65-69	48,784	26,595	22,189	53,882	29,553	24,329	
70-74	41,435	22,588	18,847	41,205	22,599	18,606	
75-79	19,499	10,630	8,869	20,963	11,498	9,465	
80+	37,882	20,654	17,228	34,675	19,019	15,656	

A		2024			2025			
Age	Total	Urban	Rural	Total	Urban	Rural		
Total	5,496,122	3,032,482	2,463,640	5,625,874	3,122,344	2,503,530		
0-4	652,713	360,135	292,578	710,967	394,585	316,382		
5-9	574,718	317,101	257,617	557,065	309,169	247,896		
10-14	624,820	344,744	280,076	620,356	344,297	276,059		
15-19	635,024	350,374	284,650	631,916	350,711	281,205		
20-24	625,025	344,856	280,169	628,049	348,565	279,484		
25-29	492,640	271,814	220,826	528,448	293,287	235,161		
30-34	433,841	239,372	194,469	425,774	236,304	189,470		
35-39	373,505	206,081	167,424	396,540	220,079	176,461		
40-44	322,544	177,963	144,581	320,735	178,006	142,729		
45-49	228,841	126,263	102,578	257,322	142,814	114,508		
50-54	174,951	96,529	78,422	170,439	94,593	75,846		
55-59	117,736	64,960	52,776	136,783	75,914	60,869		
60-64	83,712	46,188	37,524	79,084	43,892	35,192		
65-69	61,187	33,760	27,427	68,906	38,242	30,664		
70-74	39,631	21,867	17,764	37,946	21,060	16,886		
75-79	23,737	13,097	10,640	26,595	14,759	11,836		
80+	31,497	17,378	14,119	28,949	16,067	12,882		

		2026		2027			
Age	Total	Urban	Rural	Total	Urban	Rural	
Total	5,759,600	3,214,959	2,544,641	5,896,852	3,310,016	2,586,836	
0-4	773,428	431,721	341,707	839,695	471,337	368,358	
5-9	541,763	302,408	239,355	529,540	297,241	232,299	
10-14	614,357	342,928	271,429	606,032	340,176	265,856	
15-19	628,355	350,742	277,613	624,553	350,573	273,980	
20-24	628,200	350,655	277,545	627,690	352,335	275,355	
25-29	561,770	313,576	248,194	587,357	329,695	257,662	
30-34	423,187	236,220	186,967	431,158	242,017	189,141	
35-39	415,705	232,043	183,662	427,143	239,763	187,380	
40-44	321,216	179,300	141,916	327,821	184,011	143,810	
45-49	282,663	157,780	124,883	300,619	168,742	131,877	
50-54	170,015	94,900	75,115	177,447	99,604	77,843	
55-59	153,008	85,407	67,601	163,341	91,687	71,654	
60-64	77,701	43,371	34,330	81,778	45,903	35,875	
65-69	74,794	41,749	33,045	77,572	43,542	34,030	
70-74	37,617	20,998	16,619	39,419	22,126	17,293	
75-79	28,590	15,960	12,630	29,349	16,474	12,875	
80+	27,231	15,201	12,030	26,338	14,790	11,548	

A		2028		2029			
Age	Total	Urban	Rural	Total	Urban	Rural	
Total	6,037,091	3,407,141	2,629,950	6,179,764	3,505,952	2,673,812	
0-4	863,178	487,150	376,028	884,779	501,959	382,820	
5-9	576,133	325,151	250,982	627,592	356,051	271,541	
10-14	585,920	330,675	255,245	566,972	321,659	245,313	
15-19	620,792	350,356	270,436	617,054	350,072	266,982	
20-24	626,692	353,684	273,008	624,521	354,308	270,213	
25-29	603,730	340,726	263,004	612,569	347,528	265,041	
30-34	451,630	254,885	196,745	481,966	273,433	208,533	
35-39	428,913	242,064	186,849	423,254	240,124	183,130	
40-44	342,300	193,183	149,117	362,807	205,831	156,976	
45-49	309,468	174,654	134,814	311,154	176,526	134,628	

A == 0		2028		2029			
Age	Total	Urban	Rural	Total	Urban	Rural	
50-54	194,324	109,670	84,654	218,560	123,995	94,565	
55-59	166,351	93,883	72,468	163,815	92,937	70,878	
60-64	92,394	52,145	40,249	108,102	61,330	46,772	
65-69	76,581	43,219	33,362	72,880	41,347	31,533	
70-74	43,687	24,655	19,032	49,702	28,198	21,504	
75-79	29,128	16,439	12,689	28,002	15,887	12,115	
80+	25,870	14,602	11,268	26,035	14,767	11,268	

<b>A</b>		2030		2031			
Age	Total	Urban	Rural	Total	Urban	Rural	
Total	6,324,490	3,606,185	2,718,305	6,471,184	3,707,782	2,763,402	
0-4	903,773	515,325	388,448	920,855	527,619	393,236	
5-9	684,245	390,152	294,093	745,381	427,080	318,301	
10-14	549,663	313,414	236,249	534,667	306,347	228,320	
15-19	612,740	349,382	263,358	606,912	347,741	259,171	
20-24	621,569	354,415	267,154	618,173	354,194	263,979	
25-29	615,661	351,046	264,615	615,932	352,910	263,022	
30-34	517,113	294,855	222,258	549,839	315,041	234,798	
35-39	415,513	236,923	178,590	413,124	236,707	176,417	
40-44	385,296	219,693	165,603	404,020	231,490	172,530	
45-49	309,552	176,506	133,046	310,173	177,718	132,455	
50-54	245,824	140,167	105,657	270,079	154,747	115,332	
55-59	159,710	91,066	68,644	159,478	91,376	68,102	
60-64	125,604	71,619	53,985	140,465	80,482	59,983	
65-69	68,926	39,302	29,624	67,884	38,895	28,989	
70-74	55,996	31,929	24,067	60,741	34,802	25,939	
75-79	26,868	15,321	11,547	26,759	15,332	11,427	
80+	26,437	15,070	11,367	26,702	15,301	11,401	

_		2032			2033	
Age	Total	Urban	Rural	Total	Urban	Rural
Total	6,618,845	3,810,047	2,808,798	6,766,952	3,912,622	2,854,330
0-4	935,450	538,479	396,971	947,523	547,853	399,670
5-9	810,535	466,574	343,961	833,769	482,081	351,688
10-14	522,707	300,889	221,818	568,733	328,839	239,894
15-19	598,783	344,681	254,102	579,001	334,776	244,225
20-24	614,541	353,753	260,788	610,952	353,251	257,701
25-29	615,564	354,341	261,223	614,705	355,420	259,285
30-34	575,003	330,992	244,011	591,162	341,807	249,355
35-39	421,046	242,370	178,676	441,175	255,086	186,089
40-44	415,243	239,029	176,214	417,076	241,151	175,925
45-49	316,712	182,311	134,401	330,856	191,299	139,557
50-54	287,288	165,374	121,914	295,825	171,044	124,781
55-59	166,644	95,927	70,717	182,676	105,623	77,053
60-64	149,901	86,289	63,612	152,631	88,251	64,380
65-69	71,663	41,251	30,412	81,164	46,930	34,234
70-74	62,923	36,222	26,701	62,050	35,876	26,174
75-79	28,206	16,237	11,969	31,412	18,163	13,249
80+	26,636	15,328	11,308	26,242	15,172	11,070

A		2034		2035			
Age	Total	Urban	Rural	Total	Urban	Rural	
Total	6,915,155	4,015,263	2,899,892	7,062,889	4,117,579	2,945,310	
0-4	957,186	555,787	401,399	964,490	562,286	402,204	
5-9	855,254	496,600	358,654	874,195	509,646	364,549	
10-14	619,667	359,808	259,859	675,765	393,963	281,802	
15-19	560,364	325,374	234,990	543,344	316,764	226,580	
20-24	607,387	352,676	254,711	603,254	351,689	251,565	
25-29	612,707	355,766	256,941	609,930	355,582	254,348	
30-34	599,958	348,365	251,593	603,127	351,615	251,512	
35-39	470,948	273,456	197,492	505,416	294,652	210,764	
40-44	411,703	239,055	172,648	404,312	235,709	168,603	
45-49	350,818	203,702	147,116	372,679	217,267	155,412	

A		2034		2035			
Age	Total	Urban	Rural	Total	Urban	Rural	
50-54	297,563	172,780	124,783	296,189	172,674	123,515	
55-59	205,606	119,385	86,221	231,359	134,879	96,480	
60-64	150,320	87,283	63,037	146,636	85,487	61,149	
65-69	95,082	55,209	39,873	110,486	64,412	46,074	
70-74	59,040	34,282	24,758	55,921	32,602	23,319	
75-79	35,837	20,809	15,028	40,386	23,545	16,841	
80+	25,715	14,926	10,789	25,400	14,807	10,593	

A		2036			2037	
Age	Total	Urban	Rural	Total	Urban	Rural
Total	7,210,236	4,219,628	2,990,608	7,356,092	4,320,643	3,035,449
0-4	969,569	567,418	402,151	972,311	571,092	401,219
5-9	891,302	521,613	369,689	906,032	532,163	373,869
10-14	736,316	430,913	305,403	800,874	470,397	330,477
15-19	528,611	309,358	219,253	516,881	303,593	213,288
20-24	597,622	349,745	247,877	589,724	346,378	243,346
25-29	606,720	355,069	251,651	603,280	354,340	248,940
30-34	603,535	353,205	250,330	603,310	354,357	248,953
35-39	537,529	314,578	222,951	562,263	330,249	232,014
40-44	402,136	235,341	166,795	410,013	240,823	169,190
45-49	390,895	228,762	162,133	401,856	236,033	165,823
50-54	296,972	173,797	123,175	303,425	178,218	125,207
55-59	254,281	148,811	105,470	270,583	158,928	111,655
60-64	146,576	85,780	60,796	153,352	90,072	63,280
65-69	123,506	72,279	51,227	131,727	77,371	54,356
70-74	55,275	32,349	22,926	58,627	34,435	24,192
75-79	43,754	25,606	18,148	45,237	26,569	18,668
80+	25,637	15,004	10,633	26,597	15,625	10,972

Age	2040			2041			
	Total	Urban	Rural	Total	Urban	Rural	
Total	7,784,540	4,617,374	3,167,166	7,924,939	4,714,611	3,210,328	
0-4	971,638	576,324	395,314	970,133	577,141	392,992	
5-9	936,007	555,189	380,818	941,523	560,120	381,403	
10-14	864,324	512,671	351,653	881,418	524,363	357,055	
15-19	668,602	396,580	272,022	728,606	433,454	295,152	
20-24	535,408	317,576	217,832	521,001	309,948	211,053	
25-29	592,587	351,492	241,095	587,181	349,318	237,863	
30-34	598,193	354,816	243,377	595,177	354,076	241,101	
35-39	590,199	350,075	240,124	590,751	351,443	239,308	
40-44	492,650	292,213	200,437	524,081	311,780	212,301	
45-49	391,665	232,315	159,350	389,730	231,852	157,878	
50-54	357,521	212,062	145,459	375,089	223,143	151,946	
55-59	279,517	165,794	113,723	280,519	166,883	113,636	
60-64	213,286	126,510	86,776	234,422	139,459	94,963	
65-69	128,978	76,503	52,475	129,164	76,840	52,324	
70-74	90,906	53,920	36,986	101,534	60,403	41,131	
75-79	40,212	23,851	16,361	39,969	23,778	16,191	
80+	32,847	19,483	13,364	34,641	20,610	14,031	

Age	2042			2043		
	Total	Urban	Rural	Total	Urban	Rural
Total	8,064,009	4,810,926	3,253,083	8,203,531	4,907,555	3,295,976
0-4	968,892	578,034	390,858	969,767	580,139	389,628
5-9	944,779	563,648	381,131	946,203	566,043	380,160
10-14	896,167	534,646	361,521	908,542	543,513	365,029
15-19	792,559	472,834	319,725	815,574	487,897	327,677
20-24	509,549	303,993	205,556	554,679	331,823	222,856
25-29	579,543	345,752	233,791	560,592	335,359	225,233
30-34	591,937	353,146	238,791	588,739	352,198	236,541
35-39	590,681	352,396	238,285	590,138	353,035	237,103
40-44	548,329	327,129	221,200	564,011	337,406	226,605
45-49	397,548	237,174	160,374	416,885	249,391	167,494

A	2042			2043		
Age	Total	Urban	Rural	Total	Urban	Rural
50-54	385,698	230,104	155,594	387,609	231,878	155,731
55-59	286,876	171,148	115,728	300,085	179,518	120,567
60-64	249,472	148,833	100,639	257,075	153,789	103,286
65-69	135,432	80,798	54,634	148,884	89,065	59,819
70-74	108,171	64,534	43,637	110,013	65,813	44,200
75-79	42,688	25,468	17,220	48,798	29,192	19,606
80+	35,688	21,289	14,399	35,937	21,496	14,441

Age	2044			2045			
	Total	Urban	Rural	Total	Urban	Rural	
Total	8,345,636	5,005,973	3,339,663	8,490,719	5,106,454	3,384,265	
0-4	974,668	584,636	390,032	984,178	591,900	392,278	
5-9	946,413	567,688	378,725	945,783	568,809	376,974	
10-14	918,577	550,992	367,585	926,361	557,127	369,234	
15-19	836,884	501,988	334,896	855,723	514,646	341,077	
20-24	604,601	362,659	241,942	659,552	396,665	262,887	
25-29	542,758	325,563	217,195	526,491	316,641	209,850	
30-34	585,568	351,242	234,326	581,842	349,929	231,913	
35-39	588,490	352,995	235,495	586,095	352,486	233,609	
40-44	572,695	343,520	229,175	576,027	346,432	229,595	
45-49	445,322	267,119	178,203	478,187	287,589	190,598	
50-54	382,871	229,658	153,213	376,312	226,321	149,991	
55-59	318,514	191,054	127,460	338,605	203,642	134,963	
60-64	258,897	155,294	103,603	258,143	155,251	102,892	
65-69	167,841	100,677	67,164	188,964	113,646	75,318	
70-74	108,383	65,011	43,372	105,990	63,744	42,246	
75-79	57,409	34,436	22,973	66,708	40,120	26,588	
80+	35,745	21,441	14,304	35,758	21,506	14,252	

