



**Isle of Man**  
**Government**

*Reiltys Ellan Vannin*

# The Isle of Man Strategic Plan Review

## Supporting Evidence

### Paper 1: Housing Demand

An examination of the 2011 Census and the Isle of Man  
Population Projections 2011

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Planning Policy Team  
Strategy, Policy and Performance  
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# **The Isle of Man Strategic Plan Review**

## **Executive Summary**

for

### **Paper 1: Housing Demand, Paper 2: Housing Supply and Paper 3: Future housing requirements and recommended policy change**

- ES 1 The Isle of Man Strategic Plan 2007 was the first strategic land use planning policy document produced on the Island. It is still in operation and is a written statement formulating the Department's general policies in respect of the development and other use of land in the Island, together with a reasoned justification of those policies.
- ES 2 The 2001 and 2006 Censuses provided the data for the Isle of Man Population Projections which were used to formulate the broad Housing Policies in the Isle of Man Strategic Plan 2007 (Strategic Policy 11, Housing Policy 1 and Housing Policy 3). These Policies set out the general housing needs of the Island between 2001 and 2016.
- ES 3 The Department supports the partial review of the Isle of Man Strategic Plan focusing on the housing numbers given that: the existing 2007 Plan remains largely effective, new population projection data is now available following the 2011 Census, over 80% of the 6000 dwellings required between 2001 and 2016 have been built, and the Areas of the East and West have surpassed (in terms of planning approvals) the housing need requirement figures set out in the 2007 Plan. There is also a commitment for the Isle of Man Strategic Plan to undergo a regular cycle of review.
- ES 4 The Draft Isle of Man Strategic Plan 2015 is essentially the Isle of Man Strategic Plan 2007 but with some changes to certain key figures and supporting text. The new document is titled "The Draft Isle of Man Strategic Plan - Towards a Sustainable Island (incorporating amendments brought about by review of Strategic Policy 11, Housing Policy 1 and Housing Policy 3)."
- ES 5 The Department proposes that the lifetime of the Isle of Man Strategic Plan should change from '2001 to 2016' to '2011 to 2026' (a 'Plan period' of 15 years). Other than Housing Policies 1 and 3 and Strategic Policy 11, all other Policies in the Plan remain unchanged.
- ES 6 The 2011 Census revealed that resident population and the number of households was rising. Resident population had increased by 4547 (6%) between 2001 and 2011 and households had increased by 4078 (13%).
- ES 7 The 2011 Census revealed that average household size had fallen from 2.37 in 2001 to 2.33 in 2011 – a reduction of 0.04 per annum. This was not as rapid a fall as predicted in the Isle of Man Strategic Plan 2007.

- ES 8 In calculating new housing needs for the Island, projections for household size are critical to the final figures. Household size can be influenced by many factors.
- ES 9 Three Scenarios were devised for the analysis of household size. Out of the three Scenarios for household size examined, Scenario C was judged to be the most appropriate. Scenario C examined the impact of a gradual reduction in household size (0.04 every 10 years) and was based on the actual fall in household size between 2001 and 2011. Under Scenario C, there would be 4885 more households in 2026 than in 2011.
- ES 10 The application of a vacancy factor is also important in calculating future household needs. A vacancy factor of 4% was applied to the household numbers. This is the same as the Isle of Man Strategic Plan 2007, but further testing and comparison of the figure with other jurisdictions, was undertaken.
- ES 11 The Residential Land Availability Study and Updates have monitored new housing developments on the Island since 2001.
- ES 12 Between 2001 and 2013, 5620 new dwellings had been granted planning approval. At the time of the 2011 Census, this stood at 5400 new dwellings. Analysis undertaken as part of this Review has shown that 5162 of those 5400 approvals recorded in 2011 remain valid.
- ES 13 The majority of the new dwellings were approved in the period up to June 2006 with annual approvals reaching a peak of 784 units (14%) between July 2005 and June 2006 and a low of 140 units (2.5%) between July 2012 and June 2013.
- ES 14 In terms of new homes built or under construction since 2001, this reached 4469 in 2011 and 4872 in 2013.
- ES 15 The North, East and West were dominated by new housing in Ramsey, Douglas and Peel. In the South, development was more evenly spread between Castletown, Port Erin and Port St Mary.
- ES 16 The development data indicates a higher demand for housing development in the East, particularly in Douglas, and a lower demand for housing in the North.
- ES 17 Planning application submissions for new housing units dropped reasonably steadily from 2001 to 2013. From a peak of 445 applications in 2001 (calendar year), applications dropped to 214 applications in 2013 (calendar year).
- ES 18 Planning approvals for new dwellings decreased considerably after June 2007. The general fall in the number of approvals is likely to have been influenced by:
- The all-Island housing need figure and spatial distribution figures for the 4 Areas of the Island set out in the Isle of Man Strategic Plan 2007 (Strategic Policy 11, Housing Policy 1 and Housing Policy 3);
  - The availability of land zoned for residential development which has affected where and when development has taken place;
  - The quality of the land zoned for residential development and the ease to which it can be developed;

- Economic conditions and their impact on the housing market, developer/consumer confidence (including that of government) and the availability of finance, all of which may affect decisions about whether or not to make a planning application; and
- The progress of new Area Plans - this may have impacted upon decisions about pursuing applications on existing sites or waiting for potential new land releases.

ES 19 The amount of land allocated for residential development and still available (which include land allocated on the 1982 Development Plan, Local Plans and the Area Plan for the South) amounts to 148 hectares. There has been little overall change in this amount in recent years but as further Area Plans are produced the breakdown of available land in terms of location, quantity, quality and availability is likely to change.

ES 20 The proposed new housing requirement figure for the Plan period '2011 to 2026' which would be used for Strategic Policy 11 and Housing Policy 1 was calculated by: identifying the difference between the 2011 and 2026 household numbers (4885) and adding a vacancy factor of 4%. The resulting figure was calculated to be 5080. The Area figures were rounded up individually to produce an all-Island housing need figure of 5100.

ES 21 In order to adjust Housing Policy 3, a detailed assessment was undertaken which examined the existing spatial distribution of housing around the Island and a variety of approaches for change.

ES 22 The preferred option was 'Approach 3' which based the distribution of housing on historical development trends but with a clear awareness of: settlement pattern around the Island and the potential of those settlements for growth, proximity to the nearest employment centres and services and relationship with and impact on the strategic highway network.

ES 23 The recommendation for the spatial distribution of the adjusted new housing figure (5100 between 2011 and 2026) is as follows: North 770 dwellings, South 1120 dwellings, East 2440 dwellings, and West 770 dwellings.

ES 24 In summary, the Department recommends that the proposed wording of Strategic Policy 11, Housing Policy 1 and Housing Policy 3 is as follows:

### **Proposed Strategic Policy 11**

The housing needs of the Island will be met by making provision for sufficient development opportunities to enable 5100 additional dwellings (net of demolitions), and including those created by conversion, to be built over the Plan period 2011-2026.

### **Proposed Housing Policy 1**

The housing needs of the Island will be met by making provision for sufficient development opportunities to enable 5100 additional dwellings (net of demolitions), and including those created by conversion, to be built over the Plan period 2011-2026.

### **Proposed Housing Policy 3**

The Island's housing need of 5100 additional dwellings between 2011 and 2026 is to be met by a spatial distribution of housing across the North, South, East and West as follows:

- North                770
- South                1120
- East                 2440
- West                 770
- All Island           5100

# The Isle of Man Strategic Plan Review

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## Paper 1: Housing Demand

This Paper examines the 2011 Census and the Isle of Man  
Population Projections 2011

### 1.0 Introduction

- 1.1 Many government policy documents contain or rely on statistical information about the Island's population and how it is changing. Much of this information, whether it is about the overall number of people on the Island, the age profile of the population or household composition, comes from the Isle of Man Census. The most recent Census was carried out in 2011 and essentially provides a detailed picture of the entire population of the Island. The statistics and projections that have flowed from it allow for documents such as the Isle of Man Strategic Plan, 2007 to be updated.
- 1.2 The full Census in 2001, which was updated by an interim Census in 2006, provided the raw data for the Isle of Man Population Projections 2006 which were used to inform the broad Housing Policies in the Isle of Man Strategic Plan 2007 (see paragraph 3.3 and 3.4 below). It is these Policies which set out the general housing needs of the Island between 2001 and 2016.
- 1.3 The Island's Population Projections are formulated by Government using a Model which can be updated when new Census information becomes available. With revised population projections now available following the 2011 Census, it is an opportune time to review the broad housing figures included in the Isle of Man Strategic Plan, 2007 which relied on earlier projection modelling. It is also timely given the recent mid-term report from the Council of Ministers on the Agenda for Change which recognises that the number of homes will have to increase to meet current and future housing requirements. By proper planning for population growth the Island can create and maintain "well designed, sustainable places where we are able to access the amenities and services we need."<sup>1</sup>
- 1.4 This Paper (Paper 1) is one of three papers which, together, support the Policy changes and approach included in the Draft Isle of Man Strategic Plan. The Draft is essentially the Isle of Man Strategic Plan 2007 but with some changes to certain key figures and supporting text. The new document is titled "The Draft Isle of Man Strategic Plan 2015 - Towards a Sustainable Island (incorporating amendments brought about by review of Strategic Policy 11, Housing Policy 1 and Housing Policy 3)."

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<sup>1</sup> Securing a Sustainable Future for our Island – a Mid-Term Report from the Council of Ministers on the Agenda for Change, November 2014 (extract taken from the National Outcomes, Page 12).



- 1.5 **Paper 1** concentrates on housing demand. It examines the 2011 Census and the Isle of Man Population Projections produced following that Census. It examines the implications of the new figures on the Island's population and anticipates household numbers up to 2026. The Department proposes that the lifetime of the Isle of Man Strategic Plan should change from '2001 to 2016' to '2011 to 2026' (15 years). The year 2026 is considered preferable to 2036 which was included as a possible date in the Preliminary Publicity and to other dates put forward by respondents to the Preliminary Publicity which included the suggestions 2016, 2018 and 2021. Clearly there will be the ability for Government to refine the population projections following the interim Census in 2016 and the full Census in 2021 and the Department will monitor any changes carefully. The Department judges that the 2011 projections allow for sufficient certainty up to 2026 and there is no benefit now in attempting to meet the projected population figures beyond this date.
- 1.6 Part of the methodology in working out future housing needs is to look at household size. Paper 1 highlights the complexities associated with predicting future household size and also sets out a case for including a 'vacancy factor', which makes an allowance for empty properties when examining housing demand.
- 1.7 **Paper 2** concentrates on housing supply. It examines the findings of the Residential Land Availability Study Updates which, to date, have analysed planning approval and residential land availability data between 2001 and 2013. Paper 2 also examines more closely planning approval data between the Census years 2001 and 2011 and the period after 2011 to 2013. Also included in Paper 2 is a summary of land currently zoned for residential development on extant development plans which remains available for development.
- 1.8 **Paper 3** draws together the findings of Papers 1 and 2 and makes key conclusions in respect of the Island's general housing needs up to 2026, how they should be distributed around the Island and how these shall be reflected in specific Policies. It is important to note that the Department is confident that the additional households identified between 2011 and 2026 (which will ultimately translate into additional dwellings required) will be able to be accommodated in line with the existing Spatial Strategy set out in the Isle of Man Strategic Plan 2007 i.e. to focus new development within existing towns and villages or in sustainable urban extensions, avoiding the coalescence of settlements and maintaining their local identity.<sup>2</sup> The evidence to support this is set out in Paper 3.

## 2.0 The Isle of Man Census

### 2.1 Background

- 2.1.1 The Isle of Man Census was held in March 2011 and was conducted by the Economic Affairs Division of the Treasury under the authority of the Census Act 1929 (Economic Affairs is now part of the Cabinet Office). A full Census is held every 10 years and is, according to the

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<sup>2</sup> Isle of Man Strategic Plan 2007, Chapter 5, Spatial Vision, Paragraph 5.7, Page 20.

Census Report produced in April 2012 which was laid before Tynwald, "a comprehensive survey of people and households in the Island."<sup>3</sup>

2.1.2 Unlike other jurisdictions, there is a Government commitment to retaining the Census as a regular survey. The Department recognises that the Isle of Man Census is a prime information source and the information which flows from it will be relied upon when evaluating housing needs in the future.

2.1.3 Despite the accuracy of the Census information, the Department recognises that using this data to predict growth in population and changes in household size is subject to a wide range of influences. Accordingly, whilst a figure will be broken down for the North, South, East and West, it is not intended that these numbers should be referred to as maximum numbers for the Plan Period. The Department's preference shall therefore be to continue with an approach of "Plan, Monitor and Manage"<sup>4</sup>. This essentially means:

- i. planning for population growth and the implications of that growth (for example, on the environment and infrastructure) by the use of statutory planning documents based on an up to date evidence base;
- ii. the monitoring and assessment of new population and household data when it becomes available;
- iii. the monitoring of the number and type of planning approvals for new dwellings and rates of take-up; and
- iv. preparing and reviewing statutory planning documents when necessary to ensure the sufficient provision of new housing land; these may include the allocation of Strategic Reserve Sites for release in the longer term as and when required.

## **2.2 Population growth on the Island**

2.2.1 According to the 2011 Census, resident population on the Isle of Man stands at 84,497<sup>5</sup>. This represents an increase of 5.5% on the 80,058 recorded in the 2006 Census<sup>6</sup>. Population generally has been growing since 1961, when it was 48,133. The chart below shows the projected increase in resident population between 2011 and 2026.

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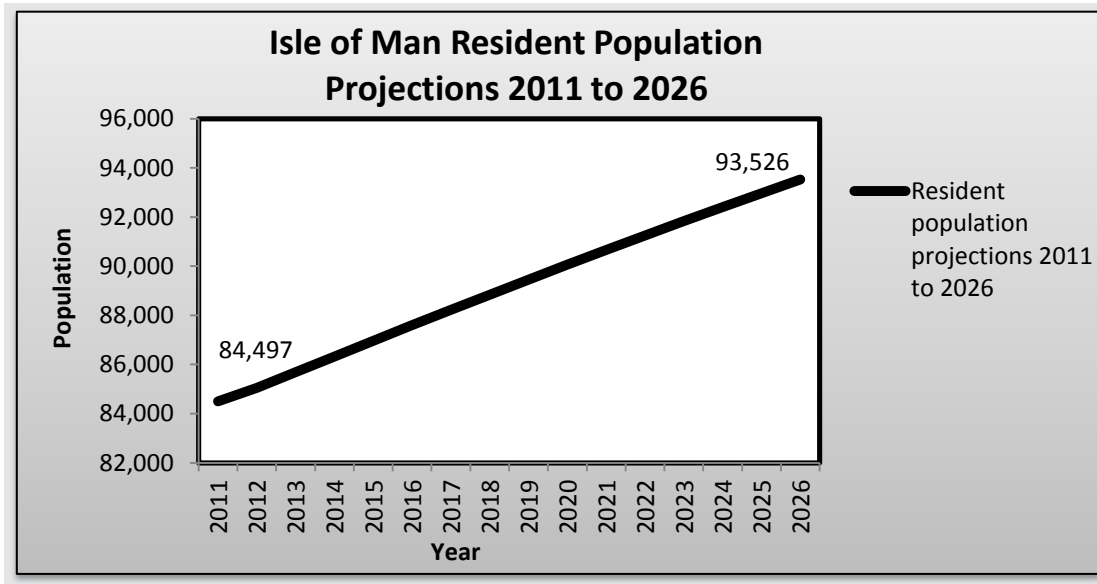
<sup>3</sup> Isle of Man Census Report 2011, Page 4, Isle of Man Government (Treasury), retrieved from <http://www.gov.im/lib/docs/treasury/economic/census/census2011reportfinalresized.pdf>

<sup>4</sup> Isle of Man Strategic Plan 2007, Appendix 1: Definition of 'Plan Monitor Manage.'

<sup>5</sup> 'Resident population' represents the number of residents present on Census night plus residents absent on Census night.

<sup>6</sup> Isle of Man Census Report 2011, Isle of Man Government (Treasury), April 2012 Page 8.

### 2.2.2 Chart 1: Isle of Man Resident Population Projections 2011 to 2026



### 3.0 The Isle of Man Strategic Plan, 2007

3.1 The Isle of Man Strategic Plan was approved by Tynwald in 2007. The Plan used the 2001 full Census (updated in 2006 by the interim Census) to calculate the Island's broad housing requirements between 2001 and 2016. Chapter 8 in the Plan (Housing) included an extract from the Isle of Man (IoM) Population Projections 2006 prepared by Treasury, and Table 8.3 in the Plan presented the figures which were used as the basis for calculations (see Table 1 below and Appendix 1). When examining Table 1 it is important to note that the 'average household size' figure for 2001 was calculated slightly differently than the 'average household size' figure for 2006 and the years thereafter. This is explained further in Section 3.6 below and in Appendix 1.

3.2 The Strategic Plan Policies which set out the Island's broad housing requirements are Strategic Policy 11, Housing Policy 1 and Housing Policy 3. Strategic Policy 11 was repeated in the Housing Chapter as Housing Policy 1 (see below).

#### 3.3 Strategic Policy 11 & Housing Policy 1:

**The housing needs of the Island will be met by making provision for sufficient development opportunities to enable 6000 additional dwellings (net of demolitions), and including those created by conversion, to be built over the Plan period 2001 to 2016.**

### 3.4 Housing Policy 3:

The overall housing provision will be distributed as follows:

- **North**                    **1,200**
- **South**                    **1,300**
- **East**                      **2,500**
- **West**                     **1,000**
- **All Island**              **6,000**

3.5 In terms of Strategic Policy 11 (which was repeated as Housing Policy 1), the number of additional dwellings required by 2016 (6000) was worked out by examining the difference between the number of households in 2001 and the projected number of households in 2016 and adding an additional 4% (to represent a vacancy factor<sup>7</sup>). The final figure of 6006 was rounded down to 6000 (see Table 2). The average household size (taken from the Census) was 2.42 in 2001 (based on resident population) and was predicted to be 2.25 in 2016 (based on residents living in private households).<sup>8</sup> Focusing on the household size projections beyond 2006, the predicted change represented a fall of 0.01 per annum between 2006 and 2016 (2.35 and 2.25 respectively). The figure of 0.01 was based on the best information available at the time and was identified by Treasury (see Appendix 1). Tables 1 and 2 below set out a summary of the projections set out in the Isle of Man Strategic Plan 2007.

**3.5.1 Table 1: The Isle of Man Strategic Plan 2007 figures (a summary of the information set out in the Plan)**

<b>The Isle of Man Strategic Plan, 2007</b>	<b>2001 (Census) Actual Figures</b>	<b>The Isle of Man Strategic Plan, 2007</b>	<b>2016 (IoM Population Projections, 2006) Projected figures</b>
Resident population	76,315	Resident population	85,604
Residents living in private households	Not available in 2007 Plan	Residents living in private households	83,916
Number of households	31,521	Number of households	37,296
Average household size	2.42	Average household size	2.25

<sup>7</sup> The vacancy factor makes allowance for the number of properties which may be vacant at any point in time e.g. awaiting refurbishment or conversion or in the process of being sold (see the Isle of Man Strategic Plan 2007 Page 62, paragraph 8.4.6). See Section 9 for further discussion of this issue.

<sup>8</sup> The difference between the resident population and those living in private households is that the latter excludes all those people in nursing homes with high levels of supportive care and also those in prison.

### 3.6 Explanation of Table 1 - extracted (in part) from Table 8.3 set out in the Isle of Man Strategic Plan, 2007

3.6.1 In 2001, average household size was calculated by dividing the 'resident population' by the 'number of households.' From 2006 onwards, average household size was calculated by dividing the number of 'residents living in private households' (which excludes a small proportion of the overall population living in prison/nursing homes) by the 'number of households' and this method has continued to be used. Figures are now available for 'residents living in private households' in 2001 (which helps when comparing data sets) and these are set out in Table 3 below. Whether using Table 8.3 in the Isle of Man Strategic Plan (reflected in Table 1 above) or the IoM Population Projections based on the 2011 Census (reflected in Table 3), the 'number of households' recorded for 2001 remains the same at 31,521.

### 3.7 The Isle of Man Strategic Plan, 2007: Calculating Housing Demand on the Isle of Man (2001 to 2016)

3.7.1 Housing needs for the Island (2001 to 2016) were calculated using the data set out above in Table 1 with an added vacancy factor (see Section 9). Table 2 sets out how the overall housing need figure for the Island was calculated.

#### 3.7.2 Table 2: Working out the housing demand figure between 2001-2016

Difference between 2001 & 2016 household numbers	+ Vacancy Factor 4%	Total units needed	Rounded down total
5,775 (37,296 - 31,521)	231 (4% of 5775)	6,006 (5775 + 231)	6,000

3.7.2 On the basis of the above, the Isle of Man Strategic Plan 2007 set out in Strategic Policy 11 (and Housing Policy 1) that opportunities for **6000** additional dwellings were needed over the Plan period 2001 to 2016 (see paragraph 3.3 for the full Policy).

## 4.0 The Isle of Man Population Projection Model

4.1 The Isle of Man (IoM) Population Projection Model was devised by Treasury and allows population projections for the Isle of Man to be updated when new Census data becomes available. The 2011 based projections therefore update the 2006 based projections. The primary purpose of the modelling, which essentially provides national projections, is to provide an estimate of the future size and age structure of the population of the Isle of Man,

if specified assumptions about future fertility, mortality and migration were to be realised. It is an official set of projections and is available to all Government Departments who may use it for different purposes depending on their remit. The basic data set remains the same, but whilst Planning Policy may use the projections to estimate the number of new homes required for the next 15 years, the Department of Education and Children, for example, may use the projections to help calculate the number of primary school places required in the next 5 to 10 years. Users of the projection statistics are able to interrogate the data differently to get the most relevant statistics they need; the outcome being that Government resources are more able to be targeted effectively.

- 4.2 The Isle of Man Population Projections 2011 identify the Isle of Man population (as at the 2011 Census date) in terms of:
  - i. total residents;
  - ii. residents living in private households;
  - iii. number of households; and
  - iv. average household size.
- 4.3 The Projection Model uses this actual 2011 data to produce future projection figures for all of these four categories (i to iv). It should be noted, however, that projection figures for the number of households can vary dependent on assumptions made about household size. The Department, after consultation with Economic Affairs, made the final decision on likely changes in household size (see Sections 6 and 7).
- 4.4 The overall projection data set based on the 2011 Census also includes a breakdown of future population by age and sex and examines scenarios for those of pensionable age in the future and how changes in pensionable age in the future would affect dependency ratios<sup>9</sup>.
- 4.5 The national population projections provided by the modelling are critical to the building of possible scenarios for the future demand for housing on the Island. They represent the most up to date statistical information available and the 2011 projections use the same modelling techniques as those used for the Isle of Man Strategic Plan 2007. Because of this consistency, there is the ability to examine earlier projections to see how they have performed. The full Isle of Man Population Projection data set (2011 to 2036) which was published at the time of the Preliminary Publicity for this Review is set out in Appendix 2.

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<sup>9</sup> Dependency ratio is an 'age to population' ratio of those typically not in work (the dependent part) and those typically in work (the productive part), Isle of Man Census Report 2011, Isle of Man Government Treasury, April 2012, Page 6.

## **5.0 Using projections to update the housing figures in the Isle of Man Strategic Plan, 2007**

5.1 In order to review the broad housing figures (Island-wide and by Area) set out in Strategic Policy 11 and Housing Policies 1 and 3, there are a number of key figures that need to be available to allow the calculations to be made. It is the Department's intention to change the lifetime of the Plan from '2001 to 2016' as it was in the 2007 Plan, to '2011 to 2026', using the 2011 Census Year as the baseline. All of the 2011 figures will therefore be *actual* figures and those beyond 2011 up to 2026 will be *projections*, based on the 2011 Census results, and analysis of past data.

5.2 The key figures that are required to calculate housing figures from 2011 to 2026 are:

- the number of residents living in private households as at the 2011 Census date and projection data for residents living in private households in 2026;
- average household size as at the 2011 Census date and projections for average household size in 2026;
- the number of private households as at the 2011 Census date and projections for the number of households in 2026;
- an assumption for a vacancy factor (%); and
- a spatial distribution figure for each Area (i.e. a % of the total housing figure to be allocated to each Area).

5.3 The net migration figure is also essential but this is calculated as part of the official population projections and is thus already integrated into the projected figure for 'Resident Population'.

5.4 The key issues relating to:

- household size;
- the use of a vacancy factor;
- net migration; and
- the spatial distribution of housing (this is covered in detail in Paper 3),

are dealt with further in the Sections which follow (6.0 to 10.0) or in Papers 2 and 3 where highlighted.

## **6.0 Average Household Size**

6.1 In the Isle of Man Strategic Plan 2007, average household size between 2006 and 2016 was predicted to fall. This assumption had an impact on the final number of households expected in 2016 and subsequently the number of new homes required. Making projections about household size is one of the key steps in working out how many new homes are required in the future and the average household size figure used can have a significant effect on the overall housing requirement figure set out for the Island. It is important therefore to

establish the most likely trend in household size. It is also interesting to look back to the expected change in household size set out the Isle of Man Strategic Plan 2007 to see if reality mirrored the projections. The Preliminary Publicity information for the Strategic Plan Review did not set out any scenarios for how household size might be expected to change in the future; it was judged that this issue was best addressed as part of the preparation of the Draft Isle of Man Strategic Plan itself.

6.2 The IoM Population Projections set out in the Isle of Man Strategic Plan, 2007 predicted a drop in household size of 0.01 per year between 2006 and 2016 (see Appendix 1). The Plan specified that in 2011, average household size was predicted to be 2.30 (persons per dwelling) and in 2016 was predicted to be 2.25 (persons per dwelling).

6.3 The 2011 Census recorded the actual average household size in 2011 as being 2.33, meaning that households were getting smaller, although the reduction in size was not as rapid as predicted by the 2006 Population Projections set out in the Isle of Man Strategic Plan 2007. Household size can be affected by a number of variables and this can make it difficult to predict future changes. It is beneficial therefore to examine a number of possible scenarios for change before confirming which is the most likely. Many different scenarios could be looked at but the new modelling provided by Treasury (based on the 2011 Census) has looked at three Scenarios for comparison purposes, following discussion with the Department (see Table 4).

6.4 Tables 3 and 4 below set out i. the key population figures from the 2001, 2006 and 2011 Censuses and ii. 3 different Scenarios for future average household size. Chart 2 shows household growth alongside average household size and Appendix 3 sets out the full set of projections from 2011 to 2026 for all 3 Scenarios.

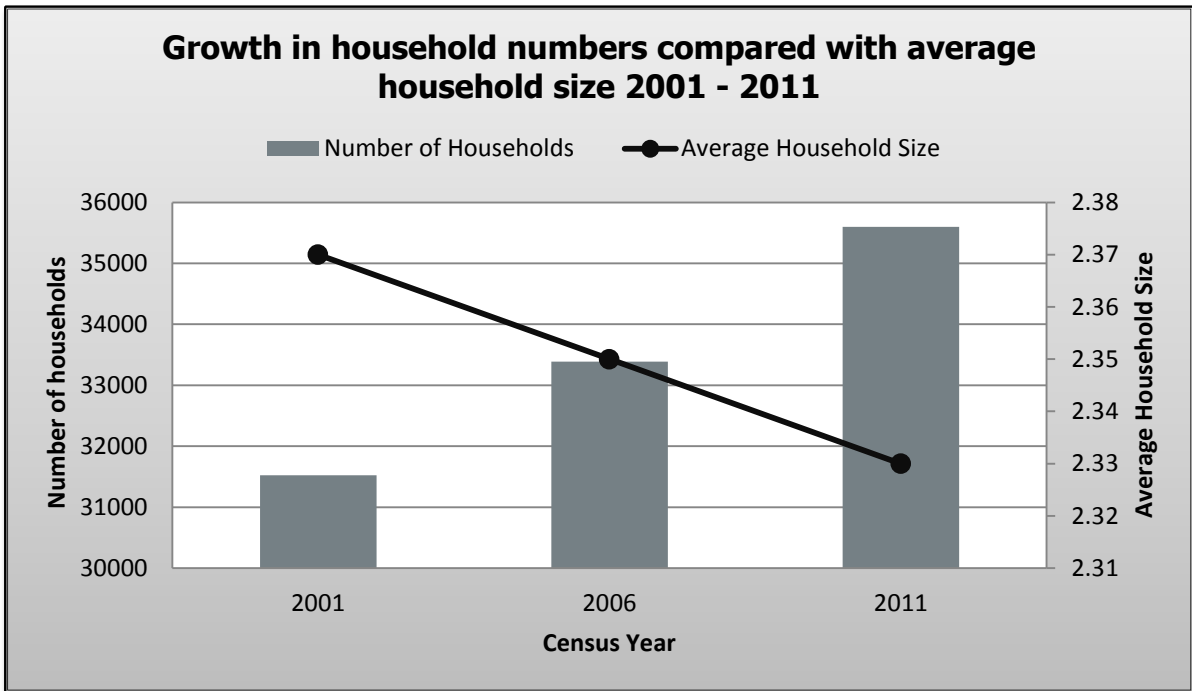
**6.4.1 Table 3: Key population figures from the 2001, 2006 (interim) and 2011 Censuses**

<b>Census Data (actual data)</b>	<b>2001<sup>10</sup> (actual)</b>	<b>2006 (actual)</b>	<b>2011 (actual)</b>
Residents living in private households	74,815	78,479	83,026
Number of households	31,521	33,390	35,599
Average household size	2.37	2.35	2.33

<sup>10</sup> The 'residents living in private households' figure was not available for the year 2001 in the IoM Population Projections set out in the Strategic Plan, 2007. Figures then were based on 'Resident Population.' Table 3 figures for 2001 are taken from the 2011 Projections (see Appendix 2).



**6.4.2 Chart 2: Line chart to show growth in household numbers between 2001 and 2011 alongside changes in average household size**



**6.4.3 Table 4: Scenarios for possible future changes in average household size**

<b>Scenario A</b>	Shows the impact of a reduction of household size by 0.01 per year (following the same assumption set out in the Strategic Plan 2007).
<b>Scenario B</b>	Shows the impact of household size remaining constant at 2011 levels (2.33). This assumes 2.33 persons per dwelling for the duration of the plan period 2011 to 2026.
<b>Scenario C</b>	Shows a gradual reduction in household size (0.04 every 10 years) based on analysis of the actual reduction in household size between 2001 and 2011.

## 7.0 The scenarios for household size (A, B and C) and implications for future household numbers

7.1 The three Scenarios set out above in Table 4 have been used to calculate the Island’s likely household numbers in 2026. It is useful to compare different scenarios particularly as it is recognised that household size rates are difficult to predict accurately. Scenarios A to C set out above are sufficiently different to allow useful comparisons. The scenarios can be used to examine the Island’s overall household numbers if, in the future:

- *there is a continuation of a reduction in household size in line with predictions in the current Strategic Plan (Scenario A);*
- *household size is maintained at levels recorded in the 2011 Census (Scenario B); or*
- *a slower reduction in household size is allowed for over time in line with historical analysis (Scenario C).*

7.2 These are considered to be the most useful Scenarios to compare as they are based on historical data for former predictions.

7.3 The data in the following tables sets out actual figures for households in 2011 for each of the Scenarios and looks ahead to 2026 using the 2011 based population projections. Paper 3 takes the 3 Scenarios further by calculating how the figures translate into specific numbers in respect of housing demand.

### 7.4 Scenario A: Shows the impact of a reduction of household size by 0.01 per year (following the same assumption set out in the Isle of Man Strategic Plan 2007)

#### 7.4.1 Table Set 5a: Existing and Projected households

Scenario A	2011	2026
Residents living in private households	83,026	91,898
Number of Households	35,599	42,155
Average Household Size	2.33	2.18

#### 7.4.2 Table Set 5a: Number of additional households in 2026 compared to 2011

Scenario A	2026
Difference between 2011 actual household figure (35,599) and projected household figure 2026 (42,155)	6,556

7.4.3 Under **Scenario A**, there would be **6556** more households in 2026 than in 2011.

**7.5 Scenario B: Shows the impact of household size remaining constant at 2011 levels (2.33). This assumes 2.33 persons per dwelling for the duration of the Plan Period 2011 to 2026**

**7.5.1 Table Set 6b: Existing and Projected Households**

<b>Scenario B</b>	<b>2011</b>	<b>2026</b>
Residents living in private households	83,026	91,898
Number of Households	35,599	39,441
Average Household Size	2.33	2.33

**7.5.2 Table Set 6b: Number of additional households in 2026 compared to 2011**

<b>Scenario B</b>	<b>2026</b>
Difference between 2011 actual household figure (35,599) and projected household figure 2026 (39,441)	3,842

7.5.3 Under **Scenario B**, there would be **3842** more households in 2026 than in 2011.

**7.6 Scenario C: Shows a gradual reduction in household size (0.04 every 10 years) based on analysis of the actual reduction in household size between 2001 and 2011**

**7.6.1 Table Set 7c: Existing and Projected Households**

<b>Scenario C</b>	<b>2011</b>	<b>2026</b>
Residents living in private households	83,026	91,898
Number of Households	35,599	40,484
Average Household Size	2.33	2.27

### 7.6.2 Table Set 7c: Number of additional households in 2026 compared to 2011

Scenario C	2026
Difference between 2011 actual household figure (35,599) and projected household figure 2026 (40,484)	4,885

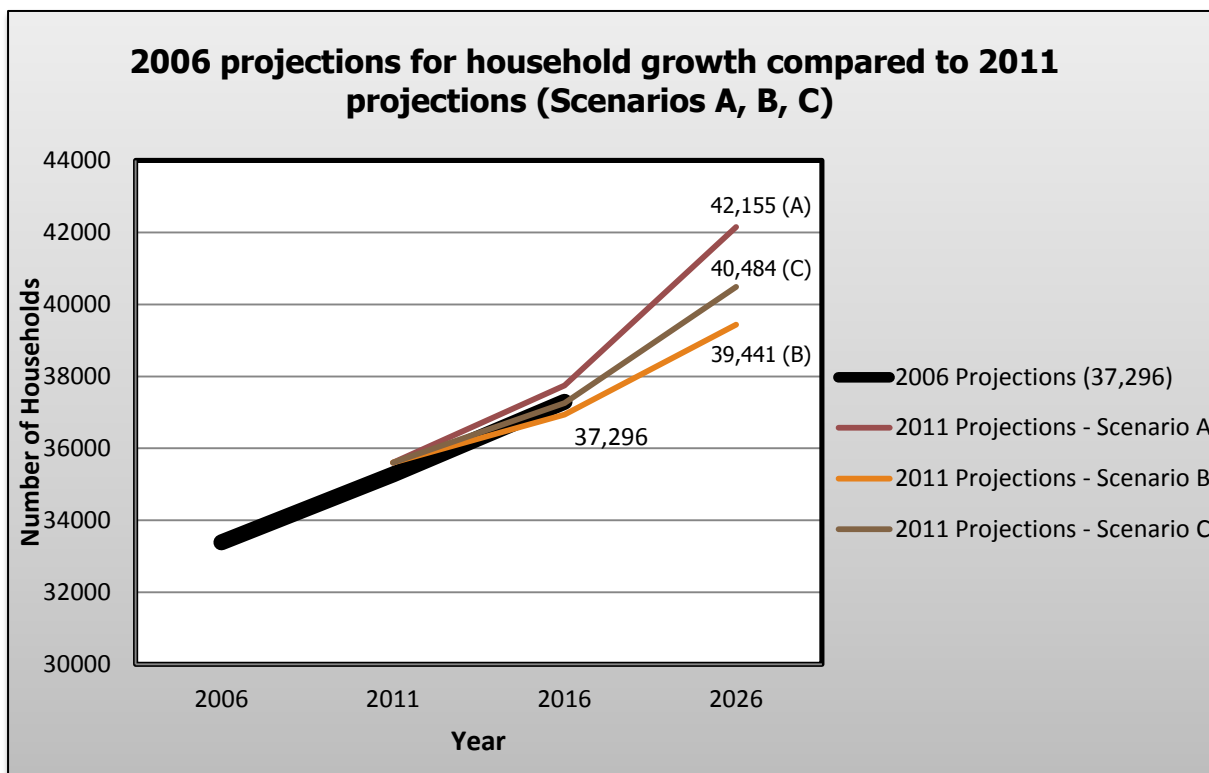
7.6.3 Under **Scenario C**, there would be **4885** more households in 2026 than in 2011.

### 7.7 A summary of the Scenarios

Under <b>Scenario A</b> , there will be <b>6556</b> more households in 2026 than in 2011
Under <b>Scenario B</b> , there will be <b>3842</b> more households in 2026 than in 2011
Under <b>Scenario C</b> , there will be <b>4885</b> more households in 2026 than in 2011

7.7.1 In order to see how the 3 identified Scenarios for household size compare to the 2006 Projections assumed in the Isle of Man Strategic Plan 2007, the figures are set out in the chart below (Chart 3).

**7.7.2 Chart 3: Household growth projections 2011 (Scenarios A, B and C) compared to 2006 household growth projections**



7.7.3 Paper 3 discusses which Scenario is most appropriate to use and explains why this is the case.

**8.0 Household size on the Isle of Man compared to other jurisdictions**

8.1 Analysis of the available Census information since the last interim Census (2006) has revealed that average household size on the Isle of Man in 2001 was 2.37 rather than 2.42 recorded in the Isle of Man Strategic Plan 2007 (this is explained earlier in section 3.6 and shown in Tables 1 and 3). In 2011, the Census identified the average household size figure as being 2.33; indicating a drop in household size over the 10 year period of 0.04. However, this fall was not at the rate predicted in the Isle of Man Strategic Plan 2007 which set out in Table 8.3 of the Plan that average household size in 2011 was projected to be 2.30. The 2011 Census showed that the fall in household size was more gradual than expected (0.004 every year, not 0.01 ) and is evidence of the difficulty in modelling future average household size and, as a consequence, predicting overall household numbers.

8.2 It is useful to compare household size on the Isle of Man with other jurisdictions. For instance, when comparing rates with England, there is evidence to show that Manx households are currently smaller than those in England. Evidence from the Housing

Statistical Release<sup>11</sup> shows that in England, the average household size is expected to fall from 2.36 in 2011 to 2.33 in 2021. Clearly the households on the Island are already smaller than that in England. On this evidence alone, the situation in England is not expected to be that of the Isle of Man now, until 2021.

8.3 In Scotland, average household size, according to the Scotland’s Census 2001 (Release 1B)<sup>12</sup> is 2.19 people per household. Average household size in Scotland has dropped by 0.08 over the 10 years between 2001 and 2011. Single person households accounted for 35% of all households in Scotland. In Jersey, the 2011 Census recorded average household size as 2.31 per household.<sup>13</sup>

8.4 In Northern Ireland<sup>14</sup>, the Census Office of the Northern Ireland Statistical Research Agency published the initial findings of the Census which revealed that the average household size in 2011 was 2.54. In terms of future projections, the only projections available are those based on 2008 figures<sup>15</sup>. This Statistical Report predicted that the average household size would be 2.49 in 2011 not 2.54 (actual) and 2.43 in 2016 and 2.32 in 2026. There was clearly an overestimate in 2008 in the rate of drop in household size. The new Census figures will clearly have implications for any new projections in Northern Ireland. On the basis of the above, the Isle of Man figures appear to be more in line with the average figures in England and Jersey than in Scotland or Northern Ireland. This is shown in Table 8 below.

**8.4.1 Table 8: Average household size on the Isle of Man compared to other jurisdictions**

<b>Location</b>	<b>Average Household Size 2011</b>
Northern Ireland	2.54
England	2.36
<b>Isle of Man</b>	<b>2.33</b>
Jersey	2.31
Scotland	2.19

8.5 On the Isle of Man, the downward trend in household size has been slowing for some time, but trying to accurately predict changes in the years ahead can be difficult. Household numbers and composition are dependent on a number of variables and are vulnerable to demographic and policy changes. Whilst it is difficult to predict what will happen in the

<sup>11</sup> Housing Statistical Release, 09/04/13 Household Interim Projections 2011- 2021, England, retrieved from <https://www.gov.uk/government/publications/household-interim-projections-2011-to-2021-in-england>

<sup>12</sup> Retrieved from <http://www.scotlandscensus.gov.uk/en/news/articles/release1B.html>

<sup>13</sup> Retrieved from

<http://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20CensusBulletin3%2020120113%20SU.pdf>

<sup>14</sup> Retrieved from [http://www.nisra.gov.uk/Census/pop\\_2\\_2011.pdf](http://www.nisra.gov.uk/Census/pop_2_2011.pdf)

<sup>15</sup> Retrieved from <http://www.nisra.gov.uk/demography/default.asp21.htm>

future, there is a general understanding of the factors which tend to have implications for household size. These include:

a. **An ageing population -**

- i. The 2006 Census recorded 18,284 people over 60 (22% of resident population). The 2011 Census recorded 20,800 people over 60 (25% of resident population). It is important to note that in terms of the demographic breakdown, the proportion of people over 60 is increasing. The issues associated with an ageing population on the Isle of Man were acknowledged in the Progress and Priorities Statement to Tynwald in October 2013.<sup>16</sup> It was acknowledged that there will be implications for healthcare, social services and pensions on the Island. The ageing population is an issue which needs to be dealt with by Government as a whole, not just by the Planning system.
  - ii. Key to how an ageing population affects household size is i. where people live (this may be in their own homes or in sheltered/special needs housing) and ii. the number of older people in the resident population. The answers to these questions will have consequences for the composition of the Island's households. Decisions about where to live may be based on health, family circumstances or affordability. Many older people may remain comfortably in their homes, maintaining or even growing single or 2 person households, or they may vacate their homes to live more comfortably in housing that provides more support.
  - iii. Decisions about whether to go into sheltered housing or special needs housing/nursing homes may depend on the level of support and care that is provided at home. For some, the ability to remain in one's own home may be compromised by health. For example, if support at home is good, which is often underpinned by government help and assistance, this may help to keep people in their own homes, maintaining single or 2 person households. Others may have to leave their homes for special needs housing. Many may downsize into smaller properties in order to release the equity in their homes. For those that are privately owned, this would release housing units back into the wider housing market. For those in public sector housing this would allow properties to be occupied by younger, potentially larger families, in housing need.
- b. **Increase in fertility rates** – a rise in fertility rates had led to an increase in the number of current and projected 0-15 year olds on the Isle of Man. According to the Economic Affairs Division, the projected average number of births is expected to rise in the next 25 years. This may affect the rate of household formation and their size.
- c. **Changes in family relationships** - these have an impact on household size. In simple terms, and as an example, a high divorce rate may lead to an increase in the number of single person households.

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<sup>16</sup> <http://www.gov.im/media/788488/cmooctoberstatementtotynwald15oct2013.pdf>

d. **Economic growth** - the ease with which finance can be secured for mortgages can be linked to economic growth rates. Interest rates can affect the cost of borrowing which may have an impact on household formation. The harder it is for young people to get on the property ladder the longer they will live at home which can affect average household size. In the UK, the Office of National Statistics reported in 2013 that the number of 20-30 year olds living with their parents increased by 25% since 1996<sup>17</sup>. The affordability of properties can therefore be a factor affecting the creation of new households.

8.6 Given the complexities associated with the factors which can affect household size, it is necessary to examine more closely the 3 identified Scenarios for household change before deciding which one will most likely reflect the Island's situation. This will assist in the long term planning for growth and development. It is important to understand that all of the Scenarios result in some level of growth and need for additional housing. It is also of interest to note that there are no absolute certainties about any one of the Scenarios but it is useful to look at more than one possible outcome for household change. It is also vital to have a direction to head in and some level of certainty upon which to base key policy decisions (the different Scenarios are further explored in Paper 3). Assumptions about household size clearly affect the number of households and thus the number of dwellings required in the future. Another factor which affects this figure is the number of vacant properties on the Island.

## 9.0 The use of a 'Vacancy Factor'

9.1 The Isle of Man Strategic Plan, 2007, used a vacancy factor of 4%. Sometimes referred to as a 'vacancy rate', this was to allow for properties which were empty at the time when the Census was carried out, and included, for instance, those properties which were undergoing refurbishment or conversion or were in the process of being sold. The impact of a vacancy factor of 4% on the final broad housing figures in the current Plan is set out in Table 2. In summary, a total of 231 units (representing a 4% vacancy factor) were added on to the household figure of 5775 to give a total of 6006. This was rounded down to 6000 which was the figure identified in both Strategic Policy 11 and Housing Policy 1.

9.2 It is important to review whether the inclusion of a vacancy factor is still necessary and reflect on the percentage used previously. As part of this assessment, it is also important to look at the situation in other places.

9.3 According to a report in the Institute of Economic Affairs (April 2012)<sup>18</sup>, the UK's vacancy rate stood at 3.4% - one of the lowest in Europe. The article went on to state that "in a dynamic housing market there will always be at least transitory vacancies." This is a

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<sup>17</sup> Retrieved from <http://www.ons.gov.uk/ons/rel/family-demography/young-adults-living-with-parents/2013/sty-young-adults.html>

<sup>18</sup> IEA Discussion Paper No.38 'Abundance of land, shortage of housing' (2012), Kristian Niemietz retrieved from <http://www.iea.org.uk/sites/default/files/publications/files/Abundance%20of%20Land%20Shortage%20of%20Housing.pdf>



reminder that the vacancy rate figure will be most unlikely ever to reach zero as there needs to be a number of properties vacant at any one time in order for the market to operate.

- 9.4 Another Study undertaken in 2013 by the Charity 'Empty Homes', reported that the vacancy rate in England was 2.79%<sup>19</sup>. It was reported in March 2013, that the housing vacancy rate in the Republic of Ireland was 15% compared to the UK which then had a vacancy rate of 3.2%<sup>20</sup>. The Isle of Man has not witnessed the house price collapse experienced in Ireland which was reportedly a consequence of: a deep recession, an oversupply of houses, a reduction of mortgage lending as a result of banking losses and falling property prices. There is no evidence to suggest that the vacancy rate on the Isle of Man is comparable with Ireland.
- 9.5 In Scotland, vacancy rates were reported to be 2.8%<sup>21</sup> in 2013, which is below the average figures reported for the UK generally. Even so, it has been recognised that there is a wide variation across the Country. It was reported that the proportion of vacant dwellings was generally lower in less depressed areas of Scotland. In Jersey, the 2011 Census revealed a much higher vacancy rate of 7%<sup>22</sup>.
- 9.6 In the Isle of Man, recent Government Surveys have not found vacancy rates on the Island to be an issue. In 2005, the Empty Properties Initiative suggested that there was no clear evidence that the problem of empty properties on the Isle of Man was an overly significant one. The Survey focused on the issue of long term empty properties. The Private Sector House Condition Survey 2007 found that the majority of vacant private homes were in transition and were expected to return to occupation in the short term. The findings of both these Surveys were reported in the Housing Progress Review Report October 2010 (Department of Social Care).<sup>23</sup> In November 2013, the Housing Review Recommendations Report was presented to Tynwald by the Department of Social Care. The Review focussed on affordable housing need and did not include any statistical data on empty homes.<sup>24</sup> The Policy Recommendations set out in the Report were approved by Tynwald.
- 9.7 Clearly, depending on the statistical source examined, the date when the data was collected and which countries are examined, the vacancy rates reported can differ. The Isle of Man Strategic Plan, 2007, stated that "it is usual to apply a vacancy factor of between 3% and 5%" (page 63). A vacancy factor of 4% was selected to reflect local circumstances. The vacancy rate in England between 1982 and 2006 was reported in ECFIN Country Focus 2008 to be an average of 3% (ranging between 2% and 4%)<sup>25</sup>. Table 9 sets out the typical vacancy rates for a number of close neighbours and the Island of Jersey.

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<sup>19</sup> Empty Homes, retrieved from <http://www.emptyhomes.com/statistics-2/empty-homes-statistic-201112/>

<sup>20</sup> Pettinger (2013) 'Irish property market – boom and bust' Retrieved from <http://www.economicshelp.org/blog/7334/economics/irish-property-market-boom-and-bust/>

<sup>21</sup> Retrieved from <http://www.gro-scotland.gov.uk/statistics/theme/households/estimates/2013/index.html>

<sup>22</sup> Retrieved from <http://www.gov.je/Government/Census/Census2011/Pages/2011CensusResults.aspx>

<sup>23</sup> Retrieved from [http://www.gov.im/media/257643/housing\\_policy\\_review2010.pdf](http://www.gov.im/media/257643/housing_policy_review2010.pdf)

<sup>24</sup> <http://www.gov.im/about-the-government/departments/health-and-social-care/housing/housing-policy-review/>

<sup>25</sup> [http://ec.europa.eu/economy\\_finance/publications/publication13282\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication13282_en.pdf)

### 9.7.1 Table 9: Average Vacancy Rates

<b>Location</b>	<b>Average Vacancy Rates %</b>
Republic of Ireland	15
Jersey	7
<b>Isle of Man<sup>26</sup></b>	<b>4</b>
England	2.8
Scotland	2.8

9.8 The Department judges after examining: the existing vacancy rate figure in the Isle of Man Strategic Plan 2007, the general situation in respect of empty properties on the Island, and the situation across the UK and Ireland, that the use of a vacancy factor should be retained and that this should be set at a level of 4%. The impact of a 4% vacancy factor on the demand side of the housing figures is addressed in Paper 3.

## 10.0 Migration

10.1 Following the 2006 interim Census, the raw population figures in the official Population Projections were adjusted to allow for inward and outward migration. The rate of net inward migration was set at 500 per annum by the projection modelling. The latest 2011 Projections have kept to this previous assumption of 500 per annum. The Department accepts the assumption by the Economic Affairs Division about the rate of net migration and does not propose to alter the figures further.

## 11.0 Summary – Paper 1

11.1 The overall housing numbers in the Isle of Man Strategic Plan 2007 (Strategic Policy 11, Housing Policy 1 and Housing Policy 3) were calculated using the 2001 Census as updated by the 2006 interim Census and the IoM Population Projection figures.

11.2 In calculating housing needs for the future, the 2011 Census and the new Population Projections are the most up to date survey data on population available and will be used to inform the Strategic Plan Review.

11.3 The lifetime of the Isle of Man Strategic Plan as reviewed is intended to be from 2011 to 2026.

11.4 In order to update the Island's housing needs up to 2026, household size is a key consideration. Average household size on the Isle of Man has dropped from 2.37 in 2001 to

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<sup>26</sup> Vacancy Rate according to the Isle of Man Strategic Plan 2007

2.33 in 2011– a fall of 0.04 over 10 years. This drop has not been as fast as that anticipated in the Strategic Plan 2007.

11.5 Household size is affected by a number of variables and is often difficult to predict.

11.6 In 2011, household size in the Isle of Man was lower than Northern Ireland and England and higher than Jersey and Scotland. The Island reflects the situation in Jersey more than the others.

11.7 Three scenarios for household size in the future have been identified which have allowed for useful comparisons and are summarised below.

11.8 Scenario A examined the impact of a reduction of household size by 0.01 per year (the scenario set out in the Strategic Plan 2007). Under Scenario A, there will be 6556 more households in 2026 than in 2011.

11.9 Scenario B examined the impact of household size remaining constant at 2011 levels (2.33). Under Scenario B, there will be 3842 more households in 2026 than in 2011.

11.10 Scenario C examined the impact of a gradual reduction in household size (0.04 every 10 years) based on the actual figures between 2001 and 2011. Under Scenario C, there will be 4885 more households in 2026 than in 2011.

11.11 A vacancy rate of 4% is to be integrated into the household figures. This figure is lower than the Republic of Ireland and Jersey but higher than England and Scotland.

11.12 The Isle of Man Population Projections 2011 assumed a net migration of 500 per annum and the Department is content to accept this assumption.

## **12.0 Conclusions – Paper 1**

12.1 Paper 1 has attempted to set out the housing demands on the Isle of Man between 2011 and 2026 and supports the proposed Policies and text as set out in the Draft Isle of Man Strategic Plan. To gain a full understanding of the population projections and the subsequent changes to the Isle of Man Strategic Plan, it is important to read Evidence Papers 2 and 3.

12.2 Paper 2 addresses the issues associated with housing supply and looks at planning approval data since 2001.

12.3 Paper 3 brings together all of the available information (including recommendations about the use of the most appropriate Scenario for household size) and includes the revised wording of Policies Strategic Policy 11, Housing Policy 1 and Housing Policy 3 which are included in the Draft Isle of Man Strategic Plan 2015.

## Appendix 1:

### Extract from the Isle of Man Strategic Plan 2007 (Chapter 8 Housing, Table 8.3 'Future population levels, household sizes and number of households', page 62)

<b>IOM POPULATION PROJECTION MODEL</b>											
	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>						
Resident population	76,315	77,156	77,400	77,848	78,300	From 2001-2005, average household size was calculated by dividing the resident population by the number of households. The figures for 2006 are based on dividing the number of residents living in private households (i.e. excluding those in institutions) by the number of households. Beyond 2006, the figures are based on projections of the number of residents living in private households and on a household size falling by 0.01 per annum.					
Average household size	2.42	2.41	2.40	2.39	2.38						
Number of households	31,521	32,015	32,250	35,572	32,899						
Additional households		494	235	322	327						
	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Resident population	80,058	80,585	81,119	81,660	82,209	82,765	83,324	83,889	84,458	85,029	85,604
Residents living in private households	78,479	78,995	79,519	80,049	80,587	81,133	81,681	82,234	82,792	83,352	83,916
Average household size	2.35	2.34	2.33	2.32	2.31	2.30	2.29	2.28	2.27	2.26	2.25
Number of households	33,390	33,759	34,128	34,504	34,886	35,275	35,668	36,068	36,472	36,882	37,296
Additional households	491	369	369	376	382	389	393	400	404	410	414

## Appendix 2: Isle of Man Population Projections 2011 (data provided by Economic Affairs – Cabinet Office)

**Table Ai: Total Resident Population and Residents living in Private Households projected to 2036**

There are no projections for the number of residents living in private households. As a result, the ratio between the 'total residents' and 'those living in private households' has been kept constant over time.

The drop in figures from the 'total residents' to 'residents living in private households' is accounted for by removing those people in prison and in nursing homes who have high levels of supportive care.

Year	1971*	1981	1991	1996	2001	2006	2011	2012	2013	2014	2015	2016	2017	2018
Total residents			69,788	71,714	76,315	80,058	84,497	85,047	85,682	86,322	86,963	87,598	88,226	88,845
Residents living in private household	UA	UA	UA	UA	74,815	78,479	83,026	83,567	84,190	84,820	85,449	86,073	86,690	87,298
Number of households	18,927	24,348	27,316	29,377	31,521	33,390	35,599							
Average household size	2.65	2.61	2.49	2.38	2.37	2.35	2.33							
Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total residents	89,455	90,059	90,656	91,246	91,829	92,405	92,971	93,526	94,068	94,594	95,108	95,610	96,099	96,566
Residents living in private household	87,898	88,491	89,078	89,657	90,231	90,797	91,353	91,898	92,430	92,947	93,452	93,945	94,426	94,884
Year	2033	2034	2035	2036										
Total residents	97,010	97,432	97,833	98,213										
Residents living in private household	95,321	95,736	96,130	96,503										

UA = Unavailable

Data between 1971 and 2011 is actual data based on past Censuses

Data between 2012 and 2036 is based on projection modelling using the 2011 Census

\* 1971 figures are based on Census Population rather than Resident Population

**Table Aii: Population Projections 2011 to 2036 using the existing model for retirement age**

Rate of 'Net Inward Migration' has been assumed by the Model to be 500 (same as the Isle of Man Strategic Plan 2007).

Working age is set at 16-64 for men, 16-59 for women (the same assumptions as in the Isle of Man Strategic Plan 2007 but which may change in the future - see Table A3).

Retirement age is set at 65 for men, 60 for women (the same assumptions as in the Isle of Man Strategic Plan 2007 but which may change in the future - see Table A3).

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>0-15</b>	15,036	15,038	15,084	15,150	15,210	15,273	15,454	15,519	15,614	15,728	15,825	15,910	15,955	16,071
Working Age	51,614	51,646	51,748	51,920	52,108	52,291	52,327	52,398	52,471	52,502	52,538	52,539	52,536	52,425
Retired Age	17,847	18,364	18,851	19,252	19,645	20,034	20,445	20,927	21,370	21,829	22,293	22,797	23,339	23,910
Dependency Ratio	0.64	0.65	0.66	0.66	0.67	0.68	0.69	0.70	0.70	0.72	0.73	0.74	0.75	0.76
<b>TOTAL</b>	<b>84,497</b>	<b>85,047</b>	<b>85,682</b>	<b>86,322</b>	<b>86,963</b>	<b>87,598</b>	<b>88,226</b>	<b>88,845</b>	<b>89,455</b>	<b>90,059</b>	<b>90,656</b>	<b>91,246</b>	<b>91,829</b>	<b>92,405</b>
	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>		
0-15	16,027	16,058	16,065	16,123	16,099	16,073	16,051	16,037	16,031	16,033	16,043	16,059		
Working Age	52,500	52,496	52,455	52,356	52,327	52,355	52,351	52,378	52,380	52,349	52,422	52,495		
Retired Age	24,444	24,971	25,548	26,115	26,682	27,182	27,697	28,150	28,598	29,050	29,367	29,660		
Dependency Ratio	0.77	0.78	0.79	0.81	0.82	0.83	0.84	0.84	0.85	0.86	0.87	0.87		
<b>TOTAL</b>	<b>92,971</b>	<b>93,526</b>	<b>94,068</b>	<b>94,594</b>	<b>95,108</b>	<b>95,610</b>	<b>96,099</b>	<b>96,566</b>	<b>97,010</b>	<b>97,432</b>	<b>97,833</b>	<b>98,213</b>		

**Table Aiii: Population Projections 2011 to 2036 using possible new assumptions/modelling for retirement age**

Rate of 'Net Inward Migration' has been assumed by the Model to be 500 (same as the Isle of Man Strategic Plan 2007).

Working age: 16-64 for men, 16-59 for women.

New assumptions based on one possible scenario for changes to retirement age: Model assumes retirement age of 65 for men. For women, this could rise from 60 to 65 by 2018, to 66 by 2020 and to 67 by 2026 for both men and women.

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
0-15	15,036	15,038	15,084	15,150	15,210	15,273	15,454	15,519	15,614	15,728	15,825	15,910	15,955	16,071
Working Age	51,890	52,188	52,562	52,976	53,403	53,821	54,447	55,129	55,793	56,437	56,562	56,735	56,838	56,801
Retired Age	17,572	17,821	18,037	18,196	18,350	18,504	18,325	18,197	18,048	17,894	18,269	18,601	19,037	19,533
Dependency Ratio	0.63	0.63	0.63	0.63	0.63	0.63	0.62	0.61	0.60	0.60	0.60	0.61	0.62	0.63
<b>TOTAL</b>	<b>84,497</b>	<b>85,047</b>	<b>85,682</b>	<b>86,322</b>	<b>86,963</b>	<b>87,598</b>	<b>88,226</b>	<b>88,845</b>	<b>89,455</b>	<b>90,059</b>	<b>90,656</b>	<b>91,246</b>	<b>91,829</b>	<b>92,405</b>
Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
0-15	16,027	16,058	16,065	16,123	16,099	16,073	16,051	16,037	16,031	16,033	16,043	16,059		
Working Age	57,543	58,211	58,320	58,327	58,336	58,381	58,314	58,300	58,277	58,303	58,260	58,229		
Retired Age	19,401	19,256	19,683	20,144	20,673	21,156	21,734	22,229	22,701	23,096	23,529	23,925		
Dependency Ratio	0.62	0.61	0.61	0.62	0.63	0.64	0.65	0.66	0.66	0.67	0.68	0.69		
<b>TOTAL</b>	<b>92,971</b>	<b>93,526</b>	<b>94,068</b>	<b>94,594</b>	<b>95,108</b>	<b>95,610</b>	<b>96,099</b>	<b>96,566</b>	<b>97,010</b>	<b>97,432</b>	<b>97,833</b>	<b>98,213</b>		

### Appendix 3: Isle of Man Population Projections (2011 to 2026) showing 3 scenarios for household change

(data provided by Economic Affairs – Cabinet Office)

	1971*	1981	1991	1996	2001	2006
<b>Total residents</b>			69,788	71,714	76,315	80,058
<b>Residents living in private households</b>	U/A	U/A	U/A	U/A	74,815	78,479
<b>Number of households</b>	18,927	24,348	27,316	29,377	31,521	33,390
<b>Average household size</b>	2.65	2.61	2.49	2.38	2.37	2.35
<b>Change in household size from previous census p.a</b>		-0.004	-0.012	-0.02	-0.002	-0.004

	2011	2012	2013	2014	2015	2016	2017	2018
<b>Total residents</b>	84,497	85,047	85,682	86,322	86,963	87,598	88,226	88,845
<b>Residents living in private households</b>	83,026	83,567	84,190	84,820	85,449	86,073	86,690	87,298
<b>Number of households</b>	35,599							
<b>Average household size</b>	2.33							
<b>Change in household size from previous census p.a</b>	-0.004							
<b>Number of households - <i>Scenario A</i></b>	35,599	36,020	36,446	36,878	37,314	37,751	38,189	38,627
<b>Average household size</b>	2.33	2.32	2.31	2.30	2.29	2.28	2.27	2.26
<b>Number of households - <i>Scenario B</i></b>	35,599	35,866	36,133	36,403	36,674	36,941	37,206	37,467
<b>Average household size</b>	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
<b>Number of households - <i>Scenario C</i></b>	35,599	35,927	36,258	36,592	36,927	37,261	37,593	37,923
<b>Average household size</b>	2.330	2.326	2.322	2.318	2.314	2.310	2.306	2.302



	2019	2020	2021	2022	2023	2024	2025	2026
<b>Total residents</b>	89,455	90,059	90,656	91,246	91,829	92,405	92,971	93,526
<b>Residents living in private household</b>	87,898	88,491	89,078	89,657	90,231	90,797	91,353	91,898
<b>Number of households</b>								
<b>Number of households - <i>Scenario A</i></b>	39,066	39,505	39,945	40,386	40,828	41,271	41,714	42,155
<b>Average household size</b>	2.25	2.24	2.23	2.22	2.21	2.20	2.19	2.18
<b>Number of households - <i>Scenario B</i></b>	37,724	37,979	38,231	38,480	38,726	38,969	39,207	39,441
<b>Average household size</b>	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
<b>Number of households - <i>Scenario C</i></b>	38,250	38,575	38,899	39,220	39,540	39,858	40,173	40,484
<b>Average household size</b>	2.298	2.294	2.290	2.286	2.282	2.278	2.274	2.270

**Notes:**

\*1971 figures are based on census population rather than resident population.

The question of residents living in private households was not asked prior to 2001.

The ratio between resident population and those living in private households has been kept constant over time.

The difference between the resident population and those living in private households is that the latter excludes all those people living in nursing homes with high levels of supportive care and also those in prison.

***Scenario A*** shows the impact of a reduction of household size by 0.01 per year.

***Scenario B*** shows the impact of household size remaining constant at 2011 levels (2.33).

***Scenario C*** shows a gradual reduction in household size (0.04 every 10 years) based on the actual reduction in households between 2001 and 2011.