



Economic Commission for Latin America and the Caribbean Subregional Headquarters for the Caribbean

> LIMITED LC/CAR/L.501 20 July 2016 ORIGINAL: ENGLISH

THE DEVELOPMENT OF POPULATION PROJECTIONS FOR THE TURKS AND CAICOS ISLANDS 2012-2027

This document has been reproduced without formal editing.

This document was prepared by Valerie E. Nam, Consultant to the Statistics and Social Development Unit of the Economic Commission for Latin America and the Caribbean (ECLAC), subregional headquarters for the Caribbean. It was produced in collaboration with the Statistics Department of the Turks and Caicos Islands Government. The project was supervised by Francis Jones, Population Affairs Officer, ECLAC and Shirlen Forbes, Director of Statistics of the Turks and Caicos Islands Government. Technical support was provided by Sinovia Moonie of the Statistics and Social Development Unit, ECLAC and by Sabrina Williams of the Statistics Department of the Turks and Caicos Islands Government. The views expressed in this document are those of the author and do not necessarily reflect the views of the Organizations.

CONTENTS

Executiv	ve Summary	5
Introduc	ction	8
Backgro	ound to the project	10
Populati	on dynamics of the Turks and Caicos Islands	
А	. Population growth	
В	. Fertility	13
C	. Mortality	16
D	. Migration	
E.	Sex composition	21
F.	Age structure	
G	. Summary and conclusion	
Method	ology and assumptions for the projections	
А	. The base population	
В	. Fertility	
	Rationale for fertility assumptions	
C	. Mortality	
	Rationale for mortality assumptions	
D	. International migration	
	Rationale for migration assumptions	
Projecti	on scenarios	
The resu	Ilts of the projections	
А	. Total population	
	Population growth rate for the Turks and Caicos Islands	
	• Components of growth of the population of the Turks and Caicos Islands	
	 Natural increase 	
	 Migration 	

	• Sex composition of the population of the Turks and Caicos Islands
	• Age structure of the population of the Turks and Caicos Islands
	• The population of young children of the Turks and Caicos Islands
	• The school age population of the Turks and Caicos Islands
	 The youth population of the Turks and Caicos Islands
	 The working age population of the Turks and Caicos Islands47
	• The older ages of the Turks and Caicos Islands
B.	Belongers
	• The population growth rate for belongers
	• Components of growth for the belonger population
	 Natural increase
	• Migration
	• Sex composition of the belonger population
	• Age structure of the belonger population
	• Young belonger children
	 The belonger population of school age
	• The belonger youth
	• The belonger population of working age
	• The older ages of the belonger population
C.	Non-belongers
	• The population growth rate of non-belongers
	• Components of growth of the non-belonger population
	• Natural increase
	 Migration61
	• Sex composition of the non-belonger population
	• Age structure of the non-belonger population
	 Young non-belonger children64
	• The non-belonger population of school age

•	The non-belonger youth	66
•	The non-belonger population of working age	67
•	The older ages of the non-belonger population	
Recommendations.		71
References		73
Appendices		74
Appendix A:	Population projections, Turks and Caicos Islands population	75
Appendix B:	Population projections, belonger population	
Appendix C:	Population projections, non-belonger population	
Appendix D:	Technical notes	144
Appendix E:	Glossary of terms	158

Executive Summary

It is not possible to trace the early demographic development of the Turks and Caicos Islands due to lack of data, but what is evident from the limited historical data is that population developments beginning in 1921 and up to 1970 followed the same path as other Caribbean Islands with substantial emigration as the most significant component of population change. Since 1980, the path has been in stark contrast to most of the Caribbean with immigration having been the main driver of population growth (although there are a number of other territories that have also seen substantial immigration including the British Virgin Islands, the Cayman Islands and Aruba).

The Turks and Caicos Islands have experienced unprecedented population growth over the last twenty years due largely to the immigration of people from neighbouring countries seeking employment created by the development of tourism. Between 1980 and 2012, the population of the islands increased four-fold from approximately 7,400 to 31,500. Since 1990, average annual immigration has moved from 255 to around 800. The focus of the growth in population over the twenty years has been the island of Providenciales. In 1990, Providenciales accounted for 42 per cent of the population of the Turks and Caicos Islands with a population of 4,821. By 2012, the share had increased to 75 per cent with a population of 23,769. This island accounted for 94 per cent of the growth of just over 20,000 to the Turks and Caicos Islands between 1990 and 2012.

Such rapid population changes for the small island group present many social, economic, environmental and political challenges. Population projections are essential so that policymakers and decision makers can make informed judgements about future strategies, policies and programmes. With the completion of the census in 2012, it was considered a particularly opportune time to develop population projections.

Population projections may be defined as "the numerical outcome of a particular set of assumptions regarding the future population. It is a conditional calculation showing what the future population would be if a particular set of assumptions were to hold true" (Siegel and Swanson 2004, 561). Population projections are not meant to be interpreted as forecasts or predictions but are simply illustrations of the growth and change in the population which would occur if certain assumptions about levels of fertility, mortality and international migration prevailed over the period covered by the projections. Projections for three scenarios are produced: low, medium and high. The choice of different scenarios for population projections is to reflect the uncertainty associated with the future. The scenarios are constructed through the combination of assumptions regarding the direction of each of the components of population change. The medium growth scenario is the most closely associated with the movements observed in the past.

The population projections for the resident population of the Turks and Caicos Islands for belongers and non-belongers have been produced separately by means of the cohort component method. When combined, the separate projections produce national totals. These projections are short-term, covering only 15 years and would require revisions if factors such as economic crises, natural disasters and in this case, a radical shift in the Government's immigration policy present themselves.

The data required for developing population projections using the cohort component method are taken from population censuses and vital statistics. In order to produce projections for male and female belongers and non-belongers, the base data must be available for these categories. Explained patterns of change observed from historical data series provide the basis for the assumptions. Long series provide better guidance. The data limitations faced in the preparation of these projections have presented major methodological challenges. There is no official report of the most recent census (2012) and no vital statistics exist before 1990. The series produced from 1990 show significant gaps and some inconsistencies.

A summary of the major findings from the projections follows:

- According to the current projections all three scenarios show that the population of the Turks and Caicos Islands will increase continuously for the 15 year projection period. The high projection shows the largest population, 61,457 by 2027, while the medium projection shows a total of 55,498 at that date. The smallest population of the three scenarios (50,734 people) is that produced by the low projections. All scenarios show considerable increases over the base year of 2012. The high and medium projections show increases of between approximately 29,300 and 23,300 over the year 2012, by 2027, while the low projection shows an increase of about 18,500.
- Growth for the medium projections which assume moderate increases in fertility and mortality and a medium level of net inflows from migration will be at an annual rate of 3.7 per cent over 15 years from 32,199 to 55,498. For the same growth scenario the non-belonger population will double at the annual average rate of 5 per cent. According to the medium projections 97 per cent of the increase in the population of the Turks and Caicos Islands will be contributed by the growth of the non-belonger population.
- An examination of the components of growth shows that the number of births rises continuously over the period for the three growth scenarios. For the medium variant births increase from 574 at the beginning of the period, to 667 and by the end of the projection period is expected to be 705. For deaths there is also a steady rise in numbers for all three variants. The numbers are highest for the low growth scenario as the assumption is that life expectancy shows no change over the period and lowest for the high growth scenario as the largest gains in life expectancy are assumed for that variant. For the medium scenario which assumes moderate increases in life expectancy, the number of deaths is 118 for the period 2012-17 and rises to 201 for the period 2022-27. The result of these changes is the natural increase which grows from 456 for the first projection period to 504 in the final projection period for the medium projections.
- The projections show that it will be migration and in particular immigration that will continue to represent the major share of future population growth. The projections are based on the assumption that the pattern observed over the past two decades will continue for the next 15 years. Such a pattern sees a continuation of the flow of immigrants and when balanced with the much smaller outflow, results in a net inflow ranging from an annual average of 800 for the low projections, 1,061 for the medium and 1,404 for the high growth projections. These annual averages are held constant for the entire projection period.
- For the medium projections, net migration contributes 68 per cent of the projected population increase with natural change (births less deaths) accounting for the remaining 32 per cent.
- Changes with respect to the age structure of the population may be examined in terms of the median age and the percentage of the population at ages 65 years and older. The median age is expected to increase by about 8 years under all three growth scenarios from 32 years to 40 years. The median age for non-belongers is higher than for belongers: 34 compared with 26.5 years in 2012. This is because many non-belongers arrived as migrants when they were

already of working age. The ageing of this generation of migrants will see the median age for the non-belonger population increase to 41 years in 2027 compared with 31 years for belongers.

- The fastest growing age group, with average growth of about 8 per cent per annum, is the 65 years and over age group. It will triple in size and its percentage share of the population will move from 3.5 per cent to 7.1 per cent over the period although this is still low compared with most Caribbean countries and territories. In 2012, belongers aged 65 and over accounted for 6 per cent of the total population of belongers increasing to 11 per cent by 2027. The comparative share for non-belongers was only 2 per cent increasing to 6 per cent by the end of the projection period. This proportion will continue to increase rapidly after 2027 as more of the non-belonger population reach old age.
- Immigration and the growth of the non-belonger population will considerably impact the demographic structure of the population of the Turks and Caicos Islands over the next 15 years. Immigrants are also slightly more likely to be male than female. Under the medium growth scenario the excess of males over females will more than double from 531 at the base period to 1,240 by the end of the period. The sex ratio will move simultaneously over the same period from 103 to 105. The age pyramids which are presented illustrate how the age structure of the population will change over the projection period. In 2012, the most populous age groups were those between 25 and 44 years (comprising 39 per cent of the population). However by 2027, the most populous age groups will be those between 35 and 54 (again 39 per cent of the total).

INTRODUCTION

Economists, political scientists and sociologists all acknowledge that the context for the study of any aspect of Caribbean societies must be their history as slave societies. Cumper (1956, 261) expresses it well as follows:

Caribbean population history, like the plantation itself, is in very many respects a direct consequence of the fact that a few European countries had come into possession of areas of tropical land with remarkable potential as suppliers of tropical produce to Europe, but in which the existing level of population density was extremely low. The principal policy objective therefore became that of bringing in the required population so that the area could be economically exploited, not for the welfare of the population thus brought in, but purely for the economic benefit of the original European appropriators.

Roberts (1974, 1) explains that much of Jamaica's history "has been passed as a slave plantation colony, and this regime [shaped to a large extent], its demographic and social structure". This statement is true for the majority of states in the English speaking Caribbean.

Higman (1995, 43) developed the following typology based on the settlement histories and the relative dominance of sugar in the British Caribbean territories:

1. Old sugar colonies, for example Barbados and Saint Kitts and Nevis.

2. Jamaica.

3. New sugar colonies for example Trinidad and Tobago, Saint Lucia, Demerara – Essequibo and Berbice (later British Guiana).

4. Marginal colonies to include British Honduras, Cayman Islands and Bahamas (including the Turks and Caicos Islands).

Jamaica was separated from the other colonies because of its diversification.

Higman argues that the economic and demographic patterns of the colonies were affected by their contrasting settlement patterns. The plantation system experienced by the Turks and Caicos Islands through the association with the Bahamas was based on cotton and was short-lived. "None of the marginal colonies produced major agricultural export staples, and they always remained marginal to the imperial plantation economy" (Higman 1995, 43).

With the establishment and entrenchment of the plantation system in the sugar colonies came the development of demographic records. "Both census taking and civil registration [in the British Caribbean] had their origin largely in the policy of the British Government in respect of the West Indies as a whole" (Roberts, 1957, 1). Census taking in the British West Indies dates back to 1841 and by the late nineteenth century most colonies had established systems of civil registration.

The Turks and Caicos Islands are one of the smallest demographic units of the Caribbean. Its development outside the range of Plantation America has had a powerful impact on many aspects of its demographic, social and economic structure. Its very small size and the scatter of its population over many miniscule islands create special problems of analysis. Added to this is the paucity of demographic data available. It is true that some of its main population features can be traced from 1881, but in general the amount of material available remains meagre and often inconsistent. (Sinclair 1984, 1).

The report of the 1943 Census of Jamaica and Dependencies of the Turks and Caicos Islands and Cayman Islands (Central Bureau of Statistics, 1945), includes detailed tabulations for the Turks and Caicos Islands for 1943 as well as census counts for these islands for the years 1881, 1891, 1911 and 1921. Following 1943, the Turks and Caicos Islands conducted censuses as part of the Regional Census Programmes in 1960, 1970, 1980, 1990, 2001 and 2012. On the other hand, there are no reports of a historical series of vital statistics before 1990.

BACKGROUND TO THE PROJECT

The Turks and Caicos Islands have experienced unprecedented population growth over the last twenty years due largely to the immigration of people from neighbouring countries seeking employment created by the development of tourism. Between 1980 and 2012, the population of the islands increased four-fold from approximately 7,400 to 31,500. Since 1990 average annual immigration has moved from 255 to around 800. The focus of the growth in population over the twenty years has been the island of Providenciales. In 1990, Providenciales accounted for 42 per cent of the population of the Turks and Caicos Islands with a population of 4,821. By 2012, the share had increased to 75 per cent with a population of 23,769. This island accounted for 94 per cent of the population increase of just over 20,000 which took place between 1990 and 2012.

Such rapid population changes for the small island group present many social, economic, environmental and political challenges. Population projections are essential so that policy makers and decision makers can make informed judgements about future strategies, policies and programmes. With the recent completion of the census in 2012, now is a particularly opportune moment to develop population projections.

Population Projections may be defined as "the numerical outcome of a particular set of assumptions regarding the future population. It is a conditional calculation showing what the future population would be if a particular set of assumptions were to hold true" (Siegel and Swanson 2004, 561). Population projections are therefore not meant to be interpreted as forecasts or predictions but are simply illustrations of the growth and change in the population which would occur if certain assumptions about levels of fertility, mortality and international migration prevailed over the period covered by the projections.

Seigel and Swanson (2004, 561) outline some of the uses of population projections to "provide a tool for analyzing the components of growth and the sensitivity of underlying assumptions. Projections can also raise our understanding of the determinants of population change. For example, what impact would a 20 per cent decline in birthrates have on a country's population size and age structure in 50 years? How would eliminating all deaths due to a particular cause affect the population growth rate?" They continue "perhaps the most important use of population projections is in the role they can play as a rational basis for decision making. Changes in population size and composition have many social, economic, environmental, and political implications. Population projections help decision makers in both the public and private sectors make informed choices."

The Population Reference Bureau (PRB) summarizes this very important use. "Population projections provide policy makers and planners with a basis for assessment of future demand for resources such as food, water, energy, as well as services such as health and education. Projections alert policymakers and planners to major trends that may affect social and economic development and help them craft appropriate policies and programmes" (PRB 2014, 1).

Rowlands (2003, 435) addresses the issue of population ageing by stating that "projections showing the impending growth in the numbers of the aged in developed countries have served as starting points for rethinking policies for funding pensions and health services for the elderly." Continuing, he argues that in less developed countries, projections of population growth have been influential in demonstrating to governments the unsustainability of continuing high growth rates. In such cases, the usefulness of a projection depends not on its accuracy as a forecast, but on its contribution to shaping an alternative future."

Perhaps the most well-known set of projections are those which have been produced by the United Nations since the late 1950s. The 2012 Revision (United Nations, 2014) was the twenty-third round of official United Nations population estimates and projections, prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. The report explains that the 2012 Revision builds on the previous revision by incorporating the results of the 2010 round of national population censuses as well as findings from recent specialized demographic surveys that have been carried out around the world.

POPULATION DYNAMICS OF THE TURKS AND CAICOS ISLANDS

A. POPULATION GROWTH

It is not possible to trace the early demographic development of the Turks and Caicos Islands due to lack of data, but what is evident from the limited historical data is that population developments beginning in 1921 and up to 1970 followed the same path as other Caribbean Islands with substantial emigration as the main component of population change. Since 1970, the path has been in stark contrast to much of the rest of the Caribbean as immigration has been the main component of population growth (with some exceptions, for example British Virgin Islands, Cayman Islands and Aruba).

The introduction to an analytic report prepared as part of the CARICOM Regional Census Programme for 1980 states:

The Turks and Caicos Islands are one of the smallest demographic units of the Caribbean. Its development outside the range of Plantation America has had a powerful impact on many aspects of its demographic, social and economic structure. Its very small size and the scatter of its population over many miniscule islands create special problems of analysis. Added to this is the paucity of demographic data available. It is true that some of its main population features can be traced from 1881, but in general the amount of material available remains meager and often inconsistent. The major limitation under which this study has had to be carried out centres on the poor quality of vital statistics for the country. Manifestly the system of vital registration now in force is poorly maintained and data on births and deaths fragmentary and inconsistent. These inconsistencies are especially marked in the distribution of vital events occurring in the six geographical units into which the country is divided. Data on all aspects of fertility and mortality are deficient, which means that detailed analysis of these aspects of the country's population cannot be undertaken (Sinclair 1984, i).

Summary of population movements and intercensal components of growth for
the Turks and Caicos Islands, 1921-2012

Table 1

		Births, deaths and migration in intercensal period							
					-	(Crude rates	5*	Annual
Census year	Population	Births	Deaths	Natural increase	Migra- tion	Births	Deaths	Natural increase	(percentage) rate of growth
1921	5,612								
1943	6,138	4,424	2,610	1,814	-1,288	34.2	20.2	14.0	0.41
1960	5,668	3,661	1,493	2,168	-2,638	36.5	14.9	21.6	-0.47
1970	5,558	2,106	582	1,524	-1,634	37.5	10.4	27.2	-0.20
1980	7,413	1,871	483	1,388	+467	28.8	7.4	21.4	2.88
1990	11,465	2,300	800	1,500	+2,552	24.4	8.5	15.9	4.36
2001	19,886	2,994	630	2,364	+6,057	16.9	3.6	13.6	4.88
2012	31,539	3,980	696	3,284	+8,369	14.9	2.6	12.3	4.44

Sources: Data for 1921-80 from Sinclair 1984; 1990 from 1990 Census Report; 2001 and 2012 from unpublished census tables.

There are no series of annual vital statistics before the 1990s. There is evidence that there has been some improvement since that time although significant gaps remain. Table 1 summarizes the

population movements in the islands for the census years 1921-2012. The table shows the substantial emigration from the islands between 1921 and 1970, which resulted in negative rates of growth. Emigration was at its highest level between 1943 and 1960 when it exceeded the volume of natural increase by one-fifth. During this period the population fell from 6,138 to 5,668. The complete reversal of the pattern of migration after 1970 has been extraordinary. Since 1990, population growth has been largely driven by immigration which has exceeded natural increase. The negative annual average rates of growth for the period from 1943 to 1970 were replaced by considerable positive rates which rose to 4.9 per cent between 1990 and 2001 and 4.4 per cent in the latest intercensal period. The table also shows the declining rates of births and deaths. The rate of natural increase fell from 15.9 per 1,000 in 1990 to 12.3 per 1,000 by 2012.

B. FERTILITY

Historical data on fertility for the Turks and Caicos Islands both from vital statistics and from censuses are very limited. From the data presented in Table 1 it is possible to derive annual averages of births. Available data on the average number of births form the basis for tracing the course of fertility over the period 1921-2012. Table 2 presents the data for the intercensal periods from 1921 onwards.

Table 2Average annual number of births and crude birth rates for the Turks and Caicos Islands, 1921-2012

Census period	Average annual births	Crude birth rate per 1,000
1921-43	201	34.2
1943-60	215	36.5
1960-70	211	37.5
1970-80	187	28.8
1980-90	230	24.4
1990-2001	265	16.9
2001-2012	384	14.9

Source: Table 1.

The table shows that at the beginning of the period annual births averaged around 200. Small increases continued up to 1970 after which there was a fall to 187 during the period 1970-80. After 1980, there were steady increases which saw a doubling to 384 in the most recent intercensal period. This increase has come with the dramatic rise in immigration. With a much larger population base, rates have fallen by more than 50 per cent from an average of 36 per 1,000 up to 1970 to 14.9 per 1,000 between 2001 and 2012.

Census measures of fertility available for both belonger and non-belonger women are the subject of Table 3. The data cover the age group 15-49 years. Children per 1,000 women is an indication of family size and at both dates non-belonger women show a higher family size than belonger women. In 2001, for every 1,000 belonger women there were approximately 1,600 children. The comparative number for non-belongers was about 1,800. By 2012, while the rate for belongers had dropped by 3 per cent to 1,582 the rate for non-belonger women moved from 1,805 to 1,614, falling by 11 per cent. As expected, average family size increased with age among both sets of women. Among belongers, in 2012, it moved from 59 per 1,000 among the youngest to 2,328 per 1,000 for ages 35-39 and by age group 45-49 it was 2,829 per 1,000. For the non-belongers, the figures for the same age groups were 152 per 1,000,

2,129 per 1,000 and 2,600 per 1,000. The rate of 2,829 per 1,000 for belonger women at the oldest age was approximately 9 per cent higher than the 2,600 for non-belongers.

	Children Per 1,000 women			% Change	2001-2012	
- Age group	Belor	agers	Non-bel	ongers	Belongers	Non- belongers
	2001	2012	2001	2012		
15-19	110	59	95	152	-46.4	60.4
20-24	544	694	724	646	27.6	-10.7
25-29	1,312	1,281	1,308	1,140	-2.4	-12.8
30-34	1,857	1,909	1,873	1,681	2.8	-10.2
35-39	2,419	2,328	2,249	2,129	-3.8	-5.3
40-44	3,047	2,649	2,811	1,566	-13.1	-44.3
45-49	3,055	2,829	2,686	2,600	-7.4	-3.2
Total	1,637	1,582	1,805	1,614	-3.4	-10.6

Table 3Children per 1,000 women for females 15-49 years by belonger status at censuses2001 and 2012

Source: Derived from unpublished tables from 2012 Census.

With respect to changes between 2001 and 2012, the rates fell in all age groups for both sets of women with the exception of belongers of ages 20-24 years and 30-34 years and the youngest cohort of non-belongers, those 15-19 years old. Average family size for female belongers of ages 20-24 years, moved by approximately 28 per cent from 544 per 1,000 in 2001 to 694 per 1,000 in 2012. For female belongers 30-34 years old the increase was a small 3 per cent from 1,857 per 1000 to 1,909 per 1,000 over the same period. For the youngest non-belongers the rate rose considerably by 60 per cent from 95 per 1,000 in 2001 to 152 per 1,000 in 2012. At the same time the rate among the youngest belongers saw the largest decline in any age group, by 46 per cent from 110 per 1,000 to 59 per 1,000. The next largest decline is observed for the rate for female non-belongers aged 40-44 which fell by 44 per cent from 2,811 in 2001 to 1,566 in 2012.

The data on current fertility which form the basis for the projections are the subject of Tables 4 and 5. The data are based on averages derived from the vital statistics for the years 2001-2003 related to the 2001 population and 2011-2013 related to the 2012 population. Births occurring outside of the country to resident belongers have been included. The tables are based on the population of women aged 15-44 years, there being no record of births to women over 44 years in the years considered. Table 4 shows that among female belongers those with the highest fertility at both periods were 20-29 years old while for the non-belongers those with the highest fertility were between 25 and 34 years. In both 2001 and 2012, more than one half (about 57.5 per cent) of births occurring to belongers were to women between the ages of 20 and 29 years. Among non-belonger females it was in the older age group of 25-34 years that the majority of births occurred: 63 per cent in 2001 and 60 per cent in 2012. There is evidence of delayed childbearing as the median age at birth increased by one year for belonger women from 25 years to 26 years and by a small 0.3 years for non-belongers between 2001 and 2012.

	Percentage of Births					
Age Group	Below	ngers	Non-Be	longers		
-	2001	2012	2001	2012		
15-19	18.71	12.64	5.23	3.62		
20-24	34.84	33.46	13.35	11.91		
25-29	22.58	24.16	27.76	29.99		
30-34	16.13	18.59	35.61	29.80		
35-39	5.16	8.55	12.81	17.46		
40-44	2.58	2.60	5.24	7.23		
Total women (=100 per cent)	2,526	2,655	2,574	5,815		
Median age at birth (years)	24.5	25.8	30.5	30.8		

Table 4Percentage of births by age groups and belonger status of women 15-44 years, 2001 and 2012

Source: Derived from unpublished tables from 2012 Census.

Table 5Age specific fertility rates per 1,000 women of ages 15-44 years by belonger status at censuses of
2001 and 2012

	Age specific fertility rates per 1,000 women			Percentage change 2001-2012		
	Belongers		Non-belongers		Delongens	Non holonoona
Age group	2001	2012	2001	2012	- Delongers	Non-Delongers
15-19	60.8	38.4	20.3	20.2	-36.9	-0.6
20-24	116.8	113.6	44.6	50.7	-2.8	13.7
25-29	79.4	87.7	84.7	107.5	10.5	26.9
30-34	58.5	70.7	93	86.2	20.9	-7.3
35-39	20.7	34.1	35.8	51.7	64.6	44.2
40-44	12.1	10.6	17.5	23.7	-12.3	35.6
Total fertility rate per woman	1.74	1.77	1.48	1.70	1.19	14.9

Source: Unpublished Vital Statistics and unpublished tables from 2012 Census.

The age specific fertility rates which relate the number births to the number of women, in each age group were highest for belonger women for the 20-24 years age group in 2001 and 2012. The total fertility rate derived represents the average number of children per woman at the prevailing age specific fertility rates. The table shows higher rates for belonger women in 2001 and 2012. The total fertility rate for belonger women in 2001 was 1.74 compared with 1.48 for non-belongers. By 2012 the rates were 1.77 and 1.70 for belongers and non-belongers respectively. What is evident, however, is the much larger

increase among non-belongers over the period. The rate increased by 0.22 or about 15 per cent for this group compared to .03 or about 1 per cent for belongers.

C. MORTALITY

There is even less historical data on mortality for the Turks and Caicos. In all likelihood, however, the islands would have experienced the dramatic declines in mortality experienced by the countries of the Caribbean beginning in the mid 1920s. The strengthening of Public Health Laws and the machinery to implement these laws and measures to improve sanitation, housing and medical facilities and to control specific important diseases took effect in the region and resulted in declines in mortality which have continued to the present time. Life expectancies for the English speaking Caribbean have moved from a range of 55-60 years around 1960 to about 70-75 years by the late twentieth century. For the Bahamas the closest island chain to the Turks and Caicos Islands and which shares many historic and demographic similarities with the Turks and Caicos Islands, life expectancy around 2010 was estimated at 71 years for men and 77 years for women.

Generally the change in population counts at older ages can be regarded as a rough measure of improvements in mortality. Table 6 shows the percentage distribution of the population age 80 years and over for males and females for the belonger population at the censuses of 1943 and 2012. The movements are quite clear. The percentage of the population in that age group has more than doubled from 0.7 per cent in 1943 to 1.6 per cent in 2012. The change for the male population has been considerably higher than for the females from 0.4 per cent to 1.2 per cent compared to a change from approximately 1 per cent to 2 per cent over the period, for the females.

	1943		201	2	
Sex	Total population	% 80+ years	Total population	% 80+ years	
Total	6,138	0.72	11,775	1.58	
Male	2,791	0.39	5,823	1.22	
Female	3,347	0.99	5,952	1.93	

Table 6Percentage distribution of the population 80 years and over for the Turks and Caicos Islands,1943 and 2012

Source: Central Bureau of Statistics, Jamaica (1945), unpublished tables from 2012 census.

Note: The data for 2012 represents the belonger population only to be more directly comparable to 1943.

Average deaths for the population and the crude death rates for the period 1921-2012 are shown in Table 7. At the beginning of the period, deaths averaged 119 per year and death rates were as high as 20 per 1,000. By the 1960s, deaths had fallen by 50 per cent to an annual average of 58 and the rate had plummeted to 10 per 1,000. A rise in the average number of deaths came with the growth of the population since 1980 but death rates have fallen to an all time low of only about 3 per 1,000. The death rate is regarded as a crude measure of mortality as it ignores the differences in mortality between age, sex and other possible subgroups of the population.

Census period	Average annual deaths	Crude death rate
1921-43	119	20.2
1943-60	88	14.9
1960-70	58	10.4
1970-80	48	7.4
1980-90	80	8.5
1990-2001	56	3.6
2001-2012	67	2.6

 Table 7

 Average annual number of deaths and crude death rates for the Turks and Caicos Islands, 1921-2012

Source: Table 1.

Life table measurements are considered more useful but analysing the historical mortality experience of the Turks and Caicos Islands using life tables is not possible because of the absence of such data. Life tables constructed for the intercensal period 2001-2012 show life expectancies of 77.3 years for women and 75.1 years for men at 2001. By 2012, 0.7 years had been added to the figure for males and 0.5 years to the figure for females yielding life expectancies of 75.8 years and 77.8 years respectively. Because of the very small numbers of deaths and even zero deaths in some age groups, five-year averages have been used for the analysis for the projections. As will be explained, for this reason the mortality assumptions were also developed on the basis of the experience of the total population assuming no differences between belongers and non-belongers. Table 8 presents the only available data on deaths by age and sex by belonger status. The data relate to the years 2001-2008.

	Belonger			Non-belonger			
Age Group	Total	Male	Female	Total	Male	Female	
0	13	2	11	9	3	6	
1-4	1	0	1	0	0	0	
5-14	6	3	3	3	2	1	
15-44	58	20	38	67	27	40	
45-64	58	23	35	29	9	20	
65+	202	111	91	14	5	9	
Total	338	159	179	122	46	76	

Table 8Deaths by age group and belonger status, 2001-2008

Source: Unpublished Vital Statistics.

The figures show that in the eight years deaths among belongers numbered 338 and among nonbelongers, 122. The total of 460 equates to an annual average of about 58. The very small numbers in the ages under 14 years, 13 belongers and 9 non-belongers, should be noted.

		Life exp	pectancy	
Age	Ма	Males		
	2001	2012	2001	2012
0	75.14	75.78	77.27	77.81
1-4	75.63	77.19	76.67	77.62
5-10	71.88	73.31	72.74	73.90
10-15	67.05	68.43	67.98	69.09
15-20	62.13	63.53	63.06	64.24
20-25	57.22	58.81	58.16	59.40
25-30	52.48	54.4	53.46	54.71
30-35	47.83	49.86	48.61	49.90
35-40	43.25	45.12	44.21	45.04
40-45	38.48	40.35	39.38	40.22
45-50	34.37	35.63	34.92	35.45
50-55	29.94	31.03	30.39	30.78
60-65	25.64	26.57	25.92	26.24
65-70	21.73	22.32	21.45	21.90
70-75	17.93	18.35	17.28	17.83
75-80	15.08	14.71	13.83	14.11
80-85	11.69	11.48	10.07	10.82
85+	7.86	8.71	7.88	8.03

Table 9Expectation of life for males and females by age, 2001 and 2012

Note: Based on life table relating deaths for a five year period centering on the census year, using the U.S. Census Bureau PASEX.XLS worksheet LPOPTDH.

D. MIGRATION

There are no migration statistics for the Turks and Caicos Islands. The figures presented in Table 1 represent the residual after accounting for births and deaths in the intercensal periods. As discussed the figures reveal that after 1970 there was a reversal of the pattern of emigration observed earlier to one of increasingly high levels of immigration. Annual average net migration moved from 255 between 1980 and 1990 to 537 between 1990 and 2001 and for 2001-2012 was estimated at about 800.

 Table 10

 Average annual number of migrants and net migration rates for the Turks and Caicos Islands, 1921-2012

Census period	Average annual migration	Migration rate	
1921-43	-129	-11.0	
1943-60	-264	-22.3	
1960-70	-163	-14.6	
1970-80	+47	+3.6	
1980-90	+255	+13.5	

Table 10 (concluded)

Census period	Average annual migration	Migration rate
1990-2001	+537	+17.1
2001-2012	+806	+15.7

Source: Table 1.

To derive the age sex distribution of migrants for this latest period, 10 year survival rates from life tables for 2001 were applied to the 2001 census population to determine the population 10 years and over expected in 2012. The difference between the expected count and the actual count was assumed to be the migration. For ages under 10 years which represents births occurring in the intercensal period, migration was assumed to be negligible. For this age group small values were assigned to obtain the overall expected total migrants. Details of how the age sex distribution of migrants was derived appear in the Technical Notes.

The percentage distribution of migrants by age group which was derived is shown in Table 11.

 Table 11

 Percentage distribution of estimated migrants 2001-2012 by age, sex and belonger status

Age group		Belonger			Non-belonger			
	Total	Male	Female	Total	Male	Female		
0-4	-1.4	-1.9	-1.0	0.4	0.3	0.5		
5-14	-5.4	-6.8	-4.2	1.1	0.9	1.2		
15-44	-57.9	-59.1	-56.9	82.1	81.4	83.0		
45-64	-18.7	-16.4	-20.6	17.3	18.3	16.2		
65+	-16.6	-15.8	-17.3	-0.9	-0.9	-0.9		
Total number	-577	-266	-311	+8,946	+4,837	+4,109		

Note: Net inflow for the Turks and Caicos Islands = -577 + 8,946 = +8,469.

Net migration is the difference between incoming and outgoing migrants. A negative net means there is an excess of outgoing while a positive net reflects an excess of incoming. The table shows that overall for belongers there was an estimated net outflow of 577 between 2001 and 2012. More than a half, 311 (54 per cent) were women. The net outflow is evident for all age groups. The age group 15-44 years accounted for 59 per cent of male migrants and 57 per cent of females. At ages 45 years and over women were dominant as 38 per cent of female migrants fell into this age group. The comparative estimate for men for that age group was 32 per cent.

For non-belongers, as expected, there was a net inflow of 8,946 of which 4,837 or 54 per cent were men. All age groups up to 64 years showed a net inflow but for the 65 years and over there was a small net outflow of about 1 per cent. Just over 8 of every 10 immigrants (82 per cent) were between the ages of 15-44 years.

Immigration statistics of major receiving countries provide very useful data sources. There are of course limitations in the amount of detail provided and these sources should be seen as complements to official in-country systems. Data on legal migration to the United States of America, possibly the major receiving country for the Turks and Caicos Islands appear in Table 12. The data cover persons born in the Turks and Caicos Islands. It is important to note that not all persons obtaining permanent legal status in a

year arrive in that year. The data for the years since 2006 show the distinction between new arrivals and others.

The total number of persons born in the Turks and Caicos Islands who were granted permanent legal status in the United States during the period 2001-2012 numbered 393. Women accounted for about 58 per cent of the annual average number of 33 persons. In the year 2010, of the 29 persons granted status, 20 were women.

Year	Total	Male	Female	% under 18 years	New arrivals	Adjustments
2001	33	n.a.	n.a.	n.a.	n.a.	n.a.
2002	31	n.a.	n.a.	n.a.	n.a.	n.a.
2003	26	15	11	30.8	n.a.	n.a.
2004	28	16	12	17.9	n.a.	n.a.
2005	34	10	24	14.7	n.a.	n.a.
2006	52	18	34	13.5	5	47
2007	31	14	17	35.5	5	26
2008	35	14	21	22.9	7	28
2009	31	15	16	16.1	13	18
2010	29	9	20	13.8	7	22
2011	33	19	14	30.3	13	20
2012	30	9	21	16.7	4	26

 Table 12

 Persons born in the Turks and Caicos Islands and obtaining permanent legal status in the United States of America, by sex 2001-2012

Source: United States Yearbook of Immigration Statistics, Department of Homeland Security. Online version retrieved at http://www.dhs.gov [date of reference December 2014].

Note: (a) n.a. not available.

(b) Legal permanent residents are foreign nationals who have been granted the right to reside permanently in the United States of America. Often referred to as Immigrants but also known as Permanent Residents, Aliens and Green Card Holders.

Table 13 presents the number of non-immigrant admissions for residents of the Turks and Caicos Islands and is shown merely as an indication of the mobility of the resident population. The data represent admissions not persons and therefore includes multiple trips. There is no consistent pattern but a peak is observed for the years 2006-2008.

 Table 13

 Number of Non-immigrant Admissions to the United States of America, 2001-2012

Year	Number of non-immigrant admissions
2001	16 544
2001	10,344
2002	13,317
2003	12,464
2004	14,583
2005	15,770
2006	20,289
2007	25,259

Year	Number of non-immigrant admissions
2008	26,314
2009	19,942
2010	16,367
2011	13,750

Table 13 (concluded)

Source: United States Yearbook of Immigration Statistics Department of Homeland Security. Online version retrieved at http://www.dhs.gov.[date of reference December 2014].

E. SEX COMPOSITION

"Three factors determining the sex composition of the population are the sex ratio at birth, the sex differential in its mortality experience and the sex composition of external migration." Roberts (1974, 14). Roberts was writing about Jamaica which has had a long history of external migration. This might have applied to the Turks and Caicos Islands up to the 1970s but in the period after it would be immigration which would have the greater impact on the sex ratio, defined as the number of males per 100 females.

The sex ratio at birth (number of male births per 100 female births) for the Turks and Caicos Islands is observed to be quite low. This makes it inconsistent with global observed rates. Generally "more boys are born than girls" (Rowlands 2003, 87). "From an examination of the sex ratios of registered births for a wide array of countries, it is apparent that the component of birth tends to bring about or to maintain an excess of males in the general population. The sex ratio of births is above 100 for nearly all countries for which relatively complete data are available and between 104 and 107 in most countries" (Siegel and Swanson 2004, 133).

Although as Roberts (1974, 14) argues "whereas in European societies sex ratios at birth of about 106 are usual, in the case of West Indian populations these are usually about 103 or less," the ratios for the Turks and Caicos Islands have historically appeared to be especially low (Table 14). This picture is described as abnormal in the Census 2001 analytic report of the Turks and Caicos Islands: "This ratio is so abnormal that it begs the question about the quality of this count in the census. Even in the larger infant age group, 0 to 4 years, the sex ratio is still anomalously below 100 at 82.8" (Mills 2009, 16).

In sugar plantation societies the preponderance of males was possibly related to the heavy demand for male slaves. Sadler (2008, 117) explains that "Unlike the sugar industry, the salt and cotton industries required equal numbers of men, women and children. A "normal" family life could develop amongst the slave population, including the increase of the population with the birth of slave children. This meant that the slave community was self-perpetuating, which limited the need to bring in slaves from Africa."

Table 14 presents a historical series of sex ratios by age for censuses of 1943, 1970, 1980, 2001 and 2012. The sex ratio at birth is reflected in the ratio for the 0-4 year age group. The overall picture is one of very low sex ratios at most ages up to 1980. The total sex ratio increased from 83 per 100 in 1943, moving to 90 in 1970, 93 in 1980, 99 in 2001 and by 2012 was 103 per 100. Up to 1980, a high sex ratio was observed for the 5-14 years age group only. From 102 in 1943, the ratio increased to 108 in 1970 and by 1980 was 101. A slight drop to 100 in 2001 was maintained in 2012. Ratios are lowest at the oldest ages and this is usually attributable to the higher mortality rates among men at these ages. By 2012, the situation changed quite radically with all age groups of 15 years and over showing a preponderance of men. In 2012, ratios were highest for the 45-64 years age group being 113 per 100.

	Sex ratio				
Age group	1943	1970	1980	2001	2012
0-4	85.4	99.8	92.6	83.1	99.8
5-14	102.1	108.0	101.3	99.5	99.7
15-44	83.6	80.0	99.3	100.5	101.3
45-64	61.0	83.1	79.1	115.1	112.6
65+	64.8	62.6	63.6	78.9	109.3
Total	83.4	90.1	93.4	99.1	103.3

Table 14Sex ratio of the Turks and Caicos Islands by age at censuses of 1943, 1970, 1980, 2001 and 2012

Source: Central Bureau of Statistics, Jamaica (1945); 1970 data extracted from Census Research Programme University of the West Indies 1970 Population Census of the Commonwealth Caribbean Vol. 8 Turks and Caicos Islands (Kingston University of the West Indies 1973); unpublished tables from 2012 census.

In Table 15 the sex ratios are shown by belonger status. The data show the preponderance of males among non-belongers especially at the older ages in 2001 and 2012. The total sex ratio for non-belongers moved from 104 to 107 over the period. For belongers the ratios were lower reflecting an excess of females. The change was from 94 in 2001 to 98 in 2012.

		Sex rai	tio	
Age group	2	001	2	2012
-	Belong	Non-belong	Belong	Non-belong
0-4	99.0	69.6	101.7	97.6
5-14	96.7	104.4	102.8	96.0
15-44	91.7	108.7	93.8	104.5
45-64	107.0	125.3	100.9	120.4
65+	75.3	104.4	94.4	152.8
Total	94.4	104.4	97.8	106.7

Table 15Sex ratio by age and belonger status 2001 and 2012

Source: Derived from unpublished tables from 2012 Census.

F. AGE STRUCTURE

Nam (2008) writes as follows:

It has been widely recognized and accepted that the world population is in the midst of an "unprecedented transformation brought about by the transition from a regime of high mortality and high fertility to one of low mortality and low fertility" (United Nations 2005, 2).

One consequence of this demographic transition is the ageing of the population. Population ageing refers most simply to increasing proportions of older people within an overall population structure and the process is primarily determined by fertility (birth) rates and secondarily by mortality (death) rates

(Kinsella and Velkoff, 2001, 17). Populations with high fertility tend to have low proportions of older people and vice versa. Generally, populations begin to age when fertility declines and adult mortality rates improve. Lee (2003) describes the process as an integral part of the demographic transition and in particular, the third phase. Increasing longevity which is characteristic of this phase, leads to a rapid increase in the elderly population.

In relation to international migration, the third component of population growth, Kinsella (2001) argues that international migration does not usually play a major role in the ageing process but can be important in smaller populations. He cites the Caribbean nations as examples of such smaller populations. In such cases, he says, the experience of the combination of emigration of working age adults, immigration of elderly retirees from other countries, and return migration ageing. It is expected that international migration should assume a more prominent role in the process of ageing, especially in the more developed countries where persistently low fertility has resulted in stable and even declining population sizes. For the Turks and Caicos Islands it is the process of immigration, which is as age and sex selective as emigration that will undoubtedly play a major role in any changes to the age structure.

Table 16 presents the percentage distribution of the population of the Turks and Caicos Islands by age group and the median age for men and women separately for the censuses of 1943, 1980, 2001 and 2012. The decline among the age groups under age 15 years is observed. In 1943 more than one-third (36 per cent) of the population was less than 15 years old. By 1980 the percentage in this age group had risen to about 41 per cent. Since that time declines are evident and by 2012 the population of less than 15 years old accounted for 21 per cent of the total population.

2001	2012
-	
11.7	8.2
16.9	13.2
53.7	56.1
14.0	19.2
3.8	3.2
19,886	31,537
28.9	33.1
10.7	8.1
17.0	13.0
54.0	55.6
15.0	20.0
3.3	3.3
0 808	16.024
9,090	10,024
	10,7 17.0 54.0 15.0 3.3 9,898

Table 16Percentage distribution of the population of the Turks and Caicos Islands by sex,1943, 1980, 2001, 2012

	Census years					
Age group	1943	1980	2001	2012		
		FEM	ALE			
0-4	12.9	13.4	12.7	8.3		
5-14	21.0	26.9	16.9	13.4		
15-44	45.4	37.3	53.3	56.7		
45-64	14.3	14.8	12.9	18.4		
65+	6.4	7.6	4.2	3.1		
Total population	3,347	3,835	9,988	15,513		
Median age (years)	22.8	18.7	28.2	32.4		

Table 16 (concluded)

Source: Central Bureau of Statistics (1945), Sinclair (1984), unpublished tables from 2012 Census.

The percentage in the oldest age groups has not increased simultaneously and actually declined. From approximately 6 per cent in 1943 and 1970, the percentage of the population of ages 65 years and over had decreased to 4 per cent in 2001 and 3 per cent in 2012. At the middle age ranges the impact of immigration is heavily in evidence. In the age range 15-44 years, which covers the younger members of the workforce, the percentage grew considerably from 39 per cent in 1980 to 54 per cent in 2001 and up to 56 per cent in 2012. The pattern of increase was the same for men and women with the changes among women being slightly higher. Between 1980 and 2001, the percentage of women aged 15-44 years increased from 37 per cent to 53 per cent and for men from 40 per cent to 54 per cent. By 2012, the female population aged between 15 and 44 years accounted for 57 per cent of the total and among men, 56 per cent of the total. The change in the proportion of older working age persons, the 45-64 year old group, was less considerable from 13 per cent in 1943, to 14 per cent in 2001, increasing to 19 per cent in 2012.

In keeping with the changes observed, the pattern of movements in the median age across the census years can be traced. At the time of the 1943 census, the median age for men was approximately 20 years and women 23 years. With the high fertility periods which followed, the age dropped to 17 years and 19 years for men and women respectively. By 2001, the median age overall had jumped to 29 years from 18 years in 1980 and by 2012 an additional four years were added giving a median age of 33 years.

Table 17 examines the changes in age composition between 2001 and 2012 among belongers and non-belongers. For belongers, the youngest population age groups under 15 years accounted for just over 30 per cent of the population of males and females at both dates. In 2001, the age group 15-44 years accounted for 48 per cent and 47 per cent of females and males respectively. By 2012, the share had dropped to 44 per cent for females and 42 per cent for males. As discussed previously, among belongers, this is the age group with the highest outflow resulting from migration. Occurring simultaneously with these changes described, was the rise in the percentages of the older age group of belongers. The older working age groups of 45-64 years rose by 5 percentage points from 14 per cent in 2001 to 19 per cent in 2012. For males the increase was from 15 per cent to 20 per cent and for females, from 14 per cent to 19 per cent. The population of ages 65 years and over was about 6 per cent of the total population in both 2001 and 2012.

Among non-belongers, the share of the population less than 15 years old fell from approximately 23 per cent for males and 28 per cent for females in 2001 to 15 per cent and 16 per cent for males and females respectively in 2012. The working age group of persons 15-64 years old accounted for 83 per cent of the total population at the time of the 2012 census, 9 percentage points more than in 2001. For

women, the rise was from 71 per cent in 2001 to 83 per cent in 2012 compared to the change from 77 per cent to 83 per cent for men.

		2001			2012	
Age group		Belonge	r		Belonger	
	Total	Male	Female	Total	Male	Female
0-4	11.2	11.5	11.0	11.7	12.0	11.5
5-14	20.6	20.9	20.4	19.7	20.2	19.2
15-44	47.5	46.8	48.2	43.1	42.2	44.0
45-64	14.4	15.3	13.5	19.4	19.7	19.1
65+	6.2	5.5	6.9	6.0	5.9	6.1
Total	10,335	5,020	5,315	11,774	5,822	5,952
Median age (years)	26.0	25.7	26.2	26.4	25.9	27.0
		Non-belon	ger		Non-belonger	
0-4	12.2	9.8	14.7	6.1	5.8	6.4
5-14	12.9	12.9	12.9	9.3	8.8	9.8
15-44	60.3	61.5	59.0	63.9	63.3	64.6
45-64	13.5	14.7	12.2	19.1	20.2	17.9
65+	1.1	1.1	1.1	1.6	1.9	1.3
Total	9,551	4,878	4,673	19,763	10,202	9,561
Median age (years)	30.8	31.7	29.8	34.8	35.6	34.0

Table 17Percentage distribution of the population by age, sex and belonger status 2001 and 2012

Source: Derived from unpublished tables from 2012 Census.

Rates of growth for the age groups are shown in Table 18. The wide disparity between growths among the non-belonger population compared to the belongers is evident. Overall the non-belonger population grew at an average annual rate of 7.0 per cent compared to 1.3 per cent for belongers. It is only among the 0-4 years group that the belonger population showed a higher rate of growth -1.7 per cent compared to 0.3 per cent. The rate of growth for non-belongers increased with age from 3.9 per cent for ages 5-14 years to 10.5 per cent among the 65 years and over group. Despite the large rate of growth for the oldest age group of non-belongers, the 65 years and over, the share of the population as shown in Table 17 moved only slightly from 1 per cent to 2 per cent over the period.

Table 18Rates of growth for age groups between 2001 and 2012 by belonger status

Age group	Total	Belonger	Non-belonger
0-4	1.02	1.66	0.33
5-14	2.05	0.81	3.89
15-44	4.88	0.32	7.57
45-64	7.53	-11.67	10.35
65+	2.97	0.88	10.47
Total	4.45	1.26	7.01

Source: Derived from unpublished tables from 2012 Census.

The variations in the proportions of children, aged persons and persons of "working age" are taken account of jointly in the age dependency ratio. The age dependency ratio represents the ratio of the

combined child population and aged population, the "dependent ages" (under 15 and 65 years and over) to the population of the "economically productive" ages (15–64 years). The age-dependency ratio is used as an indicator of the economic burden the productive portion of a population must carry; even though some persons defined as "dependent" are producers and some persons in the "productive" ages are economically dependent.

As fertility declines and the population grows the dependency ratio will fall. Continued declines in fertility eventually leads to decreases in the population of working ages and eventually dependency ratios will rise again. As the population grows older the old age dependency ratio will increase.

The data on dependency ratios presented in Table 19 shows in the first place, much higher ratios among belongers at both census dates. At the census of 2001, among belongers for every 100 persons of working age there were approximately 62 in the "dependent" groups. By 2012 this ratio had fallen by approximately 3 per cent to 60 per 100. The youth dependency ratio which relates those under 15 years to those 15–64 years, fell from 52 per 100 in 2001 to 50 per 100 in 2012. The old age ratio, which relates the 65 years and over group to the 15–64 years group, remained stable at about 10 per 100. For non-belongers the declines were more considerable. The youth dependency ratio also fell. From 34 per 100 in 2001 this ratio moved down by 45 per cent to 19 per 100 in 2012. In contrast, the old age ratio for non-belongers, although much smaller than for belongers, moved up by 27 per cent between 2001 and 2012. The net effect of these changes for belongers and non-belongers was a total dependency ratio for the Turks and Caicos Islands of 33 per 100 in 2012 down from 48 per 100 in 2001. Declines are observed for the three types of ratios. The youth dependency ratio for the Turks and Caicos Islands declined from 42 per 100 in 2010 to 28 per 100 in 2012. The decrease for the old age dependency ratio was by 23 per cent from 6 per 100 to 4 per 100. This fall is linked to the large increases in the working age population relative to the much smaller rise among the oldest group.

	Age depe	endency ratio	Percentage
Item	2001	2012	change 2001-2012
		Total	
Youth dependency ratio	42.3	28.4	-32.9
Old age dependency ratio	5.6	4.3	-23.2
Total dependency ratio	47.9	32.7	-31.7
		Belonger	
Youth dependency ratio	51.5	50.2	-2.5
Old age dependency ratio	10.0	9.6	-4.0
Total dependency ratio	61.6	59.8	-2.9
		Non-belonger	
Youth dependency ratio	34.0	18.6	-45.3
Old age dependency ratio	1.5	1.9	26.7
Total dependency ratio	35.5	20.5	-42.3

Table 19Dependency ratios and percentage change in ratios by belonger status, 2001-2012

Source: Derived from unpublished tables from 2012 Census.

G. SUMMARY AND CONCLUSION

The large volume of immigration into the Turks and Caicos Islands beginning around 1990 has had considerable impact on the demographic profile of the islands. The male dominated movement of persons in the middle age range of 15-44 years has resulted in a movement away from the historically low sex ratios. This fact of the dominance of one sex suggests that many immigrants are not moving with families. The low percentage of population at the youngest ages is some evidence of this. The jump in the median age of the population of the Turks and Caicos Islands by 15 years between 1980 and 2012 is evidence of population ageing. This will lead to increases in the proportion of the elderly in the coming years although the proportion of older persons has been falling since 1980 and is current very low. While about 6 per cent of the belonger population was 65 years and older in 2012, only about 1 per cent of the non-belonger population was of this age. The result was that only 3 per cent of the population of working age, the dependency ratios have fallen.

A very important aspect of the demographic position relates to fertility. Notwithstanding the increases in total fertility rates observed for belongers and non-belongers, rates are low, being below the replacement level of 2.1. What is instructive however, is the much larger rate of change in these rates between 2001 and 2012 for non-belongers. With growing numbers of women in the reproductive age groups, the implication for population growth takes on added importance.

METHODOLOGY AND ASSUMPTIONS FOR THE PROJECTIONS

The population projections for the resident population of the Turks and Caicos Islands for belongers and non-belongers are produced by means of the cohort component method. The cohort component technique is based on assumptions about the components of demographic change - births, deaths and international migration - to project population growth. The overall basis for this method is what is referred to as the 'balancing equation' P2 = P1 + (B - D) + (I - E) where P1 = population at an earlier date, P2 = population at a later date, B = Births, D = Deaths, I = Immigration, E = Emigration.

In keeping with current standard procedures for producing population projections, alternative assumptions related to the future movements of the three components of fertility, mortality and migration are developed.

Several assumptions are formulated for each component: fertility, mortality and migration. These are applied in the form of numbers or rates to a base population to generate births, deaths, immigrants and emigrants. The population in the following year is then obtained by simple demographic accounting, with births and immigrants being added to the base population and deaths and emigrants being subtracted. The assumptions for the components of change are based on time series analysis of historical trends.

For this series, projections were done separately for belongers and non-belongers which were then added together to produce national totals.

The actual calculations have been developed using the MORTPAK for Windows software. MORTPAK is the United Nations package for demographic measurement in developing countries. The procedure used for these projections is contained in the MORTPAK application PROJCT which uses the cohort-component method and carries out single-year projection of a population by age and sex, based on initial male and female populations in five-year age groups and assumed levels and changes in fertility, mortality and migration.

The steps are as follows:

(a) Estimation of projected levels and age patterns of mortality, fertility and migration for each single-year projection period;

(b) Estimation of the male and female populations by single years of age from the data in five-year age groups given as input;

(c) Sequential application to these annual age-specific mortality and fertility rates and migration numbers to the population to provide annual projected populations by age and sex and demographic indicators.

The input data represent the assumptions and for MORTPAK there are specific format requirements for the inputs. This section describes the input data and the methods used to establish the base population and the assumptions related to fertility, mortality and net international migration. Details of the calculations are presented in the Technical Notes.

A. THE BASE POPULATION

It is common practice to use the population at mid-year as the base for population projections. The date of the most recent census of the Turks and Caicos Islands was January 25, 2012. Accordingly, the base population required was the population at mid-year (July 1) 2012. As there is no existing series of postcensal population estimates, the mid-year population for these projections was obtained by moving the census population forward using the United States Census Bureau's PASEX spreadsheet MOVEPOP.XLS. This spreadsheet moves the population age distribution pertaining to a specific date to another date.

The first step in deriving the base population was an evaluation and assessment of the accuracy of age reporting of the census. Tests for accuracy using the United Nations Age-Sex Accuracy Index revealed a very inaccurate age distribution. An examination of the ages 0-4 years, the age group which represents the survivors of the births occurring in the five years preceding the census, and which age group is generally considered to be most subject to under enumeration, pointed to some inconsistencies when compared to data on birth occurrences. Adjustments which essentially resulted in a re-distribution of the census count of the population at ages 0 and 1-4 years, were made to this group. To eliminate the inaccuracies in the age structure, smoothing techniques have been used to redistribute the population in all age groups. The US Census Bureau's PASEX worksheet AGESMTH was used for this purpose. Details of the steps are outlined in the Technical Notes.

Tables 20-22 show the adjusted census population and the base population for the projections for the Turks and Caicos, belongers and non-belongers. The total adjusted population for the Turks and Caicos Islands is 31,539, comprising 11,773 belongers and 19,766 non-belongers. The mid-year estimate is as follows: Total 32,199, comprising 11,790 belongers and 20,409 non-belongers.

Age group		Census 2012			Mid-year 2012	
	Total	Male	Female	Total	Male	Female
0	466	237	229	475	241	234
1-4	1,980	1,009	971	2,010	1,024	986
0-4	2,446	1,246	1,200	2,485	1,265	1,220
5-9	2,250	1,121	1,129	2,286	1,139	1,147
10-14	2,107	1,027	1,080	2,141	1,043	1,098
15-19	2,237	1,089	1,148	2,277	1,108	1,169
20-24	2,513	1,230	1,283	2,567	1,256	1,311
25-29	2,798	1,393	1,405	2,862	1,425	1,437
30-34	3,295	1,679	1,616	3,375	1,720	1,655
35-39	3,233	1,665	1,568	3,314	1,707	1,607
40-44	3,021	1,571	1,450	3,094	1,610	1,484
45-49	2,536	1,327	1,209	2,599	1,361	1,238
50-54	1,822	959	863	1,860	980	880
55-59	1,324	702	622	1,350	716	634
60-64	839	451	388	856	461	395
65-69	527	285	242	534	289	245
70-74	285	153	132	289	155	134

Table 20Total population of the Turks and Caicos Islands by age group and sex,
Census 2012 and mid-year 2012

Table 20 (concluded)

	Census 2012			Mid-year 2012		
Age group	Total	Male	Female	Total	Male	Female
75-79	105	51	54	108	52	56
80+	201	78	123	202	78	124
Total	31,539	16,027	15,512	32,199	16,365	15,834

Table 21Total Population of belongers by age group and sex, Census 2012 and mid-year 2012

	Census 2012			Mid-year 2012		
Age group	Total	Male	Female	Total	Male	Female
0	236	127	109	236	127	109
1-4	1,081	559	522	1,083	560	523
0-4	1,317	686	631	1,319	687	632
5-9	1,223	622	601	1,225	623	602
10-14	1,129	560	569	1,131	561	570
15-19	1,035	508	527	1,036	508	528
20-24	928	457	471	930	458	472
25-29	863	422	441	864	422	442
30-34	810	389	421	811	390	421
35-39	770	369	401	770	369	401
40-44	755	360	395	756	361	395
45-49	687	331	356	690	333	357
50-54	609	303	306	609	303	306
55-59	507	257	250	507	257	250
60-64	384	199	185	385	200	185
65-69	283	147	136	283	147	136
70-74	189	96	93	189	96	93
75-79	98	44	54	99	44	55
80+	186	71	115	186	71	115
Total	11,773	5,821	5,952	11,790	5,830	5,960

Table 22Total population of non-belongers by age group and sex, census 2012 and mid-year 2012

	Census 2012			Mid-year 2012		
Age group	Total	Male	Female	Total	Male	Female
0	230	110	120	239	114	125
1-4	899	450	449	927	464	463
0-4	1,129	560	569	1,166	578	588
5-9	1,027	499	528	1,061	516	545
10-14	978	467	511	1,010	482	528
15-19	1,202	581	621	1,241	600	641
20-24	1,585	773	812	1,637	798	839
25-29	1,935	971	964	1,998	1,003	995
30-34	2,485	1290	1,195	2,564	1,330	1,234
35-39	2,463	1296	1,167	2,544	1,338	1,206
40-44	2,266	1211	1,055	2,338	1,249	1,089
45-49	1,849	996	853	1,909	1,028	881

Table 22 (c	concluded)
-------------	------------

	Census 2012			Mid-year 2012		
Age group	Total	Male	Female	Total	Male	Female
50-54	1,213	656	557	1,251	677	574
55-59	817	445	372	843	459	384
60-64	455	252	203	471	261	210
65-69	244	138	106	251	142	109
70-74	96	57	39	100	59	41
75-79	7	7	0	9	8	1
80+	15	7	8	16	7	9
Total	19,766	10,206	9,560	20,409	10,535	9,874

B. FERTILITY

Fertility has a major effect on the size and age structure of the population. Projections of this component are based on age specific fertility rates. The assumptions are based on the very limited trends for belongers and non-belongers based on the movements observed between 2001 and 2012. Three alternative assumptions about the future course of fertility are made. All three assume a continuation of the increase observed for 2001-2012 at levels which remain below the replacement level of 2.1 children. The three alternative assumptions relate to rapid, moderate and slow fertility increase. Under all three scenarios, fertility increases over the period.

The assumptions used for all three projection scenarios is for a total fertility rate of 1.77 for belongers, and 1.70 for non-belongers attained in the first period. There are increases in the second period for both groups. For the medium projections the rates increase to 1.79 for belongers and 1.82 for non-belongers for the second period and held constant until the end of the projection period. The low assumptions were set at 1.78 and 1.76 respectively for belongers and non-belongers for the second period and held constant until the end of the projection period. The rates for the high assumptions move to 1.80 for belongers, and 1.88 for non-belongers for the second period and held constant over the remaining projection period.

Under all three assumptions, fertility increases. At the beginning of the period, under all three assumptions, belongers have a higher fertility than non-belongers. For the low projections which maintain a lower rate of change than observed in the base period, this differential is maintained. By 2017, under both the medium and the high projections, the situation is reversed and the fertility of non-belongers is higher.

Alternate projections	2012-2017	2017-2022	2022-2027
Low	1.77	1.78	1.78
Medium	1.77	1.79	1.79
High	1.77	1.80	1.80

 Table 23

 Fertility assumptions for alternate projections for belongers

Table 24
Fertility assumptions for alternate projections for non-belongers

Alternate projections	2012-2017	2017-2022	2022-2027
Low	1.70	1.76	1.76
Medium	1.70	1.82	1.82
High	1.70	1.88	1.88

Table 25

Fertility assumptions: age specific fertility rates for base year and for projections for belonger population

		2017-2022 and 2022-2027				
Age group	Base year	Low projection	Medium projection	High projection		
15-19	0.0384	0.0385	0.0387	0.0389		
20-24	0.1136	0.1141	0.1146	0.1152		
25-29	0.0877	0.0881	0.0885	0.0889		
30-34	0.0707	0.0710	0.0713	0.0717		
35-39	0.0341	0.0343	0.0344	0.0346		
40-44	0.0106	0.0106	0.0107	0.0107		
Derived total fertility rate	1.77	1.78	1.79	1.80		

Table 26

Fertility assumptions: age specific fertility rates for base year and for projections for non-belongers

		2017-2022 and 2022-2027				
Age group	Base year	Low projection	Medium projection	High projection		
15-19	0.0202	0.0208	0.0216	0.0223		
20-24	0.0507	0.0524	0.0542	0.0560		
25-29	0.1075	0.1112	0.1150	0.1189		
30-34	0.0862	0.0892	0.0922	0.0953		
35-39	0.0517	0.0534	0.0552	0.0571		
40-44	0.0237	0.0245	0.0253	0.0262		
Derived total fertility rate	1.70	1.76	1.82	1.88		

Rationale for fertility assumptions

The assumptions have been guided by the pattern of change observed between 2001 and 2012 which shows an annual average rate of change for the TFR of .186 per cent for belongers and a much higher 1.34 per cent for non-belongers. The rates of change form the basis of the assumptions. For the medium projections the rate observed between 2001 and 2012 is maintained. For the low projection, a slower rate of increase 50 per cent of the rate observed between 2001 and 2012 is assumed while for the high projection, an annual rate of growth that is 1.5 times more than the 2001-2012 rates is used. Having determined the TFR for the projection period, age specific fertility rates consistent with the TFR are calculated using the same rates of change.

C. MORTALITY

Mortality is a component that can have a major effect on the size of populations especially as they age. In the context of demographic ageing, mortality among the elderly will be of particular interest in the years to come. The assumptions are that the decline in mortality and the rise in life expectancy observed from the recent data will continue in the coming years. For mortality no distinction is made between belongers and non-belongers. The assumptions are based on the characteristics observed for the population as a whole that there will be a continuation of the decline in mortality and hence a life expectancy at birth that will continue to rise in the coming years. Generally the higher the life expectancy attained, the lower the level of gains expected. All three assumptions begin with a life expectancy at birth in the first period of 75.8 years for men and 77.8 years for women, attained in the base year. For the medium projections this is increased by 0.5 year for each projection period, for both men and women, while the high life expectancy is assumed to increase by 1.0 year over each projection period. The low assumptions see no changes in the life expectancies observed in the base year. The life expectancies for the projected periods are shown in Table 27. The assumptions assume that the gap of approximately 2 years between male and female life expectancies observed at the base period will be maintained throughout the projection period.

Alternate projections		Males		Females			
	2012-2017	2017-2022	2022-2027	2012-2017	2017-2022	2022-2027	
Low	75.78	75.78	75.78	77.81	77.81	77.81	
Medium	75.78	76.28	76.78	77.81	78.31	78.81	
High	75.78	76.78	77.78	77.81	78.81	79.81	

 Table 27

 Mortality assumptions for alternate projections for belongers and non-belongers

The age specific mortality rates related to the life expectancies in the base period appear in Table 28. Details of the methodology used for deriving these estimates are outlined in the Technical Notes.

Age group	Male	Female
0	0.01247	0.01039
1-4	0.00105	0.00320
5-9	0.00162	0.00309
10-14	0.00137	0.00475
15-19	0.00492	0.00262
20-24	0.00923	0.00543
25-29	0.01130	0.00361
30-34	0.00478	0.00269
35-39	0.00587	0.00268
40-44	0.01179	0.01575
45-49	0.01381	0.01919
50-54	0.01411	0.02911
55-59	0.03728	0.03726
60-64	0.04296	0.05783
65-69	0.08465	0.07971
70-74	0.16168	0.10585
75-79	0.18676	0.20506
80-84	0.34056	0.30138

 Table 28

 Age specific mortality rates for males and females for the base period

Table 28 (concluded)

Age group	Male	Female
85+	1.00000	1.00000
Derived Life Expectancy at Birth	76.38	77.01
Fitted Life Expectancy at Birth	75.78	77.81

Note: The derived life expectancy is that derived by the program based on the age specific rates. The fitted values are those required for the assumptions. The program adjusts the rates to these values.

Rationale for the mortality assumptions

Typically global mortality assumptions take account of the significant increases in life expectancy which have been observed since the mid-twentieth century. In more recent times the impact of the HIV/AIDS epidemic has been a factor in the development of projection models. No information on cause of death is available for the Turks and Caicos Islands but they are likely to be typical of causes for most developing countries: cerebrovascular and heart diseases, and malignant neoplasms. Deaths from external causes appear to be very low and there is no indication that HIV/AIDS is a cause of any significance.

The assumption that the mortality pattern for the Turks and Caicos Islands is applicable to both belongers and non-belongers is considered justifiable as in all likelihood there are no variations in the mortality experience between belongers and non-belongers as residents of the Turks and Caicos Islands. As previously discussed the observed life expectancies are in keeping with the levels observed in the region. Historical data for countries with long traditions of demographic data show additions of about 15 years in total life expectancies since around 1960.

D. INTERNATIONAL MIGRATION

"International migration is the component of population change [which is] the most difficult to project. This is primarily due to the fact that data on past trends are often sparse or incomplete, and because the movement of people across international borders, is a very volatile process." Formulating trends in international migration is extremely difficult (United Nations 2014, 36-37). Flows of migrants are generally affected by government policy in sending and receiving countries. As explained previously, as no migration data exist for the Turks and Caicos Islands, for the purposes of the assumptions for the projections, the first step was to estimate the migration between 2001 and 2012 as the residual after accounting for births and deaths in the period. A summary of the estimation of migration including the assignment to sex and age has been discussed.

The assumptions for these projections have been developed on the basis of the pattern observed over the period 2001-2012. For the low projections, the annual net inflow of 800 estimated for the intercensal period is held constant for all projection periods. For the medium projections the net inflow rises to 1,061 and for the high projections the net inflow is 1,404. The components reflecting the net outflows for belongers and net inflows for non-belongers are shown in Tables 29 and 30.

Rationale for the migration assumptions

As discussed, immigration has for over 30 years become the most powerful component of growth for the islands. The Turks and Caicos Islands are a very attractive destination to foreign investors and workers from the neighbouring islands. Strong economic performance provides employment opportunities. There are no indications that this movement will abate in the short run over the period of these projections Some evidence of this is the fact that statistics on work permits granted for 2012 and 2013 show just over 1,400 for each year.

There is every indication that immigration will continue and especially within the context of low fertility and population ageing will take on added significance.

Alternate projections	2001	2001-2012		2012-2017		2017-2022		2022-2027	
	Male	Female	Male	Female	Male	Female	Male	Female	
Low	-26	-30	-28	-34	-28	-34	-28	-34	
Medium	-26	-30	-27	-32	-27	-32	-27	-32	
High	-26	-30	-26	-30	-26	-30	-26	-30	

 Table 29

 Migration assumptions for alternate projections for belongers

Table 30 Migration assumptions for alternate projections for non-belongers

Alternate Projections	2001-2012		2012-2017		2017-2022		2022-2027	
	Male	Female	Male	Female	Male	Female	Male	Female
Low	+456	+419	+449	+413	+449	+413	+449	+413
Medium	+456	+419	+584	+536	+584	+536	+584	+536
High	+456	+419	+760	+700	+760	+700	+760	+700

Table 31 Migration pattern for projections: percentage distribution of net migrants by sex for belongers and non-belongers

	Belo	ngers	Non-belongers		
Age group	Male	Female	Male	Female	
0-4	1.9	1.0	0.3	0.5	
5-9	3.0	1.3	0.4	0.6	
10-14	3.8	2.9	0.5	0.6	
15-19	6.8	6.4	4.8	4.4	
20-24	13.2	9.6	10.4	11.6	
25-29	12.8	10.3	14.2	15.4	
30-34	10.2	11.6	19.4	19.8	
35-39	8.6	10.6	18.3	18.2	
40-44	7.5	8.4	14.4	13.6	
45-49	5.6	6.8	10.5	9.6	
50-54	5.6	5.1	4.7	4.2	
55-59	4.1	4.8	2.2	1.8	
60-64	1.1	3.9	0.9	0.6	
65-69	0.8	4.2	0.1	0.1	
70-74	1.5	4.8	-0.2	-0.3	
Table 31 (concluded)

	Belongers		Non-belongers		
Age group	Male	Female	Male	Female	
75-79	10.5	8.0	-0.6	-0.5	
80+	3.0	0.3	-0.2	-0.2	
Total	100.0	100.0	100.0	100.0	

Note: All values for belongers are negative, all values for non-belongers with the exception of those shown with a negative sign, are positive.

PROJECTION SCENARIOS

Population projections are not meant to be interpreted as forecasts or predictions but are simply illustrations of the growth and change in the population which would occur if certain assumptions about levels of fertility, mortality and international migration prevailed over the period covered by the projections. Projections for three scenarios are produced: low, medium and high. The choice of different scenarios for population projections is to reflect the uncertainty associated with the future. The scenarios are constructed through the combination of assumptions regarding the direction of each of the components of population change. The medium growth scenario is the most closely associated with the movements observed in the past.

In the case of the Turks and Caicos Islands, the lack of a historical series of vital statistics covering long periods means that it is the movements in the most recent past and more specifically the period between the two most recent censuses, 2001 and 2012, that is reflected in the assumptions. The assumptions related to the low growth and high growth scenarios produce growth that is lower and higher than in the medium-growth scenario. For example assumptions of low fertility, excessive emigration and even moderate increases in life expectancy provide the basis for the typical low-growth scenario.

For the Turks and Caicos Islands, the projections prepared are for the three scenarios for belongers and non-belongers separately, which when combined represent the projections for the total resident population. Summaries of the three scenarios with assumptions are presented in Tables 32 and 33.

Alternate projections	Fertility trends	Life expectancy	Volume of emigration
Low	Slow increase	No increase	Large volume
Medium	Moderate increase	Moderate increase	Medium volume
High	Large increase	Large increase	Small volume

 Table 32

 Assumptions of fertility, mortality and migration for belongers

Table 33
Assumptions of fertility, mortality and migration for non-belongers

Alternate projections	Fertility trends	Life expectancy	Volume of immigration
Low	Slow increase	No increase	Small volume
Medium	Moderate increase	Moderate increase	Medium volume
High	Large increase	Large increase	Large volume

When combined the net migration will be as follows:

Low projection – small net immigration Medium projection – medium net immigration High projection – large net immigration

THE RESULTS OF THE PROJECTIONS

A. TOTAL POPULATION

It must be borne in mind that as previously stated, the results of the projections should not be viewed as forecasts or predictions but simply as illustrations of the growth and change in the population which would occur if certain assumptions about levels of fertility, mortality and international migration prevailed over the period covered by the projections. As such the choice of different scenarios for population projections is to reflect the uncertainty associated with the future. These projections are short-term, covering only 15 years and would require revisions if factors such as economic crises, natural disasters and in this case, a radical shift in the Government's immigration policy present themselves.

 Table 34

 Population projections for the Turks and Caicos Islands by growth scenarios, 2012-2027

Year	Low projection	Medium projection	High projection
2012	32,199	32,199	32,199
2017	38,374	39,788	41,597
2022	44,641	47,677	51,498
2027	50,734	55,498	61,457
Total increase 2012-27	18,535	23,299	29,258

According to the current projections presented in Table 34, all three scenarios show that the population of the Turks and Caicos Islands will increase continuously for the 15 year projection period. The high projection shows the largest population, 61,457 by 2027, while the medium projection shows a

total of 55,498 at that date. The low growth scenario projects the smallest population (50,734 people). All scenarios show considerable increases over the base year 2012. The high and medium projections show increases of between approximately 29,300 and 23,300 over the year 2012, by 2027, while the low projection shows an increase of about 18,500

Population growth rate for the Turks and Caicos Islands

Population change as reflected in the annual growth rate is influenced by natural increase (the difference between births and deaths) and migration is shown in Table 35. Growth rates remain high but decline by the end of the projection period. According to the medium growth scenario the population will grow at an average annual rate of 4.2 per cent (just slightly lower than between 2001 and 2012) at the beginning of the period reducing to 3.0 per cent at the end of the period. For the high growth scenario, the comparative rates are 5.1 per cent at the beginning of the period and 3.6 per cent at the end. The low projections will see lower growth rates of 3.5 per cent and 2.6 per cent at the beginning and end respectively.



Figure 1 Total Population, Turks and Caicos Islands, 1921-2027

Item	2012-17	2017-22	2022-27
Low projection			
Births	553	607	627
Deaths	119	153	208
Natural increase	434	454	419
Net-migration	+800	+800	+800
Additions to population	1,234	1,254	1,219
Crude birth rate	15.43	14.43	12.99
Crude death rate	3.30	3.64	4.30
Rate of natural increase	12.13	10.79	8.69
Net migration rate	+22.35	+19.01	+16.58
Population growth rate	3.51	3.03	2.56
Medium projection			
Births	574	667	705
Deaths	118	149	201
Natural increase	456	518	504
Net-migration	+1061	+1061	+1061
Additions to population	1,517	1,579	1,565
Crude birth rate	15.63	15.01	13.48
Crude death rate	3.22	3.34	3.82
Rate of natural increase	12.41	11.67	9.66
Net migration rate	+29.00	+23.90	+20.29
Population growth rate	4.23	3.62	3.04
High projection			
Births	600	745	811
Deaths	119	147	196
Natural increase	481	598	615
Net-migration	+1,404	+1,404	+1,404
Additions to population	1,885	2,002	2,019
Crude birth rate	16.31	15.68	14.07
Crude death rate	3.24	3.09	3.83
Rate of natural increase	13.07	12.59	10.24
Net migration rate	+38.36	+29.60	+24.39
Population growth rate	5.12	4.36	3.6

 Table 35

 Summary of demographic indicators for the Turks and Caicos Islands by growth scenarios, 2012-2027

Note: Data represent annual averages.

Components of growth of the population of the Turks and Caicos Islands

Natural increase

As this represents the difference between births and deaths and more specifically the excess of births over deaths, the change in natural increase over time is determined not only by the intensity of fertility and mortality but also by the evolving age structure of the population. Age plays a very important role as a determinant of fertility and mortality. In this regard, the numbers of women of childbearing ages and the elderly are of special significance. Table 35 shows that the number of births rises continuously over the projection period for the three growth scenarios. For the medium variant, the annual number of births increases from 574 at the beginning of the period, to 667 and by the end of the projection period is expected to be 705. For the low growth scenario the change is from 553 at the initial period to 627 at the end while for the high growth variant the rise is from 600 to 811, the largest numerical change.

For deaths there is also a steady rise in numbers for all three variants. The numbers are highest for the low growth scenario as the assumption is that life expectancy shows no change over the period and lowest for the high growth scenario as the largest gains in life expectancy are assumed for that variant. For the medium scenario, which assumes moderate increases in life expectancy, the number of deaths begin at an average of 118 for 2012-17 and rises to 201 for 2022-27. This compares with 119 at the beginning for both the low and high scenarios and 208 at the end for the low projections and 196 for the high projections.





Migration

The role of migration and in particular immigration on population growth for the Turks and Caicos Islands has been discussed and the assumptions which form the basis of the projections have been outlined. As a result this component will continue to represent the major share of future population growth. It is very important however to bear in mind the unpredictability of migration.

The projections are based on the assumption that the pattern observed over the past two decades will continue for the next 15 years. Such a pattern sees a continuation of the flow of immigrants and when balanced with the much smaller outflow, results in a net inflow ranging from an annual average of 800 for the low projections, 1,061 for the medium and 1,404 for the high growth projections. These annual averages are held constant for the entire projection periods.



Figure 3 Components of change, medium projections

Figure 4 Components of change, high projections



For the three growth scenarios, it is the migration component rather than natural increase which has the greater impact on population growth. For the medium projections migration over the period contributes on average about 2.2 times more to the population annually than natural increase. The contribution would be lowest for the low projections with on average about 1.8 times more than natural increase, on average (Table 35).

Sex composition of the population of the Turks and Caicos Islands

The historical prevalence of low sex ratios (number of males per 100 females) and the changes due to the male dominated in-migration flows have been discussed. There will continue to be more males than females under each of the three growth scenarios. The excess of males observed at the initial period rises continuously and by the end of the period under each growth variant the excess is considerably increased. As shown in Table 36, the differences in ratio for the three scenarios are very minimal. For the medium and high projections the ratio moves from approximately 103 at the beginning to approximately 105 at the end. This compares with a movement from 103 to 104 for the low variant.

Projection scenario and year	Excess of males over females	Sex ratio (Males per 100 females)
Low projection		
2012	531	103.4
2017	736	103.9
2022	911	104.2
2027	1,052	104.2
Medium projection		
2012	531	103.4
2017	800	104.1
2022	1,039	104.5
2027	1,240	104.6
High projection		
2012	531	103.4
2017	856	104.2
2022	1,146	104.6
2027	1,408	104.7

Table 36Excess of males and sex ratios by growth scenarios, 2012-2027

Age structure of the population of the Turks and Caicos Islands

All projection scenarios show that the population of the Turks and Caicos Islands will continue to age over the period as indicated by the increased proportions of persons 65 years old and older, and increases in the median age. The age structure for each sex and for each growth scenario are presented in the age pyramids appearing as Figures 5-7.

The age pyramid is a graphical representation of the age structure of a population for each sex and presents a "vivid" picture of the age-sex structure. Each horizontal bar of the pyramid represents the size of an age-sex group. The bottom bar shows the number of males and females who are less than five years old at the date, that is persons born in the five years preceding. The very short bars at the top of the pyramid show the small number of survivors of the oldest birth cohorts. Each year a new cohort is born and is placed at the bottom of the pyramid while those above move up. As the cohorts age, they inevitably lose members to death and migration.

The pyramids presented are based on the age distribution for the base period (shaded area) superimposed on the pyramid based on the structure at the end of the projection period. The widening of the horizontal bars for each age group (unshaded area) is reflective of the population increases in the age groups. The broadening of the bars at the base of the pyramids is directly related to the increases in the population at the young ages resulting mainly from births and at the top is reflective of the ageing. The widest bars appear in the middle age ranges, an indication of the large inflows from migration, in those age groups.

The discussion which follows examines the projections in relation to specific age groups. The age groups to be considered are 0-14 years, young children; 5-14 years representing the population of school age; the 15-29 years defined as youth; the population of working age, 15-64 years old; and the elderly population, 65 years and over.



Figure 5 Age sex pyramid for the Turks and Caicos Islands - Low growth scenario 2012 and 2027

Figure 6 Age sex pyramid for the Turks and Caicos Islands - Medium growth scenario 2012 and 2027



Figure 7 Age sex pyramid for the Turks and Caicos Islands - High growth scenario 2012 and 2027



The size of the 0-14 years age group in a population generally reflects the changes in fertility over the period. Table 37 shows that numerically this age group will grow for all three projection scenarios. For the medium growth scenario, the growth is from 6,912 in 2012 to 9,612 in 2027 reflecting an average annual rate of growth of 2.2 per cent. For the high growth projections the change is at a higher rate of growth, 2.9 per cent which yields a total of 10,641 at the end of the projection period. The smaller gains are observed for the low projections, from a rate of growth of 1.6 per cent per annum for a total of 8,809 in 2027. While the population grows numerically, the share of the population will continue the decreases observed in the historical pattern described earlier. For all growth scenarios, children of this age group account for approximately 22 per cent at the initial period and 17 per cent by the end of the period.

		2012-2027			
Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projection					
Number of persons 0-14 years	6,912	7,510	8,216	8,809	1.62
Percentage of total	21.5	19.6	18.4	17.4	
Medium projection					
Number of persons 0-14 years	6,912	7,617	8,626	9,612	2.20
Percentage of total	21.5	19.1	18.1	17.3	
High projection					
Number of persons 0-14 years	6,912	7,766	9,157	10,641	2.88
Percentage of total	21.5	18.7	17.8	17.3	





The school age population of the Turks and Caicos Islands

In 2012, the number of children of the Turks and Caicos Islands of school age (taken to be 5-14 years old) was approximately 4,400 representing 14 per cent of the total population (Table 38). In all three growth scenarios the number of children of this age group increases to 6,141 for the medium growth, 5,729 for the low growth and 6,665 for the high growth. The average annual rate of growth is highest (2.7 per cent) for the high projections, one percentage point higher than the 1.7 per cent for the low projections. The growth rate for the population 5-14 years old, for the medium projections is expected to be 2.2 per cent.

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projection					
Number of persons 5-14 years	4,427	4,790	5,230	5,729	1.72
Percentage of total	13.7	11.6	10.7	10.8	
Medium projection					
Number of persons 5-14 years	4,427	4,802	5,346	6,141	2.18
% of Total	13.7	12.1	11.2	11.1	
High projection					
Number of persons 5-14 years	4,427	4,817	5,496	6,665	2.73
Percentage of total	13.7	11.6	10.7	10.8	

Table 38Distribution of the population of the Turks and Caicos Islands 5-14 years old by growth scenarios,
2012-2027

The youth population of the Turks and Caicos Islands

Table 39 shows that the population of the Turks and Caicos Islands 15-29 years old, defined as the youth, numbered just over 7,700 in 2012, representing 24 per cent of the total population. This population grows at an annual average rate of 0.9 per cent for the medium growth scenario to reach 8,789 at the end of the projection period. The growth rate for this age group would be highest (1.3 per cent) under the high growth scenario and the population at the end of the period would be 9,410. Under the low growth scenario the rate of growth would be 0.5 per cent and the population in 2027 would be 8,290. The proportion of this age group falls to approximately 16 per cent under the medium scenario and 15 per cent under both the low and high.

Table 39Distribution of the Population of the Turks and Caicos Islands 15-29 years old by growth scenarios,
2012-2027

Item	2012	2017	2022	2027	Annual average rate of growth (per cent) 2012- 2027
Low projection					
Number of Persons 15-29	7,706	7,864	7,975	8,290	0.49
Percentage of total	23.9	20.6	17.5	15.3	

Table 39 (concluded)					
Item	2012	2017	2022	2027	Annual average rate of growth (per cent) 2012- 2027
Medium projection					
Number of Persons 15-29	7,706	8,169	8,425	8,789	0.88
Percentage of total	23.9	20.5	17.7	15.8	
High projection					
Number of Persons 15-29	7,706	8,557	8,991	9,410	1.33
Percentage of total	23.9	20.6	17.5	15.3	

The working age population of the Turks and Caicos Islands

The population aged 15-64 years for the Turks and Caicos Islands accounted for three-quarters (75 per cent) of the population in 2012 and throughout the projection period under all scenarios remains at only a slightly higher level (Table 40). Under the medium projections, the working age population would move from 24,154 at an annual rate of growth of 3.7 per cent to 41,938. This would be about 4,800 lower than the total of 46,754 to be attained under the high projections which would grow at a higher average rate of 4.4 per cent. Under the low growth scenario, the population would remain below 40,000 at the end of the projection period (38,096).

Annual average 2012 2017 2022 2027 rate of growth Item (percentage) 2012-2027 Low projections 3.04 Number of persons 15-64 years 24,154 29,221 33,880 38,096 Percentage of total 75.0 76.2 75.9 75.1 **Medium projections** 3.68 24,154 41,938 Number of persons 15-64 years 30,519 36,470 Percentage of total 76.5 75.6 75.0 76.7 **High projections** 4.40 Number of persons 15-64 years 24,154 32,179 39,735 46,754 Percentage of total 75.0 77.4 77.2 76.1

Table 40Distribution of the population of the Turks and Caicos Islands 15-64 years old by growth scenarios,
2012-2027

The relationship between the population of working age and the rest of the population can be measured by age dependency ratios. Movements in these ratios in the most recent intercensal period have been discussed. From Table 41 it can be observed that in 2012 there were 29 persons aged under 15 years and 5 persons aged 65 years or over per 100 persons of working age. The results of the projections show that under the three growth scenarios the youth dependency declines continuously and would be about 23 per 100 down from the 29 per 100. On the other hand, the old-age dependency ratio moves up



dramatically from 5 per 100 to 9 per 100 under the medium and high growth variants and 10 per 100 under the low variant.

Table 41Age dependency ratios of the Turks and Caicos Islands by growth scenarios, 2012-2027

Item	2012	2017	2022	2027	Percentage change 2012- 2027
Low projection					
Youth dependency ratio	28.6	25.7	24.3	23.1	-19.2
Old age dependency ratio	4.7	5.6	7.5	10.1	114.3
Total dependency ratio	33.3	31.3	31.8	33.2	-0.4
Medium projection					
Youth dependency ratio	28.6	25.0	23.7	22.9	-19.9
Old age dependency ratio	4.7	5.4	7.1	9.4	100.7
Total dependency ratio	33.3	30.4	30.7	32.3	-2.9
High projection					
Youth dependency ratio	28.6	24.1	23.0	22.8	-20.5
Old age dependency ratio	4.7	5.1	6.6	8.7	85.2
Total dependency ratio	33.3	29.3	29.6	31.4	-5.6

The older ages of the Turks and Caicos Islands

The increases in the old-age dependency ratio observed is related to the increases in the number of persons and the percentage of the total population accounted for by persons at ages 65 years and over. Typical indicators of ageing are presented as the percentage of the population in this age group and movements in the median age.

Table 42Distribution of the population of the Turks and Caicos Islands 65 years old and over
by growth scenarios, 2012-2027

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projection					
Number of persons 65 years and over	1,133	1,643	2,545	3,829	8.11
Percentage of total	3.5	4.3	5.7	7.5	
Medium projection					
Number of persons 65 years and over	1,133	1,652	2,581	3,948	8.32
Percentage of total	3.5	4.2	5.4	7.1	
High projection					
Number of persons 65 years and over	1,133	1,652	2,607	4,062	8.51
Percentage of total	3.5	4.0	5.1	6.6	

Table 42 shows the exceptionally high rates of growth for the population of ages 65 years and over. In 2012, at the beginning of the projection period the population in this age group numbered just over 1,100 and accounted for 3.5 per cent of the total population. Under the medium scenario the number moves to 3,948, and the proportion of the total doubles to 7 per cent. The highest rate of growth of 8.5 per cent per annum is observed under the high growth variant which takes the population to over 4,000. Under the low growth variant the population in this age group increases to 3,829.



Figure 10 Population projections 65 years and over, total, Turks and Caicos Islands, 2012-2027

Year	Low projection	Medium projection	High projection
2012	32.2	32.2	32.2
2017	35.3	35.4	35.4
2022	37.8	37.8	37.8
2027	40.0	40.0	39.9
Years added 2012-2027	7.8	7.8	7.7

Table 43Median ages (in years) of the Turks and Caicos Islands by growth scenarios, 2012-2027

The median age under all growth scenarios (Table 43) will increase from 32 years to around 40 years, an addition of approximately 8 years over the 15 year period.

B. BELONGERS

All three scenarios show that the population of belongers will increase continuously for the 15 year projection period. The high projection shows the largest population, 12,663 by 2027, while the medium projection shows a total of 12,564 at that date. The smallest population (12,473 people) of the three scenarios is provided by the low projections. All scenarios show small increases over the base year 2012. The high and medium projections show increases of between approximately 873 and 774 over the year 2012, by 2027, while the low projection shows an increase of about 683.

Year	Low projection	Medium projection	High projection
2012	11,790	11,790	11,790
2017	12,004	12,026	12,044
2022	12,236	12,293	12,345
2027	12,473	12,564	12,663
Total increase 2012-2027	683	774	873

Table 44Population projections for belongers by growth scenarios, 2012-2027

The population growth rate for belongers

Population change for the belonger population is shown in Table 45. Growth rates for belongers will be small throughout, at most 0.5 per cent. According to the medium and low growth scenarios the population will grow at an average annual rate which remains fairly stable throughout at about 0.4 per cent. For the high growth scenario the rate begins at 0.4 per cent and will increase to 0.5 per cent at the end.

Item	2012-17	2017-22	2022-27
Low projection			
Births	164	172	182
Deaths	59	64	73
Natural increase	105	108	109
Net-migration	-62	-62	-62
Reduction of natural growth*	59	57	57
Crude birth rate	13.73	14.18	14.70
Crude death rate	4.92	5.25	5.91
Rate of natural increase	8.81	8.93	8.79
Net migration rate	-5.2	-5.11	-5.01
Population growth rate	0.36	0.38	0.38
Medium Projection			
Births	164	174	184
Deaths	58	61	70
Natural increase	106	113	114
Net-migration	-59	-59	-59
Reduction of natural growth*	56	52	52
Crude birth rate	13.77	14.25	14.75
Crude death rate	4.86	5.02	5.59
Rate of natural increase	8.91	9.23	9.16
Net migration rate	-4.95	-4.84	-4.74
Population growth rate	0.40	0.44	0.44
High Projection			
Births	164	175	185
Deaths	57	58	66
Natural increase	107	117	119
Net-migration	-56	-56	-56
Reduction of natural growth*	53	48	47
Crude birth rate	13.77	14.32	14.77
Crude death rate	4.81	4.78	5.25
Rate of natural increase	8.96	9.54	9.52
Net migration rate	-4.69	-4.58	-4.47
Population growth rate	0.43	0.49	0.51

 Table 45

 Summary of demographic indicators for belongers by growth scenarios, 2012-2027

*Represents the percentage of natural growth reduced by net migration. Note: Data represent annual averages

Components of growth for the belonger population

Natural increase

Table 45 shows that the number of births will rise continuously over the period for the three growth scenarios. For the medium variant, births increase from 164 at the beginning of the period, to 174 and by the end of the projection period is expected to be 184. For the low growth scenario the change is from 164 at the initial period to 182 at the end while for the high growth variant the rise is from 164 to 185, the largest numerical change.

For deaths there is also a steady rise in numbers for all three variants. As for the total population, the numbers are highest for the low growth scenario with the assumption that life expectancy shows no change over the period and lowest for the high growth scenario as the largest gains in life expectancy are assumed for that variant. For the medium scenario which assumes moderate increases in life expectancy, the number of deaths begin at 58 for 2012-17 and rises to 70 for 2022-27. This compares with 59 at the beginning for the low and 57 for the high scenarios and 73 at the end for the low projections and 66 for the high projections.

Migration

The role of migration and in particular emigration on population growth of belongers has been discussed and the assumptions which form the basis of the projections have been outlined. The projections are based on the assumption that the pattern observed over the past two decades will continue for the next 15 years. Such a pattern sees a continuation of the net outflows ranging from an annual average of 62 for the low projections, 59 for the medium and 56 for the high growth projections. These annual averages are held constant for the entire projection periods.

For the three growth scenarios the migration component reduces the growth from natural increase by between 47 per cent and 59 per cent. For the medium projections, migration on average over the period reduces the growth attributable to natural increase by about 53 per cent. The reduction would be highest for the low projections with an average of 58 per cent and lowest for the high projections with an average of 49 per cent (Table 45).

Sex composition of the belonger population

The prevalence of low sex ratios (number of males per 100 females) for the Turks and Caicos Islands has been discussed. The deficit of males observed at the initial period declines continuously and by the end of the period under each growth variant the deficit is considerably reduced. The result is higher sex ratios at the end of the period. As shown in Table 46 the differences in ratio for the three scenarios are very minimal. For all projections the ratio moves from approximately 98 at the beginning to approximately 100 at the end.

Growth scenario and year	Excess of males over females	Sex ratio (Males per 100 females)
Low projection		
2012	-130	97.8
2017	-72	98.8
2022	-28	99.5
2027	-1	100.0
Medium projection		
2012	-130	97.8
2017	-76	98.7
2022	-35	99.4
2027	-8	99.9
High projection		
2012	-130	97.8
2017	-80	98.7
2022	-45	99.3
2027	-21	99.7

Table 46Excess of males and sex ratios for belongers by growth scenarios, 2012-2027

Age structure of the belonger population

The pyramids in Figures 11-13 are based on the age distribution of belongers for the base period (shaded) superimposed on the pyramid based on the structure at the end of the projection period. The slight widening of the horizontal bars for each age group (un-shaded area) is reflective of the population increases in the age groups. The wider un-shaded bars at the base of each pyramid are directly related to the decreases in the number and proportion of young children.

Figure 11 Age sex pyramid for belongers – Low growth scenario 2012 and 2027



Figure 12 Age sex pyramid for belongers - Medium growth scenario 2012 and 2027



BELONGERS 2012 (shaded) & BELONGERS MEDIUM 2027

Figure 13 Age Sex Pyramid for Belongers – High Growth Scenario 2012 and 2027



BELONGERS 2012 (shaded) & BELONGERS HIGH 2027

Young belonger children

Table 47 shows that numerically this age group will decline for belongers for all three projection scenarios. The increase in fertility observed for these women is not enough to offset the small losses due to migration and deaths and the larger declines as one cohort of the population ages and moves into another age group. For the medium growth scenario the fall is from 3,675 in 2012 to 2,525 in 2027 reflecting an average annual rate of decrease of 2.5 per cent. For the high growth projections the change is to a total of 2,544 at the end of the projection period. The largest decline is observed for the low projections, at a rate of 2.6 per cent per annum for a total of 2,508 in 2027. As the population decreases numerically, the share of the total also decreases. For all growth scenarios children of this age group account for between 31 per cent at the initial period and approximately 20 per cent by the end of the period.

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projection					
Number of persons 0-14 years	3,675	3,324	2,933	2,508	-2.55
Percentage of total	31.2	27.7	24.0	20.1	
Medium Projection					
Number of persons 0-14 years	3,675	3,324	2,942	2,525	-2.50
Percentage of total	31.2	27.6	23.9	20.1	
High Projection					
Number of persons 0-14 years	3,675	3,328	2,953	2,544	-2.45
Percentage of total	31.2	27.6	23.9	20.1	

Table 47Distribution of the belonger population 0-14 years old by growth scenarios, 2012-2027



The belonger population of school age

In 2012, the number of belonger children of school age was approximately 2,400 representing 20 per cent of the total population (Table 48). In all three growth scenarios the number of children of this age group falls, to 1,626 for the medium growth, 1,617 for the low growth and 1,637 for the high growth scenario. The average annual rate of decline is highest (2.5 per cent) for the low and medium projections. The negative growth rate for the population 5-14 years old, for the high projections is expected to be 2.4 per cent.

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projections					
Number of persons 5-14 years	2,356	2,524	2,091	1,617	-2.51
Percentage of total	20.0	21.0	17.1	13.0	
Medium projections					
Number of persons 5-14 years	2,356	2,524	2,093	1,626	-2.47
Percentage of total	20.0	21.0	17.0	12.9	
High projections					
Number of persons 5-14 years	2,356	2,525	2,097	1,637	-2.43
Percentage of total	20.0	21.0	17.0	12.9	

Table 48
Distribution of the population of belongers 5-14 years old by growth scenarios, 2012-2027

The belonger youth

Table 49 shows that the population of belongers 15-29 years old, numbered just over 2,800 at 2012, representing 24 per cent of the total population. This population grows at an annual average rate of 1.4 per cent for the medium growth scenario to reach 3,489 at the end of the projection period. The largest numerical increase for the age group will be highest (3,501) at the end of the projection period, for the high growth scenario. Under the low growth scenario the population in 2027 will be 3,478. Under all three scenarios this age group accounts for about 28 per cent of the total population.

Table 49Distribution of the belonger population 15-29 years old by growth scenarios, 2012-2027

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projections					
Number of persons 15-29 years	2,830	3,003	3,234	3,478	1.37
Percentage of total	24.0	25.0	26.4	27.9	
Medium projections					
Number of persons 15-29 years	2,830	3,008	3,243	3,489	1.40
Percentage of total	24.0	25.0	26.4	27.8	

Table 49 (concluded)					
Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
High projections					
Number of persons 15-29 years	2,830	3,012	3,250	3,501	1.42
Percentage of total	24.0	25.0	26.3	27.6	

The belonger population of working age

The population of belongers aged 15-64 years accounted for 62 per cent of the population in 2012 and throughout the projection period under all scenarios, increases in the share of the total population are observed (Table 50). Under the medium projections the population of working age would move from 7,358 at an annual rate of growth of 1.0 per cent to 8,680. This compares to the total of 8,732 to be attained under the high projections. Under the low growth scenario the population would be 8,632 at the end of the projection period.

Table 50Distribution of the belonger population 15-64 years old by growth scenarios, 2012-2027

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projections					
Number of persons 15-64 years	7,358	7,789	8,206	8,632	1.06
Percentage of total	62.4	64.9	67.1	69.2	
Medium projections					
Number of persons 15-64 years	7,358	7,804	8,237	8,680	1.01
Percentage of total	62.4	64.9	67.0	69.1	
High projections					
Number of persons 15-64 years	7,358	7,816	8,265	8,732	1.14
Percentage of total	62.4	64.9	67.0	69.0	



The age dependency ratios presented in Table 51 show that at 2012 there were about 50 persons of ages under 15 years and 10 persons aged 65 years or over to every 100 persons of working age. The results of the projections show that under the three growth scenarios youth dependency declines continuously and will be about 29 per 100 down from 50 per 100. On the other hand the old-age dependency ratio moves up, by 52 per cent from 10 per 100 to 16 per 100 under the medium variant and by 54 per cent to 16 per 100 under the high growth variant. Under the low growth scenario the rise will be by 50 per cent to 15 per 100.

Item	2012	2017	2022	2027	Percentage change 2012- 2027
Low projections					
Youth dependency ratio	49.9	42.7	35.7	29.1	-41.8
Old age dependency ratio	10.3	11.4	13.4	15.4	50.1
Total dependency ratio	60.2	54.1	49.1	44.5	-26.1
Medium projections					
Youth dependency ratio	49.9	42.6	35.7	29.1	-41.8
Old age dependency ratio	10.3	11.5	13.5	15.7	52.2
Total dependency ratio	60.2	54.1	49.2	44.7	-25.7
High projections					
Youth dependency ratio	49.9	42.6	35.7	29.1	-41.7
Old age dependency ratio	10.3	11.5	13.6	15.9	54.4
Total dependency ratio	60.2	54.1	49.4	45.0	-25.3

 Table 51

 Age dependency ratios of the belonger population by growth scenarios, 2012-2027

The older ages of the belonger population

Table 52 shows the very high rates of growth for the population of ages 65 years and over. In 2012, at the beginning of the projection period the population in this age group numbered 757 and accounted for about 6 per cent of the total population. Under the medium scenario the number moves to 1,359, with the percentage of the population moving to approximately 11 per cent. The highest rate of growth of 4.0 per cent per annum is observed under the high growth variant which takes the population to 1,387. Under the low growth variant the population in this age group increases to 1,333.

Table 52Distribution of the belonger population 65 years old and over by growth scenarios, 2012-2027

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projections					
Number of persons 65 years and over	757	891	1,097	1,333	3.77
Percentage of total	6.4	7.4	9.0	10.7	

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Medium projections					
Number of persons 65 years and over	757	898	1,114	1,359	3.90
Percentage of total	6.4	7.5	9.1	10.8	
High projections					
Number of persons 65 years and over	757	900	1,127	1,387	4.04
Percentage of total	6.4	7.5	9.1	11.0	



Table 53Median ages (in years) of belongers by growth scenarios, 2012-2027

Year	Low projection	Medium projection	High projection
2012	26.5	26.5	26.5
2017	28.2	28.2	28.2
2022	29.8	29.8	29.8
2027	31.5	31.5	31.5
Years added 2012-2027	5.0	5.0	5.0

The median age under all growth scenarios (Table 53) will increase from 27 years to around 32 years, an addition of approximately 5 years over the 15 year period.

Table 52 (concluded)

C.

All three scenarios show that the population of non-belongers will increase continuously for the 15 year projection period. The high projection shows the largest population, 48,794 by 2027, while the medium projection shows a total of 42,934 at that date. The smallest population (38,261 people) of the three scenarios is projected by the low projections. All scenarios show large increases over the base year 2012. The high and medium projections show a doubling of the population by 2027 with increases of 22,525, and 28,385 respectively over the year 2012, while the low projection shows an increase of 17,852.

Year	Low projection	Medium projection	High projection	
2012	20,409	20,409	20,409	
2017	26,370	27,762	29,553	
2022	32,405	35,384	39,153	
2027	38,261	42,934	48,794	
Total increase 2012-27	17,852	22,525	28,385	

Table 54Population projections by growth scenarios for non-belongers, 2012-2027

The population growth rate for non-belongers

Population change for the non-belonger population is shown in Table 55. Growth rates for non-belongers will be large throughout. According to the medium growth scenario the population will grow at an average annual rate of 6.2 per cent declining to 3.9 per cent. For the high scenario the rate begins at 7.4 per cent and by the end will have declined to 4.4 per cent. The low projections will see growth at lower rates of 5.1 per cent and 3.3 per cent at the beginning and the end respectively.

Components of growth for the non-belonger population

Natural increase

Table 55 shows that the number of births rises continuously over the projection period for the three growth scenarios. For the medium variant births increase from 409 at the beginning of the period, to 493 and by the end of the projection period is expected to be 522. For the low growth scenario the change is from 390 at the initial period to 445 at the end while for the high growth variant the rise is from 435 to 625, the largest numerical change.

For deaths also there is a steady rise in numbers for all three variants. As for belongers, and as reflected by the overall total population, the numbers are highest for the low growth scenario as the assumption is that life expectancy shows no change over the period and lowest for the high growth scenario as the largest gains in life expectancy are assumed for this variant. In all cases the number of deaths more than doubles at the end of the period an expected outcome from the ageing of a population of the size of the non-belongers. For the medium scenario which assumes moderate increases in life expectancy the number of deaths begin at 60 for 2012-17 and reaches 131 at 2022-27. This compares with 60 at the beginning for the low and 61 for the high scenarios and 135 at the end for the low projections and 130 for the high projections.

Item	2012-17	2017-22	2022-27
Low projections			
Births	390	435	445
Deaths	60	90	135
Natural increase	330	345	310
Net-migration	+862	+862	+862
Contribution to growth by migration	72	71	74
Crude birth rate	16.28	14.54	12.40
Crude death rate	2.49	2.98	3.74
Rate of natural increase	13.79	11.56	8.66
Net migration rate	+36.15	+28.82	+24.03
Population growth rate	5.13	4.12	3.32
Medium projections			
Births	409	493	522
Deaths	60	88	131
Natural increase	349	405	391
Net-migration	+1120	+1120	+1120
Contribution to growth by migration	76	73	74
Crude birth rate	16.53	15.31	13.09
Crude death rate	2.42	2.71	3.27
Rate of natural increase	14.11	12.6	9.82
Net migration rate	+45.52	+34.80	+28.13
Population growth rate	6.15	4.85	3.87
High Projections			
Births	435	570	625
Deaths	61	89	130
Natural Increase	374	481	495
Net-migration	+1,460	+1,460	+1,460
Contribution to growth by migration	80	75	75
Crude birth rate	17.57	16.17	13.89
Crude death rate	2.48	2.5	2.87
Rate of natural increase	15.09	13.67	11.02
Net migration rate	+59.39	+41.51	+32.45
Population growth rate	74	5 63	4 40

 Table 55

 Summary of demographic indicators for non-belongers by growth scenarios, 2012-2027

Note: Data represent annual averages.

*Represents the percentage contribution to growth by net-migration.

Migration

The role of migration and in particular immigration on population growth of non-belongers has been discussed and the assumptions which form the basis of the projections have been outlined. The

projections are based on the assumption that the pattern observed over the past two decades will continue for the next 15 years. Such a pattern sees a continuation of the net inflows ranging from an annual average of 862 for the low projections, 1,120 for the medium and 1,460 for the high growth projections. These annual averages are held constant for the entire projection periods.

For the three growth scenarios the migration component contributes more than 70 per cent of the additions to the population. For the medium projections migration on average over the period contributes 75 per cent of the total growth. The contribution would be highest for the high projections with an average of 77 per cent and lowest for the low projections with an average of 72 per cent (Table 55).

Sex composition of the non-belonger population

The prevalence of low sex ratios (number of males per 100 females) for the Turks and Caicos Islands has been discussed. There is very little difference between the sex ratios for the three scenarios. As shown in Table 56 the ratios range between 106 and 107 over the projection period.

Projection scenario and year	Excess of males over females	Sex ratio (males per 100 females)
Low projection		
2012	661	106.7
2017	808	106.3
2022	939	106.0
2027	1051	105.6
Medium projection		
2012	661	106.7
2017	876	106.5
2022	1074	106.3
2027	1248	106.0
High projection		
2012	661	106.7
2017	936	106.5
2022	1191	106.3
2027	1429	106.0

Table 56Excess of males and sex ratios for belongers by growth scenarios, 2012-2027

Age structure of the non-belonger population

The pyramids at Figures 17-19 are based on the age distribution of non-belongers for the base period (shaded) superimposed on the pyramid based on the structure at the end of the projection period. What is immediately evident from the three pyramids is the extent of the un-shaded areas in the horizontal bars indicative of the expected large increases in the age groups for non-belongers. What is seen is a narrowing of the pyramid for the youth age groups (from about age 15 years to age 29 years) and little or no population increase in the number of persons in these age groups. The data to be presented will show smaller growth in this group. There is significant population growth for all other age groups.





NON-BELONGERS 2012 (shaded) & NON-BELONGERS LOW 2027

Figure 18 Age sex pyramid for non-belongers – Medium growth scenario 2012 and 2027

NON-BELONGERS 2012 (shaded) & NON-BELONGERS MEDIUM 2027





Figure 19 Age sex pyramid for non-belongers – High growth scenario 2012 and 2027

Young non-belonger children

Table 57 shows that numerically this age group will grow for all three projection scenarios. While the size of the 0-14 year age group in a population generally reflects the changes in fertility over the period, for non-belongers, changes in this age group may also be indicative of children arriving as part of the immigrant population.

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projections					
Number of persons 0-14 years	3,237	4,186	5,283	6,301	4.44
Percentage of total	15.9	15.9	16.3	16.5	
Medium projections					
Number of Persons 0-14 years	3,237	4,293	5,684	7,087	5.22
Percentage of total	15.9	15.5	16.1	16.5	
High projections					
Number of Persons 0-14 years	3,237	4,438	6,204	8,097	6.11
Percentage of total	15.9	15.0	15.8	16.6	

Table 57Distribution of the non-belonger population 0-14 years old by growth scenarios, 2012-2027

For the medium growth scenario the growth is from 3,237 in 2012 to 7,087 in 2027 reflecting an average annual rate of growth of 5.2 per cent. For the high growth projections, the change is at a higher rate of growth, 6.1 per cent which yields a total of 8,097 at the end of the projection period. The smaller gains are observed for the low projections, from a rate of 4.4 per cent per annum for a total of 6,301 in 2027. As the population grows numerically, the share of the population will show small increases. For all growth scenarios children of this age group account for approximately 16 per cent which moves to approximately 17 per cent by the end of the period.



The non-belongers population of school age

In 2012, the number of children of school age was approximately 2,071 representing 10 per cent of the total population (Table 58). In all three growth scenarios the number of children of this age group will grow to 4,515 for the medium growth, 4,112 for the low growth and 5,028 for the high growth scenario. The average annual rate of growth will be highest (5.9 per cent) for the high projections. The growth rate for the population 5-14 years old for the medium projections will be 5.2 per cent and for the low, 4.6 per cent.

Table 58Distribution of the non-belonger population 5-14 years old by growth scenarios, 2012-2027

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projections					
Number of persons 5-14 years	2,071	2,266	3,139	4,112	4.57
Percentage of total	10.1	15.0	10.1	8.6	

Table 58 (concluded)					
Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Medium Projections					
Number of persons 5-14 years	2,071	2,278	3,253	4,515	5.20
Percentage of total	10.1	8.2	9.2	10.5	
High Projections					
Number of persons 5-14 years	2,071	2,292	3,399	5,028	5.91
Percentage of total	10.1	7.8	8.7	10.3	

The non-belonger youth

As observed from the pyramid, the growth for the population 15-29 years is expected to be in stark contrast to other age groups. Table 59 shows that the population 15-29 years old, numbered 4,876 in 2012, representing about 24 per cent of the total population. This population grows at an annual average rate of only 0.6 per cent for the medium growth scenario to reach 5,300 at the end of the projection period. The growth rate for this age group will be highest (1.3 per cent) under the high growth scenario and the population at the end of the period will be 5,909 accounting for 12 per cent of the total population, a 50 per cent reduction in share over 2012. Under the low growth scenario there will be a negative rate of growth of 0.1 per cent and the population at 2027 would be 4,812 with a share of the population of approximately 13 per cent.

Generally, population growth for non-belongers at ages over 14 years is determined by immigration. The pattern of low growth for this age group can be explained by the fact that the population of this age group in 2027 would be from the cohort of 0-14 years old in 2012 and 5-19 years in 2017 which are age groups for which assumed levels of immigration are very minimal. Immigration becomes an important determinant nearing the end of the projection period.

Item	2012	2017	2022	2027	Annual average Rate of growth (percentage) 2012-2027
Low projections					
Number of persons 15-29 years	4,876	4,861	4,741	4,812	-0.09
Percentage of total	23.9	18.4	14.6	12.6	
Medium projections					
Number of persons 15-29 years	4,876	5,161	5,182	5,300	0.56
Percentage of total	23.9	18.6	14.6	12.3	
High projections					
Number of persons 15-29 years	4,876	5,545	5,741	5,909	1.28
Percentage of total	23.9	18.8	14.7	12.1	

 Table 59

 Distribution of the non-belonger population 15-29 years old by growth scenarios, 2012-2027

The non-belonger population of working age

The non-belonger population aged 15-64 years numbered 16,796 in 2012 and throughout the projection period under all scenarios, increases in numbers as observed (Table 60). Under the medium projections the population of working age will almost double, growing at an annual rate of 4.6 per cent and will reach 33,258 by 2027. This compares to the total of 38,022 to be attained under the high projections which will show growth at a higher average rate of 5.5 per cent. Under the low growth scenario the population will be 29,464 at the end of the projection period.

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low Projections					
Number of persons 15-64 years	16,796	21,432	25,674	29,464	3.75
Percentage of total	82.3	81.3	79.2	77.0	
Medium Projections					
Number of persons 15-64 years	16,796	22,715	28,233	33,258	4.55
Percentage of total	82.3	81.8	79.8	77.5	
High Projections					
Number of persons 15-64 years	16,796	24,363	31,470	38,022	5.45
Percentage of total	82.3	82.4	80.4	77.9	

Table 60
Distribution of the non-belonger population 15-64 years old by growth scenarios, 2012-2027



The age dependency ratios presented in Table 61 show that at among non-belongers in 2012 there were about 19 persons of ages under 15 years and only 2 persons aged 65 years or over to every 100 persons of working age. Low dependency ratios for non-belongers are directly attributable to the very large percentage of the working age population. Dependency rates will increase with the decline in proportions of the working age. The results of the projections show that under the three growth scenarios, by 2027 the youth dependency ratio will be about 21 per 100 up from the 19 per 100 observed in 2012. The old-age dependency ratio moves up more dramatically, almost quadrupling in percentage share from 2 per 100 to just fewer than 8 per 100 under the medium variant. Under the high growth variant the move is from 2 per 100 to 7 per 100. The largest jump is observed for the low projections from 2 per 100 to almost 9 per 100.

Item	2012	2017	2022	2027	Percentage change 2012- 2027
Low projections					
Youth dependency ratio	19.3	19.5	20.6	21.4	11.0
Old age dependency ratio	2.2	3.5	5.6	8.5	278.4
Total dependency ratio	21.5	23.0	26.2	29.9	38.8
Medium Projections					
Youth dependency ratio	19.3	18.9	20.1	21.3	10.6
Old age dependency ratio	2.2	3.3	5.2	7.8	247.7
Total dependency ratio	21.5	22.2	25.3	29.1	35.3
High Projections					
Youth dependency ratio	19.3	18.2	19.7	21.3	10.5
Old age dependency ratio	2.2	3.1	4.7	7.0	214.3
Total dependency ratio	21.5	21.3	24.4	28.3	31.7

Table 61Age dependency ratios of the non-belonger population by growth scenarios, 2012-2027

The older ages of the non-belonger population

The increases in the old-age dependency ratio observed is related to the increases in the number of persons and the percentage of the total population accounted for by persons at ages 65 years and over. Table 62 shows the very high rates of growth for the population of ages 65 years and over. In 2012, at the beginning of the projection period the population in this age group numbered 376 and accounted for about 2 per cent of the total population. Under the medium scenario the number moves to 2,589, with the percentage of the population moving to approximately 6 per cent. The highest rate of growth of 13.0 per cent per annum is observed under the high growth variant which takes the population to 2,675. Under the low growth variant the population in this age group increases to 2,496.

Item	2012	2017	2022	2027	Annual average rate of growth (percentage) 2012-2027
Low projections					
Number of persons 65 years and over	376	752	1,448	2,496	12.62
Percentage of total	1.8	2.9	4.5	6.5	
Medium projections					
Number of persons 65 years and over	376	754	1,467	2,589	12.87
Percentage of total	1.8	2.7	4.1	6.0	
High projections					
Number of persons 65 years and over	376	752	1,480	2,675	13.08
Percentage of total	1.8	2.5	3.8	5.5	

Table 62Distribution of the non-belonger population 65 years old and over by growth scenarios, 2012-2027





Table 63Median ages (in years) of non-belongers by growth scenarios, 2012-2027

Year	Low projection	Medium projection	High projection
2012	34.08	34.08	34.08
2017	37.10	37.05	36.98
2022	39.64	39.43	39.19
2027	41.76	41.46	41.15
Years added 2012-2027	7.68	7.38	6.07

The median age for non-belongers increases under all growth scenarios (Table 63). For the medium and high growth projections, the increase is from about 34 years to about 41 years, an addition of approximately 7 years over the 15 year period. For the low projections the change is from 34 years to approximately 42 years.

RECOMMENDATIONS

It is obvious that much work has been done by the Strategic Planning and Policy Department in closing some of the gaps in the series of vital statistics and this is very commendable. Problems of data deficiencies within the statistical system are not unique to the Turks and Caicos Islands. Much of the data required are the by-products of administrative systems which were not established with any objective of producing statistics. The challenge for the statisticians is to forge collaborations to be able to gain access to these vital data sources.

Much of the work of preparing population projections (the most time-consuming and difficult) is in the preparation of the data used to formulate the assumptions and for inputs. The person doing this work will require some training at least in basic demographic techniques. Data assessment, evaluation and correction are critical activities in the process and there has to be some understanding of general demographic patterns of behaviour. As an example, mortality rates should increase with age and where the data do not reflect this there has to be some further checking. This is especially relevant to the Turks and Caicos Islands where the numbers are quite small. In some cases the data show that over a number of years there are no deaths in a particular age group. This needs careful re-checking and verification.

Specific recommendations based on observations working with the data for these projections:

- 1. As there is currently no system in place for producing annual population estimates, these can be generated from the files, always with the understanding that they are based on a specific set of assumptions.
- 2. If there are any changes in circumstances that would require changes to the assumptions. This can be done and the projections updated.
- 3. There must be improvements in the data collection and compilation in order to allow for the ongoing evaluation and assessment.
- 4. As belonger status is a critical element, all data must be compiled by these categories and for each island.
- 5. There must be checks to ensure consistency in totals across tables. For example, the total number of births and deaths for a series 1990-2009 on one table did not match the totals on another table for the same period, showing the sex disaggregation. As another example, deaths for 2011 appear as 111 in the table by month, island and gender and as 117 in the table by age and gender. Whenever discrepancies arise from revisions, the later tables should be accompanied by a note to this effect.
- 6. Data for live births should be by sex of birth, age of mother, and by belonger status for each island.
- 7. Data for deaths should be by sex of deceased, by age groups 0, 1-4 and five year groups up to the oldest, and by belonger status for each island.
- 8. Data on cause of death at least by sex and belonger status should be compiled.
- 9. Serious consideration needs to be given to the development of a system for producing migration statistics. Of the three components of growth this is the most difficult to measure.
There are a number of 'proxy' measures which can be used. This would however require the cooperation of other government agencies.

- 10. Statistics on work permits have been identified as a possible source of migration data. To be useful the data should be disaggregated by sex, age, and year of entry into the Turks and Caicos Islands. Sex and year of entry are particularly important.
- 11. Another source is the information on arrivals and departures, which is likely to be only totals but does give some indication.
- 12. A report on the 2012 Census needs to be produced without further delay.

REFERENCES

- 1. Central Bureau of Statistics (1945), *Census of Jamaica and Dependencies 1943, Population Housing and Agriculture*, Kingston: Central Bureau of Statistics.
- 2. Cumper, George (1956), "Population Movements in Jamaica 1850-1950", *Social and Economic Studies* 5 (3): 261-80.
- 3. Higman, B.W. (1995), *Slave Populations of the British Caribbean*, Kingston: The Press, University of the West Indies.
- 4. Mills, Frank (2009), National *Census Report, Turks and Caicos Islands*, CARICOM Capacity Development Programme (CCDP) 2000 Round of Population and Housing Census Data Analysis Sub-Project, CARICOM Secretariat.
- 5. Nam, Valerie (2009), *Regional Special Topic Monograph: The Elderly*, CARICOM Capacity Development Programme (CCDP) 2000 Round of Population and Housing Census Data Analysis Sub-Project, CARICOM Secretariat.
- 6. Population Reference Bureau (2014), Understanding Population Projections: Assumptions Behind the Numbers, <<u>www.prb.org</u>> [date of reference Sept 2014].
- 7. Roberts, George W. (1957), *Population of Jamaica*. Cambridge: Cambridge University Press.
- 8. ——. (ed.) (1974), "Growth of the Population", *World Population Year: Recent Population Movements in Jamaica*, Committee for International Cooperation in National Research in Demography, 1-10. Paris: CICRED.
- 9. Rowland, Donald T. (2003), *Demographic Methods and Concepts*, Oxford, Oxford University Press.
- 10. Sadler, Nigel (2008), "Slavery.", A History of the Turks and Caicos Islands, edited by Dr Carlton Mills, 117-125, Oxford. McMillan Press.
- 11. Siegel, Jacob S. and David A. Swanson (eds.) (2004), *The Methods and Materials of Demography*, Oxford, Elsevier Academic Press.
- 12. Sinclair, Sonja. A. (1984), *Recent Population Movements in Turks and Caicos*, Demographic Analysis of Census and Survey Data in the Commonwealth Caribbean UNFPA Project No. TRI/84/P02: CARICOM Secretariat.
- United Nations (2014), World Population Prospects. The 2012 Revision. Methodology. New York, Department of Economic and Social Affairs, Population Division.
 <<u>https://esa.un.org/unpd/wpp/publications/Files/WPP2012_Methodology.pdf</u>> [date of reference September 2014].

Appendices

Appendix A: Population projections in the Turks and Caicos Islands population
Appendix B: Population projections, belongers population
Appendix C: Population projections, non-belongers population
Appendix D: Technical notes
Appendix E: Glossary of terms

APPENDIX A: POPULATION PROJECTIONS TURKS AND CAICOS ISLANDS POPULATION

Table A.1Age and sex composition of the Turks and Caicos IslandsLow projection: 2012-2027

Item	2012	2017	2022	2027
Population				
Total	32,199	38,374	44,641	50,734
Male	16,365	19,555	22,776	25,893
Female	15,834	18,819	21,865	24,841
Sex ratio (Males per 100 females)	103.4	103.9	104.2	104.2
Age distribution				
Both sexes				
Percentage 0-14 years	21.47	19.57	18.40	17.36
Percentage 15-64 years	75.01	76.15	75.90	75.09
Percentage 65+ years	3.52	4.28	5.70	7.55
Percentage 80+ years	0.63	0.40	0.44	0.63
Median age (years)	32.19	35.32	37.75	40.00
Male				
Percentage 0-14 years	21.06	19.37	18.26	17.20
Percentage 15-64 years	75.43	76.17	75.72	74.86
Percentage 65+ years	3.51	4.46	6.01	7.94
Percentage 80+ years	0.48	0.31	0.42	0.67
Median age (years)	32.75	35.88	38.35	40.53
Female				
Percentage 0.14 years	21.88	19.79	18.57	17.59
Percentage 15-64 years	74.59	76.13	76.07	75.33
Percentage 65+ years	3.53	4.09	5.38	7.14
Percentage 80+ years	0.78	0.48	0.45	0.59
Median age (years)	31.62	34.69	37.15	39.40

Item	2012	2017	2022	2027
Population				
Total	32,199	39,788	47,677	55,498
Male	16,365	20,294	24,358	28,369
Female	15,834	19,494	23,319	27,129
Sex ratio (Males per 100 females)	103.4	104.1	104.5	104.6
Age distribution				
Both sexes				
Percentage 0-14 years	21.47	19.14	18.09	17.32
Percentage 15-64 years	75.01	76.70	76.49	75.57
Percentage 65+ years	3.52	4.15	5.41	7.11
Percentage 80+ years	0.63	0.39	0.40	0.57
Median age (years)	32.19	35.38	37.76	39.95
Male				
Percentage 0-14 years	21.06	18.91	17.91	17.11
Percentage 15-64 years	75.43	76.77	76.39	75.43
Percentage 65+ years	3.51	4.32	5.70	7.47
Percentage 80+ years	0.48	0.31	0.38	0.60
Median age (years)	32.75	35.94	38.34	40.48
Female				
Percentage 0.14 years	21.88	19.39	18.28	17.54
Percentage 15-64 years	74.59	76.64	76.60	75.71
Percentage 65+ years	3.53	3.98	5.12	6.75
Percentage 80+ years	0.78	0.48	0.42	0.55
Median age (years)	31.62	34.77	37.17	39.37

Table A.2Age and sex composition of the Turks and Caicos Islands
Medium projection: 2012-2027

Item	2012	2017	2022	2027
Population				
Total	32,199	41,597	51,498	61,457
Male	16,365	21,226	26,322	31,433
Female	15,834	20,370	25,176	30,025
Sex ratio (Males per 100 Females)	103.4	104.2	104.6	104.7
Age distribution				
Both sexes				
Percentage 0-14 years	21.47	18.67	17.79	17.31
Percentage 15-64 years	75.01	77.36	77.16	76.07
Percentage 65+ years	3.52	3.97	5.06	6.61
Percentage 80+ years	0.63	0.38	0.35	0.50
Median age (years)	32.19	35.44	37.75	39.87
Male				
Percentage 0-14 years	21.06	18.44	17.59	17.09
Percentage 15-64 years	75.43	77.43	77.09	75.98
Percentage 65+ years	3.51	4.13	5.32	6.93
Percentage 80+ years	0.48	0.29	0.33	0.52
Median age (years)	32.75	35.98	38.31	40.38
Female				
Percentage 0.14 years	21.88	18.91	17.98	17.55
Percentage 15-64 years	74.59	77.29	77.23	76.18
Percentage 65+ years	3.53	3.80	4.79	6.28
Percentage 80+ years	0.78	0.46	0.37	0.49
Median age (years)	31.62	34.86	37.19	39.32

Table A.3Age and sex composition of the Turks and Caicos IslandsHigh projection: 2012-2027

Indicator	2012-2017	2017-2022	2022-2027	
	Ι	Low projection		
Population change				
Total population change	6,175	6,267	6,093	
Annual rate of population change (per cent)	3.51	3.03	2.56	
Natural increase per year	436	457	422	
Rate of natural increase per 1,000 population	12.13	10.79	8.69	
Fertility				
Number of births per year	553	607	627	
Crude birth rate per 1,000 population	15.43	14.43	12.99	
Total fertility rate per woman	1.77	1.79	1.79	
Mortality				
Number of deaths per year	119	153	208	
Crude death rate per 1,000 population	3.30	3.64	4.30	
Life expectancy at birth (years)	76.80	76.80	76.80	
Male life expectancy at birth (years)	75.78	75.78	75.78	
Female life expectancy at birth (years)	77.81	77.81	77.81	
Migration				
Net number of migrants per year	+800	+800	+800	
Net migration Rate per 1,000 population	+22.35	+19.01	+16.58	
	Med	ium projectio	n	
Population Change				
Total population change	7,589	7,889	7,821	
Annual rate of population change (per cent)	4.23	3.62	3.04	
Natural increase per year	456	518	504	
Rate of natural increase per 1,000 population	12.41	11.67	9.66	
Fertility				
Number of births per year	574	667	705	
Crude birth rate per 1,000 population	15.63	15.01	13.48	
Total fertility rate per woman	1.77	1.82	1.82	
Mortality				
Number of deaths per year	118	149	201	
Crude death rate per 1,000 population	3.22	3.34	3.82	
Life expectancy at birth (years)	76.80	76.80	76.80	

 Table A.4

 Demographic indicators: 2012-2027 – Population of the Turks and Caicos Islands

Table A.4 (concluded)

Indicator	2012-2017	2017-2022	2022-2027
Male life expectancy at birth (years)	75.78	75.78	75.78
Female life expectancy at birth (years)	77.81	77.81	77.81
	Medium	projection (co	ont'd)
Migration			
Net number of migrants per year	1,061	1,061	1,061
Net migration rate per 1,000 population	+29.00	+23.90	+20.29
	Hig	gh projection	
Population change			
Total population change	9,398	9,902	9,959
Annual rate of population change (per cent)	5.12	4.36	3.60
Natural increase per year	481	598	614
Rate of natural increase per 1,000 population	13.07	12.59	10.24
Fertility			
Number of births per year	599	745	810
Crude birth rate per 1,000 population	16.31	15.68	14.07
Total fertility rate per woman	1.77	1.85	1.85
Mortality			
Number of deaths per year	118	147	196
Crude death rate per 1,000 population	3.24	3.09	3.83
Life expectancy at birth (years)	76.80	77.80	78.80
Male life expectancy at birth (years)	75.78	76.78	77.78
Female life expectancy at birth (years)	77.81	78.81	79.81
Migration			
Net number of migrants per year	+1,404	+1,404	+1,404
Net migration rate per 1,000 population	+38.36	+29.60	+24.39

Age	Low projection: Small fertility increase, no increase in life expectancy, small net immigration				
	2012	2017	2022	2027	
0-4	2,485	2,720	2,986	3,080	
5-9	2,286	2,493	2,727	2,993	
10-14	2,141	2,297	2,503	2,736	
15-19	2,277	2,231	2,386	2,592	
20-24	2,567	2,569	2,524	2,677	
25-29	2,862	3,064	3,065	3,021	
30-34	3,375	3,551	3,752	3,754	
35-39	3,314	4,143	4,318	4,517	
40-44	3,094	3,961	4,786	4,959	
45-49	2,599	3,560	4,421	5,238	
50-54	1,860	2,855	3,802	4,650	
55-59	1,350	1,940	2,911	3,839	
60-64	856	1,347	1,915	2,849	
65-69	534	814	1,273	1,807	
70-74	289	468	719	1,133	
75-79	108	209	358	569	
80+	202	152	195	320	
Total	32,199	38,374	44,641	50,734	

Table A.5Total population of the Turks and Caicos Islands
Low projection: 2012-2027

Age	Low projecti	Low projection: Small fertility increase, no increase in life expectancy, small net immigration				
	2012	2017	2022	2027		
0-4	1,265	1,377	1,511	1,559		
5-9	1,139	1,267	1,378	1,513		
10-14	1,043	1,143	1,271	1,382		
15-19	1,108	1,092	1,191	1,319		
20-24	1,256	1,254	1,238	1,336		
25-29	1,425	1,498	1,495	1,480		
30-34	1,720	1,774	1,847	1,844		
35-39	1,707	2,120	2,174	2,245		
40-44	1,610	2,050	2,461	2,514		
45-49	1,361	1,862	2,299	2,705		
50-54	980	1,501	1,994	2,423		
55-59	716	1,026	1,533	2,015		
60-64	461	718	1,015	1,502		
65-69	289	442	681	960		
70-74	155	256	393	608		
75-79	52	114	199	314		
80+	78	61	96	174		
Total	16,365	19,555	22,776	25,893		

Table A.6Male population of the Turks and Caicos Islands
Low projection: 2012-2027

Age	Low projection: Small fertility increase, no increase in life expectancy, small net immigration				
	2012	2017	2022	2027	
0-4	1,220	1,345	1,480	1,527	
5-9	1,147	1,225	1,349	1,485	
10-14	1,098	1,153	1,230	1,354	
15-19	1,169	1,136	1,193	1,270	
20-24	1,311	1,314	1,284	1,338	
25-29	1,437	1,566	1,569	1,538	
30-34	1,655	1,777	1,904	1,908	
35-39	1,607	2,023	2,143	2,270	
40-44	1,484	1,911	2,324	2,443	
45-49	1,238	1,698	2,121	2,531	
50-54	880	1,354	1,807	2,225	
55-59	634	914	1,377	1,822	
60-64	395	629	899	1,346	
65-69	245	372	591	846	
70-74	134	212	326	524	
75-79	56	95	159	254	
80+	124	91	99	146	
Total	15,834	18,815	21,854	24,828	

Table A.7Female population of the Turks and Caicos IslandsLow projection: 2012-2027

Age	Low projection: Small fertility increase, no increase in life expectancy, small net immigration				
	2012	2017	2022	2027	
0-4	7.7	7.1	6.7	6.1	
5-9	7.1	6.5	6.1	5.9	
10-14	6.6	6.0	5.6	5.4	
15-19	7.1	5.8	5.3	5.1	
20-24	8.0	6.7	5.6	5.3	
25-29	8.9	8.0	6.9	5.9	
30-34	10.5	9.3	8.4	7.4	
35-39	10.3	10.8	9.7	8.9	
40-44	9.6	10.3	10.7	9.8	
45-49	8.1	9.3	9.9	10.3	
50-54	5.8	7.4	8.5	9.2	
55-59	4.2	5.1	6.5	7.6	
60-64	2.7	3.5	4.3	5.6	
65-69	1.7	2.1	2.8	3.6	
70-74	0.9	1.2	1.6	2.2	
75-79	0.3	0.5	0.8	1.1	
80+	0.6	0.4	0.4	0.6	
Total	100.0	100.0	100.0	100.0	

 Table A.8

 Total population of the Turks and Caicos Islands– Percentage distribution by age Low projection: 2012-2027

Age	Low projection: Small fertility increase, no increase in life expectancy, small net immigration				
	2012	2017	2022	2027	
0-4	7.7	7.1	6.7	6.0	
5-9	7.0	6.5	6.1	5.9	
10-14	6.4	5.8	5.6	5.3	
15-19	6.8	5.6	5.2	5.1	
20-24	7.7	6.4	5.4	5.2	
25-29	8.7	7.7	6.6	5.7	
30-34	10.5	9.1	8.1	7.1	
35-39	10.4	10.8	9.5	8.7	
40-44	9.8	10.5	10.8	9.7	
45-49	8.3	9.5	10.1	10.4	
50-54	6.0	7.7	8.8	9.4	
55-59	4.4	5.2	6.7	7.8	
60-64	2.8	3.7	4.5	5.8	
65-69	1.8	2.3	3.0	3.7	
70-74	0.9	1.3	1.7	2.3	
75-79	0.3	0.6	0.9	1.2	
80+	0.5	0.3	0.4	0.7	
Total	100.0	100.0	100.0	100.0	

Table A.9Male population of the Turks and Caicos Islands- Percentage distribution by age
Low projection: 2012-2027

Age	<i>Low projection: Small fertility increase, no increase in life expectancy,</i> <i>Age small net immigration</i>				
	2012	2017	2022	2027	
0-4	7.7	7.1	6.8	6.0	
5-9	7.2	6.5	6.2	6.0	
10-14	6.9	6.1	5.6	5.5	
15-19	7.4	6.1	5.5	5.1	
20-24	8.3	7.0	5.9	5.4	
25-29	9.1	8.3	7.2	6.2	
30-34	10.5	9.4	8.7	7.7	
35-39	10.1	10.7	9.8	9.1	
40-44	9.4	10.2	10.6	9.8	
45-49	7.8	9.0	9.7	10.2	
50-54	5.6	7.2	8.3	9.0	
55-59	4.0	4.9	6.3	7.3	
60-64	2.5	3.3	4.1	5.4	
65-69	1.5	2.0	2.7	3.4	
70-74	0.8	1.1	1.5	2.1	
75-79	0.4	0.5	0.7	1.0	
80+	0.8	0.5	0.5	0.6	
Total	100.0	100.0	100.0	100.0	

Table A.10Female population of the Turks and Caicos Islands– Percentage distribution by ageLow projection: 2012-2027

Age	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium net immigration				
	2012	2017	2022	2027	
0-4	2,485	2,815	3,280	3,471	
5-9	2,286	2,499	2,829	3,294	
10-14	2,141	2,303	2,517	2,847	
15-19	2,277	2,266	2,429	2,641	
20-24	2,567	2,671	2,659	2,822	
25-29	2,862	3,232	3,337	3,326	
30-34	3,375	3,774	4,144	4,247	
35-39	3,314	4,388	4,786	5,155	
40-44	3,094	4,172	5,241	5,638	
45-49	2,599	3,718	4,789	5,850	
50-54	1,860	2,949	4,055	5,113	
55-59	1,350	1,983	3,052	4,135	
60-64	856	1,366	1,978	3,011	
65-69	534	820	1,302	1,881	
70-74	289	471	730	1,168	
75-79	108	206	359	580	
80+	202	155	190	319	
Total	32,199	39,788	47,677	55,498	

Table A.11Total population of the Turks and Caicos Islands
Medium projection: 2012-2027

Age	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium net immigration				
	2012	2017	2022	2027	
0-4	1,265	1,422	1,658	1,756	
5-9	1,139	1,270	1,427	1,663	
10-14	1,043	1,146	1,278	1,434	
15-19	1,108	1,111	1,214	1,344	
20-24	1,256	1,306	1,308	1,411	
25-29	1,425	1,582	1,633	1,636	
30-34	1,720	1,889	2,046	2,095	
35-39	1,707	2,248	2,416	2,573	
40-44	1,610	2,162	2,700	2,868	
45-49	1,361	1,948	2,496	3,029	
50-54	980	1,553	2,132	2,673	
55-59	716	1,050	1,611	2,177	
60-64	461	730	1,051	1,592	
65-69	289	445	698	1,001	
70-74	155	258	399	628	
75-79	52	112	199	319	
80+	78	62	92	170	
Total	16,365	20,294	24,358	28,369	

Table A.12Male population of the Turks and Caicos Islands
Medium projection: 2012-2027

Age	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium net immigration				
	2012	2017	2022	2027	
0-4	1,220	1,393	1,622	1,715	
5-9	1,147	1,229	1,402	1,631	
10-14	1,098	1,157	1,239	1,413	
15-19	1,169	1,155	1,215	1,297	
20-24	1,311	1,365	1,351	1,411	
25-29	1,437	1,650	1,704	1,690	
30-34	1,655	1,885	2,098	2,152	
35-39	1,607	2,140	2,370	2,582	
40-44	1,484	2,010	2,541	2,770	
45-49	1,238	1,770	2,293	2,821	
50-54	880	1,396	1,923	2,440	
55-59	634	933	1,441	1,958	
60-64	395	636	927	1,419	
65-69	245	375	604	880	
70-74	134	213	331	540	
75-79	56	94	160	261	
80+	124	93	98	149	
Total	15,834	19,494	23,319	27,129	

Table A.13Female population of the Turks and Caicos Islands
Medium projection: 2012-2027

Age	Medium proje	ection: Moderate fertility increase, moderate increase in life expectancy, medium net immigration			
	2012	2017	2022	2027	
0-4	7.7	7.1	6.9	6.3	
5-9	7.1	6.3	5.9	6.0	
10-14	6.6	5.8	5.3	5.1	
15-19	7.1	5.7	5.1	4.7	
20-24	8.0	6.7	5.6	5.1	
25-29	8.9	8.1	7.0	6.0	
30-34	10.5	9.5	8.7	7.6	
35-39	10.3	11.0	10.0	9.3	
40-44	9.6	10.5	11.0	10.1	
45-49	8.1	9.3	10.0	10.5	
50-54	5.8	7.4	8.5	9.2	
55-59	4.2	5.0	6.4	7.4	
60-64	2.7	3.4	4.1	5.4	
65-69	1.7	2.1	2.7	3.4	
70-74	0.9	1.2	1.5	2.1	
75-79	0.3	0.5	0.8	1.0	
80+	0.6	0.4	0.4	0.6	
Total	100.0	100.0	100.0	100.0	

Table A.14Total population of the Turks and Caicos Islands- Percentage distribution by ageMedium projection: 2012-2027

Age	Medium proje	dium projection: Moderate fertility increase, moderate increase in life expectancy, medium net immigration				
	2012	2017	2022	2027		
0-4	7.7	7.0	6.9	6.3		
5-9	7.0	6.3	5.9	5.9		
10-14	6.4	5.6	5.2	5.1		
15-19	6.8	5.5	5.0	4.7		
20-24	7.7	6.4	5.4	5.0		
25-29	8.7	7.8	6.7	5.8		
30-34	10.5	9.3	8.4	7.4		
35-39	10.4	11.1	9.9	9.1		
40-44	9.8	10.7	11.1	10.1		
45-49	8.3	9.6	10.2	10.7		
50-54	6.0	7.7	8.7	9.4		
55-59	4.4	5.2	6.6	7.7		
60-64	2.8	3.6	4.3	5.6		
65-69	1.8	2.2	2.9	3.5		
70-74	0.9	1.3	1.6	2.2		
75-79	0.3	0.6	0.8	1.1		
80+	0.5	0.3	0.4	0.6		
Total	100.0	100.0	100.0	100.0		

Table A.15Male population of the Turks and Caicos Islands- Percentage distribution by ageMedium projection: 2012-2027

Age	Medium proje	projection: Moderate fertility increase, moderate increase in life expectancy, medium net immigration				
	2012	2017	2022	2027		
0-4	7.7	7.2	7.0	6.4		
5-9	7.2	6.3	6.0	6.1		
10-14	6.9	5.9	5.3	5.2		
15-19	7.4	5.9	5.2	4.8		
20-24	8.3	7.0	5.8	5.2		
25-29	9.1	8.5	7.3	6.2		
30-34	10.5	9.7	9.0	7.9		
35-39	10.1	11.0	10.2	9.5		
40-44	9.4	10.3	10.9	10.2		
45-49	7.8	9.1	9.8	10.4		
50-54	5.6	7.2	8.2	9.0		
55-59	4.0	4.8	6.2	7.2		
60-64	2.5	3.3	4.0	5.2		
65-69	1.5	1.9	2.6	3.2		
70-74	0.8	1.1	1.4	2.0		
75-79	0.4	0.5	0.7	1.0		
80+	0.8	0.5	0.4	0.5		
Total	100.0	100.0	100.0	100.0		

Table A.16Female population of the Turks and Caicos Islands- Percentage distribution by age
Medium projection: 2012-2027

Age	High projectio	High projection: Large fertility increase, large increase in life expectancy, large net immigration				
	2012	2017	2022	2027		
0-4	2,485	2,948	3,660	3,976		
5-9	2,286	2,506	2,966	3,675		
10-14	2,141	2,312	2,531	2,990		
15-19	2,277	2,309	2,479	2,697		
20-24	2,567	2,801	2,832	3,002		
25-29	2,862	3,448	3,681	3,711		
30-34	3,375	4,062	4,641	4,874		
35-39	3,314	4,706	5,386	5,962		
40-44	3,094	4,442	5,821	6,498		
45-49	2,599	3,918	5,253	6,621		
50-54	1,860	3,069	4,370	5,689		
55-59	1,350	2,036	3,220	4,498		
60-64	856	1,388	2,053	3,202		
65-69	534	826	1,333	1,965		
70-74	289	469	739	1,201		
75-79	108	201	355	587		
80+	202	156	180	310		
Total	32,199	41,597	51,498	61,457		

Table A.17Total population of the Turks and Caicos IslandsHigh projection: 2012-2027

Age	High projection: Large fertility increase, large increase in life expectancy, large net immigration				
	2012	2017	2022	2027	
0-4	1,265	1,491	1,850	2,010	
5-9	1,139	1,272	1,497	1,855	
10-14	1,043	1,150	1,283	1,507	
15-19	1,108	1,133	1,240	1,373	
20-24	1,256	1,371	1,396	1,503	
25-29	1,425	1,689	1,803	1,829	
30-34	1,720	2,034	2,294	2,409	
35-39	1,707	2,412	2,722	2,981	
40-44	1,610	2,303	3,001	3,311	
45-49	1,361	2,054	2,741	3,433	
50-54	980	1,618	2,300	2,978	
55-59	716	1,079	1,702	2,371	
60-64	461	741	1,092	1,695	
65-69	289	449	715	1,047	
70-74	155	257	403	645	
75-79	52	110	197	322	
80+	78	62	86	164	
Total	16,365	21,226	26,322	31,433	

Table A.18Male population of the Turks and Caicos IslandsHigh projection: 2012-2027

Age	High projection: Large fertility increase, large increase in life expectancy, large net immigration				
	2012	2017	2022	2027	
0-4	1,220	1,458	1,811	1,965	
5-9	1,147	1,233	1,469	1,820	
10-14	1,098	1,161	1,248	1,483	
15-19	1,168	1,175	1,238	1,325	
20-24	1,311	1,430	1,436	1,499	
25-29	1,437	1,759	1,878	1,882	
30-34	1,655	2,028	2,347	2,464	
35-39	1,607	2,294	2,664	2,981	
40-44	1,484	2,139	2,820	3,187	
45-49	1,238	1,864	2,512	3,188	
50-54	880	1,451	2,069	2,711	
55-59	634	957	1,518	2,127	
60-64	395	646	961	1,506	
65-69	245	378	618	918	
70-74	134	212	335	556	
75-79	56	91	159	265	
80+	124	94	94	146	
Total	15,834	20,370	25,176	30,025	

Table A.19Female population of the Turks and Caicos IslandsHigh projection: 2012-2027

Age	High projection	ection: Large fertility increase, large increase in life expectancy, large net immigration			
	2012	2017	2022	2027	
0-4	7.7	7.1	7.1	6.5	
5-9	7.1	6.0	5.8	6.0	
10-14	6.6	5.6	4.9	4.9	
15-19	7.1	5.5	4.8	4.4	
20-24	8.0	6.7	5.5	4.9	
25-29	8.9	8.3	7.1	6.0	
30-34	10.5	9.8	9.0	7.9	
35-39	10.3	11.3	10.5	9.7	
40-44	9.6	10.7	11.3	10.6	
45-49	8.1	9.4	10.2	10.8	
50-54	5.8	7.4	8.5	9.3	
55-59	4.2	4.9	6.3	7.3	
60-64	2.7	3.3	4.0	5.2	
65-69	1.7	2.0	2.6	3.2	
70-74	0.9	1.1	1.4	1.9	
75-79	0.3	0.5	0.7	1.0	
80+	0.6	0.4	0.3	0.5	
Total	100.0	100.0	100.0	100.0	

 Table A.20

 Total population of the Turks and Caicos Islands– Percentage distribution by age High projection: 2012-2027

Age	High projectio	ion: Large fertility increase, large increase in life expectancy, large net immigration				
	2012	2017	2022	2027		
0-4	7.7	7.0	7.0	6.4		
5-9	7.0	6.0	5.7	5.9		
10-14	6.4	5.4	4.9	4.8		
15-19	6.8	5.3	4.7	4.3		
20-24	7.7	6.5	5.3	4.8		
25-29	8.7	8.0	6.8	5.8		
30-34	10.5	9.6	8.7	7.7		
35-39	10.4	11.4	10.3	9.5		
40-44	9.8	10.9	11.4	10.5		
45-49	8.3	9.7	10.4	10.9		
50-54	6.0	7.6	8.7	9.5		
55-59	4.4	5.1	6.5	7.5		
60-64	2.8	3.5	4.1	5.4		
65-69	1.8	2.1	2.7	3.3		
70-74	0.9	1.2	1.3	2.0		
75-79	0.3	0.5	0.7	1.0		
80+	0.5	0.3	0.3	0.5		
Total	100.0	100.0	100.0	100.0		

Table A.21Male population of the Turks and Caicos Islands– Percentage distribution by age
High projection: 2012-2027

Age	High projection	m: Large fertility increase, large increase in life expectancy, large net immigration			
	2012	2017	2022	2027	
0-4	7.7	7.2	7.2	6.6	
5-9	7.2	6.1	5.8	6.1	
10-14	6.9	5.7	4.9	4.9	
15-19	7.4	5.8	4.9	4.4	
20-24	8.3	7.0	5.7	5.0	
25-29	9.1	8.6	7.5	6.3	
30-34	10.5	10.0	9.3	8.2	
35-39	10.1	11.3	10.6	9.9	
40-44	9.4	10.5	11.2	10.6	
45-49	7.8	9.2	10.0	10.6	
50-54	5.6	7.1	8.2	9.0	
55-59	4.0	4.7	6.0	7.1	
60-64	2.5	3.2	3.8	5.0	
65-69	1.5	1.9	2.5	3.1	
70-74	0.8	1.0	1.3	1.8	
75-79	0.4	0.4	0.6	0.9	
80+	0.8	0.5	0.4	0.5	
Total	100.0	100.0	100.0	100.0	

Table A.22Female population of the Turks and Caicos Islands– Percentage distribution by age
High projection: 2012-2027

APPENDIX B: POPULATION PROJECTIONS BELONGERS POPULATION

Table B.1Age and sex composition of belonger populationLow projection: 2012-2027

Item	2012	2017	2022	2027
Population				
Total	11,790	12,004	12,236	12,473
Male	5,830	5,966	6,104	6,237
Female	5,960	6,038	6,132	6,236
Sex ratio (Males per 100 females)	97.82	98.81	99.54	100.02
Age Distribution				
Both Sexes				
Percentage 0-14 years	31.17	27.69	23.97	20.11
Percentage 15-64 years	62.41	64.89	67.06	69.21
Percentage 65+ years	6.42	7.42	8.97	10.69
Percentage 80+ years	1.58	1.27	1.33	1.60
Median age (years)	26.47	28.17	29.74	31.36
Male				
Percentage 0-14 years	31.56	28.60	24.67	20.43
Percentage 15-64 years	62.41	63.86	66.02	68.51
Percentage 65+ years	6.03	7.54	9.31	11.06
Percentage 80+ years	1.20	1.02	1.25	1.65
Median age (years)	25.92	27.70	29.33	30.88
Female				
Percentage 0.14 years	30.27	26.8	23.27	19.79
Percentage 15-64 years	63.04	65.90	68.10	69.90
Percentage 65+ years	6.69	7.30	8.63	10.31
Percentage 80+ years	1.93	1.51	1.42	1.56
Median age (years)	26.99	28.62	30.15	31.82

Item	2012	2017	2022	2027
Population				
Total	11,790	12,026	12,293	12,564
Male	5,830	5,975	6,129	6,278
Female	5,960	6,051	6,164	6,286
Sex ratio (Males per 100 Females)	97.82	98.74	99.43	99.87
Age distribution				
Both sexes				
Percentage 0-14 years	31.17	27.64	23.93	20.10
Percentage 15-64 years	62.41	64.89	67.01	69.09
Percentage 65+ years	6.42	7.47	9.06	10.82
Percentage 80+ years	1.58	1.29	1.37	1.67
Median age (years)	26.47	28.21	29.80	31.45
Male				
Percentage 0-14 years	32.09	28.54	24.64	20.40
Percentage 15-64 years	61.77	63.90	65.98	68.45
Percentage 65+ years	6.14	7.56	9.38	11.15
Percentage 80+ years	1.22	1.04	1.26	1.69
Median age (years)	25.92	27.74	29.38	30.96
Female				
Percentage 0.14 years	30.27	26.76	23.23	19.79
Percentage 15-64 years	63.04	65.87	68.02	69.73
Percentage 65+ years	6.69	7.37	8.74	10.48
Percentage 80+ years	1.93	1.54	1.48	1.65
Median age (years)	26.99	28.66	30.23	31.91

Table B.2Age and sex composition of belonger population
Medium projection: 2012-2027

12,663 6,321 6,342 99.67
12,663 6,321 6,342 99.67
6,321 6,342 99.67
6,342 99.67
99.67
20.09
68.96
10.95
1.72
31.54
20.42
68.30
11.28
1.74
31.01
19.75
69.62
10.63
1.70
32.03

Table B.3Age and sex composition of belonger populationHigh projection: 2012-2027

Indicator	2012-2017	2017-2022	2022-2027
	Low projection		
Population change			
Total population change	214	232	237
Annual rate of population change (per cent)	0.36	0.38	0.38
Natural increase per year	105	108	109
Rate of natural increase per 1,000 population	8.81	8.93	8.79
Fertility			
Number of births per year	164	172	182
Crude birth rate per 1,000 population	13.73	14.18	14.70
Total fertility rate per woman	1.77	1.78	1.78
Mortality			
Number of deaths per year	59	64	73
Crude death rate per 1,000 population	4.92	5.25	5.91
Life expectancy at birth (years)	76.80	76.80	76.80
Male life expectancy at birth (years)	75.78	75.78	75.78
Female life expectancy at birth (years)	77.81	77.81	77.81
Migration			
Net number of migrants per year	-62	-62	-62
Net migration rate per 1,000 population	-5.20	-5.11	-5.01
	Med	lium projection	
Population change			
Total population change	236	267	271
Annual rate of population change (per cent)	0.40	0.44	0.44
Natural increase per year	106	113	114
Rate of natural increase per 1,000 population	8.91	9.23	9.16
Fertility			
Number of births per year	164	174	184
Crude birth rate per 1,000 population	13.77	14.25	14.75
Total fertility rate per woman	1.77	1.79	1.79
Mortality			
Number of deaths per year	58	61	70
Crude death rate per 1,000 population	4.86	5.02	5.59
Life expectancy at birth (years)	76.80	77.30	77.80

 Table B.4

 Demographic indicators: 2012-2027 – Belonger population

Table B.4 (concluded)

Indicator	2012-2017	2017-2022	2022-2027
Male life expectancy at birth (years)	75.78	76.28	76.78
Female life expectancy at birth (years)	77.81	78.31	78.81

	Medium	projection (con	t'd)
Migration			
Net number of migrants per year	-59	-59	-59
Net migration rate per 1,000 population	-4.95	-4.84	-4.74
	Hig	gh projection	
Population change			
Total population change	254	301	318
Annual rate of population change (per cent)	0.43	0.49	0.51
Natural increase per year	107	117	119
Rate of natural increase per 1,000 population	8.96	9.54	9.52
Fertility			
Number of births per year	164	175	185
Crude birth rate per 1,000 population	13.77	14.32	14.77
Total fertility rate per woman	1.77	1.80	1.80
Mortality			
Number of deaths per year	57	58	66
Crude death rate per 1,000 population	4.81	4.78	5.25
Life expectancy at birth (years)	76.80	77.80	78.80
Male life expectancy at birth (years)	75.78	76.78	77.78
Female life expectancy at birth (years)	77.81	78.81	79.81
Migration			
Net number of migrants per year	-56	-56	-56
Net migration rate per 1,000 population	-4.69	-4.58	-4.47

Age	Low projection	ase, no increase in life of emigration	e expectancy,	
	2012	2017	2022	2027
0-4	1,319	800	842	891
5-9	1,225	1,310	792	835
10-14	1,131	1,214	1,299	782
15-19	1,036	1,113	1,196	1,281
20-24	930	1,002	1,079	1,161
25-29	864	888	959	1,036
30-34	811	825	849	920
35-39	770	776	790	813
40-44	756	738	744	758
45-49	690	727	710	715
50-54	609	663	699	682
55-59	507	580	632	669
60-64	385	477	548	597
65-69	283	353	439	506
70-74	189	245	308	386
75-79	99	141	187	241
80+	186	152	163	200
Total	11,790	12,004	12,236	12,473

Table B.5Total population of belongersLow projection: 2012-2027

Age	Low projection: small fertility increase, no increase in life expectancy, large volume of emigration			
	2012	2017	2022	2027
0-4	687	407	428	453
5-9	623	682	402	424
10-14	561	617	676	397
15-19	508	552	608	667
20-24	458	490	534	589
25-29	422	435	466	510
30-34	390	403	416	447
35-39	369	375	388	400
40-44	361	355	361	374
45-49	333	348	343	348
50-54	303	320	335	329
55-59	257	289	305	320
60-64	299	243	274	289
65-69	147	186	226	255
70-74	96	130	165	201
75-79	44	73	101	131
80+	71	61	76	103
Total	5,830	5,966	6,104	6,237

Table B.6Male population of belongersLow projection: 2012-2027

Age	Low projection: small fertility increase, no increase in life expectancy, large volume of emigration			
	2012	2017	2022	2027
0-4	632	393	414	438
5-9	602	628	390	411
10-14	570	597	623	385
15-19	528	561	588	614
20-24	472	512	545	572
25-29	442	453	493	526
30-34	421	422	433	473
35-39	401	401	402	413
40-44	395	383	383	384
45-49	357	379	367	367
50-54	306	343	364	353
55-59	250	291	327	349
60-64	185	234	274	308
65-69	136	167	213	251
70-74	93	115	143	185
75-79	55	68	86	110
80+	115	91	87	97
Total	5,960	6,038	6,132	6,236

Table B.7Female population of belongersLow projection: 2012-2027

Age	Low projection: small fertility increase, no increase in life expectancy, large volume of emigration			
	2012	2017	2022	2027
0-4	11.2	6.7	6.9	7.1
5-9	10.4	10.9	6.5	6.7
10-14	9.6	10.1	10.6	6.3
15-19	8.8	9.3	9.8	10.3
20-24	7.9	8.3	8.8	9.3
25-29	7.3	7.4	7.8	8.3
30-34	6.9	6.9	6.9	7.4
35-39	6.5	6.5	6.5	6.5
40-44	6.4	6.1	6.1	6.1
45-49	5.9	6.1	0.8	5.7
50-54	5.2	5.5	5.7	5.5
55-59	4.3	4.8	5.2	5.4
60-64	3.3	4.0	4.5	4.8
65-69	2.4	2.9	3.6	4.1
70-74	1.6	2.0	2.5	3.1
75-79	0.8	1.2	1.5	1.9
80+	1.6	1.3	1.3	1.6
Total	100.0	100.0	100.0	100.0

Table B.8Total population of belongers – Percentage distribution by age
Low projection: 2012-2027

Age	Low projection: small fertility increase, no increase in life expectancy, large volume of emigration				
	2012	2017	2022	2027	
0-4	11.8	6.8	7.0	7.3	
5-9	10.7	11.4	6.6	6.8	
10-14	9.6	10.3	11.1	6.4	
15-19	8.7	9.3	10.0	10.7	
20-24	7.9	8.2	8.7	9.4	
25-29	7.2	7.3	7.6	8.2	
30-34	6.7	.8	6.8	7.2	
35-39	6.3	6.3	6.4	6.4	
40-44	6.2	6.0	5.9	6.0	
45-49	5.7	5.8	5.6	5.6	
50-54	5.2	5.4	5.5	5.3	
55-59	4.4	4.8	5.0	5.1	
60-64	3.4	4.1	4.5	4.6	
65-69	2.5	3.1	3.7	4.1	
70-74	1.6	2.2	2.7	3.2	
75-79	0.8	1.2	1.7	2.1	
80+	1.2	1.0	1.2	1.7	
Total	100.0	100.0	100.0	100.0	

Table B.9Male population of belongers – Percentage distribution by age
Low projection: 2012-2027
Age	Low projecti	on: small fertility incr large volume	ease, no increase in lij	fe expectancy,
U	2012	2017	2022	2027
0-4	10.6	6.5	6.8	7.0
5-9	10.1	10.4	6.4	6.6
10-14	9.6	9.9	10.2	6.2
15-19	8.9	9.3	9.6	9.8
20-24	7.9	8.5	8.9	9.2
25-29	7.4	7.5	8.0	8.4
30-34	7.1	7.0	7.1	7.6
35-39	6.7	6.6	6.6	6.6
40-44	6.6	6.3	6.2	6.2
45-49	6.0	6.3	6.0	5.9
50-54	5.1	5.7	5.9	5.7
55-59	4.2	4.8	5.3	5.6
60-64	3.1	3.9	4.5	4.9
65-69	2.3	2.8	3.5	4.0
70-74	1.6	1.9	2.3	3.0
75-79	0.9	1.1	1.4	1.8
80+	1.9	1.5	1.4	1.6
Total	100.0	100.0	100.0	100.0

Table B.10Female population of belongers – Percentage distribution by age
Low projection: 2012-2027

Age	Low projecti	on: small fertility incr large volume	ease, no increase in lij of emigration	fe expectancy,
0	2012	2017	2022	2027
0-4	1,319	800	849	899
5-9	1,225	1,310	793	842
10-14	1,131	1,214	1,300	784
15-19	1,036	1,114	1,198	1,283
20-24	930	1,004	1,081	1,165
25-29	864	890	964	1,041
30-34	811	827	853	926
35-39	770	777	793	819
40-44	756	740	747	763
45-49	690	729	713	720
50-54	609	664	702	687
55-59	507	581	636	673
60-64	385	478	550	603
65-69	283	354	443	511
70-74	189	247	312	392
75-79	99	142	191	246
80+	186	155	168	210
Total	11,790	12,026	12,293	12,564

Table B.11Total population of belongersMedium projection: 2012-2027

Age	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of emigration				
	2012	2017	2022	2027	
0-4	687	406	431	457	
5-9	623	682	402	427	
10-14	561	617	677	397	
15-19	508	553	609	668	
20-24	458	491	535	591	
25-29	422	436	469	513	
30-34	390	404	418	450	
35-39	369	375	389	403	
40-44	361	356	362	376	
45-49	333	349	344	350	
50-54	303	321	336	332	
55-59	257	289	307	322	
60-64	200	244	275	292	
65-69	147	186	228	257	
70-74	96	131	167	204	
75-79	44	73	103	133	
80+	71	62	77	106	
Total	5,830	5,975	6,129	6,278	

Table B.12Male population of belongersMedium projection: 2012-2027

Age	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of emigration			
	2012	2017	2022	2027
0-4	632	394	418	442
5-9	602	628	391	415
10-14	570	597	623	387
15-19	528	561	589	615
20-24	472	513	546	574
25-29	442	454	495	528
30-34	421	423	435	476
35-39	401	402	404	416
40-44	395	384	385	387
45-49	357	380	369	370
50-54	306	343	366	355
55-59	250	292	329	351
60-64	185	234	275	311
65-69	136	168	215	254
70-74	93	116	145	188
75-79	55	69	88	113
80+	115	93	91	104
Total	5,960	6,051	6,164	6,286

Table B.13Female population of belongersMedium projection: 2012-2027

Age	Medium proj li	n projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of emigration			
	2012	2017	2022	2027	
0-4	11.2	6.7	6.9	7.2	
5-9	10.4	10.9	6.5	6.7	
10-14	9.6	10.1	10.6	6.2	
15-19	8.8	9.3	9.7	10.2	
20-24	7.9	8.3	8.8	9.3	
25-29	7.3	7.4	7.8	8.3	
30-34	6.9	6.9	6.9	7.4	
35-39	6.5	6.5	6.5	6.5	
40-44	6.4	6.2	6.1	6.1	
45-49	5.9	6.1	5.8	5.7	
50-54	5.2	5.5	5.7	5.5	
55-59	4.3	4.8	5.2	5.4	
60-64	3.3	4.0	4.5	4.8	
65-69	2.4	2.9	3.6	4.1	
70-74	1.6	2.1	2.5	3.1	
75-79	0.8	1.2	1.6	2.0	
80+	1.6	1.3	1.4	1.7	
Total	100.0	100.0	100.0	100.0	

Table B.14Total population of belongers – Percentage distribution by age
Medium projection: 2012-2027

Age	Medium proj l	jection: Moderate ferti ife expectancy, medium	ility increase, moderat n volume of emigration	e increase in n
	2012	2017	2022	2027
0-4	11.8	6.8	7.0	7.3
5-9	10.7	11.4	6.6	6.8
10-14	9.6	10.3	11.0	6.3
15-19	8.7	9.3	9.9	10.6
20-24	7.9	8.2	8.7	9.4
25-29	7.2	7.3	7.7	8.2
30-34	6.7	6.8	6.8	7.2
35-39	6.3	6.3	6.3	6.4
40-44	6.2	6.0	5.9	6.0
45-49	5.7	5.8	5.6	5.6
50-54	5.2	5.4	5.5	5.3
55-59	4.4	4.8	5.0	5.1
60-64	3.4	4.1	4.5	4.7
65-69	2.5	3.1	3.7	4.1
70-74	1.6	2.2	2.7	3.2
75-79	0.8	1.2	1.7	2.1
80+	1.2	1.0	1.3	1.7
Total	100.0	100.0	100.0	100.0

Table B.15Male population of belongers – Percentage distribution by age
Medium projection: 2012-2027

Age	Medium proj li	lium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of emigration			
	2012	2017	2022	2027	
0-4	10.6	6.5	6.8	7.0	
5-9	10.1	10.4	6.3	6.6	
10-14	9.6	9.9	10.1	6.2	
15-19	8.9	9.3	9.6	9.8	
20-24	7.9	8.5	8.9	9.1	
25-29	7.4	7.5	8.0	8.4	
30-34	7.1	7.0	7.1	7.6	
35-39	6.7	6.6	6.6	6.6	
40-44	6.6	6.3	6.2	6.2	
45-49	6.0	6.3	6.0	5.9	
50-54	5.1	5.7	5.9	5.6	
55-59	4.2	4.8	5.3	5.6	
60-64	3.1	3.9	4.5	4.9	
65-69	2.3	2.8	3.5	4.0	
70-74	1.6	1.9	2.4	3.0	
75-79	0.9	1.1	1.4	1.8	
80+	1.9	1.5	1.5	1.7	
Total	100.0	100.0	100.0	100.0	

Table B.16Female population of belongers – Percentage distribution by ageMedium projection: 2012-2027

Age	High projection: Rapid fertility increase, large increase in life expectancy, small volume of emigration				
	2012	2017	2022	2027	
0-4	1,319	803	856	907	
5-9	1,225	1,310	796	849	
10-14	1,131	1,215	1,301	788	
15-19	1,036	1,115	1,199	1,285	
20-24	930	1,005	1,084	1,169	
25-29	864	892	967	1,047	
30-34	811	828	856	933	
35-39	770	779	797	825	
40-44	756	741	750	769	
45-49	690	730	716	726	
50-54	609	665	705	692	
55-59	507	582	638	678	
60-64	385	479	553	608	
65-69	283	354	446	517	
70-74	189	247	315	399	
75-79	99	143	194	253	
80+	186	156	172	218	
Total	11,790	12,044	12,345	12,663	

Table B.17Total population of belongersHigh projection: 2012-2027

Age	High projection: Rapid fertility increase, large increase in life expectancy, small volume of emigration			
	2012	2017	2022	2027
0-4	687	408	435	461
5-9	623	682	404	431
10-14	561	618	677	399
15-19	508	553	610	669
20-24	458	491	536	593
25-29	422	437	470	516
30-34	390	404	419	453
35-39	369	376	390	405
40-44	361	356	363	378
45-49	333	349	345	352
50-54	303	321	337	333
55-59	257	290	308	324
60-64	200	244	276	294
65-69	147	186	229	260
70-74	96	131	168	207
75-79	44	74	104	136
80+	71	62	79	110
Total	5,830	5,982	6,150	6,321

Table B.18Male population of belongersHigh projection: 2012-2027

Age	High projection: Rapid fertility increase, large increase in life expectancy, small volume of emigration				
	2012	2017	2022	2027	
0-4	632	395	421	446	
5-9	602	628	392	418	
10-14	570	597	624	389	
15-19	528	562	589	616	
20-24	472	514	548	576	
25-29	442	455	497	531	
30-34	421	424	437	480	
35-39	401	403	407	420	
40-44	395	385	387	391	
45-49	357	381	371	374	
50-54	306	344	368	359	
55-59	250	292	330	354	
60-64	185	235	277	314	
65-69	136	168	217	257	
70-74	93	116	147	192	
75-79	55	69	90	117	
80+	115	94	93	108	
Total	5,960	6,062	6,195	6,342	

Table B.19Female population of belongersHigh projection: 2012-2027

Age	High projection	ion: Rapid fertility increase, large increase in life expectancy, small volume of emigration			
	2012	2017	2022	2027	
0-4	11.2	6.7	6.9	7.1	
5-9	10.4	10.9	6.4	6.7	
10-14	9.6	10.1	10.5	6.2	
15-19	8.8	9.3	9.7	10.1	
20-24	7.9	8.3	8.8	9.2	
25-29	7.3	7.4	7.8	8.3	
30-34	6.9	6.9	6.9	7.4	
35-39	6.5	6.5	6.5	6.5	
40-44	6.4	6.2	6.1	6.1	
45-49	5.9	6.1	5.8	5.7	
50-54	5.2	5.5	5.7	5.6	
55-59	4.3	4.8	5.2	5.3	
60-64	3.3	4.0	4.5	4.8	
65-69	2.4	2.9	3.6	4.1	
70-74	1.6	2.1	2.6	3.1	
75-79	0.8	1.2	1.6	2.0	
80+	1.6	1.3	1.4	1.7	
Total	100.0	100.0	100.0	100.0	

Table B.20Total population of belongers – Percentage distribution by age
High projection: 2012-2027

Age	High projection	on: Rapid fertility increase, large increase in life expectancy, small volume of emigration			
	2012	2017	2022	2027	
0-4	11.8	6.8	7.1	7.3	
5-9	10.7	11.4	6.6	6.8	
10-14	9.6	10.3	11.0	6.3	
15-19	8.7	9.2	9.9	10.6	
20-24	7.9	8.2	8.7	9.4	
25-29	7.2	7.3	7.6	8.1	
30-34	6.7	6.8	6.8	7.1	
35-39	6.3	6.3	6.3	6.4	
40-44	6.2	6.0	5.9	6.0	
45-49	5.7	5.8	5.6	5.6	
50-54	5.2	5.4	5.5	5.6	
55-59	4.4	4.8	5.0	5.1	
60-64	3.4	4.1	4.5	4.6	
65-69	2.5	3.1	3.7	4.1	
70-74	1.6	2.2	2.7	3.3	
75-79	0.8	1.2	1.7	2.1	
80+	1.2	1.0	1.3	1.7	
Total	100.0	100.0	100.0	100.0	

Table B.21Male population of belongers – Percentage distribution by age
High projection: 2012-2027

Age	High projection: Rapid fertility increase, large increase in life expectancy, small volume of emigration			ife expectancy,
	2012	2017	2022	2027
0-4	10.6	6.5	6.8	7.0
5-9	10.1	10.4	6.3	6.6
10-14	9.6	9.8	10.1	6.1
15-19	8.9	9.3	9.5	9.7
20-24	7.9	8.5	8.8	9.1
25-29	7.4	7.5	8.0	8.4
30-34	7.1	7.0	7.1	7.6
35-39	6.7	6.6	6.6	6.6
40-44	6.6	6.4	6.2	6.2
45-49	6.0	6.3	6.0	5.9
50-54	5.1	5.7	5.9	5.7
55-59	4.2	4.8	5.3	5.6
60-64	3.1	3.9	4.5	5.0
65-69	2.3	2.8	3.5	4.1
70-74	1.6	1.9	2.4	3.0
75-79	0.9	1.1	1.5	1.8
80+	1.9	1.6	1.5	1.7
Total	100.0	100.0	100.0	100.0

Table B.22Female population of belongers – Percentage distribution by ageHigh projection: 2012-2027

APPENDIX C: POPULATION PROJECTIONS NON-BELONGERS POPULATION

Table C.1Age and sex composition of non-belonger population
Low projection: 2012-2027

Item	2012	2017	2022	2027
Population				
Total	20,409	26,370	32,405	38,261
Male	10,535	13,589	16,672	19,656
Female	9,874	12,781	15,733	18,605
Sex ratio (Males per 100 females)	106.7	106.3	106.0	105.6
Age distribution				
Both sexes				
Percentage 0-14 years	15.86	15.87	16.30	16.47
Percentage 15-64 years	82.30	81.27	79.23	77.01
Percentage 65+ years	1.84	2.85	4.47	6.52
Percentage 80+ years	0.08	0.00	0.10	0.31
Median age (years)	34.08	37.10	39.64	41.76
Male				
Percentage 0-14 years	14.96	15.31	15.92	16.18
Percentage 15-64 years	82.99	81.57	79.28	76.87
Percentage 65+ years	2.05	3.11	4.80	6.95
Percentage 80+ years	0.07	0.00	0.12	0.36
Median age (years)	34.85	37.80	40.35	42.42
Female				
Percentage 0.14 years	16.82	16.47	16.71	16.78
Percentage 15-64 years	81.56	80.96	79.18	77.15
Percentage 65+ years	1.62	2.57	4.11	6.07
Percentage 80+ years	0.09	0.00	0.08	0.26
Median age (years)	33.25	36.35	38.85	41.07

Item	2012	2017	2022	2027
Population				
Total	20,409	27,762	35,384	42,934
Male	10,535	14,319	18,229	22,091
Female	9,874	13,443	17,155	20,843
Sex ratio (Males per 100 Females)	106.7	106.5	106.3	106.0
Age distribution				
Both sexes				
Percentage 0-14 years	15.86	15.87	16.30	16.47
Percentage 15-64 years	82.30	81.27	79.23	77.01
Percentage 65+ years	1.84	2.72	4.15	6.03
Percentage 80+ years	0.08	0.00	0.06	0.25
Median age (years)	34.08	37.05	39.43	41.46
Male				
Percentage 0-14 years	14.96	14.90	15.65	16.17
Percentage 15-64 years	82.99	82.14	79.89	77.41
Percentage 65+ years	2.05	2.97	4.46	6.42
Percentage 80+ years	0.07	0.00	0.08	0.29
Median age (years)	34.85	37.73	40.14	42.09
Female				
Percentage 0.14 years	16.82	16.47	16.71	16.78
Percentage 15-64 years	81.56	81.48	79.69	77.52
Percentage 65+ years	1.62	2.45	3.81	5.62
Percentage 80+ years	0.09	0.00	0.04	0.22
Median age (years)	33.25	36.32	38.67	40.80

Table C.2Age and sex composition of non-belonger populationMedium projection: 2012-2027

Item	2012	2017	2022	2027
Population				
Total	20,409	29,553	39,153	48,794
Male	10,535	15,244	20,172	25,112
Female	9,874	14,308	18,981	23,683
Sex ratio (Males per 100 females)	106.7	106.5	106.3	106.0
Age distribution				
Both sexes				
Percentage 0-14 years	15.86	15.02	15.84	16.59
Percentage 15-64 years	82.30	82.44	80.38	77.92
Percentage 65+ years	1.84	2.54	3.78	5.48
Percentage 80+ years	0.08	0.00	0.02	0.19
Median age (years)	34.08	36.98	39.19	41.15
Male				
Percentage 0-14 years	14.96	14.47	15.44	16.25
Percentage 15-64 years	82.99	82.75	80.50	77.91
Percentage 65+ years	2.05	2.79	4.07	5.83
Percentage 80+ years	0.07	0.00	0.03	0.21
Median age (years)	34.85	37.64	39.87	40.53
Female				
Percentage 0.14 years	16.82	15.60	16.28	16.95
Percentage 15-64 years	81.56	82.11	80.25	77.93
Percentage 65+ years	1.62	2.29	3.47	5.11
Percentage 80+ years	0.09	0.00	0.01	0.16
Median age (years)	33.25	36.28	38.49	41.73

Table C.3Age and sex composition of non-belonger populationHigh projection: 2012-2027

Indicator	2012-2017	2017-2022	2022-2027
	Low projection		I
Population change			
Total population change	5,961	6,035	5,856
Annual rate of population change (percentage)	5.13	4.12	3.32
Natural increase per year	330	345	310
Rate of natural increase per 1,000 population	13.79	11.56	8.66
Fertility			
Number of births per year	390	435	445
Crude birth rate per 1,000 population	16.28	14.54	12.40
Total fertility rate per woman	1.70	1.76	1.76
Mortality			
Number of deaths per year	60	90	135
Crude death rate per 1,000 population	2.49	2.98	3.74
Life expectancy at birth (years)	76.80	76.80	76.80
Male life expectancy at birth (years)	75.78	75.78	75.78
Female life expectancy at birth (years)	77.81	77.81	77.81
Migration			
Net number of migrants per year	+862	+862	+862
Net migration rate per 1,000 population	+36.15	+28.82	+24.03
	Me	edium projecti	on
Population change			
Total population change	7,353	7,622	7,550
Annual rate of population change (percentage)	6.15	4.85	3.87
Natural increase per year	349	405	391
Rate of natural increase per 1,000 population	14.11	12.60	9.82
Fertility			
Number of births per year	409	493	522
Crude birth rate per 1,000 population	16.53	15.31	13.09
Total fertility rate per woman	1.70	1.82	1.82
Mortality			
Number of deaths per year	60	88	131
Crude death rate per 1,000 population	2.42	2.71	3.27
Life expectancy at birth (years)	76.80	77.30	77.80

 Table C.4

 Demographic indicators: 2012-2027 – Non-belonger population

Table C.4 (concluded)

Indicator	2012-2017	2017-2022	2022-2027
Male life expectancy at birth (years)	75.78	76.28	76.78
Female life expectancy at birth (years)	77.81	78.31	78.81

	Medium projection (cont'd)		
Migration			
Net number of migrants per year	+1,120	+1,120	+1,120
Net migration rate per 1,000 population	+45.52	+34.80	+28.13
	l	High projectio	n
Population change			
Total population change	9,144	9,601	9,641
Annual rate of population change (per cent)	7.40	5.63	4.40
Natural increase per year	374	481	495
Rate of natural increase per 1,000 population	15.09	13.67	11.02
Fertility			
Number of births per year	435	570	625
Crude birth rate per 1,000 population	17.57	16.17	13.89
Total fertility rate per woman	1.70	1.87	1.87
Mortality			
Number of deaths per year	61	89	130
Crude death rate per 1,000 population	2.48	2.50	2.87
Life expectancy at birth (years)	76.80	77.80	78.80
Male life expectancy at birth (years)	75.78	76.78	77.78
Female life expectancy at birth (years)	77.81	78.81	79.81
Migration			
Net number of migrants per year	+1,460	+1,460	+1,460
Net migration rate per 1,000 population	+59.39	+41.51	+32.45

Age	Low projection: Small fertility increase, no increase in life expectancy, Small volume of immigration				
	2012	2017	2022	2027	
0-4	1,166	1,920	2,144	2,189	
5-9	1,061	1,183	1,935	2,158	
10-14	1,010	1,083	1,204	1,954	
15-19	1,241	1,118	1,190	1,311	
20-24	1,637	1,567	1,445	1,516	
25-29	1,998	2,176	2,106	1,985	
30-34	2,564	2,726	2,903	2,834	
35-39	2,544	3,367	3,528	3,704	
40-44	2,338	3,223	4,042	4,201	
45-49	1,909	2,833	3,711	4,523	
50-54	1,251	2,192	3,103	3,968	
55-59	843	1,360	2,279	3,170	
60-64	471	870	1,367	2,252	
65-69	251	461	834	1,301	
70-74	100	223	411	747	
75-79	9	68	171	328	
80+	16	0	32	120	
Total	20,409	26,370	32,405	38,261	

Table C.5Total population of non-belongersLow projection: 2012-2027

Age	Low projection: Small fertility increase, no increase in life expectancy, Small volume of immigration				
	2012	2017	2022	2027	
0-4	578	970	1,083	1,106	
5-9	516	585	976	1,089	
10-14	482	526	595	985	
15-19	600	540	583	652	
20-24	798	764	704	747	
25-29	1,003	1,063	1,029	970	
30-34	1,330	1,371	1,431	1,397	
35-39	1,338	1,745	1,786	1,845	
40-44	1,249	1,695	2,100	2,140	
45-49	1,028	1,514	1,956	2,357	
50-54	677	1,181	1,659	2,094	
55-59	459	737	1,228	1,695	
60-64	261	475	741	1,213	
65-69	142	256	455	705	
70-74	59	126	228	407	
75-79	8	41	98	183	
80+	7	0	20	71	
Total	10,535	13,589	16,672	19,656	

Table C.6Male population of non-belongersLow projection: 2012-2027

Age	Low projecti	on: Small fertility incr Small volume	ease, no increase in lij of immigration	fe expectancy,
	2012	2017	2022	2027
0-4	588	950	1,061	1,083
5-9	545	598	959	1,069
10-14	528	557	609	969
15-19	641	578	607	659
20-24	839	803	741	769
25-29	995	1,113	1,077	1,015
30-34	1,234	1,355	1,472	1,437
35-39	1,206	1,622	1,742	1,859
40-44	1,089	1,528	1,942	2,061
45-49	881	1,319	1,755	2,166
50-54	574	1,011	1,444	1,874
55-59	384	623	1,051	1,475
60-64	210	395	626	1,039
65-69	109	205	379	596
70-74	41	97	183	340
75-79	1	27	73	145
80+	9	0	12	49
Total	9,874	12,781	15,733	18,605

Table C.7Female population of non-belongersLow projection: 2012-2027

Age	Low projection: Small fertility increase, no increase in life expectancy, Small volume of immigration			e expectancy,
	2012	2017	2022	2027
0-4	5.7	7.3	6.7	5.8
5-9	5.2	4.5	6.0	5.7
10-14	4.9	4.1	3.7	5.1
15-19	6.1	4.2	3.7	3.4
20-24	8.0	5.9	4.5	4.0
25-29	9.8	8.3	6.5	5.2
30-34	12.6	10.3	9.0	7.4
35-39	12.5	12.8	10.9	9.7
40-44	11.5	12.2	12.5	11.0
45-49	9.4	10.7	11.4	11.8
50-54	6.1	8.3	9.6	10.4
55-59	4.1	5.2	7.0	8.3
60-64	2.3	3.3	4.2	5.9
65-69	1.2	1.7	2.6	3.4
70-74	0.5	0.8	1.3	2.0
75-79	0.0	0.3	0.5	0.9
80+	0.1	0.0	0.1	0.3
Total	100.0	100.0	100.0	100.0

Table C.8Total population of non-belongers – Percentage distribution by age
Low projection: 2012-2027

Age	Low projection: Small fertility increase, no increase in life expectancy, Small volume of immigration			e expectancy,
	2012	2017	2022	2027
0-4	5.5	7.2	6.5	5.7
5-9	4.9	4.3	5.9	5.6
10-14	4.6	3.9	3.6	5.0
15-19	5.7	4.0	3.5	3.3
20-24	7.6	5.6	4.2	3.8
25-29	9.5	7.8	6.2	4.9
30-34	12.6	10.1	8.6	7.1
35-39	12.7	12.8	10.7	9.4
40-44	11.9	12.5	12.6	10.9
45-49	9.8	11.1	11.7	12.0
50-54	6.4	8.7	9.9	10.6
55-59	4.4	5.4	7.4	8.6
60-64	2.5	3.5	4.4	6.2
65-69	1.3	1.9	2.7	3.6
70-74	0.6	0.9	1.4	2.1
75-79	0.1	0.3	0.6	0.9
80+	0.1	0.0	0.1	0.4
Total	100.0	100.0	100.0	100.0

Table C.9Male population of non-belongers – Percentage distribution by age
Low projection: 2012-2027

Age	Low projection: Small fertility increase, no increase in life expectancy, Small volume of immigration				
	2012	2017	2022	2027	
0-4	6.0	7.4	6.8	5.9	
5-9	5.5	4.7	6.1	5.8	
10-14	5.3	4.4	3.9	5.2	
15-19	6.5	4.5	3.9	3.5	
20-24	8.5	6.3	4.7	4.1	
25-29	10.1	8.7	6.8	5.5	
30-34	12.5	10.6	9.4	7.7	
35-39	12.2	12.7	11.1	10.0	
40-44	11.0	12.0	12.3	11.1	
45-49	8.9	10.3	11.1	11.6	
50-54	5.8	7.9	9.2	10.1	
55-59	3.9	4.9	6.7	7.9	
60-64	2.1	3.1	4.0	5.6	
65-69	1.1	1.6	2.4	3.2	
70-74	0.4	0.8	1.2	1.8	
75-79	0.0	0.2	0.5	0.8	
80+	0.1	0.0	0.1	0.3	
Total	100.0	100.0	100.0	100.0	

Table C.10Female population of non-belongers – Percentage distribution by age
Low projection: 2012-2027

Age	Medium pro	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of immigration			
	2012	2017	2022	2027	
0-4	1,166	2,015	2,431	2,572	
5-9	1,061	1,189	2,036	2,452	
10-14	1,010	1,089	1,217	2,063	
15-19	1,241	1,152	1,231	1,358	
20-24	1,637	1,667	1,578	1,657	
25-29	1,998	2,342	2,373	2,285	
30-34	2,564	2,947	3,291	3,321	
35-39	2,544	3,611	3,993	4,336	
40-44	2,338	3,432	4,494	4,875	
45-49	1,909	2,989	4,076	5,130	
50-54	1,251	2,285	3,353	4,426	
55-59	843	1,402	2,416	3,462	
60-64	471	888	1,428	2,408	
65-69	251	466	859	1,370	
70-74	100	224	418	776	
75-79	9	64	168	334	
80+	16	0	22	109	
Total	20,409	27,762	35,384	42,934	

Table C.11Total population of non-belongersMedium projection: 2012-2027

Age	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of immigration				
	2012	2017	2022	2027	
0-4	578	1,016	1,227	1,299	
5-9	516	588	1,025	1,236	
10-14	482	529	601	1,037	
15-19	600	558	605	676	
20-24	798	815	773	820	
25-29	1,003	1,146	1,164	1,123	
30-34	1,330	1,485	1,628	1,645	
35-39	1,338	1,873	2,027	2,170	
40-44	1,249	1,806	2,338	2,492	
45-49	1,028	1,599	2,152	2,679	
50-54	677	1,232	1,796	2,341	
55-59	459	761	1,304	1,855	
60-64	261	486	776	1,300	
65-69	142	259	470	744	
70-74	59	127	232	424	
75-79	8	39	96	186	
80+	7	0	15	64	
Total	10,535	14,319	18,229	22,091	

Table C.12Male population of non-belongersMedium projection: 2012-2027

Age	Medium pro l	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of immigration				
	2012	2017	2022	2027		
0-4	588	999	1,204	1,273		
5-9	545	601	1,011	1,216		
10-14	528	560	616	1,026		
15-19	641	594	626	682		
20-24	839	852	805	837		
25-29	995	1,196	1,209	1,162		
30-34	1,234	1,462	1,663	1,676		
35-39	1,206	1,738	1,966	2,166		
40-44	1,089	1,626	2,156	2,383		
45-49	881	1,390	1,924	2,451		
50-54	574	1,053	1,557	2,085		
55-59	384	641	1,112	1,607		
60-64	210	402	652	1,108		
65-69	109	207	389	626		
70-74	41	97	186	352		
75-79	1	25	72	148		
80+	9	0	7	45		
Total	9,874	13,443	17,155	20,843		

Table C.13Female population of non-belongersMedium projection: 2012-2027

Age	Medium proj lij	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of immigration			
	2012	2017	2022	2027	
0-4	5.7	7.3	7.0	6.1	
5-9	5.2	4.3	5.8	5.8	
10-14	4.9	3.9	3.4	4.8	
15-19	6.1	4.1	3.5	3.2	
20-24	8.0	6.0	4.5	3.9	
25-29	9.8	8.4	6.7	5.3	
30-34	12.6	10.6	9.3	7.7	
35-39	12.5	13.0	11.3	10.1	
40-44	11.5	12.4	12.7	11.3	
45-49	9.4	10.8	11.5	11.9	
50-54	6.1	8.2	9.5	10.3	
55-59	4.1	5.0	6.8	8.0	
60-64	2.3	3.2	4.0	5.6	
65-69	1.2	1.7	2.4	3.2	
70-74	0.5	0.8	1.2	1.8	
75-79	0.0	0.2	0.5	0.8	
80+	0.1	0.0	0.1	0.3	
Total	100.0	100.0	100.0	100.0	

Table C.14Total population of non-belongers – Percentage distribution by ageMedium projection: 2012-2027

Age	Medium proj lij	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of immigration			
	2012	2017	2022	2027	
0-4	5.5	7.1	6.8	6.0	
5-9	4.9	4.1	5.6	5.7	
10-14	4.6	3.7	3.3	4.7	
15-19	5.7	3.9	3.3	3.1	
20-24	7.6	5.7	4.2	3.7	
25-29	9.5	8.0	6.4	5.1	
30-34	12.6	10.4	8.9	7.4	
35-39	12.7	13.1	11.1	9.8	
40-44	11.9	12.6	12.8	11.3	
45-49	9.8	11.2	11.8	12.1	
50-54	6.4	8.6	9.8	10.6	
55-59	4.4	5.3	7.1	8.4	
60-64	2.5	3.4	4.3	5.9	
65-69	1.3	1.8	2.6	3.4	
70-74	0.6	0.9	1.3	1.9	
75-79	0.1	0.3	0.5	0.8	
80+	0.1	0.0	0.1	0.3	
Total	100.0	100.0	100.0	100.0	

Table C.15Male population of non-belongers – Percentage distribution by age
Medium projection: 2012-2027

Age	Medium proj lij	Medium projection: Moderate fertility increase, moderate increase in life expectancy, medium volume of immigration			
	2012	2017	2022	2027	
0-4	6.0	7.5	7.1	6.2	
5-9	5.5	4.5	5.9	5.9	
10-14	5.3	4.2	3.6	4.9	
15-19	6.5	4.4	3.6	3.3	
20-24	8.5	6.3	4.7	4.0	
25-29	10.1	8.9	7.0	5.6	
30-34	12.5	10.9	9.7	8.0	
35-39	12.2	12.9	11.4	10.4	
40-44	11.0	12.1	12.6	11.4	
45-49	8.9	10.3	11.2	11.7	
50-54	5.8	7.8	9.1	10.0	
55-59	3.9	4.8	6.5	7.7	
60-64	2.1	3.0	3.8	5.3	
65-69	1.1	1.5	2.3	3.0	
70-74	0.4	0.7	1.1	1.7	
75-79	0.0	0.2	0.4	0.7	
80+	0.1	0.0	0.0	0.2	
Total	100.0	100.0	100.0	100.0	

Table C.16Female population of non-belongers – Percentage distribution by ageMedium projection: 2012-2027

Age	High projection: Large fertility increase, large increase in life expectancy, large volume of immigration				
	2012	2017	2022	2027	
0-4	1,166	2,145	2,804	3,069	
5-9	1,061	1,196	2,170	2,826	
10-14	1,010	1,097	1,230	2,202	
15-19	1,241	1,194	1,280	1,412	
20-24	1,637	1,796	1,748	1,833	
25-29	1,998	2,556	2,714	2,664	
30-34	2,564	3,234	3,785	3,941	
35-39	2,544	3,927	4,589	5,137	
40-44	2,338	3,701	5,071	5,729	
45-49	1,909	3,188	4,537	5,895	
50-54	1,251	2,404	3,665	4,997	
55-59	843	1,454	2,582	3,820	
60-64	471	909	1,500	2,594	
65-69	251	472	887	1,448	
70-74	100	222	424	802	
75-79	9	58	161	334	
80+	16	0	8	92	
Total	20,409	29,553	39,153	48,794	

Table C.17Total population of non-belongersHigh projection: 2012-2027

Age	High projection: Large fertility increase, large increase in life expectancy, large volume of immigration				
	2012	2017	2022	2027	
0-4	578	1,083	1,415	1,549	
5-9	516	590	1,093	1,424	
10-14	482	532	606	1,108	
15-19	600	580	630	704	
20-24	798	880	860	910	
25-29	1,003	1,252	1,333	1,313	
30-34	1,330	1,630	1,875	1,956	
35-39	1,338	2,036	2,332	2,576	
40-44	1,249	1,947	2,638	2,933	
45-49	1,028	1,705	2,396	3,081	
50-54	677	1,297	1,963	2,645	
55-59	459	789	1,394	2,047	
60-64	261	497	816	1,401	
65-69	142	263	486	787	
70-74	59	126	235	438	
75-79	8	36	93	186	
80+	7	0	7	54	
Total	10,535	15,243	20,172	25,112	

Table C.18Male population of non-belongersHigh projection: 2012-2027

Age	High projection: Large fertility increase, large increase in life expectancy, large volume of immigration				
	2012	2017	2022	2027	
0-4	588	1,063	1,390	1,519	
5-9	545	605	1,077	1,402	
10-14	528	564	624	1,094	
15-19	641	613	649	709	
20-24	839	916	888	923	
25-29	995	1,304	1,381	1,351	
30-34	1,234	1,604	1,910	1,984	
35-39	1,206	1,891	2,257	2,561	
40-44	1,089	1,754	2,433	2,796	
45-49	881	1,483	2,141	2,814	
50-54	574	1,107	1,701	2,352	
55-59	384	665	1,188	1,773	
60-64	210	411	684	1,192	
65-69	109	210	401	661	
70-74	41	96	188	364	
75-79	1	22	69	148	
80+	9	0	1	38	
Total	9,874	14,308	18,981	23,683	

Table C.19Female population of non-belongersHigh projection: 2012-2027

Age	High projection: Large fertility increase, large increase in life expectancy, large volume of immigration			
	2012	2017	2022	2027
0-4	5.7	7.3	7.2	6.3
5-9	5.2	4.0	5.5	5.8
10-14	4.9	3.7	3.1	4.5
15-19	6.1	4.0	3.3	2.9
20-24	8.0	6.1	4.5	3.8
25-29	9.8	8.6	6.9	5.5
30-34	12.6	10.9	9.7	8.1
35-39	12.5	13.3	11.7	10.5
40-44	11.5	12.5	12.9	11.7
45-49	9.4	10.8	11.6	12.1
50-54	6.1	8.1	9.4	10.2
55-59	4.1	4.9	6.6	7.8
60-64	2.3	3.1	3.8	5.3
65-69	1.2	1.6	2.3	3.0
70-74	0.5	0.8	1.1	1.6
75-79	0.0	0.2	0.4	0.7
80+	0.1	0.0	0.0	0.2
Total	100.0	100.0	100.0	100.0

Table C.20Total population of belongers – Percentage distribution by age
High projection: 2012-2027

Age	High projection	High projection: Large fertility increase, large increase in life expectancy, large volume of immigration			
	2012	2017	2022	2027	
0-4	5.5	7.1	7.0	6.2	
5-9	4.9	3.9	5.4	5.7	
10-14	4.6	3.5	3.0	4.4	
15-19	5.7	3.8	3.1	2.8	
20-24	7.6	5.8	4.3	3.6	
25-29	9.5	8.2	6.6	5.2	
30-34	12.6	10.7	9.3	7.8	
35-39	12.7	13.4	11.6	10.3	
40-44	11.9	12.8	13.1	11.7	
45-49	9.8	11.2	11.9	12.3	
50-54	6.4	8.5	9.7	10.5	
55-59	4.4	5.2	6.9	8.1	
60-64	2.5	3.3	4.0	5.6	
65-69	1.3	1.7	2.4	3.1	
70-74	0.6	0.8	1.2	1.7	
75-79	0.1	0.2	0.5	0.7	
80+	0.1	0.0	0.0	0.2	
Total	100.0	100.0	100.0	100.0	

Table C.21 Male population of belongers – Percentage distribution by age High projection: 2012-2027

Age	High projection: Large fertility increase, large increase in life expectancy, large volume of immigration			
	2012	2017	2022	2027
0-4	6.0	7.4	7.3	6.4
5-9	5.	4.2	5.7	5.9
10-14	5.3	3.9	3.3	4.6
15-19	6.5	4.3	3.4	3.0
20-24	8.5	6.4	4.7	3.9
25-29	10.1	9.1	7.3	5.7
30-34	12.5	11.2	10.1	8.4
35-39	12.2	13.2	11.9	10.8
40-44	11.0	12.3	12.8	11.8
45-49	8.9	10.4	11.3	11.9
50-54	5.8	7.7	9.0	9.99
55-59	3.9	4.6	6.3	7.5
60-64	2.1	2.9	3.6	5.0
65-69	1.1	1.5	2.1	2.8
70-74	0.4	0.7	1.0	1.5
75-79	0.0	0.2	0.4	0.6
80+	0.1	0.0	0.0	0.2
Total	100.0	100.0	100.0	100.0

Table C.22Female population of belongers – Percentage distribution by age
High projection: 2012-2027
APPENDIX D: TECHNICAL NOTES

References to the Technical Notes have been made in the previous discussions. The purpose of this appendix is:

- a. To explain calculations used in the analysis
- b. To identify the data sources and the data quality limitations
- c. To describe the procedures for the calculation of the items of data required as inputs
- d. To outline the specific steps in the process of inputting data and producing projections

Explanation of calculation of average annual growth rate

Formula for Calculating the Growth Rate:

r = ln(pn/po)/n

where: r = rate of growth

pn = population at later date

po = population at earlier date

n = interval

The census intervals (n) used for intercensal rates are shown below;

Census period	Interval (in years)
1921-1943	22
1943-1960	17
1960-1970	10
1970-1980	10
1980-1990	10
May 31, 1990-Sept 10,2001	11.278
September 11, 2001-January 25, 2012	10.375
Projection period	
2012-2017	5
2017-2022	5
2022-2027	5
2012-2027	15

Note: (a) Specific census dates for years before 1990 not known. Projection periods are from mid-year to mid year.

(b) All averages for the periods shown have been calculated using the intervals shown.

These calculations were done using using Excel spreadsheets on CD ROM based on Donald T Rowlands, Demographic Methods and Concepts (see references).

The PASEX spreadsheets

The Population Analysis Spreadsheets are a set of spreadsheets for performing calculations frequently made while analyzing population data in developing countries. They were first developed at the International Programs Center of the United States Bureau of the Census as PAS in Lotus 1-2-3 format. They were since revised as PASEX in Excel format.

Data sources

The data required for developing population projections using the cohort component method are taken from population censuses and vital statistics. In order to produce projections for male and female Belongers and Non-Belongers of the Turks and Caicos Islands the base data must be available for these categories. As explained patterns of change observed from historical data series provide the basis for the assumptions. Longer series are more useful in providing guidance.

Data availability

- 1. A report of the 2001 Census and partial reporting on the 2012 Census are available on the Department's website.
- 2. An analytic report on the 2001 census published by the CARICOM Secretariat produced only one table on Non-Belongers presenting the percentage distribution of the population by age and sex. This table was used to derive the absolute numbers. This was supplemented by unpublished data provided by the Strategic Planning and Policy Department and from a database which was eventually located by ECLAC.
- 3. No vital statistics exist before 1990. The series produced from 1990 show significant gaps and some inconsistencies
- 4. Available: Live Births by sex of birth 1991-2012. Discrepancies observed in two series of data provided. Not available by belonger status for entire series.
- 5. Available: Live Births by sex by age of mother 2001-2006, 2011-2013. Available by belonger status.
- 6. Available: Deaths by sex 1991-2012. Discrepancies observed in two series of data provided. Not available by belonger status for entire series.
- 7. Available: Deaths by age and sex 1991-2008, 2011-2013. Available by belonger status.
- 8. No migration data available.

Data limitations

- 1. The gaps identified presented major challenges. The general approach in filling these gaps was to hold an available age/sex distribution constant. For example, to derive estimates of deaths by age and sex for the missing 2009 and 2010 years the average of the age distribution for the closest available years, 2006, 2008, 2010-2012 was used to distribute the totals for these years.
- 2. In cases of missing belonger status as for example sex of live births, assignments are made assuming a distribution similar to that which is available.
- 3. The unavailability of the critical migration data presented a major challenge. The approach used will be outlined later in this appendix.

4. The projections do not take into account the naturalization of foreign-born persons, or of children born in the Turks and Caicos Islands to expatriate parents. While belonger status is acquired primarily at birth through descent from parents who are belongers, it may also be obtained through adoption, marriage to a belonger for at least ten years, or by limited other means. However, due to the strictness of these criteria, the rate of naturalization is relatively slow.

Required data inputs

The preparation of the population projections requires installation of the MORTPAK software. This can be downloaded free of cost from the following website. A manual explaining all the applications is also included.

http://www.un.org/en/development/desa/population/publications/mortality/mortpak.shtml

On opening MORTPAK select the program projet.mpl The information and data items required are shown below

TITLE: TURKS AND CAICOS ISLANDS	
BELONGER LOW	2012
Year of Base Population (4 digits)	July
Month of Base Population	1
Day of Base Population	2027
End Year of Projection	1 (Year(s) (note other options exist)
Display/Print Projection Results Every	
	80+
Open Age Group of Base Population:	1.0512
Sex Ratio at Birth (eg. 1.05)	

Enter Data Bel Model" was sel pattern USER DEFINI (note options for	low Only if "Use lected as the mo ED MODEL q(x or model life tabl	er Defined del life table x,n) Values es exist)	Base Year Popu	lation By Age a	and Sex
Age group	Males	Females	Age group	Males	Females
0 1	0.010.47	0.01020	0 7	<0 7	62.2

Age group	Males	Females	Age group	Males	Females
0 - 1	0.01247	0.01039	0 - 5	687	632
1 - 5	0.00105	0.00320	5 - 10	623	602
5 - 10	0.00162	0.00309	10 - 15	561	570
10 - 15	0.00137	0.00475	15 - 20	508	528
15 - 20	0.00492	0.00262	20 - 25	458	472
20 - 25	0.00923	0.00543	25 - 30	422	442
25 - 30	0.01130	0.00361	30 - 35	390	421
30 - 35	0.00478	0.00269	35 - 40	369	401
35 - 40	0.00587	0.00268	40 - 45	361	395
40 - 45	0.01179	0.01575	45 - 50	333	357
45 - 50	0.01381	0.01919	50 - 55	303	306

1	4	7

Note: Age grou	ps appear in cont	tinuous groups	Note: Age groups appear in continuous groups			
80 - 85	0.34056	0.30138				
75 - 80	0.18676	0.20506	80+	71	115	
70 - 75	0.16168	0.10585	75 - 80	44	55	
65 - 70	0.08465	0.07971	70 - 75	96	93	
60 - 65	0.04296	0.05783	65 - 70	147	136	
55 - 60	0.03728	0.03726	60 - 65	200	185	
50 - 55	0.01411	0.02911	55 - 60	257	250	

CURRENT AND FPROJECTED FERTILITY PATTERNS						
Age group	Base year	End year				
15 - 20	0.0384	0.0386				
20 - 25	0.1136	0.1141				
25 - 30	0.0877	0.0881				
30 - 35	0.0707	0.0710				
35 - 40	0.0341	0.0343				
40 - 45	0.0106	0.0106				
45-50						

MIGRATION PATTERN BY AGE AND SEX						
Age group	Males	Females				
0 - 5	-5	-3				
5 - 10	-8	-4				
10 - 15	-10	-9				
15 - 20	-18	-20				
20 - 25	-35	-30				
25 - 30	-34	-32				
30 - 35	-27	-36				
35 - 40	-23	-33				
40 - 45	-20	-26				
45 - 50	-15	-21				
50 - 55	-15	-16				
55 - 60	-11	-15				
60 - 65	-3	-12				
65 - 70	-2	-13				
70 - 75	-4	-15				
75 - 80	-28	-25				
80+	-8	-1				

Only one migration pattern is supplied. For each projection year, these numbers are scaled to match

the net migration.					
		Assumed ferti	lity, mortality and r	nigration levels	
Projection		<i>e</i> (0)	<i>e</i> (0)	Migration	Migration
period —	TFR	Males	Females	Males	Females
2012-2013					
Initial period	1.775	75.78	77.81	-28	-34
2026-2027					
Final period	1.784	75.78	77.81	-28	-34
2013-2014	1.775	75.78	77.81	-28	-34
2014-2015					
2015-2016					
2016-2017					
2017-2018	1.784	75.78	77.81	-28	-34
2018-2019					
2019-2020					
2020-2021					
2021-2022					
2022-2023	1.784	75.78	77.81	-28	-34
2023-2024					
2024-2025					
2025-2026					

Summary of data inputs

- 1. Base Population by Age and Sex
- 2. Base Mortality Rates by Age and Sex
- 3. Fertility Rates by Age for Base date and for end date
- 4. Migration Pattern (Number of Migrants)
- 5. Summary of Assumption Targets for Fertility, Mortality, Migration

Procedures for calculating input data

The Base Population

Adjusting the 2012 Census Data

	Male				Female		
Age group	Total	Belonger	Non-belonger	Total	Belonger	Non-belonger	
Total	16,027	5,822	10,205	15,479	5,937	9,542	
0	214	112	102	236	114	122	
1-4	1,078	585	493	1,026	555	471	
5-9	1,076	612	464	1,034	547	487	
10-14	1,003	564	439	1,051	597	454	
15-19	912	482	430	992	558	434	
20-24	970	489	481	993	432	561	
25-29	1,308	400	908	1,497	399	1,098	
30-34	1,956	360	1,596	1,860	426	1,434	
35-39	2,074	346	1,728	1,864	396	1,468	
40-44	1,696	381	1,315	1,587	411	1,176	
45-49	1,340	362	978	1,205	391	814	
50-54	904	322	582	776	323	453	
55-59	589	266	323	541	242	299	
60-64	376	199	177	329	183	146	
65-69	249	131	118	177	100	77	
70-74	109	69	40	113	83	30	
75-79	95	71	24	74	65	9	
80+	78	71	7	124	115	9	

 Table D.1

 Population of the Turks and Caicos Islands by sex and belonger status -Original pro-rated for missing age and sex only, Census 2012

Table D.2 Population of the Turks and Caicos Islands by Sex and belonger status -Original pro-rated for missing age and sex and adjusted for ages 0-4, Census 2012

		Male		Female		
Age group	Total	Belonger	Non-belonger	Total	Belonger	Non-belonger
Total	16,027	5,821	10,206	15,512	5,952	9,560
0	246	129	117	247	118	129
1-4	1,046	567	479	1,048	567	481
5-9	1,076	612	464	1,034	547	487
10-14	1,003	564	439	1,051	597	454
15-19	912	482	430	992	558	434
20-24	970	489	481	993	432	561
25-29	1,308	400	908	1,497	399	1,098
30-34	1,956	360	1,596	1,860	426	1,434
35-39	2,074	346	1,728	1,867	396	1,471
40-44	1,696	381	1,315	1,588	411	1,177
45-49	1,340	362	978	1,204	391	813
50-54	904	322	582	776	323	453

Table D.2 (concluded)

	Male				Female	
Age group	Total	Belonger	Non-belonger	Total	Belonger	Non-belonger
55-59	589	266	323	541	242	299
60-64	376	199	177	329	183	146
65-69	249	131	118	177	100	77
70-74	109	69	40	112	83	29
75-79	95	71	24	73	64	9
80+	78	71	7	123	115	8

Table D.3

Basis for adjustments to Age 0 – Survivors of births occurring January 26, 2011-January 24, 2012

	Year		Total	Survival Ratio	Age 0
Sex	2011	2012			
Males					
Full Year	255	238			
Fraction of Year	235	15	250	0.98235	246
Females					
Full Year	248	293			
Fraction of Year	230	18	248	0.99520	247

Pro-rated for Belongers and Non-Belongers on the basis of the original distribution.

Note: Includes births occurring outside of the Turks and Caicos Islands to belongers.

Table D.4Basis for adjustments to Ages1-4– Survivors of births occurring January 26, 2007-January 25, 2011

Sex	Births in Period	Survival Ratio	Age 1-4
Male	1,069	0.97844	1,046
Female	1,054	0.99428	1,048

Pro-rated for Belongers and Non-Belongers on the basis of the original distribution. Note: Includes births occurring outside of the Turks and Caicos Islands.

Table D.2 was tested for Age Accuracy using the United Nations Age-Sex Accuracy Index test. (PASEX spreadsheet AGESEX).

For this Test:

- Highly Accurate = Index of less than 20;
- Inaccurate = Index of 20-42;
- Highly Inaccurate = Index of greater than 40.

The AGESEX Worksheet in the US Bureau of the Census PASEX files showed Accuracy Index as follows:

• Belongers = 54.4

- Non-Belongers = 61.1
- Total = 50.8

All showing Highly Inaccurate Age Structure

To correct this, the distribution was smoothed using the AGESMTH Worksheets from PASEX. The spreadsheet smoothes the age distribution of a population using five different smoothing methods including a strong moving average. The 'strong smoothing' option was selected because it produced the highest level of accuracy, although it shifts the original 5 year age distribution.

Table D.5
Population of the Turks and Caicos Islands by sex and belonger status, final smoothed distribution,
Census 2012

		Male			Female	
Age Group	Total	Belonger	Non-Belonger	Total	Belonger	Non-Belonger
Total	16,027	5,821	10,206	15,512	5,952	9,560
0	237	127	110	229	109	120
1-4	1,009	559	450	971	522	449
5-9	1,121	622	499	1,129	601	528
`10-14	1,027	560	467	1,080	569	511
15-19	1,089	508	581	1,148	527	621
20-24	1,230	457	773	1,283	471	812
25-29	1,393	422	971	1,405	441	964
30-34	1,679	389	1,290	1,616	421	1,195
35-39	1,665	369	1,296	1,568	401	1,167
40-44	1,571	360	1,211	1,450	395	1,055
45-49	1,327	331	996	1,209	356	853
50-54	959	303	656	863	306	557
55-59	702	257	445	622	250	372
60-64	451	199	252	388	185	203
65-69	285	147	138	242	136	106
70-74	153	96	57	132	93	39
75-79	51	44	7	54	54	0
80+	78	71	7	123	115	8

Note: The smoothed distribution was used for the calculation of base period estimates only.

Age Accuracy Index:

Belongers = 11.7

Non-Belongers = 29.8

Total = 16.9

The non-belongers structure still shows inaccuracy, albeit at a lower level.

A note on age-sex accuracy checks¹

These checks are based on age and sex ratios analysis. Age ratios provide a measure of the 'smoothness' of the age distribution of the population over a restricted age range. Under normal circumstances the enumerated size of a particular cohort should be approximately equal to the average size of the immediately preceding and subsequent cohorts. In other words, the ratio of the census count for a particular cohort to the average of the counts for the adjacent cohorts should be approximately equal to 1 (or 100 if multiplied by a constant of 100). Significant departures from this expected ratio indicate either the presence of error in the census enumeration or factors such as sharp swings in fertility or mortality or significant levels of migration.

This last factor is of particular relevance in the context of the Turks and Caicos Islands and under normal circumstances the levels of inaccuracy revealed by the Accuracy Test could be attributable to this fact. However, the decision to adjust the data was taken because the test of the data for belongers and non-belongers separately showed the same high level of inaccuracy.

It is important to note that misreporting of age is very common in censuses and surveys. This results from the tendency of interviewers and respondents to report certain ages at the expense of others. This is called age heaping, age preference or digit preference. Preference for the digits '0' and '5' are quite widespread.

Table D.6Population of the Turks and Caicos Islands by sex and belonger status, mid-year 2012						
		Male	tos Islands by sex	and belonge	Female	year 2012
Age Group	Total	Belonger	Non-Belonger	Total	Belonger	Non-Belonger
Total	16,365	5,830	10,535	15,834	5,960	9,874
0	241	127	114	234	109	125
1-4	1,024	560	464	986	523	463
5-9	1,139	623	516	1,147	602	545
10-14	1,043	561	482	1,098	570	528
15-19	1,108	508	600	1,169	528	641
20-24	1,256	458	798	1,311	472	839
25-29	1,425	422	1,003	1,437	442	995
30-34	1,720	390	1,330	1,655	421	1,234
35-39	1,707	369	1,338	1,607	401	1,206
40-44	1,610	361	1,249	1,484	395	1,089
45-49	1,361	333	1,028	1,238	357	881
50-54	980	303	677	880	306	574
55-59	716	257	459	634	250	384
60-64	461	200	261	395	185	210
65-69	289	147	142	245	136	109
70-74	155	96	59	134	93	41
75-79	52	44	8	56	55	1
80+	78	71	7	124	115	9

Base population- Population at July 1, 2012

Extracted from United States Bureau of the Census, 1985. Evaluating Censuses of Population and Housing.

As described in the section on methods and assumptions, the base population – the population at 1st July 2012 – was calculated from the final smoothed census population (see Table D.5) using the MOVEPOP files from the PASEX Worksheets. MOVEPOP moves the population age distribution pertaining to a specific date to another date and requires as input data: the census population by age and sex, death rates by sex, age specific fertility rates and the annual number of migrants.

		Total Births 2001-2011	
Belonger Status	Male	Female	Sex Ratio
Belonger	849	808	1.0512
Non-Belonger	1274	1,227	1.0380

Table D.7 Sex ratio at birth

Fertility

Table D.8 Age specific fertility rates, total fertility rate 2001 and 2012 and assumptions for growth scenarios for belongers and non-belongers

Age group	Belongers			Non-belongers		
_	2001		2012	2001		2012
15-19	0.0608		0.0384	0.0203		0.0202
20-24	0.1168		0.1136	0.0446		0.0507
25-29	0.0794		0.0877	0.0847		0.1075
30-34	0.0585		0.0707	0.0930		0.0862
35-39	0.0207		0.0341	0.0358		0.0517
40-44	0.0121		0.0106	0.0175		0.0237
TFR	1.741		1.775	1.480		1.700
Rate of change 2001- 2012 TFR		0.1864			1.3358	
	Low	Medium	High	Low	Medium	High
Rate of change	0.0932	0.1864	0.2796	0.6679	1.3358	2.0037
15-19	0.0385	0.0387	0.0389	0.0208	0.0216	0.0223
20-24	0.1141	0.1146	0.1152	0.0524	0.0542	0.0560
25-29	0.0881	0.0885	0.0889	0.1112	0.1150	0.1189
30-34	0.0710	0.0713	0.0717	0.0892	0.0922	0.0953
35-39	0.0343	0.0344	0.0346	0.0534	0.0552	0.0571
40-44	0.0106	0.0107	0.0107	0.0245	0.0253	0.0262
TFR	1.783	1.791	1.800	1.758	1.817	1.879

Note: Rate of Change for Low = 50 per cent of rate for 2001-2012; Medium = rate for 2001-2012, High = 1.50 times rate for 2001-2012.

Requires births by age of mother from vital statistics usually for at least 3 years centering on the census year. The average annual number of births is used as the numerator with the number of women in the age group at census as the denominator. These rates were calculated using averages for 2001-2003 for 2001, 2011-2013 for 2012.

Mortality

Age	Mal	es	Fen	nale
	Original	Revised	Original	Revised
0	0.01247	0.01247	0.01039	0.01039
1	0.00105	0.00105	0.00320	0.00320
5	0.00162	0.00162	0.00309	0.00309
10	0.00137	0.00137	0.00475	0.00475
15	0.00492	0.00492	0.00262	0.00262
20	0.00923	0.00923	0.00543	0.00543
25	0.01130	0.01130	0.00361	0.00361
30	0.00478	0.00478	0.00269	0.00269
35	0.00587	0.00587	0.00268	0.00268
40	0.01179	0.01179	0.00628	0.01575
45	0.01381	0.01381	0.00844	0.01919
50	0.01411	0.01411	0.01714	0.02911
55	0.03728	0.03728	0.01830	0.03726
60	0.04296	0.04296	0.02940	0.05783
65	0.08465	0.08465	0.07075	0.07971
70	0.16168	0.16168	0.15292	0.10585
75	0.18676	0.18676	0.22075	0.20506
80	0.34056	0.34056	0.29206	0.30138
85+	0.81536	0.81536	0.67203	0.04518

 Table D.9

 Age specific death rates for base period for belongers and non-belongers

The available mortality statistics for the Turks and Caicos Islands have presented many methodological challenges. The very small numbers of deaths and even zero deaths in some age groups showed very erratic age distributions of rates. To minimize this, five-year averages were used to develop the death rates required for life table construction. The MORTPAK application UNBAR was used to smooth age specific rates to derive the base year life expectancy. This yielded an unrealistically high life expectancy of over 100 years for females. The projection application software does provide the option of using model life tables where country data are not available but the preference is always for country data. One available option is to use life tables for another country with similar characteristics. Accordingly the decision was taken to adopt rates from life tables for the Bahamas. The rates shown in Table D.9 for males are all developed from the Turks and Caicos Islands data. For the females, the rates beginning at age 40 have been substituted with those from the Bahamas Life Table for 2010 (retrieved from the Bahamas Statistical Office website). These rates are based on averages for the years 2008-2012 related to the census 2012 population.

Migration

Establishing migration estimates have presented even greater challenges as no data exist on this increasingly critical component of population growth for the Turks and Caicos Islands. As explained previously the estimates used have been derived as a residual after births and deaths were accounted for in the calculation of the intercensal components of change shown in Table D.10. The table shows that the total net migration for 2001-2012 is estimated at +8,369. This was held as the control total. For the projections this number needed to be distributed by sex (as shown) by age and between belongers and non-belongers.

Item	Total	Male	Female
Population at Census 2001	19,886	9,897	9,989
Population at Census 2012	31,539	16,027	15,512
Births 2001-2012	3,980	1,946	2,034
Deaths 2001-2012	696	389	307
Implied migration 2001-2012	8,369	4,572	3,797
Average annual births	384	188	196
Average annual deaths	67	37	30
Average annual migration	807	441	366

Table D.10
Components of growth for the Turks and Caicos Islands: 2001-2012

The first step in the process was to apply survival ratios for 2001 for age groups (from life tables created by LTPOPDTH) to the population for 2001 to obtain an expected count for the population 10 years and over at 2012. The difference between the expected count and the actual count is the estimated migration which would be either negative or positive. Application of survival ratios to 2001 showed overall net outflow for belongers and net inflow for non-belongers. The estimates produced by the initial calculations were then adjusted to be consistent with the totals for males and females shown in Table D.10. This involves including estimates for ages under 10 years. Note that the population would actually age 10.375 years. Ten years has been assumed as any differences would be expected to be so minimal as to not affect the outcome.

Table D.11Estimation of Migration for Belongers of ages 10 years and over in 2012 using Survival Ratios

Age in	Age in	Survival ratio	2001 population	2012 expected	2012 Actual	Derived migration	Adjusted migration
2001	2012			BELONGER	R MALES		
0-4	10-14	0.9949	573	570	560	-10	-10
5-9	15-19	0.9968	528	526	508	-18	-18
10-14	20-24	0.9955	494	492	457	-35	-35
15-19	25-29	0.9910	460	456	422	-34	-34
20-24	30-34	0.9861	422	416	389	-27	-27
25-29	35-39	0.9845	398	392	369	-23	-23
30-34	40-44	0.9779	389	380	360	-20	-20

Table D.11 (concluded)

Aggin Aggin	Survival	2001 population	2012 expected	2012 Actual	Derived migration	Adjusted		
2001	2001 2012 -	BELONGER MALES						
35-39	45-49	0 9647	360	347	332	-15	-15	
40-44	50-54	0.9583	332	318	303	-15	-15	
45-49	55-59	0.9303	284	268	257	-11	-11	
50-54	60-64	0.9154	201	200	199	-3	-3	
55-59	65-69	0.8634	173	149	147	-2	-2	
60-64	70-74	0.8027	125	100	96	-4	-4	
65-69	75-79	0.7820	92	72	44	-28	-28	
70+	80+	0.4636	173	80	72	-8	-8	
		Survival	2001	2012	2012	Derived	Adjusted	
Age in	Age in	Ratio	Population	Expected	Actual	migration	migration	
2001 2012	2012	BELONGER FEMALES						
0-4	10-14	0.9955	581	578	569	-9	-9	
5-9	15-19	0.9963	549	547	527	-20	-20	
10-14	20-24	0.9951	504	501	471	-30	-30	
15-19	25-29	0.9924	477	473	441	-32	-32	
20-24	30-34	0.9879	462	457	421	-36	-36	
25-29	35-39	0.9837	441	434	401	-33	-33	
30-34	40-44	0.9825	428	420	394	-26	-26	
35-39	45-49	0.9767	386	377	356	-21	-21	
40-44	50-54	0.9695	332	322	306	-16	-16	
45-49	55-59	0.9635	275	265	250	-15	-15	
50-54	60-64	0.9483	208	197	185	-12	-12	
55-59	65-69	0.9022	165	149	136	-13	-13	
60-64	70-74	0.8419	129	108	93	-15	-15	
65-69	75-79	0.7405	107	79	54	-25	-25	
70+	80+	0.4450	260	116	115	-1	-1	

Table D.12 Estimation of migration of non-belongers for ages 10 years and over in 2012 using survival ratios

Age in 2001	Age in 2012	Survival Ratio	2001 Population	2012 Expected	2012 Actual	Derived Migration	Adjusted Migration
		NON-BELONGER MALES					
0-4	10-14	0.9949	446	443	467	23	25
5-9	15-19	0.9968	369	368	581	213	230
10-14	20-24	0.9955	311	309	773	464	501
15-19	25-29	0.9910	341	338	971	633	685
20-24	30-34	0.9861	427	421	1289	868	939
25-29	35-39	0.9845	484	476	1295	819	886
30-34	40-44	0.9779	578	565	1210	645	698

Age in 2001	Age in 2012	Survival	2001 Domulation	2012 Exposite d	2012	Derived Mignetics	Adjusted Mignatics		
		Ratio	Population	Expected	Actual	migration	migration		
		NON-BELONGER MALES							
35-39	45-49	0.9647	547	528	995	467	506		
40-44	50-54	0.9583	465	446	656	210	227		
45-49	55-59	0.9448	366	346	445	99	107		
50-54	60-64	0.9154	233	213	252	39	42		
55-59	65-69	0.8634	153	132	138	6	6		
60-64	70-74	0.8027	83	66	57	-9	-11		
65-69	75-79	0.7820	42	33	7	-25	-28		
70+	80+	0.4636	38	17	7	-10	-12		
		Survival	2001	2012	2012	Derived	Adjusted		
Age in	Age in	ratio	Population	Expected	Actual	migration	migration		
2001	2012	NON-BELONGER FEMALES							
0.4	10.14	0.0055	5(2)	400	5 11	22	25		
0-4	10-14	0.9955	563	488	511	23	25		
5-9	15-19	0.9963	446	444	621	1//	180		
10-14	20-24	0.9951	346	344	812	468	476		
15-19	25-29	0.9924	345	342	964	622	632		
20-24	30-34	0.9879	400	396	1195	799	812		
25-29	35-39	0.9837	438	431	1168	737	749		
30-34	40-44	0.9825	512	503	1055	552	560		
35-39	45-49	0.9767	478	467	853	386	393		
40-44	50-54	0.9695	401	388	557	168	171		
45-49	55-59	0.9635	310	299	372	73	75		
50-54	60-64	0.9483	190	180	203	23	24		
55-59	65-69	0.9022	119	107	106	-1	5		
60-64	70-74	0.8419	61	51	39	-12	-11		
65-69	75-79	0.7405	31	23	0	-23	-22		
70+	80+	0.4450	33	19	8	-11	-7		

Output

Table D.12 (concluded)

The Output for the 1 year as stipulated in the input data displays the following:

- 1. Input data as entered.
- 2. Input data interpolated for each year in the intervening period between the initial year and the end year.
- 3. Single year population, five year age groups and percentage distribution based on five year groups for each year.
- 4. Annual Vital Statistics Summary showing absolute numbers and rates showing births, deaths, migrants and growth by sex.

APPENDIX E: GLOSSARY OF TERMS

Age dependency ratio – A ratio in which the numerator represents the total number of people not of working age (too old or too young to work and therefore "dependent" on those who do), and the denominator represents the population of working age; often multiplied by 100, which yields the number of dependents per 100 persons of working age.

Age-specific rate – A rate that relates a given demographic event at a specific age (or age group) to the corresponding at-risk population in the same age (or age group). For example the age-specific fertility rate relates births to women in a specific age group to the total women in the same age group, and the age specific death rate relates deaths of the people in an age group to the population in the same age group.

Average family size is the average number of living children of an individual or couple.

Base population – For population projections this is the starting population.

Belonger – There are a number of conditions under which a resident of the Turks and Caicos Islands acquires belonger status. In summary a belonger is a person who was born in the islands or if not born in the islands, acquired status through a parent born in the islands or through adoption or through other means as stipulated in the laws.

Crude rate - A rate that relates a demographic event to the total population and makes no distinction concerning different exposure levels to the event. Examples include the crude birth rate and the crude death rate.

Crude birth rate – The number of live births per 1,000 population in a given year.

Crude death rate – The number of deaths per 1,000 population in a given year.

Emigrant – A resident of a given country who departs to take up residence in another country.

Growth rate – Often used as a general expression to describe the rate of change in a given population, even one that is declining.

International migration – The movement across an international boundary for the purpose of establishing a new permanent residence.

Intercensal – The period between two successive censuses.

Life expectancy – The average number of years of life remaining to a group of persons who reached a given age as calculated from a life table.

Life table – A tabular display of life expectancy and the probability of dying at each age for a given population according to age-specific death rates prevailing at that time. The life table gives an organized complete portrait of a population's mortality.

Median age – The age at which exactly half the population is older and half is younger. The age at which the population is divided into two equally sized groups.

Mid-year population – Mid-year, taken to be July 1 is assumed to be the point by which half the changes in a population have occurred. The mid-year population may be calculated as the mean, or average of the population at the start and end of the year.

Natural increase – The excess of births over deaths in a population. The excess of deaths over births is referred to as natural decrease.

Net migration – The difference between the number of immigrants and the number of out migrants for a given area over a given period of time.

Net migration rate – The ratio of net migration for a given area over a given period to the population.

Non-belonger – A resident of the Turks and Caicos Islands who has not acquired belonger status.

Old population – A population with a relatively high proportion of middle-aged and elderly persons, a high median age, and thus a lower growth potential.

Population Ageing – A demographic process affecting all Caribbean countries and territories in which the age structure of the population changes and older persons come to represent a higher proportion of the total population and younger persons represent a lower proportion.

Population change refers to change in the number of inhabitants of an area. The change may be an increase, a decrease or zero.

Postcensal – The period since the last census.

Rate of change – The change of population during a given period expressed as a rate. The rate may relate to the entire period in which case the denominator is usually the initial population. Alternatively it may be an average annual rate in which case the rate may assume annual compounding, continuous compounding or some other function.

Rate of natural increase – The difference between the crude birth rate and the crude death rate.

Replacement level fertility is the level of fertility at which a cohort of women, on the average, has only enough daughters to "replace" themselves in the population. Once replacement level fertility has been reached, births gradually will reach equilibrium with deaths and in the absence of migration a population will ultimately stop growing and become stationary.

Sex ratio – The ratio of males to the number of females in a population usually computed for age groups and expressed per 100 females.

Sex ratio at birth – The ratio of males to female births.

Total fertility rate (TFR) is the average number of children that would be born alive to a woman (or group of women) during her (their) lifetime if she (they) were to pass through all the childbearing years conforming to the age specific fertility rates of a given year.

Smoothing – The adjustment of data to eliminate or reduce irregularities and other anomalies assumed to result from measurement and other errors.

Survival rate – A rate expressing the probability of survival of a population group, usually an age group, from one date to another and from one age to another.

Sources:

- 1. Population Reference Bureau (1997), *Population Handbook*, Washington, Population Reference Bureau.
- 2. Rowland, Donald T. (2003), *Demographic Methods and Concepts*, Oxford, Oxford University Press.
- 3. Siegel, Jacob S. (2004), *The Methods and Materials of Demography*, Oxford, Elsevier Academic Press.