A GUIDE TO
POPULATION PROJECTIONS

JUNE 2018
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Recommendations

✓ The recommended default population projection to use for general London population projections is the Greater London Authority (GLA) Housing led projection. Click here to access this

  - This 2016 based projection incorporates a housing trajectory taken from the GLA 2016 Strategic Housing Availability Assessment (SHLAA)\(^1\)

  - This model is the most likely scenario for future population growth in the capital and is recommended for use for borough level data

  - It only provides data projections for London and therefore if projection work is planned comparing with areas outside of London, please use the ONS population projections which can be found here

✓ For ward level data projections, please use the GLA 2016-based ward level projections consistent with the borough housing-led model. Click here

✓ For ethnicity projections, please use the GLA 2016-based housing-led ethnic group projections Click here

✓ If you change the projection that you use, please justify the reasons why you have done so. There may be good reasons for doing this, (such as for statutory reasons or for funding bids) which is fine but it helps the reader to understand why the change has been made and a note to this effect will be helpful for future reference

✓ Always read the metadata as this contains important information and caveats around the projections

Good Housekeeping Rules

✓ Always ensure that the projection source is referenced with the full title and the year. Always include a hyperlink in your document, this is standard practice and is a requirement of the Greater London Authority. This will ensure that any future updates of data are consistent as staff will know exactly which projection was used

\(^1\) https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/strategic-housing-land-availability-assessment
Introduction
Population figures are useful in providing information about an area for future planning of essential services such as school places, so it is helpful to know how the population will change. Population projections are calculated using a baseline of figures from the latest Census. This guide seeks to explain what the Census is, what are population projections, what population projections are available and the differences between them, the methodology behind them and why a particular projection should be used and when.

Census and population projections

Every ten years since 1801, the government sets aside one day for the national census; a count of all people and households. It is the most complete source of information about the population that we have. The last census was carried out in 2011.

It is the only survey which provides a detailed picture of the entire population and is unique because it covers everyone at the same time and asks the same core questions across the UK. This makes it easier to compare different areas, for example borough or region.

There are two main sources for population projections available:

The Greater London Authority (GLA) Intelligence Unit.
The unit produces data for the whole of London. Data can be viewed via the London Datastore.

Office for National Statistics (ONS), which is national.

Both sets of estimates are based on the latest Census data; however projection methodologies and data sources differ, resulting in different estimates. The period between the Census populations is estimated by variables such as births, deaths and migration rates. ONS produces mid-year population estimates and projections. Alternative population estimates from the GLA estimate population based on the same variables as ONS, plus information regarding new housing developments and different scenarios of future migration.

Both data sources are robust and credible and are equally acceptable by both local and central government. However, it should be noted that some central government departments may require that ONS data is used, for example for funding purposes.

Additionally, if comparisons are to be made between an area within London and an area outside of London, then the ONS population projections must be utilised for both in order to ensure an accurate comparison.

Figure 1 overleaf shows the current differences between population predictions and as can be seen, there is variance between them. The GLA and ONS projections are based on 2016 population figures. Explanations for the different projection types follow on after the graph.
Figure 1: Ten year population projections (2016 based) (ONS and GLA)

Between 2018 and 2028:
- The GLA housing led projection predicts a 9.6% rise in Merton’s population.
- The GLA central trend predicts a rise of 9.3%.
- The GLA short term trend predicts a rise of 7.0%.
- The GLA long term trend predicts a rise of 7.9%.
- The ONS LA projection predicts a rise of 4.9%.

GLA London Datastore projections

Borough projections

2016 based population projections (published July 2017). Projections are available by borough, ward and ethnicity. The list below shows the most current available data at the time of writing this report. Borough level projections available as follows:

- **Central Trend based projection (using a 10-year migration scenario)**
  - Click [here](#).
  - This uses past trends in births, deaths and migration to project future populations.
  - It uses a 10 year average of domestic migration, international migration inflows and out-migration rates.

- **Short-term Trend-based projection (using a 5-year migration scenario)**
  - Click [here](#).
  - This is identical to the 10-year migration scenario, but for 5 years.
• **Long-term Trend-based projection (using a 15-year migration scenario)**
  Click here
  • This is identical to the 5 and 10 year scenarios, but for 15 years

• **Housing-led projection incorporating data from the 2016 SHLAA**
  Click here
  • This model is the most likely scenario for future population growth in the capital and is recommended for use for borough level data by GLA
  • This model reconciles population growth with available housing supply
  • The data covers London boroughs only
  • The outputs are consistent (at London level) with outputs from the Central Trend variant
  • The 2016 based housing-led projection incorporates a housing trajectory taken from the 2016 Strategic Housing Availability Assessment (SHLAA)

**Ward projections**: 2016-based population projections (published November 2017)

**Ward level projections consistent with the borough housing-led model**
Click here
• This model provides a housing-led population projection for wards (as at 2011) for London
• It covers all London wards with the exception of City of London
• The outputs are consistent (at borough level) with the outputs from the Housing-led model
• The 2016 based housing-led projection incorporates a housing trajectory taken from the 2016 Strategic Housing Availability Assessment (SHLAA)

**Ethnic Group projections**: 2016-based population projections (published November 2017)

**GLA 2016 based housing-led ethnic group projections (50MB file)**
Click here
• A borough level projection of 17 ethnic groups
• The outputs are consistent at borough level with the outputs from the housing-led model
• Provides data on the projected ethnic group distribution of the population

**ONS population projections**
The latest projections are mid 2016 based and projects for 25 years up to mid 2041 by males and females in single and 5 year age groups for Regions and Local Authorities in England. Click here

The predictions were published in May 2018 and are based on 2016 mid year population estimates
They are trend based projections, meaning assumptions for future births, deaths and migration are based mainly on data from the last 5 years and shows data based on the assumption the same trend will continue
The population includes all people who live in an area, whatever their nationality. People moving in or out of the area are only included if their total stays is for 12 months or more, therefore visitors and short-term migrants are not included. Armed forces stationed within an area are included and students are taken to be resident at their term-time address.

Other available ONS population projections:

- Subnational Population Projections for Regions in England can be viewed here
- Subnational Population Projections for Local Authorities in England can be viewed here
- ONS Gender and age population predictions: The ONS population projections are also available by gender (male, female and persons) and single year of age, again based on mid-2016 data. Can be viewed here
- ONS Ward level population predictions (NB: These are classed as EXPERIMENTAL STATISTICS however the Code of Practice for Official Statistics is observed in their production). Ward level data is also available from ONS based on 2016 electoral wards by gender (male, female and persons) and single year of age. This can be viewed here

What are the differences between ONS and GLA trend based projections?

- The GLA housing led projections incorporate data from the 2016 Strategic Housing Land Availability Assessment (SHLAA) and is the most likely scenario for future population growth in London. It is therefore recommended by GLA for borough level data requirements
- GLA covers only London population whereas ONS covers the UK
- Population projections from ONS are available for the UK and its constituent countries as national population projections and for regions, local authorities and clinical commissioning groups in England as subnational population projections. Data is also available for areas such as fertility births, deaths and migration

Resident and registered populations

Both the GLA and ONS population figures are resident population, that is – those who live within the boundaries of a specified area (for example borough or ward). There is also another population known as the GP Registered population. More information about the GP Registered population can be found below.

GP Registered population

There are 23 GP Practises in Merton. The GP Registered population includes people who are registered with a GP within an area, such as a borough or ward. This population can include people who are registered with a GP within the borough but live outside of the borough. It will not capture people who live in the borough, who are registered with a GP outside the borough. Therefore when this data set is used, there must be a caveat with an explanation of the data limitations. The data will differ from the ONS and GLA population estimates, as those are Resident populations rather than GP Registered populations.

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2 https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections
GP registered population\(^3\) data projections are only available for a couple of years ahead, as the figures are refreshed annually. A gender split into male and female is not available.

Please note that GP registered populations cannot be totally accurate, as people moving away may not always inform their surgery that they are leaving the area. Therefore their details remain on the GP system and they will still be counted, even though they are no longer patients at the surgery.

**Projecting Older People Population Information (POPPI) and Projecting Adult Needs and Service Information System (PANSI)**

Both these websites require registration – one registration covers access to both. The system is provided by the Institute of Public Care on licence from the Department of Health. Its aim is to analyse population data, identify key characteristics within the population and be able to project figures in the future.

POPPI can be viewed [here](https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/clinicalcommissioninggroupmidyearpopulationestimates)

- POPPI shows population aged 65 and over in 5 year age bands, projected from 2017 to 2035
- Data for England, regions and Local Authority is available
- Figures are taken from the ONS subnational population projections by gender and single year of age, 2014 based and from the 2011 census for ethnicity data

As with the ONS projections, they are trend based projections, meaning assumptions for future births, deaths and migration are based mainly on data from the last 5 years and shows data based on the assumption the same trend will continue.

Data is available by:

- Age (5 year age bands from 65)
- Percentage of the total population
- Gender and age
- Percentage of gender and age of the total population
- Ethnic group, split into one of 5 main categories:
  - White, Mixed/multiple ethnic group, Asian/Asian British, Black/African/Caribbean/Black British, Other ethnic group
- Ethnic group as a percentage of the total population

Data is also available for:

- Living status (i.e. living alone, tenure (i.e. renting, house owner), in a care home)
- Support arrangements (self care, provision of unpaid care, domestic tasks)
- Health (includes 15 areas of health such as falls, mobility, diabetes, dementia)
- Learning disability (including baseline estimates, Down’s syndrome, autistic spectrum disorders)

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\(^3\) [https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/clinicalcommissioninggroupmidyearpopulationestimates](https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/clinicalcommissioninggroupmidyearpopulationestimates)
• Comparators (authorities listed by the closest statistically, using the Chartered Institute of Public Finance & Accountancy (CIPFA) Nearest Neighbours Model) and geographical neighbours (sharing a boundary) are also available as well as Region.
• Map – allowing movement between different areas in England

PANSI can be viewed here

• PANSI shows population aged 18-64; 18-24 and then 10 year age bands, projected from 2017 to 2035
• Data for England, regions and Local Authority is available
• Figures are taken from the ONS subnational population projections by gender and single year of age, 2014 based and from the 2011 census for ethnicity data
• As with the ONS projections, they are trend based projections, meaning assumptions for future births, deaths and migration are based mainly on data from the last 5 years and shows data based on the assumption the same trend will continue
• Data is available by:
  o Age (10 year age bands from 18-64)
  o Gender and age
  o Ethnic group, split into one of 5 main categories:
    o White
    o Mixed/multiple ethnic group
    o Asian/Asian British
    o Black/African/Caribbean/Black British
    o Other ethnic group
    o Ethnic group as a percentage of the total population
• Data is also available for:
  o Learning disability (including Down’s syndrome, autistic spectrum disorders, challenging behaviour)
  o Physical disability (including personal care, stroke, diabetes, visual impairment and hearing loss)
  o Mental health (including drugs/alcohol, suicide, survivors of sexual abuse, early onset dementia)
• Comparators (authorities listed by the closest statistically, using the Chartered Institute of Public Finance & Accountancy (CIPFA) Nearest Neighbours Model) and geographical neighbours (sharing a boundary) are also available as well as Region
• Map – allowing movement between different areas in England
Differing population projections

To give an idea of the differences in populations and projections in Merton, the following table shows values for GLA\(^4\) and ONS\(^5\) for 2018, 2020 and 2025 (rounded to the nearest 100). The GP registered population shows values for 2018 and 2020\(^6\). As can be seen, there is a considerable difference between the data sources. Values which are notably higher or lower are in **bold**.

Figure 2: Comparison between different population projections, all ages

<table>
<thead>
<tr>
<th>Persons (to nearest 100)</th>
<th>2011</th>
<th>2018</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONS 2016 based</td>
<td>-</td>
<td>209,200</td>
<td>211,700</td>
<td>216,900</td>
</tr>
<tr>
<td>GLA Housing led</td>
<td>209,400</td>
<td>212,700</td>
<td>222,700</td>
<td></td>
</tr>
<tr>
<td>GLA Central trend Population</td>
<td>210,600</td>
<td><strong>215,200</strong></td>
<td><strong>225,200</strong></td>
<td></td>
</tr>
<tr>
<td>GLA Short-term Population</td>
<td>208,700</td>
<td>211,800</td>
<td>219,500</td>
<td></td>
</tr>
<tr>
<td>GLA Long-term Population</td>
<td>209,900</td>
<td>213,700</td>
<td>222,100</td>
<td></td>
</tr>
<tr>
<td>GP Registered in Merton (NB this can include patients living outside Merton)</td>
<td>229,400</td>
<td>234,900</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>POPPI (shows data for 65+)</td>
<td>-</td>
<td>-</td>
<td>27,000</td>
<td>29,800</td>
</tr>
<tr>
<td>PANSI (shows data for 18-64)</td>
<td>-</td>
<td>-</td>
<td>141,000</td>
<td>145,400</td>
</tr>
</tbody>
</table>

**Source:**
ONS: Subnational population projections for Local Authorities, 2016 based
GLA: 2016 based demographic projections, housing led model
ONS (GP registered), CCG mid year population estimates 2016

Figures 3-7 below show different population projections by age bands, 0-4, 5-17, 18-64, 65-84 and 85 and over for 2011, 2018, 2020 and 2025 (where available).

Figure 3: Population projections for 0-4 year-olds

<table>
<thead>
<tr>
<th>Persons (to nearest 100)</th>
<th>0-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONS 2016 based</td>
<td>15,500</td>
</tr>
<tr>
<td>GLA Housing Linked</td>
<td>15,700</td>
</tr>
<tr>
<td>GLA Central trend Population</td>
<td>15,700</td>
</tr>
<tr>
<td>GLA Short-term Population</td>
<td>15,700</td>
</tr>
<tr>
<td>GLA Long-term Population</td>
<td>15,700</td>
</tr>
<tr>
<td>GP Registered in Merton</td>
<td>Age breakdown not available</td>
</tr>
</tbody>
</table>

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\(^4\) [https://data.london.gov.uk/dataset/projections](https://data.london.gov.uk/dataset/projections)  
\(^5\) [https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiessinenglandtable2](https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiessinenglandtable2)  
\(^6\) [https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/clinicalcommissioninggroupmidyearpopulationestimates](https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/clinicalcommissioninggroupmidyearpopulationestimates)
Figure 4: Population projections for 5-17 year-olds

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2018</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONS 2016 based</td>
<td>32,300</td>
<td>33,500</td>
<td>34,800</td>
<td></td>
</tr>
<tr>
<td>GLA Housing Linked</td>
<td>28,500</td>
<td>32,800</td>
<td>33,700</td>
<td>35,100</td>
</tr>
<tr>
<td>GLA Central trend Population</td>
<td>28,500</td>
<td>33,000</td>
<td>34,000</td>
<td>35,600</td>
</tr>
<tr>
<td>GLA Short-term Population</td>
<td>28,400</td>
<td>33,000</td>
<td>34,200</td>
<td>36,100</td>
</tr>
<tr>
<td>GLA Long-term Population</td>
<td>28,500</td>
<td>32,800</td>
<td>33,600</td>
<td>34,600</td>
</tr>
<tr>
<td>GP Registered in Merton</td>
<td>Age breakdown not available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5: Population projections for 18-64 year-olds

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2018</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONS 2016 based</td>
<td>135,400</td>
<td>136,300</td>
<td>137,800</td>
<td></td>
</tr>
<tr>
<td>GLA Housing Linked</td>
<td>133,900</td>
<td>135,200</td>
<td>137,000</td>
<td>142,800</td>
</tr>
<tr>
<td>GLA Central trend Population</td>
<td>133,900</td>
<td>136,100</td>
<td>138,900</td>
<td>144,500</td>
</tr>
<tr>
<td>GLA Short-term Population</td>
<td>133,900</td>
<td>134,000</td>
<td>135,300</td>
<td>138,400</td>
</tr>
<tr>
<td>GLA Long-term Population</td>
<td>133,900</td>
<td>135,700</td>
<td>138,200</td>
<td>143,100</td>
</tr>
<tr>
<td>GP Registered in Merton</td>
<td>Age breakdown not available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PANSI (18-64)</td>
<td>-</td>
<td>-</td>
<td>141,000</td>
<td>145,400</td>
</tr>
</tbody>
</table>

Figure 6: Population projections for 65-84 year-olds

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2018</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONS 2016 based</td>
<td>22,400</td>
<td>23,000</td>
<td>25,300</td>
<td></td>
</tr>
<tr>
<td>GLA Housing Linked</td>
<td>19,900</td>
<td>22,300</td>
<td>23,000</td>
<td>25,100</td>
</tr>
<tr>
<td>GLA Central trend Population</td>
<td>19,900</td>
<td>22,400</td>
<td>23,000</td>
<td>25,300</td>
</tr>
<tr>
<td>GLA Short-term Population</td>
<td>19,900</td>
<td>22,400</td>
<td>23,100</td>
<td>25,400</td>
</tr>
<tr>
<td>GLA Long-term Population</td>
<td>19,900</td>
<td>22,300</td>
<td>22,900</td>
<td>24,800</td>
</tr>
<tr>
<td>GP Registered in Merton</td>
<td>Age breakdown not available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POPPI (65+)</td>
<td>-</td>
<td>-</td>
<td>23,200</td>
<td>25,500</td>
</tr>
</tbody>
</table>

Figure 7: Population projections for 85 years and over
Summary

- Population projections are an extremely valuable tool, providing they are used correctly.
- The data available is extensive and provides valuable data for planning essential services such as health care provision, transport, development, school places and other essential services.
- The data is regularly updated to provide the most accurate projections possible.
- It is beneficial to understand the differences between the projections in order to ensure the most accurate outcome.

<table>
<thead>
<tr>
<th>Persons</th>
<th>2011</th>
<th>2018</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONS 2016 based</td>
<td>3,600</td>
<td>3,600</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>GLA Housing Linked</td>
<td>3,300</td>
<td>3,600</td>
<td>3,700</td>
<td>4,200</td>
</tr>
<tr>
<td>GLA Central trend Population</td>
<td>3,300</td>
<td>3,600</td>
<td>3,700</td>
<td>4,200</td>
</tr>
<tr>
<td>GLA Short-term Population</td>
<td>3,300</td>
<td>3,700</td>
<td>3,700</td>
<td>4,200</td>
</tr>
<tr>
<td>GLA Long-term Population</td>
<td>3,300</td>
<td>3,600</td>
<td>3,700</td>
<td>4,200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GP Registered in Merton</th>
<th>Age breakdown not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPPI (65+)</td>
<td>-</td>
</tr>
</tbody>
</table>

Important points to note:

- It is important to select the most suitable and appropriate population projection for the work being done which must be a credible and recognised source.
- Both ONS and the GLA provide information on their methodology on all their data sets to assist selection.
- If the data set selected could be questioned, consider adding a caveat to the data, for example, explain the reasons for using a particular data set instead of another.
- When using data it is essential for copyright purposes to name the source of the data set used.
- Figures will often be rounded to the nearest 100 and therefore a total may not exactly equal all of its parts.

For other data and information, please look at the Merton Data Hub.

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