Guernsey Annual Population Bulletin

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POLICY COUNCIL
THE STATES OF GUERNSEY

1.1 Introduction

This is the second edition of the Guernsey Annual Population Bulletin. It provides information on population headcounts, demographics and change, housing licences and projections. It is compiled using data provided by the States of Guernsey Social Security Department, Housing Department and the UK Government Actuary's Office. As far as possible international age groupings and classifications have been used to assist comparability with other jurisdictions.

1.2 Headlines

- At the end of March 2010, the Guernsey population was 62,431, which was 157 people (0.3%) higher than the previous year. The majority of the growth was due to natural increase. Net migration contributed just 14 people to the growth over the year ending March 2010.

- The median average age was 40 for males and 42 for females.

- The working age (16 to 64 years old) population increased by 29 people (0.1%) during the year ending March 2010, when it constituted 67.3% of the total population.

- The 0 to 15 years old age group decreased by 74 people (-0.7%) and the 65 and over age group increased by 202 people (2.0%) during the same period.

- The population over 85 years of age (classified as the "oldest old") increased by 62 people (4.4%).

- Based on recent historic trends the total population is projected to increase to approximately 70,000 by 2040, before levelling off.

Figure 1.2.1: Total population (at 31st March)
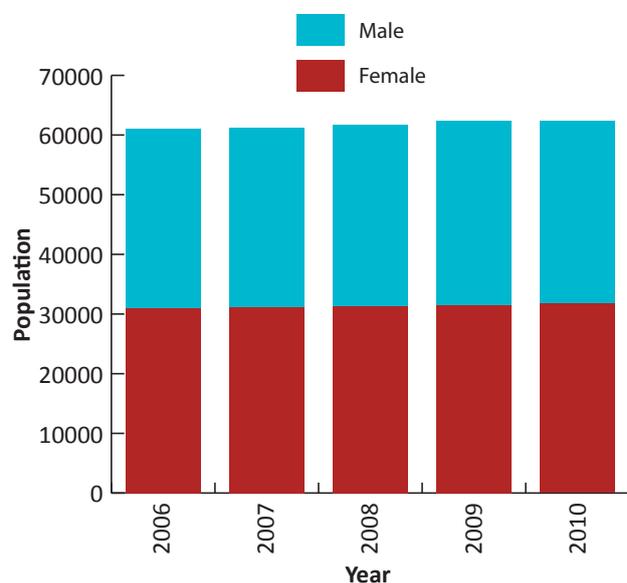
Table 1.2.1: Total population (at 31st March)

	2006	2007	2008	2009	2010
Males	30,034	30,022	30,405	30,777	30,695
Females	30,995	31,153	31,321	31,497	31,736
Total population	61,029	61,175	61,726	62,274	62,431
Annual natural increase	-	-	108	111	143
Annual net migration	-	-	443	437	14
Annual change in population	-	146	551	548	157
Annual % change in population	-	0.2	0.9	0.9	0.3

Table 2.1.1: Total population at March 31st

	Total population	Annual change in population number	Annual % change in population number
2006	61,029	-	-
2007	61,175	146	0.2
2008	61,726	551	0.9
2009	62,274	548	0.9
2010	62,431	157	0.3

Table 2.1.2: Births, deaths and natural increase during years ending March 31st

	Births	Deaths	Natural increase
2008	603	495	108
2009	646	535	111
2010	656	513	143

Table 2.1.3: Immigration, emigration and migration during years ending March 31st

	Immigration	Emigration	Net migration
2008	5,622	5,179	443
2009	5,297	4,860	437
2010	4,482	4,468	14

Figure 2.1.1: Annual changes in population number during years ending March 31st
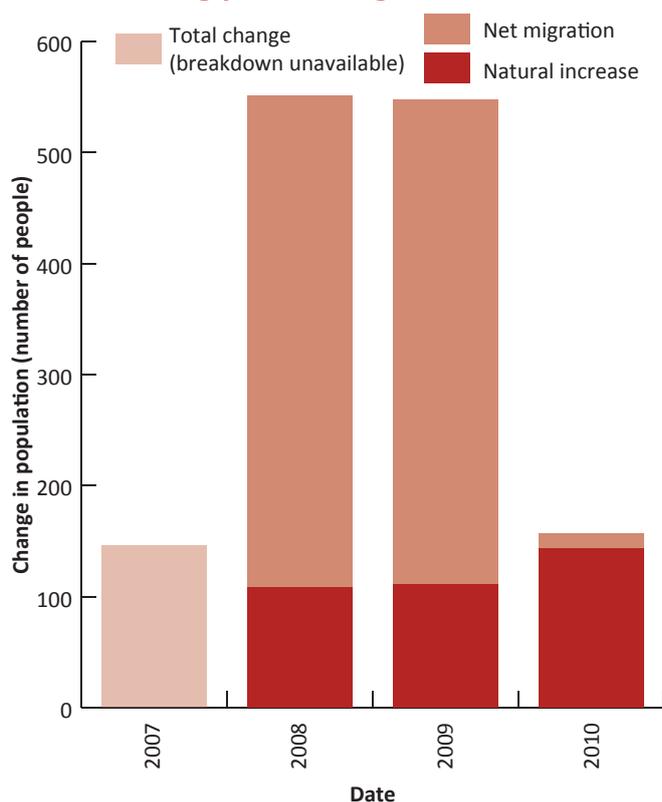
Population headcounts have been calculated by the Social Security Department using administrative records since 2006. Information on natural increase and net migration has also been available since the year ending March 2008.

The total population increased by 0.3% (157 people) to a total of 62,431 over the year ending 31st March 2010. See *Table 2.1.1*. This annual increase was a result of a natural increase of 143 people and net migration of 14 people over the year ending March 31st 2010.

Natural increase in population is defined as the number of births minus the number of deaths during a particular time period. The natural increase has been relatively stable over the three years ending 2010, when it was 143. This is shown in *Table 2.1.2*.

Net migration is the sum of immigration (people moving to the island) and emigration (people moving off the island). For statistical purposes, an immigrant is defined as a person moving to Guernsey to work for any period of time or live for a period of 26 weeks or more. An emigrant is defined as a person moving away from Guernsey to work for any period of time or live for a period of 26 weeks or more. Emigrants and immigrants include residentially qualified people; people with a housing licence and their families; and people living in open market accommodation.

In the year ending March 2010, the number of immigrants and emigrants decreased (by approximately 800 and 400 people respectively) on the previous year, resulting in a net migration of just 14 people.

As shown in *Table 2.1.3*, net migration had been around 440 people in both of the years ending March 2008 and 2009.

With natural increase remaining relatively stable, the impact of changing net migration on the total population change can clearly be seen in *Figure 2.1.1*.

3.1 Annual demographics

Age and gender distribution pyramids, such as *Figure 3.1.1* can be used to track changes in the population demographic over time.

The available data, presented in *Figure 3.1.1*, represents five consecutive years. It can be seen that in 2010, the overall age and gender distribution was very similar to the previous four years. Changes in the population demographic tend to develop over relatively long periods of time.

However, the number of males and females in five out of the six age bands from seventy years upwards was seen to increase between 2006 and 2009.

The 'bulge' in the pyramids due to the 'baby boom' between the 1950's and early 1970's can be seen to be moving up out of the 35 to 39 group and into the 60 to 64 group. This bulge will move progressively further up the pyramid as the 'baby boom' generation get older.

Comparing the median age of the male and female populations gives an indication of the differences in the two demographic profiles. In March 2010, the median age (i.e. the age of the person in the middle if everyone was to be ranked in age order) was 40 for males and 42 for females.

The male population is higher than the female in almost all the age categories up to the age of 35 (see *Table 3.1.1*). In almost all subsequent age categories the female population is higher than the male.

In March 2010, 69% of the population over the age of 85 were female. These observations are due to the average life-span being slightly longer for females than males.

Figure 3.1.1: Age and gender distribution (at 31st March)
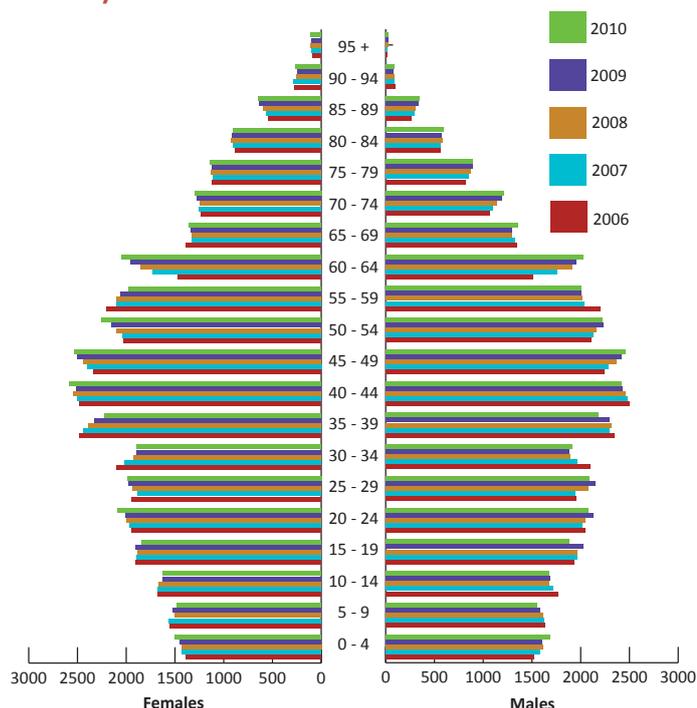
Table 3.1.1: Age and gender distribution (at 31st March 2010)

	Female	Male	Total
0 - 4	1,498	1,682	3,180
5 - 9	1,482	1,549	3,031
10 - 14	1,624	1,678	3,302
15 - 19	1,843	1,883	3,726
20 - 24	2,089	2,078	4,167
25 - 29	1,990	2,092	4,082
30 - 34	1,892	1,911	3,803
35 - 39	2,219	2,185	4,404
40 - 44	2,580	2,419	4,999
45 - 49	2,532	2,457	4,989
50 - 54	2,253	2,223	4,476
55 - 59	1,973	2,004	3,977
60 - 64	2,048	2,021	4,069
65 - 69	1,353	1,353	2,706
70 - 74	1,299	1,207	2,506
75 - 79	1,136	896	2,032
80 - 84	902	594	1,496
85 - 89	642	347	989
90 - 94	268	90	358
95 +	113	26	139
Total	31,736	30,695	62,431

Table 4.1.1: Live housing licences (at 31st March) - Essential employment related

	2006	2007	2008	2009	2010
Hostelry	153	151	161	134	132
Finance	406	458	555	423	440
Professional, business, scientific and technical	n/a	n/a	n/a	205	203
Public Administration	93	80	90	113	113
Education	230	251	251	228	238
Human health, social & charitable work	238	244	275	268	280
Other	221	224	259	227	213
Total	1,341	1,408	1,591	1,598	1,619

Table 4.1.2: Live housing licences (at 31st March) - Short term employment related

	2006	2007	2008	2009	2010
Agriculture, horticulture, fishing and quarrying	161	126	205	107	114
Construction	n/a	n/a	n/a	249	181
Wholesale, retail and repairs	n/a	n/a	n/a	256	181
Hostelry	533	452	570	569	508
Finance	n/a	n/a	n/a	100	106
Other	491	379	683	335	331
Total	1,185	957	1,458	1,616	1,421

NB At the time of producing the 2007 data there were some short-term licence applications which had not yet been processed by the Housing Department, and as such, the 2007 figures shown above are artificially low and the 2008 figures artificially high.

Table 4.1.3: Live housing licences (at 31st March) - Compassionate

	2006	2007	2008	2009	2010
"En famille" or one to one	1,110	1,185	1,265	1,341	1,345
Other	581	655	725	672	683
Total	1,691	1,840	1,990	2,013	2,028

At present, the principal means of controlling population in Guernsey is through the administration of the Housing (Control of Occupation) Law, 1994.

The Housing Department issues two main types of housing licences: (i) employment-related licences linked to a specific post of employment; (ii) non employment-related licences based on the length and strength of a person's connections with the Island.

All licences contain conditions relating to: (i) the local market accommodation the holder of the licence may occupy; and (ii) the duration of the licence.

Tables 4.1.1, 4.1.2 and *4.1.3* provide a summary of the number of licence holders (not including their spouse/partner or dependants) who were living in the Island by virtue of different types of housing licence as at 31st March for the years in question.

Tables 4.1.1 and *4.1.2* show the numbers of employment related license holders by employment sector. Due to changes in the coding system used to classify economic sectors of employment and developments to the database used by the Housing Department, more detailed statistics are available from 2009 onward. It should be noted that the sector breakdown used from 2009 onward is not strictly comparable with earlier years (where available). In particular, accountancy and legal work, which were previously included in the Finance sector are now split out into the Professional, business, scientific and technical sector.

Table 4.1.3 shows the numbers of non-employment related or compassionate licence holders. These figures are unaffected by the economic sector code changes, so are comparable year on year.

It can be seen that there has been a general upward trend in the numbers of live essential employment and compassionate housing licences since 2006.

The trend in the number of short term employment related licences was also generally been upward between 2006 and 2009. However, the number of live licences in March 2010 was lower than March 2009.
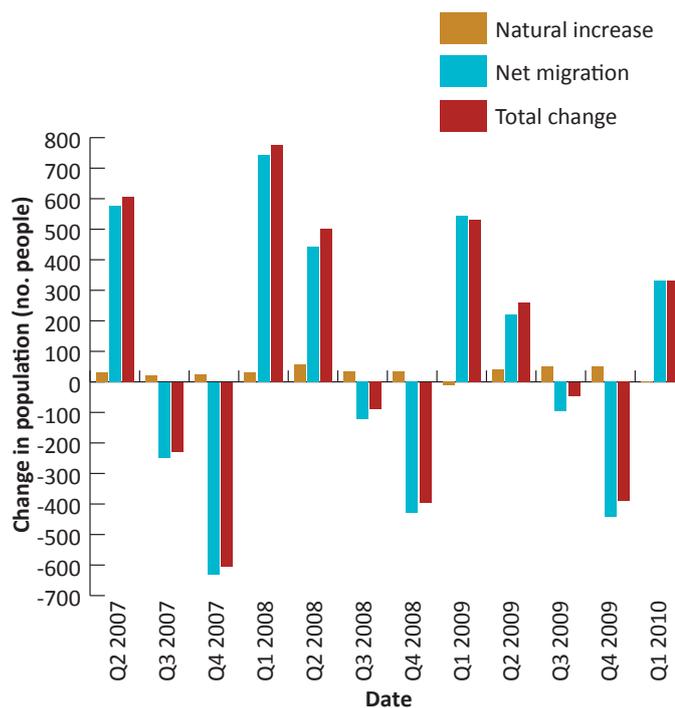
5.1 Quarterly changes

The quarterly population changes result from a combination of natural increase and net migration (see *Figure 5.1.1*).

Net migration in Guernsey tends to be higher in the spring and summer quarters than in the autumn and winter, due to the seasonal nature of some areas of the Guernsey economy. Natural increase shows less seasonality.

The highest level of natural increase (57 people) observed over the three years ending 31st March 2010 was in the second quarter of 2008. The lowest level was in the first quarter of 2009 (-12 people i.e. 12 more people died than were born during the quarter).

The highest level of net migration during the same period, was observed in the first quarter of 2008, when there were 744 more immigrants than emigrants. However, the lowest level had occurred in the quarter prior to that, when there were 630 less immigrants than emigrants.

Figure 5.1.1: Quarterly population changes


Table 5.1.1: Quarterly population changes

		Births during quarter	Deaths during quarter	Natural increase during quarter	Immigration during quarter	Emigration during quarter	Net migration during quarter	Total population at end of quarter	Quarterly change in population number	Quarterly % change in population
2007	Q1	-	-	-	-	-	-	61,175	-	-
2007	Q2	155	125	30	1,630	1,053	577	61,782	607	1.0
2007	Q3	138	118	20	1,487	1,735	-248	61,554	-228	-0.4
2007	Q4	167	141	26	907	1,537	-630	60,950	-604	-1.0
2008	Q1	143	111	32	1,598	854	744	61,726	776	1.3
2008	Q2	179	122	57	1,606	1,163	443	62,226	500	0.8
2008	Q3	147	114	33	1,374	1,496	-122	62,137	-89	-0.1
2008	Q4	162	129	33	953	1,381	-428	61,742	-395	-0.6
2009	Q1	158	170	-12	1,364	820	544	62,274	532	0.9
2009	Q2	165	125	40	1,266	1,046	220	62,534	260	0.4
2009	Q3	180	128	52	1,187	1,284	-97	62,489	-45	-0.1
2009	Q4	172	120	52	860	1,302	-442	62,099	-390	-0.6
2010	Q1	139	140	-1	1,169	836	333	62,431	332	0.5

6.1 Dependency ratios

Table 6.1.1: Dependency ratio (at 31st March)

	Dependency ratio
2007	0.49
2008	0.48
2009	0.48
2010	0.48

Figure 6.1.1: Population by age group (at 31st March)
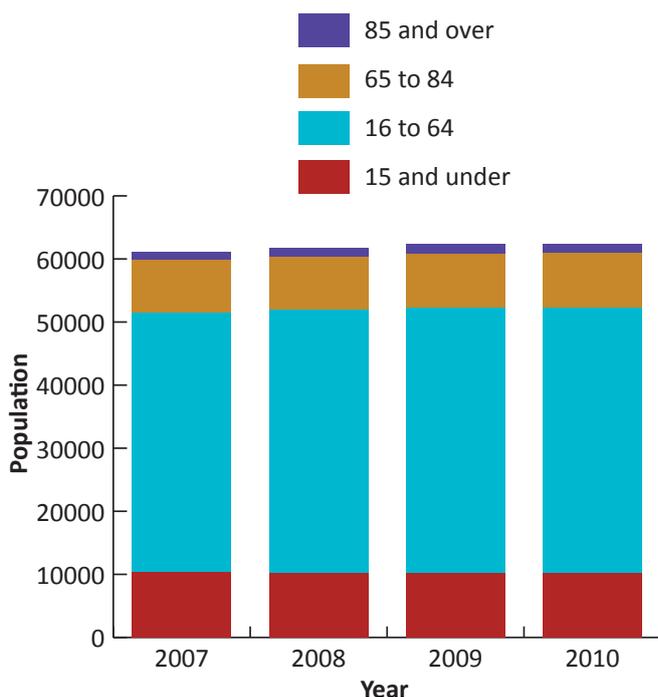
Table 6.1.2: Population by age group (at 31st March)

	15 and under	16 - 64	65 - 84	85 and over	Total
2007	10,379	41,031	8,424	1,341	61,175
2008	10,191	41,668	8,503	1,364	61,726
2009	10,235	42,015	8,600	1,424	62,274
2010	10,161	42,044	8,740	1,486	62,431

Table 6.1.3: Percentage of population by age group (at 31st March)

	15 and under (%)	16 - 64 (%)	65 - 84 (%)	85 and over (%)	Total (%)
2007	17.0	67.1	13.8	2.2	100
2008	16.5	67.5	13.8	2.2	100
2009	16.4	67.5	13.8	2.3	100
2010	16.3	67.3	14.0	2.4	100

NB - Categories may not sum to overall total due to rounding

Dependency ratios are used to indicate the portion of a population, which is economically dependent i.e. those who are eligible for retirement and those who are still in compulsory full time education (represented by the 15 and under and the 65 and over years of age categories).

The ratios (available from 2007 onward in *Table 6.1.1*) are calculated by dividing the number of individuals in the dependent age categories by the number of people in the working age category.

Trends in dependency ratios over time (and projected into the future) are used to assess the contribution rates required from the economically active in order to support the economically dependant.

In 2010, the overall dependency ratio was 0.48, which means that for every 100 people of working age (between the ages of 16 and 64) there were 48 people of dependant age.

The age groups presented in *Figure 6.1.1* and *Tables 6.1.2* and *6.1.3* are used to show the population of working age compared to those of dependant age.

The 85 and over category is used to highlight the number of "oldest old"; a portion of the population which is likely to be of particular interest when monitoring the ageing of a population.

Over the year ending March 2010, the number of people in the 16-64, 65-84 and 85 and over categories increased by 0.1%, 1.6% and 4.4% respectively. The number of children of 15 or under decreased by 0.7%.

The proportion of people in the dependent age categories was 32.7% in 2010, compared to 32.5% the previous year. However, with only four years worth of time series data available, it is not yet possible to gauge longer term trends.

7.1 Projections - current best match model

Population projections are produced periodically by the UK Government Actuary's Office[1] (GAO) primarily for the purpose of actuarial review of the Guernsey Insurance Fund for the Social Security Department.

A range of projection models are produced by the actuaries to reflect different migration scenarios. The model presented here is the one which best matches recent historic data trends, so at present is taken to be the most likely in terms of future trends. It is based on a variety of assumptions including an average net migration of plus 200 people per annum. An alternative model (based on varying migration levels to achieve a constant population, as per States policy) is provided overleaf. For more information, please see the methodology section on *page 9*.

This model (which was updated by GAO in 2011) projects the total population to increase gradually to about 70,000 in 2035 (see *Figure 7.1.1* and *Table 7.1.1*). This is primarily as a result of the ageing of the baby boom generation. The population is projected to then level off and decline from 2055 onwards (but at a slower rate than earlier increases since average life expectancy is projected to increase).

The age band 65 to 66 is shown on the graph, since between the years 2020 and 2032, the pension age will be gradually increased from 65 to 67.

The proportion of people under 15 is projected to fall from 16.3% of the total population in 2010 to 12.8% in 2070 (see *Table 7.1.2*). The proportion of people aged 16 to 64 is also projected to decrease (from 67.3% to 54.1%), whist the number of people over 65 is projected to increase (from 16.4% to 33.1%).

The result (shown in *Table 7.1.3*) is a projected dependency ratio of 0.85 by 2070 (or 0.77 based on the upper limit of the working age group increasing to 66 years), compared to 0.48 in 2010.

[1] For more information see www.gad.gov.uk

Figure 7.1.1: Projected population by age group
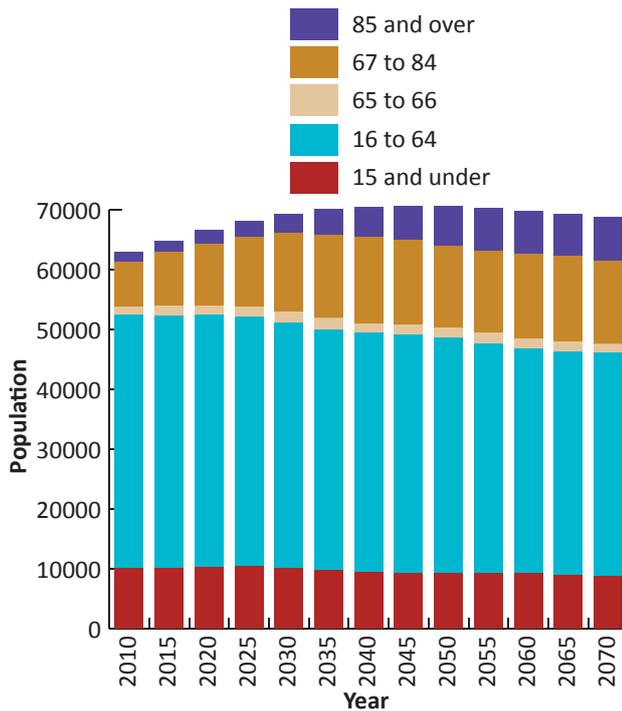
Table 7.1.1: Projected population by age group

	15 and under	16 - 64	65 - 84	85 and over	Total
2020	10,235	42,219	11,913	2,258	66,625
2030	10,117	40,974	15,027	3,249	69,368
2040	9,382	40,031	16,044	5,055	70,512
2050	9,266	39,301	15,450	6,516	70,534
2060	9,190	37,685	15,742	7,182	69,799
2070	8,790	37,233	15,468	7,274	68,765

Table 7.1.2: Projected percentage of population by age group

	15 and under (%)	16 - 64 (%)	65 - 84 (%)	85 and over (%)	Total (%)
2020	15.4	63.4	17.9	3.4	100
2030	14.6	59.1	21.7	4.7	100
2040	13.3	56.8	22.8	7.2	100
2050	13.1	55.7	21.9	9.2	100
2060	13.2	54.0	22.6	10.3	100
2070	12.8	54.1	22.5	10.6	100

Table 7.1.3: Projected dependency ratios

	Dependency ratio
2020	0.58
2030	0.69
2040	0.76
2050	0.79
2060	0.85
2070	0.85

7.2 Projections - alternative model (constant population, varying migration)

The model shown in *Figure 7.2.1* and *Table 7.2.1* reflects how the demographics of the population is projected to change if the States successfully implements its policy to keep the total population stable. The model is based on a varying level of net migration, which achieves a constant total when combined with natural population changes.

The model uses negative net migration (i.e. more people moving off the Island than onto it) in the years from 2010 to around 2025. The effect is to counteract the population increases which are projected to result primarily from the ageing baby boom generation and increasing life expectancy.

The aging and death of the baby boom population "bulge", combined with stable or reducing fertility rates is projected to result in natural population decreases from around 2050 onward. This model balances this with positive net migration (i.e. more people moving onto the Island than off it) towards the end of the projection period.

In this model, the proportion of people under 15 is projected to fall from 16.3% of the total population in 2010 to 13.0% in 2070 (see *Table 7.2.2*). The proportion of people aged 16 to 64 is also projected to decrease (from 67.3% to 57.1%), whist the number of people over 65 is projected to increase (from 16.4% to 29.8%).

The result (shown in *Table 7.2.3*) is a projected dependency ratio of 0.86 by 2050, reducing to 0.75 by 2070 (or 0.85 and 0.74 respectively based on the upper limit of the working age group increasing to 66 years), compared to 0.48 in 2010.

NB - The age band 65 to 66 is shown on the graph, since between the years 2020 and 2032, the pension age will be gradually increased from 65 to 67.

Figure 7.2.1: Projected population by age group
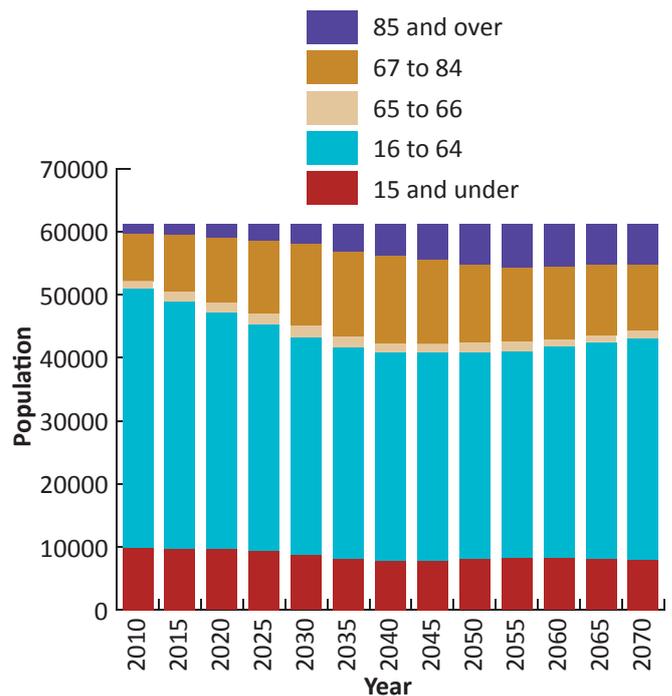
Table 7.2.1: Projected population by age group

	15 and under	16 - 64	65 - 84	85 and over	Total
2020	9,635	37,513	11,802	2,225	61,175
2030	8,683	34,471	14,828	3,194	61,175
2040	7,755	33,015	15,389	5,016	61,175
2050	8,024	32,869	13,873	6,409	61,175
2060	8,160	33,538	12,649	6,828	61,175
2070	7,982	34,956	11,822	6,415	61,175

Table 7.2.2: Projected percentage of population by age group

	15 and under (%)	16 - 64 (%)	65 - 84 (%)	85 and over (%)	Total (%)
2020	15.7	61.3	19.3	3.6	100
2030	14.2	56.3	24.2	5.2	100
2040	12.7	54.0	25.2	8.2	100
2050	13.1	53.7	22.7	10.5	100
2060	13.3	54.8	20.7	11.2	100
2070	13.0	57.1	19.3	10.5	100

Table 7.2.3: Projected dependency ratios

	Dependency ratio
2020	0.63
2030	0.77
2040	0.85
2050	0.86
2060	0.82
2070	0.75

8.1 Methodology and further information

Headcounts

Population headcounts are calculated by the Social Security Department using administrative records. All individuals who are employed in Guernsey or who are resident for longer than 26 weeks are required to register with the Department. The data is cross referenced with information provided by the Education Department in order to calculate a headcount at the end of each quarter.

This data has been available on an annual basis since March 2006 and quarterly since March 2007.

Prior to this, population figures were calculated using data collected by census every 5 or ten years; the last census was held in 2001. However, due to the different method and count date; the figures produced by the two methodologies are not directly comparable.

Following a States decision (see ***Billet d'Etat XVII, 2010***, available via ***www.gov.gg/billets***), a census will not be held in Guernsey in 2011. The Policy and Research Unit are instead working on developing an electronic alternative, which will utilise existing administrative sources. The intention is to expand upon the information already published in this bulletin in order to provide more of the information traditionally collected via a census, such as population by parish.

New information on the Island's housing stock, including household tenures and distribution by parish is available in the ***Guernsey Annual Housing Stock Bulletin***, via ***www.gov.gg/property***.

Projections

Population projections are provided periodically by the UK Government Actuary's Office (GAO) primarily for the purpose of actuarial review of the Guernsey Insurance Fund for the Social Security Department. A range of projection models are produced by the actuaries to reflect different migration scenarios. They also use a range of other assumptions in their calculations e.g. fertility and mortality rates.

Each year the Policy and Research Unit assesses which of the models offers the best match in light of any changes to actual data trends or circumstances, including changes to States policy or legislation which will affect the population level (for example, changes to immigration controls).

This year (as per last year), the model based on a migration scenario of plus 200 net per annum best matched recent historic data trends, so is taken to be the most likely in terms of future trends. However, the projected population numbers presented have been updated since last year in line with GAO's latest models.

In addition, the constant population model provided by GAO is included to show how the demographics are projected to change if the States achieves its policy to maintain a constant population by varying levels of migration.

9.1 Contact details

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