



KINGDOM OF TONGA

TONGA POPULATION CENSUS

1996

Demographic Analysis

Summary and Population Projections

	<p>POPULATION PROJECTIONS</p>	
<p>FERTILIT Y</p>		<p>MIGRATION</p>
	<p>LIFE EXPECTANCY</p>	

September 1999

PREFACE

This is the fourth publication presenting results from the most recent Population Census of the Kingdom of Tonga in 1996. This bulletin presents the Demographic Analysis or D-Series together with Population Projections until year 2026. It contains two parts with Part 1 giving a summary of the demographic analysis and Part 2 giving the population projections for Tonga for years 1997 to 2026.

The demographic indicators and population projections contained in this bulletin is provided to assist planners and policy-makers in the planning and policy making process, inform researchers and readers of the latest demographic position of the Tongan population.

The demographic analysis and preparation of this bulletin was jointly conducted by Mrs Mele P. Finau, Principal Statistician and Mrs Vilimaina L. Rakaseta, Population Advisor of the Secretariat of the Pacific Community (SPC). The Department is grateful to Mrs Finau and Mrs Rakaseta for the hard work put towards the preparation of this bulletin. The Department is also grateful to the Demography Programme of the SPC for allowing Mrs Rakaseta to assist the Department in this important task.

The Department would welcome any comments or queries regarding the statistics and information contained in this bulletin.

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PART I: DEMOGRAPHIC ANALYSIS

1.1 Introduction

The 1996 Population census of the Kingdom of Tonga, which was the fifth decennial census of Tonga, counted a total population of 97,784 persons of which 96,020 or 98.2 per cent were Tongans or Part Tongans. This report refers to the analysis of the Tongan and part-Tongans only. Estimates of child mortality, adult mortality, life tables by sex and fertility are presented in this report. Population projections are also presented for three sets of assumptions.

Tonga's population is fairly young with 39 per cent of the population under the age of 15. The population of Tonga grew at an annual growth rate of 0.3 per cent during 1986-96. This low rate of growth was mainly due to the high level of international net migration.

The census included specific questions for the estimation of child mortality, adult mortality and fertility. Indirect estimation techniques were applied to these data to arrive at the final estimates. Information from the Ministries of Health and Justice were used to compare estimates indirectly derived from census data. Data from the 1986 census were also used to derive fertility and mortality estimates.

1.2 Mortality

The data on children ever born and children surviving by age of mother were used to estimate child mortality. An evaluation of this data in terms of indices such as sex ratios and parity distribution of all women indicate the quality of data is good. The Infant Mortality Rate (IMR) estimated for Tonga for the year 1996 is 19.0 per 1,000 births. The IMR has declined from 26 per 1,000 in 1986 to 19.0 in 1996. Both male and female children experienced the same level of mortality.

Adult mortality was estimated using information on survival status of mothers and fathers. Indices derived from such information refer to the survivorship probabilities at age 25 for females and at age 32.5 years for males. These estimates were then combined with the estimates of child mortality derived above to obtain life tables for males and females. The method used was the 'Logit transformation of survivorship probabilities' as described in (the United Nations) Manual X: Indirect Techniques for Demographic Estimation. The resulting estimates of expectation of life at birth is 69.8 for males and 71.8 for females.

Table 1: Abridged Life Table - Male

Age	lx	Dx	qx	Lx	Tx	Ex
0	100,000	1,900	0.019000	98,727	6,982,292	69.8
1	98,100	419	0.004266	391,563	6,883,565	70.2
5	97,681	241	0.002464	487,806	6,492,002	66.5
10	97,441	200	0.002056	486,703	6,004,196	61.6
15	97,240	379	0.003894	485,256	5,517,493	56.7
20	96,862	541	0.005586	482,956	5,032,237	52.0
25	96,321	557	0.005780	480,212	4,549,281	47.2
30	95,764	642	0.006706	477,215	4,069,069	42.5
35	95,122	847	0.008904	473,492	3,591,855	37.8
40	94,275	1,286	0.013645	468,159	3,118,363	33.1
45	92,989	2,140	0.023009	459,594	2,650,204	28.5
50	90,849	3,543	0.038996	445,388	2,190,610	24.1
55	87,306	5,879	0.067334	421,834	1,745,223	20.0
60	81,428	9,148	0.112342	384,268	1,323,388	16.3
65	72,280	13,330	0.184425	328,074	939,120	13.0
70	58,950	11,131	0.188823	266,921	611,046	10.4
75	47,819	19,746	0.412940	189,727	344,126	7.2
80+	28,072	28,072	1.000000	154,398	154,398	5.5

Table 2: Abridged Life Table - Female

Age	lx	Dx	qx	Lx	Tx	Ex
0	100,000	1,650	0.016500	98,895	7,181,854	71.8
1	98,350	415	0.004224	392,569	7,082,960	72.0
5	97,935	201	0.002055	489,170	6,690,391	68.3
10	97,733	166	0.001694	488,253	6,201,221	63.5
15	97,568	274	0.002807	487,154	5,712,968	58.6
20	97,294	391	0.004017	485,492	5,225,814	53.7
25	96,903	493	0.005092	483,281	4,740,322	48.9
30	96,410	627	0.006504	480,480	4,257,041	44.2
35	95,783	858	0.008959	476,768	3,776,560	39.4
40	94,924	1,253	0.013198	471,490	3,299,793	34.8
45	93,672	1,969	0.021017	463,436	2,828,302	30.2
50	91,703	3,045	0.033203	450,903	2,364,866	25.8
55	88,658	4,700	0.053007	431,542	1,913,963	21.6
60	83,959	7,383	0.087932	401,336	1,482,422	17.7
65	76,576	11,605	0.151550	353,867	1,081,086	14.1
70	64,971	9,903	0.152418	300,097	727,219	11.2
75	55,068	20,610	0.374260	223,816	427,121	7.8
80+	34,458	34,458	1.000000	203,304	203,305	5.9

1.3 Fertility

The Total Fertility Rate (TFR) for Tonga in 1996 was derived by using information on children ever born and births in the year preceding the census. TFR was estimated to be 4.1. Data from the Ministry of Health compare well with this estimate (their estimate was 4.3 in 1996). TFR has declined from 5.2 in 1986. Total Fertility Rate is derived from Age Specific Fertility Rates. Table 3 shows the Age Specific Fertility Rates derived from 1986 & 1996 censuses, reported parities and births in the twelve months preceding the census.

Table 3: Age Specific Fertility Rate

Age group	Age Specific Fertility Rate (per 1,000 women)
15-19	17
20-24	160
25-29	239
30-34	208
35-39	139
40-44	59
45-49	8
TFR per woman	4.1

1.4 International Migration

International migration has and will continue to play an important role in the growth of Tonga's population. For this reason three variations in net international migration were used in projecting the population of Tonga up to year 2026: (1) constant rate of net migration, (2) reduced rate of net migration, (3) increased rate of net migration. Fertility was assumed to decline to a TFR of 2.5 and the expectation of life was assumed to follow the United Nations model of mortality improvement. For the age distribution of net migrants, the difference between the projected 1996 population without migration, and the census population was used to arrive at the estimated age distribution. These were inputted into the People Version 3.01 programme to yield the projected populations.

Births derived from the Ministry of Health reveal that it is 94% complete while death registration must be less complete. It is essential that these data be reliable in order to produce reliable population estimates.

As has been highlighted above, international migration plays an important role in the population growth and changes in the structure of the population of Tonga. However, without reliable information its actual magnitude cannot be ascertained at the present time. It is therefore imperative that international arrivals and departures information be collected as soon as possible for policy and planning decisions.

1.5 Summary of results

A summary of the vital rates obtained (per 1,000 when applicable) from the 1996 census is shown below.

Total Fertility Rate	4.1 per woman
Expectation of life (Male)	69.8 years
Expectation of life (Female)	71.8 years
Infant Mortality Rate	19.0
Crude Birth Rate	30.3
Crude Death Rate	7.5
Net Migration Rate	19.8
Natural Increase	22.8
Annual Growth Rate	0.3

1.6 Population projections

Population projections provide policy-makers with a look into the future. It is therefore an important tool for policy makers and planners in various sectors of government and private mainly for their domestic planning and policy formulation. By coming up with various population scenarios we are in effect giving pictures of what Tonga's population would look like in the future under various assumptions.

The four basic information needed for projecting the population are: (i) age-sex distribution of the latest information on population (ii) fertility (iii) mortality and (iv) migration. The projections were then devised for five year age groups by sex for thirty years, 1996-2026. In order to come up with meaningful projections, assumptions were made about future trends in fertility, mortality and migration using information from Statistics Department and Ministry of Health.

1.6.1 Projection Assumptions

Three scenarios were developed based on current and future trends of demographic indicators to give us a look into Tonga's population in thirty year's time using these different assumptions:-

1. From adjusted fertility of 4.1 derived from the result of 1996 census two assumptions of future trends were assumed (i) no change in current trend, and (ii) moderate decline in the future.
2. Mortality is also expected to decline in line with the model of mortality improvement recommended by the UN (1994). This translates into increases in life expectancy for male and female (see Table 4)
3. Migration was the most difficult of the three components of population growth to estimate. From the Balancing Equation and information from 1996 Census on adjusted crude birth rate, adjusted crude death rate, average annual growth rate; net migration was estimated to be -1,936 migrants. This was rounded to -1,950 which was taken as the estimated annual Net Migration for the projections. Because of the important implications of international migration in Tonga's population, different assumptions of migration rates were used in order to see the effect of migration on Tonga's population in the future.

Based on the combinations of fertility and migration three scenarios were used:

i. **Scenario1 (declining migration, constant fertility)**

Fertility: Total fertility rate of 4.1 in 1996 remains constant until 2026

Mortality: The life expectancy of male gradually increases from 69.8 in 1996 to 74.2 in 2026. Female life expectancy also increases from 71.8 in 1996 to 77.4 in 2026. This is based on United Nations model of moderate increase in life expectancy.

Migration: A decline in net out migrants to -1,500 throughout the projection period, (1996-2026)

ii. **Scenario2 (declining fertility, constant migration)**

Fertility: The total fertility rate of 4.1 in 1996 is assumed to decline to 2.5 in 2026.

Mortality: The life expectancy of male gradually increases from 69.8 in 1996 to 74.2 in 2026. Female life expectancy also increases from 71.8 in 1996 to 77.4 in 2026. This is based on United Nations model of moderate increase in life expectancy.

Migration: The net migration rate of -1,950 is assumed to remain constant through out the projection period, 1996-2026.

Note: This scenario is recommended to be the most likely outcome in the future of Tonga's population.

iii. **Scenario3 (declining fertility, declining of migration)**

Fertility: The total fertility rate of 4.1 in 1996 is assumed to decline to 2.5 in 2026.

Mortality: The life expectancy of male gradually increases from 69.8 in 1996 to 74.2 in 2026. Female life expectancy also increases from 71.8 in 1996 to 77.4 in 2026. This is based on United Nations model of moderate increase in life expectancy.

Migration: A decline in net out migrants to -1,500 throughout the projected period, 1996-2026.

Table 4: Years 1996 - 2026, (30 years projection) assumptions

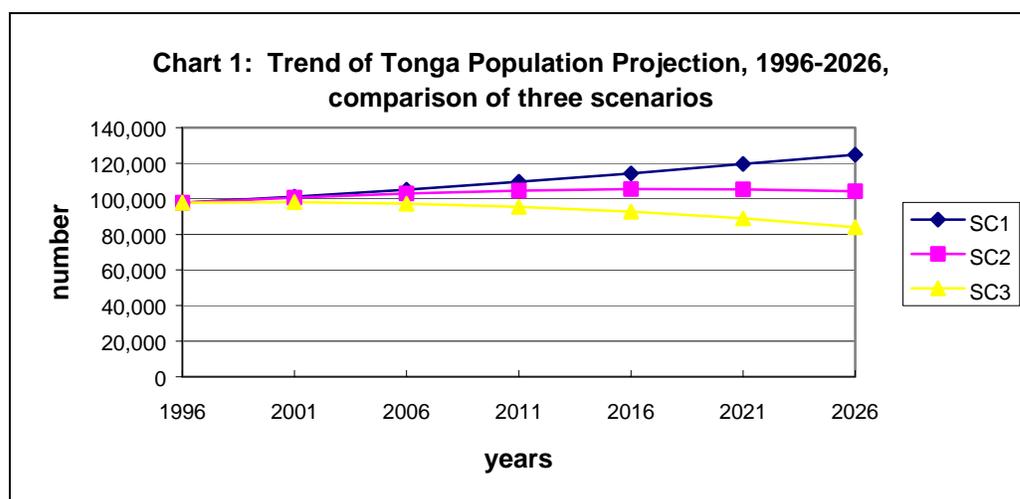
	Fertility (adjusted TFR)		Mortality (Life expectancy)		Migration (net)	
	1996	2026	1996	2026	1996	2026
Scenario1	4.1	4.1	M - 69.8	74.2	-1,500	-1,500
			F - 71.8	77.4		
Scenario2	4.1	2.5	"	"	-1,950	-1,950
Scenario3	4.1	2.5	"	"	-1,500	-1,500

1.6.2 Projection results

The results of population projections under three scenarios for years 1996-2026 are illustrated in Table 5 and Chart 1.

Table 5: Results of Tonga population projections for years 1996-2026

	1996	2001	2006	2011	2016	2021	2026
SC1	97,784	101,242	105,180	109,652	114,492	119,580	124,846
SC2	97,784	100,673	102,907	104,553	105,433	105,373	104,228
SC3	97,784	98,120	97,316	95,565	92,856	89,083	83,970



These projection scenarios highlight three key features:-

- i. the impact of international migration on the size and growth of the population (Scenario1, Scenario3);
- ii. the impact of reduction in fertility on the age-structure of the population (Scenario2 & Scenario3); and
- iii. migration has the most impact on Tonga's Population as shown by the impact of reducing migration (Scenario 1) which produced the largest population total.

Table 6: Comparison of base (1996) and end (2026) years of population projections, Tonga

	Total pop.	percentage			Median age (years)	Annual growth rate (%)
		< 15 years	15 - 64	65+		
Base year 1996	97,784	39.1	55.7	5.2	19.9	0.3
Projection results, 2026						
Scenario 1	124,846	35.1	57.4	7.5	22.7	0.9
Scenario 2	104,228	27.2	63.9	8.9	28.0	0.2
Scenario 3	83,970	26.5	62.8	10.7	28.5	-0.5
<u>Changes compared to 1996</u>						
Scenario 1	+27,062	-4.0	+1.7	+2.3	+2.8	+0.6
Scenario 2	+6,444	-11.9	+8.2	+3.7	+8.1	-0.1
Scenario 3	-13,814	-12.6	+7.1	+5.5	+8.6	-0.8

1.6.3 Summary of results:

- i. The total population will increase in Scenario 1 and Scenario 2 but Scenario 3 will produce a declining population. Total population will range from 83,970 to 124,846 in 2026;
- ii. < 15 years will show decreases in all Scenarios both proportionally and absolutely;
- iii. Working ages 15-64 will increase in all Scenarios;
- iv. The elderly population (65+) will increase in all Scenarios.

Scenario1

If fertility remains constant at 4.1 and net migration decreases to -1,500 in the next 30 years, the total population in the year 2026 will be about 124 thousand persons. The population growth will be 0.9% which is the highest of the three Scenarios. At this rate of growth Tonga's population will double in 100 year's time. The proportion of the dependent population (ages < 15 and > 64) is the highest of the three Scenarios (see Table 6).

Scenario2

If fertility declines from 4.1 in 1996 to 2.5 in 2026 and net migration remained at -1,950 throughout the 30 year period, the total population will be around 104,000 and the growth rate will be 0.2%.

Scenario3

This scenario will show the impact of declining migration and fertility on Tonga's population in the future. Based on the assumption of fertility declining to 2.5 and net migration to -1,500, the projected population in 2026 will be about 84,000 representing an average annual growth rate of -0.5%.

1.6.4. Projected Population by Age and Sex

Appendix 1 gives population projections in single years by age group and sex for years 1997 to 2026. Projection assumptions in Scenario3 above have been used to produce these population projections.

1.6.5 Projected Population by Division and Sex

Appendix 2 gives population projections in single years by division and sex for years 1997 to 2026. These projections were derived using the 1996 Census population distribution by division and the projected totals in Appendix 1. Although these population projections by division are crude, it is hoped they will help regional planners gain some insight into the future population distribution of the country by division.

In order to obtain a more realistic projection of the population by division, information on fertility, mortality and migration has to be available for each division.

The population projections given in Appendix 1 and 2 will be revised using results of the next Census in year 2006.

APPENDIX 1: PROJECTED POPULATION BY AGE AND SEX, 1997-2026 (Numbers)

COUNTRY: TONGA

AGE GROUP	1997			1998			1999			2000			2001		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
0-4	7,023	6,649	13,673	6,969	6,656	13,625	6,835	6,529	13,365	6,647	6,309	12,958	6,441	6,059	12,500
5-9	6,515	5,678	12,192	6,524	5,720	12,243	6,565	5,842	12,407	6,609	5,989	12,598	6,610	6,077	12,687
10-14	6,505	5,991	12,496	6,480	5,877	12,357	6,415	5,714	12,129	6,344	5,563	11,908	6,303	5,486	11,789
15-19	5,721	5,386	11,107	5,864	5,519	11,384	6,020	5,665	11,685	6,160	5,778	11,939	6,264	5,829	12,093
20-24	4,434	4,272	8,706	4,498	4,324	8,822	4,630	4,426	9,056	4,803	4,562	9,365	4,992	4,721	9,713
25-29	3,915	3,743	7,659	3,802	3,655	7,457	3,664	3,553	7,217	3,558	3,483	7,041	3,529	3,470	6,999
30-34	3,108	2,986	6,094	3,198	3,059	6,257	3,263	3,111	6,373	3,282	3,123	6,405	3,247	3,091	6,338
35-39	2,326	2,482	4,807	2,412	2,516	4,928	2,495	2,547	5,042	2,568	2,574	5,142	2,628	2,598	5,226
40-44	1,975	2,220	4,194	2,007	2,248	4,255	2,037	2,275	4,312	2,074	2,303	4,378	2,121	2,330	4,451
45-49	1,640	1,922	3,562	1,692	1,962	3,655	1,755	2,008	3,763	1,817	2,050	3,866	1,868	2,087	3,955
50-54	1,538	1,765	3,303	1,526	1,766	3,293	1,518	1,769	3,287	1,520	1,780	3,300	1,536	1,802	3,338
55-59	1,500	1,530	3,030	1,496	1,558	3,054	1,491	1,585	3,076	1,486	1,610	3,096	1,481	1,628	3,109
60-64	1,314	1,286	2,600	1,338	1,301	2,638	1,360	1,318	2,677	1,377	1,338	2,715	1,392	1,363	2,755
65-69	1,022	1,000	2,021	1,051	1,025	2,076	1,082	1,050	2,132	1,114	1,074	2,188	1,146	1,097	2,243
70-74	713	698	1,412	737	720	1,457	763	744	1,507	793	771	1,564	826	800	1,626
75+	789	945	1,735	813	950	1,763	837	954	1,792	862	958	1,821	888	962	1,851
All ages	50,037	48,553	98,591	50,406	48,856	99,264	50,731	49,088	99,821	51,017	49,264	100,283	51,272	49,400	100,673
<i>Median age</i>	<i>19.3</i>	<i>20.7</i>	<i>19.9</i>	<i>19.5</i>	<i>20.8</i>	<i>20.0</i>	<i>19.6</i>	<i>20.9</i>	<i>20.2</i>	<i>19.8</i>	<i>21.1</i>	<i>20.4</i>	<i>20.0</i>	<i>21.3</i>	<i>20.7</i>
SUMMARY															
Under 15	20,042	18,318	38,361	19,972	18,253	38,226	19,815	18,085	37,901	19,600	17,862	37,463	19,354	17,622	36,976
15-49	23,119	23,011	46,130	23,473	23,284	46,758	23,864	23,584	47,448	24,263	23,873	48,136	24,649	24,126	48,775
50-59	3,038	3,295	6,333	3,022	3,324	6,347	3,009	3,354	6,363	3,006	3,390	6,396	3,017	3,430	6,447
60+	3,838	3,929	7,768	3,939	3,995	7,935	4,042	4,065	8,108	4,147	4,140	8,288	4,252	4,222	8,475

Note: Totals may not be tally due to rounding of decimal places to whole numbers

APPENDIX 1: PROJECTED POPULATION BY AGE AND SEX, 1997-2026 (Numbers)

COUNTRY: TONGA

AGE GROUP	2002			2003			2004			2005			2006		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
0-4	6,295	5,884	12,179	6,201	5,778	11,980	6,157	5,740	11,898	6,154	5,760	11,913	6,167	5,805	11,972
5-9	6,577	6,109	12,686	6,495	6,067	12,562	6,366	5,951	12,317	6,212	5,792	12,004	6,068	5,646	11,714
10-14	6,303	5,493	11,795	6,338	5,578	11,915	6,383	5,706	12,089	6,405	5,812	12,217	6,375	5,845	12,220
15-19	6,241	5,740	11,980	6,183	5,588	11,771	6,118	5,422	11,540	6,081	5,307	11,388	6,089	5,280	11,369
20-24	5,111	4,831	9,942	5,252	4,967	10,219	5,404	5,108	10,512	5,542	5,213	10,755	5,647	5,263	10,910
25-29	3,564	3,494	7,057	3,652	3,557	7,209	3,779	3,658	7,436	3,922	3,781	7,704	4,075	3,916	7,991
30-34	3,207	3,077	6,284	3,102	3,011	6,112	2,967	2,911	5,878	2,858	2,822	5,680	2,811	2,778	5,589
35-39	2,723	2,659	5,382	2,814	2,724	5,538	2,882	2,781	5,664	2,903	2,807	5,710	2,865	2,784	5,649
40-44	2,186	2,355	4,541	2,261	2,381	4,642	2,343	2,411	4,754	2,426	2,446	4,873	2,500	2,486	4,986
45-49	1,908	2,121	4,029	1,938	2,151	4,089	1,967	2,177	4,143	2,002	2,201	4,203	2,053	2,227	4,280
50-54	1,572	1,825	3,397	1,627	1,861	3,488	1,689	1,906	3,595	1,748	1,952	3,700	1,796	1,994	3,790
55-59	1,467	1,638	3,105	1,454	1,642	3,096	1,447	1,644	3,091	1,454	1,651	3,105	1,476	1,671	3,147
60-64	1,393	1,382	2,775	1,390	1,406	2,797	1,387	1,434	2,822	1,384	1,462	2,846	1,381	1,483	2,864
65-69	1,167	1,109	2,277	1,193	1,122	2,315	1,215	1,137	2,352	1,232	1,157	2,389	1,246	1,184	2,430
70-74	840	828	1,668	859	854	1,713	885	876	1,761	918	894	1,813	957	908	1,865
75+	919	984	1,904	952	1,006	1,958	985	1,029	2,014	1,019	1,052	2,071	1,055	1,076	2,131
All ages	51,473	49,528	101,002	51,710	49,694	101,405	51,975	49,890	101,866	52,261	50,109	102,371	52,561	50,346	102,907
<i>Median age</i>	<i>20.3</i>	<i>21.6</i>	<i>20.9</i>	<i>20.6</i>	<i>21.8</i>	<i>21.2</i>	<i>20.9</i>	<i>22.1</i>	<i>21.5</i>	<i>21.2</i>	<i>22.3</i>	<i>21.7</i>	<i>21.4</i>	<i>22.5</i>	<i>21.9</i>
SUMMARY															
Under 15	19,175	17,486	36,661	19,034	17,423	36,457	18,907	17,397	36,304	18,771	17,363	36,134	18,610	17,296	35,906
15-49	24,939	24,276	49,216	25,201	24,380	49,581	25,460	24,467	49,927	25,735	24,578	50,313	26,040	24,734	50,774
50-59	3,039	3,463	6,502	3,081	3,503	6,584	3,136	3,550	6,686	3,202	3,603	6,805	3,272	3,665	6,937
60+	4,320	4,303	8,624	4,394	4,388	8,783	4,472	4,476	8,949	4,554	4,565	9,119	4,639	4,651	9,290

Note: Totals may not be tally due to rounding of decimal places to whole numbers

APPENDIX 1: PROJECTED POPULATION BY AGE AND SEX, 1997-2026 (Numbers)

COUNTRY: TONGA

AGE GROUP	2007			2008			2009			2010			2011		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
0-4	6,182	5,823	12,005	6,164	5,806	11,970	6,114	5,754	11,868	6,037	5,675	11,713	5,950	5,585	11,535
5-9	5,977	5,567	11,544	5,910	5,508	11,419	5,870	5,472	11,343	5,843	5,445	11,288	5,801	5,399	11,200
10-14	6,309	5,826	12,134	6,212	5,756	11,968	6,085	5,644	11,729	5,952	5,520	11,472	5,838	5,420	11,258
15-19	6,047	5,253	11,300	6,060	5,323	11,383	6,107	5,452	11,559	6,150	5,575	11,725	6,160	5,641	11,801
20-24	5,632	5,186	10,818	5,573	5,040	10,612	5,503	4,871	10,374	5,463	4,750	10,212	5,473	4,722	10,195
25-29	4,241	4,055	8,296	4,406	4,204	8,609	4,551	4,342	8,893	4,661	4,435	9,095	4,727	4,462	9,189
30-34	2,859	2,834	5,693	2,955	2,919	5,874	3,083	3,020	6,104	3,222	3,124	6,346	3,356	3,227	6,583
35-39	2,820	2,752	5,572	2,718	2,680	5,397	2,590	2,587	5,176	2,483	2,511	4,994	2,430	2,478	4,908
40-44	2,580	2,533	5,113	2,661	2,590	5,250	2,728	2,647	5,375	2,760	2,681	5,441	2,738	2,674	5,412
45-49	2,113	2,256	4,369	2,186	2,285	4,471	2,267	2,314	4,582	2,350	2,347	4,697	2,429	2,386	4,815
50-54	1,836	2,021	3,857	1,867	2,047	3,914	1,894	2,073	3,967	1,929	2,102	4,031	1,978	2,134	4,112
55-59	1,507	1,698	3,205	1,556	1,737	3,294	1,616	1,782	3,398	1,675	1,823	3,498	1,725	1,860	3,585
60-64	1,367	1,489	2,856	1,355	1,489	2,844	1,349	1,491	2,840	1,357	1,504	2,861	1,380	1,529	2,909
65-69	1,244	1,209	2,453	1,243	1,239	2,482	1,243	1,266	2,509	1,240	1,287	2,527	1,238	1,302	2,540
70-74	967	909	1,877	981	915	1,896	998	930	1,929	1,019	956	1,975	1,042	992	2,034
75+	1,090	1,105	2,196	1,127	1,136	2,263	1,165	1,168	2,332	1,204	1,200	2,404	1,244	1,233	2,477
All ages	52,771	50,518	103,289	52,972	50,673	103,647	53,164	50,813	103,978	53,343	50,937	104,280	53,509	51,044	104,553
<i>Median age</i>	<i>21.7</i>	<i>22.7</i>	<i>22.2</i>	<i>21.9</i>	<i>22.9</i>	<i>22.4</i>	<i>22.2</i>	<i>23.2</i>	<i>22.6</i>	<i>22.5</i>	<i>23.4</i>	<i>22.9</i>	<i>22.7</i>	<i>23.7</i>	<i>23.2</i>
SUMMARY															
Under 15	18,468	17,216	35,684	18,286	17,071	35,357	18,069	16,870	34,939	17,832	16,641	34,473	17,589	16,404	33,993
15-49	26,292	24,870	51,162	26,557	25,040	51,597	26,830	25,233	52,064	27,088	25,423	52,511	27,313	25,590	52,903
50-59	3,343	3,719	7,063	3,424	3,784	7,208	3,510	3,854	7,365	3,603	3,926	7,529	3,703	3,994	7,697
60+	4,668	4,712	9,381	4,705	4,779	9,485	4,754	4,855	9,610	4,820	4,947	9,767	4,904	5,056	9,960

Note: Totals may not be tally due to rounding of decimal places to whole numbers

APPENDIX 1: PROJECTED POPULATION BY AGE AND SEX, 1997-2026 (Numbers)

COUNTRY: TONGA

AGE GROUP	2012			2013			2014			2015			2016		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
0-4	5,907	5,548	11,455	5,853	5,497	11,350	5,792	5,434	11,225	5,725	5,365	11,090	5,658	5,295	10,953
5-9	5,769	5,367	11,135	5,733	5,331	11,063	5,692	5,290	10,982	5,645	5,240	10,885	5,588	5,180	10,768
10-14	5,755	5,346	11,102	5,703	5,298	11,001	5,662	5,260	10,922	5,621	5,219	10,840	5,573	5,169	10,742
15-19	6,054	5,582	11,636	5,927	5,484	11,410	5,798	5,369	11,167	5,695	5,275	10,970	5,626	5,214	10,840
20-24	5,440	4,704	10,144	5,452	4,776	10,228	5,498	4,901	10,399	5,540	5,016	10,556	5,553	5,080	10,633
25-29	4,759	4,415	9,174	4,727	4,279	9,006	4,654	4,105	8,759	4,587	3,970	8,557	4,561	3,920	8,481
30-34	3,532	3,395	6,927	3,702	3,563	7,266	3,852	3,704	7,555	3,955	3,778	7,733	4,005	3,772	7,777
35-39	2,476	2,516	4,992	2,574	2,592	5,166	2,705	2,696	5,400	2,844	2,810	5,654	2,973	2,921	5,894
40-44	2,677	2,628	5,305	2,566	2,547	5,113	2,441	2,455	4,896	2,347	2,390	4,737	2,311	2,372	4,683
45-49	2,503	2,435	4,937	2,580	2,495	5,075	2,645	2,551	5,196	2,678	2,579	5,258	2,664	2,569	5,233
50-54	2,040	2,159	4,199	2,111	2,184	4,294	2,189	2,214	4,403	2,266	2,250	4,516	2,340	2,295	4,635
55-59	1,758	1,892	3,650	1,785	1,923	3,707	1,811	1,949	3,760	1,848	1,977	3,825	1,900	2,006	3,906
60-64	1,410	1,555	2,965	1,458	1,591	3,050	1,513	1,636	3,149	1,566	1,679	3,245	1,613	1,720	3,333
65-69	1,217	1,302	2,519	1,198	1,300	2,498	1,193	1,305	2,498	1,207	1,323	2,531	1,240	1,355	2,595
70-74	1,057	1,030	2,087	1,067	1,065	2,132	1,068	1,090	2,158	1,059	1,104	2,163	1,040	1,106	2,146
75+	1,277	1,265	2,541	1,310	1,297	2,607	1,344	1,330	2,674	1,379	1,364	2,743	1,416	1,399	2,814
All ages	53,629	51,139	104,768	53,745	51,220	104,966	53,857	51,288	105,145	53,963	51,339	105,302	54,061	51,373	105,433
<i>Median age</i>	<i>23.1</i>	<i>24.0</i>	<i>23.5</i>	<i>23.4</i>	<i>24.2</i>	<i>23.7</i>	<i>23.6</i>	<i>24.4</i>	<i>24.0</i>	<i>23.9</i>	<i>24.6</i>	<i>24.2</i>	<i>24.1</i>	<i>24.8</i>	<i>24.4</i>
SUMMARY															
Under 15	17,431	16,261	33,692	17,288	16,125	33,414	17,146	15,984	33,130	16,991	15,824	32,815	16,819	15,644	32,463
15-49	27,440	25,675	53,115	27,529	25,735	53,264	27,593	25,780	53,373	27,647	25,818	53,464	27,693	25,848	53,541
50-59	3,798	4,051	7,849	3,895	4,107	8,002	4,000	4,163	8,162	4,114	4,227	8,341	4,240	4,301	8,541
60+	4,961	5,152	10,113	5,033	5,253	10,287	5,119	5,361	10,480	5,211	5,470	10,682	5,309	5,580	10,888

Note: Totals may not be tally due to rounding of decimal places to whole numbers

APPENDIX 1: PROJECTED POPULATION BY AGE AND SEX, 1997-2026 (Numbers)

COUNTRY: TONGA

AGE GROUP	2017			2018			2019			2020			2021		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
0-4	5,594	5,238	10,831	5,518	5,169	10,687	5,435	5,091	10,526	5,348	5,008	10,356	5,260	4,923	10,183
5-9	5,547	5,142	10,689	5,499	5,094	10,593	5,442	5,037	10,478	5,375	4,970	10,345	5,297	4,892	10,189
10-14	5,532	5,126	10,658	5,499	5,091	10,590	5,461	5,053	10,515	5,415	5,007	10,422	5,361	4,953	10,314
15-19	5,502	5,103	10,606	5,423	5,030	10,453	5,383	4,992	10,375	5,369	4,974	10,343	5,364	4,962	10,326
20-24	5,449	5,032	10,482	5,318	4,938	10,256	5,185	4,821	10,006	5,080	4,721	9,801	5,016	4,661	9,677
25-29	4,573	3,933	8,506	4,609	4,017	8,626	4,648	4,140	8,788	4,658	4,238	8,896	4,630	4,279	8,909
30-34	4,050	3,753	7,803	4,024	3,638	7,662	3,953	3,467	7,420	3,881	3,317	7,197	3,835	3,237	7,072
35-39	3,143	3,071	6,214	3,314	3,232	6,546	3,465	3,376	6,841	3,570	3,463	7,033	3,618	3,467	7,085
40-44	2,339	2,394	4,733	2,425	2,462	4,887	2,555	2,566	5,121	2,703	2,689	5,392	2,845	2,815	5,660
45-49	2,598	2,530	5,128	2,488	2,453	4,940	2,363	2,362	4,725	2,272	2,295	4,567	2,242	2,276	4,518
50-54	2,416	2,338	4,753	2,493	2,392	4,886	2,558	2,447	5,004	2,587	2,479	5,065	2,571	2,477	5,048
55-59	1,954	2,032	3,986	2,022	2,058	4,080	2,097	2,088	4,186	2,175	2,123	4,298	2,251	2,165	4,416
60-64	1,643	1,746	3,390	1,667	1,771	3,439	1,694	1,796	3,489	1,732	1,824	3,556	1,783	1,854	3,637
65-69	1,276	1,387	2,663	1,325	1,426	2,751	1,375	1,466	2,841	1,419	1,502	2,921	1,457	1,537	2,994
70-74	1,009	1,101	2,111	986	1,100	2,087	983	1,108	2,092	1,004	1,128	2,133	1,050	1,163	2,213
75+	1,437	1,438	2,875	1,458	1,479	2,937	1,480	1,521	3,001	1,502	1,564	3,066	1,524	1,608	3,132
All ages	54,062	51,365	105,428	54,067	51,350	105,419	54,076	51,329	105,406	54,088	51,302	105,391	54,104	51,269	105,373
<i>Median age</i>	<i>24.5</i>	<i>25.1</i>	<i>24.7</i>	<i>24.8</i>	<i>25.4</i>	<i>25.1</i>	<i>25.1</i>	<i>25.8</i>	<i>25.5</i>	<i>25.5</i>	<i>26.1</i>	<i>25.8</i>	<i>25.8</i>	<i>26.5</i>	<i>26.1</i>
SUMMARY															
Under 15	16,673	15,506	32,178	16,515	15,354	31,869	16,338	15,181	31,519	16,138	14,985	31,123	15,918	14,768	30,686
15-49	27,655	25,817	53,472	27,600	25,770	53,370	27,551	25,723	53,275	27,532	25,696	53,229	27,550	25,697	53,247
50-59	4,370	4,370	8,740	4,515	4,451	8,966	4,655	4,535	9,190	4,762	4,602	9,364	4,822	4,642	9,464
60+	5,364	5,673	11,038	5,437	5,776	11,213	5,532	5,890	11,423	5,656	6,019	11,675	5,814	6,162	11,976

Note: Totals may not be tally due to rounding of decimal places to whole numbers

APPENDIX 1: PROJECTED POPULATION BY AGE AND SEX, 1997-2026 (Numbers)

COUNTRY: TONGA

AGE GROUP	2022			2023			2024			2025			2026		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
0-4	5,178	4,848	10,026	5,080	4,757	9,838	4,972	4,653	9,625	4,857	4,543	9,401	4,742	4,433	9,175
5-9	5,233	4,835	10,068	5,164	4,772	9,935	5,087	4,702	9,789	5,002	4,619	9,622	4,904	4,523	9,427
10-14	5,311	4,903	10,215	5,265	4,855	10,120	5,209	4,800	10,009	5,144	4,735	9,879	5,070	4,664	9,734
15-19	5,281	4,883	10,164	5,220	4,825	10,045	5,182	4,789	9,971	5,162	4,768	9,930	5,150	4,753	9,903
20-24	4,898	4,558	9,457	4,817	4,486	9,303	4,773	4,443	9,217	4,757	4,420	9,176	4,755	4,408	9,163
25-29	4,575	4,263	8,838	4,471	4,180	8,652	4,335	4,061	8,396	4,203	3,945	8,148	4,103	3,862	7,965
30-34	3,861	3,279	7,140	3,904	3,382	7,286	3,946	3,503	7,449	3,952	3,584	7,536	3,909	3,595	7,504
35-39	3,658	3,428	7,086	3,633	3,308	6,941	3,569	3,144	6,713	3,499	3,008	6,507	3,452	2,934	6,386
40-44	2,997	2,950	5,947	3,158	3,099	6,256	3,309	3,241	6,550	3,426	3,336	6,762	3,489	3,356	6,845
45-49	2,267	2,304	4,571	2,351	2,374	4,725	2,480	2,475	4,955	2,626	2,592	5,218	2,774	2,716	5,490
50-54	2,512	2,432	4,944	2,407	2,354	4,762	2,286	2,266	4,552	2,196	2,205	4,402	2,167	2,193	4,360
55-59	2,319	2,210	4,529	2,393	2,267	4,660	2,458	2,320	4,778	2,491	2,351	4,842	2,481	2,347	4,828
60-64	1,836	1,881	3,717	1,902	1,908	3,810	1,974	1,939	3,913	2,048	1,975	4,024	2,122	2,021	4,143
65-69	1,474	1,563	3,037	1,491	1,589	3,080	1,518	1,617	3,135	1,561	1,648	3,209	1,620	1,680	3,300
70-74	1,102	1,198	2,300	1,152	1,235	2,387	1,195	1,271	2,466	1,226	1,307	2,533	1,247	1,341	2,588
75+	1,541	1,646	3,187	1,559	1,684	3,243	1,576	1,723	3,300	1,594	1,763	3,358	1,613	1,804	3,417
All ages	54,045	51,182	105,227	53,967	51,075	105,043	53,868	50,948	104,817	53,746	50,800	104,546	53,598	50,630	104,228
<i>Median age</i>	<i>26.2</i>	<i>26.8</i>	<i>26.5</i>	<i>26.6</i>	<i>27.2</i>	<i>26.9</i>	<i>27.0</i>	<i>27.6</i>	<i>27.3</i>	<i>27.3</i>	<i>27.9</i>	<i>27.6</i>	<i>27.7</i>	<i>28.3</i>	<i>28.0</i>
SUMMARY															
Under 15	15,722	14,587	30,309	15,508	14,384	29,892	15,269	14,154	29,423	15,003	13,898	28,901	14,716	13,620	28,336
15-49	27,538	25,665	53,203	27,555	25,654	53,209	27,593	25,657	53,250	27,625	25,652	53,278	27,632	25,624	53,256
50-59	4,831	4,642	9,474	4,800	4,621	9,421	4,744	4,587	9,331	4,687	4,557	9,244	4,648	4,540	9,188
60+	5,954	6,288	12,242	6,104	6,416	12,521	6,263	6,551	12,814	6,430	6,693	13,124	6,602	6,846	13,448

Note: Totals may not be tally due to rounding of decimal places to whole numbers

APPENDIX 2: TONGA PROJECTED POPULATION BY DIVISION AND SEX, 1997-2026 (Numbers)

DIVISION	1997			1998			1999			2000			2001			2002		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
Tongatapu	34,040	33,491	67,532	34,291	33,700	67,993	34,512	33,860	68,374	34,707	33,981	68,691	34,880	34,075	68,958	35,017	34,163	69,183
Vava'u	8,124	7,721	15,845	8,183	7,769	15,953	8,236	7,806	16,042	8,283	7,834	16,117	8,324	7,856	16,179	8,357	7,876	16,232
Ha'apai	4,144	4,061	8,205	4,175	4,086	8,261	4,201	4,106	8,308	4,225	4,121	8,346	4,246	4,132	8,378	4,263	4,143	8,406
'Eua	2,646	2,328	4,975	2,666	2,343	5,009	2,683	2,354	5,037	2,698	2,363	5,060	2,712	2,369	5,080	2,722	2,375	5,096
Niuas	1,083	952	2,035	1,091	957	2,049	1,098	962	2,060	1,104	965	2,070	1,110	968	2,078	1,114	971	2,084
TOTAL	50,037	48,553	98,591	50,406	48,856	99,264	50,731	49,088	99,821	51,017	49,264	100,283	51,272	49,400	100,673	51,473	49,528	101,002
DIVISION	2003			2004			2005			2006			2007			2008		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
Tongatapu	35,178	34,278	69,459	35,359	34,413	69,775	35,553	34,564	70,121	35,757	34,728	70,488	35,900	34,846	70,750	36,037	34,953	70,995
Vava'u	8,395	7,903	16,297	8,438	7,934	16,371	8,485	7,969	16,452	8,533	8,006	16,538	8,567	8,033	16,600	8,600	8,058	16,657
Ha'apai	4,283	4,157	8,439	4,304	4,173	8,478	4,328	4,191	8,520	4,353	4,211	8,564	4,370	4,225	8,596	4,387	4,238	8,626
'Eua	2,735	2,383	5,117	2,749	2,393	5,140	2,764	2,403	5,165	2,780	2,414	5,192	2,791	2,423	5,212	2,802	2,430	5,230
Niuas	1,119	974	2,093	1,125	978	2,102	1,131	982	2,113	1,138	987	2,124	1,142	990	2,132	1,147	993	2,139
TOTAL	51,710	49,694	101,405	51,975	49,890	101,866	52,261	50,109	102,371	52,561	50,346	102,907	52,771	50,518	103,289	52,972	50,673	103,647
DIVISION	2009			2010			2011			2012			2013			2014		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
Tongatapu	36,167	35,050	71,222	36,289	35,135	71,429	36,402	35,209	71,616	36,484	35,275	71,763	36,563	35,331	71,898	36,639	35,377	72,021
Vava'u	8,631	8,080	16,710	8,660	8,100	16,759	8,687	8,117	16,803	8,707	8,132	16,837	8,726	8,145	16,869	8,744	8,156	16,898
Ha'apai	4,403	4,250	8,653	4,418	4,261	8,679	4,431	4,269	8,701	4,441	4,277	8,719	4,451	4,284	8,736	4,460	4,290	8,751
'Eua	2,812	2,437	5,247	2,821	2,443	5,262	2,830	2,448	5,276	2,836	2,452	5,286	2,842	2,456	5,296	2,848	2,460	5,305
Niuas	1,151	996	2,146	1,155	998	2,152	1,158	1,000	2,158	1,161	1,002	2,162	1,163	1,004	2,166	1,166	1,005	2,170
TOTAL	53,164	50,813	103,978	53,343	50,937	104,280	53,509	51,044	104,553	53,629	51,139	104,768	53,745	51,220	104,966	53,857	51,288	105,145
DIVISION	2015			2016			2017			2018			2019			2020		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
Tongatapu	36,711	35,413	72,129	36,778	35,436	72,218	36,778	35,431	72,215	36,782	35,420	72,209	36,788	35,406	72,200	36,796	35,387	72,190
Vava'u	8,761	8,164	16,923	8,777	8,170	16,944	8,777	8,168	16,943	8,778	8,166	16,942	8,779	8,163	16,940	8,781	8,158	16,938
Ha'apai	4,469	4,294	8,764	4,477	4,297	8,775	4,477	4,296	8,774	4,478	4,295	8,773	4,478	4,293	8,772	4,479	4,291	8,771
'Eua	2,854	2,462	5,313	2,859	2,464	5,320	2,859	2,463	5,320	2,859	2,463	5,319	2,860	2,462	5,319	2,861	2,460	5,318
Niuas	1,168	1,006	2,173	1,170	1,007	2,176	1,170	1,007	2,176	1,170	1,006	2,176	1,171	1,006	2,175	1,171	1,005	2,175
TOTAL	53,963	51,339	105,302	54,061	51,373	105,433	54,062	51,365	105,428	54,067	51,350	105,419	54,076	51,329	105,406	54,088	51,302	105,391
DIVISION	2021			2022			2023			2024			2025			2026		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
Tongatapu	36,807	35,364	72,177	36,767	35,304	72,077	36,714	35,230	71,951	36,646	35,143	71,796	36,563	35,041	71,611	36,463	34,924	71,393
Vava'u	8,784	8,153	16,935	8,774	8,139	16,911	8,762	8,122	16,882	8,745	8,102	16,845	8,726	8,078	16,802	8,702	8,051	16,751
Ha'apai	4,481	4,288	8,770	4,476	4,281	8,757	4,469	4,272	8,742	4,461	4,261	8,723	4,451	4,249	8,701	4,439	4,235	8,674
'Eua	2,861	2,459	5,317	2,858	2,454	5,310	2,854	2,449	5,300	2,849	2,443	5,289	2,842	2,436	5,275	2,835	2,428	5,259
Niuas	1,171	1,005	2,175	1,170	1,003	2,172	1,168	1,001	2,168	1,166	998	2,163	1,163	996	2,158	1,160	992	2,151
TOTAL	54,104	51,269	105,373	54,045	51,182	105,227	53,967	51,075	105,043	53,868	50,948	104,817	53,746	50,800	104,546	53,598	50,630	104,228

Note: Totals may not be tally due to rounding of decimal places to whole numbers