

THE 2013 LONDON STRATEGIC HOUSING MARKET ASSESSMENT

Part of the evidence base for the Mayor's London Plan

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enquiries 020 7983 4100

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Summary

Introduction

- 0.1. The 2013 London Strategic Housing Market Assessment (SHMA) sets out estimates of London's current and future housing requirements, to inform the development of the Mayor's London Plan and London Housing Strategy. In line with the government's National Planning Policy Framework (NPPF) and practice guidance on carrying out SHMAs, it estimates the number of new homes needed in London by tenure and type, and also includes detailed analysis of the housing requirements of important sub-groups of the population. All of these estimates are provided at the Greater London level only – the London boroughs remain responsible for identifying housing requirements at a local or sub-regional level in the context of London Plan policy.

Historic context

- 0.2. London is one of the most important cities in the world economy and a global leader in high-skill employment. This makes it a magnet for migration from overseas and from the rest of the UK, helping to explain its unusually young age profile and high rate of population churn and growth. But while London's economy is distinctively modern its housing stock is relatively old, dating in large part from the Victorian era in the case of Inner London and the inter-war years in the case of Outer London.
- 0.3. In recent decades London has consistently failed to build enough housing to keep up with demand. Partly as a result, the private rented sector has seen rapid growth in the new century, with the proportions of both owner occupied and social rented housing falling.

Demographic trends

- 0.4. London's population is rising very rapidly (currently by around 100,000 people a year) and is projected to continue doing so, though at a slower pace over the coming decades. Future growth in the number of households is also projected to be very rapid as average household size begins to fall again, partly due to an ageing population. But at present London has a very young population, which leads to a high birth rate but also (at least until recently) high outward migration as people leave to raise families.
- 0.5. There is a great deal of uncertainty around future population and household growth, partly due to the importance of domestic and international migration in London's demographics and partly to the unpredictability of household formation patterns. Official projections based in part on data pre-dating the 2011 Census are likely to somewhat overstate London's future population and household growth. According to the central set of Greater London Authority (GLA) projections used for this study, London's population is projected to grow to around 10.1 million by 2036, an annual growth of around 76,000 people a year, while the number of households is projected to grow by around 39,500 households a year (with higher growth in the earlier years in both cases).

Economic trends

- 0.6. Employment and economic growth have recovered much more strongly in London than in the rest of the country. There is particularly rapid growth in employment at present, with an

estimated 197,000 more jobs added over the last year. This rapid jobs growth, alongside population growth and persistent under-supply, is likely to be driving much of the increase in housing costs, particularly in Inner London.

- 0.7. However, earnings are falling in real terms and poverty has increased slightly from the levels seen in the middle of the last decade, driven in part by rising housing costs.
- 0.8. There is a wide range between different projections of employment growth, but all point to continued growth over the coming decades and a corresponding need for high levels of new housing supply.

Housing market trends

- 0.9. Rapid growth in population and employment, combined with a persistent under-supply of housing, has left London with very high housing costs. The average house price was £434,000 in September 2013, having risen 9.4% in the last year. Even when adjusted for inflation, London's average house prices have more than doubled since the late 1990s and trebled since the mid-1980s.
- 0.10. Average private rents in London are also high and have grown faster than in the rest of the country in recent years. Growth in private rents (for both new and ongoing tenancies) has however moderated in the last year, falling from 2.5% a year at the start of 2013 to 1.9% in August. Average social rents for new tenancies have grown strongly in recent years, increasing by 6.2% in 2012/13 to £105 a week.
- 0.11. London has serious housing affordability problems, with lower quartile house prices now nine times lower quartile earnings. Looking across tenures, affordability problems are concentrated in the rented tenures.
- 0.12. Net new housing supply has fallen from almost 30,000 a year in 2008/09 to 21,400 in 2012/13, although this is up from a low of 19,100 in 2010/11. The number of long-term empty homes has fallen rapidly in recent years to 23,870 in 2012, just 0.7% of the housing stock.

Methodology

- 0.13. This study draws on a variety of data sources, notably the English Housing Survey (2008/09 to 2010/11), the 2011 Census and the GLA's demographic projections. A range of methodologies are available for carrying out SHMAs, but given the data available and the desire for a flexible and transparent approach a 'net stock' methodology was chosen. This approach compares the current housing stock to the future stock required, with the latter calculated from household projections, patterns of affordability and estimates of the backlog of housing need.
- 0.14. Backlog need is disaggregated into categories that add to total housing requirements (for example, concealed households), that change the tenure mix of requirements (for example, homeless households in private sector leased accommodation) and that change the size mix of requirements (for example, overcrowded social renting households). The backlog is cleared over a number of years, with this study assuming a twenty year clearance period.

- 0.15. A series of affordability tests is applied to identify which tenure future households will be able to afford, by comparing their incomes to benchmark price and rent levels. If households report being satisfied with their accommodation their affordability is not tested.
- 0.16. The final results apply to the twenty years 2015/16 to 2034/35, and take account of new homes likely to be built between now and 2015.

Analysis of housing needs

- 0.17. According to the GLA’s central demographic projection the number of households in London will grow from almost 3.3 million in 2011 to just over 4.2 million by 2035¹, an increase of 39,852 households a year. Households with children are projected to comprise 31% of the projected growth, similar to their 30% share of current households.
- 0.18. There are almost 349,000 households in some form of backlog need, but of these only 121,000 have a requirement for net additional homes. Another 102,000 are in market housing but need affordable housing, and 126,000 overcrowded households in affordable housing need to move to an affordable home of a more suitable size. Clearing the backlog of need over twenty years increases the total annual housing requirement by over 5,000 homes a year.
- 0.19. After taking account of a forecast under-supply of housing against requirements between 2011/12 and 2014/15 and assuming that second and empty homes comprise a similar proportion of new homes as they do of existing homes, the estimated total annualised housing requirement between 2015/16 and 2034/35 is 48,841 new homes a year, broken down as in Table 1.

Table 1: Net annualised housing requirement 2015/16 to 2034/35

	1b	2b	3b	4+b	Total	% of total
Market	2,798	5,791	8,545	6,083	23,217	48%
Intermediate	3,357	2,240	2,506	1,799	9,902	20%
Social rent	10,225	1,003	1,774	2,720	15,722	32%
Total	16,381	9,034	12,825	10,602	48,841	100%

- 0.20. 48% of the identified net requirement is for market housing, 20% for intermediate (for example, shared ownership homes) and 32% for social rent (including Affordable Rent). Just over half the requirement is for smaller homes (those with one or two bedrooms), with a particularly large requirement for smaller social rented homes.
- 0.21. These results are sensitive to the assumptions used. The timescale is particularly important: if we look only at the period 2015/16 to 2024/25 and assume the backlog is cleared over ten years, then the annualised housing requirement increases to 62,088 homes a year. Similarly, the tenure mix of requirements is sensitive to the particular affordability tests used, and the size mix

¹ While the demographic and employment projections in this report use the period from mid-2011 to mid-2036, the housing requirements analysis covers the period up to and including the financial year 2034/35.

depends crucially on assumptions around under-occupation. The base model assumes that both overcrowding and under-occupation are eliminated in affordable housing over the twenty year period but that under-occupation continues in market housing (because many households can afford larger homes than they need), which helps explain why the identified requirement for family homes is relatively high in the market sector and relatively low in the affordable sector.

- 0.22. In addition to the main net stock model, this report also includes an application of the affordable housing needs model from the official SHMA guidance. However, this model relies heavily on variables which are difficult to accurately measure given available data, and the results of the net stock model are therefore considered more robust.

Housing needs of particular groups

- 0.23. As required by national planning policy, this report analyses the housing requirements of a number of important sub-groups of the population, including older people, families, students, armed forces households and those seeking to build their own homes. Given the particular characteristics of these groups and the limited availability of data in some cases, the results are not necessarily directly comparable with the overall requirements outlined above.

Scenario tests

- 0.24. In addition to the results of the main model two more estimates of new housing requirements have been produced based on scenarios of lower or higher household growth. Under the low growth scenario the estimated annual requirement is for 43,300 new homes a year, while under the high growth scenario it is 54,600. In both cases the mix of tenures and types is broadly similar to the mix in the main scenario.
- 0.25. The government's welfare reform programme is also likely to have an impact on London's housing requirements, but it is not yet possible to assess the full impact of these reforms. London has relatively high housing costs and rates of worklessness which may result in a different impact compared to the rest of the country.

1 INTRODUCTION

The national policy context for Strategic Housing Market Assessments

- 1.1. The Mayor's housing and planning policies are required to be based on a robust and comprehensive evidence base. The assessment of housing requirements comprises an important part of this evidence base. The National Planning Policy Framework (NPPF) puts strong emphasis on establishing an authoritative "evidence base to ensure that [development plans] meet the full, objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with the policies set out in [the] Framework".
- 1.2. The NPPF states that housing needs should be assessed through the preparation of a Strategic Housing Market Assessment that should "identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which:
 - meets household and population projections, taking account of migration and demographic change;
 - addresses the need for all types of housing, including affordable housing and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes); and
 - caters for housing demand and the scale of housing supply necessary to meet this demand".
- 1.3. Government guidance² sets out the objectives that a SHMA should seek to meet and criteria that it must satisfy, but does not provide a detailed, step-by-step guide to carrying out such an assessment. The SHMA guidance also notes the limits of such assessments in describing a phenomenon as dynamic and complex as the housing market:

Housing markets are dynamic and complex. Because of this, strategic housing market assessments will not provide definitive estimates of housing need, demand and market conditions. However, they can provide valuable insights into how housing markets operate both now and in the future. They should provide a fit for purpose basis upon which to develop planning and housing policies by considering the characteristics of the housing market, how key factors work together and the probable scale of change in future housing need and demand.
- 1.4. In short, a SHMA should provide 'best estimates' of housing requirements, but it is important to take into account the complexity of the market, the availability of data and the importance of the methodological assumptions made when interpreting the results. Furthermore, the estimates of housing requirements in a SHMA are not themselves targets and should not be interpreted as such. Rather, a SHMA provides evidence of housing requirements which is then taken into account when forming targets and policy, alongside a range of other factors such as capacity (evidence of which comes from the 2013 London Strategic Housing Land Availability Assessment), available funding and economic viability.

² DCLG (2007), 'Strategic Housing Market Assessments: Practice Guidance, Version 2'

Conceptualising housing requirements

- 1.5. While the terms are sometimes used interchangeably, this document attempts to draw a distinction between the overall concept of 'housing requirements' and the sub-category of 'housing need'. Housing requirements combine both (1) housing need, which is the housing that households require even if they cannot afford it, and (2) housing demand, which is the housing that households are able to afford even if they don't need it.
- 1.6. A comprehensive housing market assessment requires consideration of both these elements. Excluding housing demand from the analysis of housing requirements would, for example, imply a very small requirement for larger market homes despite the obviously very high effective demand for these homes, while excluding housing need would clearly understate the requirement for affordable housing from people unable to afford suitable market housing.
- 1.7. The measurement of housing requirements is not a 'hard science' with universally applicable laws. Rather, it involves applying to objective data a set of standards that are fundamentally normative, in that they are derived from socially determined beliefs about adequate housing conditions. For example, the bedroom standard used to measure overcrowding determines the number of bedrooms a household needs, according to a formula that amounts to a series of normative rules about who should and shouldn't have to share a bedroom. Similarly, affordability tests involve applying normative rules around what share of its income a household can reasonably be expected to spend on housing costs.

Previous estimates of housing requirements in London

- 1.8. Since the foundation of the GLA in 2000 there have been a series of assessments of London's housing requirements, starting with the report of the Mayor's Housing Commission in November 2000. The GLA developed its own approach to assessing housing requirements in cooperation with Opinion Research Services, resulting in the 2004 London Housing Requirements Study (HRS). The 2008 SHMA built on this model and incorporated key messages from the government's SHMA guidance published in 2007³ (hereafter referred to as 'the SHMA guidance').
- 1.9. The methodology used in the 2004 HRS and the 2008 SHMA is described in more detail later in this report, but the key findings of the 2008 report are set out in Table 2. London's total estimated net new housing requirement was initially broken down by tenure and dwelling size as follows:

³ DCLG (2007), 'Strategic housing market assessments: Practice guidance'

Table 2: Initial estimates of London housing requirements, 2007-17⁴

Size	Tenure			
	Market	Intermediate	Social	All
1 bedroom	74,000	0	0	73,900
2 bedrooms	88,800	5,300	102,600	196,700
3 bedrooms	19,400	13,900	-25,400	7,900
4+ bedrooms	-14,900	19,300	66,400	70,800
Total	167,200	38,500	143,700	349,400

1.10. These initial estimates were then further refined to take account of the surpluses identified, with surplus larger homes assumed to be converted into smaller ones, reducing the net requirement for smaller homes and with it the overall requirement.

Table 3: Estimated London housing requirements after reallocation of surpluses, 2007-17

Size	Tenure			
	Market	Intermediate	Social	All
1 bedroom	56,500	0	0	56,400
2 bedrooms	67,800	5,300	88,400	161,500
3 bedrooms	19,400	12,000	0	31,300
4+ bedrooms	0	19,300	57,200	76,500
Total	143,600	36,500	145,600	325,800

1.11. There were two main differences between the requirements identified in the SHMA and the final London Plan policies:

- The estimated capacity for new homes was below the estimated requirement so the 2011 London Plan housing provision targets were set at (a minimum of) 32,210 a year across all boroughs⁵.
- The SHMA identified an annual requirement for around 18,000 new affordable homes a year, most of them social housing. But the vast majority of new affordable housing supply in London requires public funding, and taking into account expectations of funding availability and the record of recent delivery the London Plan set a target for 13,200 new affordable homes a year, around 5,000 below the need identified⁶.

1.12. This was not the first time policy targets had fallen below identified needs in London. The 2004 HRS identified a net requirement for 35,400 homes a year, but the London Plan housing provision target was initially set at 23,000 a year and then increased to 30,500 a year in 2008. The affordable housing targets in the London Plan were also below the estimated need, with

⁴ A minus figure indicates a surplus of supply over requirements, and a zero indicates no net requirement as requirements and supply are in balance. Totals may not sum due to rounding

⁵ See Policy 3.3 and paragraphs 3.16 to 3.17 of the 2011 London Plan

⁶ Policy 3.11 and para 3.64

the previous 50% affordable housing target lower in both absolute and proportional terms than the need identified in the HRS (around 23,000 affordable homes a year, or 66% of the total) – and the subsequent level of affordable housing supply was lower still. This long-standing legacy of under-supply of housing compared to requirements, particularly of affordable housing, contributed towards the large backlog of need which exists today (as explained later in this report).

Spatial scale

- 1.13. It is important to note that this SHMA, like the 2004 HRS and the 2008 SHMA before it, looks at housing requirements at the regional London level only, and does not provide any estimates of requirements at the local level. London boroughs remain responsible for assessing their own requirements, within the policy context set by the NPPF and the London Plan. Given the fact that housing market areas in London frequently extend across local borough boundaries, many boroughs have chosen to work in partnership to assess housing requirements on a sub-regional basis.

Process and output checklists from the guidance

- 1.14. The SHMA guidance states that an assessment should be considered robust and credible if it provides all of a series of ‘core outputs’ and meets a series of ‘process criteria’. Table 4 sets out each core output and notes where in the report it is satisfied.

Table 4: SHMA guidance core outputs

	Description	Section reference
1	Estimates of current dwellings in terms of size, type, condition, tenure	Chapter 2
2	Analysis of past and current housing market trends, including balance between supply and demand in different housing sectors and price/affordability; Description of key drivers underpinning the housing market	Chapters 5 and 7
3	Estimate of total future number of households, broken down by age and type where possible	Chapters 3 and 7
4	Estimate of current number of households in housing need	Chapter 7
5	Estimate of future households that will require affordable housing	Chapter 7
6	Estimate of future households requiring market housing	Chapter 7
7	Estimate of the size of affordable housing required	Chapter 7
8	Estimate of household groups who have particular housing requirements	Chapter 8

- 1.15. The process checklist is also set out below, but in general its requirements apply to the report as a whole rather than to specific sections.

Table 5: SHMA guidance process checklist

	Description	How satisfied
1	Approach to identifying housing market area(s) is consistent with other approaches to identifying housing market areas within the region	While the London housing market is accepted to cross the regional boundary, practical considerations including data availability and the precise identification of the market area (see chapter 2) favour limiting the study to the Greater London area, in line with previous such studies and with common practice both within London and in neighbouring areas.
2	Housing market conditions are assessed within the context of the housing market area	London's housing requirements are estimated using population and household projections that explicitly account for migration trends between London and other areas, including parts of the wider market area.
3	Involves key stakeholders, including house builders	The development of the SHMA and the new London Strategic Housing Land Availability Assessment were informed by consultation with a steering group of stakeholders including London boroughs, community groups and house builders.
4	Contains a full technical explanation of the methods employed, with any limitations noted	See throughout the report, but particularly chapters 6 and 7.
5	Assumptions, judgements and findings are fully justified and presented in an open and transparent manner	See throughout the report, but particularly chapters 6 and 7.
6	Uses and reports upon effective quality control mechanisms	See chapters 6 and 7 for the data and methodology used.
7	Explains how the assessment findings have been monitored and updated (where appropriate) since it was originally undertaken	Results of the 2008 SHMA are set out in chapter 1.

Further information

- 1.16. This report includes analysis of the relevant demographic, economic and housing market context for the SHMA, but further information is also available in the draft London Housing Strategy published in November 2013, and in the annual evidence base publication 'Housing in London', the next edition of which is due to be published in January 2014.

2 HISTORIC AND SPATIAL CONTEXT

Global city, global links

- 2.1. London's housing is profoundly influenced by its status as one of the most important cities in the world economy. It sits at the centre of a great variety of communication, transportation and trade networks, with strong links to Europe, the Americas and Asia as well as the rest of the UK. In recent decades its economy has been transformed into one of the most productive in the world across a range of sectors.
- 2.2. London's role in the world economy is illustrated by a recent study by Deloitte, which examined 22 high-value market sectors and found that London was the global leader in 12 of them in terms of employee numbers and "substantially the biggest global hub for employment in these high-skill, knowledge-based sectors". Compared with other major cities worldwide, the report found that "London has both the highest number of people working in high-skill, knowledge-based industries and also the joint highest proportion relative to the total size of the city's working population"⁷. Similarly, a report by McKinsey Global Institute found that London ranks third (behind Tokyo and New York) for the number of large corporate headquarters⁸.
- 2.3. The strength of London's economy, its cultural attractions and its history as a city open to newcomers make it a magnet for international migrants, with around 200,000 people coming to live here from abroad each year and around 100,000 moving abroad (chapter 3 provides more detail on migration flows). Successive waves of migration have made some parts of London among the most ethnically diverse areas in the world, and the 2011 Census recorded that 37% of Londoners were born abroad.

Links with the rest of the UK

- 2.4. Of course, London also has very strong links with the rest of the UK. Currently around 250,000 people leave London every year for other parts of the UK, while another 200,000 arrive (chapter 3 provides more detail on migration flows). London plays a unique role in the national economy, functioning as an 'escalator region' for the whole country, enabling those who come here (as well as lifelong Londoners) to improve their skills and increase their earnings at a faster rate than any other part of the country⁹. This unique role helps explain London's unusually young age profile, high rate of population churn and large private rented sector. The evidence also indicates that most UK-born Londoners were born outside London¹⁰.
- 2.5. London's importance to the national economy has grown over recent decades, with its share of national GVA (Gross Value Added) rising from 18.5% in 1997 to 21.1% in 2011¹¹.

Defining London's housing market

- 2.6. While London is formally defined as the Greater London Area, with a population of 8.3 million, its urban area spreads beyond this boundary and encompasses a substantial hinterland. There is no universally accepted way to measure a city's extent, and estimates of London's 'true' size

⁷ Deloitte (2013), 'Globaltown: Winning London's crucial battle for talent'

⁸ McKinsey Global Institute (2013), 'Urban world: The shifting global business landscape'

⁹ Champion et al (2013), 'How far do England's second-order cities emulate London as human-capital 'escalators'?

¹⁰ GLA analysis of data from the Understanding Society longitudinal survey, Wave 1. 39% of adult respondents to the survey currently resident in London said they were born abroad and 24% in London, with the remaining 37% born in the rest of the UK.

¹¹ ONS, Headline GVA at current prices, data to 2011

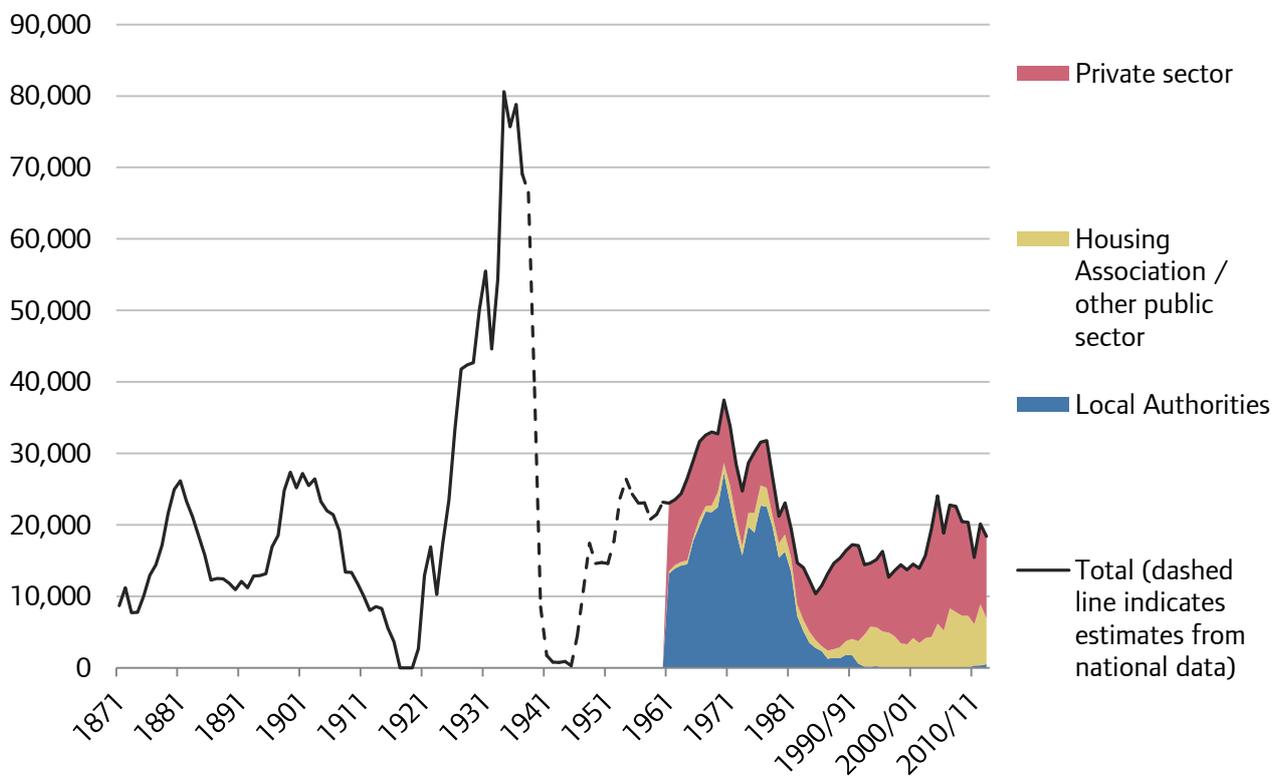
vary greatly depending on the method used. The London 'built-up area' as measured by the Office for National Statistics (ONS), contained around 9.8 million people in 2008. This compares to two EU measures, one the 'Larger Urban Area' of 11.9 million as defined in the Urban Audit, and the other a 'Metropolitan region' of 13.3 million.

- 2.7. Other dimensions of London's wider reach are captured by commuting or migration patterns. Commuting is particularly common from local authorities around London's fringe, but very small numbers do commute from much further afield, including other countries. A higher share of migration moves come from further afield, but nearby areas still account for a disproportionate share. Recent research has sought to identify housing market areas using data on commuting and migration, but the boundaries identified are highly sensitive to the specific level of containment used (e.g. whether housing market areas contain 75%, 77.5% or some other share of commuting trips)¹².

Historic house building and London’s dwelling stock

- 2.8. London’s population grew very rapidly in the 19th century, but the greatest period of house building in its history was the 1930s, when around 600,000 homes were built, mostly in Outer London. However, Outer London’s contribution to new supply has fallen since then, and so far in the 21st century slightly more new homes have been built in Inner London.

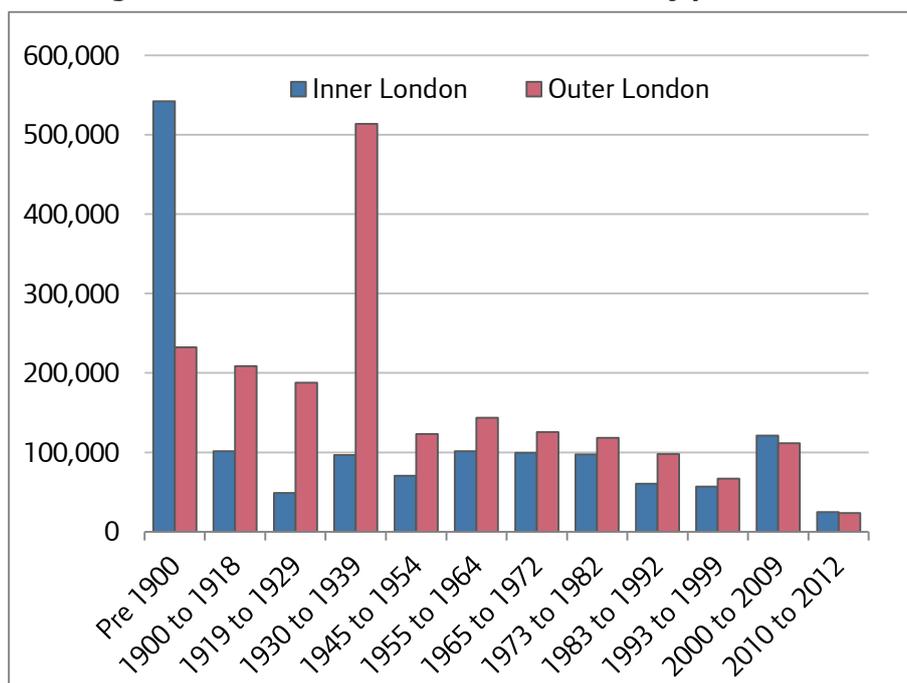
Figure 1: New homes built in Greater London, 1871-2013¹³



¹² Jones et al (2010), 'Geography of housing market areas: Final report'

¹³ This chart shows only gross house building, and thus under-states new housing supply in recent decades that featured high levels of conversions and new supply from changes of use. For the data sources used to create this chart please see the endnotes to the 2013 Draft London Housing Strategy.

Figure 2: Homes in Inner and Outer London by period built



2.9. Today, the average London home is relatively old due to this rapid pre-War growth, the fact that the heaviest damage was confined to the East End, and the protections accorded to large swathes of Inner London’s built stock for their historic value. Development in recent decades has been focused on sites in East London formerly occupied by docks and heavy manufacturing.

2.10. According to the last Census there were almost 3.36 million dwellings in London in 2011, of which all but around 9,000 were unshared. Taking shared dwellings (where two or more households share some or all of their accommodation) into account, there were almost 3.39 million ‘household spaces’, of which just over 121,000 or 3.7% did not have any usual residents.

Table 6: Dwellings and household spaces in London, 2011

Description	Number
All dwellings, of which	3,358,163
Unshared	3,349,011
Shared	9,152
All household spaces, of which	3,387,255
With no usual residents	121,082
With at least one usual resident	3,266,173

2.11. The tenure of or number of bedrooms in vacant household spaces is not known, so the best approximation to a tenure and size profile of the stock uses the number of household spaces with at least one usual resident, or in other words the number of households. In 2011 22% of homes had one bedroom, 32% two bedrooms, 31% three bedrooms and 15% four or more, but the distribution of sizes varied greatly by tenure. Most owner occupied homes (including shared ownership) were ‘family sized’ (three bedrooms or more) while around 70% of both social and

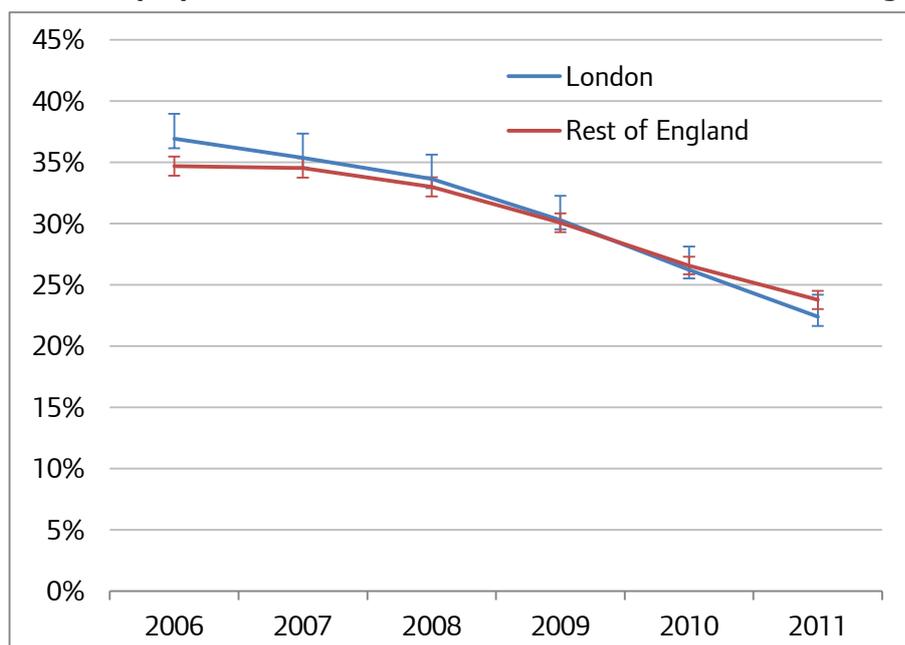
private rented homes had just one or two bedrooms. There were just over 42,000 shared ownership homes in 2011, 1.3% of the total, but the size breakdown of these homes is not yet available from the Census¹⁴.

Table 7: Household spaces with at least one usual resident by tenure and number of bedrooms, 2011

Tenure	1 bedroom	2 bedroom	3 bedrooms	4+ bedrooms	All sizes
Owner occupied	159,749	428,882	661,868	367,816	1,618,315
Social rented	276,371	280,164	187,501	41,957	785,993
Private rented or living rent free	283,902	321,922	173,503	82,538	861,865
All tenures	720,022	1,030,968	1,022,872	492,311	3,266,173
% of total	22%	32%	31%	15%	100%

2.12. The government's official definition of dwelling stock condition is the Decent Homes standard, which rates dwellings as 'non-decent' if they fail any of four criteria relating to hazards, state of repair, kitchen and bathroom facilities, and thermal comfort¹⁵. The proportion of non-decent homes in London has fallen rapidly from around 37% in 2006 to around 22% in 2011, a slightly faster rate of reduction than seen in the rest of England (Figure 3).

Figure 3: Trend in proportion of non-decent homes in London and rest of England



Tenure trend

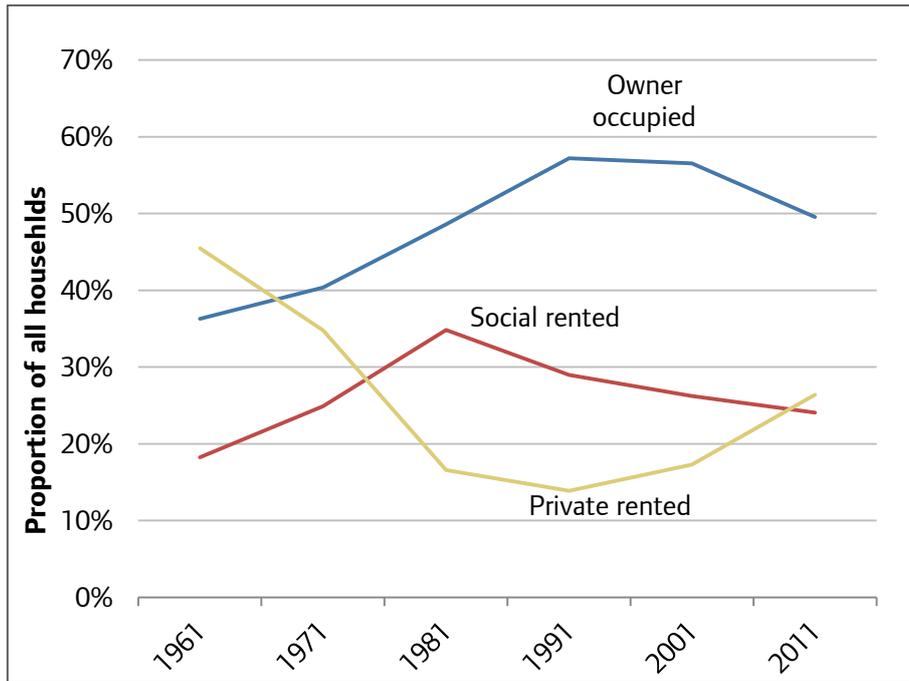
2.13. Finally, Census data allows us to trace the evolution of London's tenure mix back to 1961, the first Census to gather data at the Greater London level. The private rented sector was once the largest tenure in London but shrank from 46% of households in 1961 to 14% in 1991, before rapid growth brought it back up to 26% in 2011, making it the second largest tenure. Owner

¹⁴ Census 2011 table DC4405EW, 'Tenure by household size by number of bedrooms'

¹⁵ DCLG (2006), 'A Decent Home: Definition and guidance for implementation'

occupation has followed an almost opposite trend, rising until 1991 and then falling to just under half of all households by the time of the 2011 Census - the first time owner occupiers have been in the minority since the 1980s. Social renting grew rapidly between the 1960s and 1980s, accommodating 35% of households in 1981, before falling to 24% in 2011. Shared ownership, which is included here within the owner occupation category, comprised 1.3% of the stock in 2011.

Figure 4: Trend in household tenures, London 1961-2011



3 DEMOGRAPHIC TRENDS AND PROJECTIONS

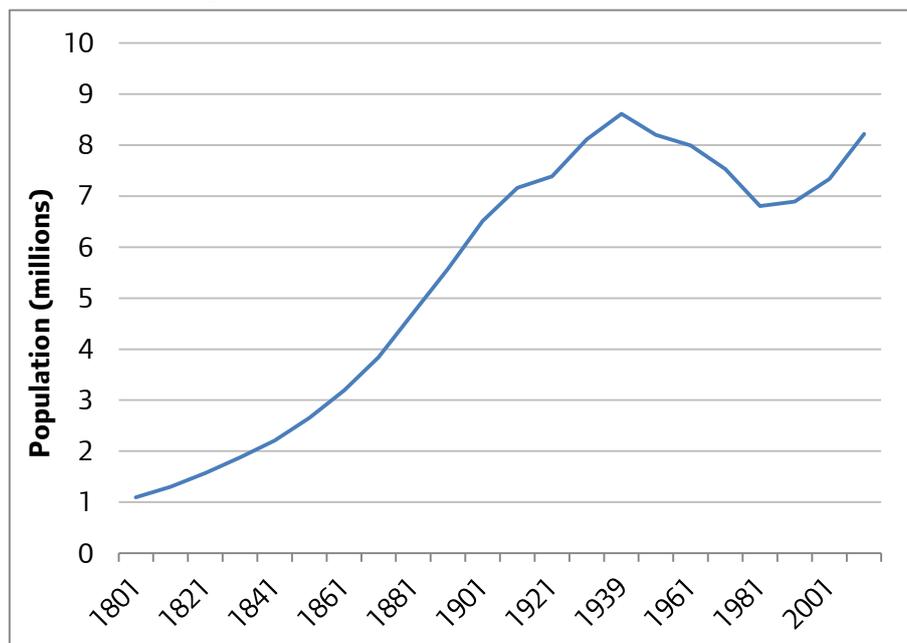
Introduction

- 3.1. This chapter sets out the key demographic trends and patterns affecting London's housing market and housing requirements. It also explains the derivation of the GLA's demographic projections and how they differ from national projections.

Historic population trends in London

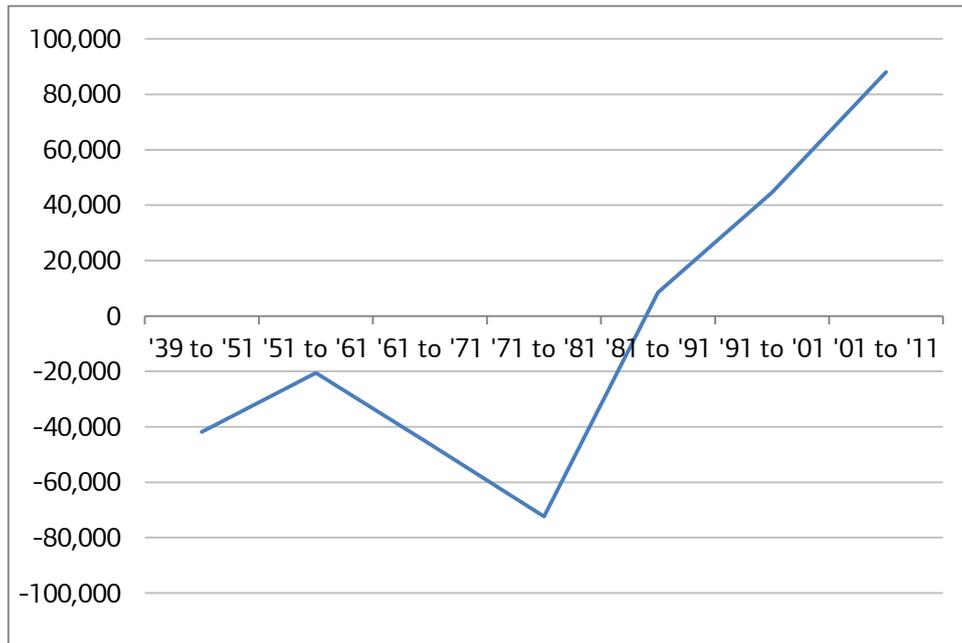
- 3.2. Estimates of London's population extend back to the UK's first census in 1801, when the number of residents was put at a little over one million. The population grew at an ever increasing rate up to the start of the 20th century, standing at over six million by 1901. The Great War dampened but did not reverse this growth and the population reached a peak of 8.6 million at the start of the Second World War in 1939. The war was to prove a turning point for London. The Blitz devastated housing stocks in the East End of London and the post war reconstruction efforts focussed on the creation of new towns. London entered a period of declining population that lasted until the 1980s – with the 1981 Census recording the city's population at 6.6 million.

Figure 5: London's population, 1801 to 2011



- 3.3. Since that point, the population has once more been growing – slowly at first, but at an increasing rate. By 2011, the population was estimated at 8.174 million people and to be growing by over one hundred thousand per year.

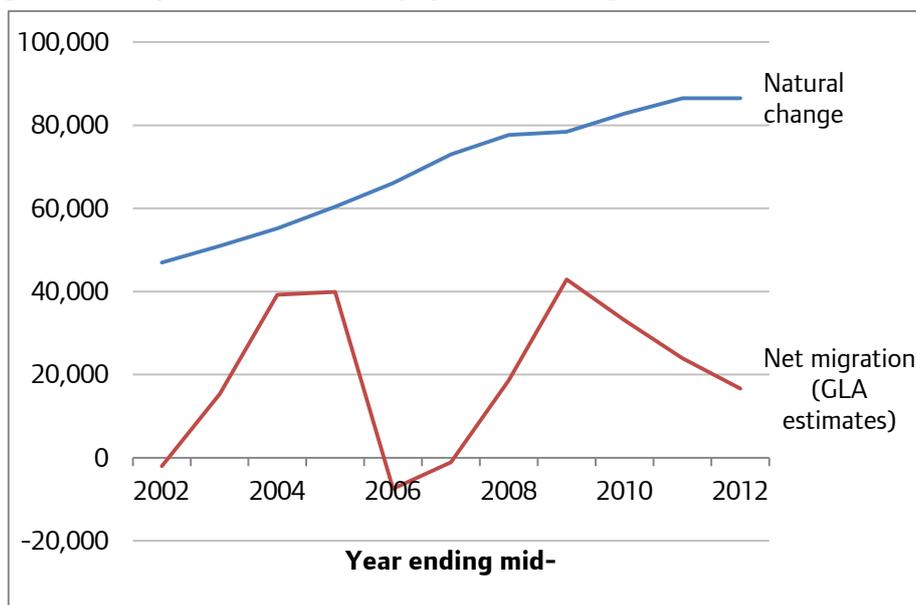
Figure 6: Annualised population change in London by decade, 1939 to 2011



Overall drivers of population change

3.4. What is driving the recent growth in the population? There are three main components to total population change - births, deaths and migration. Over the last decade, the simple answer to this question would appear to be that the biggest driver of growth has been natural change – the difference between births and deaths. This measure has risen in line with a dramatic growth in births and a steady fall in deaths. While annual estimates of past migration vary greatly between different sources and different points in time, reflecting the uncertainty of accurately measuring the movement of both domestic and international migrants, all estimates agree that the direct impact of migration on the total population is much smaller than that of natural change.

Figure 7: Components of annual population change in London, 2001 to 2012



3.5. However, this explanation proves to be rather too simplistic and fails to take into account London’s unique population dynamics and relationship with the rest of the UK and the world. To understand London’s interaction with the outside world we need to look at the direction, size and structure of its migration flows. London attracts large numbers of young people for work and education from the UK and the rest of the world (see Figure 8, which shows domestic migration flows by single year of age). Analysis of the age characteristics of migration flows into London shows that they contain very high proportions of people aged twenty to thirty. In contrast, flows away from central London contain a much higher proportion of children and older people. This age structure reflects an established pattern of migration for London, where there is a tendency to move out to the suburbs or surrounding counties to raise families.

Figure 8: Domestic migration flows between London and the rest of the UK by single year of age, year to mid-2012

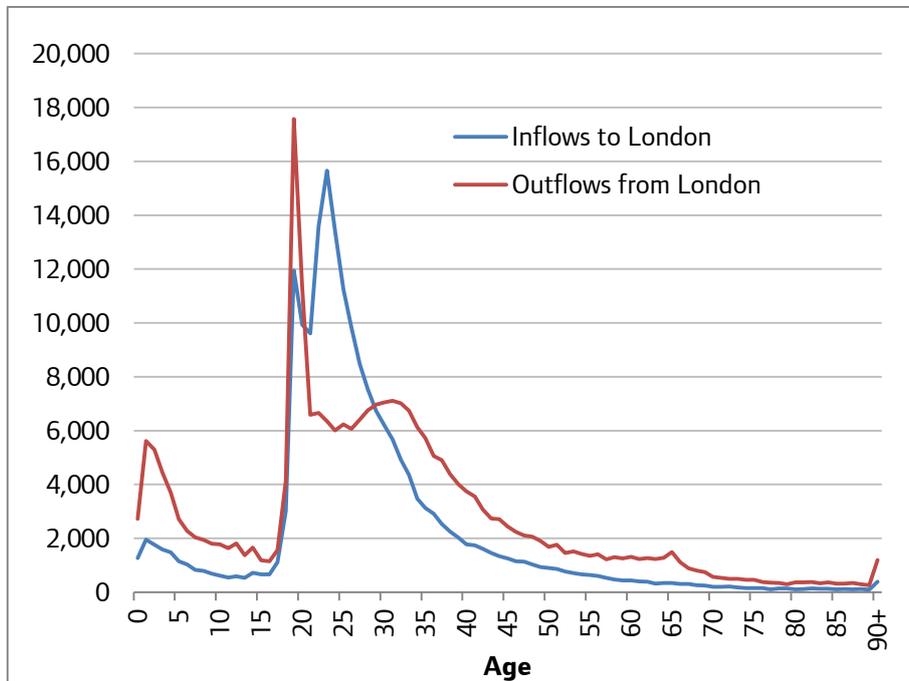
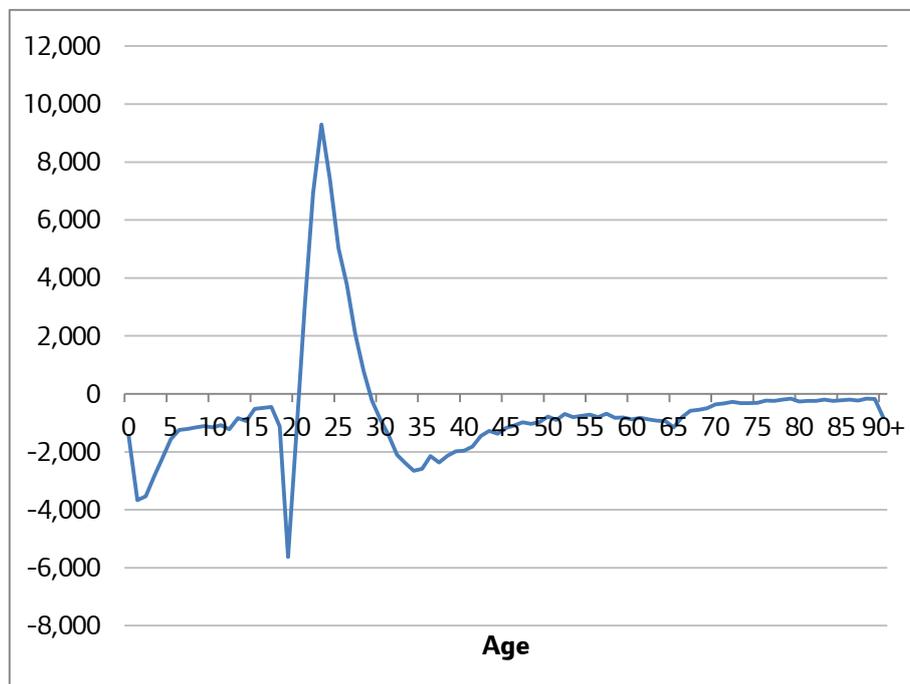
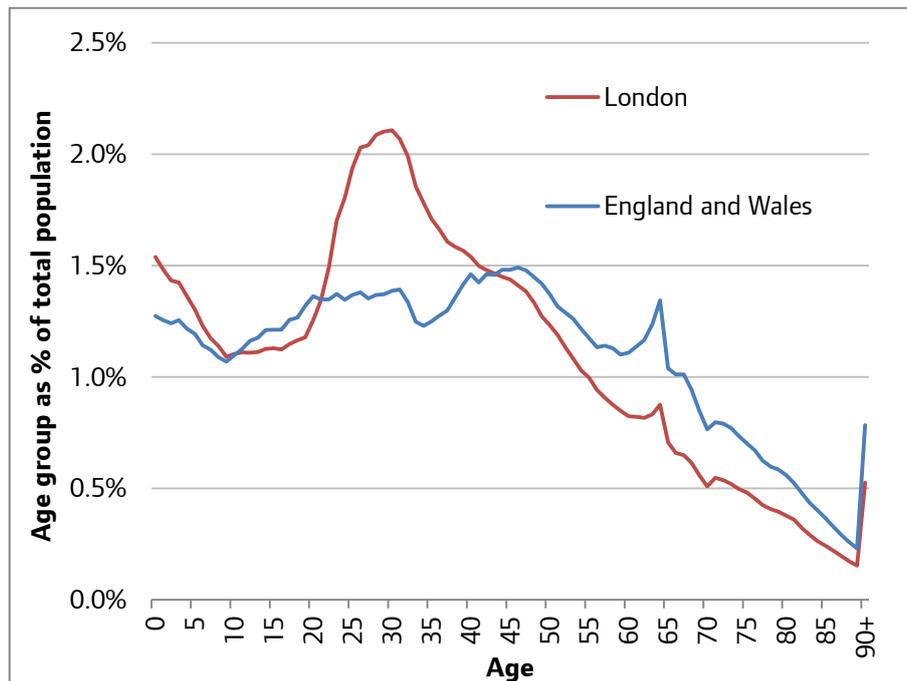


Figure 9: Difference between domestic migration flows to and from London by single year of age, year to mid-2012



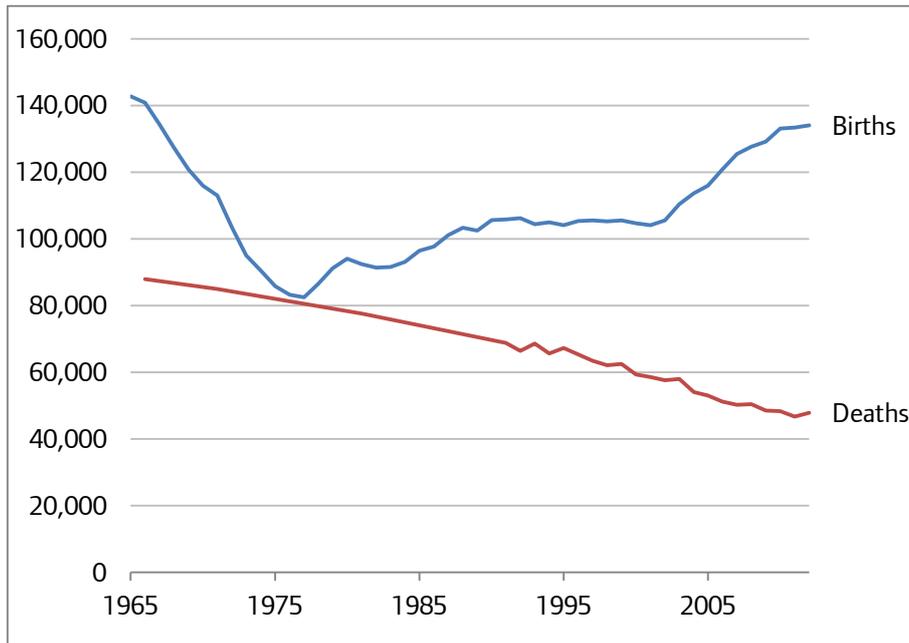
- 3.6. The difference in the character of London's in- and outflows is what gives rise to London's comparatively youthful population (Figure 10), which in turn leads to high levels of natural change due to higher fertility rates and low mortality rates among young people. Therefore, although migration may not initially appear as significant a force as natural change for driving the growth of the population, it is the large gross migration in- and outflows, and in particular their distinct age compositions, that give rise to London's high levels of natural change.
- 3.7. The following sections explain in more detail how these different population flows are measured, and how they contribute to London's population change.

Figure 10: Age structure of London and England and Wales in 2011

Natural change

- 3.8. Births in London fell dramatically from over 140,000 a year in the mid-sixties to approximately 80,000 in 1977. This drop was the result of a combination of a declining population and falling fertility rates. By the early 90s they had recovered to approximately 105,000 per year where they remained steady through the decade. After 2001, annual births began to increase rapidly, reaching 134,000 for the year to mid-2012.
- 3.9. Deaths have fallen fairly steadily in London since the 1960s and continued to do so in the last decade, reflecting a trend of rising life expectancy across the country as a whole. But even though life expectancy is forecast to continue rising, the number of annual deaths in London is projected to begin to increase by the end of the current decade, the result of increasing numbers of older people in the population. This trend of rising life expectancy and increasing numbers of older people in the population is very important for household projections due to the tendency for older people to form smaller households.

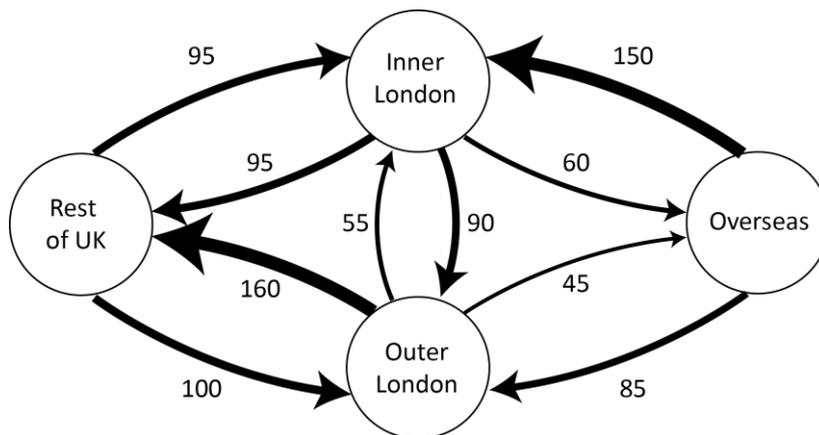
Figure 11: Trend in births and deaths in London¹⁶



Migration

3.10. London is a net importer from overseas and a net exporter to the rest of the UK (Figure 12). At the start of the last decade, the two effects roughly balanced out to give a very low (estimated to be within a few thousand either side of zero) overall net migration, in comparison to the very large combined gross flows in to and out of London of approximately 700,000 a year.

Figure 12: Internal, domestic and international migration flows (average annual flows, 2005-6 to 2009-10), in thousands



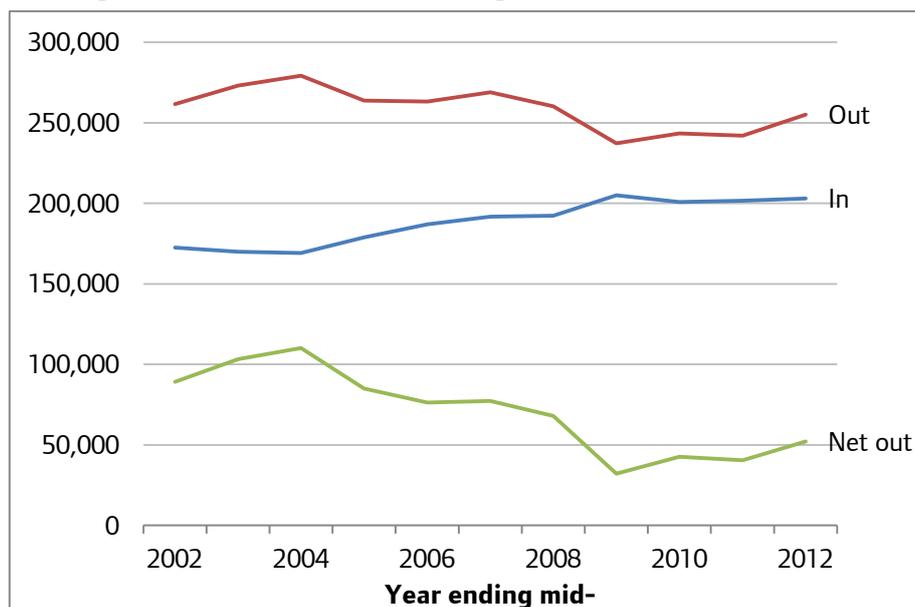
3.11. However, while estimates of births and deaths can generally be assumed to have a high degree of accuracy, this is not the case for estimates of migration flows in to and out of London. There is a great deal of uncertainty in these estimates, which makes the task of estimating or projecting London’s population especially challenging.

Domestic migration

¹⁶ Deaths are recorded for Census years only between 1966 and 1991 and interpolated for intervening years

- 3.12. Estimates of domestic migration flows are produced by ONS and based primarily on moves recorded in the NHS Central Register. This approach works well with those groups in the population who engage regularly with health services – namely children and the elderly. It is much less reliable for capturing moves among young adults (especially men), who often fail to re-register with a new GP when they move residence. This is a particular issue for London where the population contains a high proportion of young and highly mobile adults. In recent years, ONS has incorporated data from the Higher Education Statistics Agency (HESA) to better capture moves by students.
- 3.13. Inflows to London from the rest of the UK steadily increased from 2003 onwards, reflecting its growing popularity as a destination for work and education. Domestic out-migration was affected by the 2007 financial crisis, with outflows falling by 15% in its aftermath. This drop is likely to have been in part the result of a slowing of the housing market as mortgage availability fell, and in part due to London’s job market proving relatively resilient compared to those in other parts of the UK. At the same time, domestic in-migration increased, though not quite as dramatically. As a result of shifts in both in- and out-migration, *net* domestic out-migration outflows fell from 100,000 per annum at the start of the 2000s to around 30,000 in 2009 before rising slightly to 50,000 in 2012.

Figure 13: London – Domestic migration flows 2002 to 2012¹⁷



- 3.14. The impact of these changes on the population goes beyond the headline numbers. Domestic outflows tend to contain a high proportion of families with young children and in recent years more families have remained in London that might have previously opted to move out of the city. Combined with recent high birth rates, the effect has been a large increase in the number of children in the city and a corresponding increase in demand for the infrastructure to support them. The other effect of increasing numbers of families remaining in London is that average household size (AHS) tends to increase, explaining some of the rise in AHS observed between 2001 and 2011.

¹⁷ ONS, internal migration estimates to 2012

International migration

- 3.15. Producing estimates of international out migration is challenging and confidence in estimates at local authority level is relatively low compared to other migration flows. ONS is working on improvements to the methodology, though significant advances in quality may rely on the results of initiatives such as E-Borders.
- 3.16. ONS's estimates of international outflows at a higher level (e.g. England level) are obtained from the International Passenger Survey (IPS). Because of the small IPS sample size for individual local authorities, outflow estimates at this level are calculated using a regression model. This methodology takes those statistics judged to be significant determinants of the propensity to out-migrate and uses them as predictors in the model. The data used to inform outflows comes from the IPS, Northern Ireland migration data and Home Office data on asylum seekers and dependents.
- 3.17. ONS's estimates of international inflows have undergone a number of changes in recent years in an attempt to improve the accuracy of the data. The most significant revisions to the methodology came about as a result of the Migration Statistics Improvement Programme (MSIP), the results of which were released in November 2011.
- 3.18. Prior to the release of MSIP, international inflow estimates were based primarily on data from the IPS combined with regional migration distributions from the Labour Force Survey (LFS). The methodology was considered to give inaccurate results for London local authorities, in part due to inherent bias in the IPS data that tends to overestimate the number of migrants settling in central London boroughs and underestimate flows to other London authorities.
- 3.19. The revised methodology brought in with MSIP can briefly be summarised as follows. The IPS totals are split into five categories: children, workers, students, over 60s, and others. These are then sorted into first time and returning migrants. A range of administrative sources are then used to distribute the migrants in each category, including:
- Migrant Worker Scan - a count of foreign nationals applying for a National Insurance Number (NINo);
 - Lifetime Labour Market database - used to estimate the proportion of the NINo count who are long-term migrant workers;
 - HESA administrative data - for distributing publicly funded Higher Education student flows;
 - HESA survey data - to distribute private Higher Education flows;
 - Department of Business, Innovation and Skills and Welsh Government administrative data sources - used to distribute Further Education student flows;
 - 2001 Census data - for distributing UK-born returning migrant flows;
 - National Asylum Support Service data to distribute asylum seeker flows identified in the IPS;
 - Flag 4 data from the GP Patient Register Database - to distribute the remaining migrants.
- 3.20. The MSIP methodology was considered a great step forward in improving the accuracy of estimates. The results aligned with expectation and other sources of evidence far better than prior estimates had done – with flows to central London boroughs revised downwards and flows to boroughs such as Newham and Brent revised strongly upwards.

- 3.21. Unfortunately, the administrative data required to produce estimates with the MSIP methodology is only available back to the middle of the last decade. The series of revised inflow estimates begins at 2005-6 and estimates prior to this were left unchanged until ONS revised its full mid-year population estimate series from 2002 to 2010 in line with the results of the 2011 Census.
- 3.22. ONS's back-series revisions sought to provide a consistent series of estimates between the two censuses. It was generally acknowledged that the main sources of error in the existing series were likely to have arisen from international migration estimates in the first half of the decade and error in the starting 2001 population base. However, ONS felt that insufficient evidence existed to make significant changes to either of these components and so made only very minor adjustments to international migration flows. The majority of the revisions to the population series were instead made by adding in a new component of change labelled as "unattributable other". This effectively took the remainder of the difference between the rolled forward and Census-based mid-year estimates and spread this evenly across the decade. While at London-level this adjustment looks relatively small, for individual local authorities where the original mid-year estimates did not align well with the Census results, this correction factor was quite significant (e.g. 3,000 people a year in the case of Westminster).
- 3.23. In December 2012, the GLA produced its own population back-series estimates as part of its 2012 round of population projections. It was acknowledged that insufficient supporting data existed to allow accurate estimates of international migration flows in the first half of the decade. However, as it was judged that the majority of the error in the estimate series took place in the early part of the decade – either through inaccurate international migration estimates or through error in the starting 2001 population estimate – the GLA took a decision to confine its adjustments to the pre-MSIP international inflow estimates produced prior to 2005-6. While the accuracy of these adjustments may be questionable, it was deemed that lumping the correction at the start of the decade would give rise to a more realistic population time series than spreading the correction across the entire decade, especially when it seems likely that the original ONS estimates would have under-represented inflows associated with the accession of the EU8 nations to the European Union in May 2004.
- 3.24. The effect of these different assumptions is illustrated in Figure 14, which shows that whereas the GLA and ONS estimates of international out-migration are very similar, the GLA estimates a higher level of international in-migration in the early years of the decade and ONS a higher level in the latter part. Figure 15 then shows the different estimates of net international in-migration that result.

Figure 14: Comparison of GLA and ONS estimates of international migration flows, 2001 to 2012

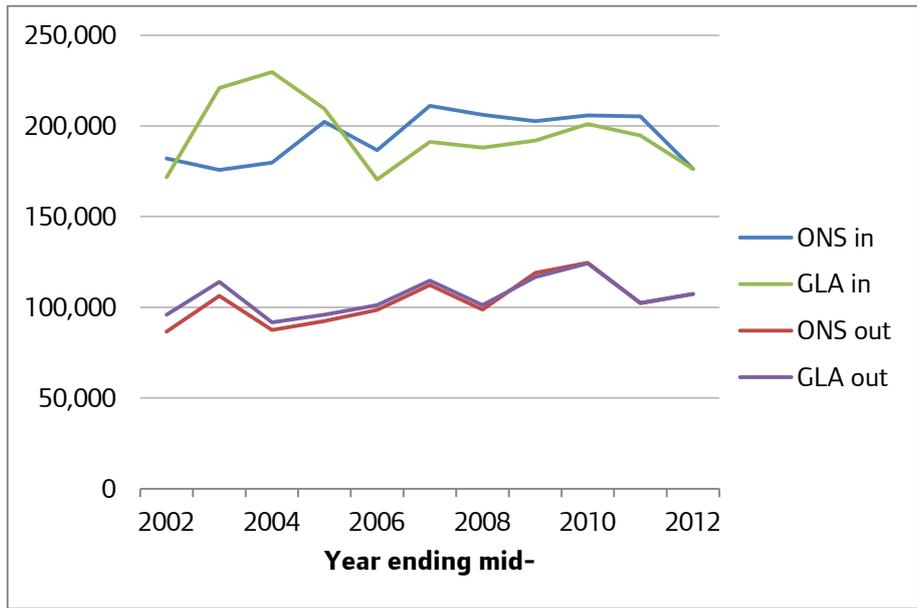
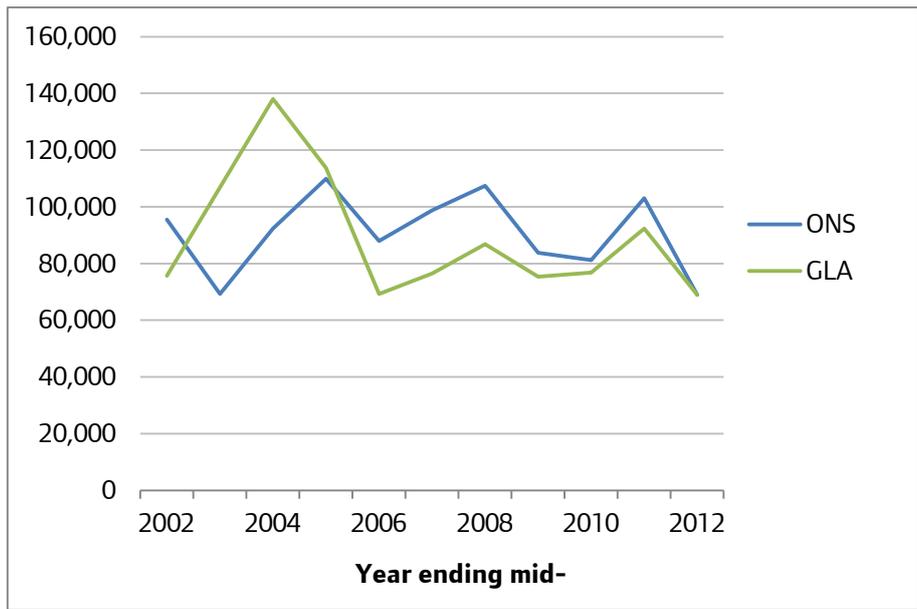


Figure 15: Comparison of GLA and ONS estimates of net international in-migration, 2001 to 2012



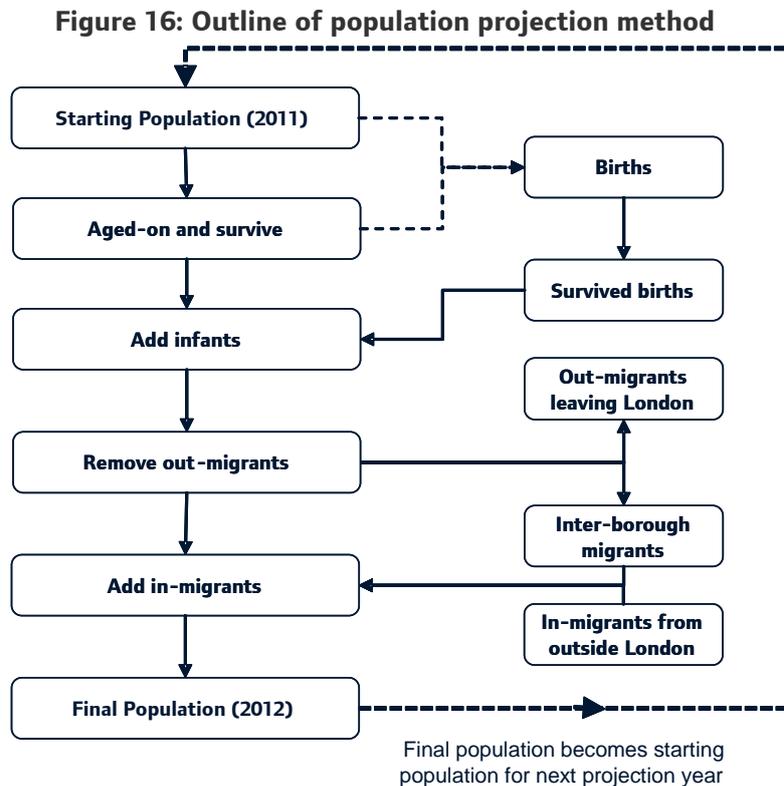
Projecting the population

GLA projections

- 3.25. The GLA produces a range of annually-updated population projections at both borough and ward level. Multiple different projections are produced to meet various user requirements, but in general the variants form two groups – those based purely on trends in fertility, mortality and migration, and those constrained to a forecast development trajectory. All projections discussed in this document are of the former type and are produced at borough-level.

- 3.26. These projections are produced using a cohort component projection model, illustrated in Figure 16. Projections are produced from the starting point of the most recent census-year mid-year estimate available (now 2011). This starting population is aged-on a year, and deaths, births

and migration flows are accounted for to arrive at an estimated population for mid-year 2012. This process is repeated, using the final population calculated in each loop as the starting population for the next. Beyond the last year with actual data available, values for births, deaths and migration flows are projected using age-specific probabilities for fertility, mortality and migration generated from historic trends.



3.27. Uncertainty is inherent in all population projections. They are not predictions, but rather the modelled results of “what-if” scenarios. So many uncontrollable and unknowable factors underpin the dynamics of population change that it is imprudent to rely entirely on any one projection, and far better to take into account a range of plausible scenarios and consider the implications when making policy decisions.

3.28. The greatest source of uncertainty in projecting London’s population comes from migration, for several reasons:

- The scale of population movement is much higher than elsewhere in the country, making London very sensitive to changes in migration patterns.
- Existing patterns of migration arise from highly complex social and economic relationships between and within London, the UK, and the rest of the world. The most sophisticated models we can build to project future migration are crude approximations.
- Migration flows are volatile and sensitive to future changes in the economy, government policy, and to major world events, all of which are essentially unpredictable.

- Our understanding of past and existing patterns of migration is incomplete, limited not least by the data available to us.

3.29. Fertility and mortality variations also add uncertainty into projections, but they are generally of less concern than migration because:

- They are less volatile. Changes in mortality are especially gradual, taking place over successive generations. Births can vary significantly over shorter timescales, but much of this volatility is actually the result of migration effects and transient changes in the timing of births rather than dramatic shifts in the overall fertility rate of the population.
- Many of the wider impacts of changes in mortality and fertility are delayed, as infants won't begin to form new households and take up employment until decades after they are born (though they will need nursery and primary school places rather sooner).

3.30. The recent economic downturn adds to the uncertainty inherent in projecting London's population. As discussed above, net domestic out-migration fell substantially in the aftermath of the financial crisis and has remained relatively low. With an economic recovery now under way, the question is what effect it will have on migration trends. There are a range of plausible responses that broadly fall between the following two scenarios:

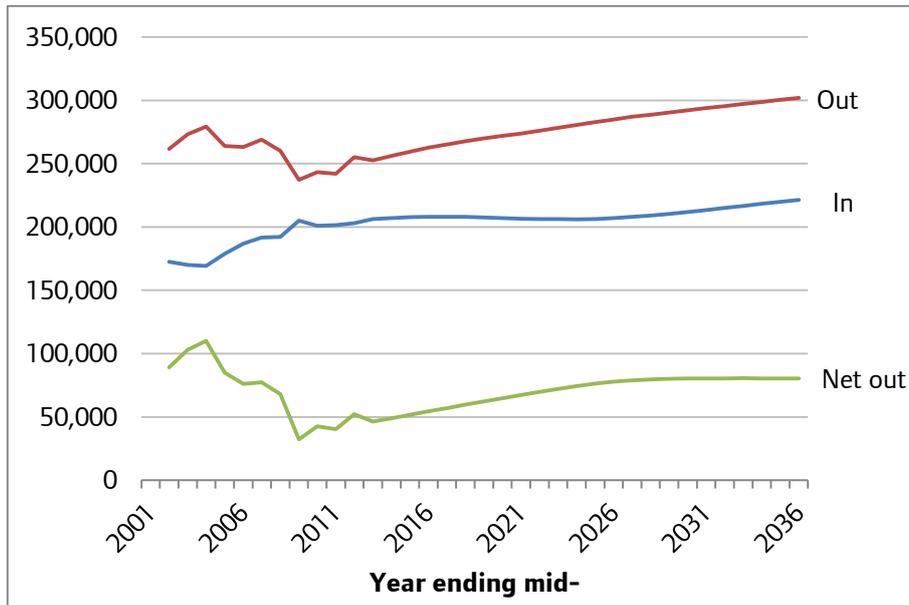
- No effect of economic recovery on migration trends. This scenario implies that recent changes are 'structural' and will persist, perhaps because London has adapted to increasing numbers of families staying rather than moving and has become a more welcoming place to raise children.
- Reversion to pre-recession 'norms'. This scenario implies that recent changes in migration are a temporary reaction to 'cyclical' economic forces and accompanying housing market problems, and that migration trends will eventually return to previous levels.

3.31. For its population and household projections, the GLA has considered three possible population scenarios. The first two reflect the scenarios listed above. To simplify the modelling process, it was assumed that the changes in migration in the second scenario would happen abruptly after mid-2017. The third scenario uses assumptions mid-way between the other two – i.e. a partial return to previous trends.

3.32. The three population growth scenarios give a broad range of plausible outcomes, and are referred to hereafter as the Central, Low, and High variants. In each case, mortality, fertility and international migration methodologies are the same, but the assumptions regarding domestic migration differ, as explained below.

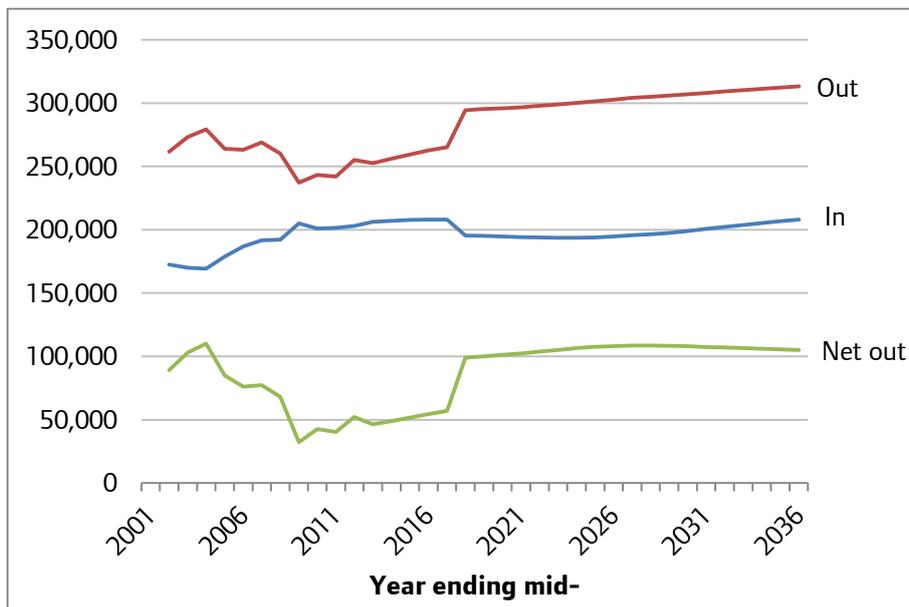
1. **High variant:** Domestic migration trends are taken from the period mid-2008 to mid-2012 and held constant for the entire projection period. Both in- and outflows increase over time to reflect increasing population in London and the rest of the UK.

Figure 17: Domestic migration - High scenario



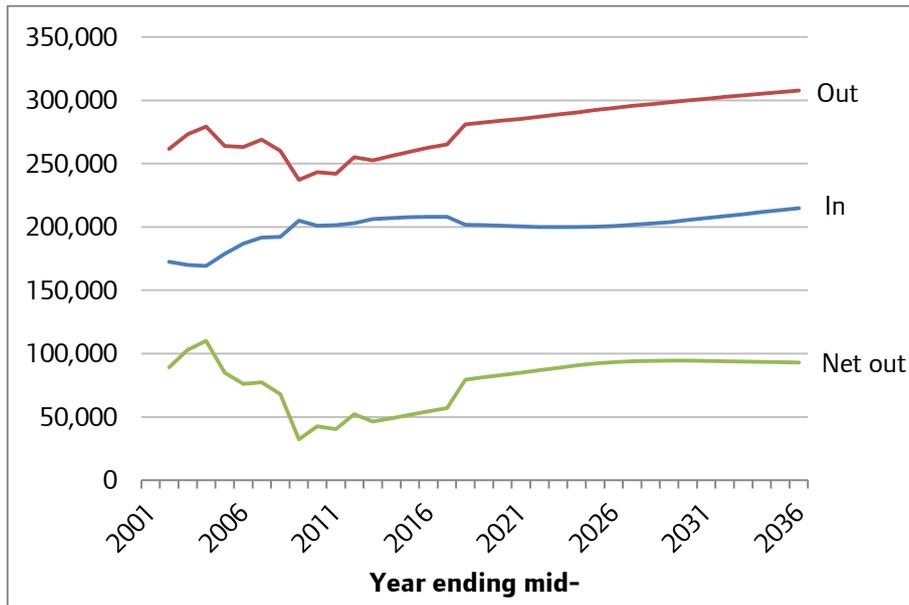
- 2. **Low variant:** Domestic migration is the same as per the High projection through to mid-2017. Beyond this point, outflows increase by 10% and inflows decrease by 6%.

Figure 18: Domestic migration - Low scenario



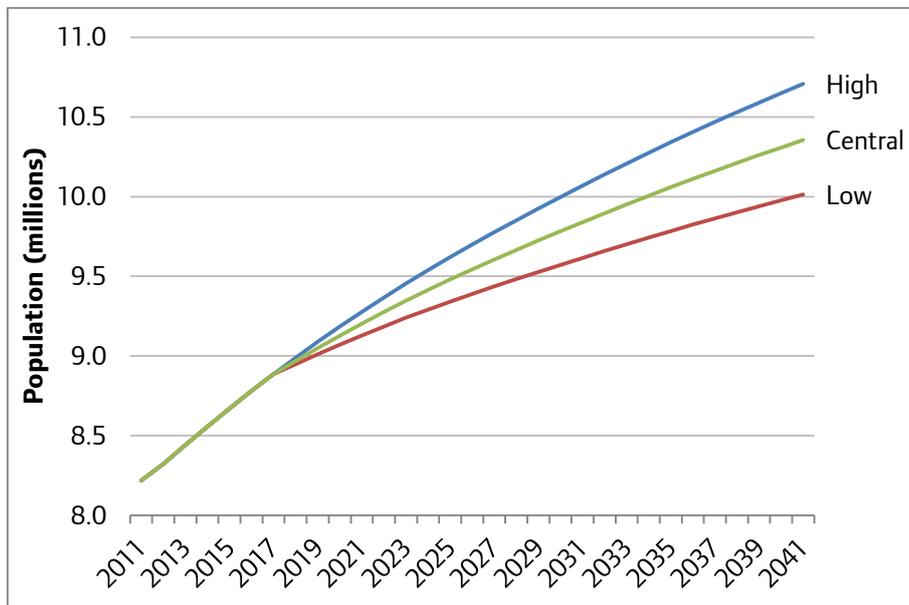
- 3. **Central variant:** This scenario takes the mid-point of the assumptions in the High and Low projections. That is, after 2017 outflows increase by 5% and inflows fall by 3%.

Figure 19: Domestic migration - Central scenario

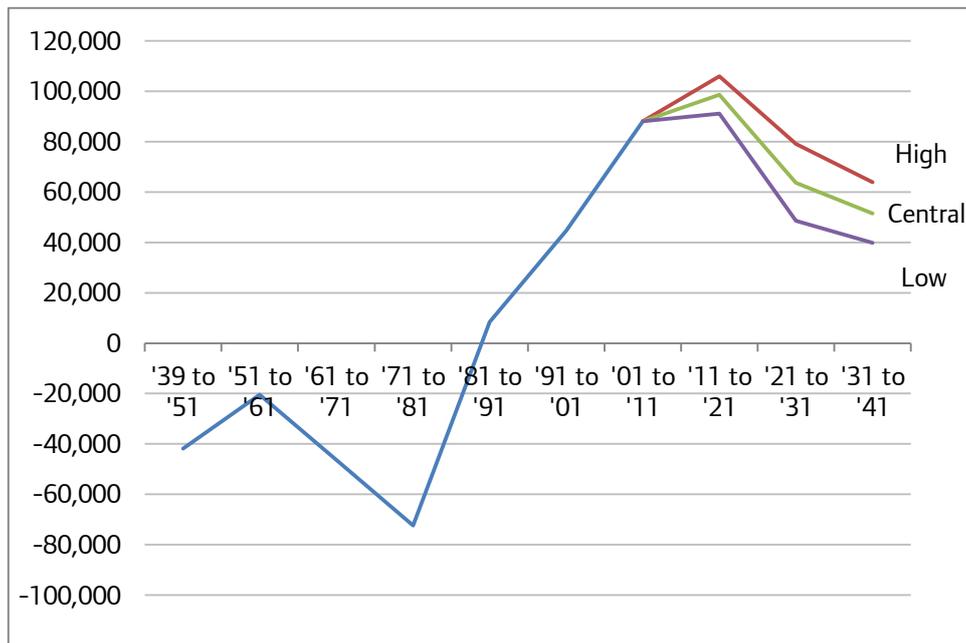


3.33. These three migration scenarios give rise to a range of population outcomes. By 2036 the difference between the High and Low projections of London’s total population is approximately 600,000, with the range 9.8 to 10.4 million. The difference looks greater when the growth since 2011 is considered, with a range of 1.6 to 2.2 million.

Figure 20: Projected population growth in three GLA scenarios



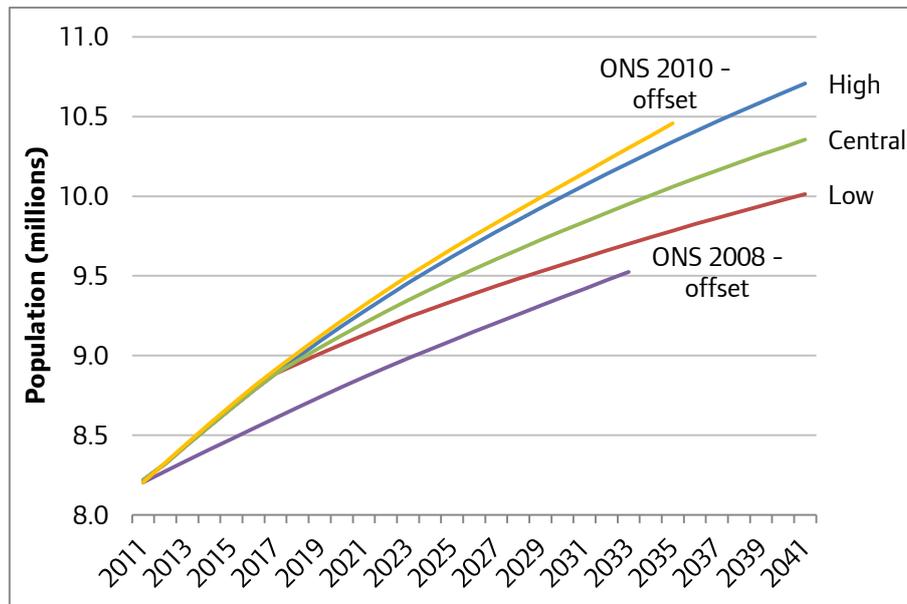
3.34. This projected growth can be considered in historical context by comparing with past growth estimates. While none of the projection variants show future growth to remain as high as the levels reached at the end of the last decade, even the low variant projects overall population growth in the decade to 2021 to be higher than estimated for any previous decade bar 1891 to 1901. But population growth is projected to slow in each scenario, falling to around 50,000 a year by the 2030s in the Central scenario.

Figure 21: Historic and projected annualised population growth by decade*Comparison with ONS projections*

- 3.35. The GLA population projections can be compared with those released by ONS as part of their biennial Subnational Population Projections (SNPP). The last full release of projections was the 2010-based SNPP released in March 2012, and the next release, the 2012-based SNPP, is scheduled for spring 2014. In September 2012, ONS released an additional set of projections to 2021, described as “interim” and incorporating the newly available 2011 Census-based mid-year population estimate but no other information from the 2011 Census.
- 3.36. The ONS projections are based on a broadly similar methodology to the GLA’s. Both use a cohort component model and project forward according to recent trends in fertility, mortality and migration. A single projection is produced with no variants and this uses the assumption that recent patterns of migration will persist for the duration of the projection period – the equivalent assumption to that used in the GLA’s High variant. The most significant methodological difference is that the sum of ONS’s subnational projections for all authorities in England and Wales are constrained to be consistent with the results of the equivalent round of their National Population Projections (NPP).
- 3.37. Figure 22 shows the projected growth in London’s population from the last two sets of full subnational projections (2008- and 2010-based) applied to the 2011 census-based mid-year estimate population base and plotted alongside the GLA’s three variants. The 2010-based ONS projection shows similar annual growth to the GLA’s high projection variant, and the 2008-based projection shows lower growth than the low variant.
- 3.38. The methodology used in each of the two sets of ONS projections is largely similar, but the input data is considerably different. A key difference between them is that the 2010-based projection incorporated the results of the Migration Statistics Improvement Program (MSIP), which sought to improve the quality of international inflow estimates at subnational level and

led to an overall upward revision of inflow estimates for London. Additionally, both sets of projections used five years of domestic migration data to project forward - 2002/3 to 2007/8, and 2004/5 to 2009/10 for the 2008- and 2010-based respectively. As Figure 13 illustrates, there was a very large difference in average net domestic migration over these two periods.

Figure 22: 2008- and 2010-based ONS population projections compared to GLA variants

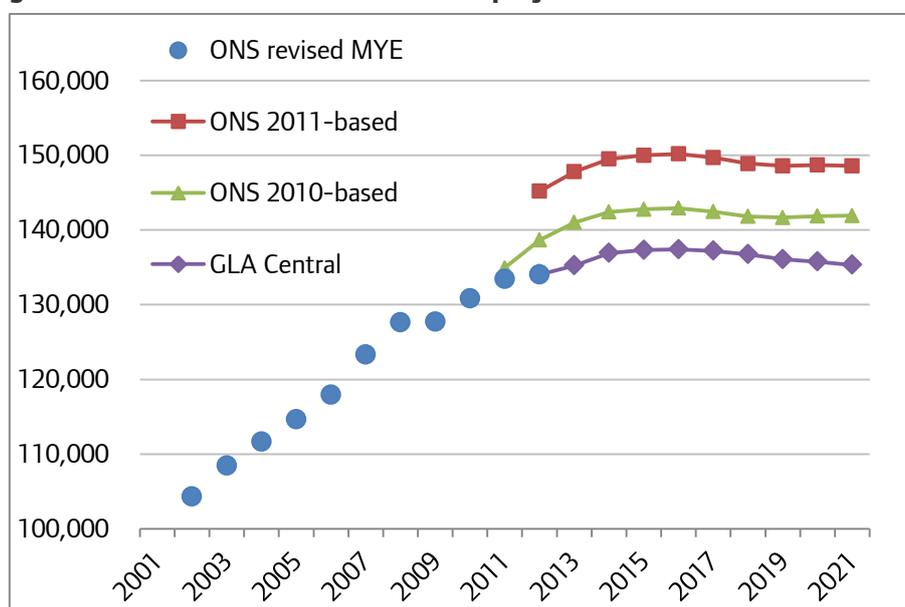


- 3.39. Following the release of the 2011 census-based mid-year estimate, ONS produced a set of interim subnational projections making use of this new population base. Projected growth for London as a whole was even higher than in the 2010-based SNPP, with substantial variations from previous projections at borough level.
- 3.40. These projections were short-term, extending only to 2021, and were not constrained to national projections. At the time they were released, ONS had yet to produce an updated set of mid-year estimates consistent with the results of both the 2001 and 2011 censuses. In both the GLA's and ONS's projection methodologies, the series of population estimates before the "base" projection year are integral to the process of producing the trends of fertility and mortality rates, and migration propensities that are used to project forward. Lacking this consistent back series, ONS took the rates and propensities calculated using the previous (pre-census) set of mid-year estimates and applied these to the new 2011 mid-year estimate populations.
- 3.41. This approach was flawed because the rates calculated were only consistent with the new population base if the previous set of mid-year estimates were also consistent with the census results. For London this was a particular problem as the previous ONS population estimates for many local authorities in the capital aligned poorly with the 2011 Census results. This meant, for example, that the fertility rates estimated for London from the pre-Census mid-year estimates were too high as they were based on an under-estimate of the number of females in London. Applying these fertility rates to the Census population therefore resulted in too high a projection of future births. As a result of these discontinuities in the population estimate series,

the projected components of population change – especially births and migration, and especially for London – were distorted.

- 3.42. After its release in September 2012, the 2011-based interim projection faced criticism from the GLA and local authorities¹⁸. The release by ONS of their 2012 mid-year estimate then confirmed many of the issues that had been raised: the 2011 SNPP had projected total population growth in London of 127,000 between mid-2011 and mid-2012, whereas the mid-year estimate gave a figure of 104,000. Likewise, the projection of live births for the period was 145,000 and the subsequent estimate 134,000. In comparison, the equivalent GLA projection (the 2012 round) projected the total London births to an accuracy of a little over one hundred births (see Figure 23).

Figure 23: Estimates and ONS and GLA projections of live births in London



- 3.43. In summary, there are significant concerns over the methodology used for the 2011-based interim population projections and their use as the basis for household projections.
- 3.44. In spring 2014, ONS will release the 2012-based subnational projections. These will incorporate ONS's revised mid-year population estimates for 2002 to 2010 and will be constrained to the 2012-based NPP. The results of these projections are likely to differ significantly from those of the 2011 interim projections. The 2012-based SNPP will project forward on the basis of the most recent four years of domestic migration data and can be considered to be broadly comparable to the GLA's high projection variant.

Projecting households

- 3.45. In order to project future household growth, assumptions about how households form are applied to the projected population. In doing so, the GLA makes use of the methodologies and assumptions underpinning the Department of Communities and Local Government (DCLG) household projections. An outline of this methodology follows, and more details can be found

¹⁸ GLA Intelligence Update 23-2012: The ONS 2011 Sub-national Population Projections

in the documentation DCLG produced to accompany the release of the 2011-based interim projections^{19 20}.

Converting population to households

- 3.46. The conversion of population into households is a two-stage process. The first stage involves producing projections of households by age group and marital status (single, couple, previously married). The second stage disaggregates the Stage One projections into more detailed household types. The processes involved in each stage are described in the following sections.
- 3.47. **Stage One** produces projected numbers of households by age group and marital status (single, couple and previously married). The steps to produce these projections are as follows:
- Create projections of Private Household Population (PHP) by age, gender and relationship status. This involves apportioning the chosen base population projection, e.g. the 2011 SNPP, into these groups.
 - Project Household Representative Rates (HRRs). HRRs are a set of probabilities that define the likelihood of a member of the population heading a household. Probabilities are produced by age, gender and relationship status.
 - Apply the HRRs to the projected PHP.
- 3.48. Projections of PHP and HRR are created by projecting forward trends from past census results. The detailed data required from the 2011 Census was not available at the time these projections were created. Data from the Labour Force Survey (LFS) and the projected HRRs from the 2008-based household projections were combined with the data available from the 2011 Census to produce the information necessary to update the projections.
- 3.49. The projections incorporate the assumption that the communal establishment population in each age group will remain constant at 2011 estimated numbers with the exception of those groups aged 75+, for whom it is assumed that a constant *proportion* of the population will reside in a communal establishment.
- 3.50. **Stage Two** disaggregates the Stage One projections into more detailed household types. This process makes use of commissioned tables of detailed household characteristics from the 2001 Census. Such tables were not yet available from the 2011 Census. Additional steps were required to produce comparable estimates for 2011 using LFS data and results from the 2008-based projections in conjunction with the available Key Statistics and Quick Statistics tables.
- 3.51. The methodology produces a set of headship rates by type and age - defined as the proportion of people in each age group who are the head of a household. These headship rates are projected forward from the 2001 and 2011 data points through to 2021. Applying these projected headship rates to the household population generates initial projections of households by type and age. Final projections are then generated by constraining the Stage Two output such that the total households by year and local authority match the output from Stage One.

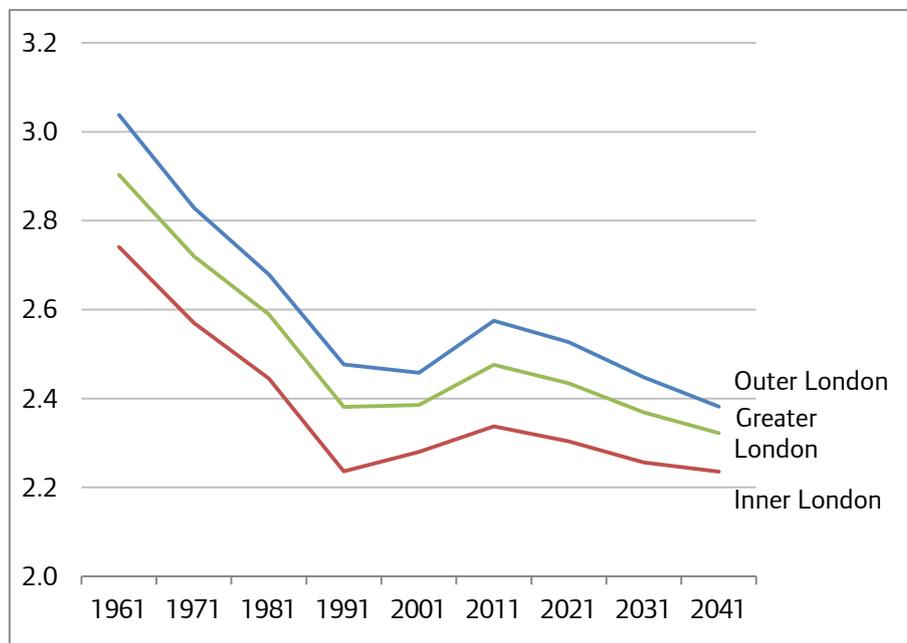
¹⁹ Household interim projections in England, 2011 to 2021; DCLG; April 2013

²⁰ Updating DCLG's household projections to a 2011 base: methodology; DCLG; April 2013

Household size

- 3.52. The household representative and headship rates used determine the number, type and average size of households that a given population would form. Because the Stage Two projections are constrained to the total number of households resulting from Stage One, it is the household representative rates used in Stage One that ultimately determine the number and size of the households projected. These rates are projected forward from a back series of data spanning from 1971 to 2011 for the 2011-based DCLG projections.
- 3.53. Projected average household sizes can be compared to historical trends from Census data. The period from 1961 to 1991 saw the continuation of a trend of falling average household size in London (see Figure 24), decreasing from 2.9 to 2.38 persons per household. This trend was shown to have come to an end by the results of the 2001 Census, which showed little change in household size from 1991. But between 2001 and 2011, the Census indicated an increase in average household size from 2.39 to 2.47.
 - 3.54. Despite these recent increases, the model projects that household sizes across London will begin to fall again immediately and to continue to fall through to 2041. From the recent high of 2.47 in the 2011 Census, Greater London’s average household size is projected to fall back below its 2001 value of 2.37 by 2031 and to reach 2.34 by 2036. Average household size does differ slightly for the three population variants, ranging between 2.346 for the High population variant and 2.338 for the Low by 2036.

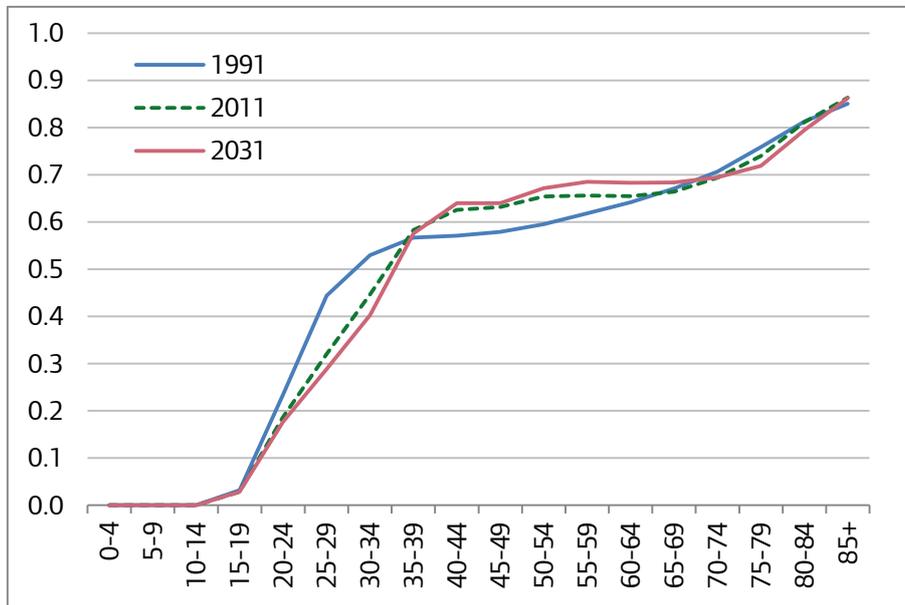
Figure 24: Average household size by area in the Central GLA projection



- 3.55. The reason why the model yields more households as the population ages stems from the changing propensity of people of different ages to head households. Figure 25 shows estimated and projected household representative rates for London in 1991, 2011 and 2031 (in the Central projection). Older people are far more likely to head a household (equivalently they are

far more likely to be in small or one-person households), even after we have assumed a proportion of those aged 75 or more will live in communal establishments.

Figure 25: Household representative rates by age group, London 1991 to 2031

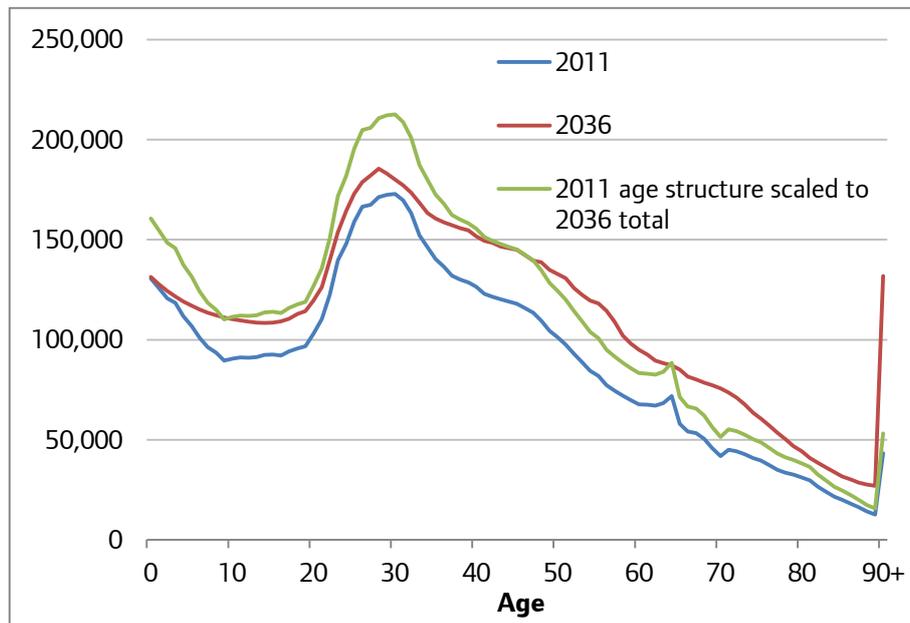


3.56. DCLG projected these propensities forward to 2021 by extrapolating forward historic trends from 1971. The GLA in turn has extended these trends to 2041. The impact of the projected changes to these rates has a relatively minor impact on the number of households that are formed (decreasing the annualised household growth by around one or two thousand compared with holding the rates constant at 2011 levels).

Impact of an ageing population on household projections

3.57. To illustrate the influence of the population age structure on household size and projected household growth, we can compare the projected household yield from two populations:

1. A projection of the London 2036 population, in this example giving the age structure shown in *red* in Figure 26.
2. The 2011 London population scaled up to match the total population from the 2036 projection. This is shown in *green*.

Figure 26: Impact of population ageing

- 3.58. The projected 2036 population has a much older average age, which has a very large effect on projected household growth. Using the same set of household representative rates (DCLG rates extended to 2036), the projected 2036 population (the red line) would result in 4.27 million households, while the same number of people distributed according to the 2011 age distribution (the green line) would result in 3.96 million households. This difference of approximately 300,000 by 2036 equates to a difference of around 12,000 in annualised household growth rates, or almost a third of the annual growth of 39,500 in the central projection.
- 3.59. This exercise demonstrates the sensitivity of the household projections to the behaviour of the older population. If we were to assume a propensity for older people to migrate out of London or a lower rate of increase in life expectancy, then we would project fewer, but larger households (and vice versa).

Projected households

- 3.60. The methodology described above yields a set of household projections for each of the population projection variants. Figure 27 and Figure 28 show the total projected households for London and the equivalent annualised household growth figures. The High, Central and Low projections yield 4.38 million, 4.27 million, and 4.15 million households by 2036 – a range of 232,000. In terms of annualised household growth from 2011 to 2036, these equate to 44,200, 39,500, and 34,800 respectively.

Figure 27: Projected households to 2036

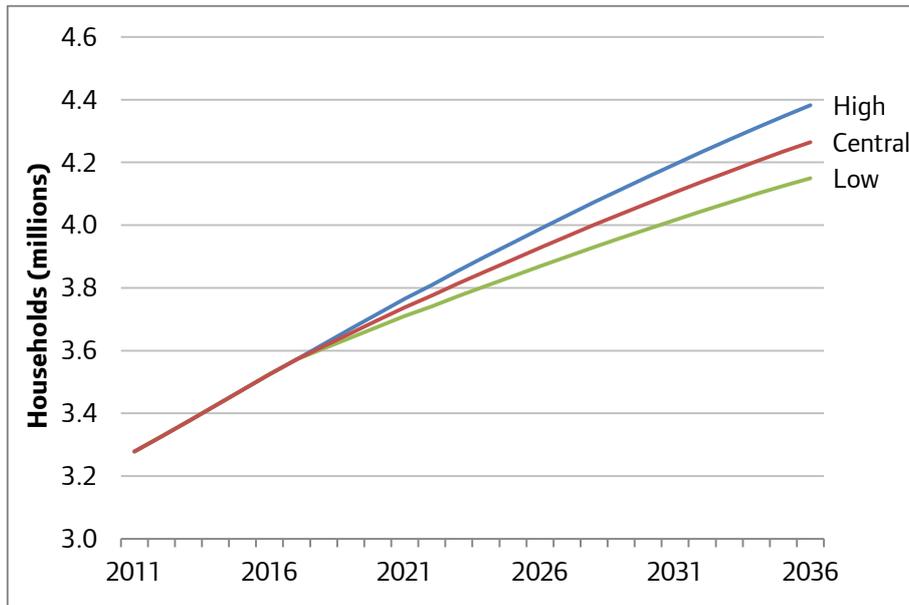
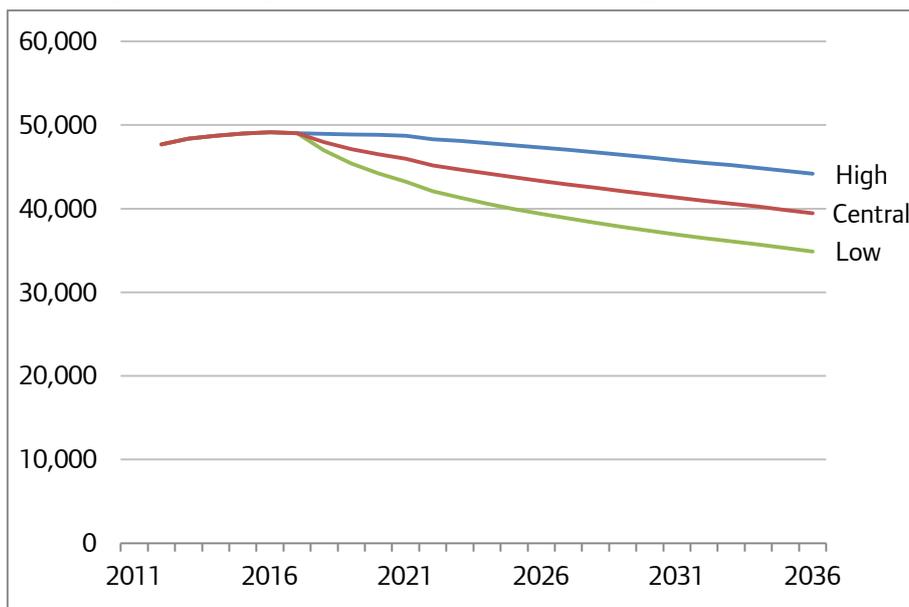


Figure 28: Projected annualised household growth to 2036



3.61. Household size is projected to fall for the duration of the projection period – from 2.476 in 2011 to 2.342 in 2036 (for the central projection). The three projection variants show little difference in household size trends, with a projected range for Greater London of between 2.346 and 2.338 by 2036. The variation between the projections arises purely as a result of differing projected age structures. In all cases the projected decline in household size is driven by increasing projected proportions of older people in the population.

Uncertainty in household formation rates

3.62. Patterns of household formation have changed significantly over the years and it is often difficult to disentangle the causes for the changes observed. A complex range of factors influence household formation and accurately predicting future trends is extremely challenging.

- 3.63. Comparison of data from recent censuses shows two main trends: falling household representation among those aged 20 to 34, and increasing household representation among those aged 40 to 59.
- 3.64. The key drivers behind the fall in household formation among the young are likely to have been increasing participation in higher education and increasing costs of housing. The future direction of household formation for this age group will therefore depend on future trends in these factors, which, themselves, are difficult to predict.
- 3.65. The rise in household formation among those aged 40 to 59 correlates with a decline in the proportion of Londoners of those ages married or cohabiting and this is likely to be the primary cause for the change. The proportion of people who are married has been falling for decades, but it is unclear at what rate this trend will continue – if at all.
- 3.66. The methodology employed by DCLG and adopted by the GLA is to project formation rates for each age group based on the historic series for that age group. A criticism of this approach is that no account is taken of possible cohort effects in future rates. Where changes have been observed in patterns of household formation in a given cohort, formation rates in subsequent years for this cohort may continue to differ from those of previous cohorts. For example, it is not yet understood whether the reduced household formation among younger people observed in recent years will persist – with the cohort continuing to show reduced formation rates over time as compared to prior cohorts.
- 3.67. Another potentially significant factor not fully accounted for within the methodology is the impact of the closing gap between male and female life expectancy. The high rates of household formation observed among the elderly are partly the result of the tendency for women to outlive their spouses. The discrepancy in life expectancy between males and females increased over the course of the 20th Century, reaching its widest point in the 1970s when women aged 65 could be expected to live four years longer than their male counterparts. The gap has since narrowed, with the difference now closer to two and a half years²¹. This trend could lead to lower proportions of widowed women in some age groups, and correspondingly lower household formation rates.

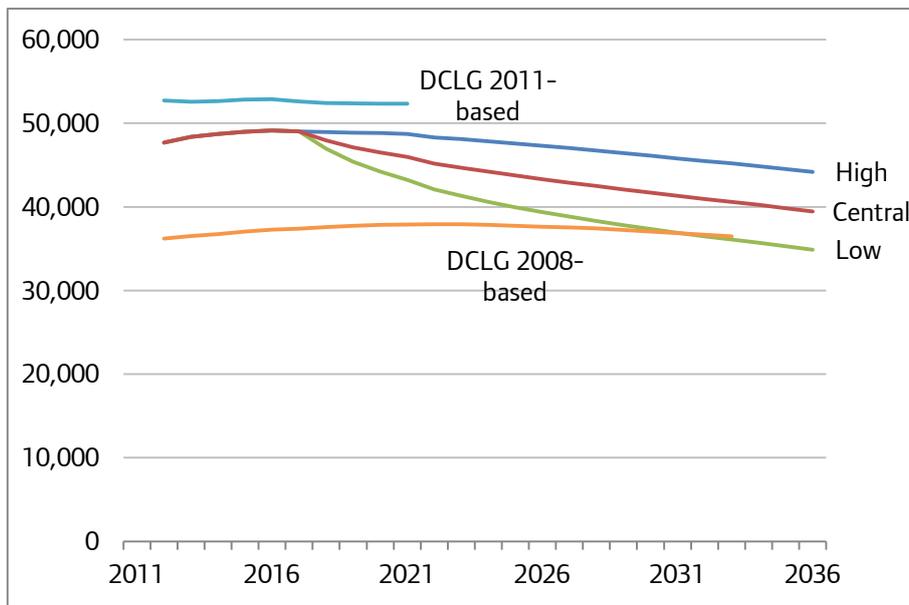
Comparison with DCLG household projections

- 3.68. DCLG periodically produce subnational household projections for England and Wales. The last complete set of projections was the 2008-based, released in November 2010. These were underpinned by the 2008-based ONS SNPP. No 2010-based set was produced because of the imminent release of results from the 2011 Census. Instead, the decision was made to wait to produce a set of interim household projections, incorporating the early results from the census and the interim ONS subnational projections. Many of the detailed census tables required to fully refresh the projections were yet to be released, and so additional sources of information (data from the Annual Population Survey and the results of the 2008-based projections) were incorporated as proxies for the missing information.

²¹ Longevity Science Advisory Panel (2013), 'Life Expectancy: past and future variations by gender in England & Wales'

- 3.69. These projections were released in April 2013, labelled as 2011-based interim. They show a higher level of growth in households than any previous set of projections, with annual growth of over 52,000 households per year through to 2021. By comparison, the 2008-based DCLG projections gave annualised growth of approximately 37,000 through to 2033. The 2008-based projection is undermined by the results of the 2011 Census, which showed that both the underlying population assumptions used were inaccurate for most London boroughs, and that household size had in fact risen between the 2001 and 2011 censuses rather than fallen as projected.
- 3.70. The 2011-based projection, by contrast, suffers from being underpinned by the 2011-based interim subnational projections discussed earlier. The GLA’s own household projections, which combine DCLG household formation rates and GLA population projections, project slightly lower annual household growth from 2011 to 2021 than the DCLG 2011-based set due to differences in the GLA and ONS population projections.

Figure 29: Annualised household growth according to DCLG and GLA household projections

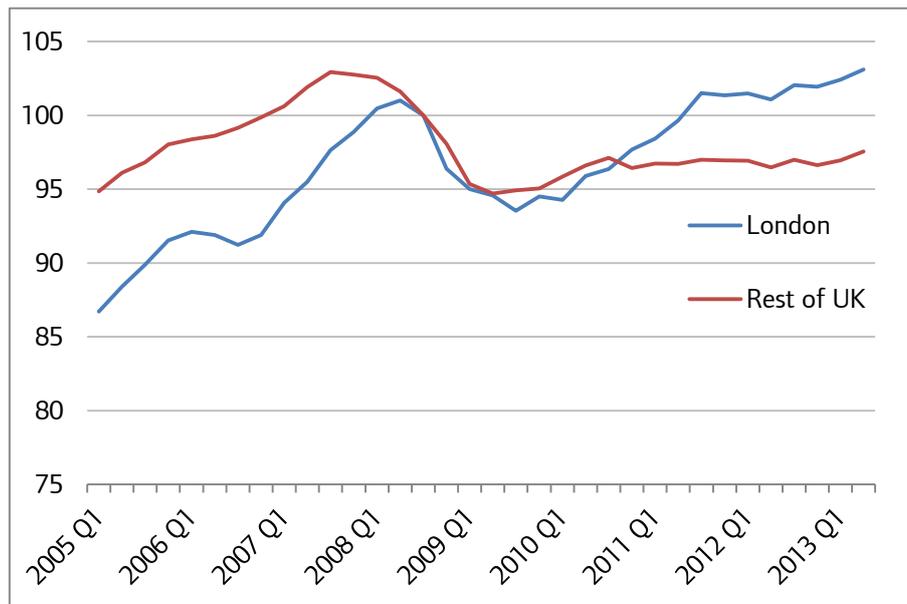


4 ECONOMIC TRENDS

Economic output and employment

- 4.1. As the previous London SHMA was published in early 2009, London's economy was at the start of a recession following four years of rapid growth. Between September 2008 and September 2010 London's workforce lost 3.3% of its jobs, compared to just 1.8% in the rest of England²², and its economy contracted 3.6% in real terms compared to 2.9% in the rest of the UK²³.

Figure 30: Trend in real Gross Value Added in London and rest of UK (2008 Q3 = 100)

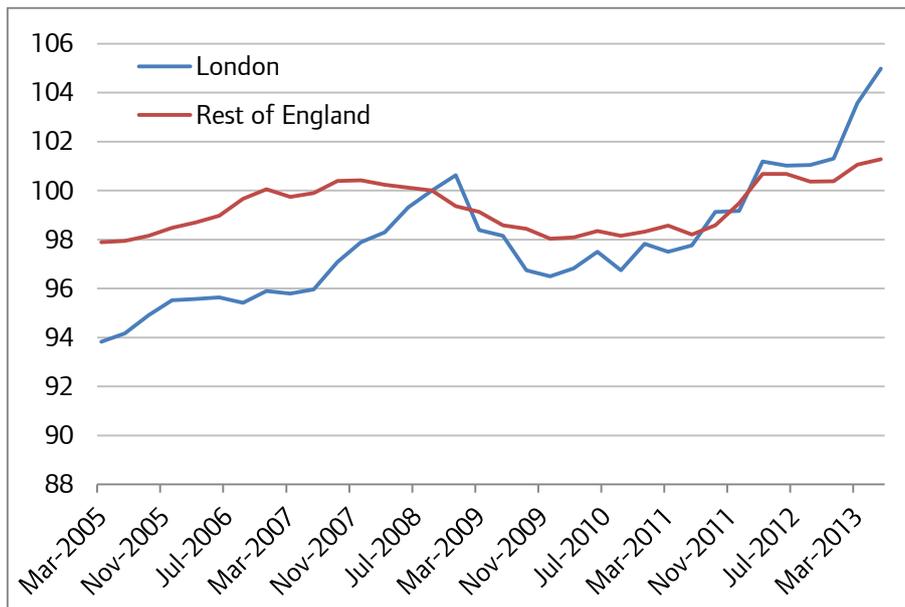


- 4.2. But London subsequently saw a much stronger recovery than the rest of the country. Between September 2010 and June 2013 (the most recent data at the time of writing), London's workforce grew by 8.5% compared to 3.2% in the rest of England, and its economy grew by 7% compared to 0.5% in the rest of the UK²⁴. Employment growth in London has been particularly rapid in the last year, with an estimated 197,000 workforce jobs added.

²² ONS, Workforce jobs by industry, data to June 2013

²³ Experian, GVA estimates provided to GLA, data to June 2013

²⁴ Ibid.

Figure 31: Trend in workforce jobs in London and rest of England (Sep 2008 = 100)

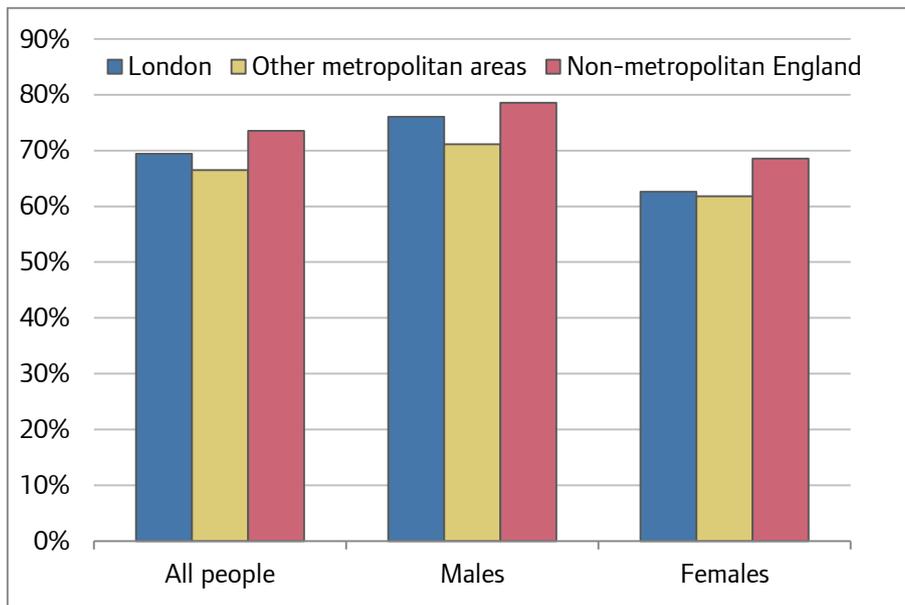
- 4.3. As a result of rapid jobs growth, London's employment rate (the number in employment as a proportion of all people aged 16-64) has converged somewhat with the national rate, while still remaining below average. Cities tend to have lower employment rates due to concentrations of low skills, and London's employment rate is in fact higher than that of other metropolitan areas in England. But as Figure 32 shows this is only due to higher employment rates for males²⁵. Employment rates for females in London are well below the national average and in line with other English cities. The main cause seems to be very low part-time employment rates in London, where only 21% of females work part-time compared to 25% in other metropolitan areas and 31% in the remainder of the country²⁶. These low part-time employment rates are in turn due to a complex range of factors, including the tax and benefits system and the high cost of childcare²⁷.

²⁵ ONS, Annual Population Survey, data to June 2013

²⁶ Ibid.

²⁷ Bell et al (2012), 'Driving up part-time employment in London'

Figure 32: Employment rates for those aged 16-64 by area and gender, year to June 2013²⁸



4.4. Employment growth over the last decade has been unevenly distributed across London, with the three boroughs of Westminster, Tower Hamlets and the City accounting for 57% of jobs growth between 2000 and 2011²⁹. Income growth has also been concentrated in Inner London, as shown in Figure 33: Inner London’s gross disposable household income per head is now 50% higher than the UK average compared to around 30% in 2002, while Outer London has stayed relatively steady at around 14% above the UK average³⁰. The growth of employment in the central boroughs is likely to be a major factor behind higher housing demand and price growth in Inner London over the last decade.

Figure 33: Ratio of gross disposable household income per head to UK average



²⁸ ONS, Annual Population Survey, data to June 2013

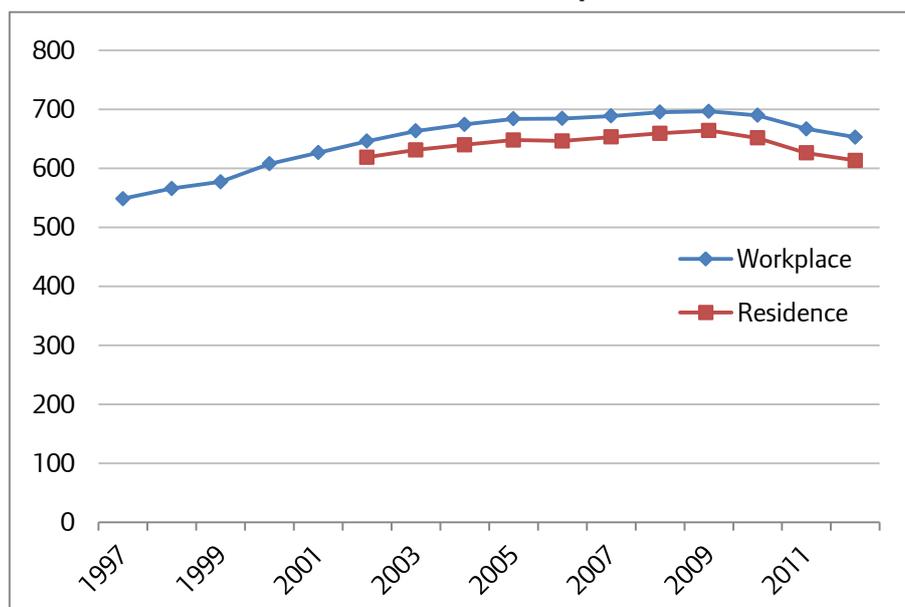
²⁹ GLA Datastore, Jobs and Jobs Density by borough, data to 2011

³⁰ ONS, Regional Gross Disposable Household Income, data to 2011

Earnings

- 4.5. Median full-time earnings in London have fallen in real terms for three years between 2009 and 2012 (Figure 34), and currently stand at £653 a week for those who work in London (including those who commute from outside) and £613 a week for those who live in London (some of whom work elsewhere). In nominal terms earnings have risen slightly, but not as fast as either house prices or rents, resulting in worsening affordability.

Figure 34: Trend in median gross weekly full-time earnings, London, by place of work and place of residence (constant 2012 prices)³¹

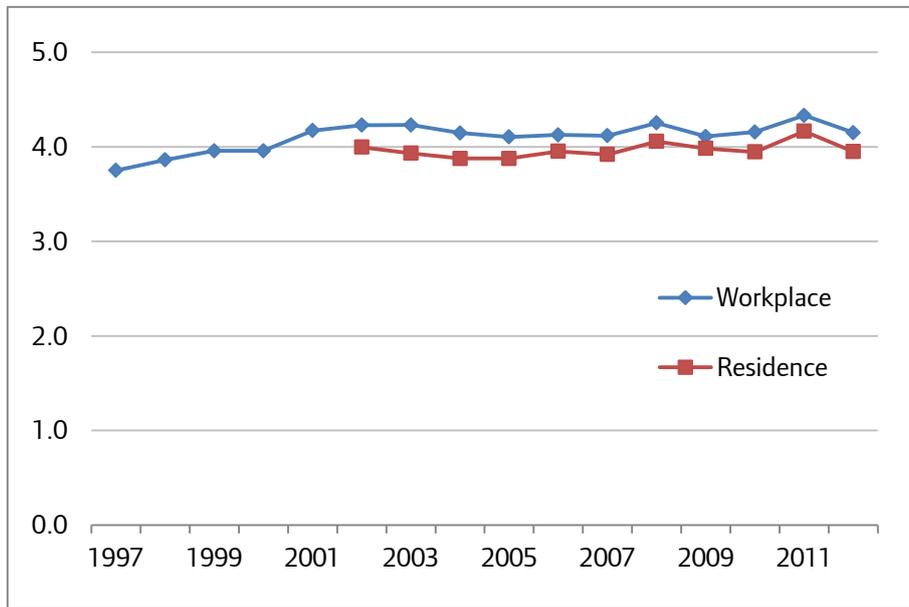


- 4.6. Figure 35 shows the trend in earnings inequality in London, as represented by the ratio between the 90th and 10th percentiles of the gross weekly full-time earnings distribution, by both place of work and place of residence. The trend has been relatively flat over the last decade, with inequality (by this measure at least) no higher in 2012 than in 2002 by either place of work or place of residence.
- 4.7. However, this is but one way to measure inequality, and others (taking into account non-earned income, or household rather than individual incomes, or wealth) may well show a different picture. For example, researchers at the London School of Economics estimate that the ratio between the 90th and 10th percentiles of net equivalised household income after housing costs rose in London from 8.4 in 2007/08 to 10.7 in 2010/11, driven by a large fall in income after housing costs for the poorest 10% of households³². This increase in inequality is likely to have been caused by a combination of falling income and rising housing costs: as chapter 5 shows, both private and social rents have risen strongly in recent years, which will have particularly affected households towards the bottom of the income distribution.

³¹ ONS, Annual Survey of Hours and Earnings, data to 2012 (adjusted to real terms using Consumer Price Index)

³² Lupton et al (2013), 'Prosperity, Poverty and Inequality in London 2000/01 to 2010/11'

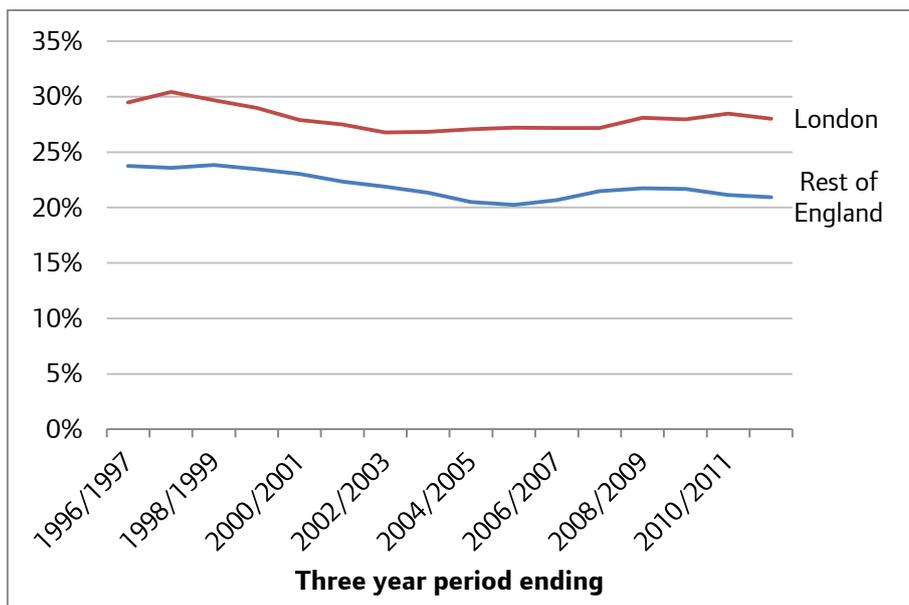
Figure 35: Trend in earnings inequality (ratio of 90th to 10th percentile gross weekly full-time earnings), London, by place of work and place of residence



Poverty

4.8. While incomes in London are higher than in the rest of the country, the gap in housing costs is even higher (see chapter 5). As a result, around 28% of households in London are considered to be living in poverty when housing costs are taken into account, compared to 21% in the rest of England. Poverty is defined here as a household income below 60% of the national median, after adjusting for household size. According to this measure, poverty in London has risen slightly in the last decade, but is lower than in the mid-1990s. However, in recent years part of the fall in poverty according to this measure is caused by a drop in the median national household income used to derive the poverty threshold³³.

Figure 36: Trend in poverty rate after housing costs, London and rest of England



³³ New Policy Institute (2013), 'London's Poverty Profile'

Employment projections

- 4.9. According to the latest GLA Economics projections, the number of jobs in London is projected to increase from 4,896,000 in 2011 to 5,757,000 in 2036³⁴. This equates to annual average growth of just under 34,000 jobs per year and results in over 860,000 more jobs in London by 2036. If we assume that the ratio of London jobs to London homes remains at roughly 1.5 to 1, then a very crude calculation suggests that 34,000 more jobs per year would require around 23,000 more homes a year.
- 4.10. If this ratio were to fall, however - for example due to a drop in the share of jobs taken by commuters from other regions - then the number of homes required could be higher. Furthermore, there are a range of methods for carrying out employment projections³⁵, and some other forecasters are projecting more rapid employment growth in London, albeit over a shorter projection period - for example, the projection by Oxford Economics of around 68,000 more jobs per year between 2015 and 2020, which (applying the same ratio as above) would point to a housing requirement of just over 50,000 homes a year³⁶.
- 4.11. The composition of employment growth will also affect the level and mix of future housing requirements (for example, growth in higher-wage jobs will tend to have a greater impact on housing demand). GLA Economics forecast that just over half of the employment growth in London to 2036 will be in the professional, real estate, scientific and technical activities sector. Information and communication, administrative and support service activities, and accommodation and food service activities are also expected to see large increases in employment numbers. However, manufacturing, wholesale, transportation and storage, and public administration are all projected to see declines in employment in London over the same period³⁷.

³⁴ GLA Economics (2013), 'London labour market projections'

³⁵ See GLA Economics (forthcoming), 'Performance of GLA Economics Employment Projections' for a detailed comparison of the performance of different projections

³⁶ Oxford Economics (2013), 'The economic outlook for London'

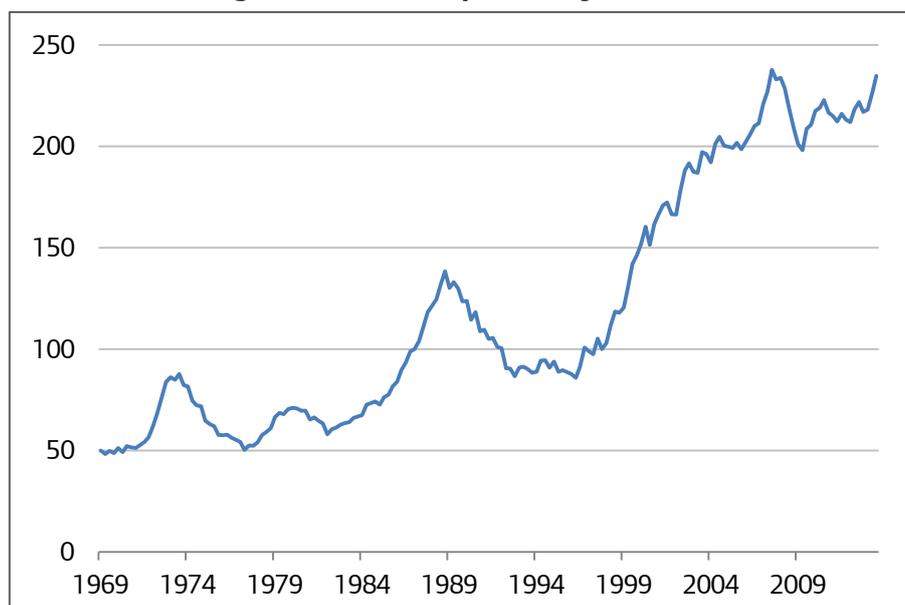
³⁷ GLA Economics (2013), 'London labour market projections'

5 HOUSING MARKET TRENDS

House prices

- 5.1. Rapid growth in population and employment, combined with a persistent under-supply of housing, has left London with very high housing costs. In September 2013 the average mix-adjusted house price in London stood at £434,000, compared to £255,000 in England as a whole. London's average prices had risen by 9.4% since September 2012 (in nominal terms – for real terms price changes see below), more than twice as fast as the 4.2% national increase³⁸.
- 5.2. Average prices vary widely between London boroughs, with Kensington and Chelsea the most expensive at £1,180,000, but even the cheapest (Barking and Dagenham) has the 44th highest prices in the country and is therefore more expensive than the vast majority of non-London local authorities³⁹.
- 5.3. Even when adjusted for inflation, London's average house prices have more than doubled since the late 1990s and trebled since the mid-1980s (Figure 37)⁴⁰. It is notable that whereas previous house price cycles featured long post-peak price declines, the price drop following the peak in mid-2007 was relatively small and has been made up by subsequent increases. The implication is that London's prices are under-pinned by strong fundamental factors of high demand and low supply.

Figure 37: ONS index of average London house prices, adjusted for RPI inflation (Q1 1987=100)



- 5.4. Another way to illustrate the price trend is to show the ratio between mix-adjusted average house prices in London and the UK as a whole (Figure 38)⁴¹. This ratio has recently reached its highest recorded value, with London prices around 80% higher than the UK average⁴². While the trend again exhibits strong cycles (evidence of a 'ripple effect' in prices between London and the rest of the country), it is notable that the bottom of each previous cycle has left average

³⁸ ONS, House Price Index, data to September 2013

³⁹ Land Registry, House Price Index data (seasonally adjusted and smoothed prices), October 2013

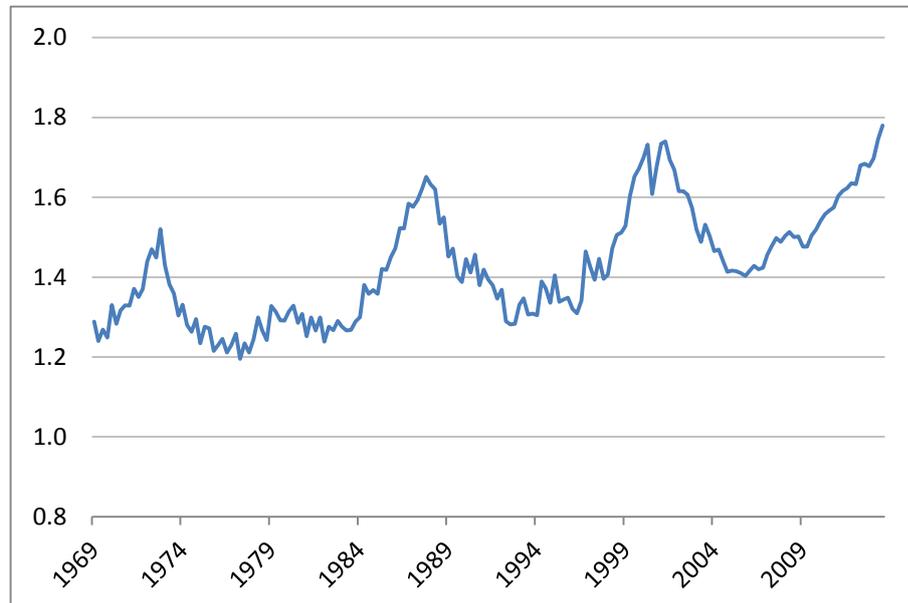
⁴⁰ Trend constructed by GLA using ONS mix-adjusted price index (Table 10) and RPI data

⁴¹ Trend constructed by GLA using ONS mix-adjusted price tables 14 and 15

⁴² Monthly data, only available back to February 2002, indicates that prices in London are now 2.03 times the average in the rest of the UK, also a record level.

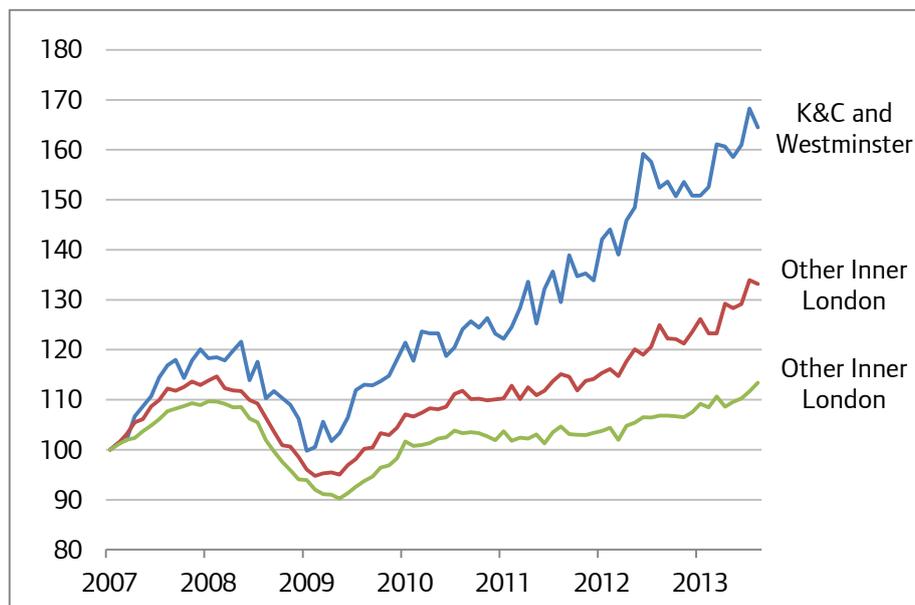
London prices further above the UK average than the one before it, further evidence of a long-term failure of supply to meet demand.

Figure 38: Ratio of London to UK mix-adjusted house prices



- 5.5. In addition to divergence in average house prices between London and the rest of the UK, recent years have also seen substantial divergence within London, with particularly rapid price growth in 'prime' central London areas such as Westminster and Kensington and Chelsea, positive but slower growth in the rest of Inner London, and until recently very little growth in Outer London. Figure 39 shows estimated average house price indices (this time not adjusted for inflation) for these three parts of London, relative to a base value of 100 in January 2007. As of August 2013 average prices in Westminster and Kensington and Chelsea were an estimated 64% higher than in January 2007, while in Inner London they were 33% higher and in Outer London 13% higher⁴³. In recent years prices have therefore risen the most in the places where they were highest to begin with, widening the disparity in prices across London.

⁴³ These indices were calculated by GLA as averages of individual borough average price values, weighted by borough transaction volumes. The original data is from the Land Registry historical House Price Index, to August 2013.

Figure 39: Estimated London house price indices

Private rents

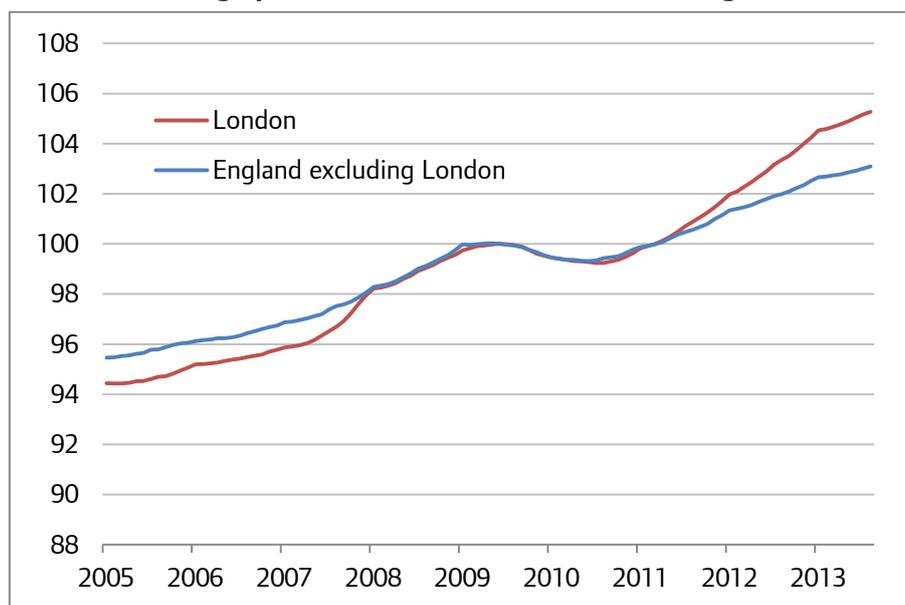
- 5.6. Average private rents in London are also considerably higher than the national average. The Valuation Office Agency (VOA) report a median rent for London (across all unit types and sizes) of £1,250 a month, compared to £585 in England as a whole⁴⁴. However, it must be borne in mind that the VOA deliberately exclude from their statistics any cases where the tenant receives Housing Benefit (including Local Housing Allowance)⁴⁵. These cases usually involve below-average rents, and the Housing Benefit caseload has grown rapidly in London in recent years (discussed in more detail below), so the VOA average tends to over-state the true average private rent as paid by all tenants, and in recent years has also over-stated the increase in private rents in London (and other areas where the Housing Benefit caseload has grown).
- 5.7. Trends in average private rents over time are available from the new ONS index of private rents, which is based on a matched and weighted sample⁴⁶. As Figure 40 shows, average rents rose more quickly in London than in the rest of England both before and after the recent recession. In August 2013 average rents in London were 5.3% above their June 2009 level, compared to 3.1% in the rest of England. However, annual rental growth in London has fallen in recent months, from 2.5% a year at the start of 2013 to 1.9% in August.

⁴⁴ VOA, Private Rental Market Statistics, to March 2013

⁴⁵ See VOA, Private Rental Market Statistics Release Notes:

http://www.voa.gov.uk/corporate/statisticalReleases/130530_PRM_Release_Notes.html

⁴⁶ ONS (2013), 'Index of Private Housing Rental Prices, Historical Series'

Figure 40: Index of average private rents, London and rest of England (June 2009 = 100)

- 5.8. It is important to note that this ONS index calculates changes in the rents for both new and ongoing tenancies. It is therefore very different from private sector rent indices such as those from LSL Property Services and Homelet, which show the change in rents for new tenancies only. Homelet estimate the annual increase in average rents for new tenancies in London to be 2.6% in October 2013 (down from around 7% at the start of the year)⁴⁷, while LSL estimate a 4.9% increase (down from 6.2% in February)⁴⁸. The fact that average rental growth excluding ongoing tenancies is so much higher indicates that many if not most landlords tend not to raise rents or raise them only moderately when renewing tenancies, while bringing them in line with the market for the beginning of a new tenancy – but direct evidence of this is not currently available.

Social and affordable rents

- 5.9. Rents for new general needs social rent tenancies have risen rapidly in recent years, in large part because they are based on an inflation-linked formula. The average rent for a new social rented tenancy in London in 2012/13 was £105 a week, a 6.2% increase from 2011/12⁴⁹. Average social rents in London are 31% above the England average, a much smaller gap than exists for private rents (see p. 51).
- 5.10. Figure 41 shows the trend in average weekly rents for new social rent tenancies alongside Affordable Rent tenancies, which were first introduced in 2011/12 and which can be let at rents of up to 80% of the equivalent market rent (or up to the Local Housing Allowance caps if they are lower). The average rent for a new Affordable Rent tenancy was £160 in 2012/13, down

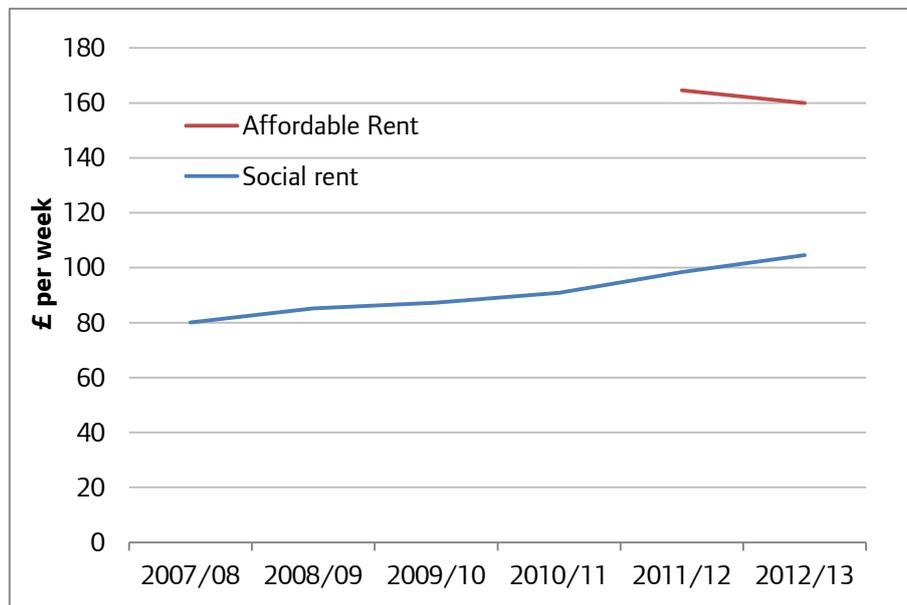
⁴⁷ Homelet (2013), 'Rental Index October 2013'

⁴⁸ LSL Property Services (2013), 'Buy to Let Index'

⁴⁹ DCLG (2013), 'Social housing lettings in England: April 2012 to March 2013'. The figures from this source for both social rents and Affordable Rents exclude service charges.

from £165 in 2011/12 (but as there were very few Affordable Rent lettings in 2011/12 this trend is not very significant)⁵⁰.

Figure 41: Average weekly rents for new social rent and Affordable Rent tenancies in London (not mix-adjusted, excluding service charges)

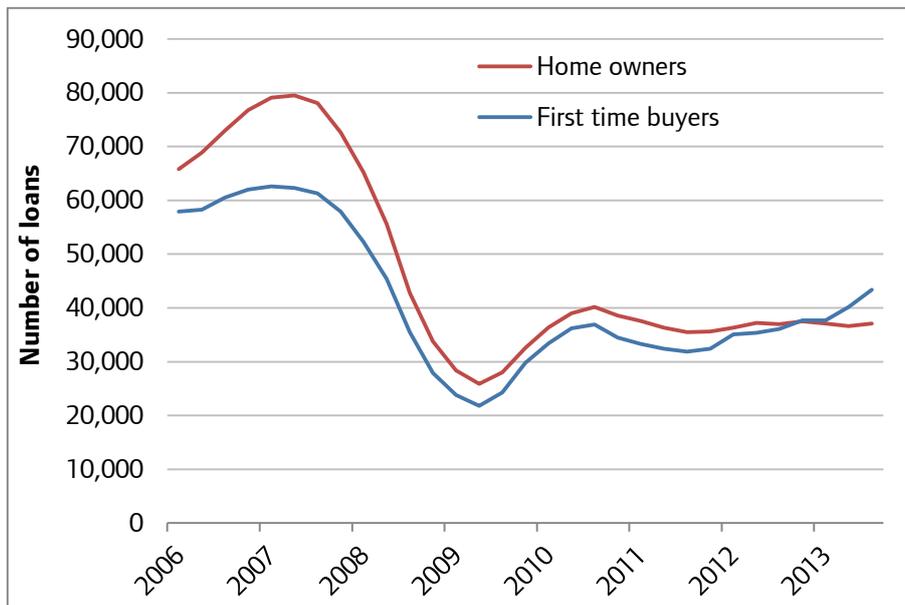


Transactions and mortgage lending

5.11. A prolonged mortgage lending shortfall followed the last recession, with the number of new loans in London falling almost by half relative to pre-recession levels (Figure 42). However, the number of loans to first time buyers in London has increased by 20% to 43,400 in the year to September 2013, while the number of loans to home owners moving house has remained relatively static. Even at the current rate of growth, however, it would take another two years for the number of loans to first time buyers to return to pre-recession levels.

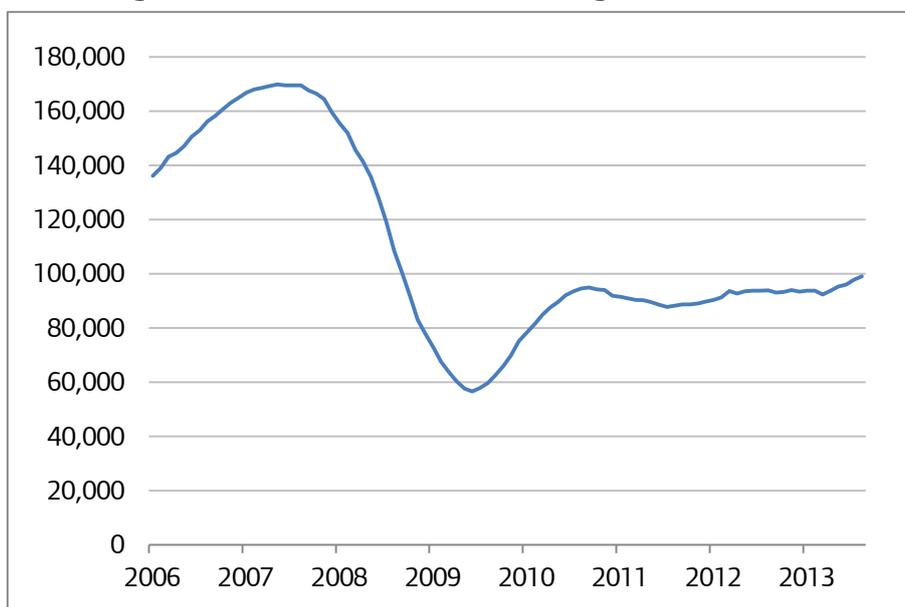
⁵⁰ Ibid.

Figure 42: Annualised new mortgage advances in London by type of buyer



5.12. While there were a total of just over 75,000 new mortgage loans made to homeowners (new and existing) in London in 2012, there were around 93,400 home sales in total (Figure 43). Assuming no major measurement discrepancies, the gap of 18,400 presumably comprises sales to cash buyers and Buy to Let landlords.

Figure 43: Annualised trend in housing sales in London

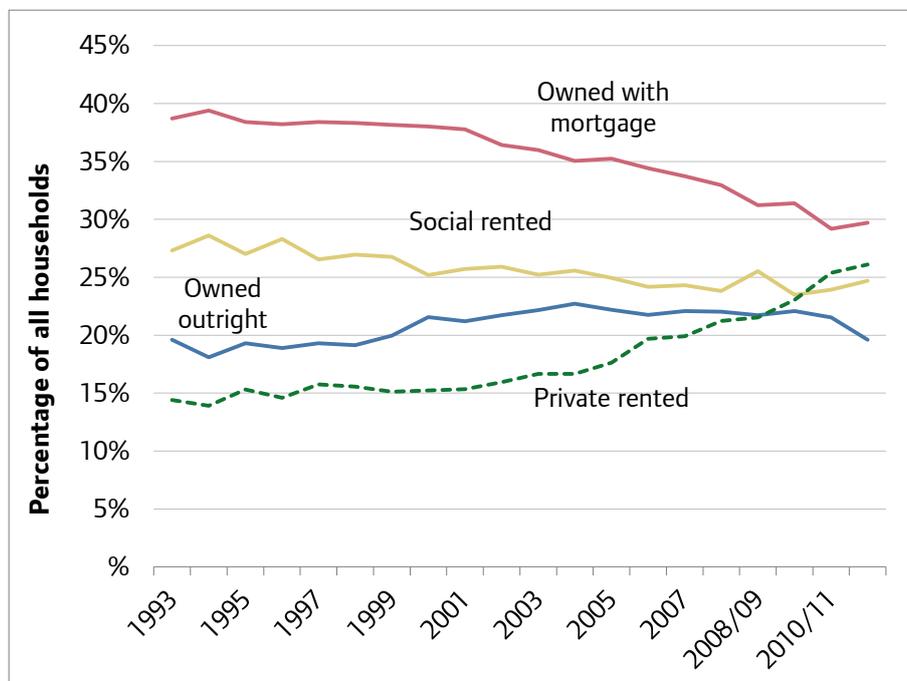


Tenure trends

5.13. The long term trend in housing tenures was set out in chapter 2, but the shorter term trends are also relevant to the analysis of London’s housing requirements. As Figure 44 shows, growth in the private rented sector has been particularly rapid in recent years, probably due in large part to the mortgage shortage outlined above. The private rented sector has grown from around

15% of London's housing in the early 1990s to around 26% in 2011/12, while the proportion of households who own their home with a mortgage has fallen from around 40% to around 30%.

Figure 44: Estimated annual trend in household tenure, London

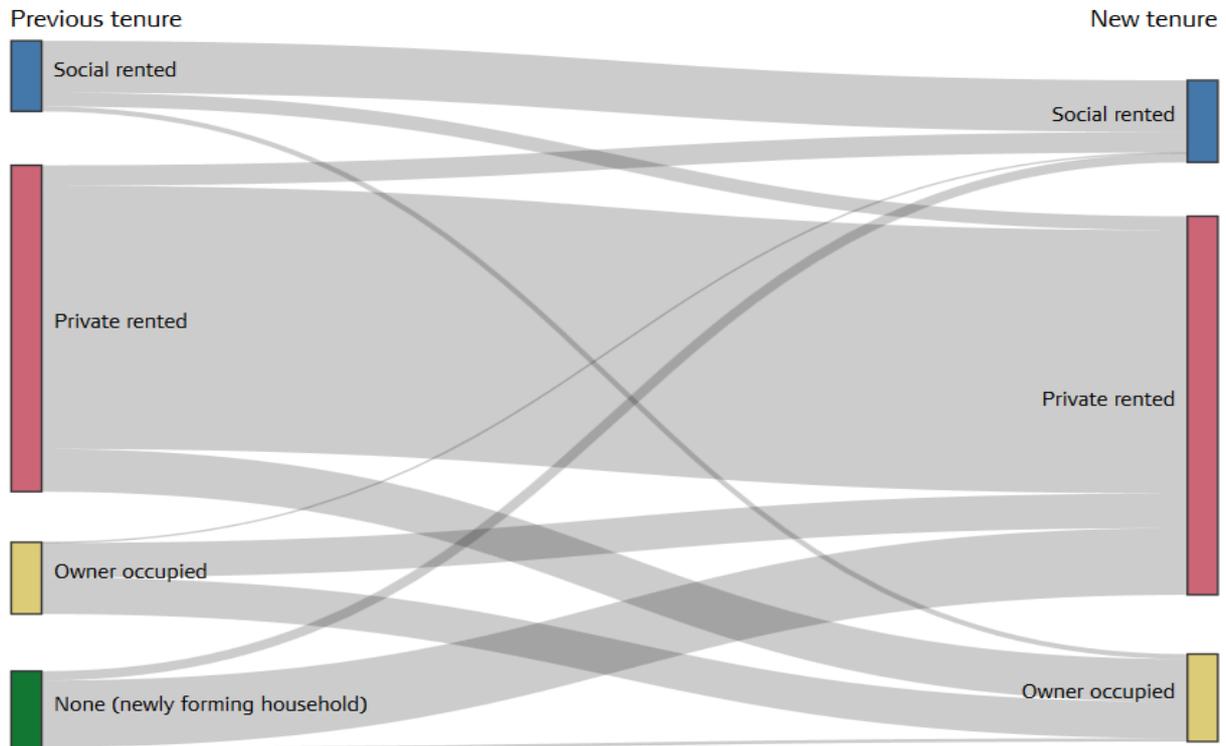


5.14. The scale of moves between tenures helps explain these trends. Figure 45 shows the pattern of moves between tenures in London (and the tenures occupied by newly forming households) in an average recent year⁵¹. Overall, around 330,000 or one in ten households in London move per year, and 69% of moves are either into or within the private rented sector. More households move from the private rented sector into owner occupation than the other way around, but the private rented sector's share is still growing rapidly because it absorbs so many newly forming households, around 40,000 of the roughly 48,000 that form each year. Social rented and owner occupied housing each receive around 13% of moves, many of which are within the same tenure.

5.15. It is impossible to know whether or to what extent the private rented sector will continue to grow as the mortgage market improves. It is notable, however, that aspirations to own remain strong, even if for many households they may be unrealisable in the short term⁵².

⁵¹ The data is from the English Housing Survey and uses an average of the three years 2009/10 to 2011/12.

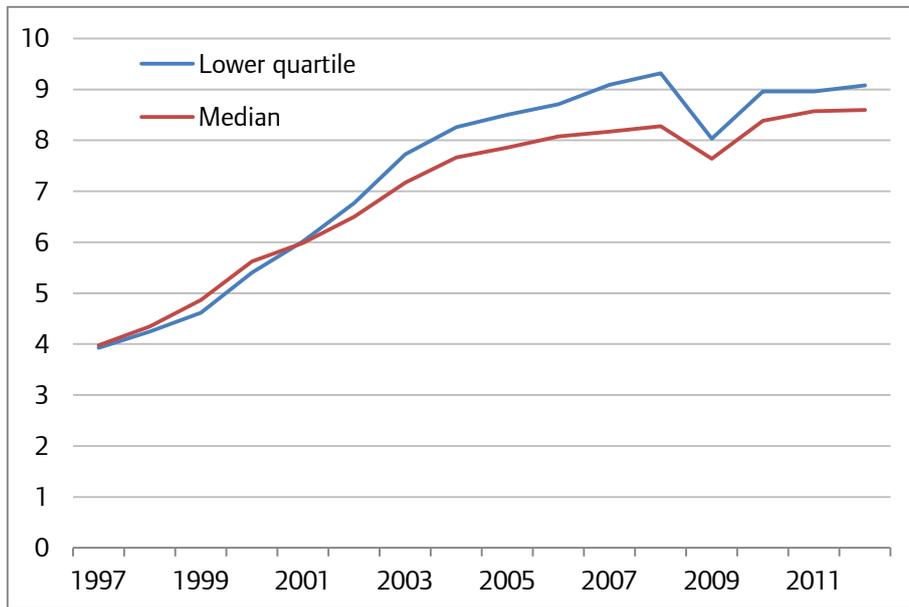
⁵² See GLA (2012), 'Housing in London 2012', section 1.14

Figure 45: Moves between tenures in London, average of 2009/10 to 2011/12

Affordability

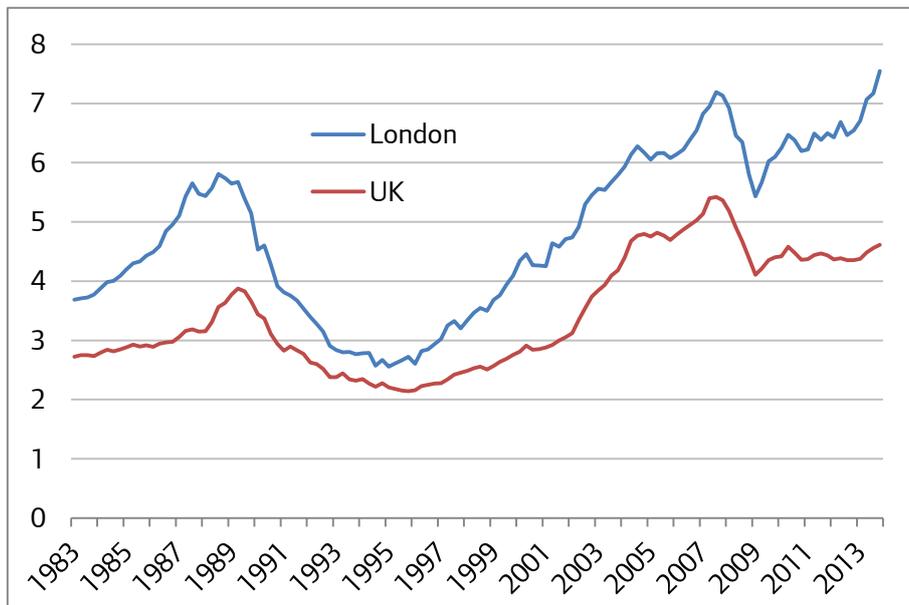
- 5.16. London has serious problems of housing affordability both in historic terms and in comparison to other parts of the country. Figure 46 shows the trend in a standard measure of affordability, the ratio of lower quartile house prices to lower quartile individual earnings, alongside the equivalent ratio for median prices and median earnings. According to both measures house prices were four times earnings in 1997, but the ratio rose rapidly to around nine to one in 2012. The recent recession, when prices fell more than earnings, caused only a temporary improvement in affordability as prices subsequently rose faster than earnings, returning affordability to its pre-crash levels.

Figure 46: Affordability ratios in London - lower quartile and median house prices and earnings, 1997 to 2012



5.17. Similar indicators can be calculated in a variety of ways, and Figure 47 shows the ratio of average first time buyer prices to earnings as calculated by Nationwide, for London and the UK as a whole. According to this measure affordability in London is worse than at any point since 1983, while affordability in the UK has returned to 2004 levels.

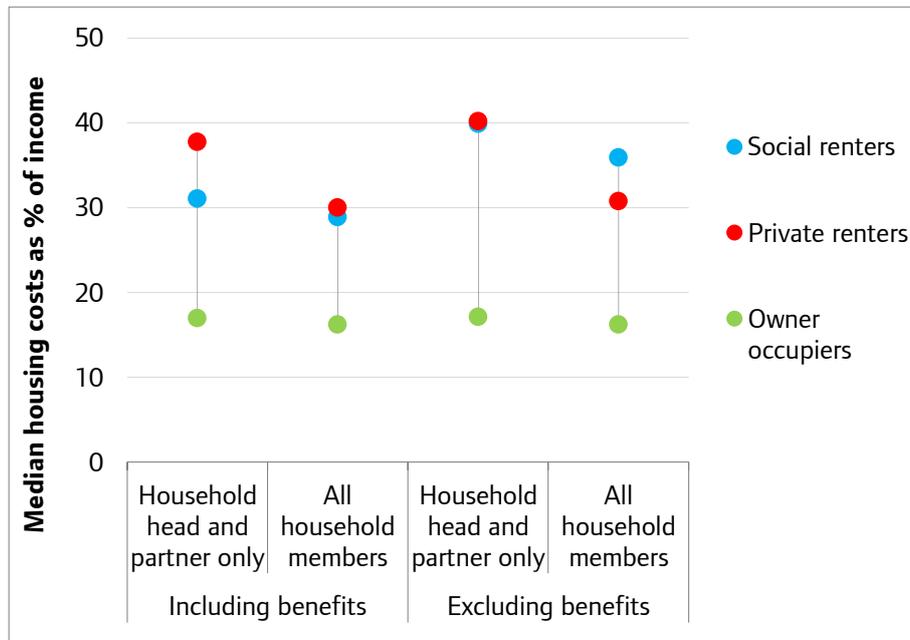
Figure 47: Ratio of Nationwide first time buyer prices to average earnings, London and UK



5.18. Similar ratios cannot be calculated for rents due to the absence of similar trend data, but affordability can be compared across tenures by calculating housing costs as a proportion of income, as in Figure 48. The burden of housing costs varies by tenure and by whether you count just the income of the household head and partner or include other household members too. Taking incomes of all household members into account makes a big difference for private

renting households, due to the number of multi-adult households in the sector. Benefits have the greatest impact on social tenants, reducing their costs from 40% to 30% of income. On any definition, owner occupiers paying off a mortgage have the lowest average housing cost burden (those who already own their home outright are excluded).

Figure 48: Median housing costs as % of income by tenure in London, 2010/11



5.19. The relatively low housing costs burden on owner occupiers largely reflects the very low interest rates at present, and has also contributed to relatively low rates of repossession and arrears in recent years compared to previous housing market downturns.

Overseas investment

5.20. In recent years overseas buyers have assumed a greater role in London’s housing market, in both absolute and proportional terms. The estate agent Savills estimate that overseas equity flows into prime London residential property increased from around £3 billion in 2008 to £7 billion in 2012 (though this was only slightly above the previous peak of £6 billion in 2007⁵³), and that overseas buyers bought 36% of prime resales in 2012, up from 24% in 2008. Overseas investment is higher in new build property, with Knight Frank estimating that 49% of central London new build sales went to overseas buyers (defined by country of residence), while 69% went to foreign buyers (defined by nationality)⁵⁴.

5.21. The distinction between buyers based overseas and those of non-UK nationality is frequently lost in discussions of overseas investment in London housing (a significant issue considering 37% of Londoners were born outside the UK and around 21% hold non-UK passports), as is the distinction between prime or central areas and the rest of London, creating a misleading impression of the importance of overseas buyers in London as a whole. Based on a careful analysis of Land Registry records, Knight Frank estimated that in the two years to June 2013

⁵³ Savills (2013), ‘The World in London 2013’

⁵⁴ Knight Frank (2013), ‘International Buyers in London’

overseas investors (by country of residence) bought 49% of new build homes in central London but only 20% in the rest of Inner London and only 7% in Outer London. Across London as a whole they estimate that overseas investors bought 10% to 15% of new build homes in this period⁵⁵.

- 5.22. As overseas investors seem particularly interested in new build, their share of London's resale market is lower still, and estimates of their share of London's total housing market (including both new build and resales) range from the Bank of England's estimate of 3%⁵⁶ to LSE London's estimate of 6.5%⁵⁷. Their impact is also concentrated on the upper end of the market – Savills estimate that overseas buyers account for around a quarter of new build sales in London at less than £450 per square foot but around 90% of the highest value sales (those priced at more than £2,000 per square foot)⁵⁸.
- 5.23. Research by Savills also indicates that most overseas buyers of new build prime London homes intend to either let them out or use them as a main residence, with only around 16% in 2012 (equivalent to 2.5% of all prime sales in London) intending to use them as a second home⁵⁹.

New supply and empty homes

- 5.24. Chapter 2 described long-term trends in London's housing supply. For more recent trends we can use data from the London Development Database, which captures a rich range of detail on all housing developments in London. Figure 49 shows the net conventional supply of new housing in London (i.e. excluding bedspaces in non-self-contained accommodation and empty homes returning to use) between 2004/05 and 2012/13 (provisional)⁶⁰.

⁵⁵ Ibid.

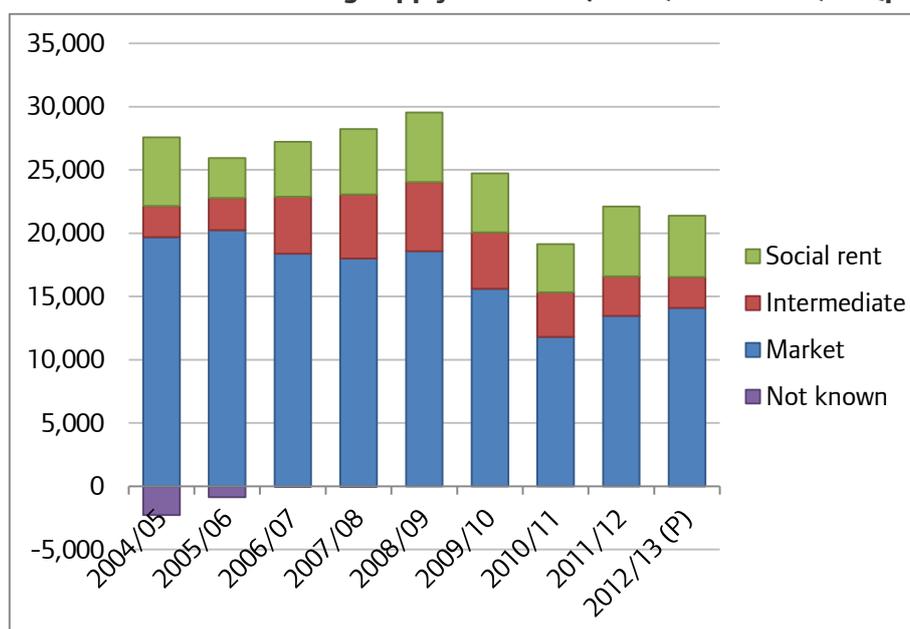
⁵⁶ Bank of England (2013), 'Financial Stability Report, November 2013'

⁵⁷ Whitehead et al (2013), 'Creating the Conditions for Growth'

⁵⁸ Savills (2013), 'The World in London 2013'

⁵⁹ Ibid.

⁶⁰ Data from the GLA's London Development Database is frequently updated on the basis of new information from the London boroughs. The figure for 2012/13 is provisional pending the publication of the next London Plan Annual Monitoring Report in spring 2014.

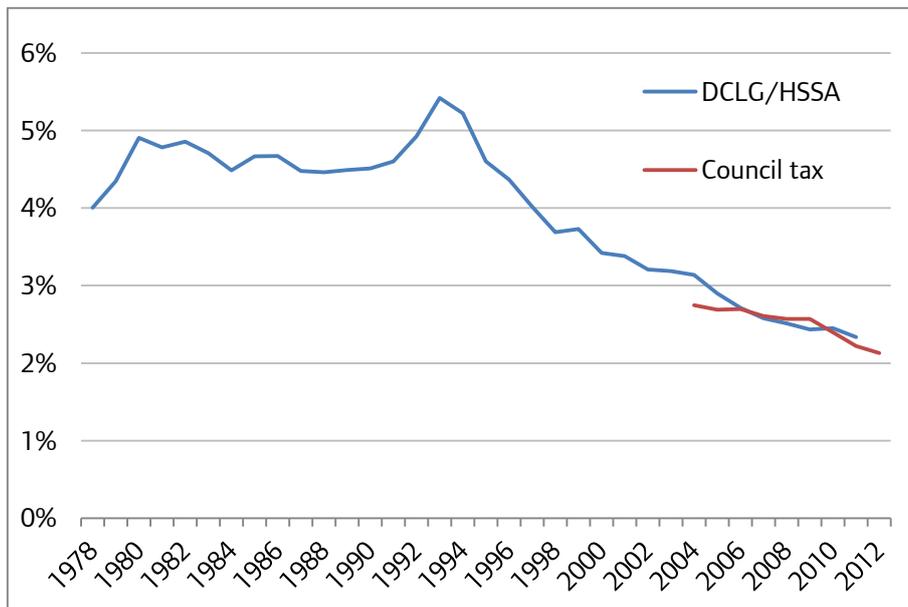
Figure 49: Net conventional housing supply in London, 2004/05 to 2012/13 (provisional)

5.25. New supply by this measure reached almost 30,000 in 2008/09 before falling to 19,100 in 2010/11 and recovering slightly to 21,400 in 2012/13. Since 2007/08 affordable housing's share of total net conventional supply has tended to be around 35%, with a high of 39% in 2011/12 and a low of 34% in 2012/13. Social rented housing accounted for half of affordable housing supply in 2007/08, but this share increased to two-thirds in 2012/13 (including just over one hundred Affordable Rent properties).

5.26. Empty homes returning to use that had been vacant for more than six months contribute to total housing supply as defined in the London Plan, and over the last decade there has been a substantial fall in the number of these long-term empty homes. According to DCLG statistics based on council tax data, there were 42,600 homes in London that had been empty for more than six months in 2004 (1.35% of the dwelling stock), and by 2012 this had fallen to 23,870 (0.7% of the dwelling stock)⁶¹. Figure 50 shows that the total number of empty homes (including those empty for less than six months) has fallen to its lowest share of London's dwelling stock since at least the late 1970s. Such low levels of long-term vacancy are another strong indication of a large shortfall of housing supply relative to housing demand.

⁶¹ Data on long-term empty homes is from DCLG's Housing Live Table 615, and total dwelling stock is from Live Table 1000.

Figure 50: Empty homes in London as % of total stock⁶²



⁶² 'DCLG/HSSA' refers to data provided by DCLG or from Housing Strategy Statistical Appendix data, while 'Council tax' refers to DCLG statistics from council tax data.

6 METHODOLOGY

Data availability

- 6.1. While a range of secondary data can inform assessments of housing requirements, the ideal data source provides a wide range of information about individual households, allowing the user to cross-reference variables on household characteristics, tenure, income and housing need. The 2004 HRS and the 2008 SHMA used data from the 2002 London Household Survey, a bespoke survey with a large sample. As that survey is now quite out of the date, this SHMA instead uses three years of data from the government's English Housing Survey (EHS). The EHS is an annual national survey, interviewing a sample of around 16,000 households a year and weighting the results to be representative at the national level. A wide range of housing-related topics are covered in detail, making the EHS a key source of information on topics such as tenure, overcrowding and housing affordability at the national and regional levels. However, a single year of EHS data contains only around two thousand cases from London, which is not enough to give reasonably precise estimates when disaggregated by tenure and household type. The SHMA model therefore uses averages calculated from the three years 2008/09 to 2010/11⁶³, and adjusts the results to match the 2011 household population.
- 6.2. By uprating 2008/09 and 2009/10 EHS data on incomes and housing costs using secondary data, these two years can be rebased to 2010/11, making the three-year averages reasonably comparable with data from the 2011 Census.
- 6.3. Using a base year of 2011 inevitably means that more recent trends are not reflected in the data, notably various aspects of the government's welfare reforms. However, as discussed in chapter 9 there is little available data on the impact of these reforms at the time of writing, and much of what is available indicates that it will be some time before the full effects are known⁶⁴.
- 6.4. Other data that inform this SHMA include:
 - Population and household projections from the GLA, DCLG and ONS (as set out in chapter 3)
 - Population and housing statistics from the 2011 Census
 - House price statistics from ONS and the Land Registry
 - Homelessness statistics from DCLG
- 6.5. As stated in chapter 5, the sample used to calculate average rents by the Valuation Office Agency (VOA) excludes any cases in which Housing Benefit / Local Housing Allowance is used to help pay the rent. This exclusion means that the VOA statistics do not reflect the whole of the market, and their average rent is higher than the average paid by all tenants including those in receipt of HB/LHA. In order to calculate an entry threshold for market renting in London, the lower quartile rent reported by private renting households in the EHS dataset was therefore used instead of the VOA data.

⁶³ 2011/12 data was published in September 2013, too late to be incorporated in the SHMA model

⁶⁴ For example, DWP (2013), 'Monitoring the impact of changes to the Local Housing Allowance system of Housing Benefit: Interim report'

Overview of available methodologies

6.6. GLA officers have reviewed a range of potential methodologies for a new SHMA, including those summarised in the table below⁶⁵.

Table 8: Summary of methodologies

Type of model	Brief description of method	References / examples
Household flows	Household moves estimated from population flows, headship rates and trends/expectations of moves. Moving households create a requirement and a supply, each of particular tenure and size. Net requirement is the difference between gross requirement and supply, with an allowance made for backlog need.	2008 GLA SHMA
Net stock	Future housing stock required estimated by combining household projections with current occupancy patterns, modified in some cases by data on affordability, backlog need and/or preferences. Future stock required compared to current stock to derive the net requirement.	Shelter (2008), 'Homes for the Future'
Econometric	Housing need is estimated as a dependent variable in an econometric model in which demographic, economic and housing market (including supply) are causal factors. The results are used to identify supply levels that would be required to reduce or eliminate backlog need.	Bramley et al (2010), 'Estimating Housing Need'
Affordable housing need	Newly arising need for affordable housing calculated from household forecasts combined with distributions of household incomes and housing costs. Backlog need to be cleared per year is added to newly arising need to get gross total. Annual social housing lettings are subtracted to get net annual need.	DCLG SHMA guidance

6.7. Each of these methodologies has its own benefits and drawbacks. A household flows model as employed in the 2008 GLA SHMA can capture very well the dynamic nature of a large and diverse housing market like London's, but it requires detailed bespoke data on past and potential future housing moves of a kind which is not currently available. An econometric model can be particularly valuable in revealing the subtle economic and behavioural relationships between a wide range of factors, but can be challenging in terms of data requirements, analytic complexity and transparency to lay users. Finally, the affordable housing needs model in the DCLG guidance is conceptually relatively straightforward, but relies heavily on variables that are difficult to measure given the currently available data (see chapter 7 for more detail) and does not relate affordable housing need to overall household growth.

6.8. Given the data available, the relatively tight timescale and the desire for as transparent a final product as possible, the net stock model was therefore chosen as the most suitable methodology for this SHMA. A version of the DCLG affordable housing needs model is also run

⁶⁵ This section is not intended as an exhaustive analysis of either the range of methodologies available or of the merits of those shown. A fuller discussion of issues around estimating housing requirements and a useful comparison of a number of methodologies is available in the 2010 DCLG report 'Estimating Housing Need' by Bramley et al.

for the sake of completeness, but as explained on p. 89 it is likely to underestimate the level of need.

Key elements of housing requirements

- 6.9. While methodologies for assessing housing requirements differ, most incorporate three central elements which broadly determine the overall scale and mix of requirements identified: growth (or decline in some cases) in the number of households in the area, any backlog of housing need that must be cleared, and the affordability of different types of housing. The net stock model employed in this SHMA also focuses on these three elements, and their roles are described below. Full details of how each element feeds into London's final estimated requirements are set out in chapter 7.
- 6.10. **Household growth** is estimated using household projections, which (as described in more detail in chapter 3) are derived by applying household formation rates to projected population growth. Both the underlying population projections and the resulting household projections are sensitive to the data and assumptions used. The net stock model used in this SHMA projects requirements for different tenures and size of housing by applying the mix of tenures and sizes currently occupied by each household type (from analysis of EHS data) to the projected future number of households of that type. In other words, while the number of households of each type changes over time in line with projections, the mix of homes required by households of each type is assumed to remain the same.
- 6.11. **Backlog housing need** comprises households who are currently in unsuitable accommodation, and whose needs imply a different mix of provision from that suggested by household growth alone. There are a range of types of backlog need but they fall into three main categories, each with a different impact on the final mix of housing requirements:
- Net backlog: Households not currently in self-contained accommodation of their own who will therefore not free up a home for another household when they move. Their requirements add to the total as well as changing the tenure and size mix.
 - Tenure backlog: Households in self-contained private sector accommodation who need to move to affordable housing. Their requirements change the tenure and size mix but do not add to the total requirement as they free up a home when they move.
 - Size backlog: Households in self-contained affordable housing who need to move to a more suitable home. Their requirements change the size mix but do not add to the total requirement or the tenure mix.
- 6.12. This distinction between different types of backlog need is critically important, as if all types of backlog need were added to the total requirement it would make a very big difference, but only by effectively disregarding the homes that are freed up by the moves of households in the tenure or size backlog. Different treatments of backlog need are often the main factor behind very different estimates of housing need⁶⁶.

⁶⁶ For example, the recent London Councils estimate (London Councils (2013), 'The London Housing Challenge') of an annual requirement for 80,000 new homes in London derived from a method that added overcrowded households to the total net housing requirement.

- 6.13. The backlog housing need for new homes is a 'stock' variable, which should be cleared over time by a 'flow' of net housing completions. The annual flow of completions required is calculated by dividing the total stock of need for new homes by the number of years over which it is to be cleared, with a shorter period resulting in a higher annualised requirement.
- 6.14. Backlog housing need must be cleared over a number of years, with a shorter period resulting in a higher annualised requirement. The SHMA guidance suggests that backlogs should be cleared over five years, but notes that longer timescales can be used if justified. In this context it is notable that London's rates of backlog need are far higher than in the rest of the country: for example, in 2011 8.4% of households in London were overcrowded compared to 2.1% in the rest of England⁶⁷, while 1.03% of households were homeless and in temporary accommodation in London compared to 0.08% in the rest of England⁶⁸. As housing need tends to be spread unevenly across the rest of the country, the typical local authority in the rest of England will tend to have even lower rates than these.
- 6.15. Substantial backlogs of housing need have been identified throughout most if not all of London's recorded history, so to successfully clear the backlog - that is, to reduce to zero the number of overcrowded, concealed or homeless households - would be an unprecedented achievement, especially at a time when the population is growing at such a rapid rate. Given these considerations a five-year backlog clearance period for London seems highly unrealistic and a ten-year period not much less so. This study therefore assumes the backlog is cleared over 20 years.
- 6.16. For the avoidance of doubt, it should be noted that a backlog clearance period of twenty years does not mean that individual households currently homeless or overcrowded are expected to remain in the same circumstances for 20 years. Nor does it mean that any households becoming homeless or overcrowded over the next twenty years are excluded from the total requirement. Every year there is a 'flow' of households into and out of need, and clearing the backlog essentially means increasing the outflow relative to the in-flow until the 'stock' of need is reduced to zero.
- 6.17. **Affordability** is a critically important factor in determining the tenure mix of the housing requirements identified. While the simplest version of the net stock model would predict the tenure of homes required in future on the basis of the mix of tenures currently occupied by each household type, this would simply carry forward into the future any affordability problems that currently exist. This study therefore applies a series of affordability tests to identify which tenure future households will be able to afford. The affordability tests are set out in Table 9, with more detail provided in the following text.

⁶⁷ DCLG, English Housing Survey data to 2010/11

⁶⁸ DLCC, PIE data to 2011

Table 9: Affordability tests

Tenure	Details of test
Owner occupation	Existing outright owner occupiers are assumed to be able to afford to continue to own. Other households can afford owner occupation if (1) the sum of (a) 3.5 times the income of single earner or 2.9 times the income of joint earners and (b) available savings plus equity exceeds the lower quartile price, and (2) savings plus equity exceeds 10% of the purchase price.
Private rent	Households can afford private rent if the lower quartile private rent does not exceed 25% of gross household income for households with incomes of less than £40,000 and 30% for households with incomes of more than £40,000.
Intermediate	Households are allocated to this category if they cannot afford owner occupation or private rent but can afford more than social rent levels, i.e. if the target rent for the size of property they require does not exceed 25% of gross household income for households with incomes of less than £40,000 and 30% for households with incomes of £40,000 or more ⁶⁹ .
Social rent / Affordable Rent	Households are allocated to this category if they are unable to afford market housing or intermediate housing.

6.18. Table 10 shows the price and rent thresholds used for these tests, broken down by the size of property.

Table 10: Price and rent thresholds used for affordability tests (£s)

	1 bedrooms	2 bedrooms	3 bedrooms	4+ bedrooms
Lower quartile house price ⁷⁰	157,000	200,000	245,000	413,934
Lower quartile weekly private rents ⁷¹	144	180	213	257
Weekly target social rents ⁷²	91	103	116	132

6.19. Affordable Rent homes are let at rents of up to 80% of market rents for the equivalent property, and as shown in chapter 5 their average rents are significantly higher than average social rents. But this study treats Affordable Rent as identical to social rent for affordability purposes, because the extra costs of Affordable Rent explicitly intended to be met by higher Housing Benefit levels, effectively substituting revenue for capital subsidy. Government guidance is also clear that the same households should be eligible for both social rent and Affordable Rent:

- The NPPF defines Affordable Rent as “let by local authorities or private registered providers of social housing to households who are eligible for social rented housing”⁷³.
- The Homes and Communities Agency’s 2011-15 Affordable Homes Programme Framework, which set out the policy and funding context for Affordable Rent, stated that “Affordable

⁶⁹ This definition is consistent with the previous London SHMA, and the lower bound is in line with the income range set out in the 2011 London Plan (para 3.61)

⁷⁰ From 2011 ONS data provided to GLA

⁷¹ From rents as paid by households in the English Housing Survey dataset, with 2008/09 and 2009/10 values uprated to 2010/11 levels using ONS private rents index

⁷² From the 2011 Regulatory Statistical Return

⁷³ NPPF Annex 2

Rent is a form of social housing” that should be “allocated in the same way as social housing is at present”⁷⁴.

- 6.20. Lastly, while Affordable Rents can be set at up to 80% of equivalent market rents, in practice most Affordable Rent properties built in London so far have been let at less than that, with an average figure of 69% as at September 2013, ranging from 77% for one bedroom homes to 59% for three bedroom homes⁷⁵.
- 6.21. Affordability test filters: It should be noted that the affordability tests described above are not applied to all households. If households own their home outright, are headed by a full-time student or report being satisfied with their accommodation, then they are filtered out of the affordability test and assumed to continue in their current tenure for the purpose of projecting future requirements. The exclusion of outright owners and student-headed households is relatively straightforward to explain: given their low incomes, student households are likely to have transient affordability problems as conventionally measured⁷⁶, while outright owners can be assumed to be able to afford owner occupation.
- 6.22. There are a number of reasons for filtering out households who are satisfied with their accommodation. First, it helps address what would otherwise be a discrepancy in the net stock model used in this report as compared to other SHMA methodologies, which by and large implicitly ignore the housing situation of households who do not move or form within the period of analysis (and who are not in backlog need). The presumption, as set out in the SHMA guidance⁷⁷, is that it is not necessary to examine the needs of these households as they can be assumed to be satisfied with their accommodation. But without a satisfaction filter the net stock model used in this report would assign households to different tenures on the basis of affordability alone, whether or not they needed or wanted to move. Filtering by satisfaction therefore brings the net stock model closer to the approach used by other methodologies.
- 6.23. Second, filtering by satisfaction takes into account the fact that some households may be quite prepared to pay more than 25% or 30% of their income on housing given other factors which are not observable with the data available. For example, it is well known that households actively trade off higher housing costs for lower transport costs (and indeed London households do spend a smaller share of their budgets on transport than those in the rest of the country⁷⁸). Looking at housing alone can therefore give a misleading impression of how affordable different

⁷⁴ Homes and Communities Agency (2011), ‘2011-15 Affordable Homes Programme – Framework’, paragraphs 1.2 and 3.3

⁷⁵ GLA, Affordable housing additional statistics, to September 2013 (Table 10). GLA officers expect that by the end of the programme the figure will be around 65%. A much lower figure of 49% is given by DCLG in its publication ‘Social housing lettings in England: April 2012 to March 2013’, but this is derived using a different methodology. First, DCLG exclude service charges while the GLA include them, and secondly DCLG divide the average Affordable Rent by the average VOA private sector rent for London as a whole while the GLA compare the Affordable Rent for each individual property with the equivalent market rent. As the characteristics of average homes in the affordable and market sectors can differ quite substantially, so too do the results given by the two methodologies.

⁷⁶ The housing requirements of students are considered separately in chapter 8

⁷⁷ See p. 42 of the SHMA guidance

⁷⁸ In London 15.9% of household expenditure goes on ‘net’ housing costs (i.e. excluding mortgage interest payments), fuel and power. This is the highest proportion of any region, and compares to a figure of 12.8% for the UK as a whole. However, approximately half of this gap is offset by lower expenditure by London households on transport. Transport accounts for 11.6% of household spending in London, compared to 13.4% for the UK as a whole. See ONS, (2012) ‘Family Spending Report’, table A33

locations really are⁷⁹. Some households, for example, may be prepared to pay a considerable share of their income on housing in exchange for being able to walk to work, but this should not automatically mean they should be thought to require affordable housing.

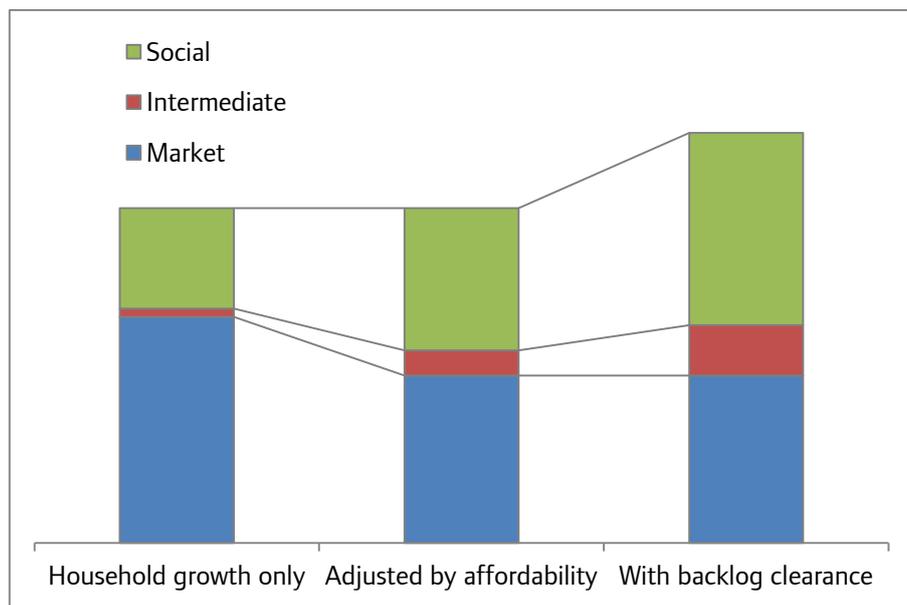
- 6.24. Households also trade off higher housing costs for access to positive amenities such as parks, museums and areas of good architecture. There is strong evidence that London, especially the city centre, boasts particularly high levels of such amenities, which would predict higher housing costs for a given level of earnings and thus worse affordability by conventional measures⁸⁰.
- 6.25. Finally, when making choices in the housing market individuals and households do not have regard only to their current income and housing costs, but instead take into account their expected future incomes too. An individual or household may trade off a low income at present for an expected higher one in the future (essentially the trade-off involved in undertaking further education), particularly in areas such as London which tend to feature quicker wage progression (see p. 11). A snapshot picture of affordability such as that provided by the English Housing Survey can therefore overstate affordability problems when compared to a longer view that takes into account career progression.
- 6.26. From the available English Housing Survey data it is not possible to precisely assess the extent to which households are making these trade-offs. The 2008 SHMA and many similar studies implicitly incorporated satisfaction by asking households whether they needed or intended to move, but that information is not available for the present study. Filtering out households who are satisfied can therefore be considered a proxy indicator for the same underlying phenomena.
- 6.27. It is important to note, however, that the satisfaction filter is not applied to households in backlog need, as there is objective evidence that their accommodation is unsatisfactory.
- 6.28. Housing benefit: This SHMA does not assume that all households currently in receipt of Housing Benefit are in need of affordable housing, as that assumption would be contrary to the policy of this and previous governments to support low-income households in the private rented sector with Housing Benefit. Rather, in line with the 2008 SHMA, it effectively assumes that the proportion of households in receipt of Housing Benefit stays the same as it was in 2008/09 to 2010/11.
- 6.29. Size requirement: In the main model it is assumed that households in affordable housing occupy only the size of homes they require according to the bedroom standard, even though some currently have more or fewer bedrooms than they need. This assumption is used because households entering affordable housing in a constrained environment like London are generally allocated the size of home they require and no more, and because reducing both under-occupation and overcrowding in affordable housing are currently important policy objectives.

⁷⁹ This concept is widely understood in the US, where the federal departments of housing and transport have recently launched a joint analytical tool, the Location Affordability Index, to help households understand how combined housing and transportation costs vary from place to place (<http://www.locationaffordability.info>)

⁸⁰ See for example: GLA Economics (2010), 'Working Paper 42 - Valuing housing and green spaces: Understanding local amenities, the built environment and house prices in London'; Ahlfeldt (2013), 'Urbanity' http://www.ahlfeldt.com/WP/GA_Urbanity.pdf; and Gibbons et al (2011), 'Real Earnings Disparities in Britain' <http://eprints.lse.ac.uk/33576/1/sercdp0065.pdf>

- 6.30. Conversely, households in market housing often under-occupy their homes because they can afford to, and the model therefore assumes that current patterns of under-occupation in the market sector are projected forward into the future. To assume that under-occupation is eliminated in market housing would be highly unrealistic, as it would imply that every household in the market sector becomes unable to afford any more bedrooms than they need.
- 6.31. Figure 51 illustrates in schematic terms (and with invented data) how the basic steps of the model affect the tenure mix of requirements, starting from a mix based on household growth alone and then adjusting for affordability before adding on backlog need.

Figure 51: Schematic illustration of methodological stages



Interim supply and second or vacant homes

- 6.32. The base year for the SHMA model is 2011, as that aligns with the available data and with the base year of the GLA population and household projections. But as this SHMA is published in 2014, and any policies taking it into account will only take effect from 2015, it would be misleading to calculate an annualised housing requirement without taking into account actual and likely levels of housing supply in London between 2011 and 2015.
- 6.33. The final results presented here therefore estimate likely housing supply (in terms of net completions) between 2011/12 and 2014/15 and subtract them from the requirement identified between 2011/12 and 2034/35, annualising the remainder to identify an annual requirement for new homes over the twenty years 2015/16 to 2034/35 inclusive.
- 6.34. Accounting for under-supply against requirements in these intervening years also helps account for trends seen in London since 2011 such as the increase in prices and in indicators of housing need, insofar as these result from imbalances of supply and demand. Homelessness and rough sleeping have both increased in this period, and while the overcrowding rate dipped slightly between 2010/11 and 2011/12, the rate still remains very high. But while these trends are not

reflected in the base model with its reference year of 2011, they result from the same under-supply of new homes relative to need accounted for by this stage in the methodology.

- 6.35. Thus far we have assumed that all homes are occupied by a household. In reality, at any given point there are a number of second homes and long-term vacant homes which do not contribute towards meeting housing needs. It is reasonable to assume that second homes and long-term vacant homes will comprise roughly the same proportion of the future housing stock as they currently do. As a final step, we therefore increase the annual net requirement in order to account for expected increases in unoccupied homes.

Differences from previous studies

- 6.36. The 2004 HRS and the 2008 SHMA drew on the 2002 London Household Survey, a large and detailed survey of London households designed to inform analyses of housing requirements. They employed a technique called micro-simulation, which applies individual and household characteristics from sample surveys to entire populations to create a detailed picture of (in this case) forecast population growth and household moves.
- 6.37. In these studies net requirements were estimated by comparing housing 'demand' in terms of moves that households will need or want to make in the future and 'supply' in terms of homes available for them to move into. When households move from self-contained accommodation the home they seek adds to demand while the home they free up adds to supply. If there was no underlying growth in the number of households (due to formations exceeding dissolutions and in-migration excluding out-migration) and no pre-existing backlog of need then these moves would tend to match and the identified requirements would be minimal. It is household growth and the backlog of need (akin to adding players and subtracting chairs from a game of musical chairs) which creates the net requirement for new homes to be built.
- 6.38. A key difference between the 2004 HRS and the 2008 SHMA on the one hand and the present study on the other is that the prior studies incorporated data on whether households intended to move out of London. If they did, their needs were subtracted from future requirements, reducing both the overall requirement and the provision required to clear the backlog of housing need. Due to an absence of survey data on moving intentions, it is not possible to make quite the same adjustments in the new study, although out-migration does form an important part of the demographic projections used.
- 6.39. While the methodologies used are quite different in conception and execution the fundamentals are not so dissimilar: in both cases the total requirement for new housing is basically driven by population growth and the existing backlog of need. In carrying out the new SHMA an effort has been made to ensure a reasonable measure of consistency with the previous studies, for example in terms of the demographic data used, the affordability tests employed and the treatment of Housing Benefit.

Limits to the methodology

- 6.40. As noted above, different types of SHMA methodologies have different strengths and weaknesses. This SHMA does not seek to estimate the kind of dynamic relationships that a full econometric analysis might - for example the impact of different levels and mixes of housing

supply on the mix of households or the distribution of prices or incomes in an area. It is important to bear this limitation in mind when interpreting the results, because these dynamic changes can be an important consideration for the policy-making process. For example, while a static analysis might identify a large backlog of housing need which standard methods suggest should be cleared as soon as possible (implying a very high affordable housing target), a dynamic analysis that takes into account the impact of different types of housing supply on housing costs might imply that a low share of market housing in new supply could worsen affordability and ultimately increase the backlog.

7 ANALYSIS OF HOUSING NEEDS

Introduction

7.1. This chapter sets out the main findings of the SHMA, the process used to arrive at them and the various assumptions made throughout.

Household change

7.2. As set out in chapter 3, both the population and the number of households in London are projected to grow rapidly over the next few decades. According to the central projection the number of households will grow from almost 3.3 million in 2011 to just over 4.2 million by 2035, an increase of 39,852 households a year⁸¹. This figure provides a baseline for the analysis of housing needs set out in this chapter.

7.3. As shown in Table 11, of the 39,850 projected annualised growth in households between 2011 and 2035, 6,260 is from one person households, 19,000 is from couple households (including those with other adults in the household), 5,700 is from lone parent households (again, including those with other adults in the household) and 8,900 is from 'other' households (those without couples, lone parents or dependent children). Households with children comprise only 31% of the projected growth in this period, but this is very similar to their 30% share of current households. In terms of percentage annual growth no household type is projected to shrink or to grow more than 3% a year: growth rates range from 0.3% a year for one-person female households to 2.8% a year for childless couple households with one or more other adults.

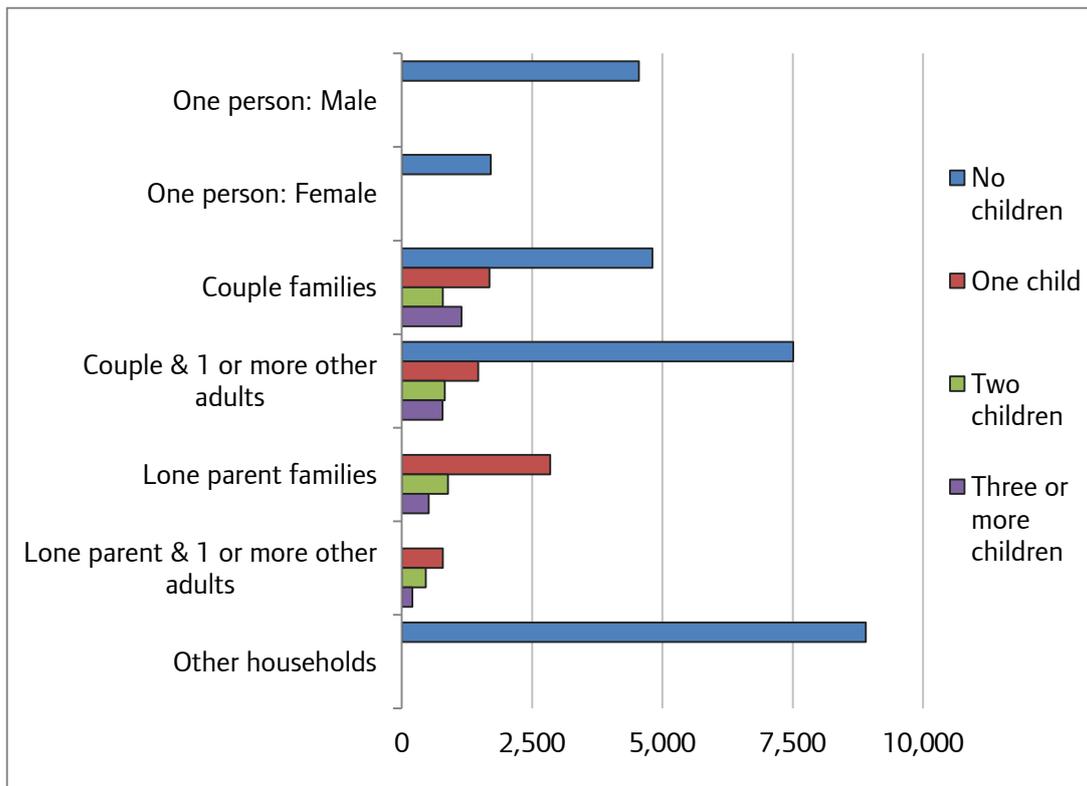
Table 11: Projected annualised household growth 2011-35 by type and number of children

Household type	No children	One child	Two children	Three or more children	Total
One person: Male	4,551	0	0	0	4,551
One person: Female	1,706	0	0	0	1,706
Couple families	4,807	1,683	788	1,143	8,421
Couple & 1 or more other adults	7,506	1,465	825	779	10,575
Lone parent families	0	2,850	884	516	4,249
Lone parent & 1 or more other adults	0	784	463	202	1,448
Other households	8,901	0	0	0	8,901
Total	27,471	6,781	2,960	2,640	39,852

7.4. Figure 52 shows the annualised growth for each of the seventeen household types used in the SHMA model (and in the DCLG and GLA household projections).

⁸¹ These figures refer to the middle of each year.

Figure 52: Projected annualised household growth 2011-35 by type and number of children



7.5. These different types of household currently occupy a very different mix of tenures, as shown in Table 12⁸². The proportion of households in social housing varies from 11% for couples without dependent children to 69% for lone parent households with three or more children, and across all household types is 25%. As intermediate housing is still a very small part of London’s stock it accounts for only a small proportion of all household types, while 75% of households are currently accommodated in market housing (mostly owner occupation). As of the base date of 2011 there were no Affordable Rent homes so the tables below use social rent only.

⁸² These estimates are from English Housing Survey, data from 2008/09 to 2010/11

Table 12: Current tenure by household type

Household type	Owner occupation	Inter-mediate	Social rent
One person households: Male	69%	1%	30%
One person households: Female	69%	3%	28%
One family and no others: Couple: No dependent children	88%	1%	11%
One family and no others: Couple: 1 dependent child	86%	1%	14%
One family and no others: Couple: 2 dependent children	84%	1%	15%
One family and no others: Couple: 3+ dependent children	68%	2%	31%
One family and no others: Lone parent: 1 dependent child	46%	0%	54%
One family and no others: Lone parent: 2 dependent children	40%	1%	58%
One family and no others: Lone parent: 3+ dependent children	34%	0%	66%
A couple and one or more other adults: No dependent children	85%	0%	14%
A couple and one or more other adults: 1 dependent child	75%	0%	25%
A couple and one or more other adults: 2 dependent children	80%	2%	18%
A couple and one or more other adults: 3+ dependent children	54%	0%	46%
A lone parent and one or more other adults: 1 dependent child	45%	0%	55%
A lone parent and one or more other adults: 2 dependent children	61%	0%	39%
A lone parent and one or more other adults: 3+ dependent children	31%	0%	69%
Other households	77%	1%	22%
Total	75%	1%	24%

7.6. If we were to apply the current tenure and size patterns for each household type to the projected household growth, in other words to ignore backlog need and affordability and project future housing requirements only on the basis of household growth and current occupancy patterns, then the annualised requirement would be as in Table 13⁸³. According to this method the tenure mix of requirements would be very similar to the current tenure mix, with market housing accounting for 74% of the requirement, social rent 25% and intermediate 1%⁸⁴.

⁸³ Note, '1b' means 'One bedroom', '2b' 'Two bedrooms', and so on.

⁸⁴ In this and the following tables, the 'Social rent' category includes Affordable Rent

Table 13: Net annualised requirement 2011-35 based on household growth and current occupancy only, by tenure and number of bedrooms

	1b	2b	3b	4b+	Total	% of total
Market	2,673	7,815	11,987	6,965	29,440	74%
Intermediate	92	121	84	2	298	1%
Social rent	2,203	4,112	3,139	661	10,114	25%
Total	4,967	12,047	15,210	7,628	39,852	100%

7.7. However, this approach would not reflect either London's affordability issues or the existing backlog of need. The next sections therefore adjust the results to incorporate these factors.

Affordability

7.8. Differential patterns of household growth have a significant impact on the final results, since different types of household growth are more or less likely to be able to afford particular tenures. Figure 53 shows the tenure households are currently able to afford, taking Housing Benefit into account and assuming, as discussed in chapter 6, that both student households and those satisfied with their accommodation continue in their current tenure⁸⁵. Lone parent households are the least likely to be able to afford market housing, while couples without children are the most likely.

7.9. Figure 54 then breaks down the projected annualised growth in each household type between 2011 and 2035 by current tenure affordability. In very general terms, household types which are more able to afford market housing (for example, couple households and 'other' households) tend to see the highest levels of projected growth. Overall, 72% of the additional households over this period would be able to afford market housing according to this method.

7.10. However, this figure does not represent a net tenure requirement because it does not take into account the fact that some current households cannot afford their current accommodation. We can incorporate this by comparing the current tenure mix to the one required in future. Again comparing 2011 to 2035, Table 14 shows that the proportion of households able to afford market housing falls to 65% when current affordability is incorporated.

⁸⁵ The housing requirements of students are considered separately in chapter 8

Table 14: Net annualised requirement 2011-35 based on household growth and affordability, by tenure and number of bedrooms

	1b	2b	3b	4b+	Total	% of total
Market	4,373	7,627	8,336	5,638	25,975	65%
Intermediate	1,308	1,814	1,686	927	5,736	14%
Social rent	6,997	989	-240	394	8,141	20%
Total	12,678	10,431	9,783	6,960	39,852	100%

7.11. At this point it is worth stressing again that the size mix of requirements depends heavily on the assumptions made around future rates of under-occupation. These results effectively assume that under-occupation, along with overcrowding, is eliminated in affordable housing by the end of the period, because affordable housing tends to be let at full occupancy and because of the various policy initiatives to reduce under-occupation. By contrast, it is assumed that current patterns of under-occupation persist in the market sector (while overcrowding is relieved either by moves to more suitable market homes or by moves to affordable housing), because many households in market housing are both willing and able to pay for a larger home than they 'need' according to the bedroom standard. While these are felt to be the most reasonable assumptions, they could of course be varied – see separate section on assumptions at the end of this chapter.

7.12. Thus far we have estimated housing requirements by taking into account household growth and affordability. The next section will add to these estimated requirements by incorporating the existing backlog of housing need.

Figure 53: Tenure households are currently able to afford by household type (incorporating Housing Benefit and satisfaction)

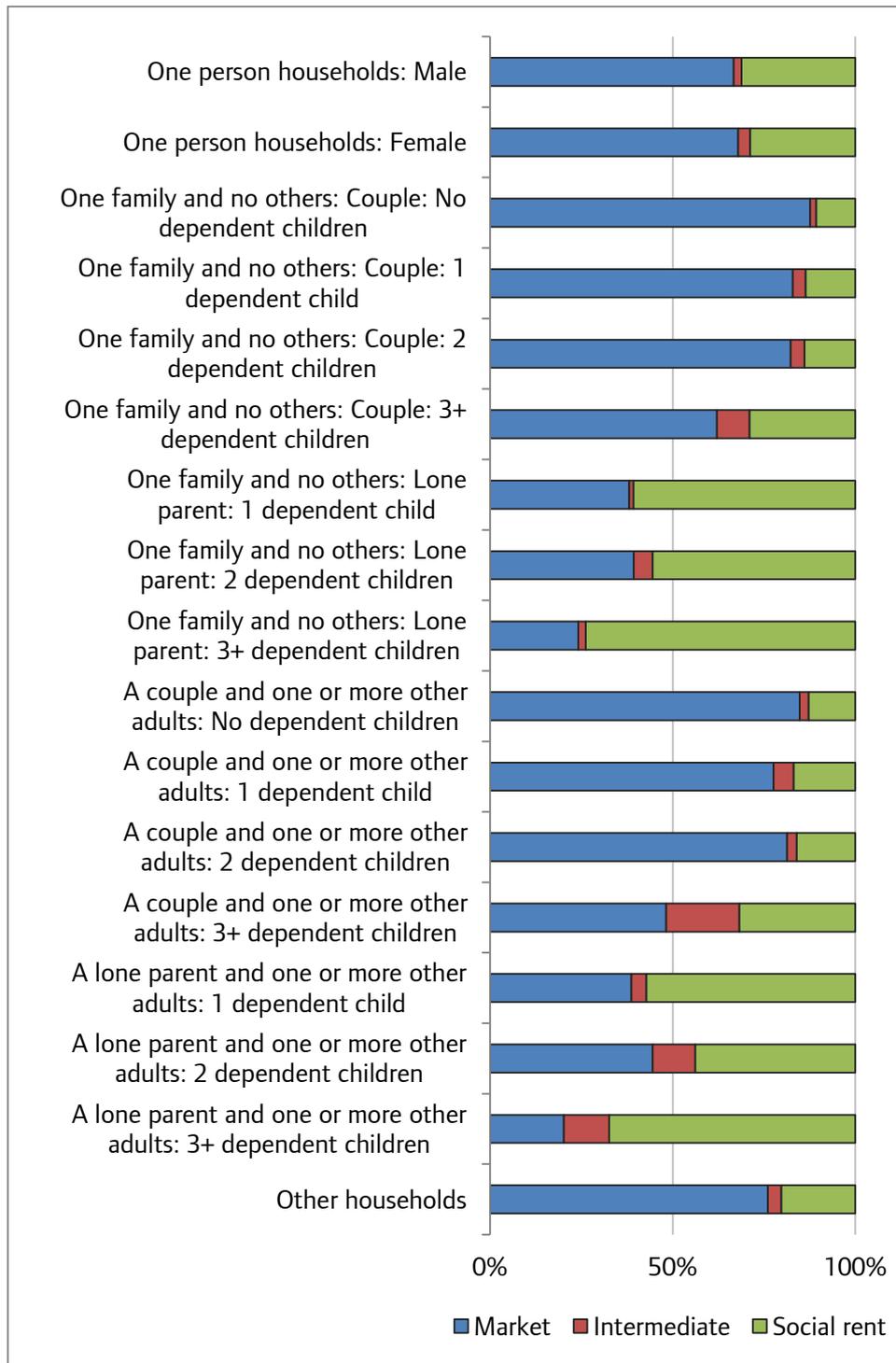
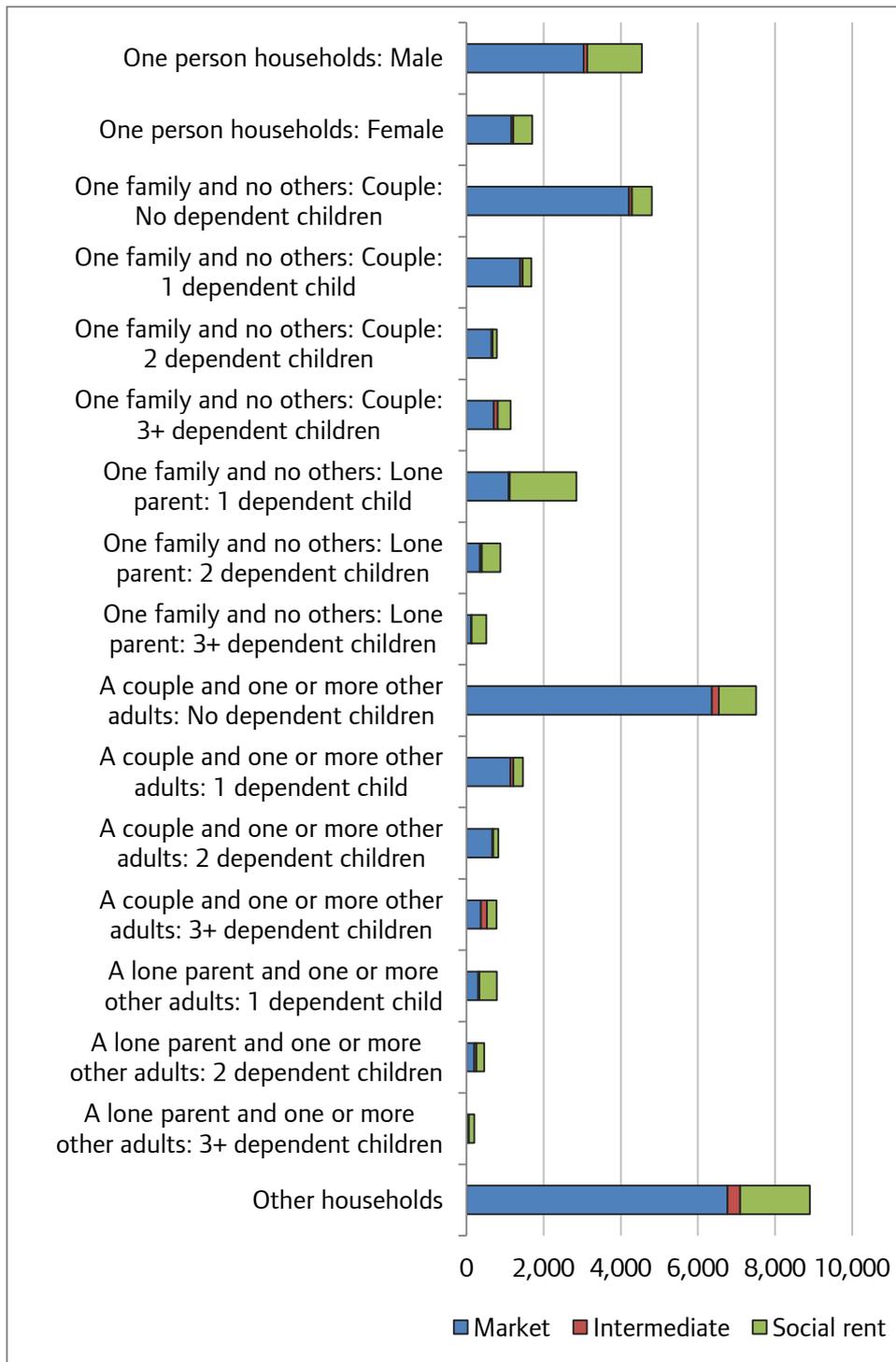


Figure 54: Annualised projected household growth 2011-35 by current tenure affordability



Backlog housing need

7.13. Estimates of households in backlog need have been compiled for this SHMA from a variety of sources. Table 15 lists the different types of backlog need, describes the definition and derivation of estimates for each type, and provides the estimated number of households in each category.

Table 15: Backlog need

Category / type of backlog	Definition and source	Calculation of requirements	Estimated number of households
Net backlog			
Concealed households	People aged 25 or older living as part of a household and who would prefer their own accommodation but either can't afford it or expect to find something they can afford shortly. A given household can contain more than one concealed household, as individuals who are described as belonging to different family units are assumed to belong to separate concealed households. From English Housing Survey.	Tenure affordability calculated using individual incomes aggregated by family unit. Housing benefit is not known so is excluded. Bedrooms required are assumed to equal the number of people in concealed household.	90,978
Households lacking basic facilities	Households without their own kitchen, bathroom or inside toilet. From English Housing Survey.	Tenure requirements calculated using standard affordability tests	6,418
Sharing households	Households with facilities but currently sharing any part of their accommodation with another household. From English Housing Survey.	Tenure requirements calculated using standard affordability tests	17,699
Homeless households in non-self-contained temporary accommodation	Homeless households in bed and breakfast, hostels, women's refuges, other nightly paid shared accommodation, 'other types of accommodation' or homeless at home in London in March 2011. From DCLG P1E data.	Assumed to require social rented housing. Size requirement calculated from CORE lettings data on size of home households leaving these forms of accommodation move into.	6,303
Non-homeless households in non-self-contained accommodation	Non-homeless households moving from non self-contained accommodation (excluding concealed households), including probation hostels, children's homes / foster care, foyer accommodation, hospitals or rough sleeping. From CORE lettings data.	Assumed to require social rented housing. Size requirement calculated from CORE data on size of home households leaving these forms of accommodation move into.	Stock data unavailable so an annual flow, starting at 285 in 2011 and rising in line with household growth
Households who need to move due to harassment or neighbour problems	Households moving from non self-contained accommodation (see above) due to racial harassment or other problems with neighbours.	Assumed to require social rented housing. Size requirement calculated from CORE lettings data on size of home households leaving these forms of accommodation move into.	Stock data unavailable so an annual flow, starting at 26 in 2011 and rising in line with household growth
Tenure backlog			
Overcrowded private sector households who need to move to affordable housing	Households in market housing who are overcrowded according to the bedroom standard and who cannot afford appropriately sized market housing. Excludes households in any net backlog category or headed by a student and discounts the bedrooms required by any concealed	Tenure requirements calculated using standard affordability tests	67,176, or 70,064 without taking Housing Benefit into account

Category / type of backlog	Definition and source	Calculation of requirements	Estimated number of households
	households. From English Housing Survey.		
Homeless households in Private Sector Leased accommodation	Homeless households in private sector accommodation leased by local authorities, registered social landlords or directly with the landlord in London in March 2011. From DCLG P1E data.	Assumed to require social rented housing. Size requirement calculated from CORE lettings data on size of home households leaving these forms of accommodation move into.	24,098
Households containing someone with a disability that need to move to social housing	Private sector households looking to move somewhere more suitable to cope with disability and who are on a social housing waiting list. From English Housing Survey.	Typical affordability test not applied given the specificity of the home being sought. Assumed to all require social rented housing.	1,942
Private sector households in arrears	Households more than three months behind with their mortgage and 'falling further behind', plus private tenants not keeping up with rent payments. Excludes households in other backlog categories. From English Housing Survey.	Assumed to require social rented housing.	8,670
Size backlog			
Overcrowded households in affordable housing	Households in affordable housing who are overcrowded according to the bedroom standard. Excludes households headed by students and discounts the bedrooms required by any concealed households. From English Housing Survey.	Assumed to move within current tenure.	125,641

7.14. Some further notes on particular categories are provided below:

- Concealed households: The affordability tests show that some concealed households can already afford market housing. These households are presumably saving for something preferable, but are added to the market requirement.
- Facilities: Households lacking basic facilities are assumed to add to the total housing requirement as their current homes are likely to be of such low quality that they would not add to the useful housing stock when these households move out.
- Sharing households: While it could be argued that only one of each pair of sharing households should be added to need, it is assumed here that the dwelling is not suitable for habitation by a single household and thus each sharing household is added to the total requirement.
- Overcrowding: Households headed by students are excluded because their needs are assumed to be transient. Also, overcrowded private sector households who can afford to move to a more suitably sized home do not change the market housing size mix as they are assumed to be voluntarily choosing overcrowded conditions, perhaps in return for a better location.

- Disability: Around 21,000 households are attempting to move somewhere more suitable to cope with a disability, but only 7,000 of these are on a social housing waiting list and the majority of these are already in social housing.
- Harassment: Households moving within the affordable housing sector due to harassment or other problems with neighbours are assumed to create no change in the mix of requirements as they free up a home of the same size and tenure as the one they move to.

7.15. In line with previous studies, cases of dwelling disrepair are excluded from the backlog of housing need as in-situ solutions are assumed to be possible through non-planning policies such as owner investment, local authority enforcement, equity release, grants and so on. In this context it is worth noting that the proportion of dwellings in London that fail to meet the Decent Homes Standard has fallen from around 37% in 2006 to around 22% in 2011⁸⁶.

7.16. Table 16 shows the estimated tenure and size requirements of households in backlog need. In all there are almost 349,000 households in some form of backlog need (excluding double-counting and the two annual flow categories) but of these only 121,000 have a requirement for net additional homes (of whom around 107,000 need affordable housing). Another 102,000 are in market housing but need affordable housing, and 126,000 overcrowded households in affordable housing need to move to an affordable home of a more suitable size⁸⁷.

⁸⁶ DCLG, English House Condition Survey and English Housing Survey data to 2011

⁸⁷ Not all of these households show up in Table 16 because it shows net rather than gross moves, and some of their moves are offsetting – for example, households in one bedroom homes who need to move to two bedroom homes offset by households in two bedroom homes who need to move to three bedroom homes.

Table 16: Housing requirements of households in backlog need

Tenure	Number of bedrooms				Total
	One	Two	Three	Four+	
<u>Concealed households</u>					
Social rent	42,525	0	0	0	42,525
Intermediate	34,159	3,872	0	0	38,031
Market	7,932	2,490	0	0	10,422
Total	84,616	6,362	0	0	90,978
<u>Households lacking basic facilities</u>					
Social rent	2,732	418	0	0	3,150
Intermediate	1,366	468	0	0	1,834
Market	1,434	0	0	0	1,434
Total	5,532	886	0	0	6,418
<u>Sharing households</u>					
Social rent	7,986	929	0	0	8,915
Intermediate	5,839	0	0	0	5,839
Market	2,945	0	0	0	2,945
Total	16,770	929	0	0	17,699
<u>Homeless households in non-self-contained temporary accommodation</u>					
Social rent	3,818	1,576	728	182	6,303
Intermediate	0	0	0	0	0
Market	0	0	0	0	0
Total	3,818	1,576	728	182	6,303
<u>Non-homeless households in non-self-contained accommodation (annual)</u>					
Social rent	248	30	6	2	285
Intermediate	0	0	0	0	0
Market	0	0	0	0	0
Total	248	30	6	2	285
<u>Households needing to move due to harassment or other problems (annual)</u>					
Social rent	18	5	2	1	26
Intermediate	0	0	0	0	0
Market	0	0	0	0	0
Total	18	5	2	1	26
<u>Net backlog total (excluding annual flows)</u>					
Social rent	57,060	2,923	728	182	60,893
Intermediate	41,365	4,340	0	0	45,705
Market	12,311	2,490	0	0	14,801

Total	110,736	9,753	728	182	121,399
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Overcrowded private sector households					
Social rent	0	13,084	10,877	8,698	32,659
Intermediate	0	7,530	9,679	17,308	34,517
Market	-21,265	-24,138	-14,056	-7,717	-67,176
Total	-21,265	-3,525	6,500	18,289	0

Homeless households in private sector leased accommodation					
Social rent	7,848	10,673	4,461	1,115	24,098
Intermediate	0	0	0	0	0
Market	-7,848	-10,673	-4,461	-1,115	-24,098
Total	0	0	0	0	0

Households needing to move to social rented housing due to a disability					
Social rent	0	905	1,036	0	1,942
Intermediate	0	0	0	0	0
Market	0	-905	-1,036	0	-1,942
Total	0	0	0	0	0

Private sector households in arrears					
Social rent	1,626	3,442	2,443	1,158	8,670
Intermediate	0	0	0	0	0
Market	-1,626	-3,442	-2,443	-1,158	-8,670
Total	0	0	0	0	0

Tenure backlog total					
Social rent	9,474	28,105	18,818	10,972	67,369
Intermediate	0	7,530	9,679	17,308	34,517
Market	-30,739	-39,160	-21,997	-9,990	-101,886
Total	-21,265	-3,525	6,500	18,289	0

Overcrowded households in affordable housing (Size backlog total)					
Social rent	-32,571	-27,453	27,793	32,231	0
Intermediate	0	-1,779	1,779	0	0
Market	0	0	0	0	0
Total	-32,571	-29,233	29,572	32,231	0

7.17. We can now estimate the total net requirement including backlog need. As discussed above, while a range of backlog clearance periods can be used, we assume here that the backlog is cleared over twenty years. This gives the results shown in Table 17. Incorporating the backlog increases the total requirement by over 5,000 homes a year to 45,213 and also redistributes the

total requirement between the tenures, with the social rent and intermediate requirements rising from 20% to 31% and 14% to 19% respectively. The total number of homes required in 2035 is then 4.363 million.

Table 17: Net annualised requirement 2011/12 to 2034/35 based on household growth, affordability and backlog clearance over 20 years, by tenure and number of bedrooms

	1b	2b	3b	4b+	Total	% of total
Market	3,605	6,081	7,390	5,150	22,226	49%
Intermediate	3,032	2,135	2,115	1,497	8,779	19%
Social rent	8,732	1,280	1,810	2,386	14,209	31%
Total	15,369	9,496	11,315	9,033	45,213	100%

Interim supply and second/vacant homes

- 7.18. The results presented so far have all used a timescale starting in the base year of 2011 (or 2011/12 in financial year terms). But this report is published in early 2014, and any new policies taking it into account may not come into effect until 2015/16. The next stage in estimating future requirements is therefore to take account of any over- or under-supply of new housing in the intervening years 2011/12 to 2014/15.
- 7.19. Table 18 shows the assumed levels of net new housing supply by tenure (the size breakdown is not shown for reasons of space) in 2011/12 to 2014/15, comprising conventional completions (new build, conversions and changes of use), non-conventional completions (primarily units in student halls of residence), and long-term vacant homes returning to use. At the time of writing full data is only available for 2011/12 – for 2012/13 we have data on net conventional completions only, and supply from non-conventional completions and vacant homes is added to this in the same proportions as in 2011/12. Housing supply in 2013/14 and 2014/15 is then assumed to be 35,887 a year, in line with SHLAA data, with the same tenure and size mix as 2012/13. Tenure and size data is not available for supply from non-conventional completions or vacant homes, so for all years the tenure and size split of the total figure is assumed to match that of the conventional completions.

Table 18: Assumed housing supply in 2011/12 to 2014/15 (size breakdown not shown)

Year	Market	Intermediate	Social	Total
2011/12	17,657	3,335	7,332	28,324
2012/13	16,987	2,923	5,816	25,726
2013/14	23,696	4,078	8,113	35,887
2014/15	23,696	4,078	8,113	35,887
Total	82,035	14,413	29,375	125,824
% of total	65%	11%	23%	100%

- 7.20. Across these four years the total assumed housing supply is 125,824. This can be added to the 3.278 million households in 2011 to give a new baseline figure of 3.404 million at the start of

2015/16. Comparing this to the 4.363 million homes required by 2035 gives a total net requirement of 959,298 homes over twenty years, or 47,965 homes a year.

7.21. In terms of the tenure mix, the key point to note is that the intermediate sector is forecast to see the most 'under-supply' in this period relative to its requirements, with 11% of the supply compared to 19% of the requirement. This has only a minor impact on the results, increasing the intermediate share of the annual requirement from 19% to 20%.

7.22. In 2011, the number of long-term vacant homes was equivalent to 0.9% of the number of households⁸⁸. An additional 0.9% is therefore added to the requirement for homes of each tenure and type. There were also 47,866 second homes in 2011⁸⁹, all of which are assumed to be market sector homes. An additional 2% is therefore added to the requirement for market homes of each size. In total these additions constitute an extra 876 homes a year, bringing the total annualised requirement to 48,841, broken down by tenure and size in Table 19.

Table 19: Final net annualised housing requirements 2015/16 to 2034/35: Main results

	1b	2b	3b	4+b	Total	% of total
Market	2,798	5,791	8,545	6,083	23,217	48%
Intermediate	3,357	2,240	2,506	1,799	9,902	20%
Social rent	10,225	1,003	1,774	2,720	15,722	32%
Total	16,381	9,034	12,825	10,602	48,841	100%

Alternative assumptions

7.23. As already set out above, the results of this study rest on a range of methodological assumptions. This section shows the impact of varying some of the most important. A further set of demographic scenario tests are set out in chapter 9.

7.24. **Timescale:** For the overall total the most important assumptions are the timescale used and the time taken to clear the backlog. If instead of a twenty year timescale we were to estimate requirements over the ten years from 2015/16, assuming that the entire backlog was cleared in this time, then the annualised net requirement would be far higher, at 62,088 homes a year. Approximately 4,000 of the difference is due to the higher rates of annual household growth projected up to 2025 as opposed to 2035, and the remainder is due to clearing the backlog in half the time. In terms of the tenure mix there is a sharp increase in the affordable housing requirement, particularly for intermediate housing as there is such a large difference between the current intermediate stock and the backlog of need for it.

⁸⁸ DCLG, Live tables on dwelling stock, table 615

⁸⁹ DCLG, Council Taxbase statistics, 2011

Table 20: Variation 1 - Ten year timescale

	1b	2b	3b	4b+	Total	% of total
Market	3,274	4,325	7,109	6,098	20,806	34%
Intermediate	6,486	3,952	4,610	3,316	18,364	30%
Social rent	18,123	-1,838	1,710	4,922	22,918	37%
Total	27,883	6,440	13,429	14,336	62,088	100%

7.25. **Market size requirement:** As discussed in chapter 6, the model broadly assumes that current levels of under-occupation in market housing carry forward into the future, and therefore that more new family-sized homes are required than occupation requirements dictated by the bedroom standard would suggest. If we instead assume that market sector households only require the size of homes they need according to the bedroom standard then the size mix of both market and total requirements changes dramatically, as shown in Table 21. This assumption implies an enormous surplus of family-sized market housing and an even bigger deficit of one-bedroom market homes. In practice such a scenario would probably imply a very high level of conversions of the existing family-sized stock to smaller units rather than wholesale demolition and rebuild. But it is not a plausible scenario as it implies that no households are able to afford any extra space in the market sector (i.e. every one person or couple household occupies a one-bedroom home), which is far from the case today even in a very expensive housing market.

Table 21: Variation 2 - No under-occupation in market sector

	1b	2b	3b	4+b	Total	% of total
Market	56,541	9,416	-24,325	-18,415	23,217	48%
Intermediate	3,772	1,945	2,416	1,770	9,902	20%
Social rent	10,225	1,004	1,774	2,720	15,722	32%
Total	70,538	12,364	-20,136	-13,925	48,841	100%

7.26. **Housing Benefit:** The main model assumes that a similar proportion of households will be able to receive Housing Benefit (and at similar levels relative to rents) in future as at the base period of the study. Table 22 shows the impact on the results of assuming no Housing Benefit in future. In this scenario the social rent requirement increases by around five percentage points, largely at the expense of the intermediate requirement. The market requirement does not fall very much because households with incomes close to the intermediate/market threshold are currently unlikely to be receiving Housing Benefit, while households with incomes close to the social/intermediate threshold are significantly more likely to.

Table 22: Variation 3 - No Housing Benefit

	1b	2b	3b	4+b	Total	% of total
Market	2,798	5,482	8,545	6,053	22,878	47%
Intermediate	3,083	1,662	1,688	1,624	8,057	16%
Social rent	10,499	1,884	2,592	2,925	17,899	37%
Total	16,381	9,028	12,825	10,601	48,835	100%

Applying the guidance needs model

- 7.27. The SHMA guidance includes a simple model for assessing the annual need for new affordable housing. This model compares gross housing need to the stock available to meet it (affordable homes occupied by those in need, plus 'committed supply'), and then divides the resulting net current need by a backlog clearance period and adds on newly arising need (newly forming households who can't afford market housing) to calculate the net annual need for affordable housing.
- 7.28. Compared to the net stock model used elsewhere in this report, the needs model has a number of drawbacks:
- The results are highly sensitive to variables which are difficult to accurately measure using available data, particularly 'existing households falling into need'.
 - It does not estimate overall or market housing requirements.
 - It does not explicitly produce a breakdown of needs by size – the guidance suggests using housing registers to understand the size mix of housing needs.
- 7.29. Due to these drawbacks, the net stock model is considered to give a more accurate and robust estimate of London's housing requirements. Nevertheless, a version of the needs model is presented here for the sake of information and completeness.

Table 23: The needs model applied to London

#	Category	Estimate	Source / notes
1.1	Homeless households	33,645	P1E data, March 2011
1.2	Overcrowded households and other groups in need	290,689	Main SHMA model – total current gross need minus homeless households
1.3	Total current gross need	324,334	Main SHMA model – total backlog need minus 13,291 households who can afford market housing
2.1	Annual new household formation	50,226	Estimate from English Housing Survey
2.2	Proportion unable to buy or rent in the market	47%	Approximation from 2010/11 EHS data. Note, would be only 16% if incorporating satisfaction
2.3	Existing households falling into need	10,180	Households accepted as statutorily homeless in London in 2010/11, from DCLG live table 784. <u>Likely to be an under-estimate</u> (see accompanying text)
2.4	Total newly arising need	33,786	Sum of 2.1 to 2.3
3.1	Affordable dwellings occupied by households in need	125,641	Overcrowded households currently in affordable housing, from the English Housing Survey. Likely to be a slight under-estimate as it excludes smaller categories of need.
3.2	Committed supply of affordable housing	41,513	Net number of units with planning permission but under construction or not yet started, from the London Development Database. As it is a net figure it takes into account homes due to be demolished.
3.3	Total affordable housing stock available	167,154	Sum of 3.1 and 3.2
4.1	Net annual supply of social housing re-lets	36,252	CORE general needs and supported housing lettings, 2011/12
4.2	Intermediate re-sales	1,036	Estimated by GLA, based on average resales market share of 19% and average new supply in 2008-15 of 4,416 new First Steps homes a year. CORE data not used as it seems to under-estimate intermediate sales
4.3	Total annual supply of affordable housing	37,288	Sum of 4.1 and 4.2
5.1	Net current need	157,180	1.3 minus 3.3
5.2	Annualised over 20 years	7,859	5.1 divided by 20

5.3	Total annualised new and current need	41,645	5.2 plus 2.4
5.4	Net annualised need	4,357	5.3 minus 4.3

7.30. The estimated net need resulting from this model is low, but is very likely to be a significant under-estimate for two main reasons:

- There is no reliable data on the number of households falling into need each year. The number used here represents households accepted as homeless in 2012/13, but the true number of those falling into need is very likely to be higher. A higher estimate of households falling into need each year would translate one-for-one into a higher net annual need.
- The committed supply of affordable units is likely to be an over-estimate, as it includes all units on schemes with planning permission that are under construction or not yet started. It is likely that some of these schemes will not be completed for many years, if ever. Reducing the committed supply of affordable units has a relatively small effect on the estimated need.

7.31. In addition, reducing the number of years to clear the backlog of housing need would increase the net annual need, as it does in the net stock model.

8 HOUSING NEEDS OF PARTICULAR GROUPS

- 8.1. The NPPF states that SHMAs should address “the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes)”, echoing similar language in the SHMA guidance. This chapter provides extra detail on the requirements of some of these groups, over and above that already included in the main results.
- 8.2. Not every group can be analysed using the same approach as taken for overall requirements, due either to a lack of data or a different conceptualisation of ‘need’ (for example, students and self-build housing). This chapter therefore takes an eclectic approach, accepting that in some cases the results for particular groups are not strictly comparable with the overall results.

Families

- 8.3. If we define them as households with children, then there were just under one million families in London in 2011, around two thirds of them living in market housing (Table 24).

Table 24: Families with children by tenure and dwelling size, 2011

	1b	2b	3b	4b+	Total	% of total
Market	38,121	148,552	279,454	192,450	658,576	67%
Intermediate	0	3,150	2,392	574	6,116	1%
Social rent	29,713	150,975	106,394	26,278	313,360	32%
Total	67,833	302,676	388,240	219,302	978,052	100%

- 8.4. Using the GLA’s central scenario, the number of families with children is projected to grow to 1.275 million by 2035, an increase of around 12,400 a year. This rate of growth is almost exactly the same as the overall household growth rate, meaning that the family share of the total is projected to remain almost unaltered.
- 8.5. Table 25 shows the projected mix of homes required by families with children in 2035, broken down by tenure and size using the same affordability tests applied in the main model above but without incorporating a full assessment of backlog need (as the data on backlog need cannot all be broken down by family type). The main difference is that the projected intermediate requirement is significantly higher than the current stock of intermediate homes occupied by families. Families are also projected to require fewer one-bedroom homes than they currently occupy (particularly in social rented housing), reflecting the fact that some families are currently overcrowded and require a larger home.

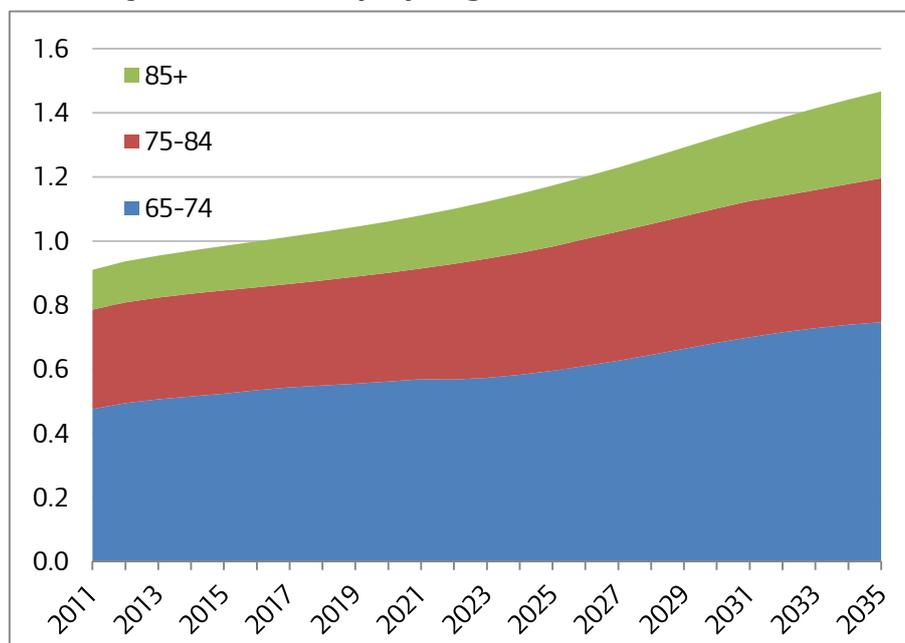
Table 25: Projected 2035 housing requirement of families with children

	1b	2b	3b	4b+	Total	% of total
Market	37,199	192,541	340,218	240,928	810,887	64%
Intermediate	0	31,096	29,961	21,665	82,722	6%
Social rent	1,621	199,020	135,665	45,273	381,579	30%
Total	38,820	422,657	505,845	307,866	1,275,188	100%

8.6. These figures have not been turned into a set of net requirements by tenure and size, as some family requirements could be met through mobility within the original stock rather than new supply. For example, the fact that families are projected to require many fewer one bedroom social rented homes in the future than they currently occupy does not necessarily mean that the 'surplus' homes should all be demolished and new larger homes built, as some of the imbalance could be addressed by families moving from smaller social rented homes to larger ones (and smaller households moving in the opposite direction).

Older people

8.7. According to the GLA's central population projection the number of people aged 65 or more in London is projected to grow rapidly over the coming decades, from 910,000 in 2011 to 1,467,000 in 2035 (Figure 55).

Figure 55: Projected number of people aged 65 or more in London, 2011 to 2035

8.8. The GLA commissioned research to estimate the impact of this growth in the older population on the need for different types of accommodation. In line with existing practice in this field, the research assumed that 2.5% of households headed by someone aged 65 to 74 and 15% of those headed by someone aged 75 or more would require specialist accommodation in future.

Applying these rates to the GLA's household projections indicates a required stock of around 61,000 units of specialist provision in 2015 and 76,000 by 2025.

- 8.9. This gross requirement was then compared with the current provision of specialist accommodation, based on data provided by the Elderly Accommodation Council. As of 2013 there are estimated to be around 57,000 specialist elderly accommodation homes in London, of which around 46,000 are social rented.
- 8.10. Looking to 2025 and making further assumptions about the proportion of social rented homes that are fit for purpose, the research identified a net requirement of between 3,600 and 4,200 new units of specialist provision for the elderly per year between 2015 and 2025. At the mid-point of 3,900, the indicative tenure split is approximately 2,600 private sale units, 1,000 shared ownership and 300 new affordable rented units. There may also be a requirement for some 400 - 500 new bedspaces per annum in care homes.

People with disabilities

- 8.11. As reported in Table 16 in chapter 7, there are estimated to be around 1,942 households in market housing who need to move to social rented housing due to the disability of a household member. But as explained in paragraph 7.14, this figure excludes those households who are already in social housing or who or not on a waiting list.
- 8.12. Altogether there are around 180,000 households in London who require a home adaptation because of the disability of a household member. Of these around 21,000 households say they are attempting to move somewhere more suitable to cope with a disability, of which around 7,000 are on a social housing waiting list, of which around 2,000 are not currently already in social housing.

People wishing to build their own homes

Current provision

- 8.13. The National Planning Policy Framework (NPPF) states that "Local Authorities should plan for ... people wishing to build their own homes" (para 50). This is often referred to as self-build (or custom-build) development, a term which covers a variety of development models but can be broadly considered housing which is developed by its future residents.
- 8.14. The total number of self-build homes completed in the UK for the 2012/13 financial year was estimated to be 10,940⁹⁰, slightly down from 11,850 in 2011/12 and 13,500 in 2010/11⁹¹. DCLG estimated 13,800 units in 2010/11⁹².

⁹⁰ UK Self-build Market Report, Homebuilding & Renovating Market Research

⁹¹ The only official statistic available on the size of the UK self-build market is the number of VAT refunds made each month by HMRC for completed projects under 'VAT 431NB – VAT refunds for DIY housebuilders'. This is a scheme which allows private individuals to recover the input tax paid on eligible building materials to ensure they benefit equally from the zero rate of VAT applied to new dwellings. It is widely accepted that a significant proportion of self-builders recover input VAT by other means, such as via a VAT-registered building contractor, or their own VAT registered business.

- 8.15. Self-build completion figures tend to follow the wider house building market, with a slight time lag. Based on the DCLG's unpublished analysis of the self-build sector's market share between 1987 and 2011 it is clear that while its share has marginally increased in the last few years the long term trend has remained relatively steady, averaging between 7-10% of the overall number of new homes built each year in the UK⁹³. This is in stark contrast with most European countries, where self-build development typically accounts for anything between 30% - 65% of total housing output⁹⁴.
- 8.16. Self-build provides 32% of all news homes built in Wales and 23% in Scotland, but only 4% of output in England⁹⁵. This supports a received wisdom that self-build is generally more prevalent in rural areas. A report by Joseph Rowntree Foundation⁹⁶ estimated that self-build in London accounted for 2.1% of total output in London in 1999. Typically self-build in London takes place in small infill sites, end of terrace spaces, backland sites, gardens, garages, and small industrial sites.
- 8.17. The London Development Database (LDD) records 417 completed developments involving the erection of a new single residential unit in 2012/13. This figure is fairly constant at 480 in 2011/12, 422 in 2010/11, and 472 in 2009/10. It should be noted that some of these may be speculative development of a single unit rather than self-build. The LDD also records extensions to existing buildings to create a single residential unit, and change of use from non-residential to create a single residential unit. These are more likely to be speculative development, and when added to the new single-unit developments bring the total to 766 in 2012/13, 892 in 2011/12, 833 in 10/11, and 942 in 2009/10. These figures do not include any group self-build or multi-unit custom build developments, or those who build one unit for themselves and other units for sale or investment. However, these can be assumed to be fairly negligible at present. These figures suggest self-build could be between 1.9% and 3.5% of annual housing output in London. It is expected that in many cases buying a run-down, possibly empty, home and carrying out substantial alternations and repairs can be another way of achieving the benefits of self-build in London.

Demand for self-build

- 8.18. A national survey for the Building Societies Association⁹⁷ in 2011 found that 53% of all respondents said they would be interested in building their own home. An Ipsos MORI survey conducted in 2013⁹⁸ found that 13% of adults in London were actively researching self-build,

A survey conducted by Homebuilding & Renovating magazine in March 2013 found that of 688 self-builders who had recently completed a project, 64.3% had recovered VAT using 'VAT 431NB' with the balance recovering VAT by other means. To get a more accurate indication of the true size of the UK self-build market, therefore, the HMRC completion figures are adjusted by a factor of 1.5554.

⁹² DCLG (unpublished) quoted in "Lending information for self build in the UK", Building Societies Association, April 2012

⁹³ *ibid*

⁹⁴ AMA Research (2011), 'Self Build Housing Market Report UK 2011-2015 Analysis' and Dol et al (2012), 'Self-provided housing in developed societies' International Encyclopedia of Housing and Home (pp. 310- 315).

⁹⁵ AMA Research (2011), 'Self Build Housing Market Report UK 2011-2015 Analysis' – based on the VAT refunds data.

⁹⁶ Barlow et al (2001), 'Homes to DIY for: The UK's self-build housing market in the twenty-first century", James Barlow, Robert Jackson and Jim Meikle, Joseph Rowntree Foundation, 2001 – based on a survey of building control departments in 1999

⁹⁷ Building Societies Association (2012), 'Lending information for self build in the UK'

⁹⁸ Ipsos MORI (2013), 'National Self Build Association Survey of Self Build intentions'

broadly in line with the national average⁹⁹. The same survey found that only 2% of adults in London (the same as in the country as a whole) were taking some form of action including acquiring land, submitting a planning application, or starting construction, and less than 1% expect to complete a self-build project within a year¹⁰⁰.

- 8.19. Finally, the London Legacy Development Corporation (LLDC) carried out a call for interest in self-build or custom-build on the Olympic site in Feb 2013¹⁰¹. Nearly 600 households expressed an interest in a two month period, with only local media targeted in the four boroughs around the Olympic site.
- 8.20. While levels of interest and research into self-build are fairly even across the UK, completed self-build projects make up a much lower percentage of total housing output in London than in other regions. This indicates a significant unmet demand where a large number of households are actively researching self-build, but either do not pursue the option further or are unsuccessful in taking action at the point of acquiring a site. This may be due to London's high-cost land market, which favours builders used to capital-intensive, high-density development. London's high costs also make it harder for self-builders to access finance, as lenders have tended to see the sector as relatively risky, although there are signs that this is changing. Demand is thus to some extent a function of market conditions, and it could be expected that if more opportunities for self-build development are provided, and the self-build process is made less difficult, the level of effective demand could rise.

Group self-build

- 8.21. Group self-build involves several households developing housing on a larger site, which may allow costs to be shared and economies of scale to be achieved. While this is estimated to be around 2% of all self-build development, DCLG's survey found that that 26% of self-builders would be interested in building their home as part of a group scheme and a further 35% are undecided on whether they would be interested¹⁰². It is notable that the demographic profile of self-builders interested in such schemes appears to be skewed towards younger age groups. This type of project is likely to be the most relevant for London, as it can enable denser developments, comparable to conventional speculative development.
- 8.22. A few developers and boroughs are initiating projects to select interested households to "custom-build" homes on larger sites (over 0.2 hectares). Groups have also come together independently to form a legal entity and initiate development for themselves. Most of the groups in London have entered into partnerships with registered providers to undertake the construction and financing. There are at least 15 such group schemes at various stages of development in London providing around 20 to 30 units each¹⁰³.

⁹⁹ 'Researching' included looking for and watching television programmes, using the internet, buying specialist magazines, visiting exhibitions, discussing the possibility with others, enquiring about finance, and looking for land, and enquiring about planning permission.

¹⁰⁰ Ibid.

¹⁰¹ LLDC (2013), unpublished research

¹⁰² Building Societies Association (2012), 'Lending information for self build in the UK'

¹⁰³ UK Cohousing Network website listings, National CLT Network website, GLA 'Build your own home the London way' enquiries

Conclusions

- The self-build market in London is still relatively small, and it is therefore difficult to draw definitive conclusions about the scale and nature of demand, except to say that it is likely to far exceed current levels of activity.
- Both the high levels of interest and the low levels of activity may be a function of London's uniquely pressured housing and land markets, which tend to favour larger and more experienced builders.
- Single unit self-build schemes are most likely to be practicable in low-cost parts of London, and the evidence of demand is strong enough for boroughs in such areas to pro-actively encourage and facilitate such projects. Where there are complex or 'fringe' sites not of interest to mainstream developers they may also be suitable for targeting to self-builders.
- Group self-build could have the potential to deliver larger numbers in higher-cost areas, especially with supportive systems of finance, planning and construction. Evidence from current schemes will inform future estimates of demand for this form of development.

Students

8.23. Students differ from the wider household population in several important respects:

- They are not identified separately in official household projections.
- Their numbers are subject to different influencing factors, including demographics but also national policy around fees and visa restrictions, the exchange rate and the relative standing of London's educational institutions.
- Students also tend to have very low incomes relative to housing costs, but only temporarily.
- Students may live by themselves, as part of a conventional household, together with other students in a self-contained dwelling, or with other students in halls of residence.
- Finally, students in London occupy both purpose-built and general-purpose accommodation.

8.24. For these reasons, it is neither appropriate nor feasible to identify the housing requirements of students with the same methodology as employed for the population as a whole. Other estimates of student housing requirements are available, however. The Mayor's Academic Forum¹⁰⁴ has developed projections of the growth in full-time students in London from 2011/12 to 2026/27 and the corresponding requirement for additional purpose-built student accommodation.

8.25. Table 26 shows the actual number of full time students in 2011/2012. 'LU HESA' refers to those students who feature in Higher Education Statistics Agency data for London universities¹⁰⁵, 'Other students' includes those at London campus branches of non-London universities, alternative providers and international exchange students from Study Abroad and Erasmus.

¹⁰⁴ The Mayor's Academic Forum includes representatives from Universities, London Boroughs and Private, Charitable and Voluntary student accommodation providers.

¹⁰⁵ London HESA students are those that attend London universities funded by HEFCE¹⁰⁵ (non-London campuses may be HESA funded, but are not captured in London's HESA data).

Table 26: Full time students in London, 2011/12

Type	LU HESA	Other (estimate)	Total	LU HESA %
Undergraduate students	219,735	24,461	244,196	91%
Postgraduate students	74,820	24,107	98,927	76%
Total student numbers	294,555	48,569	343,124	86%

8.26. To provide projections that reflect the range of factors affecting student numbers, the Academic Forum have produced a number of scenarios resulting in a range of projected population growth. All the scenarios are based on full time students only. The following scenarios have been produced:

- **High growth:** The high growth scenario is based on an assumption of exponential growth, by which student numbers are expected to increase at a proportionate rate per year from 2012/13 to 2026/27. The annual proportional growth rate is calculated through a range of assumptions, including the 'rolling average' of the historic data (1995/96 -2011/12) and British Council's growth assumptions¹⁰⁶ for international students (increase by 4.7% per year). Using a proportional growth rate, the absolute increase grows larger with every passing year, and is therefore considered to be the 'high' range of the GLA projection.
- **Low growth:** The low growth scenario assumes a constant absolute growth rate from 2012/13 to 2026/27. To provide a more nuanced understanding of the low growth assumption on potential student numbers, three variants have been run using the low growth assumptions (see below). As the baseline projection is based on the HESA student numbers, which only accounts for HESA registered full-time students in London Universities, the low growth assumptions also include a calculation to estimate the number of 'Other students' (see table above). To do this GLA applied the proportion of 'Other students' to HESA students in 2011/12 to the calculation of the total full-time student numbers in London under the low growth assumption.
 1. The baseline, using annual absolute growth from HESA student data from 1995/96 to 2011/12, plus the 'other students' estimate;
 2. This variant starts from the same baseline as 1 but factors in the fall in the UK population aged 18 to 20 (using the average reduction in the three years 2009/10 to 2011/12) on the total number of UK domiciled students (postgraduates and undergraduates) in London, plus the 'other students' estimate;
 3. This variant starts from the same baseline as 1 but factors in the fall in the UK population aged 18 to 20 (using only the reduction in 2011/12), plus the 'other student' estimate. The population data used in the projection is the 'National Population Projections 2010-based projections', sourced from the ONS.

8.27. A scenario of medium growth, set at the mid-point between the high and low growth scenarios, has also been developed and is considered by the GLA to be the most robust of the set. There

¹⁰⁶ British Council, Universities UK, IDP, Education UK (2004), 'Vision 2020: Forecasting international student mobility: a UK perspective'

are three variants to the medium growth scenario, as the mid-point changes in relation to each of the three low growth variants. As set out above there is only one high growth scenario.

Table 27: Projected number of full time students in London, 2026/27

Scenario	Variant 1	Variant 2	Variant 3
High	487,317	487,317	487,317
Medium	485,916	457,521	458,354
Low	484,515	427,724	429,391

8.28. Table 3 produces average annual growth rates from 2011/12 to 2025/26 (inclusive) by comparing the projected student population in 2026/27 to the 2011/12 baseline.

Table 28: Average annual increase in full time students under different scenarios, London 2011/12 to 2025/26 inclusive

Scenario	Variant 1	Variant 2	Variant 3
High	9,613	9,613	9,613
Medium	9,519	7,626	7,682
Low	9,426	5,640	5,751

8.29. The next stage is to translate these annual growth figures into requirement/demand for purpose built student housing. As mentioned above, not all full time students require purpose-built accommodation, and the actual level of need for purpose-built provision was a subject of considerable debate by the Academic Forum. In broad terms, the university and private sector believe that there is significant demand for purpose built accommodation that is not currently being met, whereas some boroughs feel that London's large number of Homes in Multiple Occupation (HMOs) can continue to flexibly meet a large share of future demand. Therefore the Academic Forum estimated the requirement for additional purpose built accommodation based on a number of different plausible assumptions, as set out below.

- a) Current proportion: currently in London, 21% of full time students (HESA students only) are living in purpose built accommodation.
- b) Manchester proportion: Manchester has the second largest student population after London and 26% of its population live in purpose built accommodation.
- c) Charitable providers suggest that 33% is a better benchmark as it would help meet the unmet demand for student accommodation (which should in turn reduce pressure on the conventional housing stock).
- d) Private sector providers suggested that as much as 40% of student need could be met in purpose-built accommodation.

8.30. Table 29 applies these proportions to the student growth projections.

Table 29: Estimated annual requirement for bed spaces in purpose-built student accommodation under different scenarios and assumptions, 2011/12 to 2025/26 inclusive

Scenario and assumed purpose built share	Variant 1	Variant 2	Variant 3
a) 21% share			
High	2,019	2,019	2,019
Medium	1,999	1,602	1,613
Low	1,979	1,184	1,208
b) 26% share			
High	2,499	2,499	2,499
Medium	2,475	1,983	1,997
Low	2,451	1,466	1,495
c) 33% share			
High	3,172	3,172	3,172
Medium	3,141	2,517	2,535
Low	3,111	1,861	1,898
d) 40% share			
High	3,845	3,845	3,845
Medium	3,808	3,051	3,073
Low	3,770	2,256	2,300

8.31. Taking the medium growth as the best estimate of future student growth, the projected requirement for purpose built student accommodation ranges from 1,600 to 3,800 bed spaces a year (rounded). Taking into account the likely scale of pent up demand for purpose built student accommodation and the scope to reduce pressure on the conventional housing stock, the Academic Forum suggested that the 33% assumption was the most reasonable, implying an annual requirement of between 2,500 and 3,100 student bed spaces a year.

Members of the armed forces

8.32. Analysis of the housing requirements of members of the armed forces and their families is hampered by their relatively small numbers, especially when relying on sample surveys. Data from the 2008/09 to 2010/11 English Housing Survey datasets suggests that there are around 8,000 households in London containing a member of the armed forces, or around 0.3% all households, but this figure equates to only eleven survey cases across the combined three-year dataset. As a result, the following estimates are inevitably imprecise and should be interpreted with caution.

8.33. The majority of armed forces households in London live in owner occupied or private rented housing, with around 7,500 spread between the two tenures, and the remaining 500 in social rented housing. Analysis of their dwelling size requirements indicates that none of the armed forces households in London are overcrowded.

8.34. Taking affordability into account, the tenure requirements of armed forces households are split in the same proportion as their current tenure, i.e. with the vast majority requiring market housing. As there are no projections of future change in the number of armed forces households, the most reasonable assumption is that both their total requirements and the tenure mix of those requirements will rise in line with overall growth in the number of households in London.

Gypsies and travellers

8.35. The London boroughs conducted a joint Gypsy and Traveller Accommodation Assessment in 2009, but have not repeated the exercise on a joint basis since then. Given the very uneven distribution of the Gypsy and Traveller population in London, an assessment at the London-wide level in line with the rest of this SHMA would be of little value and has not been attempted. Boroughs are responsible for assessing needs at the local level and addressing these needs in light of local circumstances and in line with government guidance and the London Plan.

9 SCENARIOS

Demographic scenarios

- 9.1. Chapter 3 set out details of how the GLA has produced three separate household projections based on the Low, Central and High population projection scenarios. The Central household projection, considered the most likely of the three, has been used as the basis of the main housing requirements model in this report. In this section the Low and High household projections are fed through the same model to identify the number and mix of new homes that would be required under each alternative scenario.
- 9.2. Figure 28 showed the projected annualised growth in the number of households for each of the scenarios, with the Low scenario resulting in an annualised growth of around 35,300 by 2035 compared to 39,900 in the Central scenario and 44,600 in the High one.
- 9.3. Table 30 shows the contribution of growth in each household type to the total growth (from 2011 to 2035) under each scenario. There is relatively little variation in the composition of growth in each scenario (largely because the same household formation rates are applied to population growth in each scenario), with the most notable differences between more rapid growth in one person female households and slower growth in both childless 'couple and one other adult' households and 'other' households under the High scenario.

Table 30: Contribution of growth in each household type to total growth by household projection scenario

Household type	Low	Central	High
One person households: Male	11.1%	11.4%	11.7%
One person households: Female	3.2%	4.3%	5.2%
One family and no others: Couple: No dependent children	11.6%	12.1%	12.4%
One family and no others: Couple: 1 dependent child	4.0%	4.2%	4.4%
One family and no others: Couple: 2 dependent children	1.4%	2.0%	2.4%
One family and no others: Couple: 3+ dependent children	2.7%	2.9%	3.0%
One family and no others: Lone parent: 1 dependent child	7.4%	7.2%	7.0%
One family and no others: Lone parent: 2 dependent children	2.2%	2.2%	2.3%
One family and no others: Lone parent: 3+ dependent children	1.3%	1.3%	1.3%
A couple and one or more other adults: No dependent children	20.0%	18.8%	17.9%
A couple and one or more other adults: 1 dependent child	3.8%	3.7%	3.6%
A couple and one or more other adults: 2 dependent children	2.1%	2.1%	2.0%
A couple and one or more other adults: 3+ dependent children	2.0%	2.0%	1.9%
A lone parent and one or more other adults: 1 dependent child	2.0%	2.0%	1.9%
A lone parent and one or more other adults: 2 dependent children	1.2%	1.2%	1.1%
A lone parent and one or more other adults: 3+ dependent children	0.5%	0.5%	0.5%
Other households	23.5%	22.3%	21.4%
Total	100%	100%	100%

9.4. The similarities in the composition of household growth feed into similar affordability patterns, and the differences between the results from each scenario once the affordability tests have been applied and backlog taken into account are therefore more to do with the scale rather than the mix of requirements. Table 31 shows the estimated annual requirements between 2015/16 and 2034/35 (for comparison with the results of the main model using the Central projection in Table 19) using the Low projection, and Table 32 the equivalent results using the High projection.

Table 31: Net annualised housing requirements 2015/16 to 2034/35: Low scenario

	1b	2b	3b	4b+	Total	% of total
Market	2,226	4,651	7,059	5,262	19,198	44%
Intermediate	3,298	2,163	2,440	1,767	9,667	22%
Social rent	9,676	551	1,483	2,657	14,367	33%
Total	15,200	7,365	10,981	9,686	43,233	100%

Table 32: Net annualised housing requirements 2015/16 to 2034/35: High scenario

	1b	2b	3b	4b+	Total	% of total
Market	3,383	6,957	10,067	6,925	27,332	50%
Intermediate	3,419	2,318	2,575	1,831	10,143	19%
Social rent	10,787	1,468	2,072	2,784	17,111	31%
Total	17,588	10,744	14,714	11,540	54,586	100%

9.5. Under the Low household growth scenario the estimated total annualised requirement is around 43,200 homes a year, compared to 54,600 in the High scenario (and 48,800 in the Central one). In terms of the tenure mix, the main difference is a higher market housing requirement in the High scenario (50% versus 44% in the Low scenario), due largely to higher household growth in household types which are more likely to be able to afford market housing. In terms of size mix, the main difference is a significantly higher requirement for two bedroom homes in the High scenario.

Welfare reform

- 9.6. The government is in the process of implementing a range of reforms designed to reduce expenditure on welfare. Some of these, such as reductions in Local Housing Allowance (LHA), are directly related to housing, while others, such as reductions in Incapacity Benefit or Council Tax Benefit, are not. There are several strands to the welfare reform programme, often working on very different time scales, and over the longer term the government is also carrying out a wide ranging reform of the entire welfare system through the introduction of Universal Credit.
- 9.7. Welfare reform is clearly relevant to the analysis of London's housing requirements, as it may significantly affect the ability of some households to afford different types of housing. But for a number of reasons it is very difficult to analyse the full impact of these reforms at the time of writing.
- 9.8. First, there is the general problem of a time-lag in data reporting. For example, English Housing Survey data is generally not published until around 18 months after the end of the survey period, and there was a similar time lag between the 2011 Census day and the publication of the first results, with an even longer period until the more detailed results were available. As of the time of writing, the most detailed official assessment of the impact of the LHA changes, published in May 2013, was based on interviews carried out in the first half of 2012¹⁰⁷. There is

¹⁰⁷ DWP (2013), 'Monitoring the impact of changes to the Local Housing Allowance system of Housing Benefit: Interim report'

therefore a significant time-lag between the impacts occurring and robust data on these impacts becoming available.

- 9.9. Second, it can take time for the full impacts of such changes to occur, as both households and public authorities may put in place a variety of measures to delay or manage the transition from the pre-reform to post-reform regimes. Taking the example of the LHA changes again, transitional protections were put in place for existing claimants when the reforms were first introduced, and local authorities have a limited amount of Discretionary Housing Payment (DHP) funding available to help households in greatest need, but both of these measures were intended to be temporary supports rather than long-term solutions. More generally, households may have a range of possible responses to reforms like the LHA changes available to them (moving house, cutting back on other expenditures, finding work, and so on) and their preferred response may change over time. The interim DWP impact assessment report published in 2013 found that awareness of the LHA changes was relatively poor and that many of those affected were “hanging on to their current accommodation for as long as possible because they did not want to move, even if they would probably have to do so eventually”¹⁰⁸.
- 9.10. Finally, the complexity and specificity of the reforms means that it is not possible to identify from the data available for this SHMA precisely which households will be affected. The impact on each household depends on the detailed circumstances of their household composition, employment (if applicable), accommodation, housing costs and eligibility for a range of benefits. While several estimates of the number of households likely to be affected by various reforms have been made (some of them discussed below), almost all are being revised in the light of experience as the reforms are actually implemented due to the very specific nature of the impacts.
- 9.11. In summary, it may be some time before a robust analysis of the impacts of welfare reform on London’s housing requirements is possible. However, at this stage we can draw some more indicative conclusions from the information currently available.
- 9.12. Households in London are both more likely to be paying high housing costs and more likely to be workless than the average household in the rest of the country. As a result the household benefit cap is having a greater impact in London than elsewhere: of the 28,482 households who had had their benefits capped by October 2013, 13,400 or 47% were in London¹⁰⁹. The final number of capped households in London is likely to be between this figure and around 20,000 (half of the previous DWP estimate of 40,000 affected households nationwide). Looking at all types of welfare reform, researchers from Sheffield Hallam University estimated that the total annual loss in income per annum would be £2,910 million in London, or £520 per working age adult (compared to an average across Great Britain of £470).
- 9.13. However, some of the impacts of welfare reform on London’s housing requirements are already implicitly included in the model. For example social renting households are all assumed to

¹⁰⁸ Ibid.

¹⁰⁹ DWP (2013), ‘Benefit cap – number of households capped, data to October 2013, GB’. These figures do not represent the final number of capped households as some local authorities may not yet have fully processed their caseload prior to returning their data.

require accommodation of an appropriate size, so that any down-sizing as a result of the social sector size criteria is already taken into account. Many of the households likely to be affected by the household benefit cap are either in temporary accommodation and thus already recorded as requiring social housing or already in social housing and therefore do not require a change in tenure¹¹⁰. Of those currently in the private rented sector some proportion will be already assumed to require social housing due to affordability problems or housing need, though it is not possible to identify exactly what proportion.

- 9.14. A household having to move from a more expensive to a less expensive private rented home does not necessarily create a need for new affordable housing, if the household is still able to afford a private rented home at lower quartile London rents according to the affordability tests set out in chapter 7. In theory a household receiving LHA equivalent to the 30th percentile of private rents in the relevant Broad Rental Market Area should be able to afford lower quartile rents, as long as their benefit is not further constrained by the LHA caps or the household benefit cap. A further important factor here is the response of landlords to the LHA changes: if a large number decide not to accept LHA recipients in future then the recipients' ability to find a suitable home in the private rented sector will be reduced accordingly.
- 9.15. Finally, cuts to benefits such as disability benefits and Council Tax Benefit are likely to worsen affordability for some households but given the data available it is not possible to estimate the *net* impact over and above the other reforms already discussed and the affordable housing requirements already identified in the model. An increase in the number of households including a member with a disability who cannot afford suitable accommodation would translate into a higher backlog need.
- 9.16. In summary, our ability to estimate the impact of welfare reform on London's housing requirements is restricted by a range of important 'unknowables'. But a sense of the scale involved can be arrived at by taking the estimate of London Councils' 2011 estimate that around 130,000 workless households in London would be unable to afford their rent as a result of the LHA caps and/or the household benefit cap, slightly more than half of them primarily because of the household benefit cap and the remainder primarily because of the LHA caps.
- 9.17. Given the fall in the number of households estimated to be affected by the household benefit cap from 56,000 initially to 40,000 in April 2013 (and a possible further reduction in light of the incomplete October 2013 figure of 28,000), the London Councils figure of 130,000 is likely to be an over-estimate. Furthermore, as discussed above, some of the households affected by the household benefit cap will already be in social housing or temporary accommodation, some will be in private sector housing but already recorded by the main SHMA model as requiring social rented housing, and some of the households affected by the LHA should be able to afford private rented housing elsewhere in London. In each of these cases the household's tenure requirement as identified in the main model would be unaffected by the household benefit cap.

¹¹⁰ An analysis of capped households in the pilot borough of Haringey found that 43% were in temporary accommodation, 13% in social rented housing and 45% in private rented housing. See Chartered Institute of Housing (2013), 'Experiences and effects of the benefit cap in Haringey'.

9.18. It is not possible to say how many households remain who are currently in private rented housing and would require affordable housing. As a purely indicative scenario to show the scale of the impact on the annual requirements, if the figure was 50,000 then according to the methodology used in this report the annual affordable housing requirement would increase by 2,500 (probably mostly social rented housing) and the annual requirement for market housing would fall by the same number, in order to meet housing needs over a 20 year period.

10 CONCLUSIONS

- 10.1. This SHMA has identified an annual requirement for around 49,000 new homes a year in London over the next two decades, in order to accommodate projected household growth and clear the backlog of need.
- 10.2. It is worth stressing again that the results of the SHMA should be carefully interpreted in light of the inputs and assumptions used and the prevailing policy context, rather than transferred straight into targets. Two important examples are the requirement for larger homes and the requirement for intermediate housing.
- 10.3. The estimated requirement for larger homes depends crucially on whether current occupancy patterns are assumed to continue or not. For market housing current patterns are assumed to continue, reflecting the effective demand for more space, while for affordable housing households are assumed to only occupy the size of homes they require according to the bedroom standard (reflecting common practice in allocation policies). If instead households in all tenures were assumed to require only the size of homes required under the bedroom standard, then the requirement for larger market homes would be considerably smaller. While this would seem an unreasonable assumption given the ability of households in the market to obtain homes larger than they need, policy-makers should consider that market under-occupation rates may fall in the future if housing shortages continue and prices and rents continue to rise relatively fast.
- 10.4. The main results indicate an annual requirement for 9,902 intermediate homes, an estimate which is derived by comparing the household income distribution to the costs of social and private renting. In practice, this intermediate requirement could be met in full by the provision of dedicated intermediate housing such as low-cost home ownership, but part of it could also be met by expanding the size of the social rented sector, by increasing Housing Benefit support for low-income private tenants, or by building enough market housing to reduce market prices and rents in real terms.
- 10.5. As these examples show, the policy responses to the requirements identified in the SHMA are not set in stone but are a matter for judgement in light of available resources, the policy context and other strategic aspirations. This is particularly applicable to the tenure and size split of requirements, which are relatively sensitive to the assumptions used. The overall requirement is more certain, but is still sensitive to assumptions around the period to clear the backlog of housing need, in addition to underlying uncertainty in the population and household projections used.

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Chinese

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Hindi

यदि आप इस दस्तावेज की प्रति अपनी
भाषा में चाहते हैं, तो कृपया निम्नलिखित
नंबर पर फोन करें अथवा नीचे दिये गये
पते पर संपर्क करें

Vietnamese

Nếu bạn muốn có văn bản tài liệu
này bằng ngôn ngữ của mình, hãy
liên hệ theo số điện thoại hoặc địa
chỉ dưới đây.

Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি
(কপি) চান, তা হলে নীচের ফোন নম্বরে
বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

Greek

Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος
εγγράφου στη δική σας γλώσσα, παρακαλείστε να
επικοινωνήσετε τηλεφωνικά στον αριθμό αυτό ή ταχυ-
δρομικά στην παρακάτω διεύθυνση.

Urdu

اگر آپ اس دستاویز کی نقل اپنی زبان میں
چاہتے ہیں، تو براہ کرم نیچے دئے گئے نمبر
پر فون کریں یا دیئے گئے پتے پر رابطہ کریں

Turkish

Bu belgenin kendi dilinizde
hazırlanmış bir nüshasını
edinmek için, lütfen aşağıdaki
telefon numarasını arayınız
veya adrese başvurunuz.

Arabic

إذا أردت نسخة من هذه الوثيقة بلغتك، يرجى
الاتصال برقم الهاتف أو مراسلة العنوان
أدناه

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ
ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ
ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ ਕਰੋ:

Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં
જોઈતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર
ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાધો.