# GLA
# Population Projections
# for Croydon

**For the Strategy Community Group**

**June 2014**

Edmund Fallon, Strategic Intelligence Unit.

**Different GLA Projections available**

Population Projections

| | | |
|---|---|---|
| GLA 2013 round trend-based population projections : | Borough level : | High, Central (BPO*), Low variants |
| | Ward level : | Central (BPO*) |
| GLA 2013 SHLAA-based population projections : | Borough level | |
| | Ward level | |
| GLA 2013 Capped SHLAA-based population projections : | Borough level | |
| | Ward level | |
| GLA 2013 DCLG zero development population projections : | Borough level | |
| | Ward level | |
| GLA 2013 capped zero development population projections : | Borough level | |
| | Ward level | |

GLA 2013 round-trend-based projections is a revised version of the birth projections spreadsheet, and the full GLA projections are available here: http://data.london.gov.uk/datastorefiles/datafiles/demographics/2013rnd_trend_proj_central_2012npp_fertility.xlsx

Household projections

| | | |
|---|---|---|
| GLA 2013 round trend-based household projections : | Borough level : | High, Central (BPO*), Low variants |
| GLA 2013 SHLAA-based household projections : | Borough level | |

BPO* = borough preferred option

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**POPULATION PROJECTION MODELS**

| | GLA - Trend-based population projections | | | GLA - Housing linked population projections | | ONS |
|---|---|---|---|---|---|---|
| | **High** | **Central** | **Low** | **DCLG-based** | **Capped household size** | **ONS 2011 Interim** |
| **MODEL** | Domestic migration trends taken from the period mid-2008 to mid-2012 and held constant for the entire projection period. | Beyond 2017, domestic migration outflows predicted to increase by 5% and domestic migration inflows to decrease by 3%. | Beyond 2017, domestic migration outflows predicted to increase by 10% and domestic migration inflows to decrease by 6% | Household representative rates (HRR) from DCLG's 2011-based household projections are used to match population to household spaces available. Then HRRs are extrapolated by GLA beyond 2021. | Extension to the DCLG-based model with link to development assumption that household sizes will continue at 2012 levels. | Population taken from Census 2011 base and projected forwards. |
| **PROS** | • Equivalent to ONS Subnational Population Projections.<br>• Trend population and household projections form part of the FALP (Further Alterations to the London Plan) and SHMA (Strategic Housing Market Assessment).<br>• The variants reflect uncertain impact of economic recovery on domestic migration based on annual figures from NHS, higher education, characteristics from 2001 census data (age, etc) and ONS subnational data.<br>• Used in Further Alteration to London Plan (FALP) and Strategic Housing Market Assessment (SHMA).<br>• Now includes net migration flow from Census 2011, updated fertility rates and mortality trends, adjustment to number of children in 2011 mid-year estimate; updated household formation assumptions; revised back series of population for 2002-2010. | | | • Based on household formation trends from 1971 to 2011.<br>• Produces set of household projections consistent with population outputs.<br>• Tends to work well for many areas but at odds with Outer London boroughs where recent population growth is high and planned development is low.<br>• Internal migration adjusted to fit household number to household spaces. | • GLA recommendation for use by Croydon.<br>• Allows greater flexibility to follow population growth in trend-based projections.<br>• Household size has increased between 2001 and 2011 with more older people in smaller household units.<br>• Particularly relevant to use where there has been strong population growth and relatively low levels of planned development, | • Starting base most accurate at the time.<br>• The ONS 2012 based subnational population projection (SPP), due out in Summer 2014, will supersede this model and have projections from 2012-2037. |
| **CONS** | • No development data used at borough level.<br>• Based only on trends of fertility, migration and mortality.<br>• (Latest International migration data based on 2005 only.)<br>• Assumption that economic recovery will happen in 2017.<br>• Assumptions on mortality, fertility and international migration same for each of the 3 variants (High, Central, Low).<br>• Domestic migration assumptions differ.<br>• Tend to imply increasing household sizes in the future. | | | • Can under project for local authorities with rising household sizes.<br>• Assumes larger household sizes than 2011 Census.<br>• Assumes more dwellings will mean higher net migration.<br>• Developments modest compared to recent growth.<br>• Zero development. | • No consistent household projections available from this model.<br>• Implies that household sizes will be falling into the future (probably true for Croydon's ageing pop.).<br>• Capping households at 2012 level is arbitrary.<br>• Projected overcrowding not in the model. | • No consistent back series to help predict probability of future population projection.<br>• Fertility data was "inflated" to match base from 2011 Census.<br>• ONS missed some children (0-4 years and 11 years) which affected some boroughs more than others. |

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**CROYDON TOTAL POPULATION PROJECTIONS FROM THE DIFFERENT MODELS**

| ONS Interim 2011 based SPP | | GLA 2013 High | | GLA 2013 Central | | GLA 2013 Low | | GLA 2013 SHLAA (DCLG-linked) | | GLA 2013 SHLAA (Household size capped) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **2001** | | **2001** | 335,479 | **2001** | 335,479 | **2001** | 335,479 | **2001** | 335,479 | **2001** | 335,479 |
| **2002** | | **2002** | 337,651 | **2002** | 337,651 | **2002** | 337,651 | **2002** | 337,651 | **2002** | 337,651 |
| **2003** | | **2003** | 340,206 | **2003** | 340,206 | **2003** | 340,206 | **2003** | 340,207 | **2003** | 340,207 |
| **2004** | | **2004** | 344,195 | **2004** | 344,195 | **2004** | 344,195 | **2004** | 344,192 | **2004** | 344,192 |
| **2005** | | **2005** | 348,831 | **2005** | 348,831 | **2005** | 348,831 | **2005** | 348,824 | **2005** | 348,824 |
| **2006** | | **2006** | 348,652 | **2006** | 348,652 | **2006** | 348,652 | **2006** | 348,653 | **2006** | 348,653 |
| **2007** | | **2007** | 350,661 | **2007** | 350,661 | **2007** | 350,661 | **2007** | 350,661 | **2007** | 350,661 |
| **2008** | | **2008** | 354,132 | **2008** | 354,132 | **2008** | 354,132 | **2008** | 354,131 | **2008** | 354,131 |
| **2009** | | **2009** | 355,974 | **2009** | 355,974 | **2009** | 355,974 | **2009** | 355,976 | **2009** | 355,976 |
| **2010** | | **2010** | 360,820 | **2010** | 360,820 | **2010** | 360,820 | **2010** | 360,817 | **2010** | 360,817 |
| **2011** | 364,815 | **2011** | 364,815 | **2011** | 364,815 | **2011** | 364,815 | **2011** | 364,815 | **2011** | 364,815 |
| **2012** | 367,788 | **2012** | 369,045 | **2012** | 369,045 | **2012** | 369,045 | **2012** | 367,129 | **2012** | 369,031 |
| **2013** | 371,005 | **2013** | 373,090 | **2013** | 373,090 | **2013** | 373,090 | **2013** | 370,270 | **2013** | 373,088 |
| **2014** | 374,316 | **2014** | 377,163 | **2014** | 377,163 | **2014** | 377,163 | **2014** | 373,389 | **2014** | 377,154 |
| **2015** | 377,695 | **2015** | 381,174 | **2015** | 381,174 | **2015** | 381,174 | **2015** | 376,409 | **2015** | 381,171 |
| **2016** | 381,083 | **2016** | 385,141 | **2016** | 385,141 | **2016** | 385,141 | **2016** | 378,098 | **2016** | 384,958 |
| **2017** | 384,474 | **2017** | 389,077 | **2017** | 389,077 | **2017** | 389,077 | **2017** | 379,832 | **2017** | 388,104 |
| **2018** | 387,865 | **2018** | 392,938 | **2018** | 392,190 | **2018** | 391,437 | **2018** | 381,586 | **2018** | 391,257 |
| **2019** | 391,270 | **2019** | 396,742 | **2019** | 395,248 | **2019** | 393,761 | **2019** | 383,277 | **2019** | 394,415 |
| **2020** | 394,706 | **2020** | 400,508 | **2020** | 398,283 | **2020** | 396,076 | **2020** | 384,871 | **2020** | 397,572 |

*Source : ONS & GLA Projection Models*

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**CROYDON TOTAL POPULATION PROJECTIONS FROM THE DIFFERENT MODELS**

| ONS Interim 2011 based SPP | | GLA 2013 High | | GLA 2013 Central | | GLA 2013 Low | | GLA 2013 SHLAA (DCLG-linked) | | GLA 2013 SHLAA (Household size capped) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **2021** | 398,156 | **2021** | 404,248 | **2021** | 401,281 | **2021** | 398,342 | **2021** | 387,184 | **2021** | 401,285 |
| **2022** | | **2022** | 407,864 | **2022** | 404,179 | **2022** | 400,503 | **2022** | 389,991 | **2022** | 404,176 |
| **2023** | | **2023** | 411,371 | **2023** | 406,963 | **2023** | 402,583 | **2023** | 392,504 | **2023** | 406,964 |
| **2024** | | **2024** | 414,756 | **2024** | 409,643 | **2024** | 404,568 | **2024** | 394,967 | **2024** | 409,637 |
| **2025** | | **2025** | 418,047 | **2025** | 412,213 | **2025** | 406,437 | **2025** | 397,353 | **2025** | 412,205 |
| **2026** | | **2026** | 421,185 | **2026** | 414,656 | **2026** | 408,198 | **2026** | 398,297 | **2026** | 414,653 |
| **2027** | | **2027** | 424,234 | **2027** | 417,004 | **2027** | 409,870 | **2027** | 399,198 | **2027** | 417,000 |
| **2028** | | **2028** | 427,230 | **2028** | 419,310 | **2028** | 411,511 | **2028** | 400,113 | **2028** | 419,311 |
| **2029** | | **2029** | 430,180 | **2029** | 421,584 | **2029** | 413,123 | **2029** | 401,078 | **2029** | 421,575 |
| **2030** | | **2030** | 433,063 | **2030** | 423,797 | **2030** | 414,696 | **2030** | 402,082 | **2030** | 423,792 |
| **2031** | | **2031** | 435,903 | **2031** | 425,973 | **2031** | 416,235 | **2031** | 403,031 | **2031** | 425,967 |
| **2032** | | **2032** | 438,680 | **2032** | 428,090 | **2032** | 417,735 | **2032** | 403,994 | **2032** | 428,089 |
| **2033** | | **2033** | 441,401 | **2033** | 430,177 | **2033** | 419,216 | **2033** | 404,934 | **2033** | 430,174 |
| **2034** | | **2034** | 444,066 | **2034** | 432,215 | **2034** | 420,655 | **2034** | 405,931 | **2034** | 432,214 |
| **2035** | | **2035** | 446,692 | **2035** | 434,228 | **2035** | 422,085 | **2035** | 407,015 | **2035** | 434,224 |
| **2036** | | **2036** | 449,274 | **2036** | 436,214 | **2036** | 423,497 | **2036** | 408,168 | **2036** | 436,209 |
| **2037** | | **2037** | 451,807 | **2037** | 438,161 | **2037** | 424,878 | **2037** | 409,392 | **2037** | 438,148 |
| **2038** | | **2038** | 454,293 | **2038** | 440,067 | **2038** | 426,241 | **2038** | 410,632 | **2038** | 440,053 |
| **2039** | | **2039** | 456,741 | **2039** | 441,953 | **2039** | 427,588 | **2039** | 411,929 | **2039** | 441,933 |
| **2040** | | **2040** | 459,144 | **2040** | 443,800 | **2040** | 428,922 | **2040** | 413,275 | **2040** | 443,791 |
| **2041** | | **2041** | 461,517 | **2041** | 445,639 | **2041** | 430,258 | **2041** | 414,672 | **2041** | 445,627 |

*Source : ONS & GLA Projection Models*

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## GLA Population Projections : Percentage increases on 2014 after every 5 years

**0-4 years** DIFFERENCES (%)

| | 2014 -2019 | 2014 - 2024 | 2014 - 2029 | 2014 - 2034 | 2014 - 2039 |
|---|---|---|---|---|---|
| GLA 2013 SHLAA | -2.7% | -6.7% | -6.7% | -10.7% | -9.3% |
| GLA 2013 SHLAA Capped | -0.3% | -3.4% | -3.4% | -5.4% | -3.6% |
| GLA 2013 High | 0.5% | -1.9% | -1.9% | -2.7% | -0.3% |
| GLA 2013 Central | 0.0% | -3.7% | -3.7% | -6.1% | -4.2% |
| GLA 2013 Low | -0.5% | -5.4% | -5.4% | -9.3% | -7.9% |

**5-10 years** DIFFERENCES (%)

| | 2014 -2019 | 2019 - 2024 | 2024 - 2029 | 2029 - 2034 | 2034 - 2039 |
|---|---|---|---|---|---|
| GLA 2013 SHLAA | 5.9% | 5.2% | 0.1% | -3.3% | -3.9% |
| GLA 2013 SHLAA Capped | 8.0% | 8.8% | 5.4% | 3.2% | 3.0% |
| GLA 2013 High | 8.7% | 10.3% | 7.9% | 6.4% | 6.8% |
| GLA 2013 Central | 8.4% | 9.0% | 5.3% | 2.8% | 2.5% |
| GLA 2013 Low | 8.1% | 7.7% | 2.8% | -0.6% | -1.6% |

**11-18 years** DIFFERENCES (%)

| | 2014 -2019 | 2019 - 2024 | 2024 - 2029 | 2029 - 2034 | 2034 - 2039 |
|---|---|---|---|---|---|
| GLA 2013 SHLAA | 2.5% | 13.3% | 14.4% | 10.0% | 6.4% |
| GLA 2013 SHLAA Capped | 3.9% | 15.9% | 19.1% | 16.8% | 14.2% |
| GLA 2013 High | 4.3% | 17.1% | 21.5% | 20.2% | 18.3% |
| GLA 2013 Central | 4.0% | 16.2% | 19.7% | 17.2% | 14.2% |
| GLA 2013 Low | 3.8% | 15.3% | 17.8% | 14.2% | 10.1% |

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**19-64 years** DIFFERENCES (%)

| | 2014 -2019 | 2019 - 2024 | 2024 - 2029 | 2029 - 2034 | 2034 - 2039 |
|---|---|---|---|---|---|
| GLA 2013 SHLAA | 1.7% | 3.2% | 3.5% | 3.8% | 5.1% |
| GLA 2013 SHLAA Capped | 3.8% | 6.2% | 7.8% | 9.6% | 11.8% |
| GLA 2013 High | 4.5% | 7.6% | 10.1% | 12.8% | 15.7% |
| GLA 2013 Central | 4.0% | 6.1% | 7.7% | 9.6% | 11.8% |
| GLA 2013 Low | 3.6% | 4.6% | 5.4% | 6.5% | 8.0% |

**65+ years** DIFFERENCES (%)

| | 2014 -2019 | 2019 - 2024 | 2024 - 2029 | 2029 - 2034 | 2034 - 2039 |
|---|---|---|---|---|---|
| GLA 2013 SHLAA | 8.3% | 19.9% | 35.9% | 50.1% | 58.7% |
| GLA 2013 SHLAA Capped | 9.5% | 21.9% | 39.7% | 56.0% | 66.5% |
| GLA 2013 High | 9.8% | 22.9% | 41.6% | 59.1% | 70.9% |
| GLA 2013 Central | 9.6% | 22.1% | 40.0% | 56.5% | 67.3% |
| GLA 2013 Low | 9.4% | 21.3% | 38.4% | 53.9% | 63.7% |

**ALL years** DIFFERENCES (%)

| | 2014 -2019 | 2019 - 2024 | 2024 - 2029 | 2029 - 2034 | 2034 - 2039 |
|---|---|---|---|---|---|
| GLA 2013 SHLAA | 2.6% | 5.8% | 7.4% | 8.7% | 10.3% |
| GLA 2013 SHLAA Capped | 4.6% | 8.6% | 11.8% | 14.6% | 17.2% |
| GLA 2013 High | 5.2% | 10.0% | 14.1% | 17.7% | 21.1% |
| GLA 2013 Central | 4.8% | 8.6% | 11.8% | 14.6% | 17.2% |
| GLA 2013 Low | 4.4% | 7.3% | 9.5% | 11.5% | 13.4% |

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**GLA**

Methodology of the trend-based projections :

http://data.london.gov.uk/datastore/package/gla-2013-round-population-and-household-projections

An update detailing the methodology of the trend-based projections can be downloaded :
http://data.london.gov.uk/datastorefiles/documents/update-03-2014-2013rnd_trend-proj-methodology.pdf.

GLA 2013 round-trend-based projections with revised birth projections :
http://data.london.gov.uk/datastorefiles/datafiles/demographics/2013rnd_trend_proj_central_2012npp_fertility.xlsx

The fertility assumptions :
http://www.ons.gov.uk/ons/rel/npp/national-population-projections/2012-based-projections/rep-fertility.html#tab-Assumptions-for-Fertility-Variants

**ONS (SPP)**

: http://www.ons.gov.uk/ons/about-ons/get-involved/events/events/2012-based-subnational-population-projections-consultation-/index.html
Update expected in Summer 2014

## For more information or advice on using GLA projections please contact :

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