

Guernsey Indicators of Poverty Report

2017

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This is the third report looking at the extent of the risk of social and economic poverty in Guernsey using a multi-dimensional set of indicators, covering seven areas: income, employment, health, education, crime, housing and the environment.



States of Guernsey
Data and Analysis

1.1 Introduction

This is the third report in which the extent of potential social and economic deprivation in Guernsey is quantified via a set of multi-dimensional indicators.

In January 2016 (see www.gov.gg/billets) the States of Guernsey agreed to “improve and broaden the measurement of relative poverty” to give a more accurate and rounded picture of potential deprivation. Previously, measurements have focused only on relative income poverty (for example, those published in the **States Strategic Monitoring Report**, available from www.gov.gg/kpi).

The measures of relative income poverty are based on a comprehensive dataset now available annually from the Rolling Electronic Census. These measures are included along with a wealth of other related information in the **Guernsey Household Income Report**, available from www.gov.gg/household.

Measurement also now covers other aspects of social and economic deprivation. As well as the headline figures for those at risk of relative income poverty, this report includes indicators for six other areas, which are: employment; education, skills and training; health deprivation and disability; crime; barriers to housing and services; and living environment. The methodology is broadly based on that used to compile the “English Indices of Deprivation”, published by the Office for National Statistics.

The use of wide-ranging measurements is important because they will give a holistic view – in the context of a general lack of resources or opportunity – rather than focusing solely on relative low income. These reports will help to identify topics in need of more in-depth assessment.

This report begins to compile time series data for the indicators required to calculate an overall index and presents data for 2014 to 2017 only, since some data is not available for earlier years. Time series will be built up year-on-year and trend analysis will become the focus in future editions of this report.

No attempt is made to define appropriate levels, desired trends or targets for any of the indicators. This report continues to provide a platform upon which this broadened set of indicators for Guernsey can be built into measures of performance in future years.

The Report, entitled **Future Guernsey**, published in 2016 as the first phase of the States’ Policy & Resource Plan, stated that “We want to understand better the extent of relative poverty and income inequality in Guernsey and their effects on individuals, families and the prosperity and well-being of society generally” (see www.gov.gg/policyandresourceplan). These reports are intended to help achieve that vision.

1.1 Introduction (continued)

The domains used in the multi-dimensional index are described as follows:

Domain	Description
Income	The proportion of the population at risk of relative poverty due to lack of income
Employment	The proportion of the working age population being involuntarily excluded from the labour market
Health	The risk of premature death and increased need of care
Education	Educational achievement and participation
Crime	The risk of being a victim of certain crimes
Housing	The difficulty in accessing appropriate housing
Environment	Quality of indoor and outdoor environments

Each of the domains is measured via a set of indicators. The individual indicators are presented in this report, which provides 2014 to 2017 data (where available). Data from several sources has been used, namely: the Rolling Electronic Census, the Law Enforcement Annual Report, Public Health Services, Education Services and the Office of Environmental Health and Pollution Regulation.

2014 is set as the base year for future trend analysis. As such, each of the domains has been given a “deprivation index” of 100 in 2014. The annual changes in individual measures within each domain are combined (without weighting) to give an overall change for the domain. This change is applied to this base figure to show whether the index for the domain as a whole has increased or decreased each year. The overall changes are shown in **Appendix 1**.

1.2 Summary

The indicators presented in this Report provide a baseline from where performance in relation to achieving the States’ aims relating to poverty can begin to be measured and objectively assessed. These aims are summarised in the **Future Guernsey** Report; to “Implement the improvements required to monitor, understand and reduce poverty and income inequality in Guernsey” (see www.gov.gg/policyandresourceplan).

In this Report, all the indicators are presented with equal coverage and weight. This style of presentation is intended to enable each reader to identify the areas they wish to focus further attention upon. No judgement is made in the Report regarding performance compared to benchmarks, targets or other jurisdictions, although these could be introduced in future. 2014 figures are presented as a starting point for information and discussion and the indicators presented will be refined as the report becomes more mature.

2.1 Income

The first of the seven domains looks at income. Some definitions of relative poverty only look at income, either in relative or absolute terms. However, in this methodology, it is recognised that this does not give a holistic view. For example, someone with a low income may have enough for his or her needs and may, for example, own a well-insulated home with no mortgage and enjoy good health, rarely visiting the doctor. By way of comparison, someone with a relatively high income may spend more on rent and need to visit the doctor often to manage a long-term illness or disability. As such, income is presented alongside the six other domains and it is important that all are considered before any conclusions are drawn.

In order to gauge potential income deprivation, the proportion of people who live in a household with a net equivalised income of less than 60% of the median is identified. This figure of 60% is a recognised boundary for those being at risk of relative income poverty. The incomes are net of housing costs, social security contributions and taxes.

Household incomes are equivalised to a two adult, no children household. Further information on household incomes and equivalisation can be found in **Appendix 2** of this report or in the **Guernsey Household Income Report** (available at www.gov.gg/household), which also contains information on median incomes and the distribution of income at a household level.

In 2016, 60% of the median net equivalised annual income was £19,420. 22.7% of people lived in a household which had an income lower than that. This threshold amount equates to an income of £373 per week for a household of two adults. This is the amount of income remaining after housing costs, social security contributions and taxes have been paid. **Section 12** of the **Guernsey Household Income Report** contains further breakdown of the households included within this group by tenure and household composition and internationally recognised measures for monitoring income distribution, such as the Gini coefficient and income decile ratio. Data was not available for 2017 at the time of publishing this report. A broadly comparable figure for 2014/15 in Jersey is 23% and for the UK in 2016/17 is 22%.

The percentage of people who fall within this group and who were not in receipt of income support in the form of supplementary benefit is also used as an indicator. Supplementary benefit in Guernsey is a cash amount payable to someone whose household income is below that which is considered to be enough to live on. Eligibility for supplementary benefit is dependant on individual household circumstances. In 2016, 16.3% of the population both had a household income below the 60% median figure detailed above and were not in receipt of income support.

Table 2.1.1 Income deprivation indicators and index

Indicator	2014	2015	2016	2017*
Proportion of population whose household income is less than 60% of the median	22.3%	21.3%	22.7%	-
Proportion of population who both have a household income of less than 60% of the median and are not in receipt of income support	17.4%	15.5%	16.3%	-
Index figure for domain (based on indicators above having equal weighting)	100	92.3	97.9	-

* 2017 figures will be available in 2019.

2.2 Employment

This element of the report looks at the number of Guernsey residents who are prevented from working due to long-term illness, disability, involuntary unemployment or the necessity of caring for another person. These are measured via the number of claimants of four particular benefits: incapacity, severe disability or unemployment benefit, or of a carer's allowance.

Incapacity benefit may be paid to someone who has been unable to work for six months or more due to illness or injury, subject to certain conditions.

Severe disability benefit may be available to someone with a physical or mental disability that requires a lot of care and supervision.

Carer's allowance can be paid to someone caring (for at least 35 hours per week) for a person in receipt of severe disability allowance, dependant on certain conditions being met.

Unemployment benefit is a cash amount which may be paid to someone who is unemployed and actively looking for work.

The number of people aged 16 to 64, i.e. anyone of working age, in receipt of any one of these benefits at the end of each quarter is compared to the total number of people in the age group. An annual average is presented for each year.

As shown below, 3.3% of the working age population was in receipt of these benefits in 2017, compared to 3.4% in 2016.

Table 2.2.1 Employment deprivation indicators and index

Indicator	2014	2015	2016	2017
Proportion of working age population receiving incapacity, severe disability or unemployment benefits, or carer's allowance	3.6%	3.5%	3.4%	3.3%
Index figure for domain (based on indicators above having equal weighting)	100	98.7	93.8	93.2

2.3 Health

The health domain is covered by five indicators. The first indicator shows years of potential life lost, which is calculated as a three year age and gender standardised measure of mortality before the age of 75.

Other factors considered were: the proportion of people receiving benefits as a result of ill health (a sub-set of those identified on the previous page), the number of emergency admissions into hospital, the excess winter mortality rate and the number of doctors visits by people receiving financial assistance compared with those who are not.

The number of emergency admissions looked at the number of admissions through A&E or directly onto a ward where the discharge was at least 24 hours after admission This is intended to show levels of admissions for more serious health conditions.

Excess winter mortality is a five year average of the number of deaths per year over and above the generally expected number, due to winter conditions. This figure is presented as a five year average to smooth out random variations from one year to the next. This figure is not currently updated annually.

Supplementary Benefit is a means tested scheme which, in addition to paying cash benefits, covers the cost of primary health care expenses, such as doctor and nurse appointments. The annual average number of appointments for people in receipt of this assistance (4.6 in 2017) was divided by the annual average for people who did not receive this assistance (3.2 in 2017) to produce a figure showing how frequency of access to healthcare is impacted by the cost to the individual. For the purpose of this report, people in receipt of Supplementary Benefit who are also in receipt of health related benefits have been excluded, as they may require more frequent visits with a health care professional, therefore affecting the ratio.

Table 2.3.1 Health deprivation indicators and index

Indicator	2014	2015	2016	2017
Years of potential life lost per 10,000 population	317	314	-	-
Proportion of population receiving invalidity or severe disability benefits	2.40%	2.29%	2.25%	2.31%
Number of emergency admissions lasting at least 24 hours per capita	0.054	0.052	0.044	0.046
Excess winter mortality (5 year average per 10,000 population)	2.28	3.23	3.07	-
Comparison of number of doctor and nurse appointments for those in receipt of Supplementary Benefit compared with those not in receipt of the Benefit	1.24	1.41	1.51	1.44
Index figure for domain (based on indicators above having equal weighting)	100	109.2	106.3E	106.4 E

E: estimated due to unavailable data for one 2016 and two 2017 measures at this time.

2.4 Education

Low educational achievement and attendance levels can indicate potential deprivation. The figures in this section do not include pupils in Alderney.

The attainment of pupils at the end of key stages 2 and 4 (i.e. at ages 11 and 16) was considered.

The percentage of pupils (excluding those attending Melrose, Beechwood or Blanchelande, since data was not available) not achieving at least level 4 in both Maths and English at the end of key stage 2 was calculated. In 2017, this was 15.5% of pupils, compared to 16.5% in 2016.

The percentage of pupils (including those attending Ladies College, Elizabeth College or Blanchelande) not achieving five or more GCSEs at grade G or higher, or equivalent, at the end of key stage 4 was calculated. In 2017, this included 8.4% of pupils, compared to 8.0% in 2016.

The secondary school absence rate (excluding those attending Ladies College, Elizabeth College or Blanchelande, since data was not available) was 6.3% in 2017, compared to 7.1% in 2016. This includes authorised absence (e.g. sickness) and unauthorised absence (e.g. holidays in term time).

As well as the total proportion of 16 years olds not remaining in education, employment or training following the end of key stage 4, the number of 18 to 20 years olds not in full-time higher education or employment is also presented.

As a final indicator, the number of students who had access to a uniform grant in the year shown or the year prior to that (as new uniforms are not always required annually) was taken into account.

Table 2.4.1 Education deprivation indicators and index

Indicator	2014	2015	2016	2017
Those not achieving level 4 or higher at key stage 2	17.7%	15.1%	16.5%	15.5%
Those not achieving 5 A* to G GCSEs or equivalent at key stage 4	7.3%	9.2%	8.0%	8.4%
Secondary school absence rate	7.2%	7.5%	7.1%	6.3%
Proportion of 16 years olds not in education, employment or training	2.5%	1.5%	2.3%	2.1%
Proportion of 18 to 20 year olds not in education or employment*	15.0%	13.1%	14.5%	13.6%
Number of approved applications for uniform grants as percentage of total school children	12.7%	14.3%	11.1%	11.4%
Index figure for domain (based on indicators above having equal weighting)	100	96.0	96.3	92.6

* This figure includes those who are: in part-time training, at university but have not informed the States of Guernsey (e.g. have not applied for a Higher Education grant), unemployed, taking a gap year or are not in the job market for another reason.

2.5 Crime

Crime can have a major impact on both individuals and the wider community and plays a part in assessing how deprived an area may potentially be.

The categories of crime considered most relevant for the purpose of this exercise are: violent crime, burglary, theft and criminal damage. Crime figures are published in the Guernsey Law Enforcement annual report. Rolling three year averages of the number of reported crimes per category are used.

On this rolling basis, there were decreases across three of these four categories between 2016 and 2017.

Table 2.5.1 Crime deprivation indicators and index

Indicator	2014	2015	2016	2017
Violent crime per 10,000 population	68	65	64	62
Burglary per 10,000 population	17	13	10	11
Theft per 10,000 population	76	72	62	55
Criminal damage per 10,000 population	80	75	69	64
Index figure for domain (based on indicators above having equal weighting)	100	90.6	81.5	77.3

2.6 Housing

The housing domain considers the availability and affordability of appropriate housing as an indicator of potential deprivation.

Household overcrowding is an indicator of potential deprivation and relative poverty, but can be difficult to define. A calculation has been undertaken using the number, age and gender of the residents of each household, together with the number of bedrooms in their houses (where known) and some assumptions about living arrangements (as no data is held regarding sizes of bedrooms or individual domestic arrangements). This gives figures that have been calculated on a consistent basis each year, but care should be taken when interpreting the absolute numbers. Of the households classified as overcrowded, approximately two-thirds were overcrowded by one person.

Homelessness is used as an indicator in the UK, but the level in Guernsey is challenging to quantify. The organisations dedicated to providing temporary housing or shelter keep records of numbers but there are many reasons why people seek temporary housing and not all are due to homelessness. As such, this indicator is not included in this report, but attempts will be made to develop a method appropriate to Guernsey for monitoring levels of homelessness, perhaps including an estimation of the number of people with no permanent residence who may “sofa-surf”, for future editions.

There are several indicators of housing affordability, including a rent to earnings ratio (mix-adjusted average private rental payments compared to median individual employment earnings, both annual totals) and a house price to earnings ratio (mix-adjusted average property prices compared to median individual employment earnings, the total price compared to annual total earnings).

Additionally, the percentage of people in affordable housing (rented from the States of Guernsey Housing Department or the Guernsey Housing Association [GHA]; or a household in a partial ownership scheme) is shown below. This figure increased between 2016 and 2017 (please see the [Annual Housing Stock Bulletin](#) via www.gov.gg/property for trends in the numbers of affordable housing units).

The percentage of households receiving assistance with social housing rent payments is also presented up to 2016. Data is not yet available for 2017. In future editions, this may be expanded to include households receiving assistance with private and other housing association rent payments.

Table 2.6.1 Housing deprivation indicators and index

Indicator	2014	2015	2016	2017
Household overcrowding as percentage of households (data held for approx. 92% of properties)	10.4%	9.8%	9.3%	9.2%
Affordability: annual rent to earnings ratio	0.50	0.48	0.45	0.47
Affordability: purchase price to earnings ratio	15.2	14.2	13.3	13.1
Affordability: percentage of population in affordable housing (rented from the States or GHA)	9.3%	9.5%	9.6%	9.7%
Affordability: percentage of households receiving assistance with social housing rent payments	7.9%	7.5%	7.4%	-
Index figure for domain (based on indicators above having equal weighting)	100	95.9	92.8	93.3 E

E: estimated due to unavailable data for one 2017 measure at this time. Data will be available in 2019.

2.7 Environmental

The immediate indoor and general outdoor living environments can also be used to indicate potential deprivation.

The indoor living environment, in this instance, focuses on the state of repair of houses. The Office of Environmental Health and Pollution Regulation receives complaints about the state of repair of domestic properties (including all tenures). Care should be taken in the interpretation of trends for this measure over time as the Office has become increasingly proactive in encouraging more people to come forward with complaints, which may have led to an increase in numbers.

In terms of the outdoor environment, three factors were taken into account, as shown in the table below.

The Office of Environmental Health and Pollution Regulation monitors the air quality across the island and collects information on a range of pollutants. The pollutants selected for this indicator are nitrogen dioxide and sulphur dioxide. A three year rolling average is used to smooth out random variations from one year to the next.

In terms of road safety, a three year average figure for the number of serious and fatal injuries resulting from road traffic accidents per year was calculated, based on figures published by the Guernsey Police.

The proportion of beaches obtaining a guideline level pass is used to indicate standards in the outdoor living environment.

Table 2.7.1 Environmental deprivation indicators and index

Indicator	2014	2015	2016	2017
Number of housing complaints per 1,000 houses	2.2	2.5	2.4	2.6
Outdoor pollutant level, µg per m ³ - nitrogen dioxide (3 year average)	19.6	16.5	14.9	13.6
Outdoor pollutant level, µg per m ³ - sulphur dioxide (3 year average)	12.2	9.3	5.9	1.7
Road traffic accident injuries (three year average)	12	11	10	13
Bathing water quality rating*	-	27	27	31
Index figure for domain (based on indicators above having equal weighting)	100	96.4	84.0	85.0

*The methodology changed in 2015 so data is only comparable from 2015 onwards. A reverse sliding scale is used where a classification of "Excellent" is given 1 point and "Poor" is given 4 points)

3.1 Further Information

The indicators of potential deprivation presented in this Report provide a baseline from where performance in relation to achieving the States' aims relating to relative poverty can begin to be measured and objectively assessed.

In future editions, trends will become clearer. In the absence of time series data, readers may wish to compare the figures in this Report to equivalent figures for other jurisdictions. Some of the indicators can be compared with other jurisdictions (with care regarding differences in methodologies used) and comparable figures for Jersey and the UK are provided in the income domain section, but have not yet been sourced for other domains. More comparable figures for other jurisdictions may be added in future reports if readers indicate that these will be useful.

Considerable detail on income equality (one of the seven domains featured in this report) in particular is available in the separate **Guernsey Household Income Report 2016**, which is available from www.gov.gg/household.

In some areas, refinements will be made to the way indicators are measured or presented, while maintaining the continuity of time series data as far as possible. Further information is provided in **Appendix 1** regarding how the individual domains could be weighted to reflect the relevant importance of each in terms of achieving the States' aims relating to relative poverty. Feedback in this regard or relating to any other aspect of this Report is welcome.

4.1 Contact details

You may also be interested in other States of Guernsey Data and Analysis publications, which are all available online at www.gov.gg/data. Please contact us for further information.

E-mail: dataandanalysis@gov.gg

Telephone: (01481) 717292

Write / visit: Data and Analysis
Sir Charles Frossard House
La Charroterie
St Peter Port
Guernsey
GY1 1FH

Appendix 1 - weightings and overall index figures

All but one of the domains presented in this Report include more than one individual measure of potential deprivation. The English methodology applies a weighting to each indicator to derive a score for each domain, which is then used to calculate an overall relative poverty level figure. However, since the set of Guernsey indicators varies slightly from the original set used, the weightings needed to be amended.

For the purposes of calculating a single figure for each domain within this Report, each measure has been given equal weighting within its domain. These weightings may be revised for future reports, after further research and consultation has been undertaken regarding the relevant importance of each indicator and domain in terms of achieving the States of Guernsey's aims relating to relative poverty.

The weightings used in this Report can be found in **Tables A.1.1 to A.1.7** below.

Table A.1.1 Weightings given to income indicators

Indicator	Weighting
Proportion of all households whose income is less than 60% of the median	0.5
Proportion of all households who both have an income of less than 60% of the median and are not receiving supplementary benefit	0.5

Table A.1.2 Weightings given to employment indicators

Indicator	Weighting
Proportion of working age population receiving invalidity, severe disability or unemployment benefits, or carer's allowance	1.0

Table A.1.3 Weightings given to health indicators

Indicator	Weighting
Years of potential life lost per 10,000 population	0.2
Proportion of population receiving invalidity or severe disability benefits	0.2
Number of emergency admissions lasting at least 24 hours per capita	0.2
Excess winter mortality (5 year average per 10,000 population)	0.2
Average number of appointments per annum for those on Supplementary Benefit divided by average for those not on the Benefit	0.2

Table A.1.4 Weightings given to education indicators

Indicator	Weighting
Those not achieving level 4 or higher at key stage 2	0.167
Those not achieving 5 A* to G GCSEs or equivalent at key stage 4	0.167
Secondary school absence rate	0.167
Proportion of 16 years olds not in education, employment or training	0.167
Proportion of 18 to 20 year olds not in education or employment	0.167
Number of approved applications for uniform grants as percentage of total school children	0.167

Appendix 1 - weightings and overall index figures

Table A.1.5 Weightings given to crime indicators

Indicator	Weighting
Violent crime per 10,000 population	0.25
Burglary per 10,000 population	0.25
Theft per 10,000 population	0.25
Criminal damage per 10,000 population	0.25

Table A.1.6 Weightings given to housing indicators

Indicator	Weighting
Household overcrowding as percentage of households	0.20
Affordability: annual rent to earnings ratio	0.20
Affordability: purchase price to earnings ratio	0.20
Affordability: percentage of population in affordable housing	0.20
Affordability: percentage of households receiving assistance with social housing rent payments	0.20

Table A.1.7 Weightings given to environment indicators

Indicator	Weighting
Number of housing complaints per 1,000 houses	0.20
Outdoor pollutant level, μg per m^3 - nitrogen dioxide	0.20
Outdoor pollutant level, μg per m^3 - sulphur dioxide	0.20
Road traffic accident injuries	0.20
Bathing water quality	0.20

Table A.1.8 Weightings given to domains in the English Indices of Deprivation 2015 Report

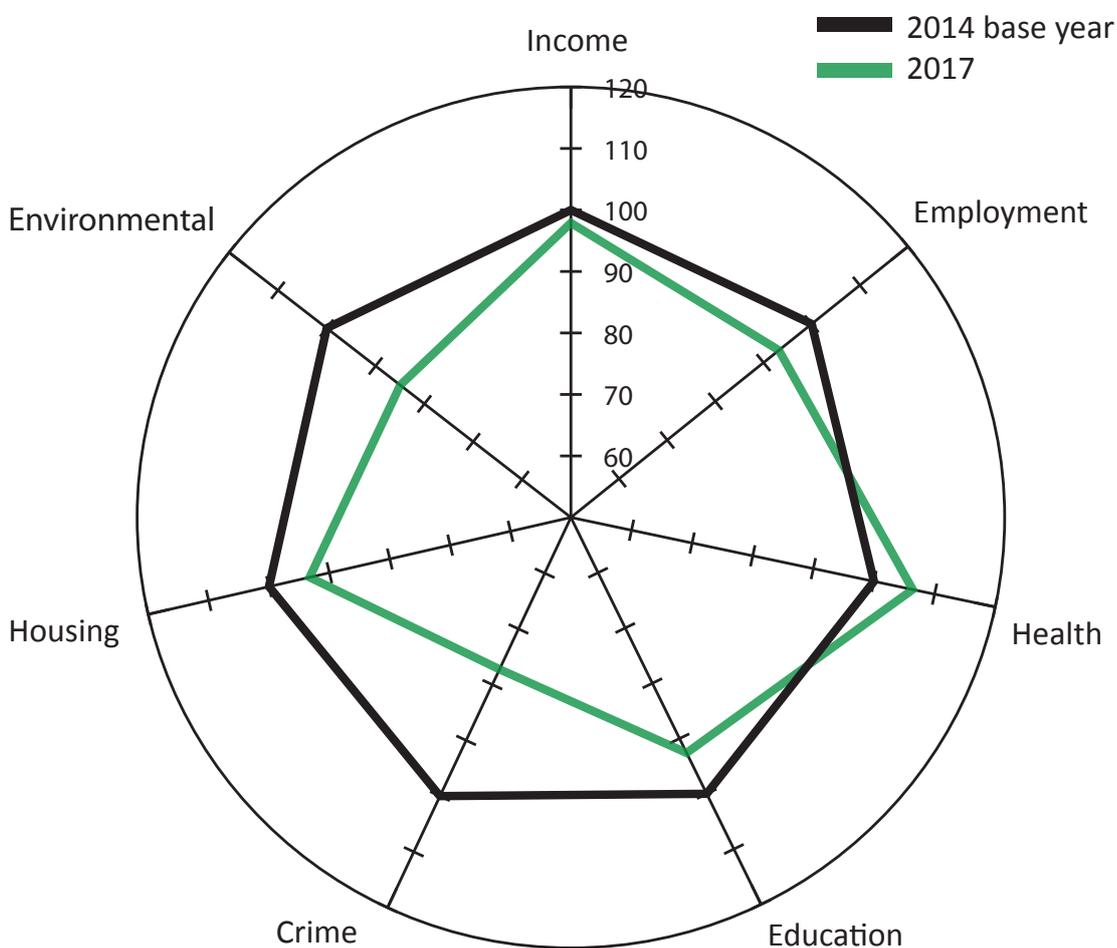
Indicator	Weighting
Income	22.5%
Employment	22.5%
Health	13.5%
Education	13.5%
Crime	9.33%
Housing	9.33%
Environment	9.33%

Appendix 1 - weightings and overall index figures

The diagram below illustrates how the index figure for each domain could be tracked visually over time. If the potential deprivation index decreased over time, it would get closer to the centre and if it increased, it would get further away, compared to the base year position.

This form of visualisation can be achieved without weighting individual domains. However, if an overall index figure were to be required, a weight would need to be determined for each domain. The weights used to calculate the indices in the English Indices of Deprivation 2015 Report are shown in [Table A.1.8](#) on [page 14](#).

Figure A.1.1 Potential deprivation index by domain



Appendix 2 - Income equivalisation and netting of income

The income that a household needs to attain a given standard of living will depend on its size and composition. "Equivalisation" means adjusting a household's income for size and composition so households can be looked at on a more comparable basis. Gross incomes have been equivalised using the 'Modified-OECD' equivalence scale, in which each household is given a weighting depending on its composition and this is divided by its gross household income. Households of two adults and no children do not see their gross incomes change after equivalisation, whilst incomes of households comprising more than two adults are scaled down. Households containing fewer than two adults will have their income scaled up after equivalisation.

As an example, take a household of two adults and two children and a gross income of £50,000. If this is compared with a household containing just one adult with a gross income of £45,000, then although the larger household had a higher gross income it is the smaller one that has the higher equivalised income. This is illustrated in the diagram below.



Appendix 2 - Income equalisation and netting of income

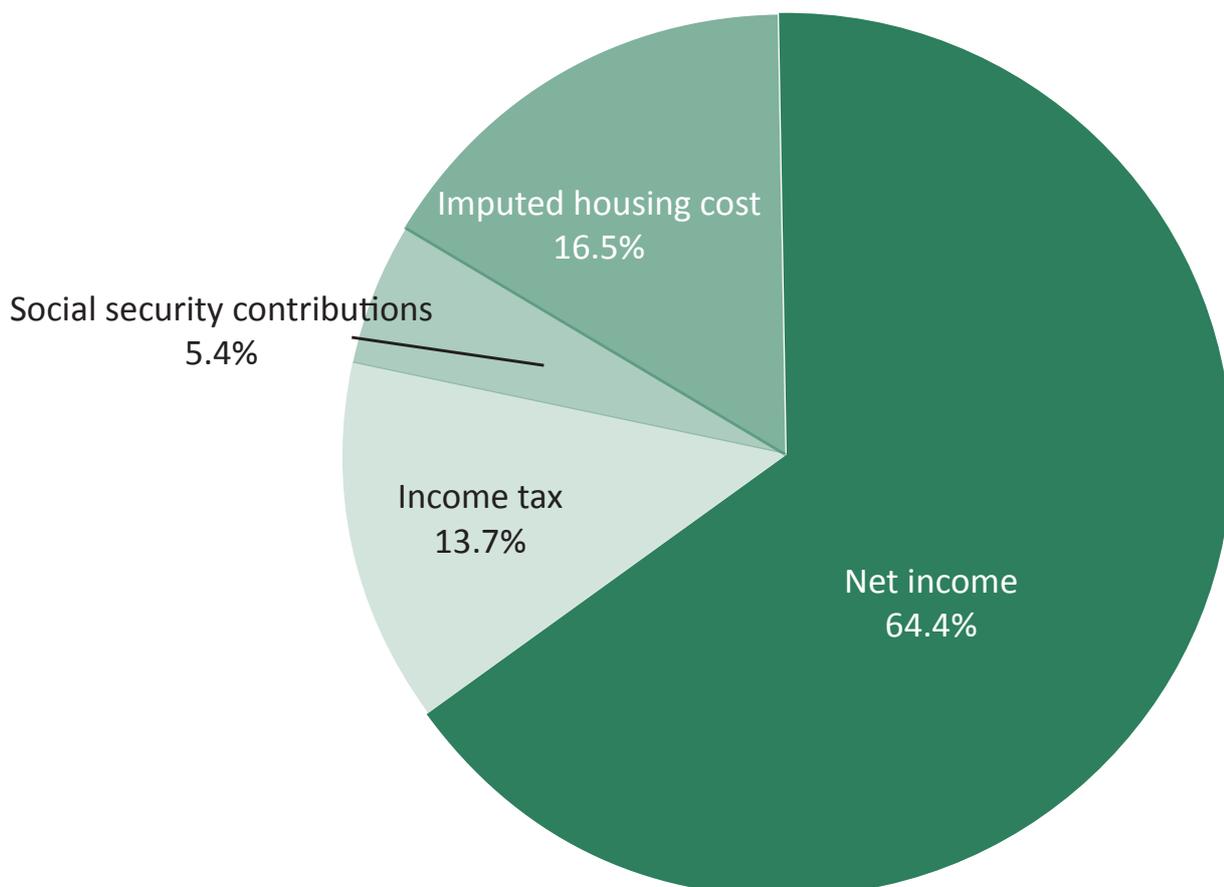
The Report provides data on equivalised household income in 2014, 2015 and 2016 after tax, social security contributions and imputed housing costs have been deducted. Housing costs referred to here mean mortgage and rent costs. The income remaining after these deductions broadly indicates the amount of money left to buy goods and services, often termed disposable income. The overall breakdown of gross income to net income is shown in **Figure A2.1**.

The housing cost in these calculations has been imputed as the actual cost of housing within individual households is not known; however, the tenure type and property size is known and can be combined with data on average rental and purchase prices to estimate the housing costs for privately rented and owner occupied properties with a mortgage.

For those properties which are rented either through the States of Guernsey or Guernsey Housing Association, housing costs have been calculated according to the rental values for property type as set by the States of Guernsey.

Please note that in the case of those households which have been identified as owner occupied without a mortgage no housing cost has been deducted from these incomes.

Figure A2.1: Breakdown of gross income to income net of social security, income tax and housing costs (equivalised)





For more information
go to gov.gg/data