

# Monitoring Social, Economic and Environmental Trends

## Introduction

This year's Sustainable Guernsey – Monitoring Social, Economic and Environmental Trends is the sixth in the series of annual reports published by the States of Guernsey Policy Council. Its role is to provide a 'picture' of Guernsey's sustainability in terms of how the Island's community, economy and environment are faring.

The purpose of this document is to continue reporting changes in trends on a wide range of indicators. It is an information "tool" to be used in the formulation of policy, including the new Government Business Plan and the monitoring of policy outcomes at a strategic level.

In the future, it is intended that an additional 'management style' report will be published, containing performance indicators reflecting Government Business Plan outcomes. These will have an operational focus and represent the results of actions promoted through the Plan, particularly the progress being made in pursuing States Priority objectives.

# How to use this document

## Anatomy of a typical page

The pages of the Sustainable Guernsey document follow the same style and layout. The various parts of a typical page and what they mean are shown below. On each double page, commentary and explanatory text is given on the left whilst the data tables and graphs are shown on the right.

### Indicator Gauge Summary

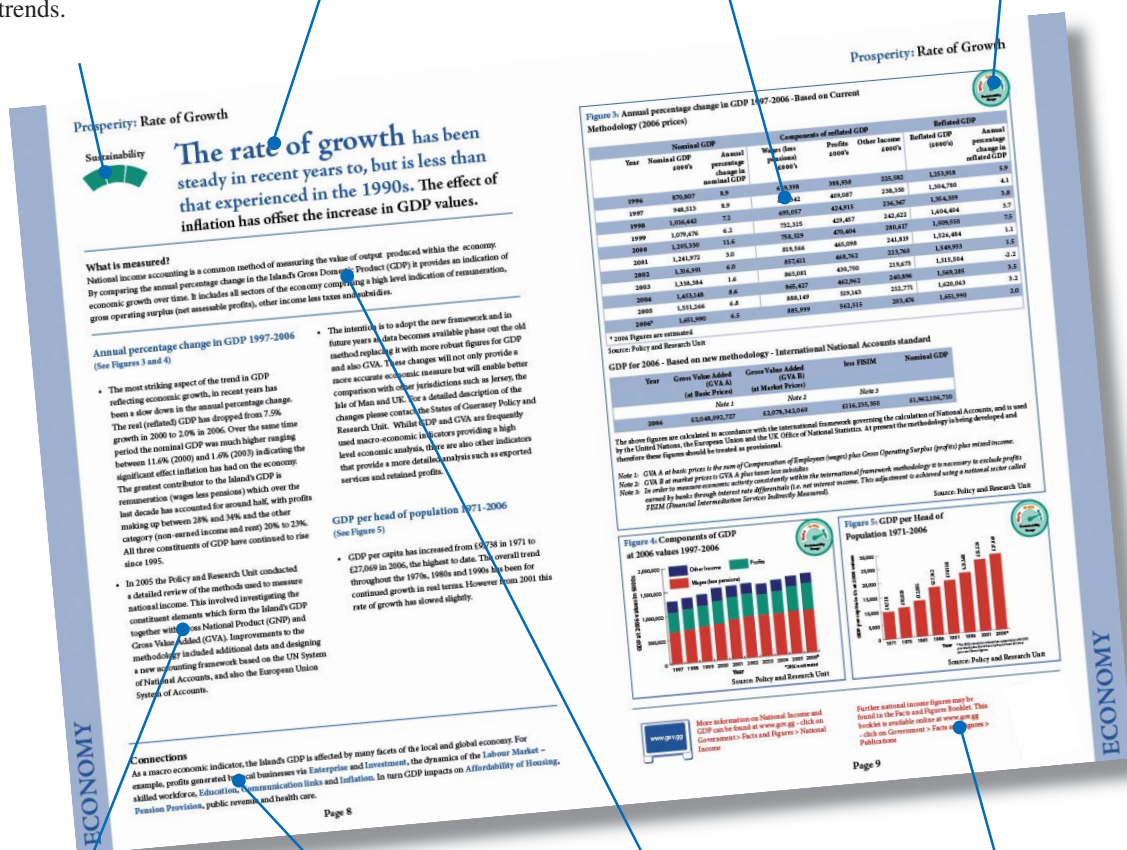
This is provided for each indicator. The colour of each segment relates to each sustainability gauge shown on the right hand side of the page. For instance in this example, there are three pieces of data that make up the headline indicator, each showing green, indicating 'better' trends.

**Indicator Headlines**  
Summarises the main findings of the indicator.

### Indicator data

Presented in tables and charts. Commentary and explanation is shown in the text on the left of the page.

**Sustainability Gauge**  
Indicates whether the data trends are better (green), stable (orange) or worse (red).



**Commentary on data trends**  
This text offers an explanation of the tables and graphs shown on the opposite page.

**Connections**  
Outlines the connections that the indicator may have to other indicators in the report.

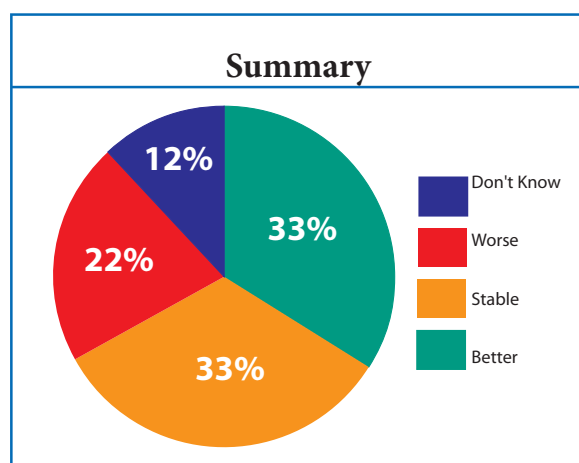
**What is measured?**  
This section outlines what it is that the indicator measures.

**Further reading**  
Shows links to other documents and useful web sites.

# Executive Summary

This year, the sustainability gauges which provide a broad indication of the Island's sustainability have been further developed to better reflect changes in all the strategic indicators underpinning each headline indicator. The gauges continue to provide a clear guide of how Guernsey is faring and are based on the key trends emerging from the 36 headline and 85 strategic indicators. In order to provide a quick and visual interpretation of each indicator, they have been colour coded using a 'traffic light' scheme to represent the three categories 'Better', 'Stable' and 'Worse'. This also provides a basic assessment of the changes that have occurred over the period being reported.

**Figure 1:**  
**Broad indication of sustainability trends**



Currently 10 (12%) strategic indicator gauges contain a question mark, out of a total of 85. These question marks reflect either a lack of data over a number of years so that trends can be compared, or that an indicator is in the process of being developed. Over time, as the indicators are developed and time-series data becomes available, these question marks will be reduced.

For 2007, 28 (or 33%) of the indicators are categorised as better. The Environment and the Community Well-being dimensions have the highest percentage (38% and 53% respectively) of indicators classed as better, reflecting trends in Water Quality and Water Consumption, Land Use, Life Expectancy and Sense of Well-Being.










The Social dimension has the most (82%) stable indicators compared with the other three strands. These represent stabilising trends in educational attainment, as well as demographic trends.

Despite 67% of the indicators reflecting a positive (stable or better) picture of Guernsey's sustainability, 18 or 22% of indicators show an unsustainable or worse trend. These occur in the Economy, Environment and Community Well-being dimensions. However, the majority fall within the Environmental dimension. These are the Waste, Energy, Local Transport and Climate Change indicators.

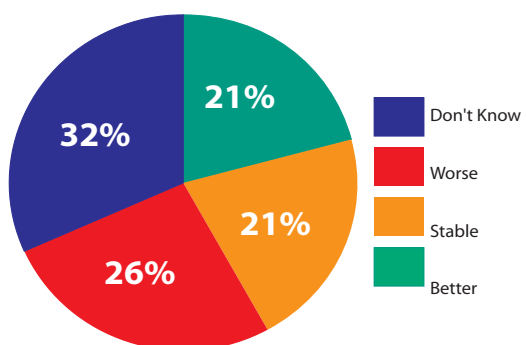
## Concluding comments










Overall, most (56) indicators reflect a stable to better position. This accounts for 75% of the indicators where a trend has been established. Despite the Island following a generally sustainable path, there are concerns with the environment, for example the effects of climate change, the increasing quantity of waste produced, and the continued rise in energy consumption.

## Executive Summary

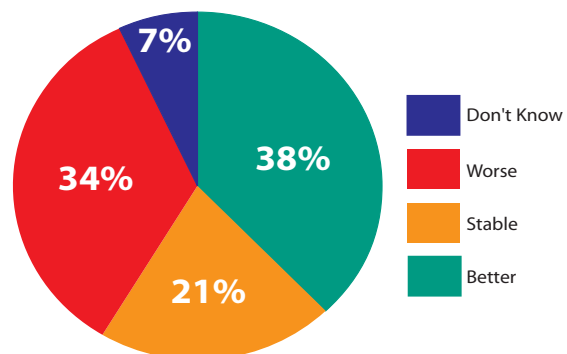
Economy			
Section	Indicator	Gauge	Page No
Prosperity	Growth Rate		8
	Inflation		10
	Personal Income		12
Activity	Labour Market		14
	Enterprise		16
	Investment		17
Capacity	Communication Links		18
	Workforce Development		20
	Distribution		22










### Summary



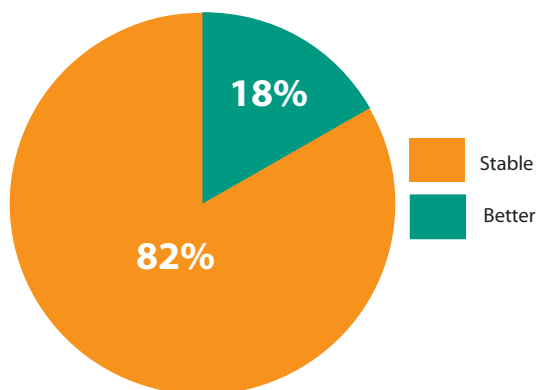
Environment			
Section	Indicator	Gauge	Page No
Natural Environment	Air Quality		26
	Water Quality		28
	Biodiversity		30
Built Environment	Land Use		32
	Local Transport		34
	Impact of Climate Change		36
Consumption	Waste		38
	Water Consumption		40
	Energy		42










### Summary



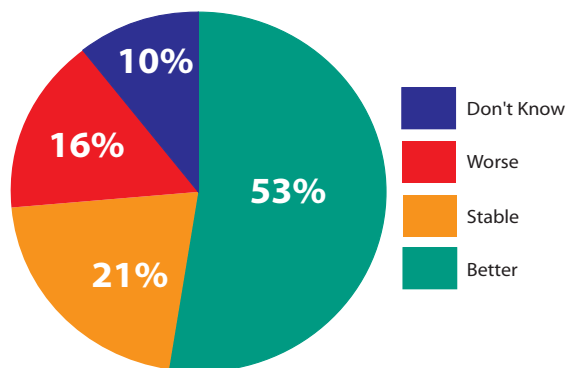
Social			
Section	Indicator	Gauge	Page No
Population	Population Trends		46
	Demographic Trends		48
	Immigration and Emigration		50
Housing	Availability of Housing		52
	Quality of Housing		54
	Affordability		56
Education	Literacy and Numeracy at 11 Years		58
	Education to 16 years		60
	Post 16 Participation		62

Summary



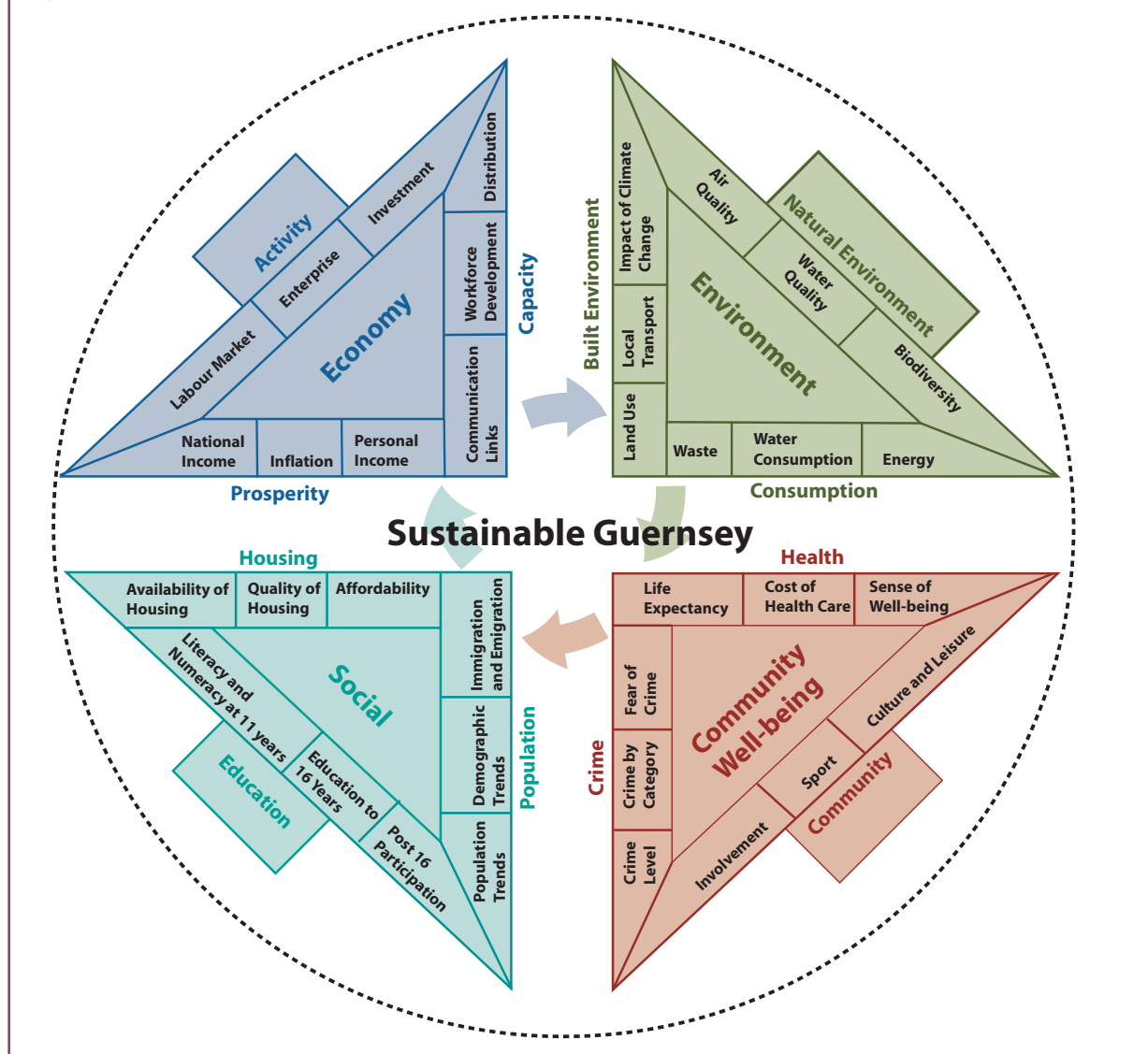
Community Well-being			
Section	Indicator	Gauge	Page No
Crime	Crime Level		66
	Crime by Category		68
	Fear of Crime		70
Health	Life Expectancy		72
	Cost of Health Care Comparisons		74
	Sense of Well-Being		76
Community	Involvement		78
	Sport		80
	Culture and Leisure		82

Summary



# Developments

Figure 2: 2005 Indicator Structure



## Indicator Developments

Building upon the changes made in 2005, this year's Sustainable Guernsey – Monitoring Social, Economic and Environmental Trends benefits from several new and improved indicator data sets.

The Availability of Housing indicator has been expanded and includes data from the Guernsey Youth Housing organisation and monitors the number of homelessness referrals received annually and the gender breakdown of those referrals. The Guernsey Youth Housing organisation was set up in 2000 with the aim of reducing youth homelessness on the Island and, wherever possible, preventing rough sleeping by young people aged between 16 and 21 years of age.

The Culture and Leisure indicator has also been further developed, with two new data sets introduced this year. The first measures the membership figures of the Association of Guernsey Charities, an organisation that encourages charitable and community work in Guernsey. The second monitors the distribution of Guernsey's share of the Channel Island Lottery proceeds.

The workforce development indicator includes more up to date statistics on work related qualifications, replacing 2001 Census figures.

### **Sustainability Gauge**

The introduction of the sustainability gauge has provided a simple mechanism for broadly evaluating indicator trends. Rather than using a single gauge for each indicator, simple colour coded segments are used to represent each data set held within the indicator, showing the proportion of the indicator which is stable, better or worse. To aid in this process and to provide a more considered view each States Department has had a role in the authentication process of each gauge.

The Executive Summary has been used to provide a more complete overview of the Island's sustainability by taking the results from the colour coded sustainability gauges and presenting them in a simple pie chart.

### **Cover design**

This year's cover design competition has again been run in conjunction with the College of Further Education. Whilst judging a winner was an extremely difficult task, a panel of judges did eventually select Kris Bichard, as the overall winner and it is his design, which is featured on the cover of this year's report. The design from the runner-up Keiran Wyatt-Nicolle has been used as the cover of the 2007 Facts and Figures booklet.

### **Facts and Figures Booklet**

By streamlining the indicators and reducing the length of Sustainable Guernsey there is an increased need for better signposting to the relevant sources of data. Rather than containing the complete data sets, this year's report provides an overview that points the reader to selected websites, reports and publications where further information can be accessed, including the 2007 Facts and Figures booklet.

## Prosperity: Rate of Growth



**The rate of growth has been steady in recent years, but is less than that experienced in the 1990s. The effect of inflation has offset the increase in GDP values.**

### What is measured?

National income accounting is a common method of measuring the value of output produced within the economy. By comparing the annual percentage change in the Island's Gross Domestic Product (GDP) it provides an indication of economic growth over time. It includes all sectors of the economy comprising a high level indication of remuneration, gross operating surplus (net assessable profits), other income less taxes and subsidies.

### Annual percentage change in GDP 1997-2006 (See Figures 3 and 4)

- The most striking aspect of the trend in GDP reflecting economic growth in recent years has been a slow down in the annual percentage change. The real (reflated) GDP has dropped from 7.5% growth in 2000 to 2.0% in 2006. Over the same time period the nominal GDP was much higher, ranging between 11.6% (2000) and 1.6% (2003) indicating the significant effect inflation has had on the economy. The greatest contributor to the Island's GDP is remuneration (wages less pensions) which over the last decade has accounted for around half, with profits making up between 28% and 34% and the other category (non-earned income and rent) 20% to 23%. All three constituents of GDP have continued to rise since 1995.
- In 2005 the Policy and Research Unit conducted a detailed review of the methods used to measure national income. This involved investigating the constituent elements which form the Island's GDP together with Gross National Product (GNP) and Gross Value Added (GVA). Improvements to the methodology included additional data and designing a new accounting framework based on the UN System of National Accounts, and also the European Union System of Accounts.

- The intention is to adopt the new framework and in future years, as data becomes available, phase out the old method replacing it with more robust figures for GDP and also GVA. These changes will not only provide a more accurate economic measure but will enable better comparison with other jurisdictions such as Jersey, the Isle of Man and UK. For a detailed description of the changes please contact the States of Guernsey Policy and Research Unit. Whilst GDP and GVA are frequently used macro-economic indicators providing a high level economic analysis, there are also other indicators that provide a more detailed analysis, such as exported services and retained profits.

### GDP per head of population 1971-2006 (See Figure 5)

- GDP per capita has increased from £9,738 in 1971 to £27,069 in 2006, the highest to date. The overall trend throughout the 1970s, 1980s and 1990s has been for continued growth in real terms. However from 2001 this rate of growth has slowed slightly.

### Connections

As a macro-economic indicator, the Island's GDP is affected by many facets of the local and global economy. For example, profits generated by local businesses via [Enterprise](#) and [Investment](#), the dynamics of the [Labour Market](#) – skilled workforce, [Education](#), [Communication links](#) and [Inflation](#). In turn GDP impacts on [Affordability of Housing](#), [Pension Provision](#), public revenue and health care.



**Figure 3: Annual percentage change in GDP 1997-2006 -Based on current methodology (2006 prices)**



Year	Nominal GDP		Components of reflation GDP			Reflation GDP	
	Nominal GDP £000's	Annual percentage change in nominal GDP	Wages (less pensions) £000's	Profits £000's	Other Income £000's	Reflation GDP £000's	Annual percentage change in reflation GDP
1996	870,807	8.9	639,398	388,938	225,582	1,253,918	5.9
1997	948,513	8.9	657,342	409,087	238,350	1,304,780	4.1
1998	1,016,442	7.2	693,057	424,915	236,367	1,354,339	3.8
1999	1,079,676	6.2	732,325	429,457	242,622	1,404,404	3.7
2000	1,205,330	11.6	758,529	470,404	280,617	1,509,550	7.5
2001	1,241,972	3.0	819,566	465,098	241,819	1,526,484	1.1
2002	1,316,991	6.0	857,411	468,762	223,760	1,549,933	1.5
2003	1,338,384	1.6	865,081	430,750	219,673	1,515,504	-2.2
2004	1,453,148	8.6	865,427	462,962	240,896	1,569,285	3.5
2005	1,551,266	6.8	888,149	519,143	212,771	1,620,063	3.2
2006*	1,651,990	6.5	885,999	562,515	203,476	1,651,990	2.0

\* 2006 Figures are estimated

Source: Policy and Research Unit

## GDP for 2006 - Based on new methodology - International National Accounts standard

Year	Gross Value Added (GVA A) (at Basic Prices)	Gross Value Added (GVA B) (at Market Prices)	less FISIM	Nominal GDP
	Note 1	Note 2	Note 3	
2006	£2,048,092,727	£2,078,342,060	£116,235,350	£1,962,106,710

The above figures are calculated in accordance with the international framework governing the calculation of National Accounts, and is used by the United Nations, the European Union and the UK Office of National Statistics. At present the methodology is being developed and therefore these figures should be treated as provisional.

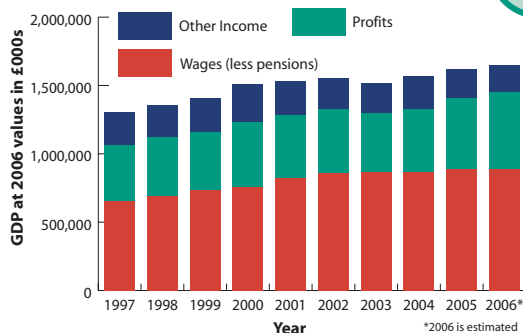
Note 1: GVA A at basic prices is the sum of Compensation of Employees (wages) plus Gross Operating Surplus (profits) plus mixed income.

Note 2: GVA B at market prices is GVA A plus taxes less subsidies

Note 3: In order to measure economic activity consistently within the international framework methodology it is necessary to exclude profits earned by banks through interest rate differentials (i.e. net interest income). This adjustment is achieved using a notional sector called FISIM (Financial Intermediation Services Indirectly Measured).

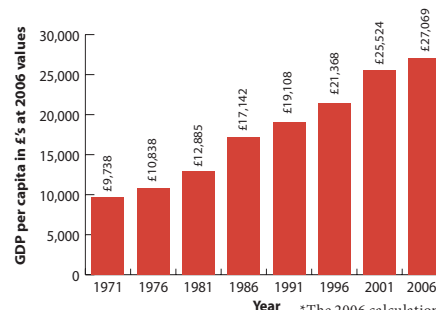
Source: Policy and Research Unit

**Figure 4: Components of GDP at 2006 values 1997-2006**



Source: Policy and Research Unit

**Figure 5: GDP per Head of Population 1971-2006**



\*The 2006 calculation is based on a population of 61,029 provided by the Social Security Department. All other years are Census figures.

Source: Policy and Research Unit



More information on National Income and GDP can be found at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > National Income

Further national income figures may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications



# Guernsey's headline rate of inflation has risen in the past year in line with that of the UK.

### What is measured?

The Guernsey Retail Prices Index (GRPI) measures the change in the prices of goods and services bought for the consumption, or use, by households in Guernsey. The calculation of the GRPI is based on the price change of several thousand goods or services. It is a key macro-economic indicator that tracks both the headline rate of inflation and RPIX, which excludes mortgage interest payments.

### Trends in the 'headline' rate of inflation for Guernsey, Jersey and UK 1992-2007 (See Figure 6)

- Guernsey's headline inflation rate has been following a cyclical trend of peaks and troughs over the past ten years. It reached a peak of 5.2% for the twelve months ending September 2004 before declining to a low of 3.1% in March 2006. It has since risen to 4.8% for the twelve months ending March 2007.
- Increases in the rate of inflation over the last four quarters up to March 2007 are due to a combination of factors, such as several rises in the base interest rate, rising property prices, fluctuations in global oil prices and increases in duty on petrol, alcohol and tobacco.
- The Housing group is the largest contributor to headline inflation as it holds the highest weight within the Index. It contributed 2.8% of the 4.8% headline figure for the twelve months ending March 2007. This group includes the cost of servicing a mortgage, which is calculated using a combination of average house prices and interest rates. Other major contributing factors to the GRPI in March 2007 were Food (0.5%), Alcoholic Drink (0.4%), Motoring Expenditure (0.3%) and Leisure Services (0.3%).
- The Guernsey RPI follows a similar trend to that of the UK, typically at a higher level. However, the Guernsey headline figure fell below that of the UK by 0.1% in September 2006. The GRPI matched the UK RPI for the twelve months ending December 2006 and March 2007. The Jersey headline RPI has been

running at a lower rate than that of Guernsey since March 2005 and dipped below that of the UK for the twelve months ending December 2006 and March 2007.

- Care needs to be taken when making direct comparisons between Guernsey, Jersey and the UK, as although the broad principles behind calculating the RPI are the same, there are differences in patterns of expenditure as well as slight methodological variations between jurisdictions.

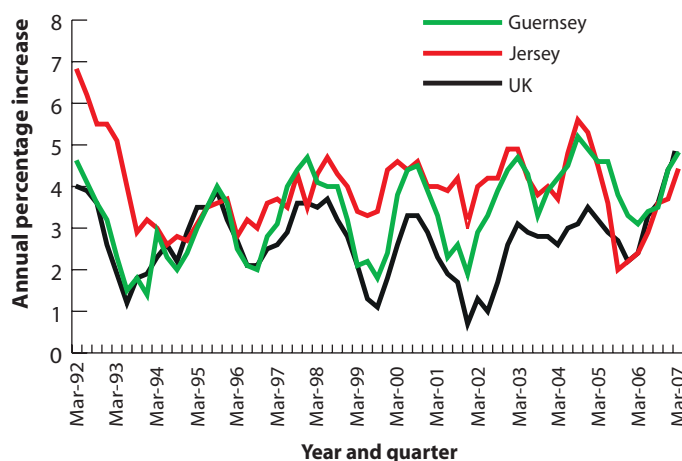
### Trends in the RPIX for Guernsey, Jersey and UK 1998-2007 (See Figure 7)

- The RPIX is viewed by some jurisdictions as being more representative than the RPI as it excludes mortgage interest payments. In Jersey, the RPIX is the preferred measure of inflation. This was also the case in the UK until the Consumer Price Index, an additional measure of inflation, was introduced. Over the last ten years, Guernsey's RPIX has fluctuated between 2.2% to 4.3%. At the end of March 2007 it stood at 3.1%, compared with 3.9% in the UK and 2.8% in Jersey.
- Historically, Guernsey's RPIX figure has been higher than the UK. However, Guernsey's RPIX matched that of the UK in June 2006 at 3.1%. Whilst the UK figure continued to rise over the subsequent three quarters, Guernsey's RPIX remained stable in comparison. This would suggest that core inflationary pressures are currently less in Guernsey than in the UK.

### Connections

Changes in the Island's inflation rate impacts on many aspects of the economy such as **National Income** by eroding the value of the GDP. It also affects house prices and general **Affordability of Housing**. Inflation can have a negative impact on business cost base and **Labour Market** dynamics through wages affecting the Island's competitive market advantage.

**Figure 6: Trends in the 'headline' rate of inflation for Guernsey, Jersey and UK 1992-2007**

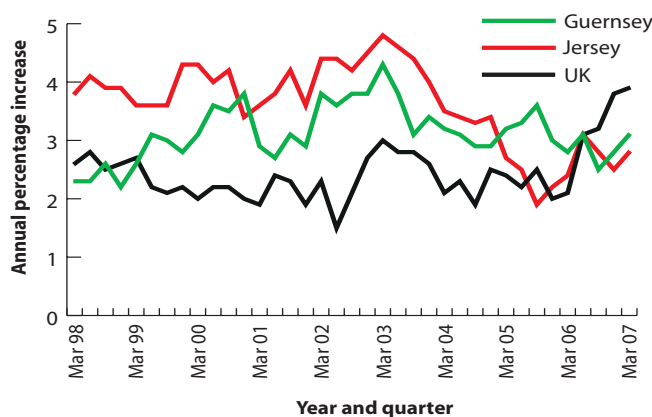


Quarter 1	Gsy	Jsy	UK
Mar-98	4.1	4.3	3.5
Mar-99	2.1	3.4	2.1
Mar-00	3.8	4.6	2.6
Mar-01	3.3	4	2.3
Mar-02	2.9	4	1.3
Mar-03	4.7	4.9	3.1
Mar-04	4.2	3.7	2.6
Mar-05	4.6	4.5	3.2
Mar-06	3.1	2.4	2.4
Mar-07	4.8	4.4	4.8

Source: Policy and Research Unit



**Figure 7: Trends in the RPIX for Guernsey, Jersey and UK 1998-2007**



RPIX excludes mortgage interest payments

		Guernsey	UK	Jersey
1998	Mar	2.3	2.6	3.8
1999	Mar	2.6	2.7	3.6
2000	Mar	3.1	2.0	4.3
2001	Mar	2.9	1.9	3.6
2002	Mar	3.8	2.3	4.4
2003	Mar	4.3	3.0	4.8
2004	Mar	3.2	2.1	3.5
2005	Mar	3.2	2.4	2.7
2006	Mar	2.8	2.1	2.4
2007	Mar	3.1	3.9	2.8

Source: Policy and Research Unit



More information on the Retail Prices Index can be found at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Retail Prices Index

Further inflation figures and more information on the Guernsey Retail Prices Index may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications

## Prosperity: Personal Income

Sustainability



# In 2001, 37% of the workforce had membership of an occupational pension scheme.

### What is measured?

This indicator will measure the change in the proportion of the Island's community, aged between 16 and 64 years, who are members of an occupational pension scheme and/or regularly contributing to a personal pension plan. Over time, changes in the level of average earnings provide an indication of the 'health' of the economy and the community in terms of personal income.

At present no new data are available. The latest most comprehensive information is from the 2001 Census. However from 2007 when data becomes available, the intention is to start monitoring aggregated figures of pension provision (occupational and personal pension schemes) in Guernsey. Changes to the Income Tax Office computer system will enable regular high-level analysis of pension provision.

### Membership of an occupational pension scheme by economic sector 2001 (See Figure 8)

- In 2001, out of an economically active population of 32,293, a total of 11,970 persons, or 37%, were members of an occupational pension scheme. This number represented 20% of the Island's 2001 population of 59,807.
- In 2001, 59% of the 11,970 persons who were members of an occupational pension scheme made no contribution themselves, i.e. the scheme was fully employer-funded.
- Within the Personal services, Construction, Hospitality and Horticulture & Other primary economic sectors, the percentage of the workforce in a scheme was just 5%. The 7,782 people working in these sectors represented 24% of the economically active population and 13% of the Island's population.
- In 2001, the highest proportion of occupational pension scheme members fell within the Information technology, Education, Finance, Utilities and Public administration economic sectors, the percentage within these sectors ranging from 61% to 86%. The 12,029 people working in these sectors represented 37% of the economically active population and 20% of the Island's 2001 population.

### Personal pension plan by economic sector 2001 (See Figure 9)

- In 2001, of an economically active population of 32,293, a total of 9,822 persons, or 30%, were contributing to a personal pension plan or retirement annuity contract. This number represented 16% of the population at that time.
- A number of people that contributed to personal pension plans or retirement annuity contracts were also members of an occupational pension scheme.
- Unlike membership of occupational pension schemes, the 2001 Census data revealed a much more even percentage across economic sectors of working persons who were contributing to personal pension plans or retirement annuity contracts with a range from 17% of the active workforce (Hospitality) to 39% (Business services).

### Earnings

- Due to changes to the methodology for measuring personal earned income, it is not possible at present to include time series statistics. However it is intended in future reports that aggregated personal earned income figures analysed by economic sector will be sourced from the Income Tax Office once core data becomes available in 2007.

### Connections

The extent to which the community are able to save for retirement via pension contributions is linked to such factors as the [Labour Market](#), business [Enterprise](#) and economic growth measured by [National Income](#). It is also affected by the changes in the Island's demography and [Life Expectancy](#).

**Figure 8: Membership of an occupational pension scheme by economic sector 2001**

Economic sector	Number of members	Number of contributors	Sector total
Horticulture and other primary	100	82	1,476
Manufacturing	426	338	1,798
Construction	146	95	2,932
Utilities	375	356	454
Transport	291	257	1,228
Hostelry	120	73	2,455
Supplier / wholesale	395	355	1,325
Retail	622	406	3,676
Personal services	50	28	919
Recreation / cultural	121	103	557
Finance	4,682	821	7,300
Business services	246	103	1,299
Information Services	545	479	891
Health	1,223	1,138	2,387
Education	944	859	1,487
Public administration	1,629	1,544	1,897
Non-profit	55	23	212
<b>TOTAL</b>	<b>11,970</b>	<b>7,060</b>	<b>32,293</b>

Source: 2001 Census

**Figure 9: Contribution to personal pension plan by economic sector 2001**

Economic sector	Number of contributors	Sector total
Horticulture and other primary	381	1,476
Manufacturing	590	1,798
Construction	1,014	2,932
Utilities	135	454
Transport	431	1,228
Hostelry	425	2,455
Supplier / wholesale	489	1,325
Retail	1,086	3,676
Personal services	224	919
Recreation / cultural	180	557
Finance	2,448	7,300
Business services	513	1,299
Information Services	301	891
Health	683	2,387
Education	417	1,487
Public administration	514	1,897
Non-profit	51	212
<b>TOTAL</b>	<b>9,882</b>	<b>32,293</b>

Source: 2001 Census

Further information on the 2001 Census may be found online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications

**Activity: Labour Market**

Sustainability



# Employment figures for Guernsey fell slightly during 2006 and numbers of benefit claimants increased.

**What is measured?**

Monitoring changes in employment levels provides a key indicator of the 'health' of the labour market, the wider economy and community well-being. The number of people registering as unemployed is measured, as are overall employment trends by economic sector.

**Overall employment trends**

(See Figures 10 and 11)

- In 2006, the total number of employed people on the Island fell by 0.6% to 31,156. However over the last ten years, 1997 to 2006, the Island's workforce has increased by 4%.
- During 2006, the number of males in employment on the Island fell by 125 and the number of females by 73. Over the last ten years the total number of females employed in Guernsey has increased by 7%, whereas the number of males has increased by 2%.
- Although there has been an overall rise in the total workforce figures since 1997, the ratio of employees to self-employed has remained stable. In 2006, 90% of the workforce continued to be employees of an organisation as opposed to being self-employed.

**Employment trends by economic sector**

(See Figure 12)

- The Finance sector continues to provide the highest level of employment in Guernsey, employing 23% of the total workforce.
- The numbers employed by the Finance sector peaked in 2003 but have since experienced a slight decline. In 2006, the number of people working for the finance industry was slightly higher than in 2005.
- Due to changes in the States of Guernsey payroll

system, there was a rise in the numbers employed in Public Administration and a fall in numbers in Health in March 2006. Employees who previously appeared on the Health & Social Services Department payroll now appear on the main States of Guernsey payment schedule. The increase in employees in the Public Administration should be offset against the decrease in the Health sector.

- The numbers of people working in the Retail, Business Services and Education sectors have increased in recent years, whilst there has been a decline in the numbers working in Information Services, Manufacturing and the Primary Sector (including horticulture and agriculture).

**Unemployment trends**

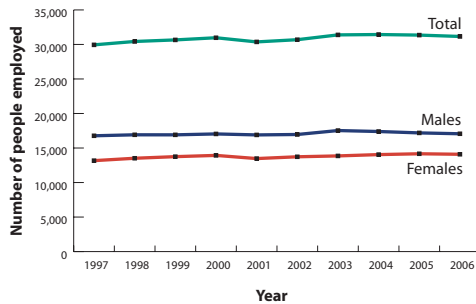
(See Figures 13 and 14)

- In March 2006, the number of people claiming benefits was greater than in 2005. However, the figure remains relatively low at 0.6%.
- The number of people claiming benefits in 2006 peaked in January at 202 and showed an overall decrease through the year.

**Connections**

Changes in employment and unemployment impact on several social and economic aspects such as **National Income** (GDP), **Workforce Development**, **Personal Income**, **Distribution**, **Communication Links** and **Affordability of Housing**.

**Figure 10: Employed population at the first quarter of each year 1997 - 2006**



Source: Social Security Department

	Males	Females	Total
1997	16,771	13,170	29,941
1998	16,914	13,516	30,430
1999	16,908	13,749	30,657
2000	17,039	13,930	30,969
2001	16,897	13,471	30,368
2002	16,958	13,730	30,688
2003	17,529	13,855	31,384
2004	17,390	14,046	31,436
2005	17,188	14,166	31,354
2006	17,063	14,093	31,156



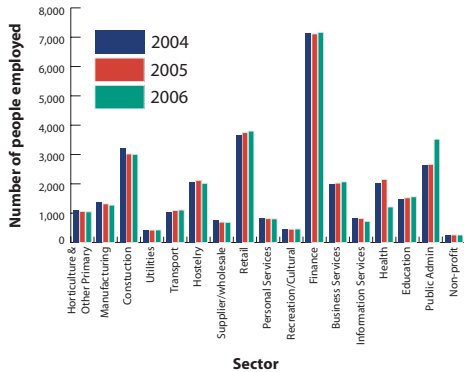
**Figure 11: Employed and self-employed 1997 - 2006**



Source: Social Security Department

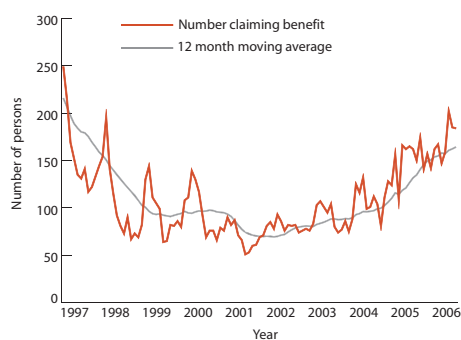
	Employed	Self-employed	Total
1997	26,832	3,109	29,941
1998	27,328	3,102	30,430
1999	27,510	3,147	30,657
2000	27,806	3,163	30,969
2001	27,258	3,110	30,368
2002	27,721	2,967	30,688
2003	28,260	3,115	31,375
2004	28,344	3,092	31,436
2005	28,274	3,080	31,354
2006	27,972	3,184	31,156

**Figure 12: Employment by economic sector 2004 - 2006**



Source: Social Security Department

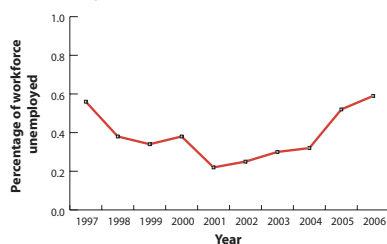
**Figure 13: Trends in unemployment benefit claimants 1997 - 2006**



Source: Social Security Department



**Figure 14: Percentage of workforce unemployed people claiming benefits 1997 - 2006**



	Number of registered unemployed	Number claiming benefit	% of workforce claiming benefit
2003	120	95	0.30
2004	136	101	0.32
2005	209	162	0.52
2006	219	184	0.59

Source: Social Security Department



More information on the Labour Market can be found at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Labour Market

Further information on the Guernsey Labour Market may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications



**Activity: Enterprise**

Sustainability

**This indicator is being developed****What is measured?**

The change in the number of business start-ups and closures on the Island, by size of firm and economic sector, is to be measured by this indicator. This will provide a broad high-level analysis of the enterprising nature of the business community.

**Definition**

- Start-up is a new business set up by a sole trader, partnership, company, or as a social enterprise. This includes new franchises, starting a referral marketing operation and management buyouts/buy-ins but excludes buying an existing business/franchise and subsidiary operations set up by existing companies.
- As an internationally recognised measure of sustainable economic development, the rate of business start-ups provides an indication of potential for economic growth. A high rate of business births drives up levels of competitiveness and productivity. Business survival rates, i.e. monitoring the number of start-ups and measuring the number of closures, provides a 'yardstick' for determining broad trends in the entrepreneurial capacity of an economy.
- It may be possible in the future to include expansion, mergers and acquisitions of existing local businesses and measure change over time to get a more complete assessment of enterprise within the local economy.

**How it will be measured?**

- Connected to the Investment indicator, it will measure changes in the number of firms with a physical presence in Guernsey. The intention is to monitor the length of time businesses operate by time period, i.e. date of trading/establishment and by business closure. This will be analysed by size of business and economic sector.
- No data are available at present. However, as an outcome of the establishment of a new Company Registry currently being developed by the Commerce and Employment Department, the intention will be to source information on the number of company formations (incorporations) and cessations. It is planned that the new registry will be in operation by mid 2008 with data available in 2009.

**Connections**

New business ventures and their survival rates have an impact on a wide range of social and economic factors. For example the **National Income**, **Investment**, **Labour Market** dynamics and **Workforce Development**, **Land Use**, and both **Local** and **International Transport**. Monitoring changes in the number of business start-ups and closures also provides a core measure of the level of entrepreneurship on the Island.



# This indicator is being developed

Sustainability



## What is measured?

The number of newly located firms and local 'home grown' businesses is to be monitored, for the purpose of assessing changes in both inward (foreign owned) and local (Guernsey resident owned) businesses. This indicator is directly linked to the Enterprise indicator and is intended to provide further analysis by business ownership. It may be possible in the future to determine aggregated economic contribution at a sector level.

## Description

- As a developing indicator, the first step is to monitor the change in the number of newly established firms investing in the Island's economy either from off-Island (foreign direct investment, net inflow) or local 'home grown' businesses. It may be possible in the future to include business expansion as well as mergers and acquisitions and then measure change over time. At a basic level, Investment is defined as the number of jobs created and/or retained, the footprint i.e. floor space owned or rented, analysed by economic sector.
- In time, as data becomes available, it may also be possible to monitor at broad sector level the contribution (value) to the economy and public revenue. In the future there may also be the possibility of measuring foreign inward investment as a proportion of the Island's GDP, business retention and export economy.

## How it will be measured?

- In common with the Enterprise indicator, the Policy and Research Unit and the Commerce and Employment Department have explored how best to obtain the information on an ongoing basis. In due course, some data will be available from company registrations, also post 2008 further data on business ownership will be developed in a joint initiative by the two departments.

## Connections

Inward investment and locally generated investment is closely linked to **Enterprise** and the establishment of new business ventures. It can also affect future economic growth measured through **National Income**. It can also affect the dynamics of the **Labour Market** and the skills base reflected through the **Workforce Development** indicator. Other connections include the Island's public revenue – **Distribution** and **Land Use**, together with **Local** and **International Transport**.

## Capacity: Communication Links

Sustainability



# Total passenger movements fell by 3.9% in 2006 due to a 12% fall in sea passenger figures.

### What is measured?

Changes in passenger movements are monitored, which are the sum of passenger arrivals and departures at the Island's Harbour and Airport. Movements between Guernsey, Herm and Sark are excluded from the figures. The number of national and international transport routes being operated from the Island is also monitored.

### Total air movements 1997-2006 (See Figure 15)

- Air transport remains the Island's most frequently used external mode of transportation, with England being the most frequently visited international destination.
- In 2006, air passenger figures fell slightly by 2,354 passengers, to 869,076. Despite this small drop, total air passenger movements have remained constant over the last ten year period.
- Air passenger figures to and from the continent continued to decline, with 2006 Continental passenger figures being 61% below 1997 figures. It should however be noted that far fewer passengers travel via continental routes than compared to the UK, due to fewer flights.

### Total sea movements 1997-2006 (See Figure 16)

- In 2006, total numbers of sea passengers fell by 47,411 on 2005 figures to 342,075, representing a fall of 12%.
- 2006 sea passenger movements are at their lowest since the 1997 figure of 332,222.
- The fall in sea passenger figures during 2006 is mainly due to a drop in journeys to and from both UK and Channel Island destinations of 43,829 or 15%. The number of UK sea passenger journeys recorded in 2006 was the lowest recorded in the last ten years.

### Total passenger movements 1997-2006 (See Figure 17)

- In 2006, total passenger movements decreased by 49,765 or 3.9% on 2005 figures. It is a drop of 7% on the ten year peak in 2002.
- This fall in figures is the steepest recorded over the last ten years and represents the third lowest figure recorded in the last ten year period.

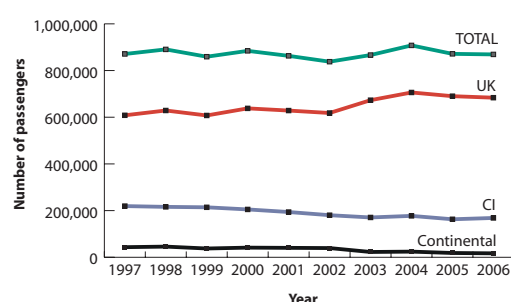
### Air and sea routes (See Figure 18)

- In 2006, the number of direct air transport routes rose from twelve to fourteen. This increase saw the new destinations of Cardiff and the Isle of Man opening.
- In 2006, there were five sea routes that continued to operate on a daily basis. One was to Jersey, three were to English ports and one to the French port of St. Malo. A further two routes were operated on a weekly basis to Carteret and Dielette on the Cotentin Peninsula.

### Connections

The need for frequent competitively priced transport links provides the opportunity for cheap transportation of goods and services, which helps to sustain **Economic Activity** and provides business opportunities that promote **Enterprise** and **Investment** on the Island. Regular transport links enable the Island's community to benefit from off-Island **Education** and **Health** facilities such as Universities, training colleges and hospitals. **Air Quality** – both air and sea travel are recognised as contributing to atmospheric pollution.

**Figure 15: Total air movements 1997-2006**

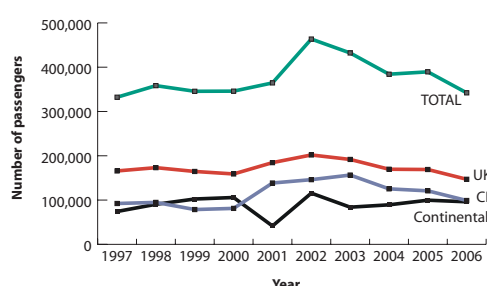


	2002	2003	2004	2005	2006
UK	618,090	673,038	706,032	690,165	683,677
CI	180,333	170,621	177,365	162,867	168,474
Continental	39,493	22,731	24,264	18,398	16,925
Total	837,916	866,390	907,661	871,430	869,076

Source: Policy and Research Unit



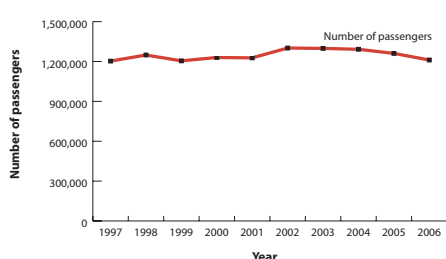
**Figure 16: Total sea movements 1997-2006**



Source: Policy and Research Unit



**Figure 17: Total number of passengers 1997-2006**



Source: Policy and Research Unit



**Figure 18: Air and sea routes 2006**

Air routes from Guernsey		Sea routes from Guernsey	
Birmingham	Frequency: daily	Carteret	Frequency: approx daily in summer only
Bournemouth	Frequency: daily	Dielette	Frequency: approx daily in summer only
Bristol	Frequency: daily	Jersey	Frequency: daily in summer
Dinard	Frequency: daily	Poole	Frequency: daily in summer
Cardiff (new)	Frequency: once a week	Portsmouth	Frequency: daily
Exeter	Frequency: daily	St Malo	Frequency: daily in summer only
London Gatwick	Frequency: daily	Weymouth	Frequency: daily in summer only
Manchester	Frequency: daily		
Norwich	Frequency: once a week		
Southampton	Frequency: daily		
Stansted	Frequency: daily		
Jersey & Alderney	Frequency: daily		
Isle of Man (new)	Frequency: 5 times a week		

Source:  
Commerce and  
Employment  
Department



More information on passenger movements can be found at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Tourism and Travel

Further figures on travel and tourism may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications



# The majority of qualifications gained last year were obtained by people employed in the financial services sector.

### What is measured?

Workforce development is monitored through the number of students gaining vocational qualifications / course certificates, and through the numbers of those in adult education (those aged 19 and over).

### Skills base qualifications (See Figure 19 and 20)

- Over three quarters of qualifications gained in 2006 from certified courses provided by the Guernsey Training Agency and BPP Training Agency were at levels 3, 4 and 5. A further 16% of achievers gained level 7 qualifications which are equivalent to postgraduate degrees such as an MSc, MBA or MA.
- Last year, people employed in the Financial Services sector achieved the greatest number (182) of qualifications, which ranged from level 2 to level 7.
- At present data are only available for one year and for two training providers. It is anticipated that further data will be presented in future reports.

### Adult Education (19 years and over) (See Figures 21, 22, 23 and 24)

- In 2004 the proportion of students gaining level 2, 3 and 4 qualifications increased by between 2 and 3.5%, when compared to 2001 figures.
- Guernsey was slightly below the English percentage figures for level 4, but was nearly double the percentage at level 2 in 2004.
- The trend in local students engaged in higher education in the UK continues to rise. In 2006/07, there were 885 students in higher education; the highest figure recorded over the last decade.
- The most popular subject studied by Guernsey undergraduates in 2006 was Creative Arts and Design (16% of students).
- Fewer students study more specialised subjects such as mathematical sciences (1%) or Agriculture and related subjects (2%).
- In 2003, the largest proportion of returning Guernsey graduates were employed in the Finance, Insurance and Business Services sector.

### Connections

**Economic Performance** – a well-developed workforce is competitive and diverse, which allows it to adapt to changes within the global economy. **Educational Achievement** – the Institute for Fiscal Studies has found that training is associated with greater productivity gains than wage rises. **Communication Links** – Over 800 Guernsey students attend higher education establishments in the UK and travel to and from the Island. Many more Islanders attend conferences and seminars in the UK and beyond and need frequent convenient routes. **Labour Market** – training and development helps to create a diverse and attractive workforce.

**Figure 19: Number of students gaining qualifications / course certificates in 2006, in Guernsey**

Level	Description	Number of qualifications gained
1	GCSEs Grades D-G; NVQ 1 (e.g. Certificate in Plastering); Apprenticeships and Certificate in Motor Vehicle Studies.	0
2	4/5 GCSEs Grades A*- C; Intermediate GNVQ, vocational GCSEs, BTEC 1st Diploma, City and Guilds/ NVQ 2 and Apprenticeships.	17
3	AS/A2 Levels; Vocational A levels; BTEC National Cert/Diploma, City and Guilds/NVQ 3; Advanced Extension Awards and Apprenticeships.	60
4	Diploma in Sport and Recreation; Certificate in Site Management; Certificate in Early Years Practice.	52
5	Foundation degree; Higher National Certificate/Diploma; NVQ5 (e.g. Diploma in Construction).	75
6	First degree (e.g. BA, BSc hons), graduate diplomas.	0
7	Postgraduate diplomas, certificates and degrees - masters degrees (e.g. MSc, MBA, MA).	40
8	PH.D; Doctorates - DBA, D.Phil, D.Eng.	0
Total		244



**Figure 20: Number of students gaining qualifications / course certificates in 2006, in Guernsey**

Business sector	Qualifications levels								Total
	1	2	3	4	5	6	7	8	
Primary (agriculture, fishing)	0	0	0	1	0	0	0	0	1
Manufacturing, Construction	0	1	4	0	0	0	0	0	5
Finance	0	1	33	39	70	0	39	0	182
Business Services, Legal, ICT	0	5	13	5	1	0	1	0	25
Retail	0	1	0	7	0	0	0	0	8
Transport, Hospitality	0	0	0	0	0	0	0	0	0
Public administration	0	9	10	0	4	0	0	0	23
Total	0	17	60	52	75	0	40	0	244

Source: Guernsey Training Agency and BPP Training Agency

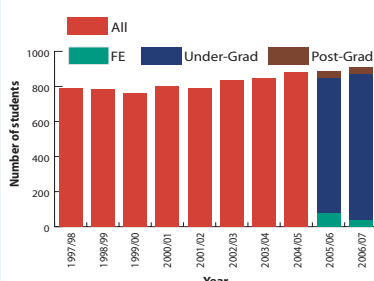
**Figure 21: Percentage of qualification levels in 2001, 2004 and 2005 for England and Guernsey**

	Level 1 or no qualifications		Level 2		Level 3		Level 4	
	England	Gsy	England	Gsy	England	Gsy	England	Gsy
Total 2001	35%	24%	22%	40%	19%	17%	24%	19%
Total 2004	33%	16%	22%	42%	20%	19.5%	26%	22.5%
Total 2005	32%	N/A	22%	N/A	20%	N/A	27%	N/A

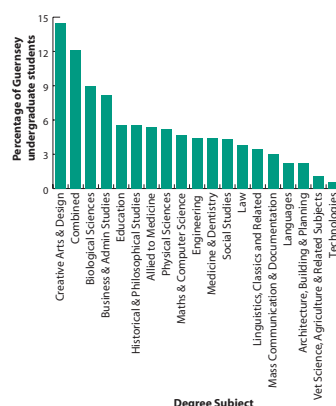
Source: Education Department



**Figure 22: Number of Guernsey students engaged in education in the UK 1997 - 2007**



**Figure 23: Subjects studied by Guernsey undergraduates in 2006**



**Figure 24: Top five economic sectors of employment for local Guernsey graduates in 2003**

Economic sector	%
Finance, Insurance and Business Services	21
Education	12
Other Public Services	12
Information Communication Technology	9
Construction	9



For more information on Guernsey's skills base and qualifications please see the Guernsey Census. This is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications > 2001 Census Report

For more information on adult education in Guernsey please see the Education Development Plan, Billet d'Etat II and XII, 2004

## Capacity: Distribution

Sustainability



**Total factor income has increased steadily.** The Finance sector is the largest contributor. In percentage terms the ICT and Business Services sector's factor income has increased the most over the past 10 years.

### What is measured?

Distribution is measured through factor incomes, which is a component of GDP, comprising of both total gross remuneration and net assessable profits generated by local business. To determine the sustainability of the economy, factor incomes are analysed by economic sector and per head of the Island's workforce.

### Factor income by economic sector 1997-2006 (See Figure 25)

- In 2006, the Finance Sector provided the greatest economic contribution in terms of factor income. Contributors in this sector accounted for over 33% of the total factor incomes in 2006, considerably higher than any other sector. Other major contributors were Health, Education and Public Administration (15%), Wholesale and Retail (12%), ICT and Business Services (14%) and Construction (10%).
- Financial services income increased from 1997 to a peak of £505m in 2002, dropping back slightly in 2003, but increasing again in 2004 and 2005 and 2006.
- Primary sectors and Manufacturing have continued a downward trend over the last decade (albeit these now appear to have stabilised), whilst the service sectors have increased.
- The greatest rate of increase has been in the ICT and Other Business Services sector (e.g., architects, surveyors, advertising and leasing) – accounting for an increase of 142% between 1997 and 2006.
- Total factor income has increased steadily by 37% in total since 1997.

### Gross Value Added by economic sector (See Figure 26)

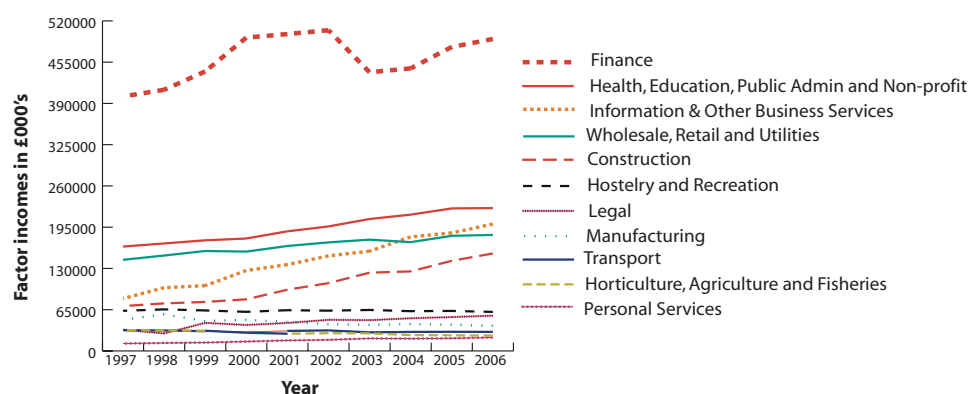
- In 2005 the Policy and Research Unit conducted a detailed review of the methods used to measure national income. This involved investigating the constituent elements which form the Island's GDP together with Gross National Product (GNP) and Gross Value Added (GVA). Improvements to the methodology included additional data and designing a new accounting framework based on the UN System of National Accounts, and also the European Union System of Accounts. At this stage the data is still at an experimental stage, and all results should be treated as provisional.

The results for 2006 show that Finance is by far the largest sector accounting for £753,492,625 of Gross Value Added. Not surprisingly, Finance is the sector with the greatest GVA per employee at £114,287 per employee in 2006.

### Connections

**National Income** and the **Labour Market** are strongly linked to the distribution of the economic contribution. However other facets of sustainable development are also directly connected such as **Workforce Development**, **Inflation**, **Education**, **Enterprise**, **Local** and **International Transport**, **Land Use** and **Investment**.

Figure 25: Factor income by economic sector 1997 - 2006



Reflated to 2006 Values (£000's)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006*
Horticulture, and other primary	32,887	32,146	31,822	28,702	27,162	27,945	27,725	25,009	24,618	24,197
Manufacturing	48,962	57,849	47,049	49,088	45,738	42,169	41,156	42,326	41,270	39,566
Construction	70,692	74,901	77,246	81,355	96,473	106,877	123,299	125,323	142,041	153,579
Transport	32,633	32,247	31,081	30,015	31,566	32,358	29,269	29,989	30,148	30,057
Hostelry and Recreation	63,243	65,480	63,798	61,613	64,186	63,473	64,576	62,677	63,046	61,513
Wholesale, Retail and Utilities	143,572	150,333	157,493	156,515	165,364	171,038	175,374	171,414	181,392	182,784
Personal Services	11,633	12,515	13,194	14,790	16,555	17,467	19,721	19,388	19,856	21,258
Finance	401,044	411,465	440,449	493,759	499,274	505,404	439,064	445,205	478,991	491,514
Legal	33,409	27,602	44,229	40,906	44,068	49,077	48,478	51,481	53,366	55,574
Information & Other Business Services	82,514	99,639	102,947	126,713	136,056	149,751	157,207	179,705	185,972	199,878
Health, Education, Public Admin and Non-Profit	164,479	169,358	174,298	177,159	188,491	196,169	207,911	214,764	224,555	225,071
<b>Total All Sectors</b>	<b>1,085,068</b>	<b>1,133,537</b>	<b>1,183,606</b>	<b>1,260,613</b>	<b>1,314,933</b>	<b>1,361,728</b>	<b>1,333,779</b>	<b>1,367,281</b>	<b>1,445,253</b>	<b>1,484,990</b>

\* 2006 is estimated

Source: Policy and Research Unit, Income Tax Office

Figure 26: Gross Value Added by economic sector (2006) - GDP New Methodology

Economic Sector	GVA (£)	GVA per Employee (£)	Economic Sector	GVA (£)	GVA per Employee (£)
Horticulture and other primary	12,966,392	26,089	Recreation	16,162,273	34,908
Manufacturing	42,120,603	35,665	Finance	753,492,625	114,287
Construction	163,257,313	75,863	Legal	36,156,171	91,073
Utilities	14,930,342	35,804	Business Services	168,505,021	95,362
Transport	32,357,147	31,263	Information	51,887,676	31,263
Hostelry	53,672,081	26,118	Health	70,333,559	26,118
Wholesale	50,421,043	76,628	Education	52,072,748	34,107
Retail	125,696,048	34,848	Public Admin	105,528,730	39,992
Personal Services	23,627,859	43,434	Non-Profit	6,216,071	43,434

Source: Policy and Research Unit



More information on National Income and GDP can be found at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > National Income

Further national income figures may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications



# References and further reading

## Prosperity

---

### Signpost to Data Providers

Policy and Research Unit  
Policy Council  
Sir Charles Frossard House  
PO Box 43  
La Charroterie  
St. Peter Port  
Guernsey  
GY1 1FH  
Tel: 717000

### Further Reading

Guernsey Facts and Figures booklet  
Policy and Research Unit, Policy Council  
Downloadable from [www.gov.gg](http://www.gov.gg) - click on  
Government > Facts and Figures > Publications

The Guernsey Retail Prices Index  
Published quarterly by the Policy and Research Unit,  
Policy Council  
[www.gov.gg](http://www.gov.gg) - click on Government > Facts and  
Figures> Retail Prices Index

2001 Census Report  
Policy Council, States of Guernsey  
Downloadable from [www.gov.gg](http://www.gov.gg) - click on  
Government > Facts and Figures > Publications > 2001  
Census Report

### Websites

Policy and Research Unit, Policy Council  
[www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures  
> Policy and Research Unit

UK Government Treasury  
[www.hm-treasury.gov.uk](http://www.hm-treasury.gov.uk)

UK Government Statistics  
[www.statistics.gov.uk](http://www.statistics.gov.uk)

Jersey Government  
[www.gov.je](http://www.gov.je)

## Activity

---

### Signpost to Data Providers

Policy and Research Unit  
Policy Council  
Sir Charles Frossard House  
PO Box 43  
La Charroterie  
St. Peter Port  
Guernsey  
GY1 1FH  
Tel: 717000

### Further Reading

Guernsey Facts and Figures booklet  
Policy and Research Unit  
Downloadable from [www.gov.gg](http://www.gov.gg) - click on Government  
> Facts and Figures > Publications

### Websites

Policy and Research Unit, Policy Council  
[www.gov.gg](http://www.gov.gg) click on Government > Facts and Figures >  
Policy and Research Unit

Local Futures Group – Policy and Strategy Analysts  
[www.localfutures.com](http://www.localfutures.com)

Scottish Enterprise Agency  
[www.scottish-enterprise.com](http://www.scottish-enterprise.com)

World Business Council for Sustainable Development  
[www.wbcsd.ch](http://www.wbcsd.ch)

Institution of Economic Development  
[www.ied.co.uk](http://www.ied.co.uk)

UK Government Treasury  
[www.hm-treasury.gov.uk](http://www.hm-treasury.gov.uk)

UK Government Department for Trade and Industry  
[www.dti.gov.uk](http://www.dti.gov.uk)



# References and further reading

## Capacity

---

### Signpost to Data Providers

#### Guernsey Airport

La Villiaze  
Forest  
Guernsey  
GY8 ODS  
Tel: (01481) 237766

#### Guernsey Harbour Authority

Harbourmaster's Office  
PO Box 631  
St Julians Emplacement  
St Peter Port  
Guernsey  
GY1 3DL  
Tel: (01481) 720229

#### Policy and Research Unit

Policy Council  
Sir Charles Frossard House  
PO Box 43  
La Charroterie  
St. Peter Port  
Guernsey  
GY1 1FH  
Tel: (01481) 717000

#### GTA University Centre

Ann's Place  
St Peter Port  
Guernsey  
GY1 2NU  
Tel: (01481) 721555

#### Education Department

PO Box 32  
Grange Road  
St Peter Port  
Guernsey  
GY1 3AU  
Tel: (01481) 710821

### Further Reading

#### Education Development Plan

Billet d'Etat VI, 2002  
Billet d'Etat III, 2003  
Billet d'Etat II and XII, 2004|  
(Billets are downloadable from [www.gov.gg](http://www.gov.gg))

## Capacity (continued)

---

### Further Reading (continued)

#### College of Further Education: Annual Report

Guernsey College of Further Education, 2002

#### Learning in Guernsey

The Findings of the Learning Trends Survey in Guernsey  
University of Plymouth and the States Education  
Department, 2001

#### Higher Education: The Guernsey Experience in 2003

Education Department, 2003

### Websites

Guernsey Airport  
[www.guernsey-airport.gov.gg](http://www.guernsey-airport.gov.gg)

Policy and Research Unit, Policy Council  
[www.gov.gg](http://www.gov.gg) click on Government > Facts and Figures >  
Policy and Research Unit

Guernsey College of Further Education  
[www.cfe.edu.gg](http://www.cfe.edu.gg)

UK Department for Education and Skills  
[www.dfes.gov.uk](http://www.dfes.gov.uk)

UK Learning and Skills Council  
[www.lsc.gov.uk](http://www.lsc.gov.uk)

Guernsey Careers Service  
[www.careers.gg](http://www.careers.gg)

Guernsey Social Security Department  
[www.gov.gg](http://www.gov.gg) - click on Social Security

Guernsey Income Tax Office  
[www.gov.gg/tax](http://www.gov.gg/tax)

UK Office of National Statistics  
[www.statistics.gov.uk](http://www.statistics.gov.uk)

Jersey Statistics Unit  
[www.gov.je/statistics](http://www.gov.je/statistics)

## Natural Environment: Air Quality

Sustainability



**Air quality** in Guernsey is generally good, despite a small rise in motor vehicle emissions. Nitrogen Dioxide levels are well below the WHO standard.

### What is measured?

Air quality over Guernsey is measured by monitoring levels of the four main air pollutants; nitrogen dioxide, sulphur dioxide, particulates and ozone. Emissions of Greenhouse Gases from the Island are monitored through a Greenhouse Gas Emissions inventory.

### Maximum levels of air pollution recorded in Guernsey from 2000 to 2006 (See Figure 27)

- Compared to the World Health Organisations (WHO) international guideline levels, results show that the general air quality of Guernsey is very good.
- Real time air quality monitoring confirms that the main source of atmospheric pollution in Guernsey is motor vehicle emissions, with roadside Nitrogen Dioxide levels during peak hours measuring in at twice that of non-peak hours. Background levels of nitrogen dioxide in 2006 remained at similar levels to 2005, well below the peak experienced in 2004.
- Declining levels of Sulphur Dioxide over the last six years are primarily due to the electricity connection with France, which has resulted in far less burning of heavy fuel oil at the Island's power station.
- Particulate (PM 10) matter found in the air around Guernsey is high. This is primarily due to the exposure of the Island to dust and sand particles picked up by strong on-shore winds.
- Maximum ozone levels have risen slightly in 2006 but still remain below the WHO guideline figures. Ozone is a transboundary pollutant, i.e. it can be transported in weather systems over considerable distances. Because of this, there is little that can be done to control levels occurring over Guernsey, emphasising the importance of conventions such as the Kyoto Protocol, which seek to minimise transboundary pollutants on a global scale.

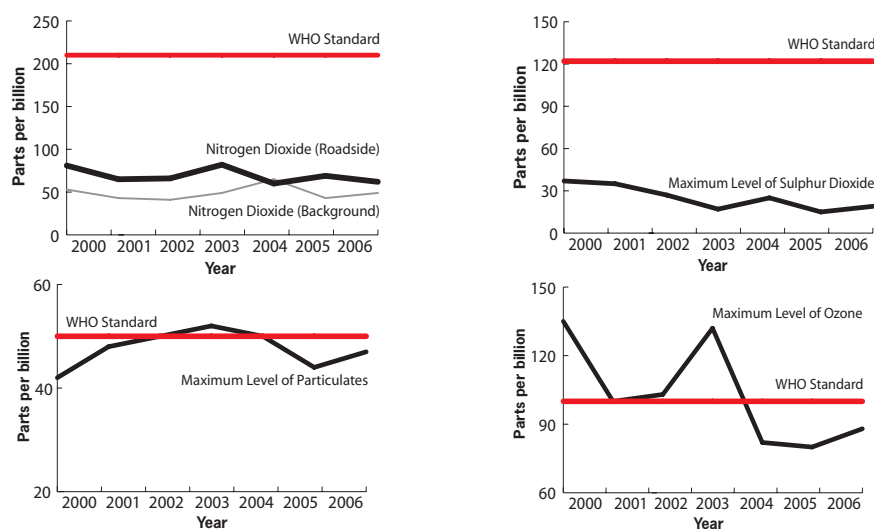
### Guernsey Greenhouse gas emission estimates for 2002 and 2004 (See Figure 28)

- Through formal ratification of the Kyoto Protocol the States of Guernsey has agreed to reduce its CO<sub>2</sub> emissions by 12.5% by 2010. The following inventory is the first stage in measuring the Island's 'greenhouse gas' emissions.
- The main contributor is carbon, of which the Island emitted approximately 118,277 tonnes in 2002 and 99,548 tonnes in 2004. This reduction in figures is predominantly due to the electricity connection with France and the reduction in electricity production on the Island.
- The Greenhouse Gas emissions estimate will be updated to include figures for 2006 at the end of 2007.

### Connections

**Local and International transport** emissions contribute to air pollution. **Energy Consumption** and the burning of carbon-based fuels (such as coal, oil, petrol and diesel) are responsible for a majority of greenhouse gas emissions. **Climate Change and Biodiversity** - greenhouse gas emissions are acknowledged as the primary cause of climate change. **Health** - air pollution is recognised as a contributing factor to many breathing related illnesses.

**Figure 27: Maximum levels of air pollution recorded in Guernsey - 2000 to 2006**



Source: Health and Social Services Department

		Maximum Concentration Recorded							
	WHO Standard (ppb)	2000	2001	2002	2003	2004	2005	2006	
Nitrogen Dioxide (Roadside)	210	81	65	66	82	60	69	62	
Nitrogen Dioxide (Background)	210	53	43	41	49	65	43	49	
Sulphur Dioxide	122	37	35	27	17	25	15	19	
Particulates (PM10)	50	42	48	50	52	50	44	47	
Ozone	100	135	100	103	132	82	80	88	

**Figure 28: Guernsey Greenhouse gas emissions estimates for 2002 and 2004**

	Tonnes Carbon		Tonnes CH <sub>4</sub>		Tonnes N <sub>2</sub> O		HFC*		PFC*		SF <sub>6</sub> *	
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
Power Generation	9,750	9,565	0	0	0	0	-	-	-	-	-	0
Commercial, Residential and Agricultural Combustion	34,791	18,884	8	4	1	1	0	0	0	0	0	0
Extraction/ Distribution of Fossil Fuels	-	-	-	-	-	-	-	-	-	-	-	-
Solvent Use	-	-	-	-	-	-	8,009	8,456	0	0	88	207
Road Transport	24,837	22,288	16	11	15	15	-	-	-	-	-	-
Other Mobile Machinery	48,899	48,812	15	15	28	28	-	-	-	-	-	-
Waste Treatment & Disposal	-	-	856	712	4	4	-	-	-	-	-	-
Agriculture	-	-	374	371	7	7	-	-	-	-	-	-
<b>Total</b>	<b>118,277</b>	<b>99,548</b>	<b>1,268</b>	<b>1,114</b>	<b>54</b>	<b>54</b>	<b>8,009</b>	<b>8,456</b>	<b>0</b>	<b>0</b>	<b>88</b>	<b>207</b>

\*HFC, PFC and SF<sub>6</sub> are expressed as tonnes of Carbon equivalent. Source: National Environmental Technology Centre – AEA Technology

## Natural Environment: Water Quality

### Sustainability



**Fresh water quality in Guernsey is excellent.** However over the last few years there has been a decline in **bathing water** quality.

#### What is measured?

Guernsey's fresh water quality is monitored through analysis of stored water on the Island and water treatment works compliance levels. The bathing water quality of the Island's beaches is monitored against the EC Bathing Water Directive.

#### Raw water storage compliance 2002-2006 (See Figure 29)

- Raw water quality has been maintained over the last year, with 2006 figures showing that all three storage reservoirs on the Island were 100% compliant for the elements of nitrate, potassium and ammonia in their storage analysis. This is the third consecutive year that all three storage reservoirs have shown 100% compliance.
- This reflects the successful containment of nitrates, which have been high in previous years especially in the warmer summer months.

#### Water treatment works compliance 1998-2006 (See Figure 30)

- The data for this indicator is based upon analysis of water samples taken from the Island's three water treatment works. The compliance figures have been judged against the UK drinking water regulations.
- Guernsey's water after treatment scored highly in compliance with UK drinking water regulations during 2006, with all three works maintaining compliance figures of over 99%.
- The 2006 compliance figures represent the highest figures recorded over the last nine years, improving on last year's record compliance figures.

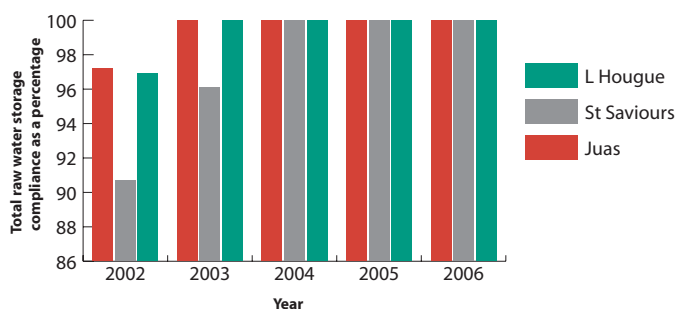
#### Quality of Guernsey's bathing water 1996-2006 (See Figure 31)

- Bathing water testing is carried out at 13 of the Island's beaches. In 2006 all but one of the Island's beaches passed the EC Mandatory standard. Pembroke/L'Ancrese was the beach that failed to achieve the standard, this being the first time since 2002 that a Guernsey beach has failed to achieve the EC Mandatory standard.
- The EC Guideline standard is twenty times more stringent than the EC Mandatory standard. Over the last year, 2005 to 2006, the number of beaches gaining the EC Guideline standard has remained at 7. This is equivalent to 54% of the beaches tested and when compared to previous years is the third lowest number of Island beaches gaining the Guideline standard. The highest bathing water quality standards were recorded in 1997 and 1998 when 11 of the 12 beaches tested (92%) attained the EC Guideline standard.
- It is difficult to definitively establish sources of pollution.

#### Connections

Changes in water quality (particularly fresh water) are often a general reflection of **Land Use** and management practices. Our **Health** and the health of the Island's **Biodiversity** are closely linked to good quality fresh and sea water.

**Figure 29: Raw water storage compliance 2002-2006 (percentage)**

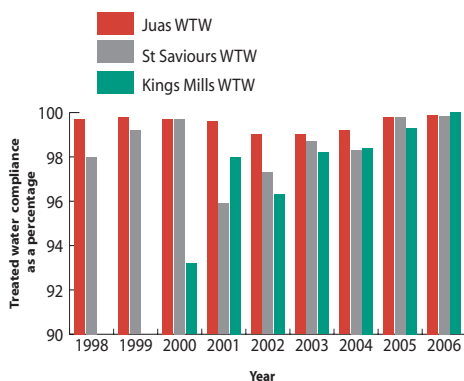


	Juas	St Saviours	Longue Hougue
2002	97.2	90.7	96.9
2003	100	96.1	100
2004	100	100	100
2005	100	100	100
2006	100	100	100

Source: Guernsey Water



**Figure 30: Water treatment works compliance 1998-2006 (percentage)**



Water Treatment Works	1998	1999	2000	2001	2002	2003	2004	2005	2006
Juas	99.7	99.8	99.7	99.6	99.0	99.0	99.2	99.8	99.9
St Saviours	98.0	99.2	99.7	95.9	97.3	98.7	98.3	99.8	99.8
Kings Mills	n/a	n/a	93.2	98	96.3	98.2	98.4	99.3	100

Source: Guernsey Water



**Figure 31: Quality of Guernsey's bathing water 1996-2006**

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Vazon	G	G	G	G	M	G	M	G	M	M	G
Pembroke/L'Ancrese	G	G	G	G	G	G	G	M	M	M	F
L'Eree	G	G	G	G	G	G	G	G	G	G	G
Port Soif	G	G	G	G	G	M	G	G	G	G	G
Cobo	G	G	G	M	M	M	M	M	M	M	M
Fermain	G	G	G	G	G	G	F	M	G	G	G
Petit Bot	G	G	G	M	G	G	M	M	M	M	M
Havelet	G	G	G	G	M	M	G	G	G	G	G
Ladies Bay	M	M	M	M	M	M	M	M	M	M	M
Portelet	G	G	G	G	G	G	G	M	M	G	M
Saints	G	G	G	G	G	G	G	G	G	G	G
Bordeaux	-	G	G	G	G	G	G	G	G	M	M
Grandes Rocques	-	-	-	M	M	M	G	M	G	G	G

G = Guideline Pass: 95% of the samples pass the EC Mandatory Standard, 80% of samples pass the EC Guideline Standard for total and faecal coliforms and 90% of samples pass the EC Guideline Standard for streptococci

M = Mandatory Pass: 95% of the samples pass the EC Mandatory Standard

F = Fail

Source: Environment Department



For a detailed description of the EC bathing water standards please visit – [www.defra.gov.uk/environment/water/quality/bathing/default.htm](http://www.defra.gov.uk/environment/water/quality/bathing/default.htm)

## Natural Environment: Biodiversity

Sustainability



Whilst the status of the Island's **breeding birds** is relatively healthy, the state of the Island's shore bird populations is relatively unhealthy.

### What is measured?

Guernsey's habitat coverage was first surveyed in 1998/99. The health of bird populations as an indicator of biodiversity is well established; a sea bird census, a breeding bird survey and a shore bird survey are used to monitor bird populations on the Island.

### Habitat cover in Guernsey – 1998/9

(See Figure 32)

- 38% of Guernsey's land area is part of the built environment and subsequently of relatively low value to wildlife, being buildings, roads, car parks, etc. From the 62% that remains, improved grassland, arable land, amenity grassland and bare ground make up 40% and are also of limited wildlife value. Guernsey's key habitats, such as scrub, marshy grassland (wet meadows), swamp (reed beds), cliff and dune are contained in less than 22% of the Island's land area.

### Guernsey sea bird Census 1970, 1992 and 2000

(See Figure 33)

- Breeding sea birds have been the subjects of three detailed national surveys over the period 1970 to 2000. All 11 species of breeding sea birds did well during the period 1970-1992. Fulmar (75 pairs) and Manx Shearwater (15 pairs) were recorded breeding for the first time, while four species increased by more than 100 pairs: Shag - up from 188 to 480 pairs, Lesser Black-backed Gull - up from 52 to 220 pairs, Herring Gull - up from 900 to 1,145 pairs and Common Tern - up from 7 to 110 pairs.
- The position from 1992-2000 was far less favourable with only three species continuing to increase their populations (Lesser Black-backed Gull - up by 87 pairs, Herring Gull - up by 475 pairs and Guillemot - up by 30 pairs). Manx Shearwater, Common Tern, Razorbill and Puffin are now all under severe threat with their populations having reduced by more than 50%, while Fulmar and Cormorant are both under moderate threat.

### Percentage change in Guernsey's shore bird populations over the past 5, 10 and 20 years

(See Figure 34)

- Since 1979, shore bird populations in Guernsey have been counted annually as part of the Wetland Bird Survey. The data collected shows how the populations of the ten commonest species have changed over the past 5, 10 and 20 years. Five out of the ten species monitored (Redshank, Dunlin, Purple Sandpiper, Turnstone and Golden Plover) are all under severe threat on the Guernsey shore. Ringed Plover are under a moderate threat and Oystercatcher, Sanderling, Grey Plover and Curlew are under no immediate threat. Shorebirds are doing very poorly in Guernsey, due to both external and internal factors. Externally, warmer winters especially on the East coast of England are improving wintering conditions there. Internally, recreational beach use is increasing and with it a serious increase in disturbance, by both walkers and dogs, of the birds' roosting and feeding areas.

### Status of breeding birds in Guernsey 2000-2005

- Since 2000, breeding and wintering bird population numbers have been monitored by counts made four times each year in a number of 1km squares on the Island. Although trend data is currently limited, the status of breeding birds in Guernsey appears to show mixed fortunes. Over a third (38%) of the Island's breeding bird species appear to be stable, while 25% are decreasing and 37% are increasing.

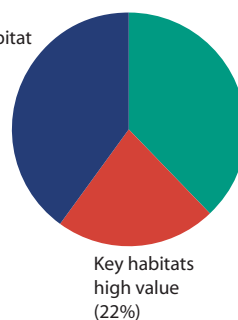
### Connections

**Housing** and **Land Use** both have direct connections to habitat cover and biodiversity. Pollutants that affect the health of the Island's biodiversity are monitored within the **Water Quality**, **Air Quality** and **Land Use** indicators.

**Figure 32: Habitat cover in Guernsey – 1998/9**

Habitat type	Percentage of habitat area	Percentage of total land area
Key habitat		
Grassland	15	9
Woodland	5	4
Park land	1	0
Others	14	9
Total key habitat	35	22
Managed Habitat		
Grassland	64	39
Others	1	1
Total managed habitat	65	40
Total habitat	100	62
Total built environment		38
Total	100	100

Managed habitat  
limited value  
(40%)



Built environment  
low value (38%)

Key habitats  
high value  
(22%)

Source: Environment Department / La Société Guernesiaise



**Figure 33: Guernsey sea bird population changes: 2000, 1992 and 1970**

Species	Population			Population and percentage change			
	2000	1992	1970	1992-2000		1970-1992	
	Number of birds	Number of birds	Number of birds	Change (number)	Percentage change	Change (number)	Percentage change
Fulmar (pair)	43	75	0	-32	-43	75	-
Manx shearwater (pair)	5	15	0	-10	-67	15	-
Cormorant (pair)	20	30	4	-10	-33	26	650
Shag (pair)	496	480	188	16	3	292	155
LBB Gull (pair)	307	220	52	87	40	168	323
Herring Gull (pair)	1620	1145	900	475	41	245	27
GBB Gull (pair)	154	150	52	4	3	98	188
Common tern (pair)	24	110	7	-86	-78	103	1471
Guillemot (individual)	105	75	24	30	40	51	213
Razorbill (individual)	12	35	2	-23	-66	33	1650
Puffin (individual)	40	95	35	-55	-58	60	171

Increasing trend Low Alert (0-25%) Medium Alert (26%-49%) High Alert (>50%)

Source: La Société Guernesiaise



**Figure 34: Percentage change in Guernsey's shore bird populations over the past 20, 10 and 5 years**

Species	Population				Population and Percentage Change							
	2003	1998	1993	1983	5 years		10 years		20 years			
	Number of birds	Number of birds	Number of birds	Number of birds	Change	% change	Change	% change	Change	% change	Change	% change
Oystercatcher	696	618	581	500	78	12	115	19	196	39		
Dunlin	114	218	262	572	-104	-47	-148	-56	-458	-80		
Curlew	82	83	108	58	-1	0	-26	-23	24	40		
Redshank	24	32	38	71	-8	-22	-14	-35	-47	-65		
Ringed Plover	74	102	117	103	-28	-27	-43	-36	-29	-27		
Golden Plover	5	33	16	33	-28	-86	-11	-71	-28	-86		
Grey Plover	78	95	101	81	-17	-18	-23	-23	-3	-4		
Sanderling	31	19	19	5	12	60	12	61	26	483		
Turnstone	205	247	488	496	-42	-17	-283	-58	-291	-58		
Purple Sandpiper	1	4	8	21	-3	-79	-7	-90	-20	-96		

Source: La Société Guernesiaise



For further information on the Wetland Bird Survey please see [www.bto.org/survey/webs/index.htm](http://www.bto.org/survey/webs/index.htm)

For further information on Guernsey's key habitats please contact the Guernsey Biological Records Centre



## Built Environment: Land Use

Sustainability



**All new build applications granted over the last year have been on brownfield land sites.** Nitrate levels, which are used to measure land quality, continue to decline.

### What is measured?

Land use on Guernsey is measured by calculating the built environment as a percentage of the Island's total land mass. The use of previously developed land for new buildings is monitored to show the impact that new development has on the environment. Land quality is monitored using water catchment nitrate levels, and provides an indicator of natural and man-made influences on the Island's environment.

### Land used for the built environment (See Figures 35 and 36)

- In 2006, the built environment accounted for 14.7% of Guernsey's total land mass. This includes buildings, roads and car parks, greenhouses, the airport, swimming pools, churches, fortifications and ruins.
- Despite 85% of Guernsey's total land mass being undeveloped, much of this is still classed as built environment, comprising private gardens and public amenity land.
- In 2006, the amount of developed land decreased by 0.4% or 139 verges, as a direct result of greenhouses on the Island being dismantled.
- Buildings over 10m<sup>2</sup> (including domestic, commercial and public premises), roads and car parks account for 75% of the Island's built environment. Greenhouses account for a further 18%. This figure has declined from nearly 21% in 2004. Buildings have increased from 38.6% in 2004 to 39.4% in 2006 and roads and car parks have increased by 1.2% since 2004 to 35.9% in 2006.

### Percentage of new housing granted on greenfield and brownfield sites (See Figure 37)

- During 2006, 99.5% of new house builds were on brownfield sites. The only greenfield development in 2006 involved a former vinery site within a designated Settlement Area of the Urban Area Plan. Over the last five years, the trend has been for the majority of new build housing to be built on brownfield land.

### Annual and monthly nitrate levels (See Figures 38 and 39)

- Guernsey Water collects samples on a weekly basis from 24 individual stream catchment areas across the Island. It uses the UK drinking water regulation's Maximum Admissible Concentration or MAC as a benchmark to assess nitrate concentrations. This currently stands at 50mg/l (50 milligrams per litre). Rainfall levels are also recorded as these can have a strong bearing upon the amount of nitrate washing its way into the stream catchments.
- The average nitrate levels for each month of 2006 were contained under the 50mg/l benchmark.
- Over the last ten years the annual average nitrate levels found in the Island's stream catchments has declined by 41%, from the 1996 peak of 74mg/l to 40.6mg/l in 2006.
- The only rise in annual nitrate figures for the period was measured in 2003. This was attributed to the unusually warm summer and lack of rainfall experienced on the Island.
- This reduction in nitrate levels, whilst in part reflecting the contraction of the horticulture industry, also reflects the more effective control measures introduced by States departments, such as Commerce and Employment's 'farming with wildlife in mind' whole farm contracts.

### Connections

Changes in land use, for example draining wetlands or clearing land for housing or industrial use can alter wildlife habitats and consequently affect the **Biodiversity** they help to support.



**Figure 35: Percentage of land used for the built environment**

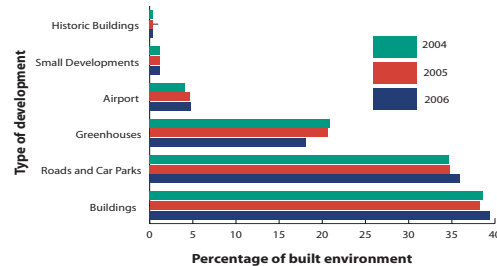
	2004		2005		2006	
	Vergees	% of Total Area	Vergees	% of Total Area	Vergees	% of Total Area
<b>Total Built Environment</b>	5,773	14.9	5,855	15.1	5,716	14.7
<b>Remaining land area on Island - Farmland, garden curtilage, playing fields, golf courses, etc.</b>	33,028	85.1	32,946	84.9	33,085	85.3
<b>Total Area of Guernsey</b>	38,801	100	38,801	100	38,801	100

1 acre = approximately 2.5 vergees



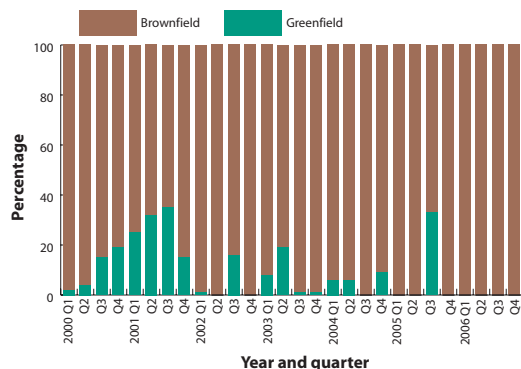
**Figure 36: Type of development as a percentage of the Island's total built environment**

	2005		2006	
	Vergees	Percentage of Built Environment	Vergees	Percentage of Built Environment
<b>Buildings</b>	2,236	38.2	2,254	39.4
<b>Roads and Car Parks</b>	2,040	34.8	2,051	35.9
<b>Greenhouses</b>	1,205	20.6	1,037	18.1
<b>Airport</b>	277	4.7	277	4.8
<b>Small Developments</b>	72	1.2	71	1.2
<b>Historic Buildings</b>	25	0.4	25	0.4
<b>Total</b>	5,855	100	5,716	100



Source: Digimap

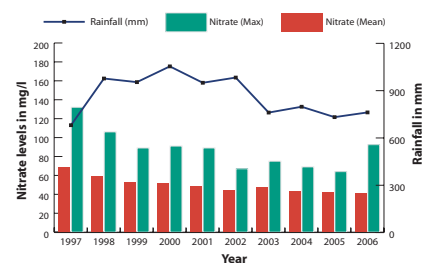
**Figure 37: Percentage of new housing permissions granted on greenfield and brownfield sites**



Source: Environment Department



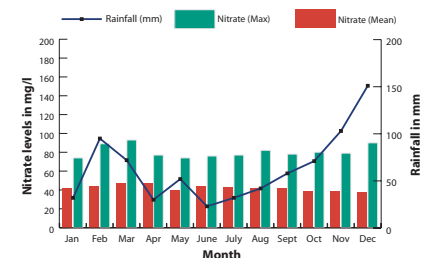
**Figure 38: Annually recorded nitrate levels 1997-2006**



Source: Guernsey Water



**Figure 39: Monthly nitrate levels recorded in 2006**



Source: Guernsey Water

## Built Environment: Local Transport



Sustainability

**Traffic volumes** have risen over the last twelve months, whilst passenger journeys by bus have stabilised after five successive yearly rises.

### What is measured?

Local transport levels are measured using traffic volumes taken at various locations around St. Peter Port at peak times. Public transport is monitored using annual bus passenger numbers.

#### Traffic flows along the Grange 2003 - 2006 (See Figure 40)

- Traffic volume along the Grange in 2006 remained consistently high during peak hours, between an average of 4,627 vehicles and 5815 vehicles per day (measured quarterly). These levels are the highest recorded since 2003.
- The Grange was closed for installation of a new surface water system during quarter 2, resulting in a drop in traffic flows for that quarter.
- Please note that due to data collection problems, monitoring of traffic volumes before 2003 is not included.

#### Traffic flows along Les Banques 2003 - 2006 (See Figure 41)

- Traffic volumes along Les Banques peaked in quarter 3 of 2006 at an average of 11,209 vehicles per day. This peak was primarily due to surrounding road works preventing access to other routes.
- Resurfacing work was carried out along Les Banques during quarter 1 of 2006, resulting in a drop in traffic flows for that quarter.
- Overall traffic volumes experienced along Les Banques in 2006 have risen considerably on the figures recorded in previous years.

#### Traffic flows along Les Val des Terres 2003 - 2006 (See Figure 42)

- Traffic volumes along Les Val des Terres in 2006 have reached peak levels recorded, between an average of 3,233 and 3,840 vehicles per day (measured quarterly).

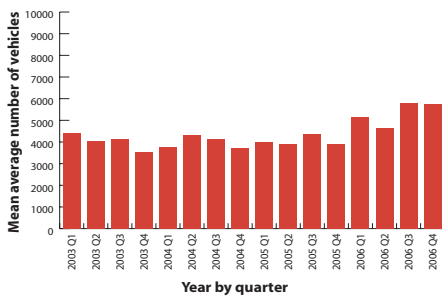
#### Number of passenger journeys on scheduled bus services 1997 - 2006 (See Figure 43)

- The overall trend in the number of passengers using the Island's scheduled bus service declined from 1997 to 2000. However since 2000 the numbers have increased steadily.
- In 2006 there were 1,405,414 passenger journeys made. Despite this being the highest figure recorded, it also represents a slowdown in the rate of annual growth of passenger journeys since 2000. The 2006 figures increased by only 0.84% on 2005 figures.
- The rise in the number of people using the Island's scheduled bus service is a result of an improved service and cheaper fares.

### Connections

Emissions from motor vehicles impact upon the Island's **Air Quality** and **Energy Consumption** is linked to the number of car journeys made on the Island. A good transport system is essential in enabling strong **Economic Activity** and increasing the Island's **Economic Capacity**.

**Figure 40: Mean daily traffic flows along the Grange 2003 - 2006**

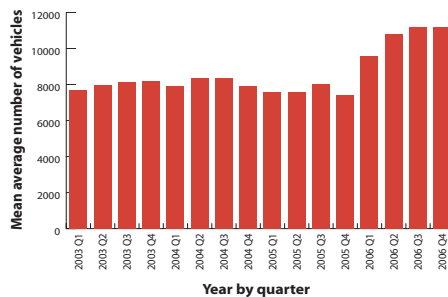


The Grange	Into St. Peter Port	Out of St. Peter Port	Into St. Peter Port	Out of St. Peter Port	Total
	7.00	- 9.00	16.00	- 18.00	
2006 Q1	1,268	1,344	1,553	968	5,133
2006 Q2	1,165	1,085	1,600	777	4,627
2006 Q3	1,339	1,597	1,851	1,028	5,815
2006 Q4	1,357	1,507	1,884	980	5,728

Source: Environment Department



**Figure 41: Mean daily traffic flows along Les Banques 2003 - 2006**

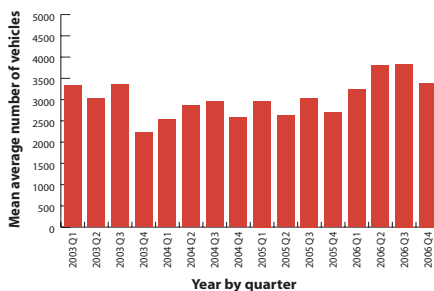


Les Banques	Into St. Peter Port	Out of St. Peter Port	Into St. Peter Port	Out of St. Peter Port	Total
	7.00	- 9.00	16.00	- 18.00	
2006 Q1	2,726	1,926	2,721	2,219	9,592
2006 Q2	2,867	2,456	2,413	3,060	10,796
2006 Q3	2,935	2,531	2,533	3,210	11,209
2006 Q4	2,682	2,278	2,899	3,320	11,179

Source: Environment Department



**Figure 42: Mean daily traffic flows along Les Val des Terres 2003 - 2006**

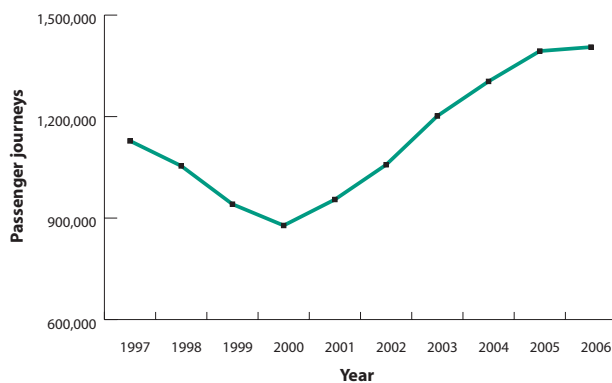


Les Val des Terres	Into St. Peter Port	Out of St. Peter Port	Into St. Peter Port	Out of St. Peter Port	Total
	7.00	- 9.00	16.00	- 18.00	
2006 Q1	1,032	539	572	1,090	3,233
2006 Q2	1,166	732	620	1,287	3,805
2006 Q3	1,127	743	644	1,326	3,840
2006 Q4	1,043	573	586	1,190	3,392

Source: Environment Department



**Figure 43: Number of passenger journeys on scheduled bus services**



	Passengers	% change
1997	1,128,101	+3.2%
1998	1,054,185	-6.6%
1999	941,052	-10.7%
2000	878,111	-6.7%
2001	954,908	+8.7%
2002	1,057,627	+10.8%
2003	1,201,799	+13.6%
2004	1,304,049	+8.5%
2005	1,393,698	+6.9%
2006	1,405,414	+0.84%

Source: Environment Department



Further travel and transport figures may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications

## Built Environment: Impact of Climate Change

Sustainability



**The mean annual air temperature** has increased by nearly  $1^{\circ}\text{C}$  during the period 1947 to 2006.

### What is measured?

Impact of climate change on the Island is measured using air temperatures, sea temperatures and spring flowering dates collected on the Island.

### Mean annual air temperatures in Guernsey 1947-2006 (See Figure 44)

- The mean annual air temperatures between 1947 and 2006 fluctuate between a minimum of  $9.6^{\circ}\text{C}$  in 1963 and a maximum of  $12.1^{\circ}\text{C}$  in 1989, 1995, 2003 and 2006.
- Due to these fluctuations, a best fit line is put on the graph in order to show the trend more clearly. Using this line, it can be seen that there is an average increase in air temperature of  $0.01^{\circ}\text{C}$  per year, resulting in an overall increase of approximately  $1^{\circ}\text{C}$  over the whole period.
- The largest rises over this period are due to warmer winter temperatures, reflected in the fall in the number of winter frosts particularly over the last decade.
- Whilst all of our seasons are becoming warmer, the Island is experiencing greater hours of sunshine, mostly in the autumn and winter, and more rainfall, mostly in winter and spring.

### Mean annual sea temperatures around Guernsey 1980-2006 (See Figure 45)

- Guernsey sea water temperatures are recorded by Sea Fisheries (part of the Commerce and Employment Department) each week at the signal station in St. Peter Port harbour. They are surface water temperatures and can be affected by sunshine and rainfall, although readings are taken in the shade avoiding heavy rainfall in an attempt to reduce these effects.
- The mean water temperature fluctuated during the period from a minimum of  $11.5^{\circ}\text{C}$  (in 1991) to a maximum of  $13.6^{\circ}\text{C}$  (in 1999).
- A best fit line is also included on this graph, which shows an average increase of  $0.051^{\circ}\text{C}$  per year. This results in an overall increase of approximately  $1.4^{\circ}\text{C}$  over the period.

- In 2006, the mean annual sea temperature was  $12.7^{\circ}\text{C}$ . A cold, late winter resulted in this figure being the lowest since 1996, although Guernsey's mean annual sea temperature has not fallen below  $12^{\circ}\text{C}$  since 1992.
- Sea water temperature in the harbour has also been monitored constantly at a depth of 6 metres for the past 5 years. It shows very good correlation with the sea surface readings. In years to come, this data will provide a clearer indication of changes that are occurring.

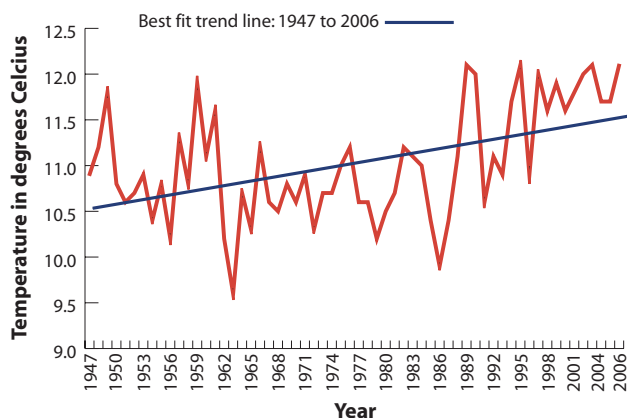
### Mean Guernsey spring flowering dates 1985-2006 (See Figure 46)

- This indicator records data on plants within a single Guernsey garden and relates to the flowering dates of the same species year after year. Nigel Jee has been recording the first flowering dates of 46 plant species since 1985.
- The dates on which plants come into flower are determined by a number of factors. With one or two exceptions, plant species flower in specific seasons, for example daffodils in spring and ivy in autumn. This suggests that temperature and day length are key to inducing flowering. Analysis shows that, on average, a  $1^{\circ}\text{C}$  increase in temperature in the three months leading up to flowering causes the flowers to appear ten days earlier.
- Despite flowering being delayed in 2006 by cold spring weather, on average the plants in Nigel Jee's garden are now flowering 13 days earlier than they did in 1985.
- The date of the first flowering of Snowdrop has fluctuated from year to year, but the trend (shown by the line of best fit on the graph) is towards earlier flowering.

### Connections

It is widely accepted by the international scientific community that climate change caused by global warming is a result of fossil fuel emissions. The impact of changes in air temperature, rainfall and sea level rise are likely to affect Guernsey's **Biodiversity**, **Water Consumption** and **Built Environment**.

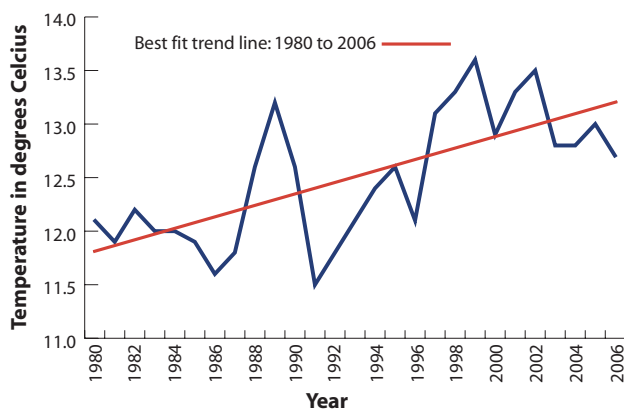
**Figure 44: Mean annual air temperatures in Guernsey 1947-2006**



Source:  
Guernsey Airport Met. Office



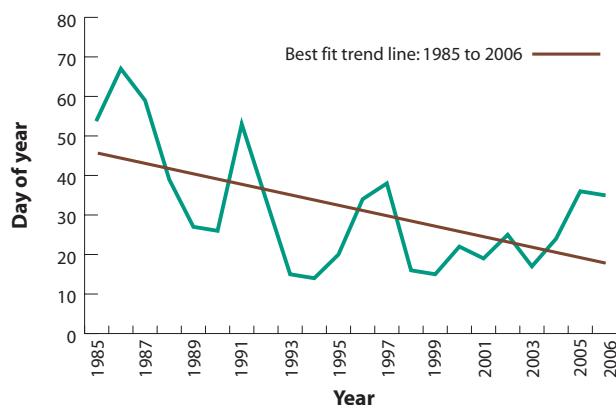
**Figure 45: Mean annual sea temperatures at St Peter Port harbour entrance 1980-2006**



Source:  
Guernsey Sea Fisheries



**Figure 46: Mean Guernsey spring flowering dates of Snowdrop 1985-2006**



Source:  
Mr Nigel Jee, Dr T Sparks and Dr A Casebow



For further information on climate change in Guernsey please see 'Planet Guernsey - Indicators and Impacts of Climate Change in Guernsey', to be published by the Guernsey Climate Change Partnership, October 2007.

Further Met. Office data relating to climate change can be found in the Facts and Figures Booklet

## Consumption: Waste



**Household waste** continues to rise, with almost 7% more household waste produced in 2006 than 2005. However, a larger percentage of this waste was recycled with 44% more household waste recycled in 2006 than in 2005.

### What is measured?

Waste generated on the Island is monitored by measuring changes in the quantity of household and commercial waste produced. Total waste produced is expressed as a per head of population figure. The quantity of waste recycled on the Island is also measured.

### Breakdown of household waste produced 1999 - 2006 (See Figure 47)

- The total amount of household waste produced continues to rise, with 7% more waste produced in 2006 than in 2005. This is the largest annual increase since monitoring began in 1999. Over the last six years, the amount of household waste produced in Guernsey has increased by 27%. Parish waste, which is landfilled at Mont Cuét and is the major component of household waste, has dropped for the first time since 2001. 2006 figures fell by 1% on 2005 figures. Household waste recycled has proved the fastest growing component of household waste produced in 2006, increasing by 44% on 2005 figures.

### Quantity of commercial waste produced 1999-2006 (See Figure 48)

- In 2006, the amount of industrial and commercial waste disposed of at the Longue Hougue Reclamation Site decreased for the third consecutive year. At Longue Hougue, 84,823 tonnes of inert waste was deposited in 2006, representing a 68% drop from the peak levels experienced in 2003. This is a direct reflection of the reduction since 2003 in the amount of major site preparation and building work being undertaken on the Island. At Mont Cuét landfill site, 32,686 tonnes of commercially produced putrescible waste was land-filled in 2006, 17% less than in 2005. This is the lowest figure for commercially produced putrescible waste recorded since 1999. Increased gate fees at Mont Cuét would appear to have had an impact in encouraging people to segregate more material at source.

### Waste produced per capita 1999-2006 (See Figure 49)

- The total amount of waste produced per capita continues to increase year on year, however so too does the percentage of waste recycled.
- In 2006, the amount of household waste produced per capita rose by 6% on 2005 figures to 386kgs/ capita. Of this total, 102kgs/ capita was recycled and 284kgs/ capita was put into landfill, representing a recycling rate of 26%. Recycling rates have increased by 10% since monitoring began in 1999.

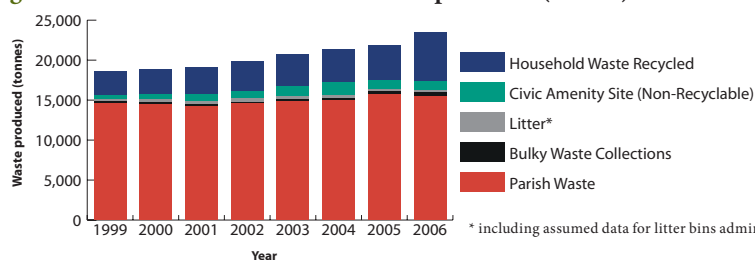
### Materials recycled under Environment Department Schemes 1994-2006 (See Figure 50)

- Over the last decade, the amount of material recycled under Environment Department operated schemes has risen by 150%. Despite figures slowing during 2005, 2006 figures rose by 14% over the year.
- In 2006 paper was the most recycled material, accounting for 42% of the total waste recycled. Following the introduction of banks for cardboard at recycling sites, the amount of cardboard recycled rose by 379% on 2005 figures, from 253 tonnes to 1,213 tonnes.
- In addition to the recycling schemes run by the Environment Department, a number of private companies and charitable organisations undertake the recycling of various household and commercial waste types. This indicator will aim to include these schemes in future years.

### Connections

Landfill and reclamation sites have a physical impact on **land use**. The methods we choose to dispose of our waste have connections to **public health**. **Water quality** and **biodiversity** can also be affected by leachate from landfill and waste disposal. Waste disposal is expensive and therefore connected to **economic prosperity**.

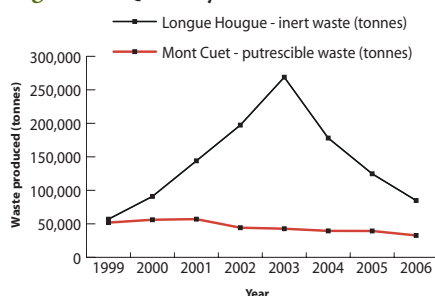
**Figure 47: Breakdown of household waste produced (tonnes) 1999-2006**



Waste Type (tonnes)	1999	2000	2001	2002	2003	2004	2005	2006
Parish Waste	14,543	14,446	14,248	14,544	14,787	14,903	15,699	15,502
Bulky Waste Collections	265	260	256	237	281	313	386	440
Litter*	358	391	385	465	438	448	466	355
Civic Amenity Site (Non-Recyclable)	468	589	757	911	1,250	1,532	1,136	1,018
Household Waste Recycled	2,946	3,180	3,411	3,721	3,914	4,128	4,337	6,228
<b>Total Household Waste Produced</b>	<b>18,580</b>	<b>18,866</b>	<b>19,057</b>	<b>19,878</b>	<b>20,670</b>	<b>21,324</b>	<b>22,025</b>	<b>23,543</b>

Source: Environment Department

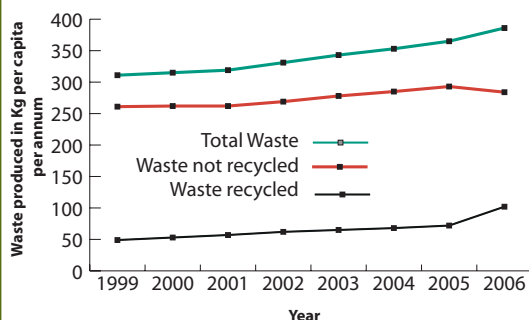
**Figure 48: Quantity of commercial waste produced 1999-2006**



Year	Mont Cuet - putrescible waste (tonnes)	Longue Hougue - inert waste (tonnes)
2000	56,105	90,939
2001	57,010	144,030
2002	44,242	197,357
2003	42,725	268,848
2004	39,474	178,023
2005	39,347	124,705
2006	32,686	84,823

Source: Environment Department

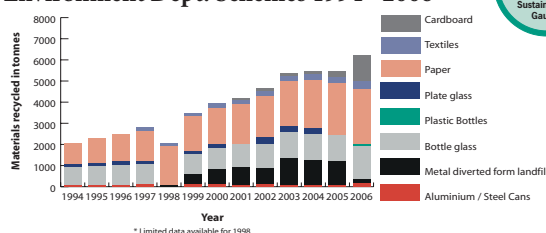
**Figure 49: Waste produced per capita 1999-2006**



KG per capita	2001	2002	2003	2004	2005	2006
Waste not recycled	262	269	278	285	293	284
Waste recycled	57	62	65	68	72	102
<b>Total Waste Produced</b>	<b>319</b>	<b>331</b>	<b>343</b>	<b>353</b>	<b>362</b>	<b>386</b>

Source: Environment Department

**Figure 50: Materials recycled under Environment Dept. Schemes 1994 - 2006**



Material recycled (tonnes)	2002	2003	2004	2005	2006
Aluminium & Steel Cans	124	84	88	82	144
Metal (diverted from landfill)	734	1,277	1,161	1,105	191
Bottle glass	1,165	1,223	1,241	1,276	1,589
Plastic bottles	-	-	-	-	75
Plate glass	292	272	269	-	-
Paper	1,960	2,138	2,305	2,416	2,642
Textiles	253	249	262	310	374
Cardboard	138	108	133	253	1,213
<b>Total</b>	<b>4,667</b>	<b>5,352</b>	<b>5,459</b>	<b>5,442</b>	<b>6,228</b>

Source: Environment Department



For further details of household and commercial waste produced, please see [www.gov.gg](http://www.gov.gg) - click on Environment > Waste Disposal and Recycling



## Consumption: Water Consumption



In 2006 average annual **domestic water consumption** fell to the lowest figure recorded since 1998. Estimated distribution losses have also continued to decline.

### What is measured?

Water consumption is measured through the amount of potable water used by the Island's metered and un-metered water consumers. The difference between demand and supply is measured through water used for operational purposes (including system cleaning and fire fighting) together with distribution losses, which show the efficiency with which water is transported from source to customer.

### Average annual water consumption per domestic supply 1998-2006 (See Figure 51)

- The average amount of potable water used by both metered and un-metered consumers continues to fall from the peak levels experienced in 2003.
- In 2006, average consumption figures for metered users rose by 0.8% on 2005 figures to 125 cubic metres.
- Average consumption figures for un-metered users in 2006 dropped by 5 cubic metres to 141 cubic metres, representing a 3.4% decrease on 2005 figures.

### Total annual water consumption by domestic supply 1998-2006 (See Figure 52)

- In 2006 the total annual water consumption figure decreased from the 2005 level of 2,841 megalitres, to 2,742 megalitres. This decrease represents a 3.5% reduction from the 2005 figures.
- Lower total consumption figures in comparison to the previous year could be attributed to a number of factors such as higher rainfall, lower building activity, reduced main drainage and lessened distributional losses.
- The 2006 total annual water consumption figure marks the fourth annual decrease in total water consumption figures since the figures peaked in 2003 at 2,948 megalitres. This suggests that water users are generally starting to conserve more water.

### Estimated water distribution losses 1998-2006 (See Figure 53)

- In 2006 the estimated distribution losses were 1.4% lower than in 2005, representing a reduction from 704 megalitres to 694 megalitres.
- 2006 estimated water losses mark the third annual decrease in estimated losses since the peak experienced in 2003 of 1,005 megalitres. 2006 figures mark a 31% drop on the peak figures recorded in 2003.
- The estimated water distribution losses show the efficiency with which water is transported from source to customer. Guernsey Water was concerned at the rise in apparent leakages in 2003 and directed resources into proactive leakage detection work. The water distribution (network of pipes) has been divided up in such a way that the quantity of water flowing into each zone is measured. This flow is then compared to the water 'sold' via the water meters in the area and the difference, after deducting operational usage, is deemed leakage. Careful control in this way ensures that valuable leakage detection resources are deployed in the most effective manner.

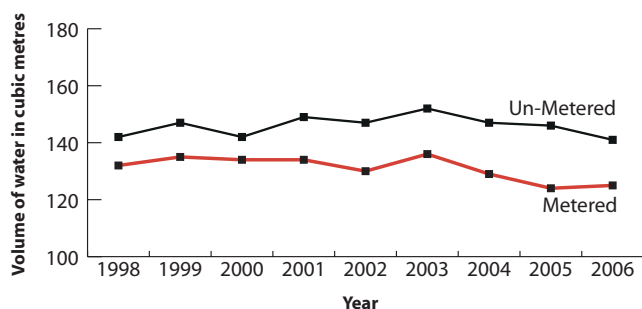
### Connections

Water is essential to all sectors of the economy; public, private, tourism, agriculture and horticulture and therefore connects to **economic prosperity**. Increasing **population trends** will require that water is used more efficiently, since the Island's supply is limited. Water is essential to sustain human life and therefore safe, clean water is vital to the **health** of the community.



## Consumption: Water Consumption

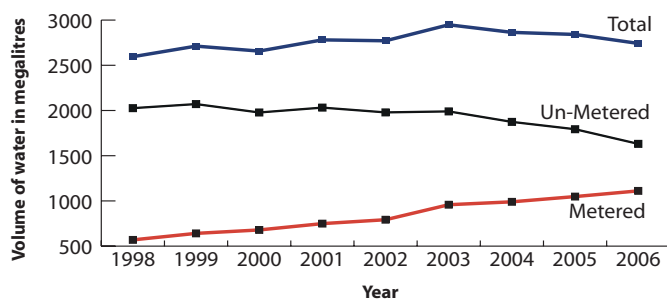
**Figure 51: Average annual water consumption per domestic supply 1998-2006 (cubic metres)**



Source: Guernsey Water

Year	Metered	Un-Metered
1998	132	142
1999	135	147
2000	134	142
2001	134	149
2002	130	147
2003	136	152
2004	129	147
2005	124	146
2006	125	141

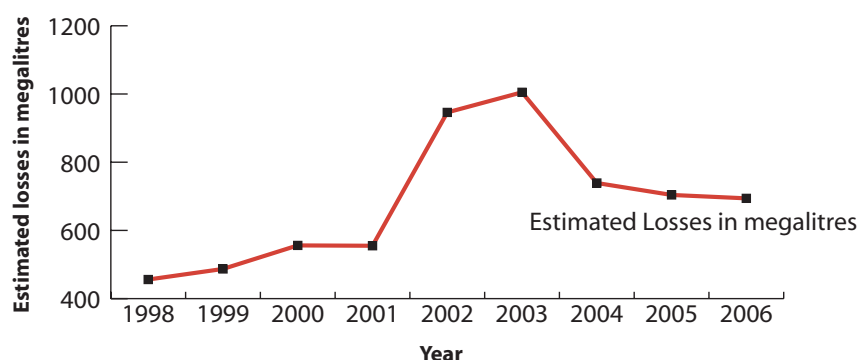
**Figure 52: Total annual water consumption by domestic supply 1998-2006 (megalitres)**



Source: Guernsey Water

Year	Metered	Un-Metered	Total
1998	569	2,026	2,595
1999	641	2,071	2,712
2000	679	1,978	2,657
2001	749	2,032	2,781
2002	792	1,979	2,771
2003	958	1,990	2,948
2004	990	1,874	2,864
2005	1,048	1,793	2,841
2006	1,111	1,631	2,742

**Figure 53: Estimated water distribution losses 1998 - 2006 (megalitres)**

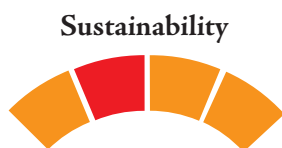


	1998	1999	2000	2001	2002	2003	2004	2005	2006
Estimated losses in megalitres	456	487	556	555	946	1005	739	704	694

Source: Guernsey Water

For more detailed analysis of Guernsey's water consumption patterns please see the Guernsey Water Annual Report 2006

## Consumption: Energy



In 2006 per capita electricity consumption figures **fell marginally** on 2005 figures, the first reduction in per capita electricity consumption since 1997.

### What is measured?

Energy consumption figures are monitored through levels of electricity, gas and oil used by the Island's consumers. Per capita electricity consumption figures are calculated to measure the efficiency of electricity use. Energy from renewable sources will be measured through the number of electricity units sold into the grid from independent producers.

### Annual electricity consumption 1997/8-2006/7 (Figure 54)

- In 2006 there was a small rise in the number of electricity consumers on the Island. Domestic customers rose by 1% on 2005 figures and total customers (domestic and commercial) rose by 1% on 2005 figures.
- During the same period, actual electricity consumption figures remained at similar levels to 2005, with domestic consumption levels falling by 0.4% on 2005 figures and total consumption levels (domestic and commercial) rising slightly by 0.3% on 2005 figures.
- Over the last ten years, total electricity consumption for both domestic and commercial use has risen by 30%, whilst the total number of consumers both domestic and commercial has risen by 5.6% only.

### Annual imports of oil 1997-2006 (Figure 55)

- Between 2000 and 2005 the imports of oil for domestic consumption declined steeply. This was due to the electricity cable link with France. Whilst this appears to bring a reduction in oil importation figures for the Island, it is in reality no longer monitoring all the energy used in the production of the Island's electricity, as some of this is now generated outside Guernsey.
- In 2006 the total amount of oil imported to the Island rose by 14% on 2005 figures to 124,673 litres. This rise is in part due to increased quantities of heavy fuel oil imported by Guernsey Electricity for local power generation and increased demands for transport fuel.

### Annual gas consumption 1997-2005/6 (Figure 56)

- Over the last ten years, annual gas consumption supplied through the mains system has fluctuated between 106,222,000 kWhs recorded in 1998 and 98,500,000 kWhs recorded in 2002. In 2005/6, the figure increased to 101,994,000. However, figures for the last year mark a change in the financial reporting methodology used by Guernsey Gas and is not strictly comparable to previous years.
- During the last ten years, the amount of bottled gas consumed annually on the Island has remained steady, ranging between 33,810,000 kWhs in 1998 and 23,170,000 in 2003.

### Electricity consumed per capita 1997-2006 (Figure 57)

- In 2006, per capita electricity consumption figures fell by 0.1% on 2005 figures. This is the first reduction in per capita electricity consumption figures since 1997.
- It should be noted that whilst the figures are attributed to per capita averages, they are estimated and based upon total electricity figures, which includes both commercial and domestic electricity use.

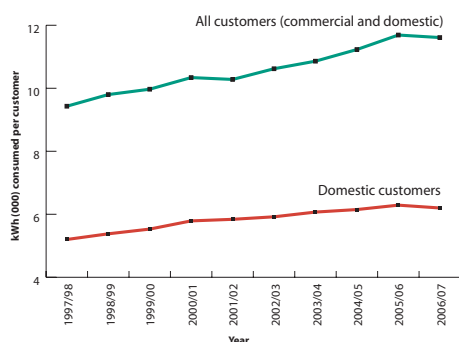
### Units of electricity produced via renewable sources

- This indicator has been devised to monitor the amount of electricity sold into the Island's grid from renewable sources. At present there have not been any such transactions.

### Connections

The burning of fossil fuels (e.g. oil, coal and wood) and the impact this has on **Air Quality** is increasingly recognised as one of the major causes of **Climate Change**. **Housing Quality** and building regulations are central to the future energy efficiency of the Island.

**Figure 54: Annual electricity consumption 1997/8-2006/7**

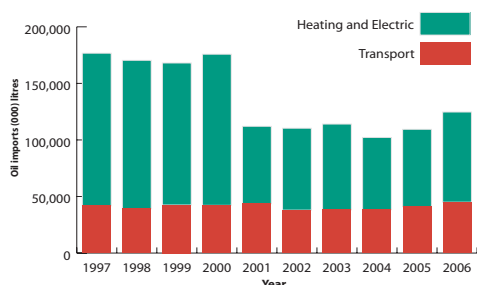


Source: Guernsey Electricity

	All Customers (000s kWh)	Domestic Customers (000s kWh)
1997/98	9.4	5.2
1998/99	9.8	5.4
1999/00	10.0	5.5
2000/01	10.3	5.8
2001/02	10.3	5.8
2002/03	10.6	5.9
2003/04	10.9	6.1
2004/05	11.2	6.1
2005/06	11.7	6.3
2006/07	11.6	6.2



**Figure 55: Annual imports of oil 1997-2006**

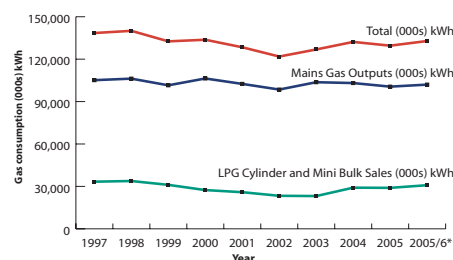


Year	Transport (000s of litres)	Heating and Electric (000s of litres)	Total (000s of litres)
1997	41,786	134,848	176,634
1998	39,103	131,231	170,334
1999	42,493	125,533	168,026
2000	42,212	133,533	175,745
2001	43,655	68,357	112,012
2002	37,966	72,348	110,314
2003	38,224	75,797	114,621
2004	38,360	63,825	102,185
2005	40,984	68,372	109,356
2006	45,000	79,673	124,673

Source: Customs and Excise, Home Department



**Figure 56: Annual gas consumption 1997-2005/6**



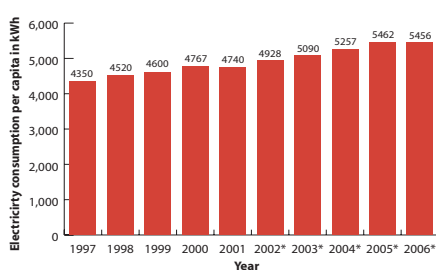
\*Guernsey Gas' financial and reporting year has changed from 1st January - 31st December to 1st July - 30th June.

Year	Mains Gas Outputs kWh	LPG cylinder and Mini Bulk sales kWh	Total
1997	105,140,000	33,340,000	138,480,000
1998	106,222,000	33,810,000	140,032,000
1999	101,500,000	31,090,000	132,590,000
2000	106,333,000	27,400,000	133,733,000
2001	102,500,000	25,900,000	128,400,000
2002	98,500,000	23,350,000	121,850,000
2003	103,690,000	23,170,000	126,860,000
2004	103,100,000	29,100,000	132,200,000
2005	100,565,000	28,975,000	129,540,000
2005/6	101,994,000	30,840,000	132,834,000

Source: Guernsey Gas



**Figure 57: Electricity consumed per capita 1997-2006**



Source: Guernsey Electricity, Policy Council

\*Population figures for 2002 onwards are based on Social Security Department estimates

	Population	Consumption (kWh)	kWh per capita		Population	Consumption (kWh)	kWh per capita
1997	58,906	256,244,000	4,350	2002*	59,999	295,668,000	4,928
1998	59,131	267,265,000	4,520	2003*	60,191	306,389,000	5,090
1999	59,356	273,013,000	4,600	2004*	60,382	317,402,000	5,257
2000	59,582	284,033,000	4,767	2005*	60,762	331,883,000	5,462
2001	59,807	283,457,000	4,740	2006*	61,029	332,991,000	5,456



For further details of energy consumption, please see [www.gov.gg](http://www.gov.gg) - click on Environment > Energy Efficiency

# References and further reading

## Natural Environment

---

### Signpost to Data Providers

Public Services  
Department  
Guernsey Water  
South Esplanade  
St. Peter Port  
Guernsey  
GY1 3AS  
Tel: 724552

Guernsey Biological  
Records Centre  
La Ramée  
St. Peter Port  
Guernsey  
GY1 2ET  
Tel: 715799  
E-Mail:  
gsybiorec@cwgsy.net

British Trust for Ornithology  
The Nunnery  
Thetford  
Norfolk  
IP24 2PU  
Tel: 01842 750050

Guernsey Greenhouse Gas Inventory  
Dr C Dore  
National Environmental Technology Centre  
AEA Technology PLC  
E5 Culham  
Abingdon  
Oxfordshire  
OX14 3ED  
Tel: 01235 463874

### Further Reading

Air Pollution – what it means to your health  
DEFRA 2003  
[www.defra.gov.uk](http://www.defra.gov.uk)

The World's Water 2006-2007: The Biennial Report on  
Freshwater Resources  
Peter H Gleick  
Island Press  
Washington D.C.

Environment Department  
Sir Charles Frossard House  
PO Box 43  
La Charroterie  
St. Peter Port  
Guernsey  
GY1 1FH  
Tel: 717200

La Société Guernesaise  
Candie Gardens  
St. Peter Port  
Guernsey  
GY1 1UG  
Tel: 725093  
E-Mail:  
lasoc@compuserve.com

## Natural Environment (continued)

---

### Websites

UK National Air Quality Information Archive  
[www.airquality.co.uk](http://www.airquality.co.uk)

The World's Water: Providing information on the world's  
freshwater resources  
[www.worldwater.org](http://www.worldwater.org)

Marine Conservation Society  
[www.mcsuk.org](http://www.mcsuk.org)

Guernsey Biological Records Centre  
[www.biologicalrecordscentre.gov.gg](http://www.biologicalrecordscentre.gov.gg)

La Société Guernesaise  
[www.societe.org.gg](http://www.societe.org.gg)

British Trust for Ornithology  
[www.bto.org](http://www.bto.org)

National Environmental Technology Centre  
[www.aea-energy-and-environment.com](http://www.aea-energy-and-environment.com)

## Built Environment

---

### Signpost to Data Providers

Digimap Ltd  
Old Tobacco Factory  
La Ramée  
St Peter Port  
Guernsey  
GY1 2ET  
Tel: 700321

Guernsey Water  
Public Services Department  
South Esplanade  
St. Peter Port  
Guernsey  
GY1 3AS  
Tel: 724552

Environment Department  
Sir Charles Frossard House  
PO Box 43  
La Charroterie  
St. Peter Port  
Guernsey  
GY1 1FH  
Tel: 717200

# References and further reading

## Built Environment (continued)

### Further Reading

- Indicators of Climate Change for Guernsey  
Dr. T. Sparks and Dr. A. Casebow (Eds), La Société  
Guernesiaise, 2005
- Scenarios of Climate Change for Islands within the BIC  
Region  
British Irish Council, July 2003
- Climate Change and Nature Conservation in Britain  
and Ireland  
MONARCH – Modelling Natural Resource Responses  
to Climate Change,
- Understanding Climate Change: A Beginners Guide to  
the UN Framework Convention  
[www.unfccc.int/resource/beginner.html](http://www.unfccc.int/resource/beginner.html)
- Climate Change and Human Health: Risks and  
Responses  
McMichael. A.J. et al  
World Health Organisation, Geneva, 2003

### Websites

- Digimap Ltd  
[www.digimap.gg](http://www.digimap.gg)
- Environment Department  
[www.gov.gg](http://www.gov.gg) - click on Environment
- Guernsey Water, Public Services Department  
[www.gov.gg](http://www.gov.gg) - click on Public Services
- DEFRA – Department for the Environment, Food and  
Rural Affairs  
[www.defra.gov.uk](http://www.defra.gov.uk)
- The Centre for Alternative and Sustainable Transport  
[www.staffs.ac.uk/schools/sciences/geography/cast](http://www.staffs.ac.uk/schools/sciences/geography/cast)

## Consumption

### Signpost to Data Providers

- |                                 |                              |
|---------------------------------|------------------------------|
| Environment Department          | Guernsey Electricity Limited |
| Sir Charles Frossard House      | North Side                   |
| PO Box 43                       | Vale                         |
| La Charroterie                  | Guernsey                     |
| St. Peter Port                  | GY1 3AD                      |
| Guernsey                        | Tel: 246931                  |
| GY1 1FH                         |                              |
| Tel: 717200                     |                              |
| Guernsey Water Annual<br>Report | Guernsey Gas Limited         |
| Guernsey Water                  | The Energy Centre            |
| Public Services Department      | Admiral Park                 |
| South Esplanade                 | St Peter Port                |
| St. Peter Port                  | GY1 2BB                      |
| Guernsey                        | Tel: 724811                  |
| GY1 3AS                         |                              |
| Tel: 724552                     |                              |
|                                 | Customs and Excise           |
|                                 | New Jetty                    |
|                                 | White Rock                   |
|                                 | St Peter Port                |
|                                 | GY1 2LL                      |
|                                 | Tel: 741400                  |

### Further Reading

- The World's Water: The Biennial Report on Freshwater  
Resources 2006-2007, Peter H Gleick, Island Press,  
Washington D.C.

### Websites

- The World's Water: Providing information on the World's  
freshwater resources  
[www.worldwater.org](http://www.worldwater.org)
- Letsrecycle  
[www.letsrecycle.com](http://www.letsrecycle.com)
- Waste watch: Recycling Initiatives  
[www.wastewatch.org.uk](http://www.wastewatch.org.uk)
- The Waste and Resources Action Programme  
[www.wrap.org.uk](http://www.wrap.org.uk)
- Guernsey Electricity Limited  
[www.electricity.gg](http://www.electricity.gg)
- Guernsey Gas Limited  
[www.gsygas.com](http://www.gsygas.com)



# Guernsey's population has risen by 19% over the last thirty five years, an average of around 273 people a year.

### What is measured?

The total number of people resident in the Island, the population density of the Island and the population of the Island's parishes are measured using data from the Island's Census and from the Social Security Department.

### Guernsey's population level - 1971 to 2006 and population projections to 2063

(See Figure 58)

- The latest Census was held on Sunday 29 April 2001. The population figures for 2006 are estimated through the Social Security Department database. The Social Security Department needs a time lapse of about one year before being able to give a reliable estimate of population at a particular point in the past. This is because many people, particularly non-employed people with income below the threshold for paying contributions, do not inform the Department when they have left the Island and this is confirmed only after subsequent follow-up actions. There is a constant flow of people into and out of the Island, amounting to roughly 10% of the population each year.
- Estimated population figures for 2006, provided by the Social Security Department, suggest that 61,029 people live on the Islands of Guernsey, Herm and Jethou. This is 1,222 more than the figure recorded in the 2001 Census.
- Population growth has been consistent since the 1970s, at an average rate of around 273 people a year over the 35 year period from 1971 to 2006.
- Population projections made by the Government Actuary's Department show the different effects on Guernsey's population of alternative migration scenarios. With zero migration, Guernsey's population would decline to just over 45,000 by 2063. However, net migration of 300 persons per year would grow the population to a peak of 69,937 by 2043.

### Population density of Guernsey and other jurisdictions (See Figure 59)

- Guernsey has a population density of 969 people per square kilometre, based upon estimated population figures for 2006.
- Guernsey's population density is almost two and a half times (150%) higher than the population density of England and 27.5% higher than the population density of Jersey. Malta, however, has a population density that is 32% higher than Guernsey's, at 1,280 people per square kilometre.

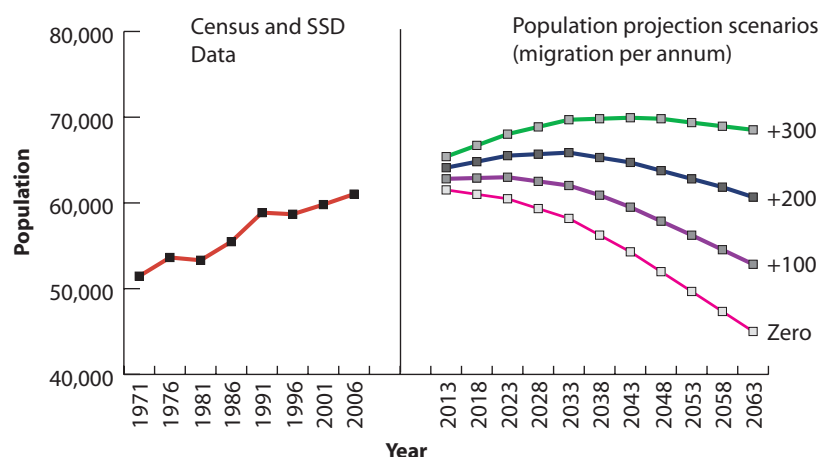
### Population of Guernsey's parishes (See Figure 60)

- The population within the Island's parishes between 1996 and 2001 shows that a strong rural/urban divide exists between the parishes. The rural parishes such as Torteval, St Saviour and St Pierre du Bois have much smaller populations compared to the urban parishes such as St Peter Port and St Sampson.
- All Guernsey parishes saw their population increase in the five years between 1996 and 2001. The biggest increase in percentage terms was seen in St. Saviour (+9.2%) and Forest (+8.9%), whilst the biggest increases in terms of numbers were St. Peter Port (+294) and St. Saviours (+227).

### Connections

**Energy/ Waste** and **Water Consumption** are all placed under pressure from a growing population, emphasising the need to preserve, re-use and recycle. As populations grow they become more diverse. **Community Involvement** allows all community members to voice their concerns and aspirations for the Island's future.

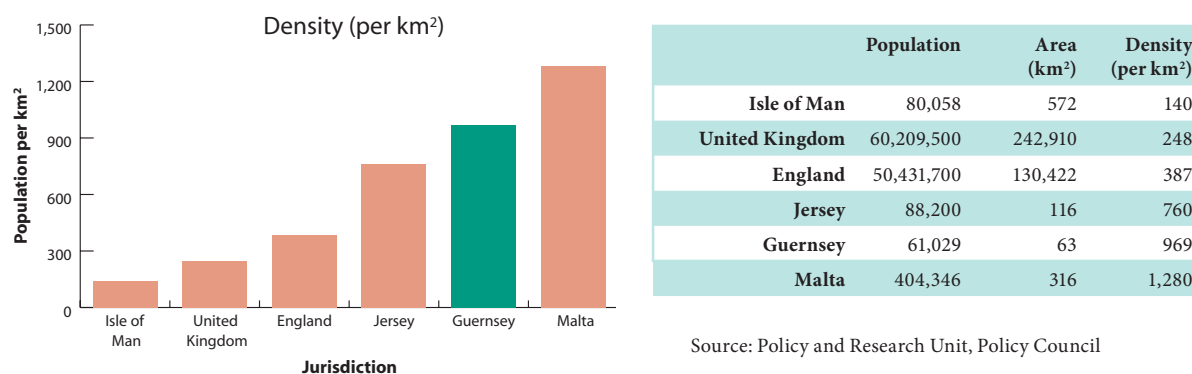
**Figure 58: Guernsey's population level – 1971 to 2006 and population projections to 2063**



Source: 2001 Guernsey Census, Policy Council; Social Security Department

Figures from 2013 to 2063 are population projections prepared by the UK Government Actuary's Department

**Figure 59: Population density of Guernsey and other jurisdictions**



Source: Policy and Research Unit, Policy Council

**Figure 60: Population of Guernsey's parishes**

	1971	1976	1981	1986	1991	1996	2001
Castel	6,317	7,309	7,727	8,260	9,068	8,922	8,975
Forest	1,460	1,383	1,288	1,293	1,386	1,423	1,549
St Andrew	2,232	2,295	2,230	2,281	2,357	2,342	2,409
St Martin	6,161	6,072	5,842	5,876	6,082	6,082	6,267
St Peter Port	16,303	16,279	15,587	16,085	16,648	16,194	16,488
St Pierre du Bois	1,829	1,934	2,018	2,057	2,242	2,151	2,188
St Sampson	6,534	6,802	6,947	7,475	8,045	8,540	8,592
St Saviour	2,116	2,321	2,432	2,404	2,419	2,469	2,696
Torteval	841	914	881	926	976	954	973
Vale	7,558	8,251	8,316	8,764	9,530	9,504	9,573
Herm and Jethou	107	77	45	61	114	100	97
<b>Total</b>	<b>51,458</b>	<b>53,637</b>	<b>53,313</b>	<b>55,482</b>	<b>58,867</b>	<b>58,681</b>	<b>59,807</b>

Source: 2001 Guernsey Census, Policy Council



For a detailed description of population statistics please see [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Census





# The age distribution of Guernsey's population shows a significant bulge in the 30-39 and 40-49 year old age groups.

### What is measured?

Demographic trends are monitored through age and gender distribution levels. Births and deaths on the Island are monitored to provide information on natural population increase.

### Age and gender breakdown of Guernsey's population - 2006 (See Figure 61)

- The age structure of the population reflects changes in birth and death rates as well as increases in life expectancy and changes arising from migration. The age distribution of Guernsey's population shows a significant bulge in the 30-39 and 40-49 year old age groups.
- In 2006, figures supplied by the Social Security Department show that there were 961 more females than males, meaning that males accounted for 49.2% of the population and females for 50.8% of the population. This difference is mostly due to females living longer than males.

### Births, deaths and natural population increase (See Figure 62)

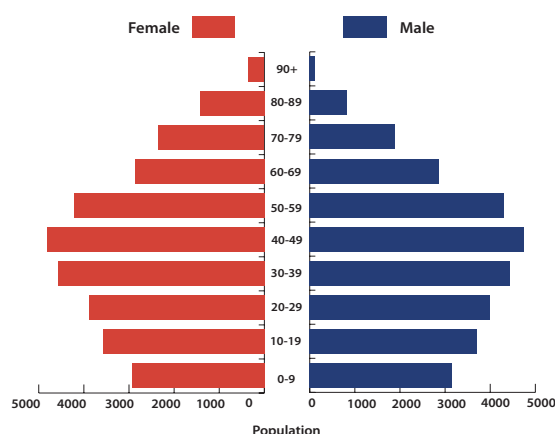
- The total population of the Island is a function of the number of births minus the number of deaths (the natural increase) and the difference between immigration and emigration (net migration).
- In the 1960s and early 1970s a bulge in the population occurred. This has been called the 'baby boom'. It was followed by a decline in the number of births, which lasted throughout the 1970s and 1980s.
- Recently the Island's population has seen a natural increase that peaked at 140 in 1999. This has subsequently been declining due to a fall in birth rate figures. The natural increase can become a natural 'decrease' at times when deaths exceed births. This occurred in 1975, 1977, 1982, 1983 and 2002.

### Connections

**Economic Prosperity** requires a vibrant and well-educated working population.

Guernsey's demographic bulge suggests future connections between an aging population and the Island's ability to provide the necessary **Health** and social services required.

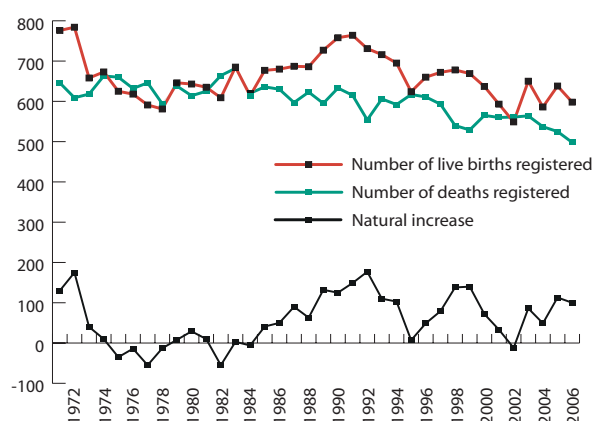
**Figure 61: Age and gender breakdown of Guernsey's population - 2006**



Age range	Numbers		Percentage of age group		Percentage of total population	
	Male	Female	Male %	Female %	Male %	Female %
0-9	3,159	2,936	51.8	48.2	10.5	9.5
10-19	3,703	3,578	50.9	49.1	12.3	11.5
20-29	3,993	3,883	50.7	49.3	13.3	12.5
30-39	4,440	4,580	49.2	50.8	14.8	14.8
40-49	4,751	4,815	49.7	50.3	15.8	15.5
50-59	4,305	4,220	50.5	49.5	14.3	13.6
60-69	2,859	2,862	50.0	50.0	9.5	9.2
70-79	1,884	2,347	44.5	55.5	6.3	7.6
80-89	827	1,421	36.8	63.2	2.8	4.6
90+	113	353	24.2	75.8	0.4	1.1
<b>Total</b>	<b>30,034</b>	<b>30,995</b>	<b>49.2</b>	<b>50.8</b>	<b>100</b>	<b>100</b>

Source: Social Security Department

**Figure 62: Births, deaths and natural population increase**



Year	Number of live births registered	Number of deaths registered	Natural increase
1997	672	593	79
1998	678	540	138
1999	669	529	140
2000	637	565	72
2001	593	560	33
2002	549	561	-12
2003	650	564	86
2004	586	537	49
2005	638	525	113
2006	598	498	100

Note: These are Guernsey rather than Bailiwick statistics – Alderney, Sark and Herm figures are registered separately and have not been included in this graph and table. The death figures include people who are not resident on the Island but died over here (e.g. tourists.). Stillbirths are not included as registered live births. The figures reflect the year of registration rather than birth or death.

Source: Register of Births and Deaths, States Greffe



For a detailed description of population statistics please see [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Census

Further population figures may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications



Over the last ten years **immigration and emigration** have almost cancelled themselves out, with net migration standing at 13 people for the previous ten year intercensal period.

### What is measured?

Net migration is the difference between immigration and emigration. When the natural increase in the population is static or falling, then the only increase in the population can come from those people moving to the Island (immigration).

### Immigration, emigration and net migration (See Figure 63)

- Immigration dropped between 1991 and 1996, but subsequently rose between 1996 and 2001. Whereas emigration rose between 1991 and 1996 but subsequently dropped between 1996 and 2001. The effect was that they virtually cancelled each other out.
- In the five years from 1991 to 1996, net migration to the Island actually fell by 634. In the five years from 1996 to 2001, net migration rose by 647. Thus over the previous two intercensal periods, net migration has been a total of 13 people.

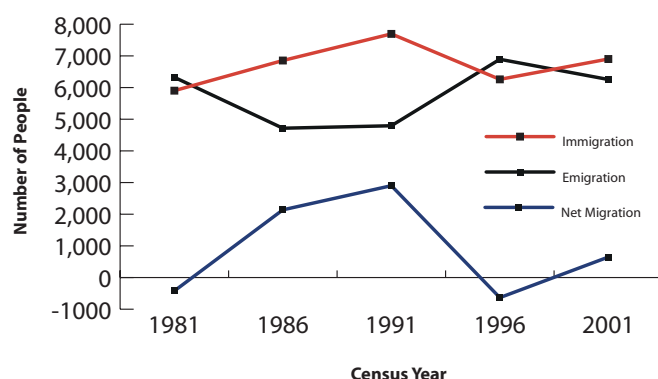
### Live housing licenses (See Figure 64)

- Housing licences are administered by the Housing Department under the Housing (Control of Occupation) (Guernsey) Laws.
- Guernsey has been unable to provide all the employees it requires, especially in specialist occupations such as Health and Education. Due to this shortfall, 'Essential' housing licences are issued for certain posts. These are generally for limited periods of time. Other licences include 'Compassionate' for people with strong connections to the Island, 'En Famille' for local residents to accommodate a non-Guernsey person and 'Short-Term' for industries such as tourism, horticulture and construction to recognise manpower shortages.
- The total number of live housing licences at 31 March 2006 rose to 4,217, an increase of 218 compared with 31 March 2005. This suggests that there were more people living in Guernsey under licence. Less than one third of live licences were for essential employment, the remainder were compassionate, 'En Famille' and Short-term licences. Only essential workers can reside in a separate, self contained dwelling or to accommodate dependencies.

### Connections

A strong and dynamic working population is the cornerstone of a vibrant **Economy**. Population turnover can effect changes in demand for services such as **Education** and **Health**. Population levels have a direct and measurable connection to **Energy Consumption** per capita.

**Figure 63: Immigration, emigration and net migration**

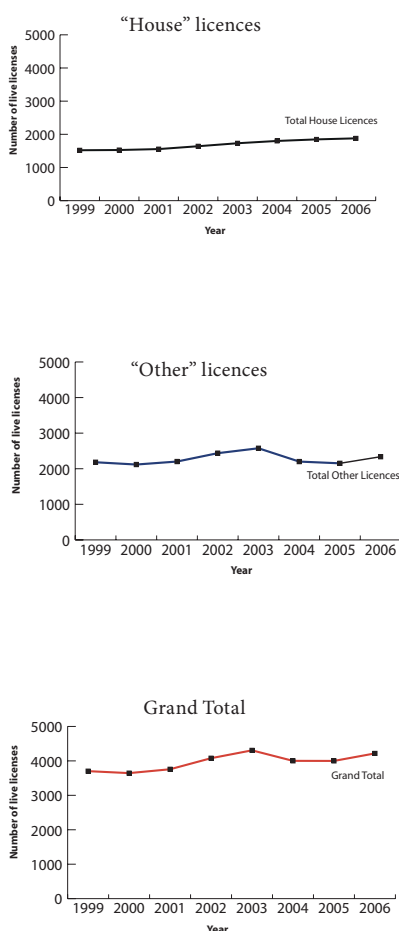


	Immigration	Emigration	Net Migration
1981	5902	6324	-422
1986	6854	4716	2138
1991	7695	4794	2901
1996	6259	6893	-634
2001	6902	6255	647

Source: 2001 Census



**Figure 64: Live housing licences**



Source: Housing Department

	2000	2001	2002	2003	2004	2005	2006
<b>Essential Employment</b>							
Finance Sector	316	321	318	339	384	367	406
Tourism/Catering	140	148	155	163	181	155	153
Education	119	133	144	159	190	204	230
Health	166	162	187	213	213	231	238
General Public Services	51	62	87	88	86	92	93
General Industry	174	180	188	200	187	232	221
<b>Total</b>	<b>966</b>	<b>1,006</b>	<b>1,079</b>	<b>1,162</b>	<b>1,241</b>	<b>1,281</b>	<b>1,341</b>
<b>Other Licences (Compassionate)</b>							
Marriage Breakdown	173	169	170	168	167	146	137
Other Compassionate	388	380	392	401	392	420	401
<b>Total</b>	<b>561</b>	<b>549</b>	<b>562</b>	<b>569</b>	<b>559</b>	<b>566</b>	<b>538</b>
<b>Total "House" Licences</b>	<b>1,527</b>	<b>1,555</b>	<b>1,641</b>	<b>1,731</b>	<b>1,800</b>	<b>1,847</b>	<b>1,879</b>
<b>Other Licences ("En Famille")</b>							
"En Famille"	981	931	955	1,009	1,050	1,042	1,110
Nursing Homes	50	40	38	37	43	47	43
<b>Total</b>	<b>1,031</b>	<b>971</b>	<b>993</b>	<b>1,046</b>	<b>1,093</b>	<b>1,089</b>	<b>1,153</b>
<b>Short-Term Licences</b>							
Tourism	526	503	551	510	429	426	533
Horticulture	260	269	272	259	133	141	161
Other Industries	286	445	609	750	546	496	491
Not Employment Related	15	14	12	10	0	0	0
<b>Total</b>	<b>1,087</b>	<b>1,231</b>	<b>1,444</b>	<b>1,529</b>	<b>1,108</b>	<b>1,063</b>	<b>1,185</b>
<b>Total "Other" Licences</b>	<b>2,118</b>	<b>2,202</b>	<b>2,437</b>	<b>2,575</b>	<b>2,201</b>	<b>2,152</b>	<b>2,338</b>
<b>Grand Total</b>	<b>3,645</b>	<b>3,757</b>	<b>4,078</b>	<b>4,306</b>	<b>4,001</b>	<b>3,999</b>	<b>4,217</b>



For a detailed description of population statistics please see [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Census

Further population figures may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications



# The number of applications on the joint waiting list for Housing Department and Guernsey Housing Association accommodation fell from 119 in 2005 to 107 in 2006, the lowest figure recorded over the last decade. 295 young people experiencing accommodation difficulties were referred to Guernsey Youth Housing Project.

### What is measured?

The number of people on the joint States/Guernsey Housing Association waiting list is monitored in order to assess demand for social rented housing on the Island. (N.B. The Guernsey Housing Association maintains a separate waiting list for persons ineligible for Housing Department accommodation or nomination to the Association, but still in need of social housing.) Changes in the Island's housing stock are also measured using information from the Census.

### Number of people on the waiting list for subsidised housing 1997-2006 (See Figure 65)

- The number of applications on the waiting list for Housing Department accommodation fell from 119 to 107 in 2006. This is the lowest figure recorded over the last decade. This reduction has been due to the completion of a number of Guernsey Housing Association properties over the last two years, combined with the effects of the tenancy review policy, whereby tenants who are no longer eligible for States' housing have in many cases voluntarily given up their tenancies and moved to the private sector.

### Number of referrals to the Guernsey Youth Housing Project 2002-2006 (See Figure 67)

- The Guernsey branch of the National Children's Home, Guernsey Youth Housing (GYH), was set up in 2000 with the aim of reducing youth homelessness and, wherever possible, preventing rough sleeping by young people aged between 16 and 21 years of age.

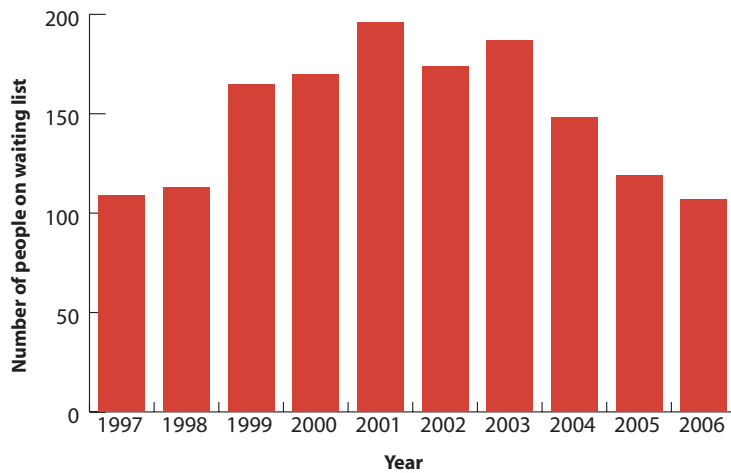
Young people can be referred to or directly contact the GYH if they are experiencing accommodation difficulties for any reason. The number of referrals gives an indication of the level of accommodation difficulties experienced by young people.

- The number of young homeless referrals increased from 163 in 2002 to 300 in 2005 and decreased slightly to 295 in 2006. The overall increase from 2002 to 2006 was 81%. This is a significant increase, which could have been due to the services provided by the GYH becoming more widely recognised as the charity became established. It also shows, however, that there is demand for such services.
- Overall GYH referrals split, by gender, show that from 2002 to 2004 there were more females referred than males. However, this trend has reversed in the last two years, with 9% more male referrals in 2006 than female.
- More time series data will be added over the forthcoming years in order to analyse long-term trends in youth homelessness.

### Connections

There is a high demand for housing on the Island but a limited supply. For this reason, there continues to be strict controls on [Housing Licences](#) and occupation. Housing provision has a physical and spatial impact - ensuring that new building takes place on [Previously Developed Land](#) is key to regulating land use impact and minimising [Biodiversity](#) loss.

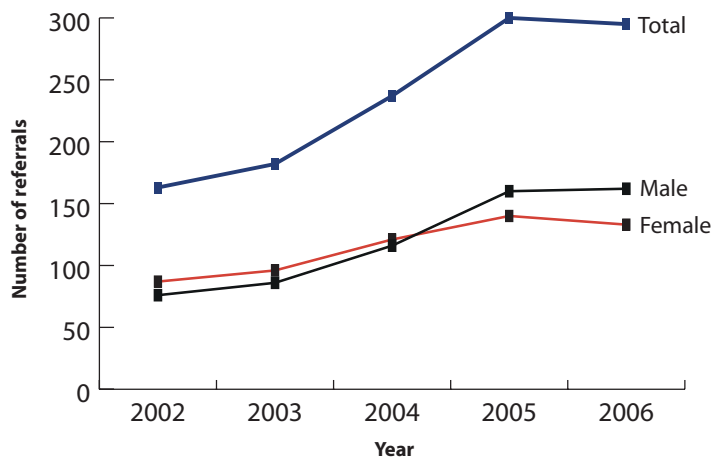
**Figure 65: Number of people on the joint waiting list for subsidised housing 1997-2006**



Year	Number of People
1997	109
1998	113
1999	165
2000	170
2001	196
2002	174
2003	187
2004	148
2005	119
2006	107

Source:  
Housing Department

**Figure 67: Number of referrals to the Guernsey Youth Housing Project 2002-2006**



Year	Female	Male	Total
2002	87	76	163
2003	96	86	182
2004	121	116	237
2005	140	160	300
2006	133	162	295

Note: referrals may include double counting

Source: Guernsey Youth Housing



For a detailed description of Guernsey's private housing trends please see the Guernsey Census. The 2001 Census Report is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications > 2001 Census Report



In 2006 no **housing units** were found to be substandard.

---

### What is measured?

This indicator measures the number of housing units found to be substandard on the Island (defined by the Environmental Health and Pollution Regulation Department).

---

### Number of housing units found to be unfit (See Figure 68)

- In 2006 and 2005 no housing units were found to be substandard. This is the lowest figure recorded in the last eight years. In 2004, one unit was found to be substandard and in 2003 there were two units. Over the eight years that monitoring has taken place the number of substandard housing units on the Island has fluctuated between zero and five houses a year.
- Quality of housing is essential to a decent quality of life. Factors assessed when considering the minimum requirements for decent habitation include the following; repair, stability, dampness, natural lighting, ventilation, water supply, facilities for storage, preparation and cooking of food, drainage, sanitary conveniences, personal washing facilities, electricity supply installation hazards, overcrowding and means of escape in a fire.
- The Housing Department are exploring an improved indicator for measuring the quality of housing, which will allow more detailed analysis of the Island's housing stock.

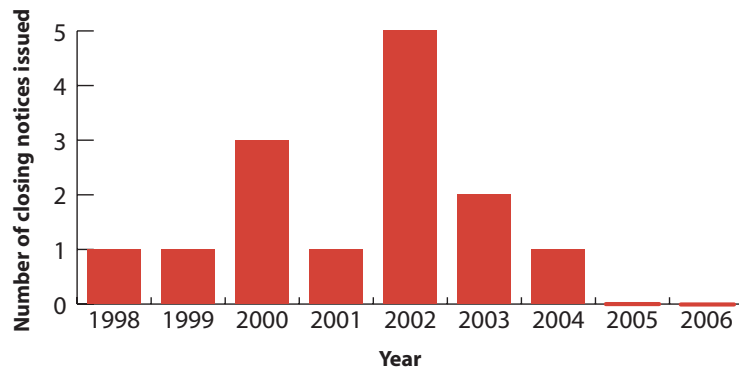
---

### Connections

Poor quality housing is often poorly insulated, which connects to energy efficiency. Future building regulations for new housing developments will be influential in improving the Island's **Energy Consumption** levels. **Economic Activity** connects to house prices, in particular average earnings, which reflect the health of the economy and the ability of people to afford adequate housing.



**Figure 68: Number of housing units found to be unfit**



Source: Health and Social Services Department



For further housing statistics please see [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Housing

For further information on Guernsey's quality of housing please see the 'Survey of Guernsey Living Standards', 2002



In 2006, the **house price to earnings ratio** decreased compared to 2005 but remains high, reflecting a gap between average earnings and house prices.

---

### What is measured?

The level of home owner occupation (72%, based on 2001 Census) compared with the UK and European Continent is relatively high and the measure of monitoring changes in affordability is by using a simple general housing affordability index. This provides a broad indication of the cost of purchasing a local market property, taking into account average earnings and interest rates.

The index represents the percentage of gross average income that interest payments would take if a purchaser bought an average house, on an average income, taking out a 100% loan to value mortgage. If the index exceeds 100 it indicates that gross interest payments are larger than the gross income of the borrower, i.e. the cost of paying the mortgage instalments is more than the borrower's income. The higher the index number, the greater the affordability gap.

---

### Guernsey affordability of local market housing index 1981 - 2006 (See Figure 69)

- In 2006, the index figure remained at 61 and is the same as the average for the whole period. However, due to very high index figures in 1989 and 1990 of 130 and 109 respectively, the average is slightly skewed upwards.
- 1992 was the last time the annual index figure went over 60, which was at a time when the average lending rate was almost double that in 2006 and the price/earnings ratio much lower. The 2006 figure reflects a lower rate of borrowing but a slightly wider differential between average earnings and average house prices.
- The index also shows that despite house prices rising, Islanders remain in a relatively better position to afford housing than they were in the late 1980s, when the index peaked at 130, due to the economy being in recession. One influencing factor at the time was the very high interest rates which raised the cost of borrowing.
- It is intended in the future, as data becomes available, that an affordability index for the private rental sector will be developed together with a detailed analysis by type of property.

---

### Connections

Affordability of local market housing is affected by many factors such as **Economic Prosperity**, **Personal Income**, **Inflation** and **Average Earnings** levels. Social dimensions such as **Housing Availability** and **Housing Quality** are also affected. Other connections with the built environment include **Land Use**.

**Figure 69: Guernsey affordability of local market housing index 1981 - 2006**



Source: Policy and Research Unit

Year	Price/earnings ratio	Base rate +1.5%	Affordability index
1981	4.9	16.0	78
1982	4.5	12.9	58
1983	4.2	11.5	48
1984	4.7	11.75	55
1985	4.6	13.5	62
1986	4.9	11.5	56
1987	5.9	10.5	62
1988	6.3	9.5	60
1989	8.4	15.5	130
1990	7.5	15.5	109
1991	6.7	13.5	90
1992	5.9	11.5	68
1993	5.5	7.5	41
1994	5.3	7.0	37
1995	5.5	8.25	45
1996	5.9	7.5	44
1997	6.7	8.25	55
1998	6.9	8.75	60
1999	6.8	7.0	48
2000	7.5	7.5	56
2001	8.2	6.5	53
2002	9.0	5.5	50
2003	9.2	5.25	48
2004	9.5	6.25	59
2005	10.1	6.0	61
2006	9.8	6.25	61
Average over time period			61

Source: Policy and Research Unit

For further information on Guernsey's affordability of housing please see the 'Study of the Guernsey Housing Market', M Parr, Law and Economics Consulting Group, 2002

Further housing figures may be found in the Facts and Figures Booklet. This booklet is available online at [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications

### Sustainability



# The literacy and numeracy skills of the Island's 11 year olds continue to show healthy figures. Numeracy figures have out performed literacy figures.

## What is measured?

National Curriculum Standard Assessment Tests (SATs) were replaced in Guernsey by Moderated Teacher Assessment (TA) in 2006. Both the TA and SATs systems measure a pupil's level of achievement and also help teachers to identify strengths and weaknesses in children's knowledge, skills and understanding.

The Teacher Assessment is a teacher's professional view of a pupil's level of attainment across all aspects of a subject whilst the SAT provides a 'snap-shot' of a pupil's performance on a narrower range of knowledge and skills for that subject. By moving to teacher assessment as a performance indicator for Guernsey schools it will be possible to provide more robust and accurate data for tracking pupil progress and levels of attainment.

## Percentage of Guernsey pupils gaining Level 4 National Curriculum (See Figure 70)

- In 2006, the percentage of Guernsey pupils achieving Level 4 by Teacher Assessments was 70% in English and 71% in Mathematics
- 2006 Teacher Assessment figures show that Guernsey pupils achieved better results in Maths than in English, the previous trend under the SATs system showed pupils scoring significantly higher in English Level 4 SATs than in Maths.
- As Teacher Assessment and SATs measure a different range of indicators of a pupil's performance it is not possible to make a direct comparison between Guernsey's Teacher Assessment Results 2006 and previous year's SATs results.

## Percentage of Guernsey pupils gaining Level 4 National Curriculum SATs in English (See Figure 71)

- In 2006, the proportion of English pupils achieving Level 4 SATs in English remained at 79%.

- It is not possible to make a direct comparison between Guernsey's 2006 Teacher Assessment results and Guernsey's previous or England's SATs results. However, when more time series data on Teacher Assessments becomes available over the next few years, it will be possible to make comparisons regarding the general upward or downward trends.

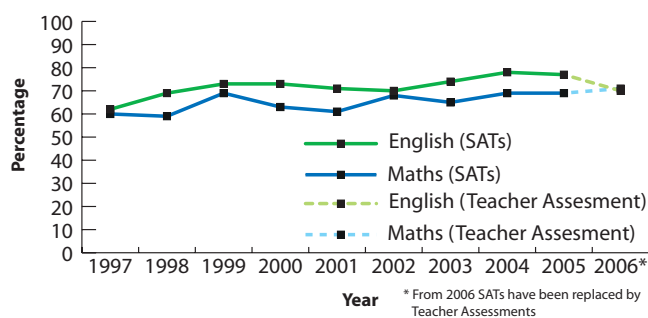
## Percentage of Guernsey pupils gaining Level 4 National Curriculum SATs in Maths (See Figure 72)

- In 2006, the proportion of English pupils achieving Level 4 SATs in Maths increased by 1% to 76%.
- As with the English results, it is not possible to make a direct comparison between Guernsey's 2006 Teacher Assessment results and Guernsey's previous or the England's SATs results. However, when more time series data on Teacher Assessments becomes available over the next few years, it will be possible to make comparisons regarding the general upward or downward trends.

## Connections

**Community Involvement** - educational achievement helps to foster a more inclusive community and allows individuals to realise their true potential. **Health** - education helps to provide a sound understanding of today's health issues and how to avoid unnecessary health risks.

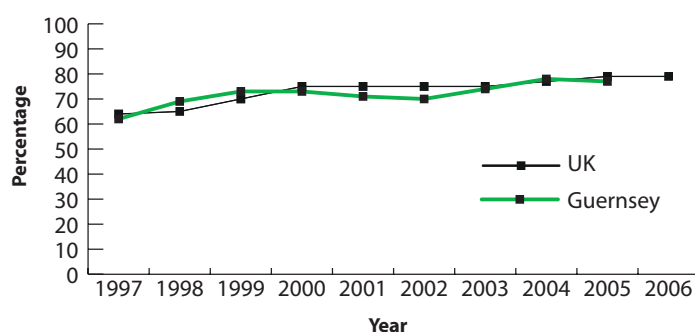
**Figure 70: Percentage of Guernsey pupils gaining Level 4 National Curriculum**



Source:  
Education Department

	SATs									TAs
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
English	62	69	73	73	71	70	74	78	77	70*
Maths	60	59	69	63	61	68	65	69	69	71*

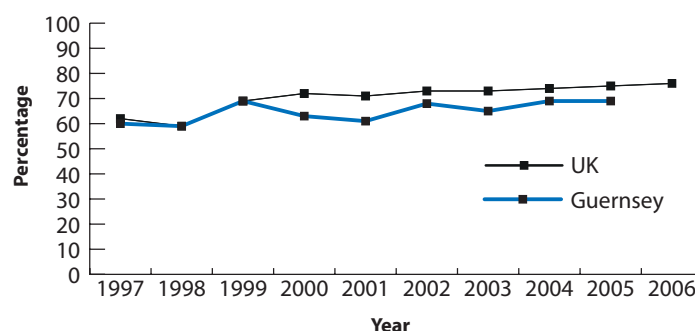
**Figure 71: Percentage of Guernsey pupils gaining Level 4 National Curriculum SATs in English**



Source:  
Education Department

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Guernsey	62	69	73	73	71	70	74	78	77	N/A
England	64	65	70	75	75	75	75	77	79	79

**Figure 72: Percentage of Guernsey pupils gaining Level 4 National Curriculum SATs in Maths**



Source:  
Education Department

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Guernsey	60	59	69	63	61	68	65	69	69	N/A
England	62	59	69	72	71	73	73	74	75	76

For Further information on Education Policies please see the Education Development Plan, Billet d'État II and XII, 2004

**Sustainability**



The percentage of **Guernsey's pupils** aged up to 16 years achieving at least 5 GCSEs fell in 2006, but remains comparable with England. Guernsey continues to have a higher proportion of pupils leaving school without formal qualifications, due to the lower school leaving age.

**What is measured?**

This indicator monitors the number of Guernsey pupils passing 1 GCSE, the number of Guernsey pupils passing 5 GCSEs and the number of Guernsey pupils leaving school with no GCSE qualifications.

**Percentage of pupils gaining 1 GCSE (grade A\*-G) (See Figure 73)**

- In 2006, the proportion of Guernsey pupils (which includes those who left school before taking GCSEs) achieving at least one GCSE reduced by 2% to 85%. Over the last eight years the proportion of Guernsey pupils achieving at least one GCSE has remained above 80%, peaking in 2005 at 87%.
- In 2006, the proportion of English pupils achieving at least one GCSE rose by 1% to 97%. Due to the higher school leaving age in England, pupils cannot leave school before taking GCSEs. This has resulted in the proportion of pupils nationally gaining at least one GCSE remaining consistently around 10% higher than Guernsey pupil figures.
- The school leaving age in Guernsey is to be raised to 16 years in September 2008, so pupils will not be able to leave school before taking GCSEs or alternative vocational qualifications.

**Percentage of pupils gaining at least 5 GCSEs (grade A\*-C) (See Figure 74)**

- In 2006, the proportion of Guernsey pupils achieving five GCSEs (grade A\* - C) was 57% compared to the 2005 peak figure of 64%.
- Figures for pupils in England achieving at least five GCSEs (grade A\* - C) have risen steadily, from 48% in 1999 to 58% in 2006. From 1999 to 2005 the proportion of Guernsey pupils gaining at least

5 GCSEs (grade A\*-C) has remained consistently above equivalent English figures. However, in 2006 Guernsey pupils' figures fell to 1% below English figures of 58%.

- However, the percentage of GCSE exam entrants (i.e. figures which do not include pupils who left school before GCSEs) that achieved 5 GCSEs (grade A\*-C) in Guernsey was 68% compared to 58% in England.
- In 2006, the percentage of pupils gaining at least five GCSEs (grade A\* - C), which include both English and Maths was 49% in Guernsey and 45% in England.

**Percentage of pupils not achieving GCSE qualifications (See Figure 75)**

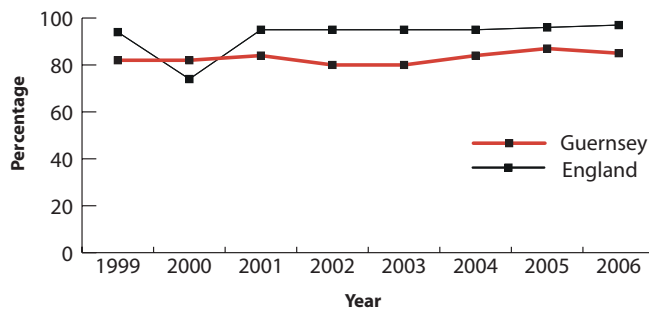
- Guernsey has a relatively high number of individuals leaving school with no GCSEs, owing to Guernsey pupils being able to leave school at 15 before taking GCSEs. In 2006, the proportion of Guernsey pupils gaining no GCSE qualifications rose to 15% from 13% in 2005.
- Since 1999 the proportion of Guernsey pupils gaining no GCSE qualifications has remained between 13% and 19%, whilst figures for England have remained consistently between 3% and 6%.
- The States Apprenticeship Scheme in Guernsey recruits some of the pupils who otherwise would have stayed on at school. In September 2006 there were 54 sixteen year olds working towards vocational qualifications by undertaking States Apprenticeships.

**Connections**

**Workforce Skills:** education is key to developing a healthy and competitive workforce.

**Community Involvement:** educational achievement helps to foster a more inclusive community and allows individuals to realise their true potential.

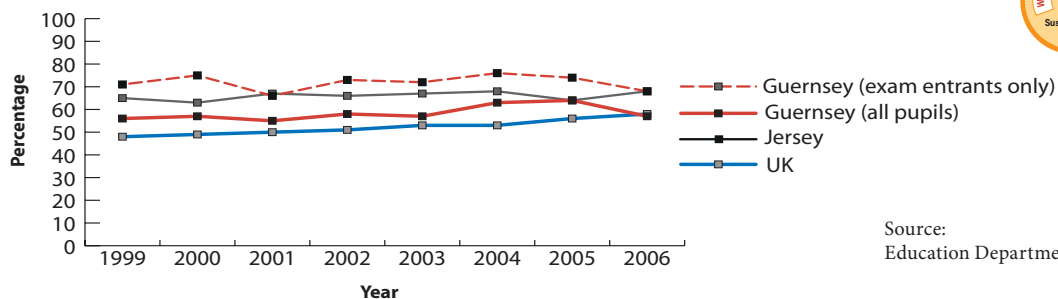
**Figure 73: Percentage of Guernsey and English pupils gaining 1 GCSE (grade A\*-G)**



	1999	2000	2001	2002	2003	2004	2005	2006
Guernsey	82	82	84	80	80	84	87	85
England	94	74	95	95	95	95	96	97

Source:  
Education Department

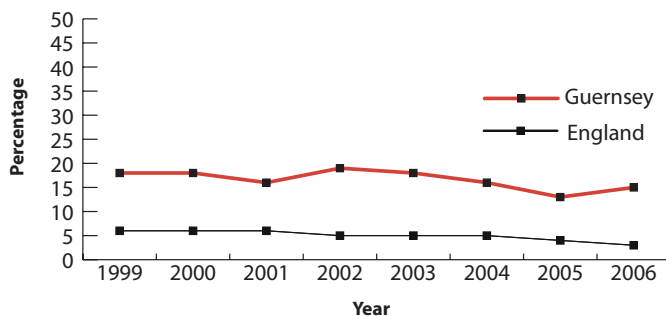
**Figure 74: Percentage of Guernsey, English and Jersey pupils gaining at least 5 GCSEs (grade A\*-C)**



Source:  
Education Department

	1999	2000	2001	2002	2003	2004	2005	2006
Guernsey (all pupils)	56	57	55	58	57	63	64	57
Guernsey (exam entrants only)	71	75	66	73	72	76	74	68
England	48	49	50	51	53	53	56	58
Jersey	65	63	67	66	67	68	64	68

**Figure 75: Percentage of Guernsey and English pupils not achieving GCSE qualifications**



	1999	2000	2001	2002	2003	2004	2005	2006
Guernsey	18	18	16	19	18	16	13	15
England	6	6	6	5	5	5	4	3

Source:  
Education Department

For Further information on Education Policies please see the Education Development Plan, Billet d'État II and XII, 2004





The proportion of Guernsey pupils entering **post 16 education** continues to be **lower than England**. However, A Level pass rates remain consistently high.

---

### What is measured?

Post 16 participation is measured through the proportion of 16-19 year olds in full-time education and the A Level pass rates achieved.

---

#### Percentage of 16-19 year olds in full-time education (See Figure 76)

- The 2006 figure for England is released by the DfES in June 2007 and therefore will not appear in this report until next year.
- In 2006, the proportion of Guernsey's 16-19 year olds enrolled in post 16 education peaked at 70%. Over the last ten years the percentage of Guernsey pupils continuing in post 16 education has only dropped below 61% once. This was in 1998 when figures fell to 56%.
- In 2005, the difference between the percentage of Guernsey pupils enrolled in post 16 full-time education and the percentage of UK pupils has widened to 8%. This difference is due in part to the lower school leaving age in Guernsey and incentives that are now offered in England to encourage young people to continue in education post 16. Approximately 11% of Guernsey students leave school aged 15. The Island also offers a traditional Apprenticeship Scheme that recruits students who otherwise may well have stayed in full-time education.

#### A Level pass rates (grade A-E) in Guernsey, Jersey and the UK (See Figure 77)

- A Level pass rates (grade A-E) in Guernsey were 99.1% in 2006, a very slight reduction from 99.3% in 2005.
- Jersey's pass rates also decreased slightly in 2006, but still remained marginally higher than Guernsey's at 99.6%. Whereas the UK pass rates increased slightly in 2006, but remain nearly 2% lower than the Guernsey figure at 97.2%.
- Guernsey students performed well on the Level 3 BTEC National Vocational Courses (the vocational equivalent of A Levels). The overall pass rate in England in 2006 was 99.3% compared to a 100% pass rate for Guernsey students.

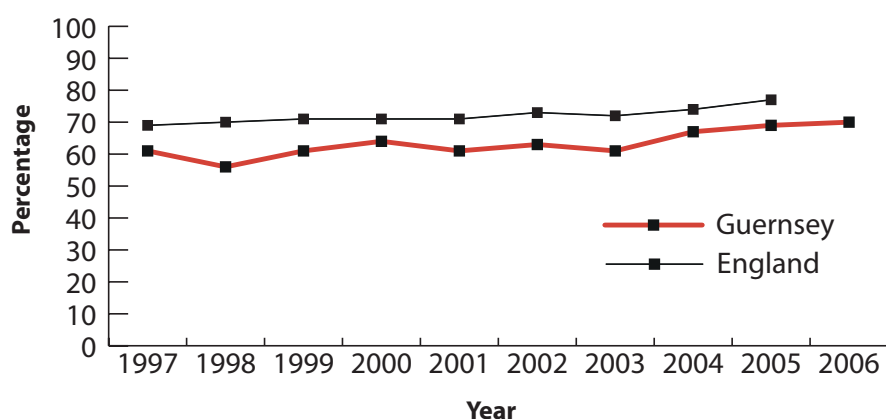
---

### Connections

**Workforce Skills:** education is key to developing a healthy and competitive workforce.

**Labour Market:** a strong labour market comes from a well skilled and knowledgeable community.

**Figure 76: Percentage of Guernsey and English 16-19 year olds in full time education**

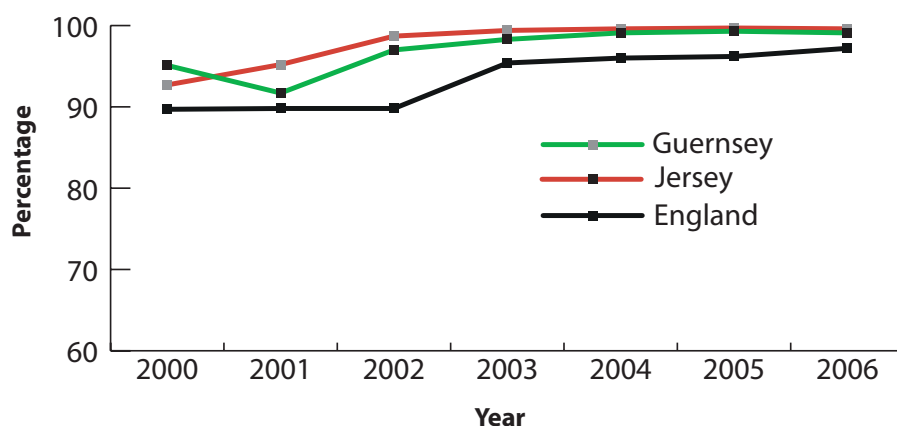


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Guernsey	61	56	61	64	61	63	61	67	69	70
England	69	70	71	71	71	73	72	74	77	*

Source:  
Education Department

\* Not available at time of publication

**Figure 77: A Level pass rates (grade A-E) in Guernsey, Jersey and the UK**



	2000	2001	2002	2003	2004	2005	2006
Guernsey	95.1	91.7	97.0	98.3	99.1	99.3	99.1
England	89.7	89.8	89.8	95.4	96.0	96.2	97.2
Jersey	92.7	95.2	98.7	99.4	99.6	99.7	99.6

Source:  
Education Department

For Further information on Education Policies please see the Education Development Plan Billet d'État II and XII, 2004

# References and further reading

## Population

---

### Signpost to Data Providers

#### [The 2001 Census Report](#)

Policy and Research Unit, Policy Council  
[www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures  
 > Census

#### [Register of Births and Deaths](#)

The Greffe  
 Royal Court House  
 St. Peter Port  
 GY1 2PB  
 Tel: 725277

### Further Reading

#### [Managing Gateways: The Moral Challenges of a Liberal Democracy](#)

Sarah Spencer  
 Institute for Public Policy Research, 2000  
[www.ippr.org.uk/research](http://www.ippr.org.uk/research)

### Websites

Policy and Research Unit, Policy Council  
[www.gov.gg](http://www.gov.gg) - Click on Government > Facts and Figures

Housing Department  
[www.gov.gg](http://www.gov.gg) - Click on Housing

## Housing

---

### Signpost to Data Providers

#### [Housing Department](#)

Sir Charles Frossard House  
 PO Box 43  
 St. Peter Port  
 Guernsey  
 GY1 1FH  
 Tel: 717000

#### [Annual MOH Report](#)

Health and Social Services Department  
 Le Vauquiedor  
 St. Martins  
 Guernsey  
 GY4 6UU  
 Tel: 725241

#### [The 1991, 1996 and 2001 Census Reports](#)

Policy and Research Unit, Policy Council  
[www.gov.gg](http://www.gov.gg) - Click on Government > Facts and Figures

### Further Reading

#### [A Study of the Guernsey Housing Market](#)

M Parr, Law and Economics Consulting Group (LECG)  
 2002, Advisory and Finance Committee and Housing Authority

#### [The Housing Needs Survey](#)

Housing Department

#### [Survey of Guernsey Living Standards](#)

Anti-Poverty Policies – A Range of Possible Options for Guernsey  
 D. Gordon, et al., University of Bristol  
 November 2002

This report may be downloaded from:

[www.gov.gg](http://www.gov.gg)>Government>online reports>2002 reports

# References and further reading

## Housing (continued)

---

### Websites

Housing Department

[www.gov.gg](http://www.gov.gg) - click on Housing

Health and Social Services

[www.gov.gg](http://www.gov.gg) - click on health

Policy and Research Unit. Policy Council

[www.gov.gg/esu](http://www.gov.gg/esu)

Interest rate trends

[www.bankofengland.co.uk](http://www.bankofengland.co.uk)

Affordability Index

[www.cheltglos.co.uk](http://www.cheltglos.co.uk)

[www.seeda.co.uk](http://www.seeda.co.uk)

## Education

---

### Signpost to Data Providers

Education Department States Reports:

[Billet d'État VI, 2002](#)

[Billet d'État III, 2003](#)

[Billet d'État II and XII, 2004](#)

### Further Reading

[Learning in Guernsey](#): The findings of the learning trends survey in Guernsey, University of Plymouth and the States Education Department, 2001 and 2004.

[Higher Education](#): The Guernsey Experience in 2003, Education Department, 2003.

### Websites

Guernsey Grid for Learning

[www.education.gg](http://www.education.gg)

Department for Education and Skills

[www.dfes.gov.uk](http://www.dfes.gov.uk)

Learning and Skills Council

[www.lsc.gov.uk](http://www.lsc.gov.uk)

Guernsey Careers Service

[www.careers.gg](http://www.careers.gg)

Guernsey College of Further Education

[www.cfe.edu.gg](http://www.cfe.edu.gg)

UK Learn Direct

[www.learndirect.co.uk](http://www.learndirect.co.uk)

## Crime: Crime Level

Sustainability



**Total reported crime levels for 2006 decreased by 1.6% when compared to 2005 figures.** However, it is the third highest figure recorded since 1997.

---

### What is measured?

Total reported crimes are monitored annually using figures presented in the Guernsey Police Statistical Digest.

---

### Total number of criminal offences reported 1997-2006 (See Figure 78)

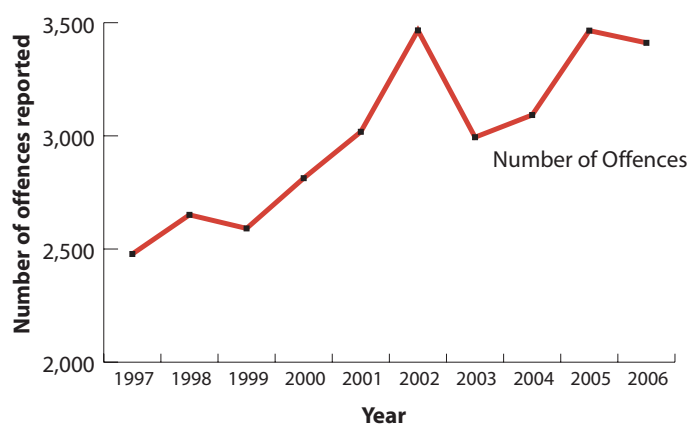
- In 2006, the total number of reported offences in Guernsey decreased by 1.6% on 2005 figures, from 3,465 to 3,411 offences.
- The 2006 total crime figure is the third highest figure recorded since 1997.
- The total number of reported offences in 2006 has risen by 38% over the last ten year period.

---

### Connections

Crime links to **Economic Activity** by affecting the readiness of individuals and companies to invest in the Island's economy. Crime can have an impact on people's **Health**, both on their physical and mental well-being and their general quality of life. Crime connects to **Community Involvement** and people's willingness to take part in community activities.

**Figure 78: Total number of criminal offences reported 1997-2006**



Source: Guernsey Police



Year	Number of Offences
1997	2,478
1998	2,651
1999	2,591
2000	2,813
2001	3,018
2002	3,466
2003	2,994
2004	3,092
2005	3,465
2006	3,411

For a complete breakdown of the 2006 crime figures please see the 2006 Guernsey Police Statistical Digest, published by the Guernsey Police Force

## Crime: Crime by Category

Sustainability



**Criminal damage** remains the most frequently reported offence in Guernsey. During 2006, levels of theft and burglary have dropped to the lowest recorded over the last seven years.

### What is measured?

The constituents of total criminal offences reported are monitored by category using data contained in the Guernsey Police Statistical Digest.

### Crime by category - most frequently reported offences in 2006 (See Figure 79)

- In 2006, the most commonly reported criminal offence was criminal damage with 1,051 offences reported, representing 31% of the total crime figure. Criminal damage includes graffiti and general unlawful damage to private and public property.
- The second most commonly reported crime was assault, with 503 reported offences or 15% of the total crime reported. Theft (general) was the third most commonly reported crime at 456 separate incidents, 13% of total crime figures. Theft of a pedal cycle had 177 incidents reported, 5% of the total crime figures.
- Burglary of a non dwelling had 162 reported incidents, 5% of the total crime figures. Drug offences had 120 incidents reported, 4% of the total crime figures reported. Theft from a motor vehicle had 101 incidents reported, 3% of the total crime figures; shoplifting had 101 incidents reported, 3% of the total crime figures reported. Taking a motor vehicle without consent had 88 incidents reported, 3% of the total crime figures. Burglary from a dwelling had 88 incidents reported, 3% of the total crime figures reported.

- In 2006, the top ten most frequently reported crimes accounted for 83% of the total reported offences, 2,847 out of the total 3,411 offences reported. For a full list of the remaining 17% of 'other' reported offences please see the Guernsey Police Plan and Statistical Digest. The list includes such crimes as other types of theft, forgery, deception and indecent assault.

### Levels of criminal offences by category 200-2006 (See Figure 80)

- In 2000, criminal damage made up 19% of total recorded crimes, since then it has never fallen below 26% of total recorded crimes.
- In 2006, the categories of 'criminal damage', 'assault', and 'other offences' all reached peak figures recorded over the last six year period.
- In 2006, 'burglary' and 'theft' both fell to the lowest figures recorded since 2000.
- Care must be taken when comparing crime statistics from year to year as the Home Office 'counting rules' can vary from year to year.

### Connections

Crime connects to **Economic Activity** by affecting the willingness of people and companies to invest in the Island's economy. Crime can have an impact on people's **Health**, both on their physical and mental well-being and their general quality of life. Crime connects to **Community Involvement** and people's willingness to take part in community activities.



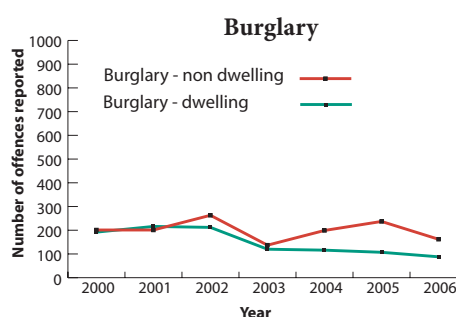
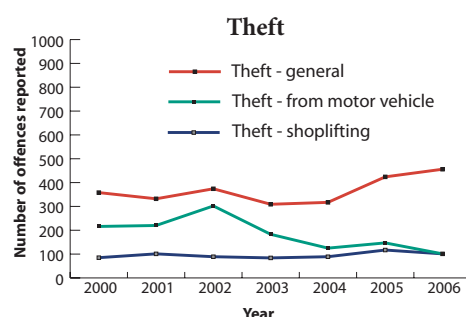
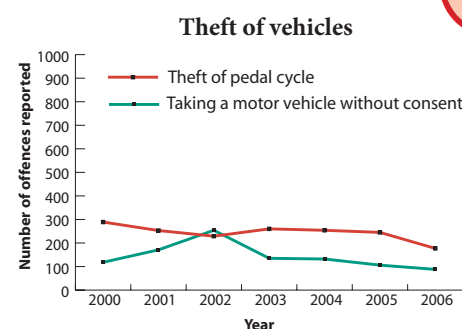
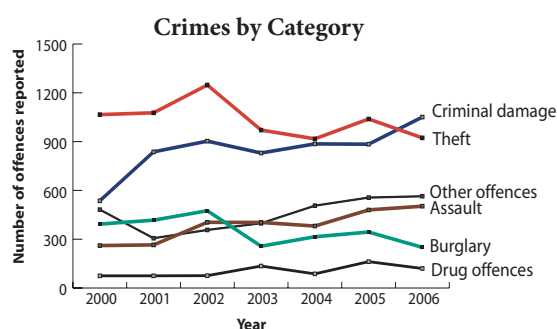
**Figure 79: Crime by category - the most frequently reported criminal offences in Guernsey**



Offence	2002		2003		2004		2005		2006	
	Offences reported	% total offences reported	Offences reported	% total offences reported	Offences reported	% total offences reported	Offences reported	% total offences reported	Offences reported	% total offences reported
<b>Criminal damage</b>	903	26%	830	28%	886	29%	884	26%	1,051	31%
<b>Assault</b>	404	12%	403	13%	381	12%	480	14%	503	15%
<b>Theft</b>	1,248	36%	971	32%	917	30%	1,039	30%	923	27%
<i>Theft - general</i>	374	11%	309	10%	317	10%	424	12%	456	13%
<i>Theft - from motor vehicle</i>	302	9%	183	6%	125	4%	147	4%	101	3%
<i>Theft - shoplifting</i>	89	3%	84	3%	89	3%	117	3%	101	3%
<i>Theft of pedal cycle</i>	229	7%	260	9%	254	8%	245	7%	177	5%
<i>Taking of motor vehicle without consent</i>	254	7%	135	5%	132	4%	106	3%	88	3%
<b>Burglary</b>	475	14%	257	9%	315	10%	344	10%	250	8%
<i>Burglary - non dwelling</i>	263	8%	137	5%	199	6%	237	7%	162	5%
<i>Burglary - from dwelling</i>	212	6%	120	4%	116	4%	107	3%	88	3%
<b>Drug offences</b>	76	2%	135	5%	87	3%	162	5%	120	4%
<b>Other offences</b>	357	10%	398	13%	506	16%	556	15%	564	17%
<b>Total</b>	<b>3,463</b>	<b>100%</b>	<b>2,994</b>	<b>100%</b>	<b>3,092</b>	<b>100%</b>	<b>3,465</b>	<b>100%</b>	<b>3,411</b>	<b>100%</b>

Source: Guernsey Police

**Figure 80: Level of criminal offences by category - 2000 to 2006**



Source: Guernsey Police

For a complete breakdown of the 2006 crime figures please see the 2006 Guernsey Police Statistical Digest, published by the Guernsey Police Force



## Guernsey residents generally feel safer at home rather than out on the streets, with one third feeling unsafe in town after dark.

### What is measured?

'Fear of Crime' is a label used to describe the concerns and anxieties that people have concerning crime in their local area. It is important to recognise that 'fear of crime' does not necessarily correlate with actual levels of crime experienced in that area.

A common way of assessing fear of crime is to ask people how safe they feel walking alone in their neighbourhood after dark and whether they feel safe when alone in their own home at night. This was asked by the Guernsey Police in a postal survey conducted in January 2005.

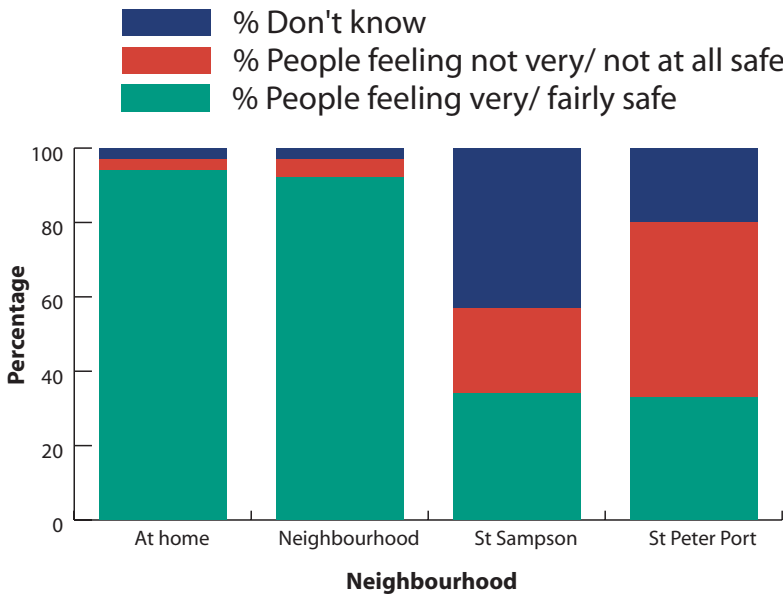
### Percentage of people feeling unsafe on the streets or at home – 2005 Fear of Crime survey (See Figure 81)

- Of those questioned, 92% reported feeling safe after dark in their local neighbourhood. 94% of people questioned felt 'fairly safe' or 'very safe' when at home alone after dark compared to only 3% who felt 'not very' or 'not at all' safe.
- Of those questioned, 33% felt 'fairly safe' after dark in St. Peter Port or in St. Sampson, whilst almost 50% felt 'not very safe' or 'not safe at all' after dark in St. Peter Port.
- Respondents were also asked to indicate how often they typically visited St. Peter Port or St. Sampson after dark. The majority of responses were 'Rarely' or 'Never'. This may explain why a large number of people left their answer blank or 'don't know' when answering how safe or unsafe they felt after dark on the Bridge or in Town.
- The Home Department, Guernsey Police and the Policy & Research Unit are designing a community safety survey. The survey will include questions on attitudes towards crime and is due to commence in 2007. Headline results on selected questions will be included in next year's report

### Connections

Crime connects to **Economic Activity** by affecting the willingness of people and companies to invest in the Island's economy. Crime can have an impact on people's **Health**, both on their physical and mental well-being and their general quality of life. Crime connects to **Community Involvement** and people's willingness to take part in community activities.

Figure 81: Percentage of people feeling unsafe on the streets or at home – 2005 Fear of Crime survey



Summary Table	At home	Neighbourhood	St Sampson	St Peter Port
% People feeling very/ fairly safe	94	92	34	33
% People feeling not very/ not at all safe	3	5	23	47
% Don't know	3	3	43	20

Source: Guernsey Police

For more information on the Fear of Crime survey please contact the Guernsey Police

## Health: Life Expectancy

Sustainability



**Life expectancy at birth is increasing.** Recent calculations show it to be 80.4 years. Whilst there has been a fall in fatalities due to cancer, it remains the commonest cause of premature death in Guernsey.

### What is measured?

Life expectancy is monitored through life expectancy at birth, which also allows comparisons to be made with other international jurisdictions. Death rate by cause is also monitored.

### Life expectancy at birth in Guernsey and other jurisdictions (See Figures 82 and 83)

- Life expectancy may be defined as *'the average number of years that a person can expect to live if they experience the current mortality rate of the population at each age'*.
- There are many factors which may affect this, ranging from environmental factors such as population density, air pollution etc., to lifestyle choices (smoking, diet and weight), as well as the provision of adequate health services, such as hospital and community based facilities and welfare provisions.
- Life expectancy at birth in Guernsey has recently been recalculated using population estimates and in 2004 it was 80.4 years.
- Life expectancy in the UK is currently increasing by one year in every five, whilst the rate of increase in Guernsey exceeds this, by an average of two years.
- Guernsey has a higher 'life expectancy at birth' for both males and females than most comparator countries, and is only a little behind Sweden, which is recognised as having amongst the best health in Europe. This is in part explained by Guernsey's small size, relative general affluence and lack of any abject poverty. The quality of Guernsey's medical and other health services can also be demonstrated to be generally high.

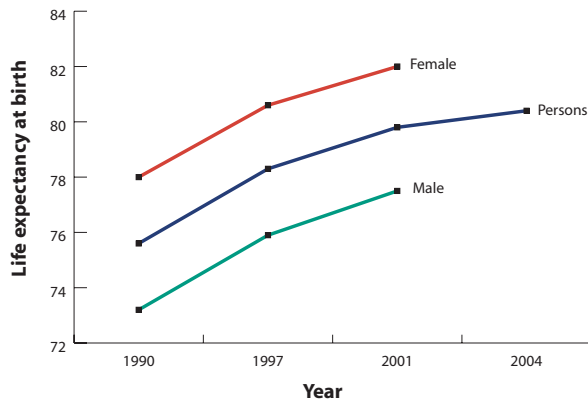
### Five year mean mortality rates for selected causes of death in Guernsey 1981 - 2005 (See Figure 84)

- Guernsey has a relatively small number of deaths in any one category in any one year. In order to increase the statistical validity it is helpful to calculate five year means around the Census denominator populations. Over the past twenty years death rates from many major causes have shown a substantial fall. This is in part due to changes in lifestyle risk factors and increased health awareness and also due to better medical intervention and treatment.

### Connections

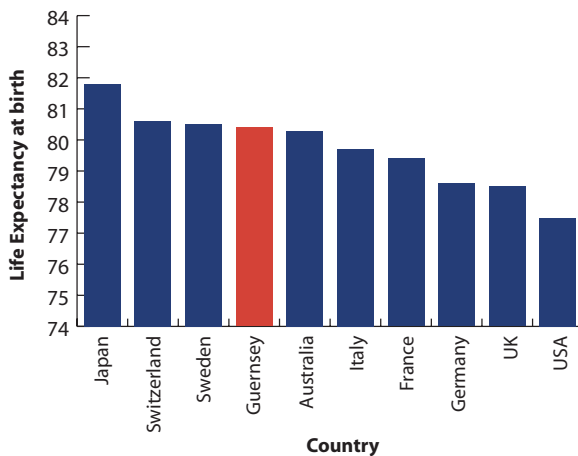
**Air Quality** and **Water Quality** are crucial to a healthy community, as is good quality **Housing**. Higher life expectancy can lead to increases in the Island's **Population**, resulting in the need for planned pension and service provision. **Economic Distribution** to all levels of the community is an important factor in enabling all people to live healthier lifestyles.

**Figure 82: Life expectancy at birth in Guernsey - changes over time**



	Female	Average	Male
1990	78	75.6	73.2
1997	80.6	78.3	75.9
2001	82	79.8	77.5
2004		80.4	

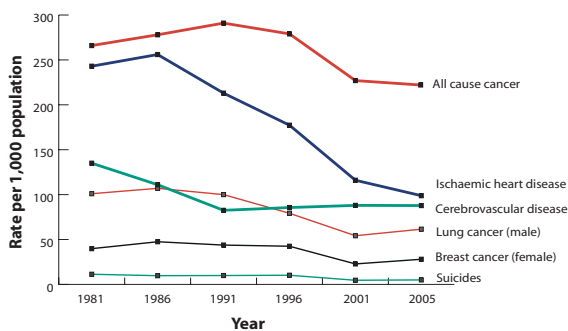
**Figure 83: Life expectancy at birth - Guernsey and other selected jurisdictions**



Country	Life Expectancy
Japan	81.8
Switzerland	80.6
Sweden	80.5
Guernsey	80.4
Australia	80.3
Italy	79.7
France	79.4
Germany	78.6
UK	78.5
USA	77.5

Source: Health and Social Services Department

**Figure 84: Five year mean mortality rates for selected causes of death in Guernsey 1981-2005**



	Rate per 1,000 of population					
	1981	1986	1991	1996	2001	2005
"All cause" cancer	266	278	291	279	227	222
Ischaemic heart disease	243	256	213	177.3	116	98.8
Cerebrovascular disease	135	111	82.5	85.6	88	87.8
Lung cancer (male)	101	107	100	79.2	54.2	61.5
Breast cancer (female)	39.8	47.5	43.8	42.5	22.8	28.0
Suicides	11.3	9.7	9.9	10.2	4.6	5.0

Source: Health and Social Services Department



For more information on the Guernsey Census, 2001, Policy Council, Policy and Research Unit, please see [www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications > 2001 Census Report.

For more detailed information on life expectancy figures, please see the 107th Annual MOH Report - 12th Annual DPH Report, 2005/06.

## Health: Cost of Health Care Comparisons

Sustainability



In 2004 Guernsey spent **£1,801** per capita on health. This is 21% more than in 2001.

---

### What is measured

Spending on health is the single largest area of expenditure made by the States of Guernsey. Guernsey's annual expenditure on healthcare is monitored as is the per capita health expenditure on the Island.

---

### Total health expenditure (public and private) per capita for selected countries and Guernsey in 2001 and 2004 (See Figure 85)

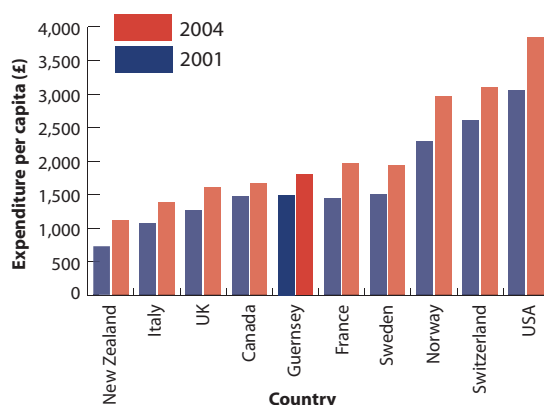
- In 2001 £1,493 was spent per capita on health care in Guernsey, in 2004 this figure rose to £1,801. Whilst this marked a significant rise, during the same period France, the Netherlands and Sweden's per capita health expenditure rose significantly above that of Guernsey. However, Guernsey's per capita health expenditure in 2004 was still above that of the UK.
- 16% of the £1,801 of Guernsey's 2004 per capita health care was funded privately rather than coming from public funding.
- It is intended that from next year data on the cost of healthcare indicator will be replaced by measuring trends in smoking and obesity.

---

### Connections

Health care costs are linked to **National Income** and **Inflation** costs. Higher life expectancy can lead to increases in the Island's **Population**, which can in turn lead to higher health costs.

**Figure 85: Total health expenditure (public and private) per capita for selected countries and Guernsey in 2001 and 2004**



Source: Health and Social Services Department

Total Healthcare expenditure per capita (£)				
	2001	2004	% change	% private
New Zealand	729	1,122	54%	23%
Italy	1079	1,383	28%	23%
UK	1,266	1,608	27%	15%
Canada	1,474	1,673	14%	30%
Guernsey	1,493	1,801	21%	16%
France	1,448	1,961	35%	21%
Sweden	1,500	1,942	29%	15%
Norway	2,300	2,972	29%	17%
Switzerland	2,606	3,105	19%	42%
USA	3,058	3,844	26%	55%

For more detailed information on Guernsey's health data, please see the 107th Annual MOH Report - 12th Annual DPH Report, 2005/06.



## Health: Sense of Well-Being

Sustainability



Compared with a range of other countries, **Guernsey** residents appear to rate their **health status highly**.

### What is measured?

The perception by an individual of their own health status and general sense of well-being can provide a useful indicator of health issues that are not easily calculated through other measures. Euroqol is a generic multi dimensional health profile, which was developed for use in Europe in 1990 and is now widely used for comparative purposes. In this, participants are asked to score along a scale (rather like a thermometer), in which the best state of health they can imagine is marked 100 and the worst state is marked 0. To allow comparison, 0-20 is regarded as 'very bad', 21-40 is 'bad', 41-60 is 'fair', etc.

### Percentage of problems reported in Guernsey Euroqol survey – 1998 and 2003 (Figure 86)

- A Guernsey “Healthy Lifestyle” or Euroqol survey is carried out every five years. The most recent of which was conducted in November 2003, when approximately 1,500 local adults were asked to complete and return a validated questionnaire. Around 780 (52%) completed responses were received. The same questions were also asked in a similar survey in 1998.
- In comparison with 1998 figures, the 2003 responses highlight less self-reported problems across all five modalities. Although Guernsey residents have consecutively reported high levels of anxiety or depression, and high levels of pain and discomfort.
- A follow-up health survey is planned for 2008, which will allow further comparisons over time.

### comparison with other jurisdictions (Figure 87)

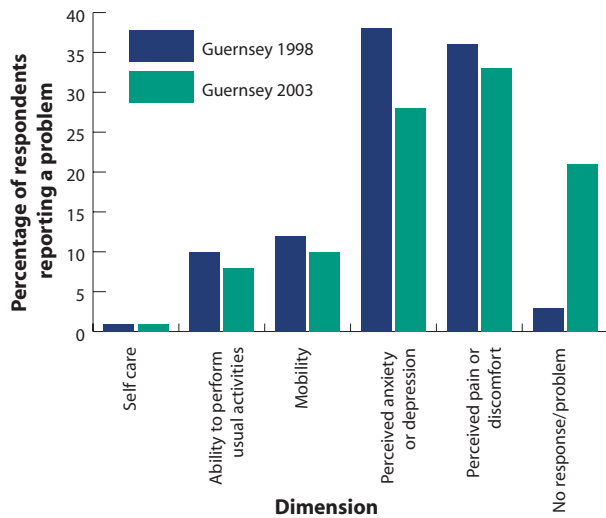
- The same Euroqol survey conducted in Guernsey in both 2003 and 1998 has also been carried out in other jurisdictions including Jersey (1999), UK (1996), Australia (1998), USA (2004), France (2004), etc.
- It should be noted that not all countries conduct their health surveys at the same time. It may be that people's perceived health status will vary along with the economic cycle, world events, etc, and therefore may not be strictly comparable.
- Compared with a range of other countries, Guernsey residents appear to rate their health status highly.

### Perceived health status – Guernsey in

### Connections

**Workforce Skills** and **Economic Activity** - a workforce with an increased sense of well-being is likely to be more productive than one with a low sense of well-being. **Community Involvement** – (especially leisure activities) can relieve the effects of anxiety and depression.

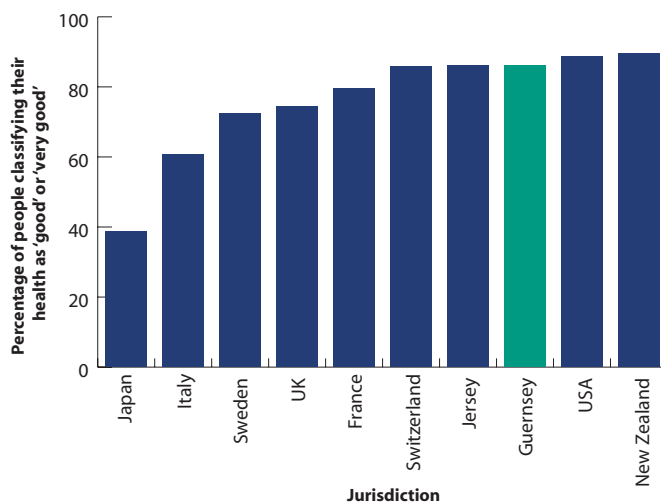
**Figure 86: Percentage of problems reported in Guernsey Euroqol survey – 1998 and 2003**



Dimension	Guernsey 1998	Guernsey 2003
Self care	1	1
Ability to perform usual activities	10	8
Mobility	12	10
Perceived anxiety or depression	38	28
Perceived pain or discomfort	36	33
No response/problem	3	21

Source: Health and Social Services Department

**Figure 87: Perceived health status – Guernsey in comparison with other jurisdictions**



Country	% people classifying their health as 'good' or 'very good'
Japan	38.7
Italy	60.6
Sweden	72.4
UK	74.5
France	79.5
Switzerland	85.8
Jersey	86.0
Guernsey	86.0
USA	88.6
New Zealand	89.6

Source: Health and Social Services Department

For more detailed information on Guernsey's health data, please see the 107th Annual MOH Report - 12th Annual DPH Report, 2005/06.

## Community: Involvement



Sustainability

**The number of people registered on the electoral roll** is low compared to the population of each parish and actual voter turnout is lower still. Despite consecutive rises in Guernsey's **overseas aid contributions**, the actual amount of contributions made in 2006 still only represented 0.11% of the Island's GNP

### What is measured?

Community involvement is measured through registered voters in the Island's political elections. The States of Guernsey's annual overseas aid contributions are also monitored.

#### Persons registered on the Electoral Roll 1998/99 - 2007/08 (See Figure 88)

- All persons aged 18 and over who have been resident on the Island for over two years are eligible to register on the Electoral Roll. From 1997 to 2004 the number of people registered to vote steadily decreased by a total of 4%. However, the General Election of 2004 prompted an increase of 16% to a peak of 30,099 registered people. In 2007 the number of people on the Electoral Roll dropped by 154 or 0.5% on 2006 figures.

#### Number of votes cast in each electoral district – 2004 General Election (See Figure 89)

- The number registered on the Electoral Roll is low compared to the population of each district and the actual turnout is lower still. In 2004 the boundaries of the electoral districts were altered to provide a fairer representation to highly populated areas. For example, St Peter Port was split into St. Peter Port North and St. Peter Port South whilst St. Saviour, St. Pierre du Bois, Torteval and Forest became the West.
- St. Peter Port South had the lowest turnout for the General Election with only a quarter (26%) of its population turning out to vote. The Vale had the highest voter turnout at almost half of its population turning up to vote (47%). Average voter turnout per district was 40%.

#### Guernsey's overseas aid contributions 1998 – 2006 (See Figure 90)

- Guernsey's overseas aid contributions increased by £77,364, from £1,670,195 in 2005 to £1,747,599 in 2006.
- Despite rising over the last nine years, in 2006, Guernsey's overseas aid contribution was equivalent to 0.11% of its Gross National Product or GNP. The United Nations target for all western economies is for overseas aid contributions to reach 0.70% of GNP.

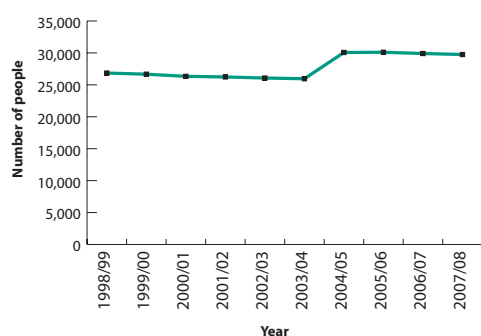
#### Distribution of Guernsey's overseas aid (See Figure 90)

- In 2006 Africa was the biggest recipient of aid from Guernsey, receiving £992,539, which represented 58% of all overseas aid contributions.
- During 2006 £200,000 was provided as emergency relief funding. However, no emergency relief was granted throughout 2006, therefore the £200,000 surplus will be granted as aid in 2007.

### Connections

Public action and **Community Involvement** is essential for a democratic and sustainable community. Both local and global issues are at the heart of sustainable development, making the contribution of overseas aid an essential part of addressing the inequalities that affect our global community.

**Figure 88: Persons registered on the Electoral Roll 1998/99 - 2006/07**

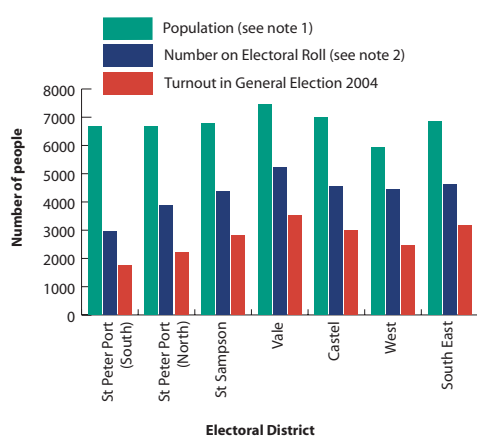


Source: Home Department

Persons registered on the electoral roll	
1998/99	26,848
1999/00	26,665
2000/01	26,330
2001/02	26,234
2002/03	26,066
2003/04	25,956
2004/05	30,068
2005/06	30,099
2006/07	29,905
2007/08	29,751



**Figure 89: Number of votes cast in each electoral district – 2004 General Election**



Source: Home Department

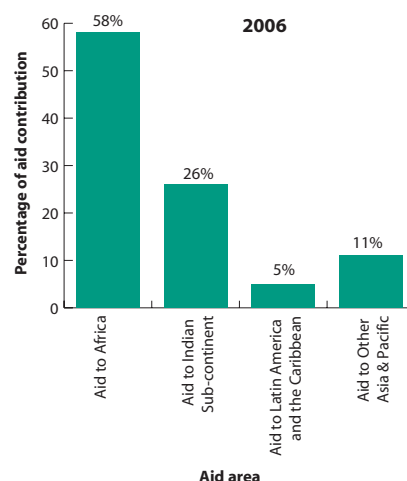
	Population (2001 Census)	Number on Electoral Roll	Turnout in General Election 2004	Percentage of Turnout
St Peter Port (S)	6,673	2,972	1,765	26.4%
St Peter Port (N)	6,673	3,864	2,227	33.3%
St Sampson	6,778	4,389	2,827	41.7%
Vale	7,459	5,219	3,521	47.2%
Castel	6,997	4,553	2,989	42.7%
West	5,913	4,454	2,449	41.4%
South East	6,862	4,617	3,173	46.2%

Notes 1. The population figure is based on 2001 Census data for people aged over 18 years.  
The population figure for St Peter Port has been halved to depict the split in electoral district.  
2. Based on the 2004/5 Electoral Roll



**Figure 90: Guernsey's overseas aid contributions 1998–2006**

	1999	2000	2001	2002
Aid to Africa	484,134	521,526	657,522	692,277
Aid to Europe	100,000	0	0	0
Aid to Indian Sub-continent	237,227	241,719	282,394	202,976
Aid to Latin America & Caribbean	94,479	37,405	39,833	44,511
Aid to Other Asia & Pacific	44,627	84,880	55,991	205,943
Emergency Relief	150,000	25,000	100,000	100,000
Total Contribution to Aid Overseas	960,467	885,530	1,035,740	1,145,707
	2003	2004	2005	2006
Aid to Africa	720,082	1,049,917	1,013,234	992,539
Aid to Europe	0	0	0	0
Aid to Indian Sub-continent	251,012	300,765	490,438	462,766
Aid to Latin America & Caribbean	88,607	74,282	32,200	94,449
Aid to Other Asia & Pacific	169,357	124,434	134,323	197,805
Emergency Relief	30,000	200,000	150,000	0
Total Contribution to Aid Overseas	1,229,058	1,549,398	1,670,195	1,747,559



Source: Overseas Aid Commission, Policy Council



For further information on Guernsey electoral roll please see the 'Promotion of the Electoral Roll'; Billet d'État X, 2003

## Community: Sport



Sustainability

**Golf continues to be the sport with the most membership**, with a slight growth in 2006. Football and cricket are also popular sporting activities in the community.

### What is measured?

Sport means all forms of physical activity, which, through casual or organised participation aims at expressing, or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels. The participation levels for the various sporting activities taking place on the Island are monitored.

### Number of medals awarded at the Island Games – Guernsey, Jersey and the Isle of Man (See Figure 91)

- Since the Island games began in 1985, Guernsey has won a total of 805 medals, beating Jersey and the Isle of Man three times out of the eleven games held. The Isle of Man has won a total of 806 medals beating Jersey and Guernsey three out of the eleven Island Games events. Whilst Jersey, has won a total of 955 medals, beating Guernsey and the Isle of Man five times out of the eleven Island Games events.
- Since the Island Games began, Guernsey has been awarded 250 gold medals, 273 silver medals and 288 bronze medals; Jersey has been awarded 344 gold medals, 305 silver medals and 306 bronze medals, whilst the Isle of Man has been awarded 277 gold medals, 263 silver medals and 266 bronze medals.

### Sports club membership 2006 - 2007 (See Figure 92)

- In terms of membership numbers, the most popular sporting activities in 2006 were Golf with 2,589 members, Football with 2,090 members and Cricket with 1,478 members.

### Levels of participation by activity at Beau Sejour Leisure Centre 2004 - 2006 (See Figure 93)

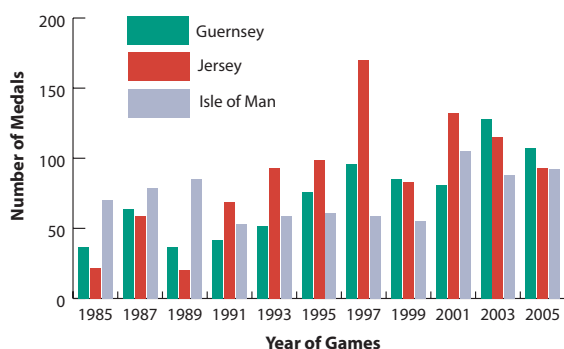
- Over the last three years, gym admissions have been the most popular activity at Beau Sejour Leisure centre, with swimming pool use the second most popular activity and organised fitness classes the third.

### Quarterly average membership figures at Beau Sejour Leisure centre - 2005 and 2006 (See Figure 94)

- Membership figures for Beau Sejour are divided between 'Freedom' membership, which allows members to participate in most activities without the need for additional payment and 'Choice' membership, where members pay for each activity but at a rate that is lower than casual usage. 'Freedom' membership is by far the most popular type of membership accounting for around 70-75% of monthly membership figures.
- Quarterly average membership figures have shown a slight decline in 2006. Figures for both 2005 and 2006 follow a similar trend, dropping slightly during the warmer summer months before picking up again in the colder months.

### Connections

**Land Use** – many sports require large areas for pitches and courts. Equestrian sports such as horse racing and sports such as cycling often benefit from the use of this public land. **Life Expectancy** – incorporating exercise into a daily routine is part of a healthy lifestyle. Many people find that playing sports is an enjoyable way of keeping mentally as well as physically fit.

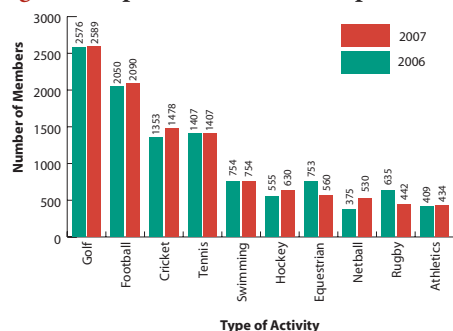
**Figure 91: Number of medals awarded at the Island Games - Guernsey, Jersey and the Isle of Man**


Island	1985	1987	1989	1991	1993	1995
Guernsey	37	64	37	42	52	76
Jersey	22	59	20	69	93	99
Isle of Man	70	79	85	53	59	61

	1997	1999	2001	2003	2005
Guernsey	96	85	81	128	107
Jersey	170	83	132	115	93
Isle of Man	59	55	105	88	92

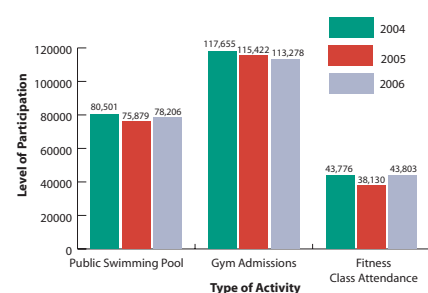
Source: Culture and Leisure Department


**Figure 92: Sports club membership 2006 - 2007**


Sporting Activity	2006	2007	2006	2007
Golf	2,576	2,589	Hockey	555 630
Football	2,050	2,090	Equestrian	753 560
Cricket	1,353	1,478	Netball	375 530
Tennis	1,407	1,407	Rugby	635 442
Swimming	754	754	Athletics	409 434

Please note: figures will contain multiple memberships

Source: Culture and Leisure Department


**Figure 93: Levels of participation by activity at Beau Sejour Leisure Centre 2004 - 2006**


Activity	2004	2005	2006
Public Swimming Pool	80,501	75,879	78,206
Gym Admissions	117,655	115,422	113,278
Class Attendance	43,776	38,130	43,803
Number of Fitness Classes	3,140	3,190	3,230

Source: Culture and Leisure Department


**Figure 94: Quarterly average membership figures at Beau Sejour Leisure Centre - 2005 and 2006**

	Freedom Membership	Choice Membership	Total Members
Q1 2005	3,363	745	4,108
Q2 2005	3,268	722	3,991
Q3 2005	3,160	721	3,881
Q4 2005	3,170	726	3,896
Q1 2006	3,375	674	4,049
Q2 2006	3,263	665	3,928
Q3 2006	3,080	643	3,723
Q4 2006	3,029	636	3,665



Source: Culture and Leisure Department



For more detailed information on Guernsey's sports participation figures please see Guernsey Sports Commissions 'Sporting Facilities Strategy'.

## Community: Culture and Leisure

### Sustainability



## A quarter of Guernsey's total land area is available for public amenity.

### Membership of the Association of Guernsey

### Charities continues to increase, as does funding from the Channel Islands Lottery.

#### What is measured?

The capacity for leisure activities on the Island is monitored through the availability of land for public amenity. Levels of voluntary participation in the charitable sector are measured using membership data from the Association of Guernsey Charities. Rising proceeds from the Channel Island Lottery assist local charities to fund local projects.

#### Land available for public amenity 2003-2006 (See Figures 95 and 96)

- The amount of land available for public and visitor enjoyment is an important indicator of the quality of life available to the Island's community.
- In 2006, the amount of land available for public amenity rose by 16 verges on 2005 figures to 10,025 verges or 25.8% of Guernsey's total land mass.
- Out of the total land available for public amenity in 2006, 78% belonged to the Crown. This land is managed by the Environment Department and mostly includes the Island's beaches and coastal areas.
- States land, which is also managed by the Environment Department, makes up 775 verges or 8% of the total land available for public amenity. States land consists of parks, gardens, cliffs and former quarries.

#### Membership of the Association of Guernsey Charities 2002-2007 (See Figure 97)

- The Association of Guernsey Charities exists to encourage charitable and community work in Guernsey. Any organisation based in the Bailiwick with purely charitable objectives can join as a member of the Association. However, it should be noted that there is no official register of charities in Guernsey.

- In 2007, membership of the Association rose to 236, an increase of 11% since 2002.
- Of the 236 member organisations, approximately one quarter focus on aiding the disabled or sick. Other types of charitable organisations include those that provide education and information, are youth organisations, give overseas aid and provide community care.

#### Channel Islands Lottery proceeds 1997-2006 (See Figure 98)

- One of the primary tasks undertaken by the Association of Guernsey Charities each year is the distribution of Guernsey's share of the profits from the Channel Islands Christmas Lottery. Any member charity undertaking a project in the Bailiwick of Guernsey can apply for a share of the lottery proceeds.
- The Channel Islands Christmas Lottery raised a record £131,597 for local charities through the sale of lottery tickets in 2006.
- Since the States of Guernsey first gave the proceeds of the Christmas Lottery to charity in 1986, over £1.6 million pounds has been donated to local charities to fund projects in the Island.

#### Connections

**Land Use** and **Land Quality** both impact upon the public's ability to enjoy culture and leisure activities. Sports and leisure activities strengthen **Community Involvement** bringing people together, bringing **Health** benefits that add to quality of life and community **Well-being**.



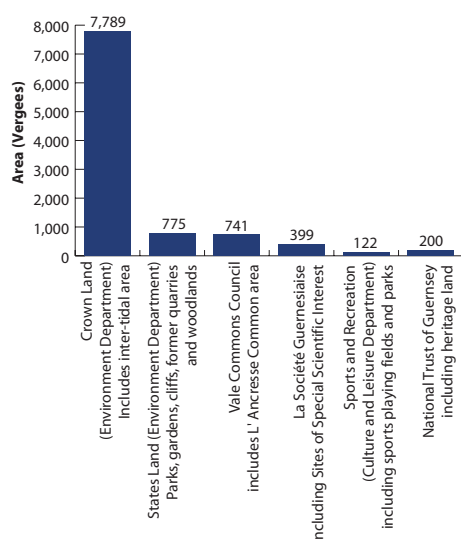
**Figure 95: Land available for public amenity 2003-2006**

	2003	2004	2005	2006
Total area of Guernsey (vergees)	38,801	38,801	38,801	38,801
Total public amenity land (vergees)	10,021	10,054	10,009	10,025
Privately owned land (vergees)	28,779	28,746	28,792	28,776
Private land not available for public amenity (%)	74.2	74.1	74.2	74.2
Land available for public amenity (%)	25.8	25.9	25.8	25.8

1 acre = approximately 2.5 vergees



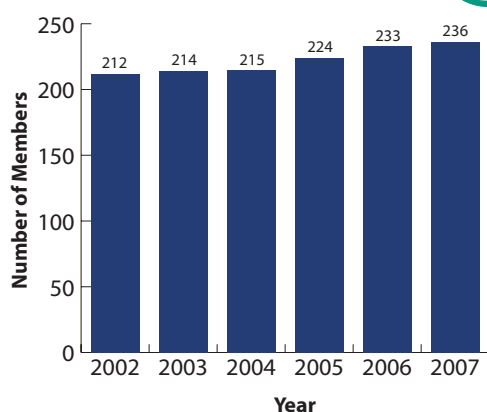
**Figure 96: Land available for public amenity - land type and owner breakdown 2006**



Land	Description of Land	Area (Vergees)
Crown Land	Includes inter-tidal area	7,789
States Land	Parks, gardens, cliffs, former quarries and woodlands	775
Vale Commons Council	Includes L' Ancresse Common area	741
La Société Guernesieise	Includes sites of Special Scientific Interest	399
Sports and Recreation	Includes sports playing fields and parks	122
National Trust of Guernsey	Includes heritage land	200

Source: Environment Department, Culture and Leisure Department, Vale Commons Council, La Société Guernesieise, The National Trust of Guernsey

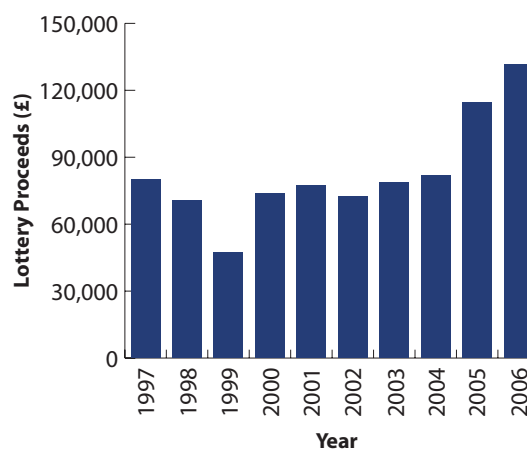
**Figure 97: Membership of the Association of Guernsey Charities 2002-2007**



Source: Association of Guernsey Charities



**Figure 98: Guernsey's share of Channel Islands Lottery Proceeds**



Year	Lottery Proceeds (£)	Year	Lottery Proceeds (£)
1997	80,220	2002	72,512
1998	70,440	2003	78,631
1999	47,424	2004	81,803
2000	73,945	2005	114,353
2001	77,453	2006	131,597

Source: Association of Guernsey Charities



For more information on Guernsey's culture and leisure activities and future strategy, please see 'Our way of life...A cultural strategy for Guernsey 2005-2010', Culture and Leisure Department

More information on the Association of Guernsey Charities is available on the website: [www.charity.org.gg](http://www.charity.org.gg)

# References and further reading

## Crime

---

### Signpost to Data Providers

Guernsey Police Force  
Police Headquarters  
Hospital Lane  
St. Peter Port  
Guernsey  
GY1 2QN

### Further Reading

The Police Statistical Digest 2006  
Published by Guernsey Police

Fear of Crime Survey 2005  
Guernsey Police

Guernsey Criminal Justice System  
Annual Statistical Digest, 2004  
Home Department

### Websites

Guernsey Police Force  
[www.gov.gg](http://www.gov.gg) - click on Home Department > Police Service

## Health

---

### Signpost to Data Providers

Annual MOH Report  
Health and Social Services  
Director of Public Health  
Health and Social Services Department  
Princess Elizabeth Hospital  
St Martins  
Guernsey  
GY4 6UU

## Health (continued)

---

### Further Reading

OECD Health Data 2006  
OECD Publishing, Paris

Healthier Island's Revisited  
A review of health and healthcare in Guernsey and Alderney 1999-2003  
Health & Social Services  
September 2005

One Hundred Years of Health  
The Changing Health of Guernsey 1899 – 1999  
Dr. David Jeffs (Ed)  
Board of Health  
November 1999

The 2001 Census Report  
Policy and Research Unit, Policy Council, 2002  
[www.gov.gg](http://www.gov.gg) - click on Government > Facts and Figures > Publications > 2001 Census Report

Corporate Anti-Poverty Programme  
Billet d'État XXV, November 2003

Anti-Poverty Policies – a Range of Possible Options for Guernsey  
Townsend Centre for International Poverty Research, February 2003

### Websites

Health and Social Services Department  
[www.gov.gg](http://www.gov.gg) and click on Health and Social Services

Guernsey Health Promotion Unit  
[www.guernseyhealthpromotion.com](http://www.guernseyhealthpromotion.com)

Guernsey Chest and Heart Association  
[www.chestandheart.fsnet.co.uk](http://www.chestandheart.fsnet.co.uk)

Cancer Research UK  
[www.cancerresearchuk.org](http://www.cancerresearchuk.org)

British Heart Foundation  
[www.bhf.org.uk](http://www.bhf.org.uk)

Euroqol Group  
[www.euroqol.org](http://www.euroqol.org)

# References and further reading

## Community

---

### Signpost to Data Providers

#### Registrar General of Electors

Home Department  
Sir Charles Frossard House  
PO Box 43  
La Charroterie  
St Peter Port  
Guernsey  
GY1 1FH

#### Overseas Aid Commission

Policy Council  
Sir Charles Frossard House  
PO Box 43  
La Charroterie  
St Peter Port  
Guernsey  
GY1 1FH  
Tel: 717000

#### Culture and Leisure Department

Guernsey Information Centre  
North Esplanade  
St Peter Port  
GY1 2Q  
Tel: 713888

#### Digimap Ltd

Old Tobacco Factory  
La Ramée  
St Peter Port  
Guernsey  
GY1 2ET  
Tel: 700321  
Fax: 700320

#### Vale Commons Council

George Domaille Tel: 246195

#### National Trust of Guernsey

Mr. Proctor  
National Trust of Guernsey  
26 Cornet Street  
St. Peter Port  
GY1 1LF

#### La Société Guernesiaise

Candie Gardens

## Community (continued)

---

St Peter Port  
Guernsey  
GY1 1UG  
Tel: 725093  
Fax: 726248  
E-mail: lasoc@compuserve.com

#### The Association of Guernsey Charities

Petit Tor  
Le Mont Durand  
St Martins  
Guernsey  
GY4 6BF  
E-mail: mail@charity.org.gg

### Further Reading

#### Promotion of the Electoral Roll

Billet d'État X, 2003

#### States Overseas Aid Commission

Annual Report, 2004, 2005

Guernsey Sports Commission, Sporting Facilities Strategy,  
March 2006

#### 2004 Culture and Leisure Survey

Culture and Leisure Department

### Websites

United Nations - Agenda 21  
[www.un.org/esa/sustdev/documents/agenda21.htm](http://www.un.org/esa/sustdev/documents/agenda21.htm)

UN Millennium Development Goals  
[www.un.org/millenniumgoals](http://www.un.org/millenniumgoals)

Culture and Leisure Department  
[www.gov.gg](http://www.gov.gg) - click on Culture and Leisure

Association of Guernsey Charities  
[www.charity.org.gg](http://www.charity.org.gg)

National Trust of Guernsey  
[www.nationaltrust-gsy.org.gg](http://www.nationaltrust-gsy.org.gg)

La Société Guernesiaise  
[www.societe.org.gg](http://www.societe.org.gg)

# Notes



# Notes