

## Data Management and Analysis Group

# GLA 2007 Round Demographic Projections



DMAG Briefing 2008-07

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## **GLA 2007 Round Demographic Projections**

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**Mid-year Estimates**

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# GLA 2007 Round Demographic Projections

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## Executive Summary

The 2007 Round Demographic Projections update those published as the 2006 Round (*DMAG Briefings 2006/32 and 2007-12*).

The new projections differ from their predecessor projections in a number of key ways, in particular:

- The projections recognise actual mid-year to mid-year births and deaths up to mid-2006 as used in the Office for National Statistics (ONS) population estimates change analyses for mid-2001 to mid-2006. Registrations in the calendar year 2006 are also used.
- The ONS mid-2006 based assumptions for the future course of total fertility rates and gender/age-specific survival rates in England have been followed.
- The 2004 London Housing Capacity Study (LHCS), as updated in 2006 for the period 2017-27, has been the main determinant of the population distribution amongst the London boroughs. However more recent data from the boroughs in terms of actual development up to the end of March 2007 and housing trajectories has enhanced the LHCS.
- The Department for Communities and Local Government's (CLG) 2004-based household projections, particularly as regards the proportion of the population resident in communal establishments, the marital status distribution and household representative rates, have been used to establish borough household and population totals based on the growth in homes as shown by the London Development Database (LDD) between 2001 and 2007 and as shown by the LHCS and borough housing trajectories thereafter.

Two projections have been published:

- The first, referred to as Post London Plan (PLP) Low, is entirely driven by the increase in homes as seen annually since mid-2001 from data collected at borough level by the LDD up to 2007 and the LHCS/boroughs from 2007 to 2027. After 2027 it is assumed that the LHCS average values for 2022 to 2027 continue until 2031.
- The second projection, PLP High, was prepared to establish the impact on London of the ONS 2006-based population projection for England. Apart from following the trends in fertility rates and improved survival, the PLP High assumes that each London borough's proportion of England's net international migration for the years mid-2001 to mid-2006 will continue based on the ONS assumption for international migration. This gives a London population that is used as a higher constraint for the borough populations. The distribution of London's population amongst the boroughs is then determined by the distribution of the PLP Low projection. The borough PLP Low populations by age/gender each year are grossed to the PLP High London totals.

The main results of the PLP Low projection are that:

- The population in 2006 is estimated to be 7.46 million, with growth of 804 thousand to a 2026 total of 8.27 million.
- Over the same period the number of households rises by 566 thousand from 3.15 million in 2006 to 3.72 million in 2026.
- The majority of the increase in households (428 thousand) will be formed by one-person households, with most of these individuals being aged between 35 and 69.
- Average household size is projected to fall from 2.34 persons in 2006 to 2.20 in 2026.
- Married couple households are expected to continue their long-term decline, falling by 210 thousand to just 822 thousand in 2026. Much of the decline is taken up by the projected 202 thousand increase in cohabiting couples, which are expected to reach 530 thousand in 2026.
- Net migration between 2006 and 2026 amounts to a loss from London of 664 thousand, equivalent to 33.2 thousand a year.

While at 2026 the new projection shows growth of 804 thousand (11%) since 2006 there are some significant changes in age structure:

- 136 thousand more children aged 0-14
- 18 thousand *fewer* persons aged 15-29
- 87 thousand more persons aged 30-44
- 357 thousand more persons aged 45-59
- 187 thousand more persons aged 60-74
- 56 thousand more persons over 75.

The age structure changes amongst adults mainly reflect the relative sizes of past birth cohorts and the population structure of London as recorded at the 2001 Census. The age structures of the migration flows into and out of London fine-tune the changes. The key point of these results is the significant ageing expected in London's population, even though the population profile will show the largest population in the cohorts between 25 and 44.

The main results of the PLP High projection are that:

- The population in 2006 is estimated to be 7.54 million, with growth of 1.07 million to a 2026 total of 8.61 million.
- The migration-led increase in population implies that over the same period the number of households would be expected to rise by 708 thousand from 3.19 million in 2006 to 3.89 million in 2026.
- The majority of the increase in households (493 thousand) would be formed by one-person households.
- Average household size is projected to fall from 2.34 persons in 2006 to 2.19 in 2026.

- Married couple households are expected to decline, falling by 180 thousand, while cohabiting couples increase by 220 thousand.
- Net migration between 2006 and 2026 amounts to a loss from London of 429 thousand, equivalent to 21.4 thousand a year.

It is generally recommended that the PLP Low projection be used for detailed analysis and planning at the borough and ward levels, but if, in the longer-term, London does continue to attract a higher level of international migrants the PLP High projection should be borne in mind for longer term projects that may ill-afford to be planned to cope with a population that turns out to be too low. However, should the London population turn out to be significantly higher than implied by PLP Low there can be no certainty as to where and how the extra population will be accommodated. The spatial distribution of PLP High is a pragmatic solution. Even so, TfL prefers to use the PLP High results in long-term transport infrastructure planning while shorter-term school roll planning uses the PLP Low, mainly between 2008 and 2018.

At 2006 the ONS mid-year estimate for London is 7.51 million – between the two GLA populations, but overall closer to PLP High. However, this is not the case with all boroughs. ONS has tended to estimate the population of central boroughs rather higher than either the PLP Low or High figures. Conversely ONS estimates are lower than either of the GLA projections in many boroughs in the rest of inner London.

The population definition used in GLA projections is the same – the usual residents – as used by ONS. This means that it only considers estimates of international migrants who intend to stay in the UK for at least a year. At present there are no estimates of short-term residents at borough level, though ONS has produced a paper outlining the issues and produced estimates for London for the periods 2003-04 and 2004-05. Discussion of some of these issues and analysis of recent National Insurance and NHS data that may imply current levels of short-term residents may be found in *DMAG Updates 14-2007* and *15-2007* and *DMAG Briefing 2008-10* (forthcoming).

## Background

The 2006 Round projections were produced as background for the *Review (Further Alterations) of the London Plan*. Summaries were published in *Draft Further Alterations to the London Plan* (GLA, September 2006) and the detailed results were used by GLA Economics and Transport for London in work leading up to the London Plan Examination in Public that took place in the summer of 2007.

The current, 2007 Round, two projections have been prepared on the same basis as in the previous round. These have been called PLP (Post London Plan) Low and PLP High.

These projections have used updated inputs in a number of particulars:

- The availability of the ONS 2006-based national population projections has provided three new inputs. There are revised national (England) trends in the annual total fertility rate and improved survival rates leading to increased life expectancies. These are used in both the PLP Low and PLP High projections. There are also changed assumptions about the future level of net international migration flows into the UK and, specifically, to England, which are used in PLP High.
- Since the 2006 Round the data on the annual net increase in new homes have been updated to 2007 and boroughs have provided revised estimates of the annual levels of future increases in homes, mainly based on the housing trajectories. These data are broadly consistent with the 2004 London Housing Capacity Study but set annually rather than over time periods.
- These are used in the PLP Low projection which also incorporates the results of the CLG 2004-based household projections in terms of three sets of borough variables that are used to convert populations to households: proportions of the population resident in private households, marital status and household representative rates.

This *Briefing* gives details of all the data incorporated in the projections, the assumptions made and the key results.

## Data used in the Projections

### *Base Population*

The model runs from mid-2001 as its starting point. It uses the re-revised ONS mid-2001 population estimates by single years of age (0 to 90+) and gender published in September 2004, but with a key exception. The mid-year estimates for single years of age 0 to 4 by gender have been adjusted in all boroughs. The reason for this adjustment is that an analysis of the relationships between births (mid-year to mid-year) and the subsequent estimates of 0 year olds to 4 year olds in the five succeeding mid-year estimates showed that the patterns of annual transition, ie from births to 0 year olds, 0 year olds to 1 year olds etc, showed that the transitions relating to the 2001 mid-year estimates were out of step with the transitions occurring in earlier and subsequent years. A correction was introduced that used the annual transitions for the years 1996 to 2000 to re-estimate the 0-4 year olds. Table 1 shows the London impact of these revisions

**Table 1: Revisions to mid-2001 Population aged 0-4: Greater London**

		<b>ONS MYE</b>	<b>Revision</b>	<b>Difference</b>	<b>Difference %</b>
<b>Males</b>	<b>0</b>	49757	52112	2355	4.73
	<b>1</b>	49531	51293	1762	3.56
	<b>2</b>	48574	50170	1596	3.29
	<b>3</b>	48240	49238	998	2.07
	<b>4</b>	48106	48789	683	1.42
<b>Females</b>	<b>0</b>	47380	49633	2253	4.76
	<b>1</b>	47210	48897	1687	3.57
	<b>2</b>	46571	48095	1524	3.27
	<b>3</b>	46524	47471	947	2.04
	<b>4</b>	46929	47630	701	1.49
<b>Persons</b>	<b>0-4</b>	478822	493328	14506	3.03

ONS has also published estimates for mid-2002, to mid-2006. These estimates are not used directly in the projections, but the associated change analyses provide the annual birth and death totals that are used in the model.

The private household population is the basis of the projection of households. To establish the household population the CLG assumptions about the communal establishment population have been used. In creating their household projections CLG assume that up to age 74 the numbers of people resident in communal establishments in each borough is constant at levels seen in the 2001 Census by gender, age and marital status. For older ages the assumption is that the proportions of the population resident in communal establishments are constant.

Within the household projection part of the model the private household population in each borough is split into four marital statuses (married, divorced, widowed and single) for each gender by five-year age groups (15-19 to 84-89 and 85+) for years 2001, 2006, 2011, 2016, 2021 and 2026. This is done using the detailed results of the CLG 2004-based household projection.

### ***Fertility***

GLA has produced an analysis of age-specific fertility rates in each borough covering data for the calendar years 2000 to 2002 (see *DMAG Briefing 2005/09*). These rates have been used in the model as the basis for future birth projections. Actual annual births up to mid-2006 have been incorporated at borough level, with the registered births in 2006 being used as a surrogate estimate for 2006-07. Future changes in age-specific fertility follow the trends in the total fertility rate as used in the ONS 2006-based projection for England.

### ***Mortality/Survival***

GLA has also produced an analysis of the age-specific mortality rates and lifetables (by gender) in each borough group (Central, Rest of Inner and Outer) covering data for the calendar years 2000 to 2002 (see *DMAG Briefing 2005/10*). These rates have been used in the model as the basis for future survival probabilities and, therefore, the projections of numbers of deaths. Borough level survival adjustments (ie borough differences from the relevant borough group norm) are based upon actual deaths in each borough since mid-2001 up to mid-2006. For 2006-07 registered deaths in 2006 have been used as a surrogate. Future changes in age-specific survival rates follow the ONS 2006-based projections for England. The average annual improvement at each age between 2006-07 and 2030-31 has been used.

### ***2001-02 Migration Matrix***

The initial migration matrix of total moves between each borough and to/from each borough with the Government Office East of England (GOER) Region, the Government Office South East (GOSE) Region, the Rest of the UK and Overseas has been created using ONS data based on NHS patient moves and the International Passenger Survey together with Home Office data on asylum seekers and visitor switchers. These data are consistent with the mid-year estimate changes for 2001-02. However in the 'alternate migration' projection the international inflows and the resulting net flows have been adjusted to accommodate GLA preferred borough estimates for 2002, see later for a fuller explanation.

### ***Migration Flow Age Structures***

All age and gender structures of migration flows are based upon data from the 2001 Census. Inflows to each borough group from GOER, GOSE, the Rest of the UK and Overseas are assumed to continue to have the same structures throughout the projection

period, ie the proportion of each flow assigned to a single year of age/gender is assumed to be constant from 2001-02 throughout the projection.

Outflow probabilities, based upon 2001 Census data, for moves from each borough group to all borough groups (including moves within the same group) plus to GOER, GOSE and the Rest of the UK and Overseas are assumed to continue throughout the projection period, ie the same proportion of a single year of age/gender population resident in the origin area is assumed to move to the destination area in each year.

Individual borough weights are applied to the probabilities in order that the projection matches the borough-to-borough matrix in 2001-02 and the required borough net migration levels in each year up to 2006-07. The weights are adjusted in each year to achieve the required matches. The probabilities and the associated borough weights remain unchanged in the migration-led projections after 2007.

### ***2002-03 and 2005-06 Gross Inflows from Outside London and Net Flows***

As with the initial matrix the gross inflows to each borough from GOER, GOSE, the Rest of the UK and Overseas have been created using ONS data based on NHS patient moves and the International Passenger Survey together with Home Office data on asylum seekers and visitor switchers. The flows from other parts of the UK are consistent with the annual mid-year estimate changes from 2002 to 2006. However the international inflows and the net flows have been adjusted to accommodate GLA preferred borough estimates for years up to 2006, as mentioned above.

### ***2006-07 Gross Inflows from Outside London and Net Flows***

Input for 2006-07 for inflows were based on the linear trends in the flows over the five years 2001-02 to 2005-06. 2006-07 is the base year for variant assumptions about future net migration levels. The assumed net flows have been based upon analyses of data for 2001-2006.

### ***Development data***

The PLP Low projection is produced by linking the results of the two initial projections (see later for descriptions) to the borough estimates of the net annual increases in homes from 2001. The boroughs supply the homes data. Actual completions and other changes up to 2007 are consistent with the London Development Database (LDD) up to 2007. From 2007 to 2027 the 2004 London Housing Capacity Study (LHCS) is used. The version of the LHCS being used includes revisions made in Summer 2006 that significantly increase the numbers of new homes expected to be provided in each borough after 2017. The average annual values for 2017-27 have been used to extend the projection to 2031. Boroughs have confirmed the data from the LHCS or supplied updated development scenarios consistent with their most recent housing trajectories.

### ***Household Representative Rates***

The results of the CLG 2004-based borough household projections provide the final inputs to the projections. These projections show the distribution of the usual resident population by gender, age group and marital status and divides it into the private household (PH) population and the communal establishment (CE) population. The CLG assumption is that the 2001 CE population is constant over time by gender, age group and marital status up to age 74. For 75-79, 80-84 and 85+ it is assumed that a constant proportion of the population (by gender, age group and marital status) is resident in CEs. The private household population by age, gender and marital status is linked to numbers of households by the application of household representative rates (ie the proportions of each population subgroup that 'represents' a household). By convention, only married males represent married couples and only males represent a cohabiting couple. All other population subgroups may represent a lone parent household, a one-person household or an 'other' household, which is one formed of two or more adults with no family. Therefore, by converting the CLG projection results to a model, a population (by five-year age groups and gender) can be converted at 2001, 2006, 2011, 2016, 2021 and 2026 into households by type.

## Initial Projections

Two projections were prepared from which the final results were developed. The first was based on following the ONS mid-year estimate trends and the second provided an alternative view of borough migration levels.

### ***MYE Trend***

This projection aims to replicate change in births, deaths and gross migration for each borough up to mid-2006 as seen in the ONS mid-year estimate change analyses between 2001 and 2006. The projection uses the revised analyses published in 2007 to be consistent with ONS' revised methodology for assessing and distributing international migration flows at regional and local levels.

For 2006-07 birth and death totals in each borough are based on registrations data for 2006. 2006-07 then becomes the effective base-year for the application of the ONS assumptions regarding the future courses of total fertility rates and age-specific survival rates in England.

Migration flows within the UK for 2006-07 are based on the linear trend in each flow over the five years 2001-02 to 2006-07. The inflows from outside London are then held constant in all later years. International inflows are set in the same way and held constant thereafter. The international outflow in 2006-07 is set such that each borough would continue to attract the same share of net international migration to England as it had been estimated by ONS to have received in 2001-06. This proportion is applied to the average net migration flow into England over the years 2006-16 as assumed in the ONS 2006-based population projection for England.

After 2006-07 all migration flows starting in a London borough are determined by the interaction of the changing population size and age structure of the borough and the constant age-specific probabilities of leaving that borough for all other destinations, both other boroughs and outside London. These probabilities are based on the 2001 Census with borough weightings determined by the model to achieve the migration flows specified for 2006-07. This process means that the outflow from London tends to rise with a rising population. Therefore the process of matching the ONS national migration assumption is an approximate rather than an accurate feature of the model. This projection aims, in broad terms, to anticipate the borough results of the ONS 2006-based subnational population projection that is expected to be available in Summer 2008.

The MYE trend projection is used later in the 2007 Round in two ways. First, it is linked with the 'alternate migration' projection to prepare the PLP Low results for each borough. The other use is that the projected population of London at each year, by age and gender, becomes the London result for the PLP High projection and constrains the borough results.

### ***Alternate Migration***

In order to calculate the PLP Low output two projections are required for each borough. Ideally, one of these should be above the anticipated population capacity of the borough based on the increase in homes, and one should be below. The MYE trend projection provides the first projection and the 2006 Round RLP Low projection provides a guide as to the capacity of the borough.

The migration inputs to the MYE trend projection are therefore altered to provide the alternative projection for each borough. Where the MYE Trend population appears to be too high when compared to 2006 RLP Low, then the alternative projection needs to be lower and below 2006 RLP Low, and vice versa. A lower (or higher) alternative population is achieved by altering the international migration inputs and the estimated net migration for each borough in each year 2001-07. The main adjustments are concentrated on the international inflows.

Care needs to be taken in resetting the migration levels. If the adjustment to the international inflow implies too great a reduction, ie to a flow of less than a thousand in a borough, then amendments are also included in the gross international outflow. Ideally the revisions to the flows should be the minimum necessary to get a second population projection that is on the required side of 2006 RLP Low, ie below or above the anticipated borough population capacity. Some trial and error is required as the interaction of migration flows between the boroughs cannot be readily predicted when so many migration flows are altered and the resulting populations are therefore changed.

In all other respects the alternate migration projection uses the same fertility and mortality inputs as the MYE trend.

## PLP Low Projection

The PLP Low projection for each borough is a hybrid of the two projections described above. The PLP Low projections are prepared separately for each individual borough as described below.

### *Method*

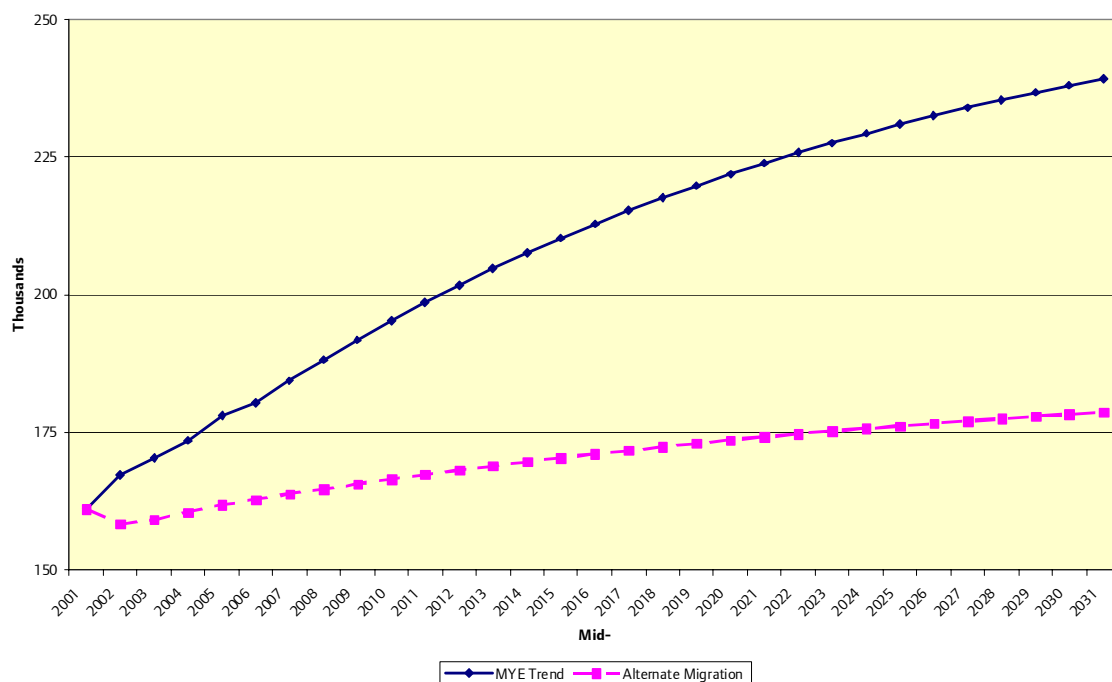
- Stage 1 The CLG 2004-based household projections were converted into borough level models such that when a new population by gender and five year age groups for years 2001, 2006, 2011, 2016, 2021 and 2026 is put into the model all of the relationships (number or proportion of the total population not in private households, marital status of the household population, and household representative rates) are applied. This results in a projection of households by type for every fifth year and enables the calculation of the average household size and the proportion of total population not resident in households.
- Stage 2 The **MYE Trend** projection was put into the CLG 'model' and for 2001, 2006, 2011, 2016, 2021 and 2026 the **total households (2001 only)**, **average household size** and **ratio of the total population to the private household population** were extracted from the results. The values of average household size and the ratio were interpolated to establish values for intervening years and the 2026 values were extended unchanged to 2031.
- Stage 3 The expected numbers of additional homes, from the LDD, LHCS and the boroughs, for each year were added to the number of households in 2001 to establish **total households in each year**.
- Stage 4 The number of households was multiplied by the average household size to establish the **total household population**. This population was grossed-up, using the ratio, to get the **total population**. This gives the first estimate of total population capacity for each year.
- Stage 5 The annual population totals were then introduced to a module that contains the full single year of age results of the **MYE Trend** and **Alternate Migration** projections. The module produces a 'weighted average' **population by single years of age and gender** by comparing the required total population (from Stage 4) each year with the two fully developed projections.
- Stage 6 Return to Stage 2 (above) and introduce the newly created population by age and gender to the model.
- Stage 7 Go through Stages 3 to 5 (above) and then repeat Stages 2 to 6 until the projection shows that the increase in households in each five-year period

matches the increase in homes from the input data. This process requires about four iterations to produce a stable solution. The projection is now complete in terms of **annual population by age and gender** as well as **households every fifth years by type and by age, gender and marital status of the household representative**.

Stage 8 The final borough populations are then introduced to the resident labour force module to create projections of the **economically active population** for each year by age groups and gender. This module links the ONS national projection of economic activity rates by age/gender (see *Labour Market Trends*, January 2006) to the borough economic activity rates as at the 2001 Census.

### ***Borough Example: Kensington & Chelsea***

**Chart 1: MYE Trend and Alternate Migration projections: Kensington & Chelsea**



Kensington & Chelsea is an example of a borough where recent trends in the ONS mid-year estimates are significantly at odds with other data, including recent housing developments. The CLG 2004-based household projections used the original ONS mid-2004 estimates and 2004-based projections for the borough. This means that they showed population in the borough rising from 207 thousand in 2006 to 326 thousand in 2026. The revised ONS 2004-based projections have reduced this growth with populations of 186 thousand in 2006 and 258 thousand in 2026. The most recent ONS mid-2006 estimates reduce the population even more, to 178 thousand. As Chart 1 shows the MYE Trend projection shows a 2026 population of 233 thousand, but even this is far higher than the 182 thousand projected in the 2006 Round RLP Low as a consequence of

expected new homes. Therefore the Alternate Migration projection reflected this and shows the population growing from 163 thousand in 2006 to 177 thousand in 2026. This population is below RLP Low – as required.

**Table 2: Housing Capacity Calculation: Kensington & Chelsea**

	Total Population	Communal Estabs. Population	Private Household Population	Households	Average Household Size	Annual Net New Homes	Ratio: Total to PHPop
2001	161.1	3.5	157.6	<b>79.3</b>	<b>1.988</b>		<b>1.022</b>
2002	161.4	3.5	157.9	79.4	1.989	<b>118</b>	1.022
2003	161.9	3.5	158.4	79.6	1.989	<b>192</b>	1.022
2004	163.0	3.5	159.5	80.1	1.990	<b>514</b>	1.022
2005	164.1	3.5	160.6	80.7	1.991	<b>541</b>	1.022
2006	164.8	3.5	161.3	81.0	<b>1.992</b>	<b>296</b>	<b>1.022</b>
2007	165.6	3.5	162.1	81.3	1.994	<b>321</b>	1.022
2008	166.6	3.5	163.1	81.7	1.997	<b>380</b>	1.022
2009	167.6	3.5	164.0	82.0	1.999	<b>380</b>	1.022
2010	168.5	3.5	165.0	82.4	2.002	<b>380</b>	1.021
2011	169.5	3.5	166.0	82.8	<b>2.004</b>	<b>380</b>	<b>1.021</b>
2012	170.3	3.5	166.8	83.2	2.005	<b>380</b>	1.021
2013	171.0	3.5	167.5	83.5	2.006	<b>324</b>	1.021
2014	171.7	3.5	168.2	83.8	2.006	<b>324</b>	1.021
2015	172.4	3.5	168.9	84.2	2.007	<b>324</b>	1.021
2016	173.1	3.6	169.6	84.5	<b>2.007</b>	<b>324</b>	<b>1.021</b>
2017	173.7	3.6	170.2	84.8	2.007	<b>324</b>	1.021
2018	174.3	3.6	170.8	85.1	2.006	<b>318</b>	1.021
2019	174.9	3.6	171.4	85.4	2.006	<b>318</b>	1.021
2020	175.5	3.6	171.9	85.8	2.005	<b>318</b>	1.021
2021	176.1	3.6	172.5	86.1	<b>2.004</b>	<b>318</b>	<b>1.021</b>
2022	176.6	3.6	173.0	86.4	2.003	<b>318</b>	1.021
2023	177.1	3.6	173.5	86.7	2.001	<b>302</b>	1.021
2024	177.5	3.6	173.9	87.0	1.999	<b>302</b>	1.021
2025	178.0	3.6	174.4	87.3	1.998	<b>302</b>	1.021
2026	178.5	3.6	174.9	87.6	<b>1.996</b>	<b>302</b>	<b>1.021</b>
2027	179.1	3.6	175.5	87.9	1.996	<b>302</b>	1.021
2028	179.7	3.7	176.1	88.2	1.996	302	1.021
2029	180.3	3.7	176.7	88.5	1.996	302	1.021
2030	181.0	3.7	177.3	88.8	1.996	302	1.021
2031	181.6	3.7	177.9	89.1	1.996	302	1.021

Units are thousands in the first four columns.

Table 2 shows the key steps and data extractions for the stable iterated capacity population, which becomes PLP Low. In the Household column the 2001 figure is consistent with the CLG estimate. The highlighted values in the Average Household Size and Ratio columns are drawn directly from the results of the stable projection, but these values are extracted at each iteration and help to re-estimate the capacity population. The highlighted values in the New Homes column are those from the LDD and LHCS and as agreed by the borough.

Kensington & Chelsea is unusual in that the CLG projection implies some small increase in the average household size. The use of the GLA projections tends to show reduced AHS,

but still rising up until 2016. Over the period 2006 to 2026 there are expected to be an additional 6.6 thousand new homes. These convert to show a population growing from 165 thousand to 178 thousand over twenty years. This is a similar result to that found in the 2006 Round RLP Low and well below the 2004-based ONS projection. While the differences between ONS and GLA figures for Kensington & Chelsea are extreme there are several boroughs where the GLA figures are higher, though none show the level of difference seen in Kensington & Chelsea, and other central London boroughs.

**Chart 2: PLP Low, PLP High, MYE Trend and Alternate Migration projections: Kensington & Chelsea**

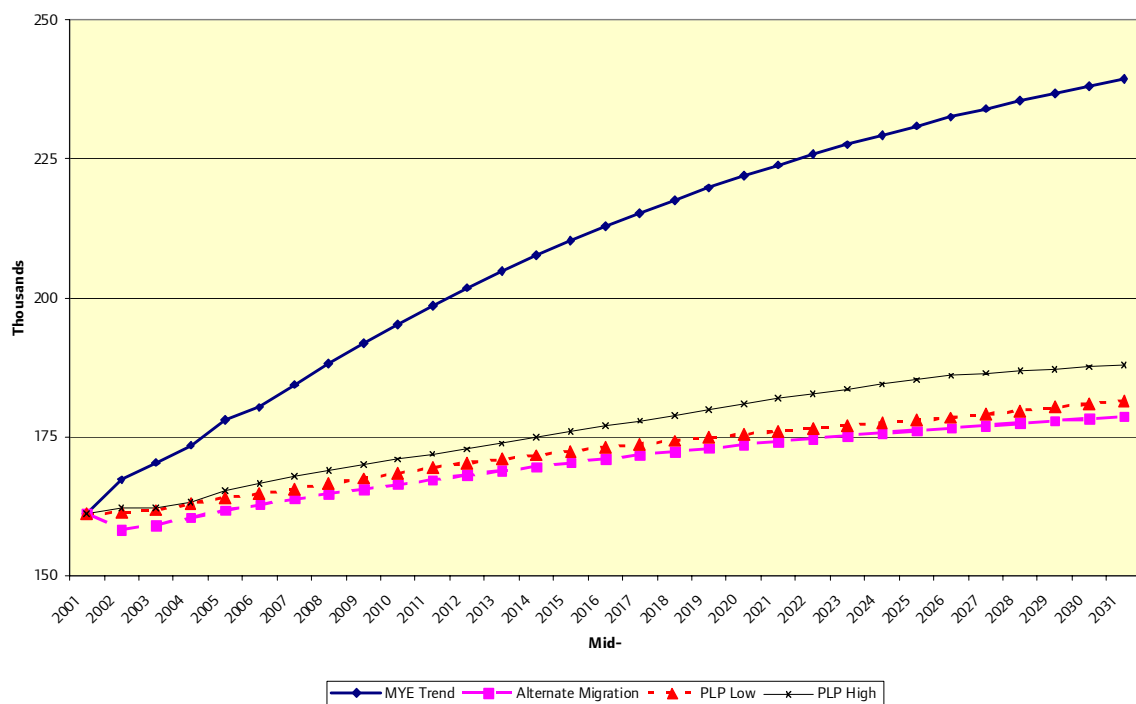


Chart 2 shows the final PLP Low projection for Kensington & Chelsea compared to the two projections from which it was prepared. The PLP High projection is included for completeness.

PLP Low is relatively close to the alternate migration projection. Given the way in which the alternate migration projection was constructed it is common to most boroughs that PLP Low would be closer to it than to the MYE trend. However in boroughs where the future growth in homes had changed since the production of the 2006 Round RLP Low projections it is possible for the MYE Trend to be closer.

## Results for London

Before reviewing the results note should be taken of the significant inputs to the calculations. The LDD/LHCS/Borough housing inputs show the following numbers of additional homes:

2006-11	178 thousand
2011-16	153 thousand
2016-21	126 thousand
2021-26	114 thousand

These additional homes, amounting to an average of over 28 thousand per year from 2006 to 2026 and is reflected in the population and household projection.

**Table 3: PLP Low: Key results for Greater London**

Units are thousands except average household size.

	2001	2006	2011	2016	2021	2026	Change 2006-26
<b>Total Population</b>	7336.9	7461.4	7749.2	7962.8	8123.6	8265.2	803.8
<b>Private Household</b>	7243.3	7368.2	7655.2	7868.3	8028.4	8168.2	800.0
<b>Communal Establishment</b>	93.6	93.2	94.0	94.5	95.3	97.0	3.8
<b>Economically Active</b>	3642.6	3807.3	3997.5	4129.9	4212.1	4258.7	451.3
<b>Total Households</b>	3036.1	3152.0	3328.6	3480.6	3605.1	3718.1	566.0
<b>Married Couples</b>	1115.7	1031.3	967.0	909.3	861.0	821.8	-209.5
<b>Cohabiting Couples</b>	261.7	327.6	398.6	451.5	493.1	529.7	202.1
<b>Lone Parents</b>	274.6	312.3	346.9	371.6	385.5	393.6	81.3
<b>One-person</b>	1052.0	1140.0	1257.2	1371.9	1474.5	1568.1	428.1
<b>Other (2+ adults: no family)</b>	332.1	340.9	358.8	376.3	391.1	405.0	64.1
<b>Average Household Size</b>	2.386	2.338	2.300	2.261	2.227	2.197	-0.141

Table 3 shows the total population rising by 804 thousand between 2006 and 2026 with the number of households increasing by 566 thousand. Significant changes are projected for household structure, with a reduction of 210 thousand married couples being partly offset by a rise of 202 thousand cohabiting couples. Most of the household increase (428 thousand) will be one-person households with 81 thousand more lone parents and 64 thousand more other (ie multi-adult non-family) households.

The increase in one-person households is concentrated in the 'middle ages' (35-69 particularly 45-54) where 414 thousand of the increase occurs. 240 thousand of this

growth is male one-person households. Reductions in one-person households are projected at younger ages and for females over age 70. These changes are consistent with reduced likelihood of marriage, more divorce and better male survival at older ages leading to reduced widowhood. Most of the older single male one-person households will be former cohabiters. These men may well have children living with former partners and their housing requirements will be more akin to divorcees of a similar age.

The resident labour force is projected to grow by 451 thousand from 3.81 million in 2006 to 4.26 million in 2026.

The PLP Low projection implies a significantly lower population at mid-2006 than does the ONS mid-2006 estimate. The comparison is 7.46 million with 7.51 million, a difference of 51 thousand, or just over 10 thousand a year since the base of mid-2001. This annual difference is only half as much as the equivalent comparison made with the 2006 Round projections at mid-2005. ONS has reviewed its methods of estimating local populations and in particular has amended the way international migration is distributed to regions and local authorities. The results of that exercise were to reduce the share of international migration to the UK being assigned to London and to reduce the London estimates.

## PLP High Projection

While the results of the PLP Low projection create a freestanding projection incorporating directly as much data as exist linking new homes, household formation and migration patterns, they are also critical to the PLP High projection.

As indicated earlier the MYE trend projection determines the total London population in the PLP High projection. The key variable in the MYE Trend projection was that London was assumed to continue to have the same 2001-06 average proportion of the ONS projection of net international flows coming to England between 2006 and 2031.

### *Method*

- Stage 1      The PLP Low population projections were grossed up at single years of age and gender for all years from 2002 to 2031 to match, in sum, the population previously projected for London in the MYE Trend projection.
- Stage 2      The borough level PLP High population projections were then put into the CLG 'model' to create at 2001, 2006, 2011, 2016, 2021 and 2026 full household projections. In this case no iterations were necessary, only a strict conversion of a predetermined population to households.
- Stage 3      The borough populations are then introduced to the resident labour force module to create projections of the economically active population for each year by age groups and gender.

### *Results for London*

Table 4 shows London's population growing between 2006 and 2026 – under the influence of recent migration trends and a national long term annual forecast of 171.5 thousand net international migrants to England – by 1.07 million to 8.61 million. This is equivalent to over 53 thousand a year. This is consistent with an increase of 708 thousand households over the 20 years, ie over 35 thousand a year. The structure of household change is similar to the RLP Low projection, but with more households in all categories and similar age structure changes. The resident labour force is projected to grow from 3.86 million in 2006 to 4.45 million in 2026.

The MYE trend projection was based upon migration trends since 2001. It therefore has a different 2006 population to the PLP Low projection that is based on new homes since 2001. Hence at 2006 the PLP High population is higher than PLP Low by 81 thousand and the implied number of households is also higher by 33 thousand.

Given the relationship to the latest ONS assumptions about long-term international migration flows PLP High may anticipate the projected changes to be expected for London and the boroughs in the 2006-based subnational population projections that are due to be released by ONS in Summer 2006. It is recommended that PLP High be used

for large-scale longer term project planning where the consequences of not using a sufficiently high projection, such as PLP Low, could be significant. TfL use PLP High for long-term transport modelling.

**Table 4: PLP High: Key results for Greater London**

Units are thousands except average household size.

	2001	2006	2011	2016	2021	2026	Change 2006-26
<b>Total Population</b>	7336.9	7542.0	7857.7	8141.2	8391.1	8613.5	1071.6
<b>Private Household</b>	7243.3	7448.6	7763.2	8045.6	8293.9	8513.4	1064.9
<b>Communal Establishment</b>	93.6	93.4	94.4	95.5	97.2	100.1	6.7
<b>Economically Active</b>	3642.6	3856.2	4057.1	4222.5	4354.5	4446.2	590.0
<b>Total Households</b>	3036.1	3185.4	3376.3	3561.3	3732.8	3892.9	707.5
<b>Married Couples</b>	1115.7	1041.2	980.5	930.4	891.7	861.2	-179.9
<b>Cohabiting Couples</b>	261.7	332.3	404.9	461.7	509.5	552.5	220.2
<b>Lone Parents</b>	274.6	316.3	352.6	381.1	399.9	412.3	96.0
<b>One-person</b>	1052.0	1150.9	1274.6	1403.9	1527.9	1644.3	493.4
<b>Other (2+ adults: no family)</b>	332.1	344.8	363.7	384.2	403.8	422.5	77.7
<b>Average Household Size</b>	2.386	2.338	2.299	2.259	2.222	2.187	-0.151

## Ward Projections

Both the PLP Low and PLP High borough projection have been converted to ward projections. The principal ward projection is PLP Low as it this that uses new homes data consistent with that used for the each of the boroughs.

Other annual ward data used in PLP Low are:

- Births by gender up to mid-2006
- Deaths by gender up to mid-2005
- Electorates up to Autumn 2006 – the 2007 Electorate

The ward level projections use the methodology as outlined in *DMAG Briefing 2007-12: GLA 2006 Round Ward Population Projections*.

The essentials of the method are that all ward projections are constrained to the borough results in terms of population by gender and age and also births and deaths. The inputs are also constrained to be consistent with borough level inputs. This is particularly relevant when checking the annual vital data and additional homes.

Ward fertility and survival differentials are determined from the most recent three years of events information. Therefore for births the differential is set based on events in 2003-06 and applied in years 2006-31.

The communal establishment population is assumed to remain constant at 2001 levels. The estimated future private household population is based on the total number of future households and an estimate of the ward average household size, based on the value at 2001 and the changes projected at borough level.

The 2001 Census provides ward migration profiles of immigrants and emigrants. Immigrants are assumed to have a constant age/gender structure of the total flow. The emigrant profile is of age and gender specific probabilities of leaving the ward.

## Appendix Tables and Charts

The following six summary tables show the PLP Low and PLP High population, household and resident labour force projections for boroughs, borough groups and London Plan subregions to 2031. However, the households are only shown to 2026, as the CLG projections upon which they are based do not go beyond 2029 and the London Housing Capacity Study only goes to 2027.

In the PLP Low population table there are two rows for Greater London results. Data labelled 'Greater London' are the sums of the individual borough projections. Data labelled 'GL (Independent)' were produced by putting Greater London population data through the household module.

The 'GL (Independent)' results are assumed to be more robust as in the CLG household projections the Greater London results are the constraints for the borough results. However, the results of the sums of the boroughs and the independent calculations are very similar.

The labour force projections have just one set of figures for Greater London as the module operates only at borough level.

The charts demonstrate four different aspects of the projections for London:

- Total Population: Comparison between PLP Low and PLP High
- Age Structure: PLP Low
- Components of Change: PLP Low
- Households by Type (PLP Low)

**Table A1: Total Population, Boroughs and Groupings, PLP Low, thousands.**

	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>
<b>Camden</b>	202.8	201.5	205.6	210.9	217.7	224.4	229.8
<b>Kensington and Chelsea</b>	161.1	164.8	169.5	173.1	176.1	178.5	181.6
<b>Westminster, City of</b>	202.9	211.5	219.3	224.8	229.8	233.7	239.9
<b>City of London</b>	7.3	9.0	10.6	12.0	12.7	13.3	14.0
<b>Central boroughs</b>	<b>574.2</b>	<b>586.9</b>	<b>605.0</b>	<b>620.9</b>	<b>636.3</b>	<b>649.9</b>	<b>665.3</b>
<b>Hackney</b>	207.8	214.9	223.8	232.2	240.4	248.1	258.7
<b>Hammersmith and Fulham</b>	169.5	175.2	182.4	188.4	192.5	196.3	202.4
<b>Haringey</b>	223.0	226.3	234.0	236.2	242.5	249.6	259.7
<b>Islington</b>	179.9	187.8	197.1	202.0	207.5	212.9	220.6
<b>Lambeth</b>	274.6	283.0	290.6	298.6	308.0	317.2	330.0
<b>Lewisham</b>	254.8	258.4	267.4	275.1	279.6	283.2	289.1
<b>Newham</b>	251.2	254.4	286.4	314.2	327.0	337.4	353.6
<b>Southwark</b>	258.1	264.7	287.4	312.3	334.7	348.7	367.9
<b>Tower Hamlets</b>	202.1	218.8	252.2	273.1	289.1	303.8	324.2
<b>Wandsworth</b>	272.2	283.0	294.7	303.5	309.6	314.5	323.4
<b>Rest of Inner boroughs</b>	<b>2293.1</b>	<b>2366.5</b>	<b>2516.0</b>	<b>2635.7</b>	<b>2730.9</b>	<b>2811.7</b>	<b>2929.4</b>
<b>Inner London</b>	<b>2867.3</b>	<b>2953.4</b>	<b>3121.0</b>	<b>3256.6</b>	<b>3367.2</b>	<b>3461.6</b>	<b>3594.7</b>
<b>Barking and Dagenham</b>	165.3	166.8	177.7	187.2	203.6	221.5	242.2
<b>Barnet</b>	319.8	321.1	339.7	367.7	373.2	377.4	387.5
<b>Bexley</b>	219.1	215.6	213.6	214.3	216.2	218.6	222.7
<b>Brent</b>	271.3	273.3	282.7	285.3	288.3	291.2	299.0
<b>Bromley</b>	295.6	297.4	299.8	299.5	300.9	303.1	308.6
<b>Croydon</b>	335.5	329.8	338.8	337.4	335.9	335.2	340.1
<b>Ealing</b>	308.4	308.8	320.4	327.2	331.9	334.9	343.2
<b>Enfield</b>	278.2	285.1	286.6	284.3	284.4	285.4	290.6
<b>Greenwich</b>	217.3	229.9	244.4	262.6	274.8	281.2	290.6
<b>Harrow</b>	210.7	214.4	215.6	216.4	215.2	214.1	216.7
<b>Havering</b>	224.8	226.7	230.3	230.4	231.0	233.0	236.2
<b>Hillingdon</b>	246.1	244.2	243.0	243.6	245.0	246.5	250.6
<b>Hounslow</b>	217.1	220.3	234.4	239.5	241.4	243.1	248.5
<b>Kingston upon Thames</b>	149.1	152.1	155.2	158.0	158.7	159.1	161.6
<b>Merton</b>	191.0	192.0	193.8	192.8	192.9	193.7	197.3
<b>Redbridge</b>	242.2	246.0	256.7	261.8	263.3	264.1	268.5
<b>Richmond upon Thames</b>	174.1	180.4	184.3	185.6	187.4	189.3	192.9
<b>Sutton</b>	181.4	180.8	181.3	180.6	180.6	181.0	183.6
<b>Waltham Forest</b>	222.8	223.2	229.7	231.9	231.7	230.9	235.9
<b>Outer London</b>	<b>4469.6</b>	<b>4508.0</b>	<b>4628.2</b>	<b>4706.2</b>	<b>4756.4</b>	<b>4803.6</b>	<b>4916.3</b>
<b>GREATER LONDON</b>	<b>7336.9</b>	<b>7461.4</b>	<b>7749.2</b>	<b>7962.8</b>	<b>8123.6</b>	<b>8265.2</b>	<b>8510.9</b>
<b>GL (Independent)</b>	<b>7336.9</b>	<b>7462.5</b>	<b>7747.7</b>	<b>7967.0</b>	<b>8143.8</b>	<b>8308.4</b>	<b>8556.5</b>
<b>North</b>	<b>789.6</b>	<b>834.6</b>	<b>875.1</b>	<b>910.6</b>	<b>932.4</b>	<b>946.5</b>	<b>968.1</b>
<b>North East</b>	<b>598.3</b>	<b>638.8</b>	<b>702.5</b>	<b>740.8</b>	<b>764.0</b>	<b>782.3</b>	<b>812.5</b>
<b>South East</b>	<b>611.3</b>	<b>643.7</b>	<b>679.7</b>	<b>711.2</b>	<b>732.3</b>	<b>741.9</b>	<b>758.5</b>
<b>South West</b>	<b>839.7</b>	<b>866.4</b>	<b>890.1</b>	<b>901.9</b>	<b>908.9</b>	<b>911.0</b>	<b>923.1</b>
<b>West</b>	<b>803.8</b>	<b>823.9</b>	<b>850.0</b>	<b>865.4</b>	<b>874.5</b>	<b>877.1</b>	<b>888.6</b>

**Table A2: Total Households, Boroughs and Groupings, PLP Low, thousands.**

	2001	2006	2011	2016	2021	2026
<b>Camden</b>	91.7	94.4	97.6	101.2	105.3	109.4
<b>Kensington and Chelsea</b>	79.3	81.0	82.8	84.5	86.1	87.6
<b>Westminster, City of</b>	100.0	105.4	109.5	112.8	116.1	119.3
<b>City of London</b>	4.3	5.2	6.1	6.9	7.4	7.8
<b>Central boroughs</b>	<b>275.4</b>	<b>285.9</b>	<b>296.0</b>	<b>305.4</b>	<b>314.9</b>	<b>324.2</b>
<b>Hackney</b>	86.1	90.9	96.3	101.6	106.6	111.4
<b>Hammersmith and Fulham</b>	75.6	77.9	81.5	84.9	87.6	90.4
<b>Haringey</b>	92.2	94.3	99.1	101.2	105.0	109.5
<b>Islington</b>	82.3	87.6	93.8	97.2	100.8	104.6
<b>Lambeth</b>	118.7	123.5	128.6	133.8	139.7	145.6
<b>Lewisham</b>	107.6	111.0	116.8	122.1	125.4	128.1
<b>Newham</b>	91.6	97.6	114.8	130.4	139.0	146.1
<b>Southwark</b>	109.2	114.7	125.8	139.5	152.2	161.1
<b>Tower Hamlets</b>	78.7	90.5	109.9	123.2	133.6	143.3
<b>Wandsworth</b>	119.4	124.8	130.5	135.8	140.4	144.5
<b>Rest of Inner boroughs</b>	<b>961.4</b>	<b>1012.9</b>	<b>1097.0</b>	<b>1169.6</b>	<b>1230.4</b>	<b>1284.6</b>
<b>Inner London</b>	<b>1236.8</b>	<b>1298.8</b>	<b>1393.1</b>	<b>1475.0</b>	<b>1545.3</b>	<b>1608.8</b>
<b>Barking and Dagenham</b>	67.2	69.8	75.5	81.0	89.4	98.6
<b>Barnet</b>	127.0	130.1	139.8	154.7	160.0	164.4
<b>Bexley</b>	89.7	90.5	91.8	93.8	95.7	97.6
<b>Brent</b>	100.3	104.0	109.9	113.9	117.4	120.7
<b>Bromley</b>	126.1	128.7	132.1	134.3	136.8	139.4
<b>Croydon</b>	139.1	142.0	150.4	154.1	156.7	159.1
<b>Ealing</b>	118.1	120.7	126.7	131.3	135.3	138.7
<b>Enfield</b>	110.6	114.8	118.0	119.7	121.9	124.2
<b>Greenwich</b>	93.0	101.4	109.5	119.8	127.3	132.1
<b>Harrow</b>	79.5	81.9	84.1	86.1	87.1	88.2
<b>Havering</b>	91.9	93.7	97.2	99.1	100.5	101.9
<b>Hillingdon</b>	96.8	98.8	100.4	102.3	104.2	106.0
<b>Hounslow</b>	84.1	87.0	93.4	96.9	99.3	101.6
<b>Kingston upon Thames</b>	61.5	64.0	66.3	68.5	69.9	71.0
<b>Merton</b>	79.0	81.1	83.5	84.9	86.5	88.1
<b>Redbridge</b>	92.5	95.5	100.9	104.8	107.1	108.9
<b>Richmond upon Thames</b>	76.3	78.5	80.2	81.2	82.8	84.4
<b>Sutton</b>	76.5	78.2	80.4	81.8	83.1	84.3
<b>Waltham Forest</b>	89.9	92.1	96.2	99.5	102.0	104.3
<b>Outer London</b>	<b>1799.2</b>	<b>1852.9</b>	<b>1936.3</b>	<b>2007.6</b>	<b>2063.2</b>	<b>2113.6</b>
<b>GREATER LONDON</b>	<b>3036.1</b>	<b>3151.7</b>	<b>3329.4</b>	<b>3482.6</b>	<b>3608.4</b>	<b>3722.4</b>
<b>North</b>	<b>789.6</b>	<b>834.6</b>	<b>875.1</b>	<b>910.6</b>	<b>932.4</b>	<b>946.5</b>
<b>North East</b>	<b>598.3</b>	<b>638.8</b>	<b>702.5</b>	<b>740.8</b>	<b>764.0</b>	<b>782.3</b>
<b>South East</b>	<b>611.3</b>	<b>643.7</b>	<b>679.7</b>	<b>711.2</b>	<b>732.3</b>	<b>741.9</b>
<b>South West</b>	<b>839.7</b>	<b>866.4</b>	<b>890.1</b>	<b>901.9</b>	<b>908.9</b>	<b>911.0</b>
<b>West</b>	<b>803.8</b>	<b>823.9</b>	<b>850.0</b>	<b>865.4</b>	<b>874.5</b>	<b>877.1</b>

**Table A3: Total Resident Labour Force, Boroughs and Groupings, PLP Low, thousands.**

	2001	2006	2011	2016	2021	2026	2031
<b>Camden</b>	102.1	105.4	108.9	112.8	117.1	120.4	122.7
<b>Kensington and Chelsea</b>	83.1	86.6	89.5	92.0	94.1	95.3	96.6
<b>Westminster, City of</b>	107.6	114.7	119.6	123.3	126.8	128.8	131.7
<b>City of London</b>	4.6	5.7	6.6	7.5	8.0	8.3	8.6
<b>Central boroughs</b>	<b>297.4</b>	<b>312.4</b>	<b>324.6</b>	<b>335.6</b>	<b>346.0</b>	<b>352.7</b>	<b>359.7</b>
<b>Hackney</b>	92.7	100.6	106.7	111.6	116.0	119.1	123.7
<b>Hammersmith and Fulham</b>	91.6	95.9	99.8	103.5	106.6	108.8	111.6
<b>Haringey</b>	108.7	115.3	121.2	124.0	127.4	130.3	134.5
<b>Islington</b>	89.8	98.3	105.0	108.6	112.0	114.6	117.7
<b>Lambeth</b>	147.9	155.2	160.4	165.4	170.7	174.7	180.1
<b>Lewisham</b>	128.6	136.7	143.9	148.8	150.8	151.9	154.4
<b>Newham</b>	103.1	113.7	134.7	150.5	156.5	160.6	167.9
<b>Southwark</b>	126.4	134.6	151.0	165.6	177.4	183.5	191.8
<b>Tower Hamlets</b>	87.4	101.2	120.5	131.5	139.6	146.0	154.6
<b>Wandsworth</b>	155.6	162.5	168.9	173.9	177.9	180.4	184.8
<b>Rest of Inner boroughs</b>	<b>1131.9</b>	<b>1214.1</b>	<b>1311.9</b>	<b>1383.5</b>	<b>1434.9</b>	<b>1469.8</b>	<b>1521.0</b>
<b>Inner London</b>	<b>1429.3</b>	<b>1526.6</b>	<b>1636.6</b>	<b>1719.1</b>	<b>1780.8</b>	<b>1822.5</b>	<b>1880.7</b>
<b>Barking and Dagenham</b>	72.1	76.0	83.3	88.6	97.0	105.7	115.6
<b>Barnet</b>	156.7	161.1	173.2	190.2	193.0	193.7	197.5
<b>Bexley</b>	107.6	109.4	110.4	111.4	112.2	112.8	114.3
<b>Brent</b>	133.4	134.5	138.8	140.2	141.5	141.7	143.8
<b>Bromley</b>	146.4	151.4	154.9	155.9	156.6	156.6	157.9
<b>Croydon</b>	168.6	169.1	176.2	175.7	173.2	170.3	170.2
<b>Ealing</b>	156.8	157.9	163.9	167.3	169.4	169.6	172.1
<b>Enfield</b>	131.9	139.0	140.5	140.1	140.1	139.6	140.4
<b>Greenwich</b>	102.2	111.6	119.5	129.6	135.3	137.0	140.1
<b>Harrow</b>	104.5	109.9	111.2	111.9	111.1	109.9	110.4
<b>Havering</b>	108.3	113.8	118.7	120.0	120.6	121.6	123.6
<b>Hillingdon</b>	123.3	125.0	125.3	126.3	126.6	126.5	127.3
<b>Hounslow</b>	111.2	114.1	121.3	124.1	125.1	125.3	126.9
<b>Kingston upon Thames</b>	78.7	82.5	84.6	86.3	86.5	85.9	86.4
<b>Merton</b>	101.2	101.7	102.6	102.1	101.9	101.5	102.2
<b>Redbridge</b>	114.7	119.6	126.7	129.6	130.0	129.7	131.1
<b>Richmond upon Thames</b>	93.5	97.7	99.6	100.3	101.1	101.4	102.6
<b>Sutton</b>	94.1	97.6	97.9	98.1	97.6	96.8	96.9
<b>Waltham Forest</b>	108.2	108.8	112.1	113.0	112.3	110.5	111.0
<b>Outer London</b>	<b>2213.3</b>	<b>2280.8</b>	<b>2360.9</b>	<b>2410.8</b>	<b>2431.2</b>	<b>2436.2</b>	<b>2470.2</b>
<b>GREATER LONDON</b>	<b>3642.6</b>	<b>3807.3</b>	<b>3997.5</b>	<b>4129.9</b>	<b>4212.1</b>	<b>4258.7</b>	<b>4350.9</b>
<b>North</b>	<b>789.6</b>	<b>834.6</b>	<b>875.1</b>	<b>910.6</b>	<b>932.4</b>	<b>946.5</b>	<b>968.1</b>
<b>North East</b>	<b>598.3</b>	<b>638.8</b>	<b>702.5</b>	<b>740.8</b>	<b>764.0</b>	<b>782.3</b>	<b>812.5</b>
<b>South East</b>	<b>611.3</b>	<b>643.7</b>	<b>679.7</b>	<b>711.2</b>	<b>732.3</b>	<b>741.9</b>	<b>758.5</b>
<b>South West</b>	<b>839.7</b>	<b>866.4</b>	<b>890.1</b>	<b>901.9</b>	<b>908.9</b>	<b>911.0</b>	<b>923.1</b>
<b>West</b>	<b>803.8</b>	<b>823.9</b>	<b>850.0</b>	<b>865.4</b>	<b>874.5</b>	<b>877.1</b>	<b>888.6</b>

**Table A4: Total Population, Boroughs and Groupings, PLP High, thousands.**

	2001	2006	2011	2016	2021	2026	2031
<b>Camden</b>	202.8	203.9	208.6	215.7	224.9	233.8	237.7
<b>Kensington and Chelsea</b>	161.1	166.6	171.9	177.1	181.9	186.1	187.9
<b>Westminster, City of</b>	202.9	214.0	222.5	229.9	237.3	243.6	248.2
<b>City of London</b>	7.3	9.1	10.7	12.3	13.1	13.9	14.5
<b>Central boroughs</b>	<b>574.2</b>	<b>593.6</b>	<b>613.7</b>	<b>634.9</b>	<b>657.3</b>	<b>677.3</b>	<b>688.3</b>
<b>Hackney</b>	207.8	217.3	227.0	237.4	248.2	258.3	267.2
<b>Hammersmith and Fulham</b>	169.5	177.3	185.1	192.7	198.9	204.5	209.4
<b>Haringey</b>	223.0	228.9	237.3	241.5	250.3	259.8	268.2
<b>Islington</b>	179.9	190.0	200.0	206.6	214.2	221.8	227.9
<b>Lambeth</b>	274.6	286.4	294.8	305.3	318.1	330.3	340.9
<b>Lewisham</b>	254.8	261.3	271.3	281.3	288.7	294.8	298.7
<b>Newham</b>	251.2	257.3	290.5	321.2	337.5	351.0	364.8
<b>Southwark</b>	258.1	267.7	291.6	319.3	345.6	363.1	380.0
<b>Tower Hamlets</b>	202.1	221.4	255.9	279.3	298.6	316.4	334.9
<b>Wandsworth</b>	272.2	286.4	299.1	310.3	319.6	327.4	334.1
<b>Rest of Inner boroughs</b>	<b>2293.1</b>	<b>2394.0</b>	<b>2552.4</b>	<b>2694.7</b>	<b>2819.5</b>	<b>2927.5</b>	<b>3026.0</b>
<b>Inner London</b>	<b>2867.3</b>	<b>2987.6</b>	<b>3166.1</b>	<b>3329.6</b>	<b>3476.8</b>	<b>3604.8</b>	<b>3714.3</b>
<b>Barking and Dagenham</b>	165.3	168.5	180.2	191.5	210.4	230.8	250.3
<b>Barnet</b>	319.8	324.4	344.4	376.0	385.7	393.7	401.4
<b>Bexley</b>	219.1	217.7	216.5	219.0	223.3	228.0	230.7
<b>Brent</b>	271.3	276.1	286.6	291.7	297.9	303.7	309.7
<b>Bromley</b>	295.6	300.3	303.8	306.2	311.0	316.4	320.1
<b>Croydon</b>	335.5	333.2	343.4	345.0	346.9	349.4	352.0
<b>Ealing</b>	308.4	312.1	324.9	334.6	342.9	349.4	355.4
<b>Enfield</b>	278.2	288.0	290.5	290.6	293.8	297.5	300.8
<b>Greenwich</b>	217.3	232.3	247.8	268.5	283.9	293.1	300.6
<b>Harrow</b>	210.7	216.6	218.6	221.2	222.4	223.4	224.6
<b>Havering</b>	224.8	228.9	233.3	235.5	238.7	242.9	244.4
<b>Hillingdon</b>	246.1	246.7	246.3	249.1	253.1	257.1	259.6
<b>Hounslow</b>	217.1	222.6	237.7	244.8	249.4	253.4	257.2
<b>Kingston upon Thames</b>	149.1	153.8	157.4	161.6	164.0	165.9	167.3
<b>Merton</b>	191.0	194.0	196.5	197.1	199.4	202.0	204.4
<b>Redbridge</b>	242.2	248.5	260.3	267.7	272.0	275.3	277.7
<b>Richmond upon Thames</b>	174.1	182.3	186.9	189.8	193.6	197.3	199.7
<b>Sutton</b>	181.4	182.6	183.8	184.6	186.6	188.8	190.2
<b>Waltham Forest</b>	222.8	225.5	232.9	237.2	239.3	240.7	244.0
<b>Outer London</b>	<b>4469.6</b>	<b>4554.3</b>	<b>4691.5</b>	<b>4811.6</b>	<b>4914.2</b>	<b>5008.7</b>	<b>5090.0</b>
<b>GREATER LONDON</b>	<b>7336.9</b>	<b>7542.0</b>	<b>7857.7</b>	<b>8141.2</b>	<b>8391.1</b>	<b>8613.5</b>	<b>8804.3</b>
<b>North</b>	<b>789.6</b>	<b>834.6</b>	<b>875.1</b>	<b>910.6</b>	<b>932.4</b>	<b>946.5</b>	<b>968.1</b>
<b>North East</b>	<b>598.3</b>	<b>638.8</b>	<b>702.5</b>	<b>740.8</b>	<b>764.0</b>	<b>782.3</b>	<b>812.5</b>
<b>South East</b>	<b>611.3</b>	<b>643.7</b>	<b>679.7</b>	<b>711.2</b>	<b>732.3</b>	<b>741.9</b>	<b>758.5</b>
<b>South West</b>	<b>839.7</b>	<b>866.4</b>	<b>890.1</b>	<b>901.9</b>	<b>908.9</b>	<b>911.0</b>	<b>923.1</b>
<b>West</b>	<b>803.8</b>	<b>823.9</b>	<b>850.0</b>	<b>865.4</b>	<b>874.5</b>	<b>877.1</b>	<b>888.6</b>

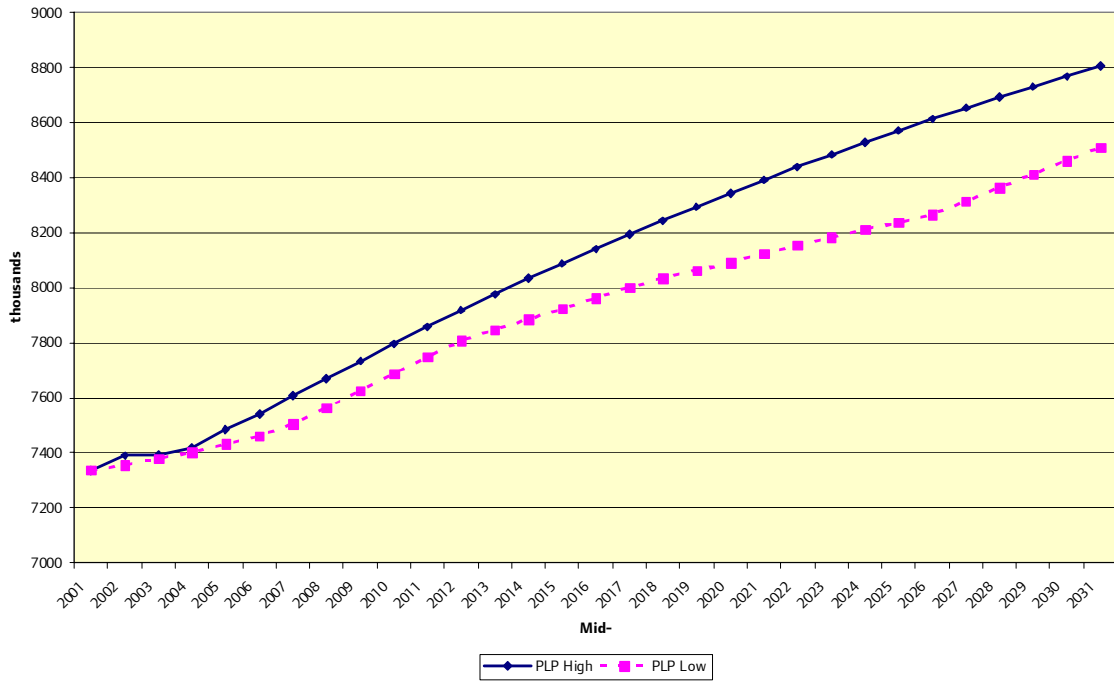
**Table A5: Total Households, Boroughs and Groupings, PLP High, thousands.**

	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>
<b>Camden</b>	91.7	95.5	99.1	103.6	109.0	114.6
<b>Kensington and Chelsea</b>	79.3	81.8	84.0	86.4	89.1	91.7
<b>Westminster, City of</b>	100.0	106.6	111.2	115.5	120.3	124.9
<b>City of London</b>	4.3	5.3	6.1	7.1	7.7	8.2
<b>Central boroughs</b>	<b>275.4</b>	<b>289.1</b>	<b>300.4</b>	<b>312.5</b>	<b>326.1</b>	<b>339.5</b>
<b>Hackney</b>	86.1	91.9	97.7	103.9	110.4	116.6
<b>Hammersmith and Fulham</b>	75.6	78.8	82.7	86.8	90.7	94.7
<b>Haringey</b>	92.2	95.4	100.6	103.5	108.7	114.5
<b>Islington</b>	82.3	88.6	95.1	99.4	104.4	109.5
<b>Lambeth</b>	118.7	124.9	130.5	136.9	144.6	152.3
<b>Lewisham</b>	107.6	112.3	118.5	124.9	129.8	134.0
<b>Newham</b>	91.6	98.7	116.5	133.4	143.9	152.7
<b>Southwark</b>	109.2	116.0	127.7	142.7	157.5	168.5
<b>Tower Hamlets</b>	78.7	91.6	111.5	126.1	138.3	149.9
<b>Wandsworth</b>	119.4	126.2	132.5	139.0	145.2	151.1
<b>Rest of Inner boroughs</b>	<b>961.4</b>	<b>1024.4</b>	<b>1113.2</b>	<b>1196.8</b>	<b>1273.5</b>	<b>1343.7</b>
<b>Inner London</b>	<b>1236.8</b>	<b>1313.5</b>	<b>1413.6</b>	<b>1509.3</b>	<b>1599.6</b>	<b>1683.2</b>
<b>Barking and Dagenham</b>	67.2	70.5	76.5	82.9	92.6	103.2
<b>Barnet</b>	127.0	131.4	141.8	158.3	165.8	172.3
<b>Bexley</b>	89.7	91.4	93.1	95.9	99.1	102.2
<b>Brent</b>	100.3	105.1	111.4	116.5	121.7	126.6
<b>Bromley</b>	126.1	129.9	133.9	137.4	141.7	146.1
<b>Croydon</b>	139.1	143.5	152.5	157.6	162.2	166.5
<b>Ealing</b>	118.1	121.9	128.5	134.4	140.1	145.4
<b>Enfield</b>	110.6	116.0	119.6	122.5	126.3	130.1
<b>Greenwich</b>	93.0	102.4	111.0	122.5	131.8	138.3
<b>Harrow</b>	79.5	82.7	85.3	88.1	90.3	92.5
<b>Havering</b>	91.9	94.6	98.5	101.3	104.1	106.7
<b>Hillingdon</b>	96.8	99.8	101.8	104.7	107.9	111.1
<b>Hounslow</b>	84.1	87.9	94.8	99.1	102.8	106.4
<b>Kingston upon Thames</b>	61.5	64.7	67.3	70.1	72.3	74.3
<b>Merton</b>	79.0	82.0	84.7	86.8	89.6	92.4
<b>Redbridge</b>	92.5	96.4	102.4	107.2	110.9	114.1
<b>Richmond upon Thames</b>	76.3	79.3	81.3	83.1	85.7	88.4
<b>Sutton</b>	76.5	79.0	81.5	83.7	86.0	88.3
<b>Waltham Forest</b>	89.9	93.0	97.5	101.8	105.7	109.2
<b>Outer London</b>	<b>1799.2</b>	<b>1871.6</b>	<b>1963.5</b>	<b>2054.0</b>	<b>2136.6</b>	<b>2214.2</b>
<b>GREATER LONDON</b>	<b>3036.1</b>	<b>3185.1</b>	<b>3377.1</b>	<b>3563.3</b>	<b>3736.2</b>	<b>3897.4</b>
<b>North</b>	<b>789.6</b>	<b>834.6</b>	<b>875.1</b>	<b>910.6</b>	<b>932.4</b>	<b>946.5</b>
<b>North East</b>	<b>598.3</b>	<b>638.8</b>	<b>702.5</b>	<b>740.8</b>	<b>764.0</b>	<b>782.3</b>
<b>South East</b>	<b>611.3</b>	<b>643.7</b>	<b>679.7</b>	<b>711.2</b>	<b>732.3</b>	<b>741.9</b>
<b>South West</b>	<b>839.7</b>	<b>866.4</b>	<b>890.1</b>	<b>901.9</b>	<b>908.9</b>	<b>911.0</b>
<b>West</b>	<b>803.8</b>	<b>823.9</b>	<b>850.0</b>	<b>865.4</b>	<b>874.5</b>	<b>877.1</b>

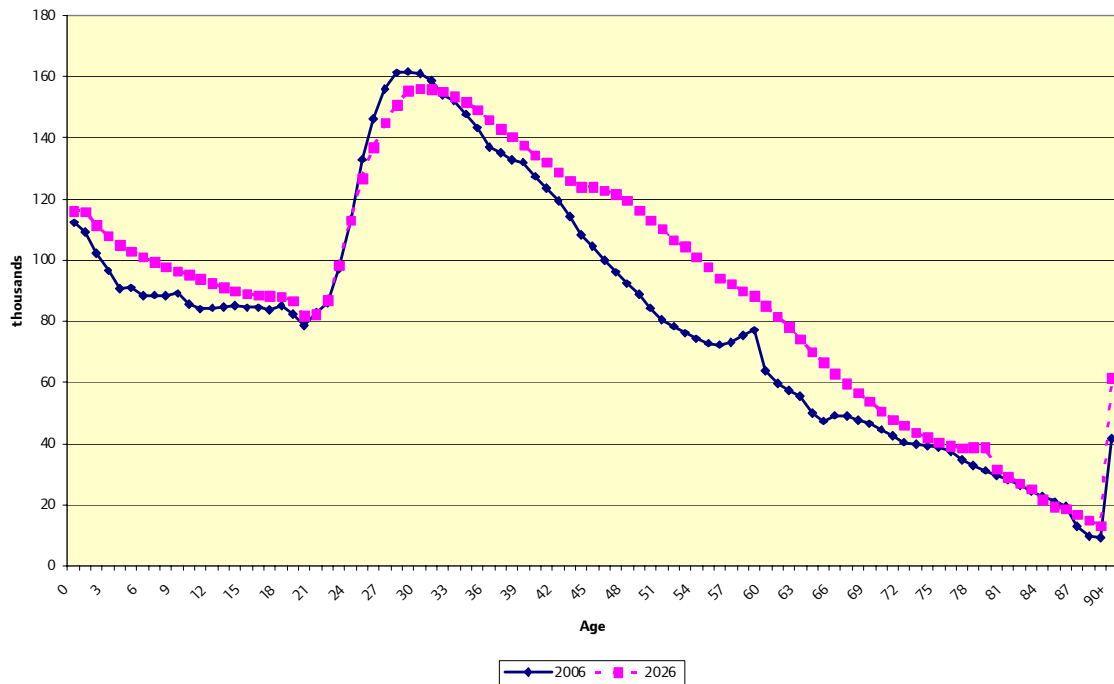
**Table A6: Total Resident Labour Force, Boroughs and Groupings, PLP High, thousands.**

	2001	2006	2011	2016	2021	2026	2031
Camden	102.1	106.8	110.6	115.3	121.0	125.7	127.1
Kensington and Chelsea	83.1	87.7	90.9	94.1	97.3	99.4	100.1
Westminster, City of	107.6	116.2	121.4	126.1	131.0	134.4	136.5
City of London	4.6	5.8	6.8	7.7	8.2	8.6	8.9
<b>Central boroughs</b>	<b>297.4</b>	<b>316.6</b>	<b>329.6</b>	<b>343.2</b>	<b>357.6</b>	<b>368.1</b>	<b>372.6</b>
Hackney	92.7	102.0	108.3	114.1	119.9	124.3	128.1
Hammersmith and Fulham	91.6	97.3	101.3	105.8	110.1	113.5	115.5
Haringey	108.7	116.8	123.1	126.8	131.7	136.0	139.3
Islington	89.8	99.7	106.6	111.0	115.8	119.6	121.9
Lambeth	147.9	157.4	162.8	169.1	176.4	182.3	186.5
Lewisham	128.6	138.5	146.1	152.1	155.9	158.6	159.9
Newham	103.1	115.3	136.7	153.9	161.8	167.5	173.9
Southwark	126.4	136.4	153.3	169.3	183.4	191.5	198.7
Tower Hamlets	87.4	102.6	122.3	134.5	144.3	152.3	160.1
Wandsworth	155.6	164.8	171.5	177.8	183.8	188.1	191.4
<b>Rest of Inner boroughs</b>	<b>1131.9</b>	<b>1230.8</b>	<b>1332.1</b>	<b>1414.6</b>	<b>1483.0</b>	<b>1533.7</b>	<b>1575.3</b>
<b>Inner London</b>	<b>1429.3</b>	<b>1547.4</b>	<b>1661.7</b>	<b>1757.7</b>	<b>1840.6</b>	<b>1901.7</b>	<b>1947.9</b>
Barking and Dagenham	72.1	76.9	84.5	90.6	100.3	110.4	119.8
Barnet	156.7	163.1	175.8	194.5	199.6	202.3	204.8
Bexley	107.6	110.7	112.0	113.8	116.0	117.8	118.6
Brent	133.4	136.1	140.9	143.4	146.4	148.0	149.1
Bromley	146.4	153.2	157.1	159.3	161.9	163.5	163.8
Croydon	168.6	171.1	178.7	179.6	179.1	177.8	176.5
Ealing	156.8	159.9	166.4	171.1	175.1	177.1	178.4
Enfield	131.9	140.7	142.6	143.3	144.9	145.8	145.6
Greenwich	102.2	113.0	121.3	132.5	140.0	143.1	145.3
Harrow	104.5	111.2	112.9	114.4	114.9	114.8	114.4
Havering	108.3	115.2	120.4	122.7	124.7	127.0	128.2
Hillingdon	123.3	126.6	127.2	129.1	130.9	132.1	132.0
Hounslow	111.2	115.5	123.1	126.9	129.4	130.9	131.6
Kingston upon Thames	78.7	83.5	85.9	88.3	89.4	89.7	89.6
Merton	101.2	103.0	104.1	104.4	105.4	106.0	105.9
Redbridge	114.7	121.1	128.5	132.5	134.4	135.5	136.0
Richmond upon Thames	93.5	98.9	101.1	102.5	104.5	105.9	106.4
Sutton	94.1	98.8	99.3	100.3	100.9	101.1	100.5
Waltham Forest	108.2	110.1	113.8	115.6	116.2	115.4	115.1
<b>Outer London</b>	<b>2213.3</b>	<b>2308.8</b>	<b>2395.4</b>	<b>2464.8</b>	<b>2513.9</b>	<b>2544.4</b>	<b>2561.7</b>
<b>GREATER LONDON</b>	<b>3642.6</b>	<b>3856.2</b>	<b>4057.1</b>	<b>4222.5</b>	<b>4354.5</b>	<b>4446.2</b>	<b>4509.6</b>
North	789.6	845.4	888.3	931.1	963.9	988.0	1003.2
North East	598.3	647.0	712.9	757.4	789.8	816.8	842.2
South East	611.3	651.8	689.8	727.1	757.1	774.6	786.3
South West	839.7	877.6	903.4	922.1	939.5	951.0	956.8
West	803.8	834.3	862.6	884.8	904.2	915.8	921.2

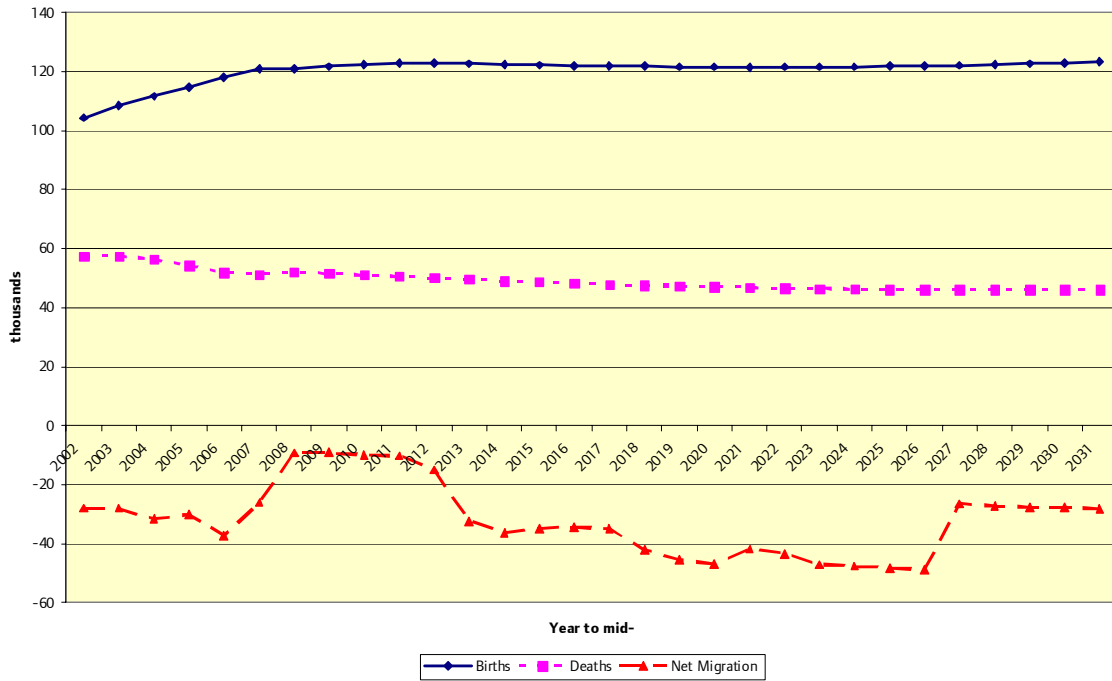
**Chart 1: Total Population, London, PLP High and PLP Low 2001-31**



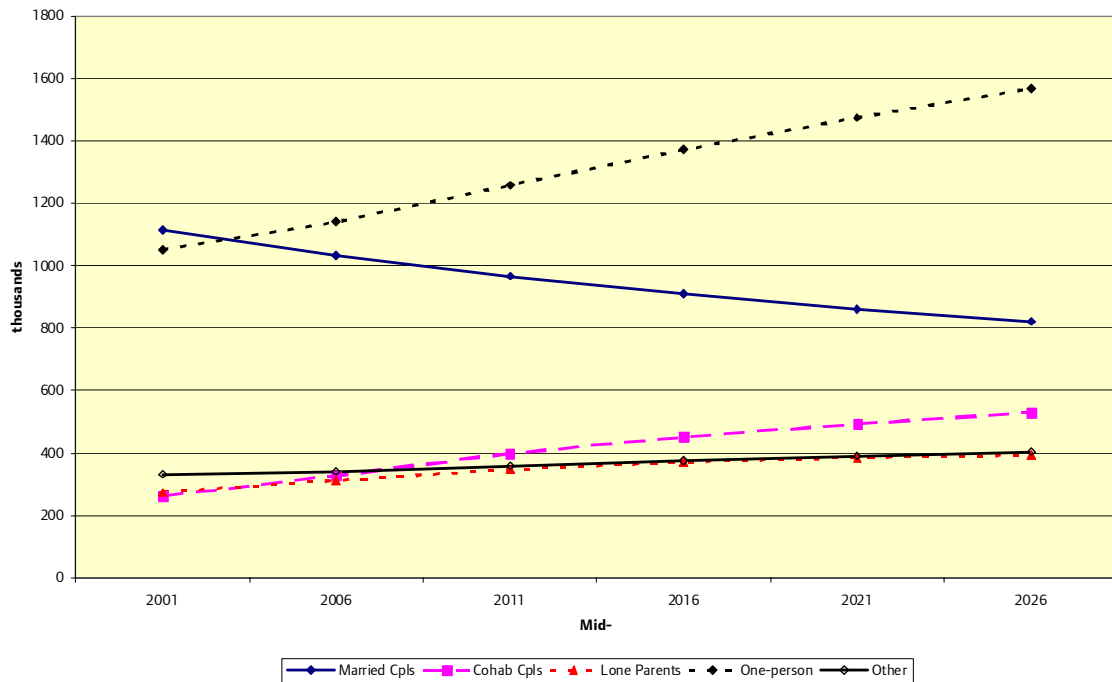
**Chart 2: Age Structure, London PLP Low 2006 and 2026**



**Chart 3: Components of Change, London, PLP Low 2001-31**



**Chart 4: Households by Type, London, PLP Low 2001-26**



## Access to Data

Full results are available for Greater London, each London borough, borough groups and *London Plan* sub-regions as follows:

- Population by single years of age and gender from 2001 to 2031, plus annual births, deaths and net migration
- Households by type and age, gender and marital status of representative for 2001, 2006, 2011, 2016, 2021 and 2026 plus private household population, communal establishment population and average household size
- Resident Labour Force by grouped ages and gender from 2001 to 2031

Ward population projections consistent with PLP Low and PLP High are also available.

These data are available as Excel files via the GLA Demography Extranet or on request to ([Demography@london.gov.uk](mailto:Demography@london.gov.uk)) or via 020 7983 4347.

Previous Rounds of GLA projections are also available on request.



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