GLAINTELLIGENCE

Update 2019-01

2017-based Trend Projection Results

January 2019

Key Findings

- The GLA has released three sets of trend-based projections based on different periods of past migration data. These are:
  - A central 10-year migration variant
  - A short 5-year migration variant
  - A long 15-year migration variant

- Based on the central variant the total population of London is projected to rise by 1.88 million over the 25-year period from 2017 to 2042 to reach 10.72 million.

- For each variant, the projected rate of population growth is lower than for the equivalent results from the 2016-based projections. For the central projection the annual growth rate over the period 2016 to 2041 is five per cent lower than for the 2016-based projection.

- London's population is projected to reach 10 million by mid-2032 in both the central and short-term variants, and by mid-2034 in the long-term variant. The population in the 2016-based central projection reached 10 million by mid-2030.

- The rate of household growth in these outputs is lower than for the equivalent results from the 2016-based projections. Annualised household growth over 25 years for the central projection is now 46 thousand per year, down from 48 thousand.

  Note: These projections do not attempt to account for the impact on London's population of the United Kingdom's exit from the European Union.

Introduction

This Update outlines the results of the GLA's 2017-based borough level population and household projections. These were released in January 2019 and incorporate ONS population estimates and internal migration estimates up to and including mid-year 2017. The 2017-based outputs represent a minor update of the GLA's projections, incorporating the latest data, but with no significant changes in methodology over the previous round of outputs.

Three variant projections have been produced, using different periods of past data to project future migration patterns.

- **Central variant:** uses ten years of past data
- **Short-term variant:** uses five years of past data
- **Long-term variant:** uses 15 years of past data

The projections based on the three migration scenarios are referred to as the central, short-term and long-term variants. In each case, mortality and fertility methodologies are the same but the assumptions regarding migration differ.

Projections based on shorter periods of past migration data will generally respond more quickly to recent changes in estimated flows and the results will have greater variation between successive sets of outputs. Users are encouraged to consider the trade-off between responsiveness and stability when determining the most appropriate projection for their application. The GLA typically employs the central variant as its primary projection to inform long-term strategic planning.

Corresponding household projections have been produced for each population output. These projections were produced using the same approach employed for the 2016-based projections, adopting a model based on that used by the Department of Communities and Local Government (now Ministry of Housing, Communities and Local Government) for their 2014-based subnational household projections. The GLA has elected not to adopt the model developed by ONS for the 2016-based household projections at this time.

The projection outputs are available on the London Datastore:
https://data.london.gov.uk/demographic-projections/

Projections for areas outside of London

As was the case with the 2016-based projections, these outputs include data for English local authorities outside of London as well as national-level data for Wales, Scotland and Northern Ireland. This report presents the results for London only. Data for areas beyond the Greater London boundary are primarily published for the purpose of transparency and do not necessarily reflect the organisation's view of future growth outside of the city.

An *Intelligence Update* (2017-07) describing the rationale for the expansion of the GLA model beyond the Greater London boundary and an overview of the 2016-based results for the Wider South East region is available to download from the London Datastore[1].

Methodology

A detailed methodology paper on the GLA cohort component model is available to download from the London Datastore[2] (Update 2016-02). An annex to this document detailing minor changes implemented since the release of the methodology paper is also available[3] (Update 2017-05).

Results: Population

Between 2017 and 2042, the Central variant projects that London's population will grow by 1.88 million (21 per cent) to 10.72 million at an annualised rate of 75 thousand per year. This compares to projected 2042 populations of 10.70 and 10.52 million for the short- and long-term variants, respectively (Table 1 and Figure 1)

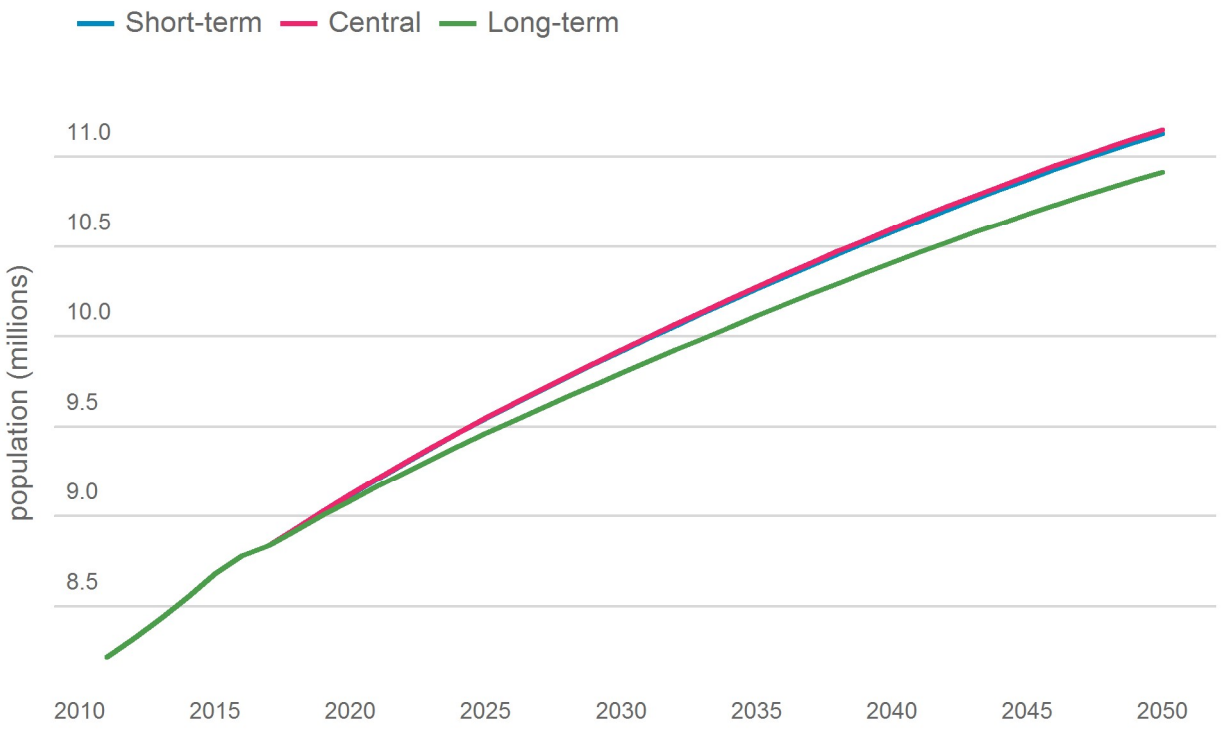
Table 1: Total Population, Greater London (millions)

Year	Central	Long-term	Short-term
2012	8.32	8.32	8.32
2017	8.84	8.84	8.84
2022	9.30	9.24	9.30
2027	9.70	9.60	9.70
2032	10.07	9.93	10.06
2037	10.41	10.24	10.39
2042	10.72	10.52	10.70

GLA 2017-based population projections

[1] https://data.london.gov.uk/dataset/2016-based-projections-documentation
[2] https://data.london.gov.uk/dataset/2015-round-population-projections/resource/8cb45509-626e-4845-acb0-f36383fc5704
[3] https://data.london.gov.uk/dataset/interim-2015-based-projections-documentation/resource/98a82931-cd30-4826-9e2b-80294bb91983

Figure 1: Total Population, Greater London 2010-2050



GLA 2017-based population projections

Table 2 shows borough population totals at five-year intervals for the period 2017-2042. The populations are taken from the central trend variant.

Table 2: Borough populations, central projection

Borough	2017	2022	2027	2032	2037	2042	2047
Camden	253,000	266,000	277,000	286,000	294,000	301,000	307,000
City of London	8,000	7,000	7,000	7,000	8,000	8,000	8,000
Hackney	276,000	292,000	306,000	318,000	331,000	342,000	351,000
Hammersmith and Fulham	183,000	190,000	195,000	200,000	205,000	209,000	213,000
Haringey	272,000	286,000	298,000	308,000	318,000	327,000	335,000
Islington	235,000	246,000	256,000	265,000	274,000	282,000	288,000
Kensington and Chelsea	156,000	160,000	164,000	167,000	171,000	174,000	177,000
Lambeth	324,000	336,000	346,000	356,000	368,000	377,000	385,000
Lewisham	302,000	319,000	334,000	347,000	360,000	371,000	381,000
Newham	349,000	372,000	391,000	408,000	423,000	436,000	446,000
Southwark	315,000	330,000	343,000	356,000	367,000	377,000	386,000
Tower Hamlets	309,000	333,000	352,000	369,000	383,000	395,000	405,000
Wandsworth	324,000	335,000	345,000	354,000	365,000	374,000	382,000
Westminster	245,000	256,000	265,000	273,000	279,000	286,000	291,000
Barking and Dagenham	211,000	228,000	244,000	257,000	268,000	279,000	289,000
Barnet	388,000	412,000	432,000	450,000	467,000	482,000	496,000
Bexley	246,000	257,000	268,000	279,000	289,000	299,000	309,000
Brent	330,000	346,000	359,000	372,000	383,000	393,000	401,000
Bromley	330,000	346,000	362,000	375,000	389,000	402,000	414,000
Croydon	385,000	403,000	420,000	435,000	450,000	463,000	476,000
Ealing	343,000	358,000	371,000	381,000	392,000	402,000	411,000
Enfield	333,000	351,000	367,000	382,000	397,000	410,000	422,000
Greenwich	283,000	297,000	311,000	323,000	335,000	346,000	356,000
Harrow	249,000	261,000	272,000	282,000	290,000	299,000	306,000
Havering	256,000	271,000	286,000	301,000	316,000	329,000	342,000
Hillingdon	303,000	320,000	335,000	349,000	361,000	372,000	382,000
Hounslow	270,000	284,000	296,000	305,000	314,000	323,000	330,000
Kingston upon Thames	175,000	185,000	193,000	201,000	207,000	213,000	218,000
Merton	207,000	217,000	225,000	232,000	240,000	246,000	252,000
Redbridge	302,000	323,000	342,000	359,000	374,000	388,000	401,000
Richmond upon Thames	196,000	205,000	212,000	217,000	223,000	229,000	235,000
Sutton	204,000	215,000	225,000	234,000	242,000	250,000	257,000
Waltham Forest	276,000	292,000	306,000	318,000	329,000	339,000	348,000
London	**8,838,000**	**9,299,000**	**9,704,000**	**10,067,000**	**10,408,000**	**10,722,000**	**11,003,000**

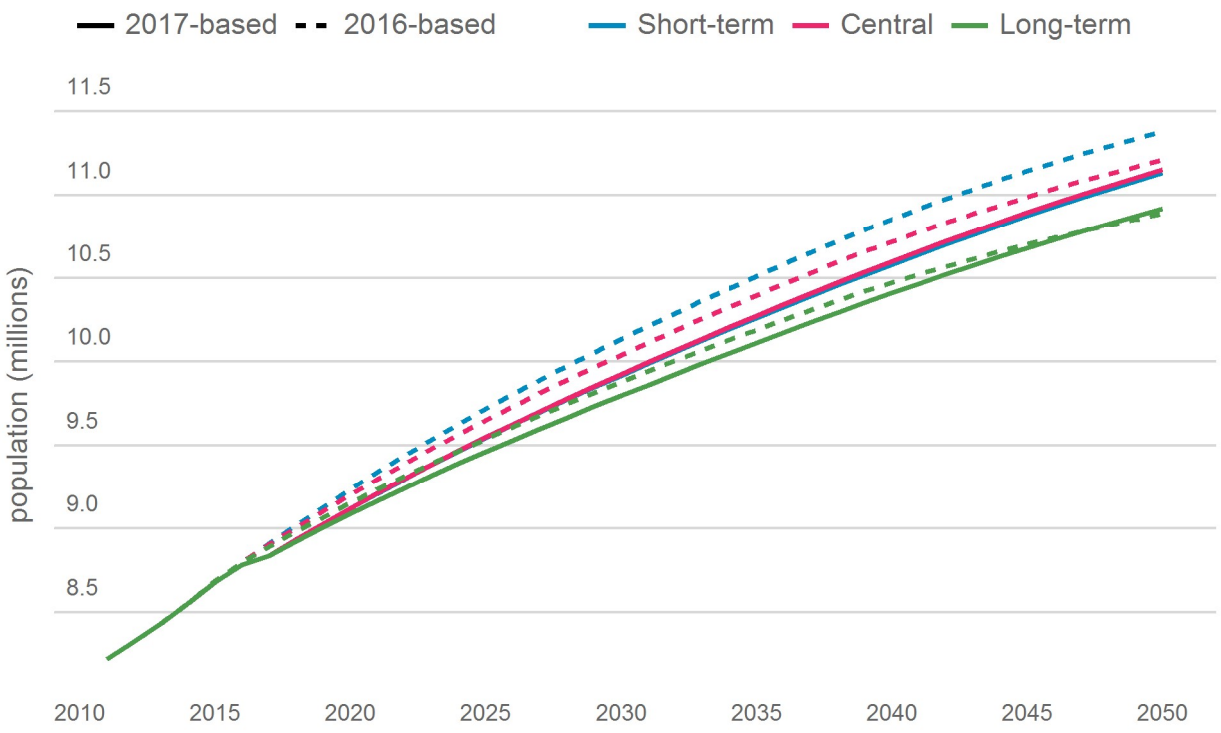
GLA 2017-based population projections

Comparison with 2016-based projections

In March 2018, ONS published revisions to its existing estimates series based on updated international migration data. These revisions gave an estimated 2016 London population some 17,000 persons below that of the original estimate, which had been used as an input to the 2016-based GLA projections. The 2017 Mid-Year Estimate (MYE), published by ONS in June 2018, estimated London's total resident population to be 8.8 million. This was an increase of 55,000 over the year from mid-2016 and far below levels seen over the last decade when annual growth regularly exceeded 100,000. This reduced level of growth results from a combination of both lower net international inflows and increased net domestic outflow.

The effect of incorporating these updated estimates is to reduce the projected rate of population growth for each variant compared to the equivalent outputs from the 2016-based projections. This reduction is not uniform across the variants, with the change in the short-term variant being the greatest and the long-term variant the least. In the 2016-based outputs, the short-term variant showed significantly higher population growth than the other outputs. For the 2017-based projection outputs, growth is now similar to and marginally lower than that of the central-trend projection. The range between the three variants' projected London populations is now much narrower than was the case for the 2016-based outputs. The 2017-based central variant now projects that London's population will reach 10 million by mid-2032 (two years later than in the 2016-based projection).

Figure 2: Comparison of 2017-based and 2016-based projections, London 2010-2050



GLA, 2017-based & 2016-based population projections

Components of Change

Births, deaths and migration all contribute to London's changing population. Natural change, which is the difference between the number of births and deaths, is the largest direct contributor to London's population growth. Natural change is high in London because its age structure is much younger than that of the rest of the UK.

London's relatively youthful population is a result of established patterns of migration to and from the capital, which give rise to a net inflow of young adults and a net outflow of all other age groups.

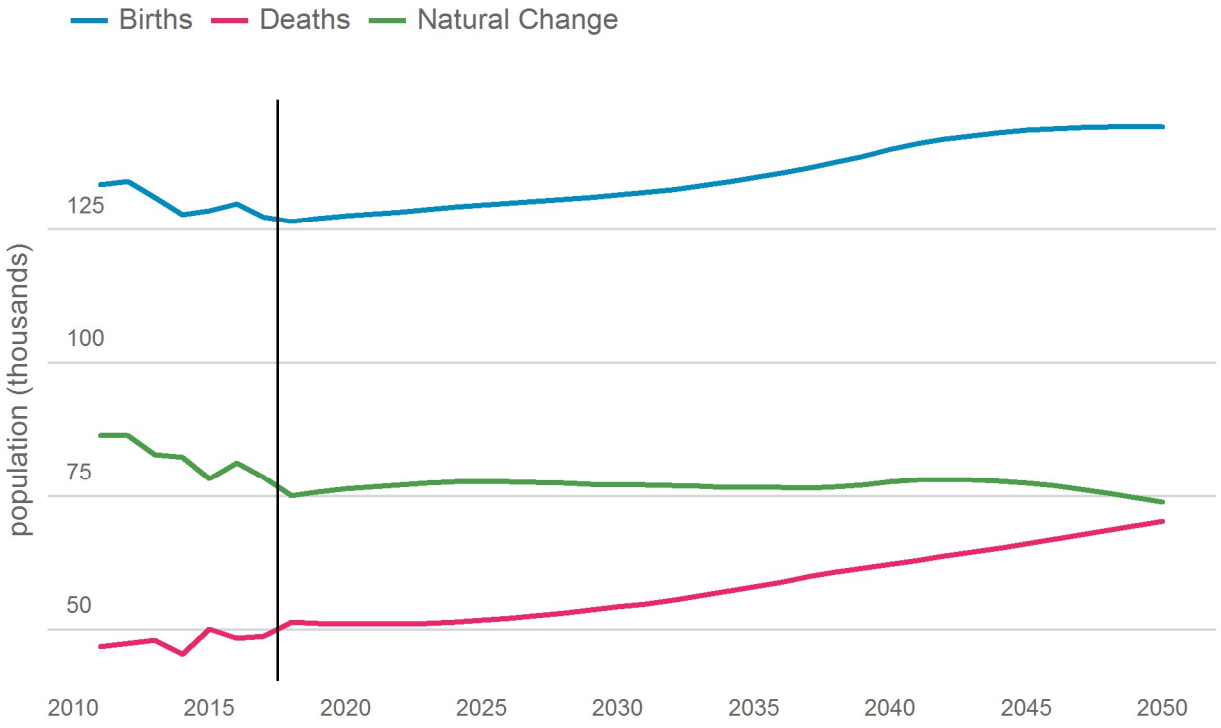
Births & Deaths

Annual births in London rose by approximately 30 per cent over the decade from 2002 to 2012. Since, then the number of births has remained relatively flat. Births are projected to rise steadily over the projection period, primarily as a result of increasing numbers of women of childbearing age, rather than significant changes in overall fertility rates.

Deaths are also projected to rise, up approximately 20 per cent over the period from 2017 to 2042. This rise comes despite an assumption that mortality rates will continue to fall over, and is a result of increasing numbers of elderly people in the population.

The projected increase in each of these components largely balance one another out and natural change remains relatively stable over the period (Figure 3).

Figure 3: Births, deaths & natural change, London 2002-2050

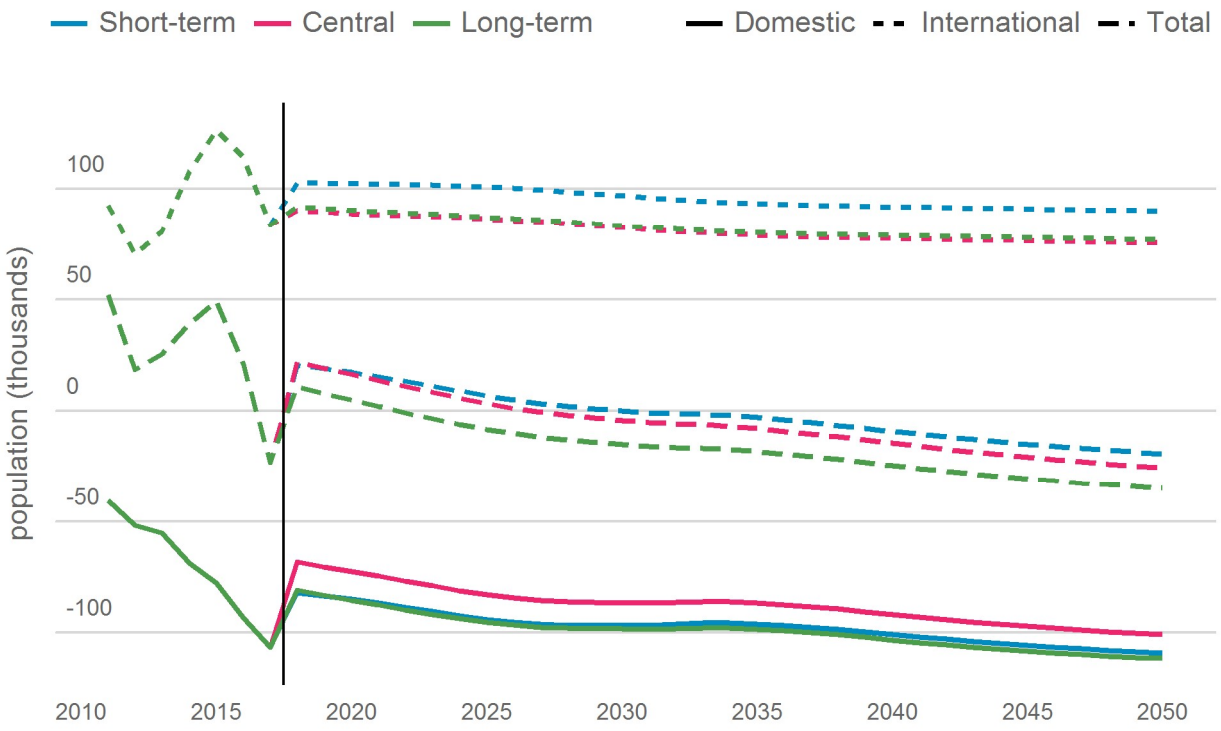


GLA, 2017-based population projections, ONS Mid Year Estimates

Note: Data up to 2017 are estimates, data from 2018 are projections

Migration

Figure 4: Net migration, London 2010-2050



GLA, 2017-based population projections, ONS Mid Year Estimates, ONS Internal migration estimates

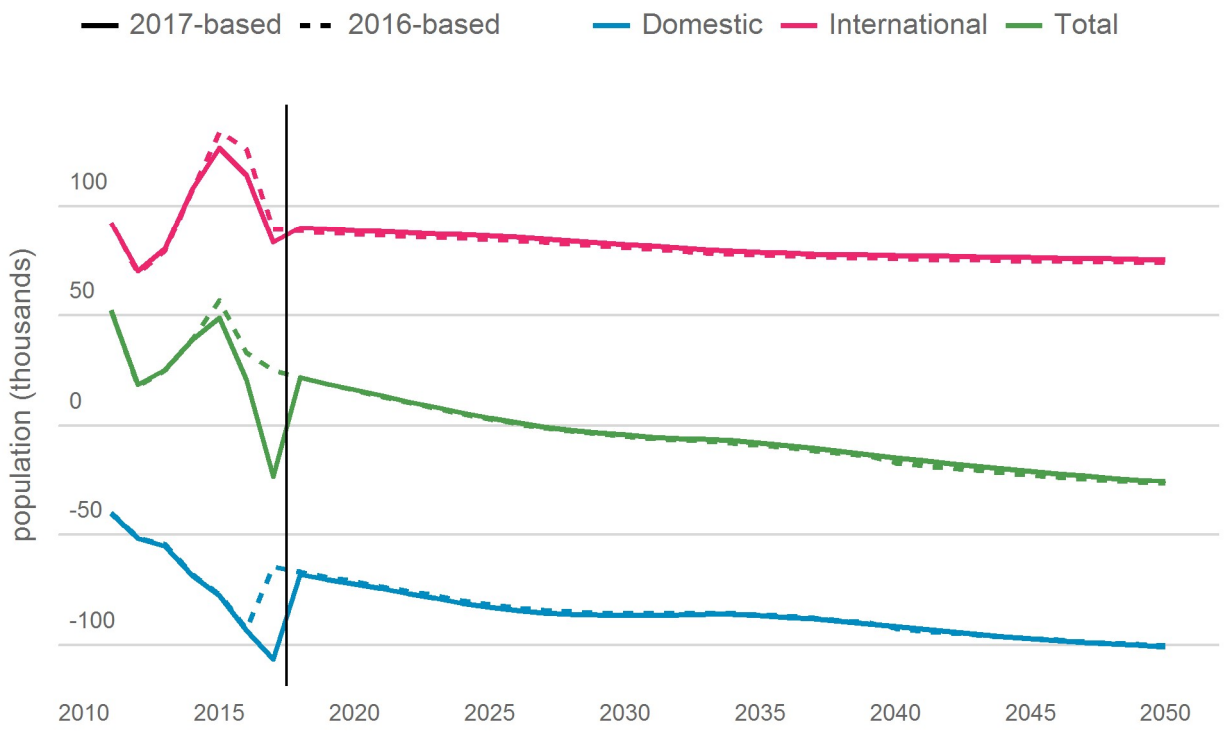
Figure 4 shows recent and projected net migration for London (domestic, international and total) for each of the three variants.

This chart illustrates the sensitivity of the projections to the period of past data used to determine future migration patterns. Here the short-term variant's use of the most recent five years of data gives rise to a higher level of projected net international inflow than does the ten or fifteen years used for the central or long-term trend projections.

However, both five- and fifteen-year periods give rise to a higher level of net domestic out-migration than does the ten-year period used in the central trend. This explains why the short-term and central variants give rise to similar levels of projected growth.

Figure 5 shows a comparison of the estimated and projected migration component for the 2017-based and 2016-based central trend projections.

Figure 5: Net migration, 2017-based and 2016-based central projections, London 2010-2050



GLA 2017- and 2016-based population projections, ONS Mid Year Estimates

Results: Households

Interpretation of household projections

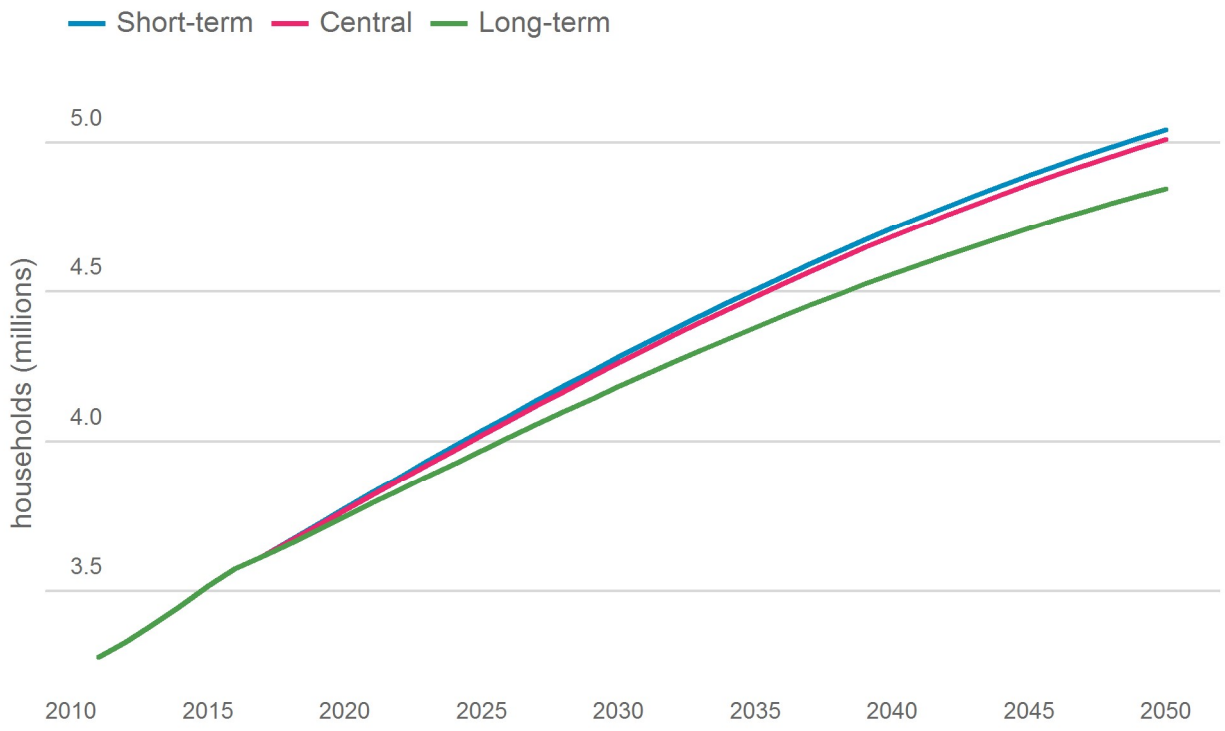
It is important to be aware that, although the population data on which they are based are estimates up to 2017 and projections beyond that point, robust annual estimates of households in England are not currently available and so the results should be considered projections from 2012 onwards rather than estimates.

Table 3: Total Households, Greater London (millions)

Year	Central	Long-term	Short-term
2012	3.33	3.33	3.33
2017	3.62	3.62	3.62
2022	3.87	3.84	3.88
2027	4.12	4.06	4.14
2032	4.35	4.27	4.38
2037	4.57	4.46	4.59
2042	4.76	4.62	4.79

GLA 2017-based household projections

Figure 6: Total households, 2017-based projections, London 2010-2050



GLA 2017-based household projections

Table 3 and Figure 6 show projected total households in London for each of the three variants. As was the case with population, projected growth in each case is lower than the equivalent results from the 2016-based projections. Annualised growth over 25-years for the central-trend is 46 thousand per year for the 2017-based outputs, down from 48 thousand.

Despite projected population growth in the short-term variant now being lower than in the central trend, household growth remains marginally higher at an annualised 47 thousand.

For more information please contact Demography, GLA Intelligence
Greater London Authority, City Hall, The Queen's Walk, More London, London SE1 2AA
Tel: 0207 983 4347 e-mail: demography@london.gov.uk