# Overview of Harrow's population and changes

Harrow's main sources of population data are the Office for National Statistics (**ONS**) and the Greater London Authority (**GLA**).

The ONS produce the National Census, Mid-Year Estimates (**MYE**) annually and the Sub-National Population Projections (**SNPP**) approximately every two years; these datasets include births and migration data.

The GLA produce and publish both the **Trend-based projections**, which are based purely on trends in fertility, mortality and migration and the **Housing-led projections**, which incorporate a forecast housing development trajectory. The GLA's school roll projections data (known as baseline data in this report) are based on one of the two population projections that are produced for the London boroughs only: the **Borough Preferred Option projections**, which are based on the housing-led methodology and the **Zero development projections**. These are produced solely for use by the London boroughs.

Last year the GLA instructed the London boroughs to use the Witan tool to select and produce their borough's population projections, however this year they have reverted to producing the population projections in-house and disseminating them to the boroughs. The GLA demography team produce a range of annually updated population projections at both borough and ward level for 33 local authorities in the London region.

#### 2011 National Census

Harrow's population has been changing and increasing since the 2001 Census. A number of factors have contributed to this position; these are outlined in this document.

The 2011 National Census revealed that Harrow's population is estimated to have increased to 239,100; this figure is 15.6% higher than the 2001 Census showed, and the ONS 2014 MYE show a further increase to 246,011. Harrow's population is now at the highest recorded level, based on records going back to 1901. The 0-4 age group has increased by 5,418 between mid- 2001 (12,058) and mid-2014 (17,476), which represents a 45% increase. There have also been increases across all the statutory school age groups.

The 2011 Census showed that Harrow's residents were born in approximately 200 different countries and the percentage of Harrow's residents born in the UK is the 6<sup>th</sup> lowest ranking nationally. Harrow is ranked 7<sup>th</sup> nationally (and in London) for ethnic diversity and 2<sup>nd</sup> for religious diversity in London.

#### **Population Projections**

The ONS's Sub-National Population Projections project what the population of every local authority will look like over the next 25 years. It should be noted that all population projections become increasingly uncertain the further they are carried forward due to the inherent uncertainty of demographic behaviour.

The most recent 2014-based SNPPs take the 2014 Mid-Year Estimates (MYEs) as their starting point, then: the population is projected forward a year at a time to 2039; the population is aged on from the previous year; the projected number of births and deaths are added; and adjustments for net migration are included. Births, deaths and migration are based on the trends observed in each

local authority over the period 2009 to 2014. Finally the SNPPs are constrained to be consistent with the national projections for England.

The GLA demography team produce a range of annually updated population projections at both borough and ward level for 33 local authorities in the London region.

## **GLA Population Projections**

Each round of projections includes a number of variants designed to meet various user requirements, but in general the variants form two groups:

- Trend projections those based purely on trends in fertility, mortality and migration;
- Housing-led projections those which incorporate a forecast housing development trajectory.

The GLA's interim 2015-based borough level population projections were released in February 2017 and incorporate the ONS estimates and internal migration estimates up to and including mid-year 2015. As there is uncertainty about future migration, caused in part by the influence of the financial crisis on recent patterns, three variant projections based on different assumptions about future migration patterns have been released – a central projection, a short-term projection and a long-term projection. In each case, mortality and fertility methodologies are the same but the assumptions regarding migration differ.

The central projection is used by the housing-led projection model – this projection uses ten years of past data to project migration trends. The GLA considers this to be the best available projection for strategic planning purposes.

## **Housing-led Model**

The GLA housing-led model incorporates forecasts of housing supply in London into a local authority-level population projection. For the 2015-based projection, the model methodology has been significantly revised and updated so that the model is better integrated with, and its outputs more consistent with, the GLA trend model.

The 2015-based population projections project the period 2016-2050, however assumed development inputs are only available to 2041. Where no development data is available the model follows underlying trend assumptions taken from the 2015-based central trend model.

#### Housing Market Area

In order to provide consistency across the suite of GLA projections the 2015-based housing-led projection has been constrained at the Housing Market Area (HMA) level to match outputs from the 2015-based central trend projection. The HMA has simply been defined as the 33 London boroughs.

This means that for Greater London, the housing-led projection matches the central trend projection for both the total population and the components of births, deaths and international migration. The housing-led model is therefore a method of distributing the London population among its constituent boroughs based on forecast housing supply. The concept of the HMA is introduced to make explicit the role of a housing market within the modelling process.

# **Borough Preferred Option (BPO)**

The model and methodology of the Borough Preferred Option and the 2015-based housing-led projection are identical, except the BPO uses housing trajectory input data provided by the borough. The BPO projection constrains to the 2015-based central trend projection. The BPO projection takes the 2015 Mid-Year Estimate as its base and projects forward to 2050. Although the model produces outputs by sex and single year of age out to 2050 these projections should be treated with caution especially at smaller geographies.

The Average Household Size (AHS) cap is set at the projected level in 2016. The model does not allow the AHS to rise above this level for the duration of the projection period. The default development trajectory used in the model is based on the results of the 2013 Strategic Housing Land Availability Assessment (SHLAA). At borough level this provides dwelling forecasts up to and including 2041. For the years 2041 to 2050 the amount of development at borough level is held constant at 2041 levels. At ward level the SHLAA provides a trajectory up to and including 2036. Years beyond 2036 assume no development will take place.

When a BPO projection is run, the borough's development trajectory replaces the SHLAA data for that borough for the years for which it is available.

The conventional units are input directly into the model as a replacement for ward SHLAA data. The non-conventional units are not incorporated at ward level. The borough trajectory is determined by adding the conventional and non-conventional units together and then aggregating the sum to borough.

## **Zero Development Projections**

The Zero Development projection assumes that, for the specified borough, there will be no change in the total dwelling stock over the projection period. All other boroughs are assumed to continue to deliver dwellings according to the trajectories developed from the SHLAA.

The primary purpose of the Zero development projection is transparency. The Zero development projection provides a baseline against which to compare the BPO projections, providing an indication of the assumed impact of development on the projected population.

# Harrow's GLA Borough Preferred Option Results

#### **Population Change**

The population of Harrow is estimated to have grown by 6,631 persons (2.8 percent) between 2011 and 2015. Over the decade to 2025 the population is projected to grow by 28,219 persons (11.4 percent). By 2041 the population is projected to reach 297,432 persons, a 23.4 percent increase on the 2011 population. This is in the context of London-wide population growth of 29.8 percent over the same 30-year period.

Table 1 below outlines the total population of Harrow from the census base population of 241,063 through five-year intervals to a projected 2041 population of 297,432.

Table 1: Population of Harrow

Year	Population
2011	241,063
2016	250,500
2021	265,138
2026	277,216
2031	284,109
2036	290,953
2041	297,432

### Age structure

The greatest growth in Harrow, between 2015 and 2031, is projected to be in the 65 and over age group where the population increases by 18,261 persons (53.9 percent). The proportion of the population aged 65 and over will rise from 14.1 percent to 18.4 percent.

Table 2: Age structure of Harrow

Age Group	Population 2011	Population 2031	Change	Percentage change
0 to 3	13,449	14,097	649	4.8
4 to 10	20,398	24,508	4,110	20.2
11 to 15	14,892	17,695	2,803	18.8
16 to 17	6,587	7,330	743	11.3
18 to 64	151,851	168,332	16,481	10.9
65 and over	33,886	52,147	18,261	53.9

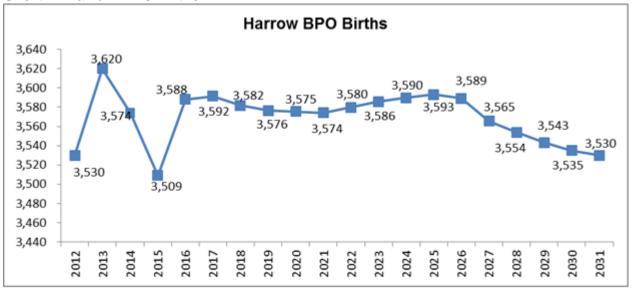
# **Components of Change**

The components of change presented here are total births and total net migration. Births data include observed data for the period 2012-2015 which are obtained from the Office for National Statistics. All migration data are based on outputs from the model.

#### **Births**

The observed births (2012 to 2015) for Harrow fluctuated between 3,530 in 2012 to 3,509 in 2015. The projections (2016 onwards) however are relatively steady from 2016 to 2026, after which point they start to drop, as can be seen in Chart 1 below.

Chart 1: Harrow BPO Births



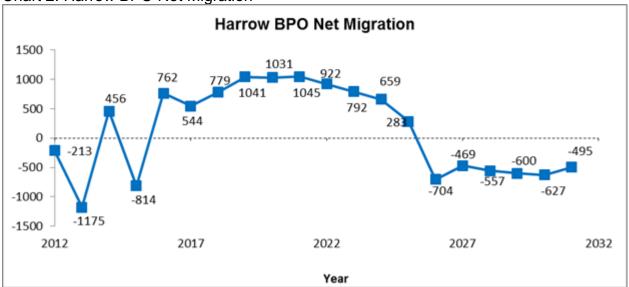
Source: GLA 2015-based ward projections

Note: Data for 2012 to 2015 are observed births, data for 2016 and after are projected.

# **Net Migration**

All migration data is projected (based on past trends), there are no observed values. Chart 2 below shows that the net migration data for Harrow shows a steady increase from +544 in 2017 to +1,045 by 2021, which is projected to decline steeply to -704 from 2026 onwards.

Chart 2: Harrow BPO Net Migration

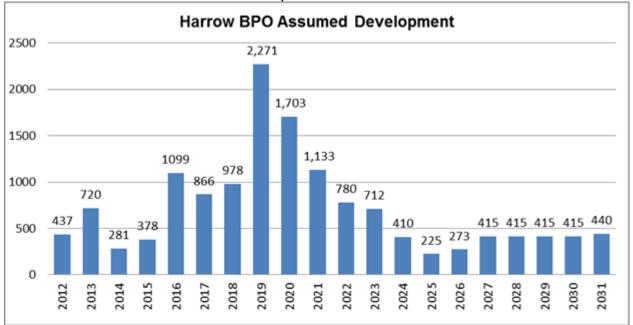


Source: GLA 2015-based ward projections

#### **Assumed Development**

The BPO model uses a net change in dwellings forecast for Harrow to distribute population growth, as can be seen in Chart 3 below. For years where no housing data is provided the London SHLAA trajectory is used up to 2050 (which assumes the level of development remains constant for the period 2041-2050). Years 2012 to 2015 incorporate completions supplied by the London Boroughs to the London Development Database.

Chart 3: Harrow BPO Assumed Development



Source: GLA 2015-based ward projections

# **ONS 2016 Mid Year Estimates (MYE)**

The ONS 2016 MYE (published 21<sup>st</sup> June 2017) show that London's population was 8.78 million in mid-2016, 114,179 (1.3%) higher than the previous year. Harrow's growth rate of 0.66 per cent over the past year, is lower than the UK growth rate of 0.83 per cent (0.79% in 2015), England & Wales growth rate of 0.86 per cent (0.83% in 2015) and London's rate of 1.3 per cent (1.58% in 2015). This indicates that for the second year Harrow's growth has slowed down in comparison to the aforementioned regions which have grown at a similar rate to recent years.

Harrow's 2016 mid-year resident population is estimated to be 248,752, which is 1,622 higher than the ONS mid-2015 population estimate of 247,130. Over the past year Harrow's population is estimated to have increased by 0.66 per cent (1,622), compared to 0.45 per cent (1,119) from mid-2014 to mid-2015, and 1.08 per cent (2,638) from mid-2013 to mid-2014. Over the decade<sup>1</sup> the borough's population has increased by 15.5 per cent (33,169).

Harrow's population growth (mid-2015 to mid-2016) can be largely attributed to natural change, with 2,172 more births than deaths. 20.6 per cent of Harrow's residents are aged under 16 (51,253), above the mid-2015 number of 50,779, as well as above both the mid-2014 number of 50,300 and the mid-2013 number of 49,500. The 2016 proportion is higher than both London (20.4%) and England (19.1%). The number of 5 to 15 year old residents in Harrow has been increasing from 32,513 at mid-2013, to 32,870 in mid-2014, to 33,283 in mid-2015 and now to 33,408.

# **ONS 2014-based Subnational Population Projections (SNPP)**

Published on 25<sup>th</sup> May 2016, the SNPP suggest that all regions of England are projected to see population growth over the 10 year period to mid-2024, but the rate of that growth could vary.

<sup>&</sup>lt;sup>1</sup> Based on ONS 2004 MYEs, revised in the light of the 2011 Census Produced by Education Team, BIU

## All ages

London is again projected to grow the fastest, by 13.7% over the 10 year period. Of the 13.7% projected growth in London, 10.4 percentage points are attributable to natural change (that is, that there are more births than deaths) while the remaining 3.2 percentage points are attributable to migration. Migration is further split down to show migration within the UK and international migration separately. This shows that the 3.2 percentage point growth in London directly attributable to migration is the result of 10.2 percentage point growth from international migration and -7.0 percentage point change (that is, a fall) due to migration within the UK. Harrow's projected population growth is estimated to be 10.7% (SNPP) between mid-2014 and mid-2024. Past international migration also has an indirect impact on the population through its effect on the numbers of births and deaths – for example, women who were born overseas but who give birth after migrating to England will increase the numbers of births, while the numbers will be decreased by women born in England but who migrate overseas before giving birth. Assumed future fertility and mortality are based on past trends of all residents irrespective of where they were born.

#### Children

In absolute terms the number of children (0-15 years) in Harrow is projected to increase, over this ten year period up to 2024, from 50,346 to 56,411, a 14.0% increase. It should be noted that Hillingdon, a neighbouring borough, has been shown as having the highest projected population growth over this period (16.1%), and they along with Harrow's other neighbouring boroughs could potentially contribute to Harrow's growth with an over-spill of children attending Harrow's schools.

#### **ONS Births**

### Live births - calendar year

The total number of live births in England and Wales increased from 695,233 in 2014 to 697,852 in 2015; this is still lower than the high of 698,512 live births in 2013. This increase is due to a 2.5% rise in births to non-UK born women, whilst there has been a 0.4% fall in live births to UK born women (from 507,489 in 2014 to 505,486 2015). Over a quarter of births (27.5% - 192,155) in 2015 were to mothers born outside of the UK, a slight increase from 2014 (27.0% - 187,515). This is the highest proportion of births to mothers born outside the UK since information on parents' country of birth has been collected.

The total number of live births in London increased from 127,399 in 2014 to 129,615 in 2015. Only 8 of 33 local authorities in London saw a reduction in births from 2014 to 2015, compared to 13 the year before. The rises in births varied in the remaining London boroughs from an increase of 8 births in the City of London, to 281 more births in Barking and Dagenham. Births in Harrow's and its statistical neighbours were: Harrow (+76), Barnet (+17), Ealing (-264), Hillingdon (-29), Kingston upon Thames (+103) and Redbridge (+120).

Harrow's live births have substantially increased from 2,581 in 2001, to 3,088 in 2007 and were at 3,585 in 2012. Live births in 2013 declined slightly to 3,559 (28 less), and then dropped again in 2014 to 3,525 (34 less), however they increased by 76 to 3,601 in 2015. Birth rates among British-born mothers have fallen from 1,307 births in 2001 to 1,017 in 2015 (1,061 in 2014). Of the 3,601 live births in 2015 71.7% were to non-UK born mothers (69.9% in 2014). Of the 71.7% non-UK born mothers 44% were born in the Middle East & Asia, 39% in the European Union and

12% in Africa. 90% of the mothers from the European Union were born in the 'New EU', which constitutes the twelve countries which joined the European Union (EU) between 2004 and 2012.

The estimated total fertility rate (TFR) for UK born women has fallen from 1.86 in 2011 to 1.76 in 2015 and for non-UK born women has fallen from 2.22 in 2012 to 2.08 in 2015.

The latest available report (Childbearing of UK and Non-UK Born Women Living in the UK) by the Office for National Statistics and based on 2011 Census data provides an analysis of fertility rates for women (aged between 15 and 44) born in around 150 non-UK countries of birth.

However fertility rates vary quite considerably depending on the country of birth of the women. For those women born in the UK the TFR was 1.84, but it can be higher (or lower) for those born elsewhere and Harrow has sizeable communities of residents born outside the United Kingdom. Table 3 below shows the top 12 countries of birth of Harrow's residents in 2011, together with the fertility rates of women (aged 15-44).

Table 3
Top 12 Countries of Birth of Harrow Residents in 2011, and TFR of Women (aged 15-44)

Country of	Number of		
Birth	residents	Rank	TFR
Total	239,056	-	
England	128,424	1	1.84 (UK)
India	21,539	2	2.35
Kenya	11,706	3	1.89
Sri Lanka	10,392	4	2.62
Ireland	4,952	5	1.56
Romania	4,784	6	2.93
Uganda	4,008	7	2.52
Poland	3,868	8	2.13
Pakistan	3,582	9	3.82
Afghanistan	3,314	10	4.25
Tanzania	2,682	11	2.35
Somalia	2,241	12	4.19

Source: 2011 Census (Table CT008) and Reference Table 1 (Total Fertility Rates for non-UK born women living in England and Wales, 2011, by mothers' country of birth), ONS

This information leads to the assumption that the size of families from the areas outside the UK (excluding Ireland) as shown in Table 3 (and some other countries not shown) would be larger than the average UK family, and also quite accurately reflects the significant demographic changes in Harrow, especially the ethnic profile of the children in Harrow's schools. The increase in child population along with the other factors listed above inevitably has had a direct impact on the population of Harrow's schools, leading to a substantial increase in the number of age 4 to 5 pupils entering Harrow schools' Reception national curriculum year group.

#### **ONS 2015 Mid-Year Estimates (MYE) Births**

On a mid-year basis, Harrow's births dropped by 1.3% from 3,620 in mid-2013 to 3,574 in mid-2014, and then fell again by 1.8% to 3,509 in mid-2015; however they have increased by 4.3% in mid-2016 to 3,661.

The 2016 MYE of births in London increased from the 2015 MYE. 11 of 33 local authorities in London saw a reduction in births from mid-year 2015 to mid-year 2016. The rise in births ranged from 5 more births in Bexley to 309 more births in Havering. Harrow, along with some of its Produced by Education Team, BIU 8

neighbouring boroughs, had an increase in births – Barnet (+108), Brent (+79), Harrow (+152) and Hillingdon (+21), however Ealing had quite a significant drop of 238 births as at mid-2016.

Chart 4 below shows the ONS calendar and mid-year estimate births for Harrow. Births in Harrow have fluctuated over this period with a sharp increase in 2003 and then again in 2010. In recent years the number of births increased to 3,620 (MYE-2013) and as at MYE-2016 they are up again at 3,661.

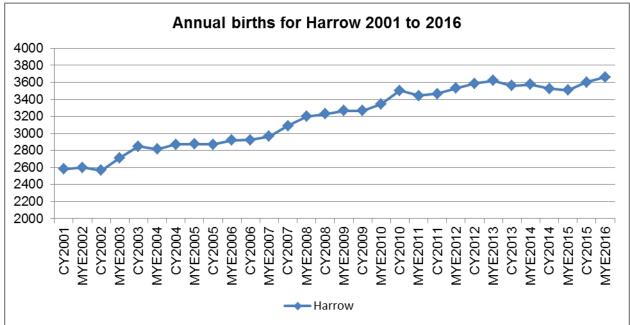
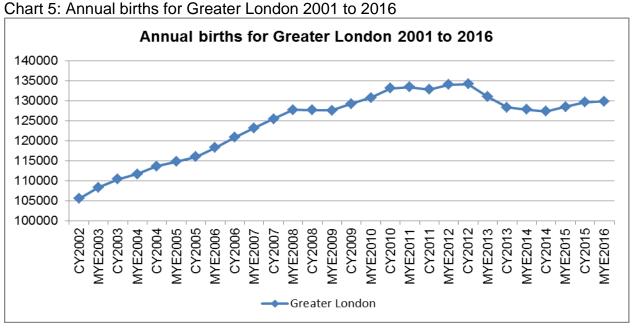


Chart 4: Annual births for Harrow 2001 to 2016

Chart 5 below, shows births for London continued rising from 2002 up until 2008, at which point they steadied for a year and then started to increase again from 2009. However London's births started to drop from 2012 onwards and the current trajectory suggests a steadier picture. The 2013 mid-year estimates for Harrow continued to rise in contrast to London, which experienced quite a sharp drop. Following this point whilst Harrow's births seem to be more inline with London, there appears to be a slightly sharper rise in Harrow over the last year.



#### **ONS SNPP births**

The ONS 2014 SNPP births are projecting Harrow's births to drop very slightly in 2015 (3,426) and 2016 (3,490), after which point they projected to remain at a steady 3.5k up until 2025.

# Migration

# **International Migration**

In recent years Harrow has seen a distinct peak of net international-migration; this is due to the influx of migrants from the A8 countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia) in 2004-05, which gave rise to increased international inmigration. The economic downturn does not seem to have had a strong impact on net international migration.

From 1 January 2014, Bulgarians and Romanians have had the freedom to live and work in the UK. This change is likely to add further pressure on our school places. The latest estimates of long-term migration from the International Passenger Survey (IPS) are for the year ending December 2014, when an estimated 46,000 Bulgarian and Romanian citizens immigrated to the UK. This is a statistically significant increase from 23,000 for the year ending December 2013. This represents 8% of total immigration to the UK. These IPS statistics are not available on a borough basis, but the Department of Work & Pensions (DWP) release statistics on National Insurance Registrations for overseas nationals (NINo) every year. This data shows that in 2014/15 the highest numbers of worker registrations in Harrow were made by Romanian nationals, with 7,160 registrations, the highest number of registrations of any national group since the start of NINo recording in 2002/3. Of course not all of these migrant workers may stay in the borough or remain for lengthy periods, or even have children, but this database does provide very useful information on migrant workers and their country of origin.

### **Internal Migration**

The ONS Mid-Year Estimates for 2016 state Harrow's internal migration (within UK) as being 17,436 people leaving Harrow for other parts of the country (16,975 in 2015). This figure is higher than the number of people coming into the borough - 13,277, (13,331 in 2015). In contrast long-term international migration into the borough is 4,922 for 2016 (4,263 in 2015) is higher than international migration out of the borough is 1,333 (1,430 in 2015), resulting in a total net result of migration in Harrow as a loss of 570 people.

### Migration projections by age

The ONS 2014 SNPP contain migration projections by age. Age groups 0 to 4 and 5 to 15 can be seen in Tables 4 and 5 below. There is a net gain from international migration for both of these age groups, which counteracts the loss from internal & cross border migration. The net gain of the 0 to 4 age group is projected to drop from 172 in 2015 to 117 in 2017 and then remain steady over the next few years at just over 100. The net gain of the 5 to 15 age group also has a downward trend, 248 in 2015 to 150 by 2025.

Table 4: 2014 SNPP Migration in Harrow by Age 0 to 4 - 2015 to 2025

Migration component	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
International migration NET	206	190	173	173	161	157	153	153	153	153	153
Internal migration NET	-31	-48	-53	-52	-48	-48	-45	-42	-39	-36	-33
Cross border migration NET	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
NET Migration	172	139	117	119	109	106	105	108	111	114	117

Table 5: 2014 SNPP Migration in Harrow by Age 5 to 15 - 2015 to 2025

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Migration Component	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
International migration NET	270	250	227	228	212	207	202	202	202	202	202
Internal migration NET	-24	-16	-22	-31	-38	-37	-38	-41	-48	-52	-54
Cross border migration NET	2	2	2	2	2	2	2	2	2	2	2
NET Migration	248	235	207	200	176	172	166	163	156	152	150

Source: 2014 SNPP Population Projections

It should be noted that these projections are purely based on past trends, so any impacts that Brexit may have on future migration levels (or as a result of any other changes in government policies or economic circumstances) are not considered.