Royal Borough of Greenwich

Population estimates and Projections, 2015

Summary

- The most recent population estimate from the ONS shows that there were 274,803 people living in Royal Greenwich in mid-2015. This represents an increase of 6,125 (2.3%) from the previous year. The GLA estimate for the same year is 271,937.

- The ONS estimate that the borough's population has grown by 19% in the last 10 years (2005 – 2015) and will grow by 14% over the next 10 years (2016 - 2026). Projections from the GLA suggest that growth will be even higher, with 17% growth projected for the same period.

- Residents aged over 65 have experienced the least growth (8%) over the past 10 years when compared to the other broad age groups, but is projected to see the largest increase over the next 10 years (30%).

- The GLA ("SHLAA-based capped household") estimate are recommended for demographic analysis of the boroughs population and forward planning, as these projections take account of future housing development and are available at ward level.

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1. Purpose

1.1. There have been a number of recent releases of population estimates for the borough from ONS and GLA. This report serves to provide a summary of these different estimates, what they show; and recommend which should be used for demographic analysis and planning.
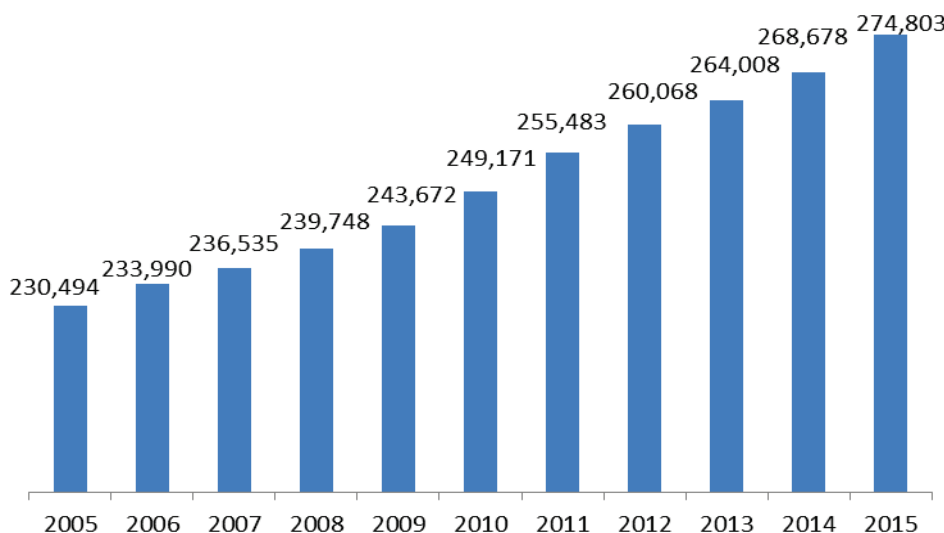
2. ONS 2015 Mid-year estimate

2.1. Each year the ONS publish population estimates for the UK known as Mid-Year Estimates. These estimates use as their base the most recent Census data, which is then adjusted for births, deaths and migration.

2.2. The methodology, known as the "component cohort method" can be summarised as follows:

- Start with the previous year's population estimate.
- Age on by one year.
- Add births between 1 July and 30th June to age 0.
- Subtract deaths between 1st July and 30th June.
- Add net internal and international migration between 1st July and 30th June.
- Add changes due to special populations (armed forces, prisoners).
- The current years population estimate is produced

2.3. The most recent estimate available is mid-2015, which was released on 23 February 2016. The ONS estimate that there are 274,803 people living in Greenwich, an increase of 6,125 (2.3%) from the mid-2014 estimate – the largest annual rise in the last 5 years. Chart 1 plots the change in Greenwich's population over the last 10 years.

Chart 1. Greenwich mid-year population estimates

Source: ONS Mid-year estimates

2.4.   The mid-year estimates provided by ONS detail the components that are driving population change from the previous year. Table 1 provides a summary of these component changes between mid-2014 and md-2015.

Table 1. Greenwich mid-2015 population components of change

Mid 2014 population	268,678
Births	*4,547*
Deaths	*1,558*
Natural change (Births minus deaths)	**2,989**
Internal migration In	*19,254*
Internal migration Out	*19,661*
Net internal migration	**-407**
International migration In	*5,029*
International migration Out	*1,663*
Net International migration	**3,366**
Other* change	**177**
Mid 2015 population	**274,803**

*The armed forces and prison populations
Source: ONS Mid-year estimates

2.5.   In terms of internal migration flows, overall there has been a net outflow of 407 people, with 19,254 people arriving in the borough and 19,661 departing to destinations with the UK. In comparison the volume of international migration movements is much lower than internal migration, but the net impact is greater, with over 3 times more international migrants arriving in the Royal Borough as departing (a net increase of 3,366 residents).

2.6.   In addition to international migration numbers, natural change is also driving growth in the borough, with increasing births and declining deaths. Between 2001 and 2012, 83% of the UK's population growth was directly due to international migration or indirectly due to births to migrants[1].

2.7.   Table 2 provides a breakdown by broad age group. Twenty-two per cent of the borough's population are under the age of 16, 68% are aged between 16 to 64; and 10% are aged 65 and over. The Greenwich age profile is similar to that of London, but when comparing population change over the last 10 years, it can be seen that Greenwich has experienced a faster rate of growth in the under 16's and 16-64 age groups, but slower growth in the over 65 population, than London as a whole.

**Table 2.** Mid-2015 Population by age group and growth

Age group	Population	% of population	RBG % growth 2005-2015	London % growth 2005-2015
0-15	60,063	22%	23%	19%
16-64	186,073	68%	20%	15%
65+	28,667	10%	8%	14%
All	274,803	100%	19%	15%

Source: ONS Mid-year estimates

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[1] http://www.migrationwatchuk.org/briefing-paper/345

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2.8. The population pyramid in Chart 2 compares the borough's age profile in 2015 to 2005. The rise in the birth rate between 2005 and 2015 has contributed to the increase in the number of children under 10 years, while an increase in net migration will have had an impact on births and increased the number of younger working age residents aged from around 20-40 years.

**Chart 2.** Royal Greenwich age profile: mid-2005 and mid-2015
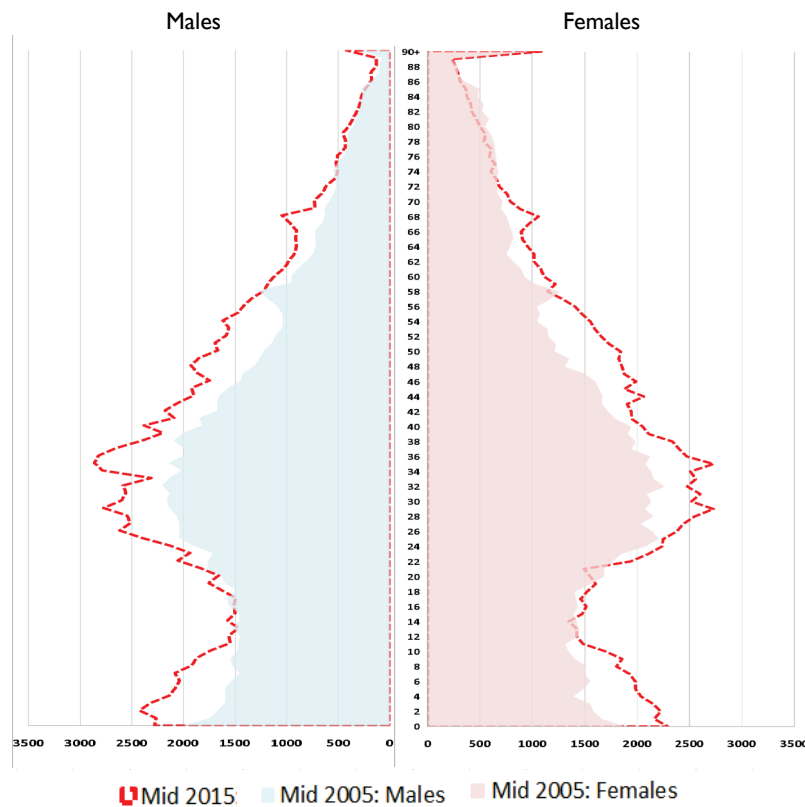
Source: ONS Mid-year estimates

3. ONS 2014-based Sub National Population Projections (SNPP)

3.1. Every 2 years the ONS release Sub National Population Projections (SNPP) for all Local Authorities in the UK, which uses the most recent mid-year estimate as the base and projects growth over the next 25 years. The most recent projection is the 2014–based SNPP, which was released on 25th May 2016.

3.2. The SNPP uses the same cohort component method as used to produce the mid-year estimates and projects forward based on recent trends in births, deaths, and migration flows for each Local Authority. The totals are then adjusted to ensure they add up to the national projection for England.

3.3. The ONS project there to be 278,259 people living in Royal Greenwich in 2016 and predict a 14% growth rate over the following 10 years, with the population reaching 316,423 by 2026 (Chart 3).

**Chart 3.** Royal Greenwich projected population: ONS 2014-based projection
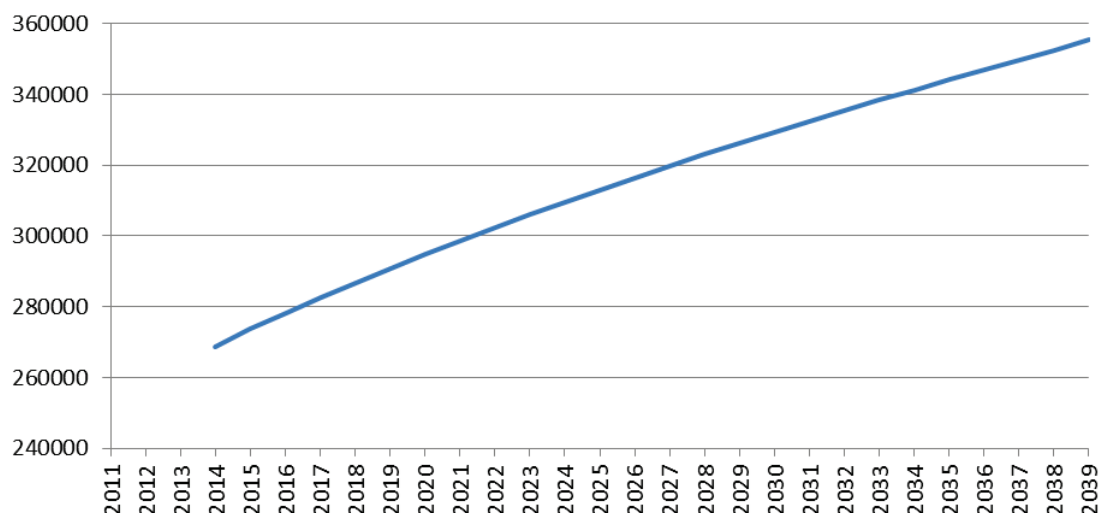
	2016	2026	2036
SNPP 2014-based	278,259	316,423	346,917

Source: 2014-based sub-national population projections

3.4.   The population pyramid (Chart 4) compares the ONS SNPP age structures between 2016 and 2026. The general age structure is expected to remain the same, reflecting the stable births, deaths and migration trends that this projection assumes.

Chart 4. Royal Greenwich age profile: 2016 and 2026
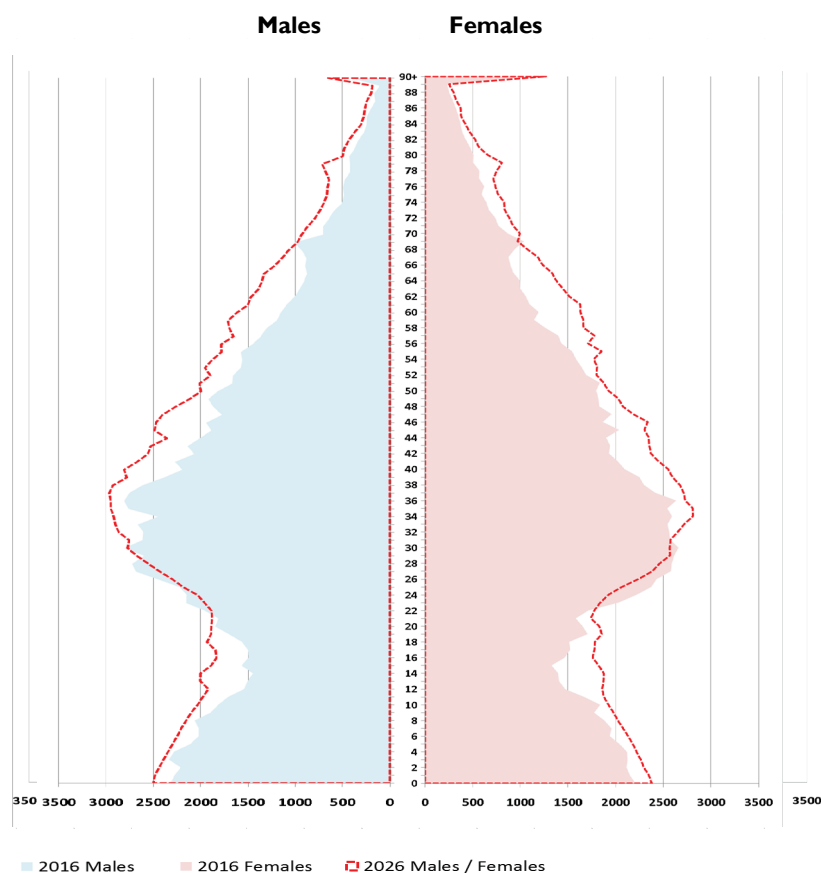
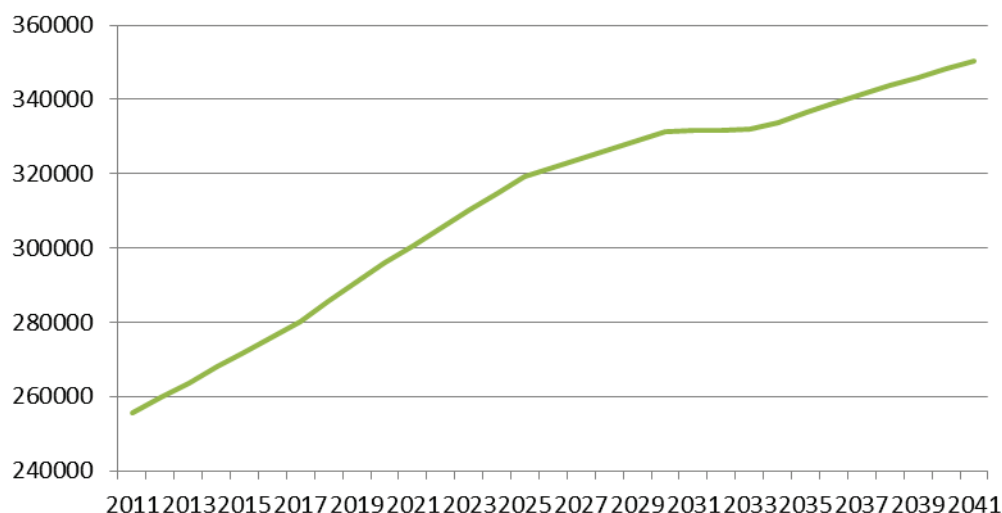
Source: 2014-based sub-national population projections

4. GLA 2015 Round SHLAA-based population projections: Capped Household Size Model

4.1. The GLA produce their own population projections for all London boroughs, as an alternative to the ONS projections. The GLA projections are ward-based by single year of age, and provide estimates for the next 25 years. The most recent GLA projection is the 2015 Round projection, which was released in May 2016 and uses as its base the 2014 ONS MYE and applies the component cohort method to project forward.

4.2. The GLA produce three sets of projections based on two different methods: trend-based and housing linked.
   - **Trend-based** projects forward based on recent trends in fertility, migration and death and applies assumptions about how these factors may change in the future i.e., birth rate will decrease, life expectancy will improve. Further sub-variants of this model are the Short-term and Long-term migration scenarios.
   - **Housing-linked** projects growth based on anticipated new development from the Strategic Housing Land Availability Assessment (SHLAA)[2]. The two housing-linked projections are SHLAA-based Capped Household Size, and the SHLAA DCLG-linked projection models. Both housing-linked models initially create a population using the cohort-component method, convert the population into a household count and use an average household size to match the households to the number of properties on the SHLAA. The DCLG-linked model creates household size using rates from their DCLG household projections, and the Capped model uses the 2012 maximum household size. The GLA have produced a summary on the differences between these variables[3].

4.3. This report presents the SHLAA Capped Household Size projection, which is considered to be the most reliable projection for the Royal Borough.

4.4. The GLA estimate that there are 275,868 people living in Royal Greenwich in 2016, with a projected growth rate of 17% over the next 10 years. By 2026 the Greenwich population is expected to have reached 321,593 (Chart 5).

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[2] The SHLAA identifies potential housing sites and assesses whether these sites are developable, how many housing units could be accommodated on them and when they could be delivered. It includes all sites being proposed by landowners, developers and agents. It is carried out in partnership between the GLA, the London Boroughs, the City Corporation and the London Legacy Development Corporation

[3] https://londondatastore-upload.s3.amazonaws.com/jYs%3Dtechnical-note-guide-gla-popproj-variants.pdf

**Chart 5.** Royal Greenwich projected population: GLA 2015 Round projection

	2016	2026	2036
GLA 2015 Round capped Household Size projection	275,868	321,593	338,924

Source: GLA 2015 round SHLAA-based Capped Household Size projection model

4.5. The GLA also make their projections available at ward level. Chart 6 shows the projected population growth rates by ward over the next ten years. The Peninsula ward population is expected to double in size between 2016 and 2026 (from 18,141 to 36,746 residents). Four wards are expected to experience slight negative growth – these being Glyndon, Charlton, Blackheath Westcombe and Kidbrooke with Hornfair.

Chart 6. 2016 – 2026 Population growth rates by Ward
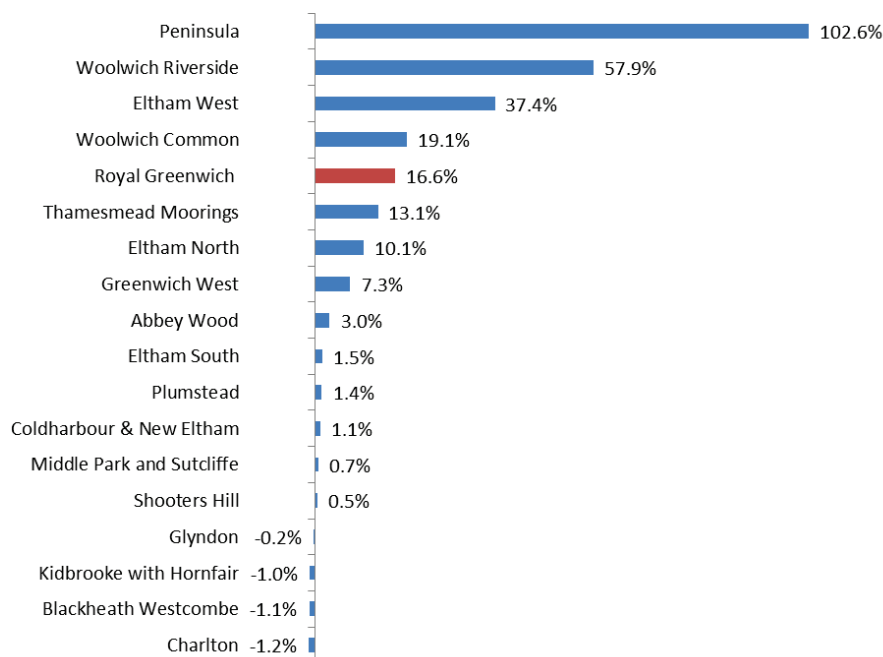
Source: GLA 2015 round ward SHLAA-based capped household Size projection model

5. GLA Witan Model

5.1. In addition to their published projections the GLA have also recently released an online projection tool (Witan), which enables boroughs to apply their own housing trajectory data and generate their own projections as opposed to using the SHLAA (the 2013 SHLAA is currently used in the latest GLA projections). Officers are continuing to work with this tool to develop bespoke projections for the borough, the outputs from which are still being refined.

5.2. The Witan model enables both trend and housing-based projections to be generated, with a range of fertility assumptions as detailed in Table 3.

Table 3: Choice of Witan model assumptions and variants

| Model name	Fertility assumption	Model variant
Trend-based	• Standard • High • Low	N/A
Housing-linked	• Standard • High • Low	• DCLG • Capped household

5.3. Outputs from Witan have been presented in the next section, in comparison to the ONS and GLA estimates.

6. Comparing the projections

6.1. Chart 7 compares the GLA SHLAA-based projection to the ONS SNPP and Witan projection. The projections are reasonably consistent up to 2021, from which point the GLA and Witan projections deviate from the ONS projection showing a higher level of growth until 2030, when the GLA projection dips below the ONS's.

6.2. The ONS projections are based on previous trends, which is why their trajectory is fairly straight. In comparison, the GLA SHLAA-based and Witan projections are driven by expected housing delivery, which fluctuates depending on the expected phasing and completions.

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Chart 7. GLA projection compared to ONS SNPP 2014-based and Witan model
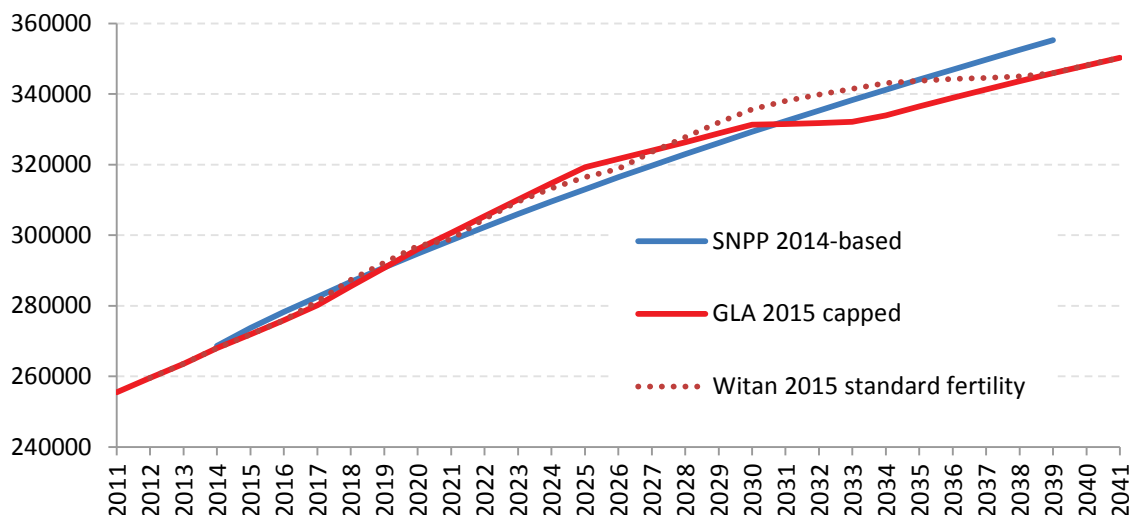
	2016	2026	2036
SNPP 2014-based	278,259	316,423	346,917
GLA 2015 capped	275,868	321,593	338,924
Witan 2015	275,868	318,837	344,315

Source: GLA 2015 round SHLAA-based Capped Household Size projection model, ONS 2014-based SNPP, Witan 2015 capped household

6.3. Chart 8 shows the projected population growth from 2016 to 2026 by broad age group for each projection source. Residents aged over 65 are expected to show the greatest percentage growth. Overall the GLA projections show the greatest amount of growth.
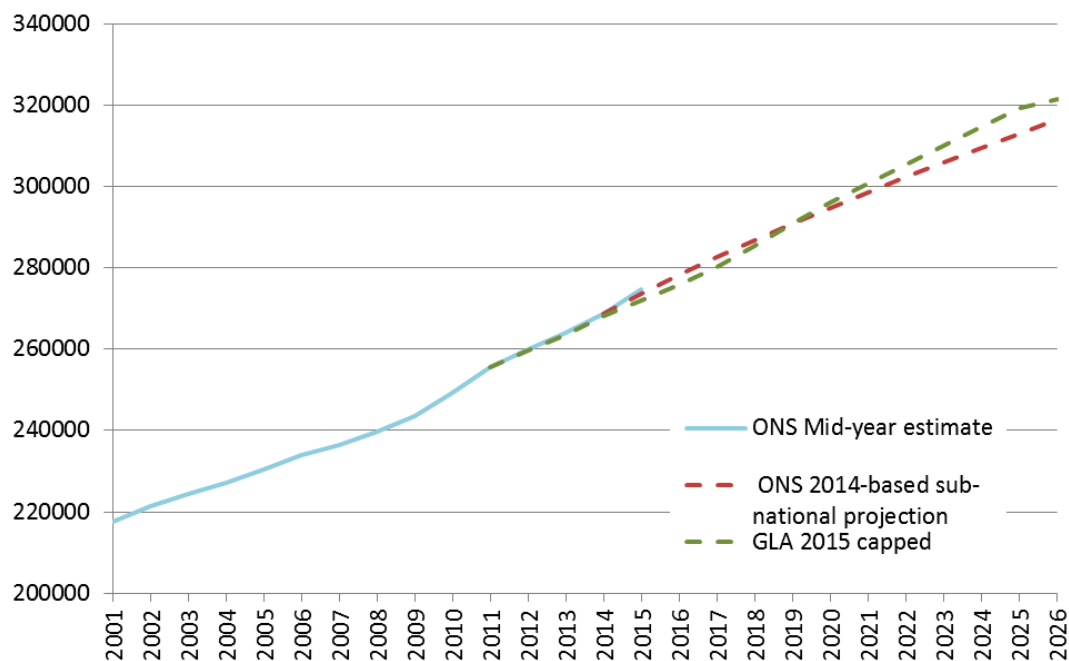
Chart 8. Royal Greenwich Projected population growth 2016-2026
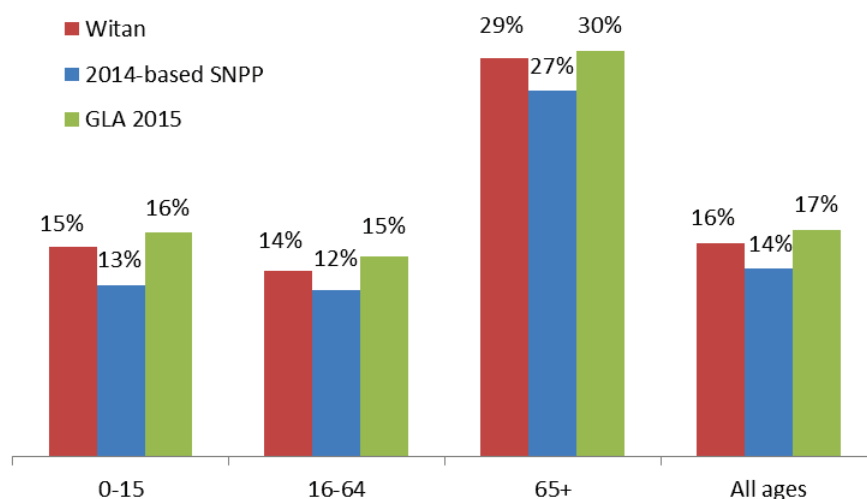
Source: GLA 2015 round SHLAA-based Capped Household Size projection model, ONS 2014-based SNPP, Witan 2015 capped household

6.4. Comparing past estimates to the future projection provides a long term picture of the growth trajectory in Greenwich (Chart 9). Between 2005 and 2015 the borough's population grew by 19%. Over the next 10 years (2016-2026) it is projected that this growth will slow slightly to between 14% (ONS SNPP) and 17% (GLA).

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Chart 9. Royal Greenwich's past and future population

Source: GLA 2015 round SHLAA-based Capped Household Size projection model, ONS 2014-based SNPP, ONS 2015 mid-year estimates

7. Recommendation

7.1. It is recommended that the GLA SHLAA-based capped household projection be used by the Royal Borough of Greenwich for demographic analysis and future planning, as this projection takes account of recent demographic trends and expected housing capacity. The ONS estimates are based on recent demographic trends, and therefore take no account of future policy or housing delivery.

7.2. It is worth noting that the most recent GLA projections are based on the last Strategic Housing Land Availability Assessment undertaken in 2013, and therefore some of the housing data might be slightly out of date. The Royal Borough can now produce its own bespoke projections using the Witan model using its own housing trajectory information, however the outputs from the Witan model are not yet thought to be adequately robust to be used for planning purposes. For more information on bespoke projections using the Witan model please contact: stats@royalgreenwich.gov.uk

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