

## ONS 2006-based Subnational Population Projections Consultation

### Introduction

The Office for National Statistics (ONS) has recently opened a consultation on the migration assumptions as proposed to be used in the 2006-based subnational population projections (SNPP), the results of which are due to be published in June 2008. The consultation closes on 17<sup>th</sup> April.

The consultation is directed at local authorities and local health bodies and focuses on the migration levels used in the first year of the projection: 2006-07. The consultation presents two migration streams: flows within England (internal) and flows to everywhere outside England (International). Most users of mid-year population estimates will be aware of the distinction between using England in the projections and the United Kingdom in the familiar migration change analyses that accompany the mid-year estimates.

This *Update* is intended to give a brief analysis of the data circulated by ONS for each London borough and to compare that with the average data for 2001-06 contained within mid-year estimate change analysis. The recent *DMAG Briefing 2008-10: London Borough Migration 2001-06* has presented the annual MYE data for within UK and International flows for each borough. It also showed the approximate annual average values for flows within England and beyond England to assist in the consultation exercise.

### Background to ONS Subnational Projections

ONS aims to produce subnational projections for England every second year. The last full set was the 2004-based, which were published in 2006 and revised in 2007 following the ONS revision to international migration estimation procedures and the associated revision to the mid-2004 population estimates. The revised projection was required in order to supply population for use in the CLG local authority grant allocation calculations for financial years 2008/09 to 2010/11. It is currently not proposed that the 2006 SNPP will be used in a follow-up allocation, but it is likely that the 2008-based SNPP will be used in 2010 for subsequent allocations.

The 2004-based projections were preceded by an online consultation that was organised by the (then) Office of the Deputy Prime Minister. Consultations have always focussed on the initial levels of the migration streams used in the projections. Once they have been agreed and set for the first year the model automatically uses the data sequentially in subsequent years.

Migration within England is 'zero-net-sum' for each single year of age used in the model. This means that a migrant must have an origin and a destination. The process is based on the probabilities of leaving each origin (by age/gender) and associated distribution matrices of the resulting outflow to each other area in England. The data to establish the probabilities and the matrix are based on the last five years data, consistent with the internal migration as used in the mid-year estimates from 2001 to 2006, but respecting England rather than the UK as the international boundary. Hence the internal flows are dynamic with the changing local population. Generally a local authority with an increasing population will see an increasing outflow over time, and *vice versa*.

International flows are treated differently. The 2006-based ONS population projection for England produces an annual net flow by age/gender, which is a constraint for the SNPP. The SNPP uses the equivalent gross flows. These gross flows are apportioned to local authority areas on the basis of the average flows over the period 2001-06, with some exceptions described later. These apportionments are then held constant. For the 2006-based national projections the net international flow to England is 153.5 thousand in 2006-07, rising to 210 thousand in 2007-08 and then falling to reach a long-term assumption of 171.5 thousand from 2014-15.

This explains why the consultation projections show variations over time, but it is just the 2006-07 levels that are being consulted upon.

### **The Consultation Ground Rules**

ONS has strict requirements for accepting amendments to the migration assumptions for the first projection year. The projections are described as 'trend-based' with the migration trends being, effectively, the average annual values of the previous five years, ie 2001-06, modelled and/or constrained as described above for 2006-07. There are exceptional cases for altering the consultation values. These are essentially that the five years data are atypical of the underlying trend and are unsustainable in the future. ONS needs to receive clear evidence to support such a claim. Any change accepted for a single area will have knock-on impacts on all other local authorities due to the ways in which migration is modelled.

Planned changes in local housing provision and employment opportunities in future years are not acceptable arguments for revisions. However, examples of one-off changes in 2001-06 due to closure of large local employers or to increases in university enrolment may be able to be considered. It is, however very doubtful that such a case could be made in London. Local authorities need to be able to point to alternate indicators of recent migration to support an argument or to challenge the accuracy of the conversion from trend data for 2001-06 into projected estimates for 2006-07. Data relating to later time periods will not initially be considered, however data post-2006 may be considered to verify any other acceptable evidence.

Other data indicating international inflows are available: NINos and NHS Flag 4s (see *Briefing 2008-10*). It is unlikely that ONS would consider their use for a single authority but may wish to experiment with them in variant projections later in 2008 (see below).

## Analysis

In setting the internal migration flows ONS has used the 2001-06 average of patient register data. Apart from using only flows in England, this is very similar to the internal migration data from the mid-year estimates change analysis.

For international flows the data have been used in three streams: cross-border with the rest of the UK; rest of the World; and asylum seekers and visitor switchers. ONS has provided the national constraints for these streams, plus the flow of armed forces to and from Northern Ireland, which is not significant to London.

**Table 1: Assumed Migration to/from England: 2006-07 (thousands)**

	<b>In</b>	<b>Out</b>	<b>Net</b>
<b>Cross-border</b>	<b>101.5</b>	<b>119.0</b>	<b>-17.5</b>
<b>Rest of the World</b>	<b>465.0</b>	<b>341.5</b>	<b>124.0</b>
<b>AS &amp; VS</b>	<b>71.5</b>	<b>24.5</b>	<b>47.5</b>
NI Armed Forces	6.0	6.0	0.0
<b>Total</b>	<b>644.5</b>	<b>491.0</b>	<b>153.5</b>

NB data are rounded to nearest 500

In the projections local cross-border flows are treated much as internal flows within England and based on the average of the five years 2001-06. However, they are constrained to national assumed totals and not based on probabilities.

Rest of the World flows are based on the International Passenger Survey (including migrant switchers) and flows with Ireland. The local distribution is based on five-year averages, but constrained to the above total flows.

Asylum seekers and visitor switchers are distributed according to that used in the 2006 mid-year estimates. This is an important difference as the asylum flows have reduced substantially over the decade.

The differences in the ways the flows are treated and, particularly, the constraining totals for flows with the rest of the World, which are at the top end (inflows) or outside (outflows) the range of the flows for the past five years, explains why at first inspection the consultation international flows for London look to be high. However there are still issues with these flows that are discussed below.

The following three tables show for the boroughs, London and England internal and international inflows, outflows and net flows from the mid-year estimates and the SNPP. The MYE data are annual averages over 2001-06 and the SNPP are the consultation values for 2006-07.

### ***Inflows (Table 2:***

Flows different from that expected by more than 500 are highlighted – blue if too low and gold if too high. The SNPP internal inflows appear to be in line with expectations from the MYE. However there are a few questions about the SNPP international inflows. Camden is the only borough where the international inflow appears to be too high by more than 500, but there are

seven boroughs where the inflow appears to be too low by at least 500. In three boroughs (Enfield, Haringey, and Newham) the size of the flow is smaller by more than a thousand. For London as a whole the inflow is well above the average of the past five years, but given the way in which the flow has been disaggregated it appears to be within an acceptable range.

***Outflows (Table 3):***

Flows different from that expected by more than 500 are highlighted – all appear to be too high. The SNPP internal outflows appear to be in line with expectations from the MYE with the exception of Newham where the value is at the very top of the range, equivalent to the average flow with the rest of the UK. Again, for London and most boroughs the international outflow appears to be high. For London this could be by about 5 thousand. Seven boroughs may have outflows too large by at least 500 with the three central boroughs (Camden, Kensington & Chelsea and Westminster) all appearing to be more than a thousand too high.

***Net Flows (Table 4):***

Flows different from that expected by more than 500 are highlighted – all highlighted international flows appear to be too low. The SNPP internal outflows appear to be in line with expectations from the MYE with the exception of the small inflow projected for Bromley, which even so may be only 500 too high.

The SNPP international inflow for London is well down on the average of the past five years. Given the way in which the international flows have been disaggregated it would be expected that the net gain would have been around 71 thousand. The difference is mainly due to the SNPP showing a high outflow. The international net loss has only been below this level once in the past five years – the ‘rogue’ year of 2002-03. The international net flows in fifteen boroughs appear also to be too low by more than 500, with five different by more than a thousand. The most extreme is Newham, too low by 1,600.

***Summary***

There are small differences in the gross and net internal flows in many boroughs from those expected from five-year averages, but in terms of the net results only one is wide of the expected level by 500. Many of the international flows are at variance from five-year averages. The constraints for England and the more complex methods used by ONS mean that averages are not the best comparison to make for the international flows.

Using only the five-year averages as a comparator the overall net migration for London in 2006-07 appears to be too low at a loss of 30.6 thousand, which in the last five years was only exceeded in the outlier year 2002-03 at over 48 thousand and which must be compared to an average five-year loss of just 18.6 thousand.

Given the methods used by ONS it would have been expected that London’s net loss to the rest of England would have been 96 thousand (based entirely on five-year averages), plus a net cross-border loss of 3 thousand and gains from the rest of the world (55 thousand) and asylum seekers and visitor switchers (18 thousand). This is an overall net loss of about 25 thousand.

As the SNPP net loss in 2006-07 is less than 31 thousand the London difference is acceptable given that over 700 thousand migrants have had to be modelled, not counting moves between boroughs, in each year. However it appears that the SNPP shows some boroughs to experience net losses in 2006-07 rather higher than expected.

**Table 2: Internal and International Inflows (thousands)**

	MYE UK 2001-06	MYE 'England' 2001-06	SNPP Internal 2006-07	MYE Ex-UK 2001-06	MYE 'Ex-England' 2001-06	SNPP International 2006-07
City of London	0.8	0.8	0.8	0.3	0.3	0.4
Barking & Dagenham	9.1	8.8	9.1	1.6	1.9	1.7
Barnet	17.9	17.4	17.6	7.1	7.6	8.2
Bexley	10.4	10.1	10.3	0.8	1.0	1.0
Brent	14.2	13.8	14.0	9.4	9.8	9.8
Bromley	15.0	14.6	14.8	1.9	2.3	2.4
Camden	17.2	16.8	16.6	10.7	11.2	12.7
Croydon	16.7	16.3	16.6	4.6	5.1	5.1
Ealing	17.5	17.0	17.0	9.4	9.9	10.9
Enfield	15.0	14.6	14.9	4.1	4.5	3.8
Greenwich	14.2	13.8	13.9	3.4	3.8	3.9
Hackney	13.0	12.6	12.7	4.5	4.8	4.5
Hammersmith & Fulham	13.4	13.0	12.9	6.6	7.0	7.5
Haringey	15.4	15.0	15.1	7.3	7.7	6.8
Harrow	12.5	12.2	12.4	4.0	4.3	4.3
Havering	9.3	9.0	9.3	0.8	1.0	1.0
Hillingdon	13.8	13.4	13.5	3.2	3.6	3.8
Hounslow	13.2	12.8	12.9	5.7	6.0	6.5
Islington	15.5	15.0	15.0	5.8	6.2	6.6
Kensington & Chelsea	9.6	9.4	9.4	9.9	10.2	11.1
Kingston upon Thames	10.5	10.2	10.2	3.4	3.7	4.0
Lambeth	21.9	21.3	21.3	6.6	7.2	7.4
Lewisham	16.2	15.7	15.9	4.5	4.9	5.0
Merton	12.9	12.5	12.7	5.3	5.7	5.9
Newham	13.4	13.1	13.3	8.2	8.6	8.2
Redbridge	15.1	14.7	15.0	3.7	4.1	4.2
Richmond upon Thames	12.5	12.1	12.1	3.9	4.2	4.7
Southwark	17.7	17.3	17.4	8.6	9.1	9.9
Sutton	9.7	9.4	9.6	1.3	1.5	1.5
Tower Hamlets	13.2	12.8	12.8	6.3	6.6	7.6
Waltham Forest	11.5	11.2	11.4	4.5	4.8	4.5
Wandsworth	24.7	24.0	23.9	8.2	8.8	9.9
Westminster	17.7	17.2	17.1	13.1	13.6	15.0
<b>London</b>	<b>156.2</b>	<b>143.4</b>	<b>145.5</b>	<b>178.5</b>	<b>191.3</b>	<b>199.6</b>
<b>England</b>	<b>98.8</b>	<b>0.0</b>	<b>0.0</b>	<b>489.0</b>	<b>587.8</b>	<b>644.5</b>

**Table 3: Internal and International Outflows (thousands)**

	<b>MYE UK 2001-06</b>	<b>MYE 'England' 2001-06</b>	<b>SNPP Internal 2006-07</b>	<b>MYE Ex-UK 2001-06</b>	<b>MYE 'Ex-England' 2001-06</b>	<b>SNPP International 2006-07</b>
<b>City of London</b>	0.7	0.7	0.7	0.3	0.3	0.4
<b>Barking &amp; Dagenham</b>	11.1	10.8	11.0	0.7	1.0	1.3
<b>Barnet</b>	20.8	20.2	20.0	4.3	4.9	6.2
<b>Bexley</b>	10.5	10.2	10.2	0.7	1.0	1.1
<b>Brent</b>	21.8	21.2	21.5	4.1	4.7	5.9
<b>Bromley</b>	15.0	14.6	14.4	2.1	2.5	2.8
<b>Camden</b>	19.4	18.8	18.7	5.2	5.7	7.5
<b>Croydon</b>	20.3	19.7	19.5	2.8	3.4	4.0
<b>Ealing</b>	24.7	24.0	23.8	5.0	5.7	6.7
<b>Enfield</b>	17.4	16.9	16.9	2.0	2.5	3.0
<b>Greenwich</b>	16.2	15.7	15.8	2.1	2.6	3.0
<b>Hackney</b>	18.3	17.8	18.0	2.0	2.5	2.8
<b>Hammersmith &amp; Fulham</b>	16.6	16.2	16.2	4.6	5.0	6.2
<b>Haringey</b>	21.5	20.9	21.1	2.9	3.5	3.9
<b>Harrow</b>	14.0	13.6	13.6	2.8	3.2	3.5
<b>Havering</b>	8.9	8.6	8.6	0.7	0.9	1.1
<b>Hillingdon</b>	15.5	15.1	15.0	2.0	2.4	2.9
<b>Hounslow</b>	17.2	16.7	16.6	3.0	3.5	4.2
<b>Islington</b>	18.0	17.5	17.6	3.4	4.0	4.5
<b>Kensington &amp; Chelsea</b>	11.8	11.5	11.5	5.8	6.2	7.9
<b>Kingston upon Thames</b>	11.2	10.9	10.8	2.0	2.3	2.8
<b>Lambeth</b>	28.4	27.6	27.9	3.3	4.1	4.4
<b>Lewisham</b>	20.5	20.0	20.0	2.0	2.6	3.0
<b>Merton</b>	15.1	14.7	14.7	3.2	3.6	4.2
<b>Newham</b>	22.8	22.1	22.8	2.6	3.3	4.2
<b>Redbridge</b>	15.8	15.3	15.4	2.4	2.8	3.4
<b>Richmond upon Thames</b>	12.8	12.5	12.2	3.7	4.0	4.8
<b>Southwark</b>	23.4	22.7	23.0	3.2	3.9	4.6
<b>Sutton</b>	9.8	9.5	9.4	1.2	1.5	1.5
<b>Tower Hamlets</b>	16.6	16.1	16.3	3.2	3.7	4.2
<b>Waltham Forest</b>	15.9	15.4	15.6	2.2	2.6	2.9
<b>Wandsworth</b>	28.5	27.6	27.7	5.5	6.3	7.4
<b>Westminster</b>	19.0	18.5	18.5	7.5	8.1	10.5
<b>London</b>	<b>255.1</b>	<b>239.2</b>	<b>239.1</b>	<b>98.2</b>	<b>114.1</b>	<b>136.5</b>
<b>England</b>	<b>120.2</b>	<b>0.0</b>	<b>0.0</b>	<b>310.9</b>	<b>431.1</b>	<b>491.0</b>

**Table 4: Internal and International Net Flows (thousands)**

	MYE UK 2001-06	MYE 'England' 2001-06	SNPP Internal 2006-07	MYE Ex-UK 2001-06	MYE 'Ex-England' 2001-06	SNPP International 2006-07
City of London	0.1	0.1	0.0	0.0	0.0	0.0
Barking & Dagenham	-2.0	-2.0	-1.9	0.9	0.9	0.5
Barnet	-2.9	-2.8	-2.4	2.9	2.8	2.0
Bexley	-0.2	-0.2	0.1	0.1	0.1	0.0
Brent	-7.6	-7.4	-7.5	5.3	5.1	3.9
Bromley	0.0	0.0	0.5	-0.2	-0.2	-0.4
Camden	-2.1	-2.1	-2.0	5.5	5.4	5.2
Croydon	-3.5	-3.4	-3.0	1.9	1.8	1.1
Ealing	-7.2	-7.0	-6.8	4.5	4.3	4.1
Enfield	-2.4	-2.3	-2.0	2.1	2.0	0.8
Greenwich	-2.0	-2.0	-1.9	1.3	1.2	0.9
Hackney	-5.3	-5.1	-5.3	2.5	2.3	1.8
Hammersmith & Fulham	-3.3	-3.2	-3.3	2.1	2.0	1.3
Haringey	-6.1	-5.9	-6.0	4.4	4.2	2.9
Harrow	-1.5	-1.4	-1.3	1.2	1.2	0.9
Havering	0.4	0.4	0.7	0.1	0.1	-0.1
Hillingdon	-1.7	-1.6	-1.5	1.3	1.2	0.8
Hounslow	-4.0	-3.9	-3.8	2.6	2.5	2.3
Islington	-2.6	-2.5	-2.7	2.4	2.3	2.1
Kensington & Chelsea	-2.2	-2.1	-2.2	4.1	4.0	3.2
Kingston upon Thames	-0.7	-0.7	-0.5	1.4	1.3	1.2
Lambeth	-6.5	-6.3	-6.5	3.3	3.1	3.1
Lewisham	-4.4	-4.2	-4.1	2.5	2.4	1.9
Merton	-2.2	-2.1	-2.0	2.1	2.1	1.8
Newham	-9.3	-9.1	-9.5	5.6	5.3	4.0
Redbridge	-0.7	-0.6	-0.4	1.3	1.3	0.8
Richmond upon Thames	-0.4	-0.3	-0.1	0.2	0.2	-0.1
Southwark	-5.6	-5.4	-5.6	5.4	5.2	5.3
Sutton	-0.1	-0.1	0.2	0.1	0.1	0.0
Tower Hamlets	-3.4	-3.3	-3.6	3.0	2.9	3.4
Waltham Forest	-4.4	-4.3	-4.2	2.3	2.2	1.6
Wandsworth	-3.8	-3.7	-3.8	2.7	2.6	2.5
Westminster	-1.3	-1.3	-1.5	5.6	5.5	4.4
<b>London</b>	<b>-98.9</b>	<b>-95.9</b>	<b>-93.6</b>	<b>80.3</b>	<b>77.3</b>	<b>63.1</b>
<b>England</b>	<b>-21.4</b>	<b>0.0</b>	<b>0.0</b>	<b>178.1</b>	<b>156.7</b>	<b>153.5</b>

## **Variant Projections**

In the second part of the consultation ONS has opened up the possibility of producing a number of variant projections, including housing constrained projections, later in 2008. This is an opportunity to follow up the discussion at the BSPS meeting on projections held last February. It was expressed by several participants that ONS should experiment with NHS Flag 4 data (new GP patients with a previous address overseas) and DWP NINo data (new national insurance registrations of overseas nationals) as alternatives, or in concert with, TIM, the ONS measure of total international migration.

It is proposed to discuss this issue at the next GLA Demography Liaison group to be held on 12 June. The aim will be to get a London-wide view of the best approach to request ONS to develop later in the year.