

Solomon Islands Government

2009 POPULATION & HOUSING CENSUS

Report on Migration and Urbanisation



Solomon Islands National Statistical Office
Ministry of Finance and Treasury
PO Box G6, Honiara, Solomon Islands
Enquiries: Tel: (677) 27835/22154, Email: STATS - Social@mof.gov.sb















Foreward and acknowledgments

This report on migration and urbanisation provides in-depth analysis of the socio-economic behaviour among the population captured from the 2009 Population and Housing Census of the Solomon Islands.

This report and analysis is one in a series of special census monographs on topics that are of high demand including the report on economic activity and labour force, and a gender analysis report that is forthcoming. This report provides new information and analysis to complement the standard reports on basic tables and descriptions (volume 1), the national analysis report (volume 2), the 10 provincial reports (including Honiara) and the other special topic monographs stated earlier.

The report is a timely initiative of the Solomon Islands National Statistical Office (SINSO) within the Ministry of Finance and Treasury (MOFT) in collaboration with the University of Auckland, New Zealand, and made possible through the support of the United Nations Fund for Population Activities (UNFPA).

The information from this analysis is relevant also for policy and planning purposes, and the monitoring and evaluation of the country's National Development Strategy (NDS) 2011-2020, the Millennium Development Goals (MDGs) and other sector policies and programmes.

The SINSO acknowledges the support provided by Dr. Ward Friesen of Auckland University, New Zealand as the contributing author of this report.

The SINSO is indebted to the Governments of Solomon Islands through the former and current Ministers of Finance and Treasury, Permanent Secretary Shadrach Fanega, staff of the SINSO and to our development partners for the 2009 Census funding and technical assistance: the Australian Government through AusAID, the European Union, United Nations through UNFPA and UNDP and the Republic of China-Taiwan and the Secretariat of the Pacific Community (SPC) for technical assistance and the Solomon Islands Partnership Facility (SIGOV Program) for statistical support. The additional data processing expertise of Dr. Michael Levin of Harvard University, USA is also acknowledged.

For further information and requires, please contact the SINSO on phone: 677 22154 or email: STATS - Social Demographic@mof.gov.sb.

Douglas Kimi

Government Statistician

Table of Contents

1.	Intr	oduc	tion	1
2.	Inte	rnati	onal migration	3
	2.1	For	eign-born people in Solomon Islands	3
	2.2	Inte	ernational movement of Solomon Islanders	4
3.	Inte	rnal	migration	5
	3.1	Intr	oduction	5
	3.2	Life	etime migration	6
	3.2.	1	Interprovincial lifetime migration	6
	3.2.	2	Lifetime migration at ward level	7
	3.3	Rec	ent migration	10
	3.3.	1	Recent interprovincial migration	10
	3.3.	2	Recent migration between wards	10
	3.4	Age	e-sex structure of migration	12
	3.5	Mu	ltiple migration	15
	3.6	Sho	ort-term mobility	15
4.	Urb	anis	ation	17
	4.1	Intr	oduction	17
	4.2	His	torical growth of Honiara and other urban centres	17
	4.3	Rec	ent trends: urban population growth rates 1999-2009	21
	4.4	Urb	oan housing: household size, land and house ownership	22
	4.5	Urb	an household amenities	24
	4.6	Urb	an household livelihoods	26
5.	Cor	nclus	ions	28
D	foron	202		30

List of Figures

Pages
Figure 1: Average annual population change 1999-2009, by ward
Figure 2: Average annual household change 1999-2009, by ward
Figure 3: Lifetime in-migration rate 2009: number of persons born in another ward as a percentage of the total population of the ward of enumeration9
Figure 4: Recent in-migration rate 2009: number of persons resident in another ward five years ago as a percentage of the enumerated population of the ward
Figure 5: Age-sex structure of lifetime and recent non-migrants (same ward at birth, and five years ago)
Figure 6: Age-sex structure of within province lifetime migrants (same province, different ward at birth) and recent within province
Figure 7: Age-sex structure of lifetime and recent interprovincial migrants (different province at birth, or five years ago)
Figure 8: Multiple migration rates as % of all enumerated in a ward (birthplace, residence five years ago, and place of enumeration
Figure 9: Short-term mobility: percentage of all enumerated in a ward whose usual ward of residence is a different ward
Figure 10: Solomon Islands urban centres
Figure 11: Growth of Honiara and other urban areas 1959-200920
Figure 12: Sex ratio in Honiara, other urban centres and Solomon Islands 1959-200920

List of Tables

Pages
Table 1 Overseas-born in Solomon Islands 2009, by country of birth4
Table 2 Overseas places of residence five years before 2009 Census of Solomon Islands citizens
Table 3 Interprovincial lifetime migration 1999 and 2009
Table 4 Interprovincial lifetime migration rates 1986, 1999, 20099
Table 5 Recent interprovincial migration 1999 and 2009
Table 6 Population change of urban centres 1999 to 200922
Table 7 Urban housing: average household size, land and house ownership23
Table 8 Household amenities: piped drinking water, grid electricity, flush toilet, government waste collection
Table 9 Household livelihoods: main sources of income and involvement in subsistence food
production and fishing27

1. Introduction

Migration is an important phenomenon that influences development process in countries worldwide. For Solomon Islands, internal migration has been much more significant than international migration in terms of the numbers of migrants involved. Migration serves a number of development purposes, including facilitating education, providing a labour force where it is needed, encouraging business development, and enabling political participation. Beyond these, there are many other, often personal, reasons for migration such as visiting relatives and friends, movement for marriage, and church-related activities.

Earlier studies have shown that Solomon Islanders participate in a great deal of mobility and that the nature of their mobility is complex. Movement durations range from daily and other short-term movements to longer term movement and potentially to permanent migration. Motives include subsistence production, marketing, seeking wage employment, facilitating church activities, and many others (Chapman 1976). In some cases, social and cultural motives for moving, for example to Honiara in order to stay with wantoks, may be at least as important as economic motives (Frazer 1981). Households and families may have strategies to diversify their livelihoods, such as keeping some members in the village, while other members pursue education and yet others work in an urban centre and send remittances home (Friesen 1986). However, recent studies with detailed analyses of migration are scarce; the Census data analysed in this report is the primary source of information on population, including migration and urbanisation.

While variations in fertility and mortality rates through Solomon Islands result in different rates of natural increase in different parts of the country, the most important variation relates to migration, and more specifically the process of urbanisation. Figure 1 shows that Honiara and the surrounding wards of Guadalcanal exhibit the highest population growth rates in Solomon Islands, reflecting the influence of urbanisation on population growth, as elaborated later in this report. This is despite the fact that Honiara has the lowest Total Fertility Rates (TFR) in the country (see Main Census Report). Some of the rapid growth shown elsewhere in Figure 1 can be attributed to high fertility rates, such as in parts of Makira-Ulawa and Choiseul, which are provinces with high TFRs. To a considerable extent Figure 2, showing the average annual rate of change in the number of households between 1999 and 2009, shows similar patterns to Figure 1. One notable difference is that, in general, the growth in the number of households in Honiara was slower than population growth, reflecting the fact that average household size there has increased more than the national average as a result of the pressures of rapid growth.

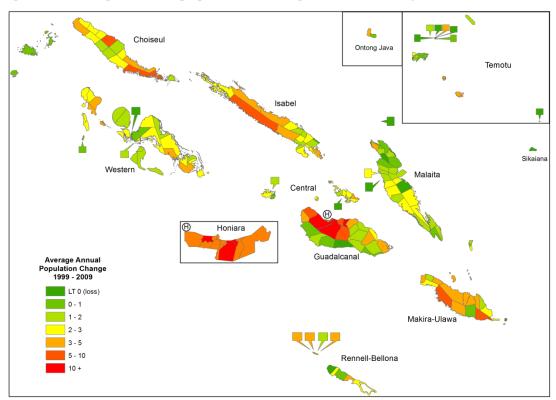
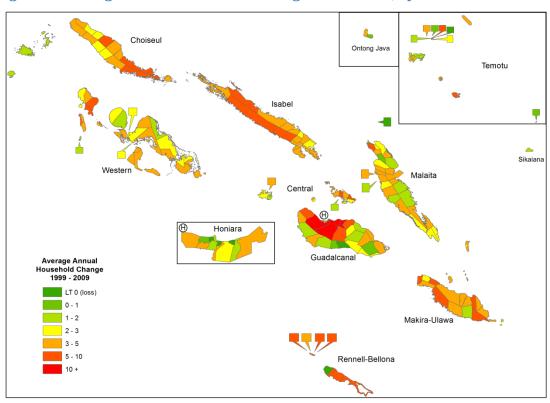


Figure 1 Average annual population change 1999-2009, by ward

Note: see map key at the end of this report





2. International migration

The scale of international migration into and out of Solomon Islands is relatively small in comparison to some other Pacific nations, especially those in Polynesia and Micronesia. One reason is that Solomon Islanders do not have the degree of residential access to ex-colonial countries that some other Pacific countries have, so long-term out-migration of Solomon Islanders is relatively minor.

2.1 Foreign-born people in Solomon Islands

During the twentieth century, there were some notable population movements into Solomon Islands. During the colonial period, there were ongoing, though relatively small, movements of expatriates into the Solomons. Most came from countries with colonial connections, such as the United Kingdom, Australia and New Zealand, and many served in the colonial administration and in churches, or in some cases operated businesses. In more recent times, people from these and other countries have typically worked in diplomatic corps, development agencies and, during the RAMSI period, in the armed forces. Another significant movement is of business entrepreneurs from Asia, especially Chinese, both during earlier periods, resulting in a population of locally-born Chinese, and more recently.

An important international movement from the Gilbert Islands (now Kiribati), has had an important impact on the ethnic composition of Solomon Islands. This occurred mainly in the 1950s and 1960s when the British administration initiated population relocation to reduce population pressures in the Gilbert Islands. Currently, many Gilbertese (I-Kiribati) are born in the Solomons and can be identified in the ethnicity data collected in the Census as comprising most of those who identified as 'Micronesian'.

Table 1 shows the countries of origin of those who were born overseas and enumerated in the 2009 Census. Papua New Guinea (PNG) accounts for about one-quarter of all overseas born and appears to comprise a mixture of people, including those who were born in PNG and then moved across the border to the adjacent provinces of Solomon Islands, workers from PNG, and those who have married Solomon Islanders. Those from Fiji and Vanuatu have also participated in employment and in some cases inter-married. 'Other Pacific' comprises those from many countries, including some of the older members of the 'Gilbertese' (I-Kiribati) community in Solomon Islands. Those born in Asia comprise just under one-quarter of all overseas born; these include many in business enterprises as well as diplomatic and development aid workers. The age-sex structure of those from Australia, New Zealand, Europe and North America suggests that they are mainly those working in diplomacy, international development and business, as well as members of RAMSI in the case of Australia and New Zealand.

Table 1: Overseas-born in Solomon Islands 2009, by country of birth

Country of birth	Number of people	% of overseas born
Papua New Guinea	612	21.9
Fiji	112	4.0
Vanuatu	72	2.6
Other Pacific	325	11.6
Australia	302	10.8
New Zealand	81	2.9
Hong Kong	71	2.5
Japan	32	1.1
Other Asia	576	20.6
United Kingdom	43	1.5
Europe (n.i. UK)	41	1.5
United States of America	32	1.1
Canada	18	0.6
Other Country	480	17.2
Total	2,797	100.0

2.2 International movement of Solomon Islanders

There is no information about the out-migration of Solomon Islanders in the 2009 Census since they were not present in the country to be enumerated. Censuses in other countries can give some idea of the scale of their international movement, but these data are not available for most countries. The 2011 Australian Census revealed 1,758 residents who were born in Solomon Islands, of whom 697 were of Solomon Islands ancestry (Australian Bureau of Statistics, 2011 Census, Table Builder). The most recent published census in New Zealand in 2006 showed 549 Solomon Islanders present on census night (Statistics New Zealand, 2006 Census, NZ.Stat). As illustrated by the Australian case, these data do not only apply to Solomon Islanders, however, since they may also include the children of expatriates who were born in Solomon Islands.

One measure of the return migration of Solomon Islanders can be derived from the Census question "Where was the person's residence five years ago" asked of all people aged five years and over. Of all people enumerated, 1,750 were born overseas, including both expatriates and Solomon Islanders. Table 2 shows that more than 1,000 Solomon Islands citizens had been overseas in 2004, and about one-half of these were in other Melanesian countries (Papua New Guinea, Fiji and Vanuatu). Education is one of the main explanations for the overseas movements of Solomon Islanders, as suggested by the age structure of those who had returned in the five year period leading up to the Census: about one-half of these were aged 25 to 39, suggesting that these are post-tertiary movements. This is especially the case for Papua New Guinea and Fiji, but also other countries, particularly Australia.

Table 2: Overseas places of residence five years before 2009 Census of Solomon Islands citizens

Diago of wasida ass	Solomon Islands Citizens overseas 5 years ago								
Place of residence 5 years ago	Citizens by birth	Citizens by natural- isation	All citizens	% of total overseas					
Papua New Guinea	236	33	269	25.7					
Fiji	201	11	212	20.2					
Vanuatu	55	4	59	5.6					
Other Pacific	22	19	41	3.9					
Australia	149	9	158	15.1					
New Zealand	20	4	24	2.3					
Asia	133	46	179	17.1					
Europe (inc. UK)	20	7	27	2.6					
USA	19	1	20	1.9					
Other Country	48	10	58	5.5					
Total	903	144	1047	100.0					

3. Internal migration

3.1 Introduction

Internal migration comprises those movements which take place within the Solomon Islands and may be measured at a variety of scales. Movement within villages or between nearby villages can be considered as internal migration, however the Census did not gather information on mobility at this local level. The two levels at which internal migration was measured in the Census and hence is considered in this report, are at the interprovincial level and between wards.

The time periods over which migration is measured also relates to the questions asked in the Census. 'Lifetime migration' is the movement of an individual from the place they were born to the place they were enumerated (or, in most cases, to their 'usual residence'). 'Recent migration' is derived from the question "Where was the person's residence five years ago?" which was asked of all of those who were aged five or more at the time of enumeration. The analysis of responses is a measure of movement since 2004, although intermediary moves are not measured. A measure of 'multiple migration' is derived when a person's birthplace, location five years ago, and place of enumeration are all different from each other. This measure is still inadequate in measuring the true complexity of mobility but it is the only indicator that can be derived from the data collected. The question "What is this person's usual place of residence?" enables calculation of a measure of 'short-term movement', comparing the place of enumeration and the place of usual residence. Each of these measures is considered in turn.

3.2 Lifetime migration

3.2.1 Interprovincial lifetime migration

An 'interprovincial lifetime migrant' is a person who was enumerated in the Census in a province which is different from the province in which he or she was born. It is a measure of internal migration which is easy to comprehend and it is quite accurate, since most people know where they were born. However, one of its limitations is that it does not record movements between birth and the census moment and, for some people, this may have involved a considerable number of moves.

Solomon Islands provincial boundaries remained the same between the 1999 and 2009 censuses, allowing easy comparison of interprovincial migration between those dates. Interprovincial lifetime migration for 2009 is compared with data from the 1999 Census in Table 3. There was an increase in the total number of migrants who had moved between provinces from 68,298 to 87,633. When these numbers are compared to the base populations in these census years, it is shown that the proportions of in and out migrants, at 16.9 percent of the total populations were the same (Table 4). However, this disguises the fact the origins and destinations of the movements were very different as a result of the ethnic tension as is illustrated in Table 3. Malaita, traditionally a province of significant out-migration, had a much higher out movement in 2009 than in 1999, suggesting many had returned to Honiara, Guadalcanal, and perhaps elsewhere after the ethnic tension. Also, some of those in Honiara had returned to Guadalcanal, as suggested by the decline in net migration for Honiara and a large reversal for Guadalcanal, from a net loss to a substantial net gain of lifetime migrants.

Table 3 shows that in both 1999 and 2009 the destination receiving the most in-migrants was Honiara, while at the same time there was a decline in the net gain between censuses as a result of the ethnic tension mentioned above. Another factor is that a considerable amount of the growth of the greater Honiara urban area took place in adjacent wards of Guadalcanal, and this is discussed at greater length later in the urbanisation section of this report. This phenomenon also explains the increase of about 2.5 times in the number of in-migrants into Guadalcanal. In both censuses, the largest source of lifetime in-migrants to Honiara was Malaita; in 2009 Malaitans comprised well over one-half of the total. The next largest source of lifetime in-migrants to Honiara, Western Province, at nealy 5,000, is followed by several provinces with 1,000 to 2,000 migrants each. For all provinces except Choiseul, Honiara is the most important lifetime destination; in the case of Choiseul, Western Province is much closer and a significant place of employment opportunity.

The longer term trend in interprovincial lifetime migration, stretching from 1986, is shown in Table 4. The overall rates are strongly influenced by the changes in Honiara, where outmigration rates have been somewhat static and in-migration rates have declined. To some extent this reflects the relatively small population base in earlier years, so that processes of circular migration had a greater impact on these rates, but also the fact that many of those born in Honiara have remained there. For the provinces, the variation in rates of interprovincial out-migration and in-migration are difficult to interpret since they increasingly

include the 'return migration' of some migrants who were born in Honiara or elsewhere and are returning to the province of birth of one or both of their parents. The rates for Guadalcanal and Malaita are also impacted by the impacts of the ethnic tension as discussed above.

The 'net migration' shown in Table 3 is the difference between the number of in-migrants and the number of out-migrants for each province, and shows the net gain or loss of population resulting from interprovincial migration at each date. As already outlined, the most significant changes relate to the reversals of population flows after the ethnic tension resulting in a large net gain in Guadalcanal and a corresponding large net loss in Malaita. Honiara's net gain has been reduced, but part of this relates to the expansion of the Honiara urban area into Guadalcanal Province.

3.2.2 Lifetime migration at ward level

To provide greater spatial detail about lifetime migration, data can be analysed at the level of wards, although as a result of the census data structure, these are only available for inmigration. Lifetime in-migration at ward level is shown in Figure 3. Since lifetime migration relates to movements over a relatively long period of time, these migration rates incorporate a range of migration types. For example, in relatively lightly populated areas such as southeastern Choiseul or parts of Isabel, lifetime in-migration includes resettlement into different wards. In most cases, lifetime in-migration includes elements of economic opportunity which explains reasonably high rates in Honiara and adjacent wards of Guadalcanal, as well as parts of Western Province where fishing, logging and other developments offer employment. These same areas have shown similar patterns of high levels of lifetime migration in earlier censuses as well. Conversely, areas with relatively limited opportunities have low rates of in-migration, and these areas, such as parts of Malaita and Guadalcanal, may be less accessible in terms of transport.

Table 3: Inter-provincial lifetime migration 1999 and 2009

Place of					P	lace of bir	th						
enumeration	Solomon					Rennell-	Guadal-		Makira-			in-	net
1999*	Islands	Choiseul	Western	Isabel	Central	Bellona	canal	Malaita	Ulawa	Temotu	Honiara	migrants	migration
Solomon Islands	403,131	20,615	59,297	21,440	21,020	2,452	62,200	131,359	31,350	21,697	31,701		
Choiseul	19,587	17,192	1,365	45	45	5	177	195	28	47	488	2,395	-1,028
Western	61,365	1,842	51,917	484	452	32	822	2,400	431	660	2,325	9,448	2,068
Isabel	20,253	86	282	18,206	171	6	252	286	145	99	720	2,047	-1,187
Central	21,476	67	217	295	17,529	58	505	1,596	191	398	620	3,947	456
Rennell-Bellona	2,361	2	17	5	42	1,694	9	28	2	5	557	667	-91
Guadalcanal	<i>59,789</i>	166	497	234	460	51	53,968	1,899	300	380	1,834	5,821	-2,411
Malaita	121,723	119	740	126	479	21	3,417	110,499	265	164	5,893	11,224	-9,636
Makira-Ulawa	30,699	38	133	94	124	8	246	471	28,400	524	661	2,299	-651
Temotu	18,880	6	135	28	183	2	282	144	141	17,392	567	1,488	-2,817
Honiara	46,998	1,097	3,994	1,923	1,535	575	2,522	13,841	1,447	2,028	18,036	28,962	15,297
out-migrants		3,423	7,380	3,234	3,491	758	8,232	20,860	2,950	4,305	13,665	68,298	0

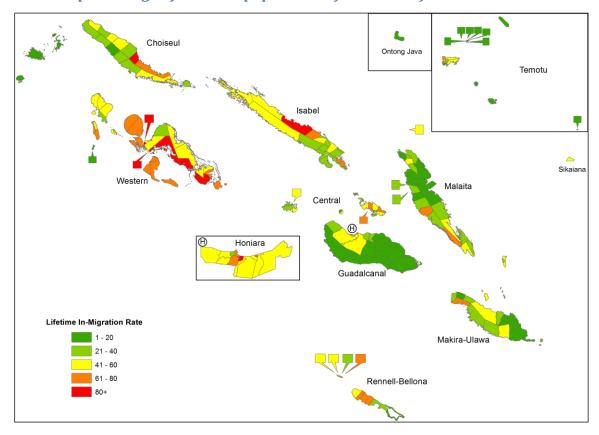
							LI.						
		Place of birth											
Place of													
enumeration	Solomon					Rennell-	Guadal-		Makira-			in-	net
2009*	Islands	Choiseul	Western	Isabel	Central	Bellona	canal	Malaita	Ulawa	Temotu	Honiara	migrants	migration
Solomon Islands	515,870	25,043	76,811	26,773	23,625	3,161	81,482	158,045	42,273	24,723	51,137		
Choiseul	26,372	21,498	2,887	132	58	7	128	253	91	47	1,007	4,610	1,065
Western	76,649	1,688	65,838	413	340	31	415	1,579	341	442	4,841	10,090	-883
Isabel	26,158	136	379	22,858	132	9	151	244	86	87	1,948	3,172	-743
Central	26,051	53	231	238	19,969	114	374	1,140	177	311	3,430	6,068	2,412
Rennell-Bellona	3,041	9	25	30	47	2,403	50	16	47	7	406	637	-121
Guadalcanal	93,613	461	1,565	821	1,463	125	77,660	6,267	881	1,529	2,544	15,656	11,834
Malaita	137,596	100	752	158	321	18	635	127,999	297	146	6,994	9,421	-20,625
Makira-Ulawa	40,419	24	210	99	61	4	179	369	38,417	297	589	1,832	-2,024
Temotu	21,362	12	133	38	101	8	162	128	112	20,040	620	1,314	-3,369
Honiara	64,609	1,062	4,791	1,986	1,133	442	1,728	20,050	1,824	1,817	28,758	34,833	12,454
out-migrants		3,545	10,973	3,915	3,656	758	3,822	30,046	3,856	4,683	22,379	87,633	0
* data exclude overse	as and 'not re	ported'											

Table 4: Inter-provincial lifetime migration rates 1986, 1999, 2009

		migrants as on born in		In-migrants as % of population enumerated in province				
Province	1986	1999	2009	1986	1999	2009		
Solomon Islands	17.4	16.9	16.9	17.4	16.9	16.9		
Choiseul	10.0	16.6	14.2	8.8	12.2	17.5		
Western	10.0	12.4	14.3	0.0	15.4	13.2		
Isabel	14.3	15.1	14.6	9.8	10.1	12.1		
Central	18.4	16.7	15.5	22.3	18.4	23.3		
Rennell-Bellona		30.9	24.0	22.5	28.3	20.9		
Guadalcanal	9.6	13.2	4.7	22.9	9.7	16.7		
Malaita	22.4	15.9	19.0	5.3	9.2	6.8		
Makira-Ulawa	9.4	9.4	9.1	7.6	7.5	4.5		
Temotu	18.1	19.8	18.9	7.2	7.9	6.2		
Honiara	46.8	43.1	43.8	71.8	61.6	53.9		

Note: In 1986, Western Province included Choiseul, and Central Province included Rennell-Bellona

Figure 3: Lifetime in-migration rate 2009: number of persons born in another ward as a percentage of the total population of the ward of enumeration



3.3 Recent migration

3.3.1 Recent inter-provincial migration

Another way of considering interprovincial migration is by considering 'recent migration', which in the 2009 Census was measured by a person's place of residence five years earlier, in 2004, compared to the place of enumeration at census moment. In the 1999 Census a similar question was asked, but the time period involved was shorter. In that census, people were asked where they were 28 months earlier, at the time of the election in August 1997. These are both indicators of relatively recent movement, although not totally comparable because of their different time frames, and also because the migration impacts of the ethnic tension were strongly felt between 1997 and 1999 (although these data were, or course, useful in assessing that migration). In the case of the 2009 Census, the post-ethnic tension can also be detected. Although some of those displaced by the tension had returned to their earlier places of residences by 2004, in some cases these return movements took place after 2004 and appear in this recent migration data.

Table 5 compares the recent interprovincial migration in 1999 and 2009. The total number of recent migrants was similar between the two censuses but relatively greater in relation to a smaller population in the earlier census because of the timing of the census 'within' the ethnic tension. Similar trends to those shown for lifetime migration are obvious in this case i.e. the large out-migration from Guadalcanal and the large in-migration to Malaita in 1999. A marked reversal of these movements is shown in the 2009 data, with apparent return migrations from Malaita to both Guadalcanal and Honiara. Some provinces, such as Choiseul, Isabel, Central, Rennell-Bellona and Makira-Ulawa exhibited similar patterns of recent migration in the two censuses. For Western Province, the net gain shown in 1999 had become a net loss by 2009, with one notable difference being the number who were in Guadalcanal, probably both in areas surrounding Honiara, and also in the areas of oil palm production, which was recovering in the five year period before the Census (Fraenkel et al. 2010). The importance of circular migration is obvious in Honiara, which in 2009 had the largest number of recent in-migrants, but also a large number of out-migrants, many of whom may have returned to their 'home' provinces.

3.3.2 Recent migration between wards

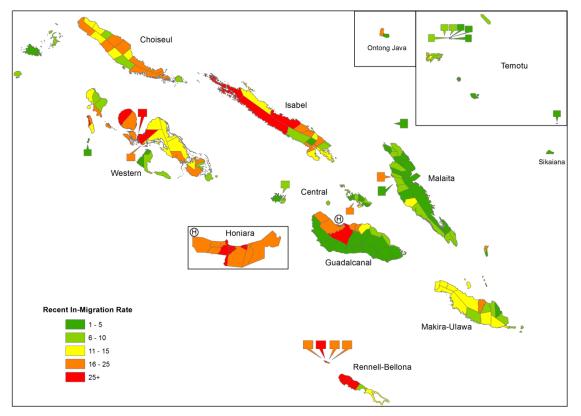
The recent in-migration rate in 2009 on a ward by ward basis is illustrated in Figure 4, which shows that a great deal of diversity underlies provincial averages. The most obvious example is Guadalcanal, in which rates of recent in-migration are very high around Honiara and on the Guadalcanal Plains, while on the Weather Coast and the interior, rates are very low. Likewise there is a great deal of variety in Western Province, reflecting the impact of nodes of economic activity, and similar patterns are seen in Isabel and Choiseul.

 Table 5: Recent inter-provincial migration 1999 and 2009

Place of				Place of re	esidence 2	8 months e	earlier (Aug	gust 1997)					
enumeration	Solomon					Rennell-	Guadal-		Makira-			in-	net
1999*	Islands	Choiseul	Western	Isabel	Central	Bellona	canal	Malaita	Ulawa	Temotu	Honiara	migrants	migration
Solomon Islands	373,147	18,168	55,632	18,747	20,048	2,288	66,118	103,135	28,050	17,430	43,531		
Choiseul	18,220	16,827	563	31	21	-	172	57	11	11	527	1,393	52
Western	57,397	715	52,665	189	178	2	646	586	159	138	2,119	4,732	1,765
Isabel	18,651	30	127	17,423	76	3	275	107	67	30	513	1,228	-96
Central	19,862	29	91	114	18,348	12	439	302	69	42	416	1,514	-186
Rennell-Bellona	2,166	-	2	3	15	2,006	22	5	-	1	112	160	-122
Guadalcanal	54,984	44	183	71	149	14	53,200	343	88	91	801	1,784	-11,134
Malaita	111,621	38	274	43	311	8	7,004	98,003	136	45	5,759	13,618	8,486
Makira-Ulawa	28,046	18	62	45	66	2	365	103	26,754	74	557	1,292	-4
Temotu	17,530	2	76	11	35	1	446	45	46	16,374	494	1,156	100
Honiara	44,670	465	1,589	817	849	240	3,549	3,584	720	624	32,233	12,437	1,139
out-migrants		1,341	2,967	1,324	1,700	282	12,918	5,132	1,296	1,056	11,298	39,314	0

Place of				Plac	e of reside	nce 5 year	s earlier (2	004)					
enumeration	Solomon					Rennell-	Guadal-		Makira-			in-	net
2009*	Islands	Choiseul	Western	Isabel	Central	Bellona	canal	Malaita	Ulawa	Temotu	Honiara	migrants	migration
Solomon Islands	433,924	22,095	66,458	21,849	21,722	2,469	71,974	126,613	32,992	18,664	46,173		
Choiseul	22,130	20,133	1,087	113	32	-	74	98	43	6	403	1,856	-106
Western	65,318	819	61,002	273	83	2	235	566	135	57	1,650	3,820	-1,636
Isabel	22,039	152	358	19,898	133	10	207	197	100	19	802	1,978	27
Central	21,660	43	100	163	19,981	89	301	200	96	31	600	1,623	-118
Rennell-Bellona	2,635	3	24	18	11	2,169	30	15	21	4	325	451	151
Guadalcanal	77,907	198	931	440	742	31	69,362	2,534	572	765	1,889	8,102	5,490
Malaita	116,812	47	329	67	141	4	215	113,313	92	34	2,035	2,964	-10,336
Makira-Ulawa	32,724	72	211	82	33	1	257	195	30,981	136	555	1,542	-469
Temotu	18,028	36	59	31	20	5	135	137	44	17,057	446	913	-694
Honiara	54,671	592	2,357	764	546	158	1,158	9,358	908	555	37,468	16,396	7,691
out-migrants		1,962	5,456	1,951	1,741	300	2,612	13,300	2,011	1,607	8,705	39,645	0
* data exclude overseas and 'not reported'													

Figure 4: Recent in-migration rate 2009: number of persons resident in another ward five years ago as a percentage of the enumerated population of the ward



3.4 Age-sex structure of migration

Levels and patterns of migration are usually age and sex specific. That is, since the reasons for migration are often related to events during the life cycle of individuals, such as education and employment, the resulting movements have particular age and sex characteristics. Figures 5, 6, and 7 illustrate the age-sex structure of three different categories related to migrant status for both lifetime and recent migration. The first category shown in Figure 5 is of non-migrants, providing a base population against which to compare migrant categories. Both lifetime and recent pyramids have a 'classic shape' of a population that seems to have experienced relatively little migration, though the modest impacts of migration can be seen in cohorts from 15 and older. The second category is of those who moved within a province over a lifetime or within the last five years. While lifetime migration appears modest, there is a notable bulge on the female side of the pyramid, possibly suggesting the significance of marriage migration within provinces. The most conspicuous recent migrant cohorts in Figure 6 are those between ages 15 and 30 for both males and females, and then to a lesser extent males aged above 30. Secondary school students probably comprise the bulk of recent migrants within the 15 to 19 cohort; both those who have moved to a school within the province and those who have returned home after schooling. Within province migration in cohorts older than this are significant with males being more highly represented, and move for work reasons are important, but many other motives are likely to be significant. Figure 7 shows the age-sex structure of the third category of migrants, interprovincial migrants. The significance of work-related interprovincial movement for those aged 20 and over is more important for both lifetime and recent migrants, than it is for migrants within provinces. Although men have a slightly higher level of representation in this migrant population,

reflecting their higher level of participation in both the wage economy in urban areas, women are also strongly represented in the age cohorts above 20 years.

Figure 5: Age-sex structure of lifetime and recent non-migrants (same ward at birth, and five years ago)

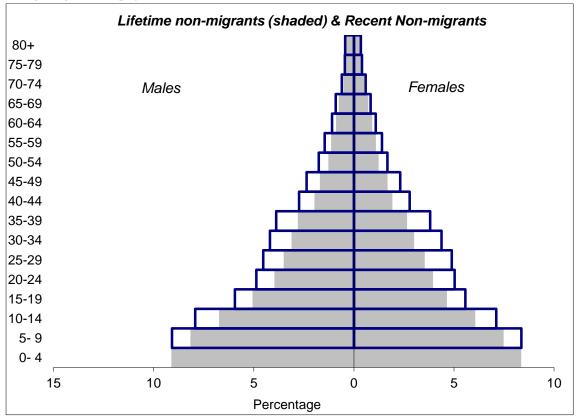


Figure 6: Age-sex structure of within province lifetime migrants (same province, different ward at birth) and recent within province migrants (same province, different ward five years ago)

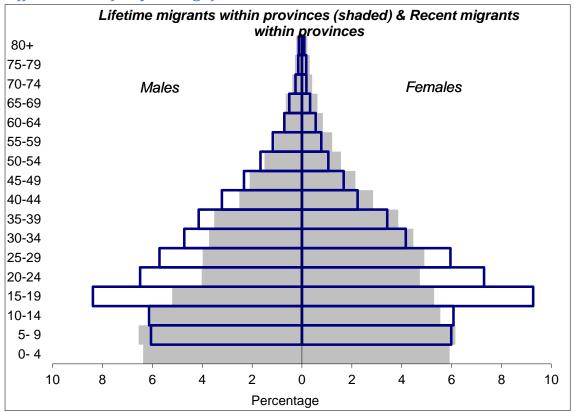
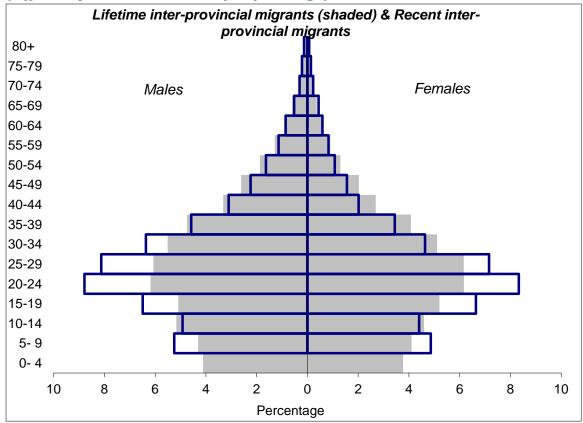


Figure 7: Age-sex structure of lifetime and recent interprovincial migrants (different province at birth, or five years ago)



3.5 Multiple migration

The census provides only 'snapshots' of mobility rather than a full history of a person's migration. We have already considered the 'lifetime snapshot' of movement away from a birthplace, and the 'recent snapshot' of movement since a point in time five years earlier. Using these same two pieces of information, we can construct a 'multiple migration' snapshot which identifies those who were enumerated at a place away from their place of birth and at a different place from where they were five years earlier.

Only about six percent of the population (aged 5+) were identified in the Census as multiple migrants. These migrants are not evenly spread through the Solomons as shown in Figure 8. They tend to be located in areas of high employment opportunity and high in-migration, such as Honiara and adjacent wards as well as parts of the Western Province, such as Noro and areas of New Georgia. In some cases multiple movement is within provinces where employment nodes have shifted over time, as is the case with the logging industry.

3.6 Short-term mobility

It is well known that Solomon Islanders take part in a great deal of short-term mobility, or circulation. 'Circulation' implies that migrants will eventually return to their 'home', which is often the village(s) where they have land rights, but increasingly may also be a place of employment (Chapman 1976; Friesen 1993). One of the questions in the 2009 Census was "What is this person's usual residence?" and the responses to this question may be used to identify people who are temporarily away from their usual residence (home). Figure 9 shows the percentage of people enumerated in a ward who stated that their usual residence was somewhere else, and this can be considered as a measure of short-term mobility. As expected, most of the Honiara wards show a reasonably high level of short-term mobility; most have more than ten percent of their population with a usual residence elsewhere. Similarly, Noro and adjacent wards in Western Province have quite high levels enumerated in this category. Other exceptional cases include Susuka in Choiseul, the northwest coast of Isabel and parts of Rennell-Bellona, each with their own specific circumstances.

Figure 8: Multiple migration rates as % of all enumerated in a ward (birthplace, residence five years ago, and place of enumeration different)

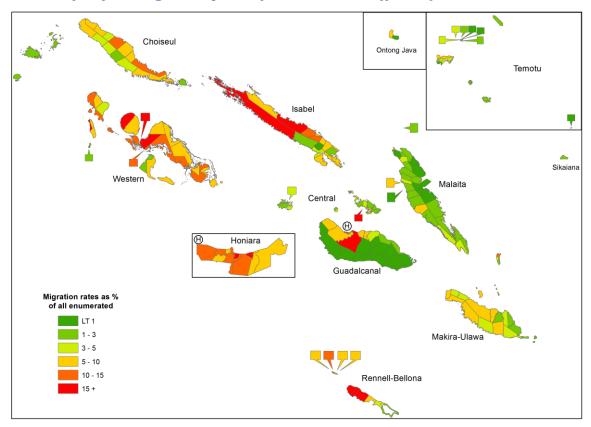
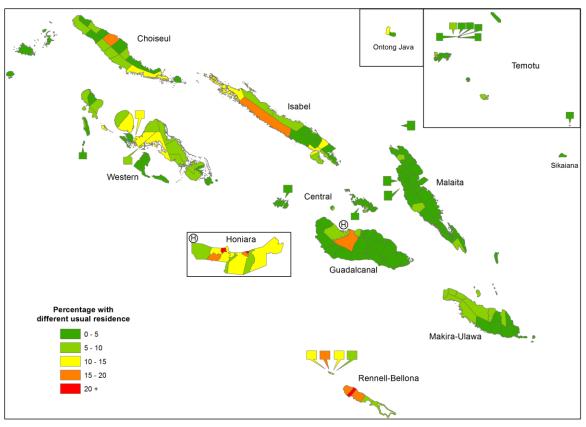


Figure 9. Short-term mobility: percentage of all enumerated in a ward whose usual ward of residence is a different ward



4. Urbanisation

4.1 Introduction

Urbanisation is a world-wide phenomenon involving the movement of people from rural to urban areas, in most cases with the urban areas growing more rapidly than the rural. In 2011 a turning point was reached, when it was estimated that 50 percent of the world's population was living in urban areas. In Melanesian countries, the proportion of population considered urban is much less than this, and Solomon Islands had just under 20 percent of its population in urban centres in 2009. Nevertheless, the global trend of urbanisation is occurring in the Solomons; urban populations have been growing more rapidly than those in rural areas for at least half a century.

The study of urbanisation is important for a number of reasons. The rapid growth of towns and cities increases demand for housing, utilities, education, healthcare and other services. If sufficient housing is not provided by government and/or the private sector, one likely outcome is the development of squatter settlements where households construct their own housing, often on land to which they do not have full legal rights, and often with inadequate provision of utilities such as electricity, water and sewerage (Connell, 2011). Urbanisation is also important because urban areas tend to be the location of 'higher level' industry and services serving the national economy, and linking a country to the global economy.

Most Pacific countries have a single dominant urban area which is much larger than the next largest urban area, with the largest city being known as a 'primate city'. Solomon Islands is no exception, with the Honiara urban area being about 15 times as large as the next largest urban area of Auki. This part of the report will focus on Honiara, but also include discussion about other urban areas.

The difference between 'urban' and 'rural' is not always clear in the Solomon Islands context. The places that are considered to be urban for the purposes of census analysis are shown in Figure 10. Each province has an administrative centre and all of these, except in Rennell-Bellona, are considered as urban, even though some of the smaller centres may not feel very 'urban'. For example places such as Taro in Choiseul, Buala in Isabel, and Kira Kira in Makira with populations averaging 1,000 have a feeling of the 'rural in the urban'. Nevertheless, these areas have significant administrative, transport and economic functions which link their respective provinces to Honiara and beyond. In Western Province, Noro and Munda (and adjacent Nusa Roviana) are also considered to be urban centres, since they have concentrated populations and significant economic functions.

4.2 Historical growth of Honiara and other urban centres

Honiara as an urban area had its origins in the Pacific War (World War II in the Pacific). American and allied troops established a major base in the Honiara area of Guadalcanal and when the war ended, left a substantial amount of infrastructure such as airfields, roads wharves and many buildings, including Quonset huts (Tedder 1966). This was a major

incentive for the returning British administration to move its colonial headquarters from Tulagi in the Ngela Islands to Honiara.

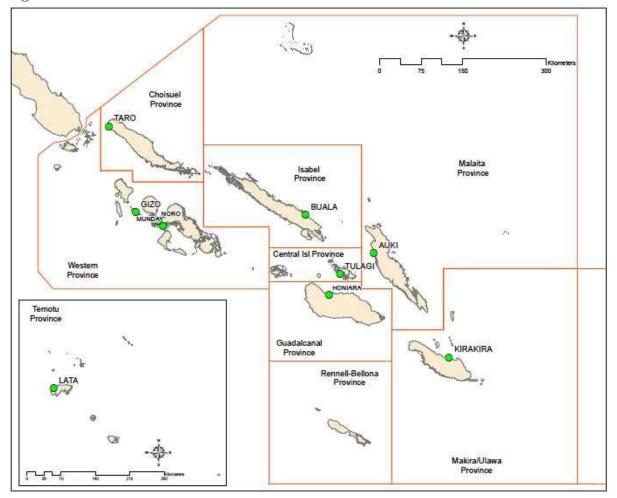


Figure 10: Solomon Islands urban centres

The on-going population growth of Honiara and other urban centres over a half century is shown in Figure 11. A sample census of the British Solomon Islands Protectorate was carried out in 1959 and showed a Honiara population of 3,534. Of this, about 80 percent were Melanesian or Polynesian (i.e. largely Solomon Islanders), ten percent were European and a further eight percent were Chinese. The town boundary at this time was similar to the current one, although most of the settlement was in the central, coastal part of this area on either side of the Mataniko River, with settlement on the ridges behind, mostly of expatriates. Males outnumbered females by three to one in 1959 with a sex ratio in Honiara of 315 (males per 100 females), reflecting the fact that population circulation and cash employment at that time were dominated by males.

The 1960s was a decade of rapid growth for Honiara, with an average annual growth rate of about 11 percent, so that by the 1970 Census there were more than 11,000 residents. Annual growth slowed to 3.6 percent in the subsequent period between censuses reaching a population of about 15,000 in 1976, the year of self-government preceding Independence in 1978. The British administration focused its bureaucracy and infrastructure in the colonial city, and private investment followed this lead (Bellam 1970), contributing to more rapid population growth in Honiara than elsewhere in the country.

The population growth of Honiara accelerated in the early years of Independence, averaging 6.6 percent between 1976 and 1986, resulting in a doubling of the population to just over 30,000 (see Figure 11). One stimulus of urban growth was the growth of the economy, with rapid development of the fishing and logging industries, the localisation of some manufacturing and service industries, and the growth of the civil service, especially in Honiara. The two provincial centres of Gizo and Auki were considered 'urban' as far back as the 1960s even though their combined population was less than 3,000 in 1970, and in the post-Independence era they continued to grow, as did a number of other centres which had administrative and/or economic functions.

Honiara was a magnet of attraction for many Solomon Islanders, even if employment was not assured, and a number of studies in this period emphasised the role of Honiara within the migration processes and circuits of the time. Chapman (1976) considered the multiple motivations for mobility, including employment, church business, visiting relatives /wantoks, or just 'going walkabout'. Movements ranged in duration from daily to long-term, and Honiara was often a central node for those moving from the Weather Coast of Guadalcanal. Frazer (1981) considered the way Malaitans, especially young men, were 'olo raon long taon' (wandering around town), in some cases looking for employment and in other cases, performing various social roles beyond the restrictions of village life. Friesen (1986, 1993) demonstrated the ways in which residence and employment in Honiara were significant options within the livelihood strategies of Choiseul households, resulting in both long-term residence for some, and shorter-term circular mobility by other individuals.

While earlier movements to Honiara were predominated by males, usually young and single, this predominance declined as the city developed, as shown in Figure 12. The most marked decline in sex ratio was between 1959 and 1970, but it has continued to decline at each census through to 2009. By 1986 the sex ratio was 132, still significantly higher than the national average of 107, but only a fraction of what it had been 27 years earlier. Other urban centres had a higher proportion of males than females compared to the national average in 1986, but these rates had almost converged by 1986. Education and employment opportunities for females were increasing in urban centres, and family migration became more common. The city had expanded to the Town Council boundaries and beyond, and housing provision was still inadequate to meet demand; one response was the further development of 'traditional' housing in periurban areas. In this post-colonial era, Solomon Islanders comprised more than 95 percent of the population of Honiara, with many government posts having been localised, and Solomon Islanders becoming increasingly involved in private business activities.

Between 1986 and 1999, the average annual growth of Honiara slowed to 3.7 percent, but this was still significantly above the national average of 2.8 percent. In absolute terms, this growth remained substantial, with more than 1,400 people being added to the population every year. By the end of the twentieth century, much urban growth was taking place beyond the Honiara Town Council boundaries, especially into the adjacent ward of Tandai, causing planning problems related to provision of services and related issues, and also issues of access to land. These land issues became even more central during the ethnic tension and

resulted in the evacuation of some of these areas in this period, although in many cases, agreements had been reached with traditional land owners.

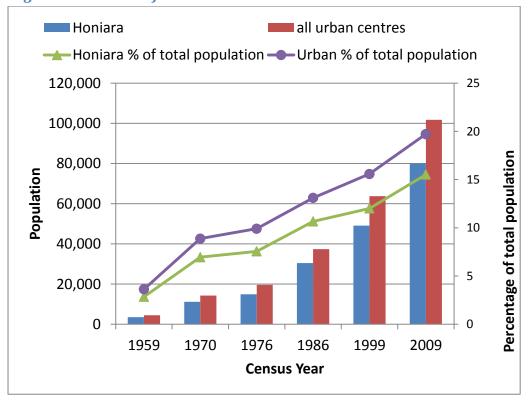


Figure 11: Growth of Honiara and other urban areas 1959-2009

Note: Until 1986 "urban areas" included only Honiara, Auki and Gizo. Honiara comprises the area of the Honiara Town Council, until 2009 when adjacent areas of Guadalcanal are included (see Table 6).

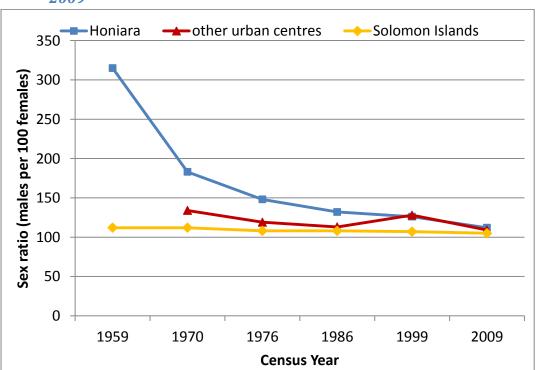


Figure 12: Sex ratio in Honiara, other urban centres and Solomon Islands 1959-2009

4.3 Recent trends: urban population growth rates 1999-2009

The recent population sizes and growth rates of urban areas, by province, are shown in Table 6. Overall, the average annual urban growth rate between 1999 and 2009 was 4.7 percent, about twice the national rate of population growth, and more than two and one half times the rate of rural population growth rate of 1.8 percent. This urban growth rate was higher than the average annual rate of 4.2 percent between 1986 and 1999, but lower than the 6.5 percent growth experienced between the 1976 and 1986 censuses.

Some of the small urban centres such as Lata (Temotu), Auki (Malaita), Kirakira (Makira-Ulawa), Buala (Isabel) and Taro (Choiseul) had higher rates of growth than the national urban average between 1999 and 2009. Overall these provincial centres (excluding Guadalcanal which is considered part of the Honiara Urban Area) had an average annual growth rate of 6.6 percent; higher than the growth rate of Honiara as well. This is a result of expanding administrative and economic infrastructures, and also of developments specific to those places. The rates are affected to some extent by small base populations at the earlier census.

The Honiara Town Council population grew by 2.7 percent a year but when the urban parts of the adjacent wards of Tandai and Malango are included, making up the Honiara Urban Area, this rate rises to 4.4 percent a year. The urban area of Tandai more than tripled over the decade with an annual growth rate of 12.8 percent, while the urban areas of Malango ward were included as 'urban' for the first time. The rapid growth of these periurban areas, much of it in squatter settlements, is symptomatic of the pressure on the provision of housing and other services for new migrants in Honiara generally, and this is discussed further later.

Within the Honiara Town Council area, there is a great deal of variation in population growth rates. Wards with small populations such as Cruz and Naha actually lost population as a result of their central locations where commercial and tourist developments replaced residential spaces. A small population loss in Kukum can be attributed to its small areal size and concentrated housing stock. At the other end of the spectrum, relatively high growth rates are seen in wards further from the centre, such as Ngossi and Mbumburu to the west and south and Panatina to the east, areas which run to the boundaries of the Town Council area and had some potential for expanded housing. While the Mataniko River runs through the centre of Honiara, the ward named after it, runs all the way to the southern town boundary, enabling housing development in this more distant area. Other more central wards showed much slower growth, as shown in Table 6. A further factor in population growth relates to household size and this is further discussed in the section on housing below.

Table 6: Population change of urban centres 1999 to 2009

		total popul	ation	annual growth
Urban centre / ward	Province/Council	1999	2009	rate 1999-2009
Taro	Choiseul	440	810	6.1
Gizo	Western	2,960	3,547	1.8
Munda/Nusa Roviana	Western	*	2,843	
Noro	Western	3,482	3,365	-0.3
Buala	Isabel	451	971	7.7
Tulagi	Central	1,333	1,251	-0.6
Auki	Malaita	1,606	5,105	11.5
Kirakira	Makira-Ulawa	979	2,074	7.5
Lata	Temotu	361	1,982	17.0
Provincial Centres		11,612	21,948	6.6
Nggosi	Honiara Town Council	6,186	10,062	4.9
Mbumburu	Honiara Town Council	2,390	3,625	4.2
Rove/Lengakiki	Honiara Town Council	2,177	2,613	1.8
Cruz	Honiara Town Council	268	232	-1.4
Vavaea	Honiara Town Council	6,683	6,996	0.5
Vuhokesa	Honiara Town Council	1,073	1,197	1.1
Mataniko	Honiara Town Council	2,898	4,343	4.0
Kola'a	Honiara Town Council	7,287	10,151	3.3
Kukum	Honiara Town Council	1,969	1,835	-0.7
Naha	Honiara Town Council	877	356	-9.0
Vura	Honiara Town Council	8,025	9,096	1.3
Panatina	Honiara Town Council	9,274	14,103	4.2
Honiara Town Council		49,107	64,609	2.7
Tandai	Guadalcanal	3,031	10,837	12.8
Malango	Guadalcanal	*	4,636	
Honiara Urban Area	(inc. Tandai & Malango)	52,138	80,082	4.4
Total urban		63,750	102,030	4.7
Total rural		345,310	413,840	1.8

^{*} Not classified as an urban centre in 1999

4.4 Urban housing: household size, land and house ownership

Problems of housing availability have been present in Honiara for a long time. A report on housing in 1958 noted that there was inadequate housing especially for Solomon Islanders working as labourers, junior clerks in the government or artisans (Tedder 1966:38). Other than some Chinese, few Honiara residents, expatriate or Solomon Islander, owned a home in the early 1960s, with most renting from the government at subsidised rates (Hughes 1969:19). In the intervening years the housing stock has expanded enormously, and many Solomon Islanders have moved onto the ridges, but there is still a shortage of adequate housing for many, and the government is still a significant provider of housing.

Table 7 presents a summary of some aspects of housing provision and ownership. Average household size in all urban areas has declined slightly from 6.9 in 1999 to 6.6 in 2009. However, in 2009 this was significantly higher than the average 5.5 persons in rural

households. The slight decline in urban areas was a result of a decline in provincial centres, while the Honiara urban area remained the same between censuses, on an average 7.0 persons per household. Within Honiara, most wards averaged between seven and eight persons, with the exception of the very small ward of Cruz.

Table 7: Urban housing: average household size, land and house ownership

Table 7: Orban nou						% HHs
			% HHs			lease
	Average	Average	own			from
Urban centres / wards	house-	house-	house or	% HHs on	% HHs lease	private/
and urban-rural	hold size	hold size	have	freehold	from	customary
comparison	1999	2009	mortgage	land	government	owner
Taro	6.3	5.6	37.2	34.5	53.8	8.3
Gizo	6.1	5.4	40.8	13.2	75.5	8.8
Munda/Nusa Roviana	*	5.2	71.4	80.3	8.0	9.7
Noro	7.3	5.7	17.7	5.8	72.8	6.6
Buala	6.1	6.1	44.9	41.1	21.5	2.5
Tulagi	6.2	5.1	11.5	5.3	50.8	42.6
Auki	6.2	5.8	33.3	21.3	19.5	9.2
Kirakira	7.5	6.6	11.4	50.0	41.8	4.7
Lata	5.0	5.6	68.1	72.1	13.4	2.0
Provincial Centres	6.5	5.6	38.2	33.1	40.1	9.6
Nggosi	6.6	7.0	43.0	20.8	54.1	18.3
Mbumburu	6.7	7.1	32.0	32.0	38.6	16.6
Rove/Lengakiki	7.0	7.8	27.5	11.4	82.9	2.1
Cruz	6.2	13.6	5.9	82.4	17.6	0.0
Vavaea	8.3	7.4	31.3	31.2	53.9	6.2
Vuhokesa	7.2	8.1	33.1	30.4	34.5	25.0
Mataniko	7.6	8.0	43.7	28.6	54.4	14.2
Kola'a	6.4	6.8	47.7	22.6	59.9	11.3
Kukum	8.2	7.9	28.8	15.5	59.7	21.5
Naha	7.8	6.6	9.3	0.0	31.5	59.3
Vura	7.4	7.2	34.1	37.6	43.5	11.8
Panatina	6.8	7.0	37.7	9.4	73.5	11.0
Honiara Town Council	7.1	7.2	38.2	22.8	57.7	12.8
Tandai	6.1	6.0	70.7	55.3	5.4	27.1
Malango	*	6.5	64.2	18.5	10.6	49.7
Honiara Urban Area	7.0	7.0	44.9	27.6	46.6	17.3
Total Urban	6.9	6.6	43.2	29.0	44.9	15.4
Total Rural	6.2	5.5	80.3	84.4	1.9	5.1

While about 80 percent of rural households in Solomon Islands own their house (or have a mortgage), only 43 percent of urban households are in this category. Within Honiara, some areas such as Rove/Lengakiki and Vavaea have high proportions of households whose housing is subsidised by government or private employers. In the urban areas outside of the

Honiara Town Council area, home ownership rates are high, at 71 percent in Tandai and 64 percent in Malango, and many of these are built of traditional materials.

One aspect of home ownership relates to the tenure of the land on which the house is located (see three right-hand columns of Table 7). The term 'freehold' was used in the census enumeration to refer to land on which the household had use rights, though in many cases, especially in rural areas, this might refer to land under customary tenure in which the ownership is ultimately held by a clan or tribal group. In some urban areas, this refers to land purchased from the government. In the Honiara Town Council area, only 23 percent of households were in this category, since most houses were on land leased from the government. In the Honiara Urban Area, Malango stands out, with about one-half of all households on land leased from private or customary owners. In the provincial centres, one-third of households were located on 'freehold land' but there was considerable variation depending on the land tenure arrangements in each of the centres. For example, in Gizo, the government controls most of the land while in nearby Munda, it controls very little, with most land being used under customary tenure.

4.5 Urban household amenities

The level of access that households have to basic amenities such as safe drinking water, electricity, toilets and waste disposal are important indicators of successful urban development. The provision of these household amenities in the urban areas of Solomon Islands is summarised in Table 8. It should be noted that these are only indicators and that the lack of a particular amenity in this table is not necessarily a problem for the household. For example, many households throughout the country rely on water tanks for drinking water, and in general these provide a safe option. Likewise, electricity may be supplied by other means such as solar panels, and lighting by kerosene lamps and these may suit the needs of many of the households that use these. However, if given an option, most urban households would opt for piped water and grid electricity because of the ease of use. The provision of amenities such as hygienic toilets and environmentally-sound waste disposal are issues impacting on households but also on the health and safety of the wider community.

Three-quarters of the households of the Honiara Town Council area had access to piped drinking water (and water used for washing) provided by the Solomon Islands Water Authority (SIWA). The wards with the lowest proportions of households with piped water tend to be those that have significant areas of traditional housing, such as Panatina. The periurban areas of Tandai and Malango had even lower levels of access to piped water, with less than half of the households of the former and one in five of the latter being in this category. The provincial centres had only about ten percent of households enumerated as having private piped water. About one-half of households in the provincial centres got their drinking water from private or communal water tanks, with the next most common source being communal standpipes.

Table 8: Household amenities: piped drinking water, grid electricity, flush toilet, government waste collection

	Household amenities							
		% with						
		piped	% with main		% with			
Urban centres / wards	Total	drinking	grid	% with	government			
and urban-rural	number of	water	electricity	private	waste			
comparison	households	(metered)	for lighting	flush toilets	collection			
Taro	145	0.0	0.0	47.6	0.0			
Gizo	660	0.0	66.1	57.1	17.1			
Munda/Nusa Roviana	549	0.2	32.2	23.5	8.2			
Noro	589	4.4	54.8	45.8	44.3			
Buala	158	0.0	60.1	50.6	43.7			
Tulagi	244	10.7	54.9	69.3	1.6			
Auki	873	35.9	37.6 53.8	36.5 50.0				
Kirakira	316	2.2						
Lata	351	0.0	27.9	10.5	22.5			
Provincial Centres	3,885	9.6	45.3	41.4	19.5			
Nggosi	1,430	82.2	53.6	52.7	33.8			
Mbumburu	513	78.0	68.4	69.6	46.6			
Rove/Lengakiki	334	68.9	90.1	81.4	70.1			
Cruz	17	100.0	100.0	94.1	82.4			
Vavaea	942	79.6	64.9	51.3	36.9			
Vuhokesa	148	95.3	48.0	47.3	24.3			
Mataniko	542	75.3	67.2	51.5	17.2			
Kola'a	1,499	75.7	61.4	46.6	25.2			
Kukum	233	87.6	91.4	82.0	50.2			
Naha	54	98.1	81.5	20.4	85.2			
Vura	1,268	77.7	77.0	72.3	58.4			
Panatina	2,001	63.6	57.2	40.6	25.3			
Honiara Town Council	8,981	75.4	64.4	54.1	36.0			
Tandai	1,798	48.4	19.4	15.5	4.1			
Malango	718	19.4	20.8	17.4	3.9			
Honiara Urban Area	17,962	67.7	54.6	49.4	29.0			
Total Urban	15,382	53.0	52.3	44.7	26.6			
Total Rural	75,869	0.3	3.6	3.1	0.3			

Just over one-half of all urban households get lighting through a main electricity grid, compared to only about four cent of rural households. This proportion approaches two-thirds in Honiara Town Council area, but is only about 20 percent of the households in the periurban areas of Tandai and Malango.

Urban households with private flush toilets comprise only 45 percent of all households compared to three percent of rural households. In this case, there is considerable variability within the provincial centres and within the Honiara Town Council area. The proportions of households with government waste collection is even lower with only about 27 percent of urban households and almost no rural households. In both cases of sanitation provision, there

is a division between areas which are made of squatter settlements, and the more formal housing areas developed by government and private developers.

4.6 Urban household livelihoods

There is a marked contrast between the livelihood patterns of urban and rural households. Of all urban households in Solomon Islands, 72.3 percent had wages or salaries as the main income source, while only 14.2 percent of rural households were in this category (Table 9). About three-quarters of households in the Honiara urban area had wages or salary as their main income and these households are quite equally spread, with slightly lower proportions in the urban areas beyond the town council boundaries. In the provincial urban areas, only about two-thirds of households had wages or salaries as their main source of income, but this is still four times as high as the rate in rural areas.

After wages and salaries, the two most significant income sources within households in urban areas are the running of an "own business" and the sale of fish, crops or handicraft. These entrepreneurial activities are distinguished by the first being considered more in the formal economy and the latter involving more informal, but cash-related activities, and each was the main source of income for between eight and nine percent of all urban households (Table 9). As might be expected the own businesses were more common in the central areas of Honiara and the importance of sale of fish, crops and handicrafts greater on the urban periphery. In the provincial urban centres there was considerable variation in the latter between towns, with the highest proportions in centres where the wages or salaries as household income were less common. It should be noted that these data refer to "main income" only, whereas the reality is that many households participate in a range of other income generating activities as well (Russell et al. 2009). For example, a study in the squatter settlements of Honiara revealed a great diversity of households income, with sources of income including the roadside sale of betelnut, recycling activities, and many others (Maebutu and Maebutu 2009).

Another important aspect of livelihoods in Solomon Islands is the subsistence production of foodcrops and the catching of fish and shellfish for consumption. These activities are often associated with rural areas, and as Table 9 shows, this is the case with 95.4 percent of rural households participating in subsistence food production and 67.9 percent catching fish and shellfish. However, these activities are also important in urban areas with 56 percent of households producing food for consumption, and 25.4 percent catching fish and shellfish. In the provincial urban centres these proportions are significantly higher, probably as a result of easier access to land for gardening than in Honiara, and easy access to opportunities for fishing since all of these towns are small coastal settlements. While the prevalence of subsistence production can be seen as a response to negligible or low cash income, the provision of at least a part of a household's food supply can be seen positively since it may result in more nutritious diets than the store-bought alternatives. The promotion of kastom gaden ("traditional gardening") through an NGO of the same name has been a successful initiative in parts of Honiara (Lacey, 2011). However, if subsistence is the only livelihood option for some urban households, this can be problematic for the provision of some basic items needed for day to day living.

Table 9: Household livelihoods: main sources of income and involvement in subsistence food production and fishing

	% of all households							
	mai	in income sou	involved in					
Urban centres / wards and urban-rural comparison	_		sale of fish/ crop/ handicraft	subsistence food production	catching fish or shellfish			
Taro	69.7	11.7	11.0	61.4	69.0			
Gizo	80.0	9.5 9.7 3.4 8.9 7.4 9.2 8.2 5.1	4.2 23.0 2.2 15.8 3.3 14.5 23.4 21.1	45.7 80.5 81.6 88.5 90.6 52.4 91.3 89.7	46.4 81.2 59.1 67.7 44.3 24.1 44.3 73.8			
Munda/Nusa Roviana	49.2							
Noro	87.6							
Buala	68.4							
Tulagi	82.4							
Auki	54.0							
Kirakira	59.5							
Lata	47.6							
Provincial Centres	65.6	8.0	12.6	70.6	52.1			
Nggosi	71.7	10.1	6.9	47.8	14.8			
Mbumburu	80.1	8.2	1.6	49.3	9.9			
Rove/Lengakiki	85.0	7.2 17.6 8.2 8.1 11.1 8.4	0.6 0.0 1.9 8.8 3.3 2.8 0.9	45.3 70.6 27.2 33.8 34.4 40.3 30.3	18.3 41.2 6.5 25.7 10.9 12.5 26.2			
Cruz	76.5							
Vavaea	79.0							
Vuhokesa	67.6							
Mataniko	75.8							
Kola'a	80.5							
Kukum	82.0	6.0						
Naha	79.6	5.6	7.4	3.8	13.0			
Vura	80.3	7.2	4.4	34.0	13.6			
Panatina	76.8	9.3	6.6	55.3	12.5			
Honiara Town Council	77.8	8.7	4.4	42.2	13.0			
Tandai	66.7	6.1	14.8	79.1	24.0			
Malango	54.5	5.6	26.3	87.1	40.3			
Honiara Urban Area	74.6	8.1	7.4	50.9	16.4			
Total Urban	72.3	8.1	8.7	56.0	25.4			
Total Rural	14.2	5.1	51.7	95.4	67.9			

5. Conclusions

The 2009 Census has shown that many of the migration patterns shown in earlier censuses are on-going. International migration has had only a limited impact on the population of Solomon Islands, with relatively limited numbers of immigrants coming into the country, and the options for emigration of Solomon Islanders being limited by restrictive immigration policies in countries which might attract them. Much of the international movement of Solomon Islanders appears to be related to tertiary education.

Interprovincial migration tends to be related to movement towards areas of wage employment, especially Honiara but also other areas such as employment nodes in Western Province. However, for both lifetime and recent (over the past five years) interprovincial migration, the rates of total movements and net movements shown in 2009 were impacted by population redistribution following the ethnic tension. Thus, losses from Guadalcanal shown in the 1999 Census were reversed, and substantial net gains were shown as many migrants returned after the end of the ethnic tension. Many of these moved from Malaita to Honiara and Guadalcanal resulting in larger than usual net losses from Malaita in relation to lifetime movement. Recent migration patterns for Malaita were reversed since there had been a significant net gain to Malaita in 1999 as many had retreated to their home island, and these became net losses in 2009 as many moved out of Malaita.

Movements between wards within provinces often have employment motives, thus showing the highest levels of in-migration in areas with higher wage or cash employment opportunities. However, these inter-ward movements also often have other motives, including marriage migration, movement for secondary education and movement between areas where individuals and families have alternative land use rights.

The age-sex structure of migrants is markedly different from non-migrants. Lifetime migration within provinces (between wards) shows much higher rates for females suggesting the importance of marriage migration. More dramatically varying from the non-migrant population, is the age-sex structure of within province lifetime migrants with high proportions of females and males in the age cohorts from 15 to 39 years, showing the importance of movements for secondary and tertiary education and then employment within provinces. Inter-provincial recent migrants show a similar structure but inter-provincial lifetime migrants are more age-specific than those within provinces, with higher proportions aged 20 years and over.

Urbanisation has been taking place in Solomon Islands since the 1950s, with Honiara dominating this process, but with smaller provincial centres also steadily increasing. By world standards the twenty percent of the national population living in urban centres is low, but the fact that the populations of urban centres are growing at twice the rate of the rural population means there are significant implications for planning in urban centres. Migration has resulted in housing pressure, especially in Honiara, where the average household size in 2009 was seven (compared to 5.5 in rural areas), the same as ten years earlier, despite the fact that average family size had declined.

One challenge is the provision of infrastructural services in urban areas. Just over two-thirds of households have piped drinking water in the Honiara urban area, but very few have this in

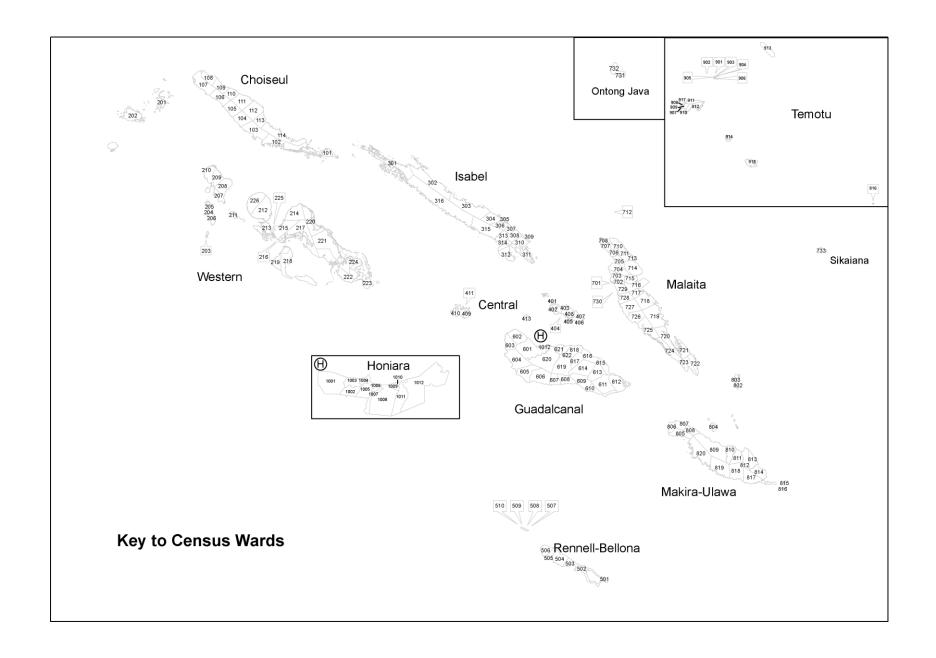
the provincial centres. In some cases this may not be a problem if there are adequate alternatives, such as tank water, but in other cases this involves bringing water from distant standpipes. Just over one-half of urban households have main grid electricity for lighting, well under one-half have private flush toilets, and only about one-quarter of households are serviced by government waste collection. In the two latter cases, there are reasonable alternatives in some cases, but in other cases this lack of provision presents health and environmental hazards.

Another challenge related to the rapid rates of growth of urban areas is the availability of adequate livelihoods, and this is an issue in many parts of the Pacific, especially in areas of informal squatter settlements. While just under three-quarters of urban households have at least one member with a waged or salaried job providing their main source of income, the other one-quarter rely on more tenuous sources of income, with a small proportion claiming to have no income at all. This and other factors result in a significant involvement in the production of subsistence food and the catching of fish and shellfish, a fact that can be attributed to a shortage of cash income, but which can also have a beneficial nutritional impact in some cases.

Processes of migration and urbanisation present challenges for the future of Solomon Islands. International migration options for Solomon Islanders are limited and this has increasingly become a point of contention in regional discussions related to trade and other economic agreements. Internal migration is an essential option for those who aspire to higher levels of education and wage employment, and much of the internal migration shown in the census relates to education and employment motives. At the same time, other forms of migration related to marriage, church activities, kinship networks, return home and *walkabout nomoa* are also significant. All of these motives are significant in the rapid growth of urban centres, especially Honiara, and the resulting challenge for the provision of urban services is likely to be an on-going one.

References

- Bellam, M. E. P. (1970). The colonial city: Honiara, a Pacific Island case study. *Pacific Viewpoint*, 11(1), 66-96.
- Chapman, M. (1976). Tribal mobility as circulation: a Solomon Islands example of micro/macro linkages. In L. A. Kosinski & J. W. Webb (eds.), *Population at microscale*, pp. 127-142. Christchurch: N.Z. Geographical Society and International Geographical Union.
- Connell, J. (2011). Elephants in the Pacific? Pacific urbanisation and its discontents. *Asia Pacific Viewpoint*, 52(2), 121-135.
- Fraenkel, J., Allen, M., & Brock, H. (2010). The resumption of palm-oil production on Guadalcanal's northern plains. *Pacific Economic Bulletin*, 25(1), 64-75.
- Frazer, I. L. (1981). Man long taon: migration and differentiation amongst the To'ambaita, Solomon Islands. Canberra: Ph.D. thesis, A.N.U.
- Frazer, I. L. (1985). Walkabout and urban movement: a Melanesian case study. *Pacific Viewpoint*, 26(1), 185-205.
- Friesen, W. (1986). Labour mobility and economic transformation in Solomon Islands: Lusim Choiseul bae kam baek moa? Auckland: Ph.D. thesis, University of Auckland.
- Friesen, W. (1993). Melanesian economy on the periphery: migration and village economy in Choiseul. *Pacific Viewpoint*, *34*(2), 193-214.
- Hughes, A. V. (1969). Low-cost housing and home ownership in Honiara (B.S.I.P.). *South Pacific Bulletin*, 19(1), 19-26.
- Lacey, A. (2011). Shifting the gaze, shifting the agenda: Sustainable livelihoods in urban Honiara. *Development*, *54*(3), 368-375.
- Maebuta, H. E., & Maebuta, J. (2009). Generating livelihoods: a study of urban squatter settlements in Solomon Islands. *Pacific Economic Bulletin*, 24(3), 118-131.
- Russell, L., Dunda, A., & Everitt, A. (eds.) (2009). *Stayin' Alive: a report on urban livelihoods in Honiara, Solomon Islands*. Canberra: Union Aid Abroad--APHEDA.
- Tedder, J. L. O. (1966). Honiara (Capital of the B.S.I.P.). South Pacific Bulletin, 16(11):36-43.



KEY TO CENSUS WARD NUMBERS AND NAMES BY PROVINCE

Chois	eul Province	Isabe	l Province	Guad	alcanal Province	Malai	ita (cont.)	Temot	u Province
101	Wagina	301	Kia	601	Tandai	719	Aiaisi	901	Fenualoa
102	Katupika	302	Baolo	602	Saghalu	720	Areare	902	Polynesian Outer Islands
103	Vasipuki	303	Kokota	603	Savulei	721	Raroisu'u	903	Nipua/Nopoli
104	Viviru	304	Hovikoilo	604	Tangarare	722	Aba/Asimeuru	904	Lipe/Temua
105	Babatana	305	Buala	605	Wanderer Bay	723	Asimae	905	Manuopo
106	Tepazaka	306	Tirotongana	606	Duidui	724	Mareho	906	Nenumpo
107	Batava	307	Koviloko	607	Vatukulau	725	Tai	907	Nevenema
108	Tavula	308	Kmaga	608	Talise	726	Kwarekwareo	908	Luva Station
109	Polo	309	Kaloka	609	Avuavu	727	Siesie	909	Graciosa Bay
110	Bangera	310	Tatamba	610	Moli	728	Waneagu Silana Sina	910	Nea/Noole
111	Susuka	311	Sigana	611	Tetekanji	729	Keaimela/Radefasu	911	North East Santa Cruz
112	Senga	312	Japuana	612	Birao	730	Langalanga	912	Nanggu/Lord Howe
113	Kerepangara	313	Kolomola	613	Valasi	731	Luaniua	913	Duff Islands
114	Kirugela	314	Kolotubi	614	Kolokarako	732	Pelau	914	Utupua
West	ern Province	315	Susubona	615	Longgu	733	Sikaiana	915	Vanikoro
201	Outer Shortlands	316	Samasodu	616	Aola	Maki	ra-Ulawa	916	Tikopia
202	Inner Shortlands	Centi	al province	617	Paripao	801	North Ulawa	917	Neo
203	Simbo	401	Sandfly/Buenavista	618	East Tasimboko	802	South Ulawa	Honia	ra town council
204	North Ranongga	402	West Gela	619	Vulolo	803	West Ulawa	1001	Nggossi
205	Central Ranongga	403	East Gela	620	Malango	804	Ugi and Pio	1002	Mbumburu
206	South Ranongga	404	Tulagi	621	West Ghaobata	805	Arosi South	1003	Rove/Lengakiki
207	Vonunu	405	South West Gela	622	East Ghaobata	806	Arosi West	1004	Cruz
208	Mbilua	406	South East Gela	Mala	ita Province	807	Arosi North	1005	Vavaea
209	Ndovele	407	North East Gela	701	Auki	808	Arosi East	1006	Vuhokesa
210	Irringgilla	408	North West Gela	702	Aimela	809	Bauro West	1007	Mataniko
211	Gizo	409	Banika	703	Buma	810	Bauro Central	1008	Kola'a
212	South Kolombangara	410	Pavuvu	704	Fauabu	811	Bauro East	1009	Kukum
213	Vonavona	411	Lovukol	705	West Baegu/Fataleka	812	Wainoni West	1010	Naha
214	Kusaghe	412	North Savo	706	Mandalua/Folotana	813	Wainoni East	1011	Vura
215	Munda	413	South Savo	707	Fo'ondo/Gwaiau	814	Star Harbour North	1012	Panatina
216	Nusa Roviana	Renn	ell-Bellona	708	Malu'u	815	Santa Ana		
217	Roviana Lagoon	501	East Tenggano	709	Matakwalao	816	Santa Catalina		
218	South Rendova	502	West Tenggano	710	Takwa	817	Star Harbour South		
219	North Rendova	503	Lughu	711	East Baegu	818	Rawo		
220	Kolombaghea	504	Kanava	712	Fouenda	819	Weather Coast		
221	Mbuini Tusu	505	Te Tau Gangoto	713	Sulufou/Kwarande	820	Haununu		
222	Nono	506	Mugi Henua	714	Sububenu/Burianiasi				
223	Nggatokae	507	Matangi	715	Nafinua				
224	North Vangunu	508	East Gaongau	716	Faumamanu/Kwai				
225	Noro	509	West Gaongau	717	Gulalofou				
226	North Kolombangara	510	Sa'aiho	718	Waneagu/Taelanasina				