Strategic Housing Market Assessment: Demographic Addendum

Draft Borough Local Plan

February 2014

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Acknowledgements

Demographic statistics used in the report have been derived from data from the Office for National Statistics under the Open Government Licence v.2.0.
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1.0 Introduction

1.1 This report is a supplement to the Royal Borough of Windsor and Maidenhead Strategic Housing Market Assessment (SHMA) January 2014.

1.2 It outlines the data and assumptions which have been used to produce the demographic projections\(^1\) used in the SHMA.

Report Structure

1.3 Section 2 ‘Geographic Scope’ explains the geography of the housing market area that has been used for demographic projections.

1.4 Section 3 ‘Scenarios Modelled’ describes the baseline and alternative scenarios which have been developed and modelled.

1.5 Section 4 ‘National Projections’ provides details of projections produced at the national level.

1.6 Section 5 ‘Demographic Model Inputs and Data Sources’ provides details of the data sources used in modelling the baseline and alternative scenarios.

1.7 Section 6 ‘Scenario Outputs’ summarises the outcome of the scenarios, presenting demographic change in terms of population, households, household spaces and workforce.

2.0 Geographic Scope

2.1 The geographic focus of the demographic projections is the Housing Market Area in which the Royal Borough of Windsor and Maidenhead sits. This is defined in the SHMA as including:

- Bracknell Forest Borough Council
- Reading Borough
- Royal Borough of Windsor and Maidenhead
- Runnymede Borough Council
- Slough Borough Council
- South Bucks District Council
- Spelthorne Borough Council
- Surrey Heath Borough Council
- Wokingham Borough Council
- Wycombe District Council

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\(^1\) Projections are not forecasts and do not take account of future government policies, changing economic circumstances or the capacity of an area to accommodate the change in population. They provide an indication of the future size and structure of the population if recent demographic trends continued.
2.2 Prior to commissioning the SHMA, the council held meetings with relevant local authorities to discuss how to approach assessing the future need for housing. The general consensus was that any assessment needed to be within a strategic context extending beyond the boundary of the Royal Borough of Windsor and Maidenhead.

2.3 Due to key data not being available from the 2011 Census at lower geographies, the whole of each local authority area was included in the Housing Market Area with projections calculated similarly.

3.0 Scenarios Modelled

3.1 A baseline demographic projection was created using the latest official demographic data available to show the expected future population, households and workforce within the Housing Market Area based on the assumption that past trends observed in the last 5 years continued. Additional scenarios were then modelled as variants to this baseline projection by using alternative migration assumptions.

3.2 The projections were built using the Local Government Association’s (LGA) POPGROUP suite of software with input assumptions derived from official national datasets. POPGROUP is a specialist demographic modelling and forecasting tool using a standard cohort-component methodology. The software is an industry standard tool for modelling populations at sub-national level and currently has over 100 users, predominantly Local Authorities within the UK. It is also used by the Welsh, Scottish and Northern Irish National Statistical Agencies to produce national household projections, and by commercial and academic users working in the
3.3 The following table provides a summary of each scenario modelled.

**Table 1: Summary of Scenarios Modelled using Popgroup**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline scenario</strong></td>
<td>What would happen if trends observed in the last 5 years continued?</td>
</tr>
<tr>
<td><strong>Scenario A: Baseline</strong></td>
<td>Utilising the latest Office of National Statistics (ONS) 2011-based interim population projections and the Department for Communities and Local Government (DCLG) 2011-based interim household projections.</td>
</tr>
<tr>
<td><strong>Housing scenarios:</strong></td>
<td>What would happen if migration levels varied to match potential house building rates over the plan period, based on projected household sizes and types?</td>
</tr>
<tr>
<td><strong>Scenario B: South East Plan housing targets</strong></td>
<td>If all local authorities built housing at the rate of the annual housing target from the South East Plan for the period 2011 to 2029, with a target for 346 dwellings per annum for the Royal Borough of Windsor and Maidenhead</td>
</tr>
<tr>
<td><strong>Scenario C: Housing capacity</strong></td>
<td>If all local authorities built housing at the rate shown in their latest published housing trajectories and Royal Borough of Windsor and Maidenhead built 290 dwellings per annum.²</td>
</tr>
<tr>
<td><strong>Economic scenarios:</strong></td>
<td>What would happen if migration levels varied to match potential changes in job supply over the plan period, based on existing commuting and economic activity levels?</td>
</tr>
<tr>
<td><strong>Scenario D: Experian jobs forecast</strong></td>
<td>If all local authorities built housing to deliver sufficient workforce to meet the Experian jobs forecast for employed and self-employed workers in their authority.</td>
</tr>
<tr>
<td><strong>Scenario E: Historical employment trends</strong></td>
<td>If all local authorities built housing to deliver sufficient workforce to meet previous employment trends for</td>
</tr>
</tbody>
</table>

² The annualised capacity at the time of analysis (See weblinks in 5.14)
employed and self-employed residents in their authority, as shown by the 2001 and 2011 Censuses.

| Scenario F: Maintain current workforce levels | If all local authorities built housing to maintain the size of their existing resident workforce. |

### 4.0 National Projections

4.1 The Office of National Statistics (ONS) produces population projections for each local authority every two years. Similarly, the Department of Communities and Local Government (DCLG) produces household projections based on the ONS population projections.

4.2 The latest releases of ONS and DCLG projections are the 2011-based interim projections which update the 2010-based population projections and the 2008-based household projections.

4.3 The 2011-based interim population projections are an update of the 2010-based projections incorporating population estimates from the 2011 Census. Trends in fertility, mortality, migration and household formation are calculated from pre-2011 census data as the detailed data from the 2011 census and revised historic data series was not available.³

4.4 The 2011-interim projections were produced to meet specific user requirements which only required projections to 2021. In order to extend the projections to the end of the plan period, the rates of demographic component change used to create the 2011-interim projections for the population change 2011 to 2021 were continued to the end of the plan period. This was considered the most appropriate assumption at the time.

4.5 The next official set of population projections which will use demographic trends from the 2011 Census data will be the 2012-based population projections published in Spring 2014, with the 2012-based household projections also expected to be published in 2014⁴.

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³ As a result of pre-2011 Census demographic trends being applied to the 2011 Census population, these interim projections are known to incorporate some quality issues, but since they do take into account the 2011 Census initial results, they provide the best official estimates of the future population of local authorities currently available and were considered the best data available at the time of the Strategic Housing Market Assessment.

⁴ At the time of writing no release date for the data has been published.
5.0 **Demographic Model Inputs and Data Sources**

5.1 Demographic projections are reliant upon a number of data sources. To provide transparency and to aid interpretation of output, the following provides a summary of key inputs and sources.

5.2 The models were generated in between January and April 2013 in accordance with the guidance on using the 2011 Census and mid-2011 population estimates to update population projections available on the POPGROUP website. Since the models were generated, further 2011 Census data has become available.

5.3 Sensitivity testing of the demographic assumptions (by examining variants in future fertility, mortality, household formation, dwelling occupation or economic activity trends) has not been undertaken at this stage.

**Base year population by single year of age and sex**

5.4 The base year population was taken as the 2011 Census population rolled forward to the mid-year point (30th June 2011) as reported by the 2011-interim population projections.


**Baseline scenario (A) projected population by single year of age and sex 2011 to 2021**

5.5 The baseline scenario takes the projected population for the years 2011 to 2021 as that published by ONS in the 2011-interim population projections.


**Household Space Occupancy Ratio**

5.6 Scenarios assume the average household space occupancy ratio estimated by the 2011 Census for each local authority within the Housing Market Area and these ratios were held constant for the plan period, i.e. All Household Spaces with a usual resident / All Household spaces

5.7 Note that ‘Household spaces with no usual residents’ includes properties used by short-term residents or visitors, holiday homes, second addresses and vacant properties.
Household spaces are as defined by the 2011 Census and include conventional single household dwellings, household spaces within houses of multiple occupation, annexes and self-contained extra care housing. Communal housing such as barracks, nursing homes and dormitories are not included.

Office of National Statistics: 2011 Census data for England and Wales Table KS401EW

**Household Representative Rates**

The projected number of households by type of household and age of household representative was taken from the DCLG 2011-based interim household projections. These projections reflected the 2011 Census results which showed more multi-person households (including couples) and fewer one-person households than projected by the 2008-based household projections.

Department for Communities and Local Government 2011-based interim household projections

**Population not in households (communal housing residents)**

The projected population living in communal establishments was taken from the DCLG 2011-based interim household projections. This includes staff and residents living in nursing homes, halls of residence, military barracks, prisons, and hotels. (The DCLG household projections assume the communal establishment population remains constant at 2011 Census levels apart from those aged 75 and over and the prison population. The population aged 75 and over has been held at a constant percentage of the total population, and the prison population has been increased in line with past trends).

Department for Communities and Local Government 2011-based interim household projections

**Economic Activity Rates**

Taken from Annual Population Survey Jul 2004-Jun 2012 - values averaged and held constant for the plan period.

- [http://www.nomisweb.co.uk/](http://www.nomisweb.co.uk/)

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Jobs to Workforce Ratio

5.12 Scenarios assume 1 job in each local authority for each 1 economically active resident.

Household spaces constraint for Housing-led scenarios (B & C)

5.13 The South East Plan housing-led scenario (B) assumes that household spaces are delivered in each local authority within the Housing Market Area to match the annual dwelling target delivery rate defined in the Regional Spatial Strategy (the South East Plan). Note: the target for Runnymede includes 2,500 homes at the former DERA site at Chertsey to be provided in Runnymede and the target for Wokingham includes 2,500 homes related to the needs of Greater Reading.

South East Regional Assembly: The South East Plan

5.14 The Housing Capacity housing-led scenario (C) assumes that household spaces are delivered in each local authority within the Housing Market Area to match the latest published trajectories as of April 2013 (when the projections were produced).

Local Authority websites:
- http://www.spelthorne.gov.uk/CHttpHandler.ashx?id=3072&p=0
- http://www.wycombe.gov.uk/Core/DownloadDoc.aspx%3FdocumentID%3D5238&sas=U&ei=UENcUc_KFem00QXhg4C4BA&ved=0CBsQFjAA&usg=AFQjC NED9Hq71CABU_uW8xqufvyclxT78w

Workforce jobs constraints for Economy-led scenarios (D, E & F)

5.15 The Experian employed & self-employed jobs economy-led scenario (D) assumes that growth in workforce jobs available in each local authority within the Housing
Market Area match the forecast employment data (employed and self-employed) from the Experian Economic Forecast extracted March 2013.

- [http://economics.experian.co.uk/](http://economics.experian.co.uk/) (Data as supplied by GVA)

5.16 Historical employed & self-employed jobs trends (Census data) economy-led scenario (E) assumes that growth in workforce jobs available in each local authority within the Housing Market Area match the average annual growth in employed and self-employed economically active population aged 16-74 between 2001 and 2011 as reported by the Censuses. Whilst economic activity as collected by 2011 Census is not directly comparable with 2001 (due to factors that include changes in the underlying classification and improvements in the questions on the census questionnaire), this measure does give a more consistent indication of past trends than the Local Labour Market Indicators drawn from the Annual Population Survey, which is a much smaller sample size.

*Office of National Statistics: 2001 Census Data for England and Wales S028*
- [http://www.nomisweb.co.uk/](http://www.nomisweb.co.uk/)

*Office of National Statistics: 2011 Census data for England and Wales Table KS601EW to KS603EW*

5.17 The Maintain Workforce economy-led scenario (F) assumes workforce jobs available in each local authority within the HMA over the plan period are maintained at their current level (assuming current levels of unemployment and commuting levels are also maintained).
6.0 **Scenario Outputs**

6.1 The following table provides a summary of the outcome of the baseline and additional scenarios.

<table>
<thead>
<tr>
<th>Annual average gain in</th>
<th>A: Baseline</th>
<th>B: South East Plan housing targets</th>
<th>C: Housing capacity</th>
<th>D: Experian employed &amp; self-employed jobs</th>
<th>E: Historical employed &amp; self-employed jobs trends (from census data)</th>
<th>F: Maintain workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBWM Housing Market Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total population</td>
<td>11725</td>
<td>6521</td>
<td>6283</td>
<td>24368</td>
<td>11264</td>
<td>4897</td>
</tr>
<tr>
<td>Households</td>
<td>5394</td>
<td>3526</td>
<td>3426</td>
<td>9721</td>
<td>5158</td>
<td>2973</td>
</tr>
<tr>
<td>household spaces</td>
<td>5589</td>
<td>3657</td>
<td>3556</td>
<td>10082</td>
<td>5348</td>
<td>3082</td>
</tr>
<tr>
<td>Workforce</td>
<td>4003</td>
<td>1000</td>
<td>777</td>
<td>10808</td>
<td>3522</td>
<td>0</td>
</tr>
<tr>
<td>Royal Borough of Windsor and Maidenhead</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total population</td>
<td>1443</td>
<td>471</td>
<td>317</td>
<td>3331</td>
<td>1689</td>
<td>685</td>
</tr>
<tr>
<td>households</td>
<td>672</td>
<td>331</td>
<td>278</td>
<td>1329</td>
<td>757</td>
<td>409</td>
</tr>
<tr>
<td>household spaces</td>
<td>701</td>
<td>346</td>
<td>290</td>
<td>1389</td>
<td>791</td>
<td>427</td>
</tr>
<tr>
<td>workforce</td>
<td>451</td>
<td>-111</td>
<td>-197</td>
<td>1467</td>
<td>560</td>
<td>0</td>
</tr>
</tbody>
</table>