

ONS Population Turnover Rates

In May 2006, ONS released Population Turnover Rates for mid-year to mid-year 2000-01, 2001-02 and 2002-03. The Turnover Rates are in- and out-migration rates in England and Wales per 1,000 resident population. For 2001-02 and 2002-03 the data relate to Middle Layer Super Output Areas (MSOAs), while for 2000-01 the rates are for the 2003 ward boundaries.

The data presented in this *Update* are for mid-2002 to mid-2003, however, the map shows the average of 2001-02 and 2002-03 data.

The higher the population turnover rate, the higher the level of migration in or out of the MSOA relative to the existing population.

Overall, the highest inflow turnover rate, of 315 per 1,000 resident population, was found in a MSOA in Westminster. In one of the MSOAs in Kingston upon Thames there was an inflow turnover rate of 274, and MSOAs in Camden, Greenwich, Hillingdon, Richmond upon Thames and Wandsworth had population turnover of greater than 150 per 1,000 population.

The lowest inflow rates were found in MSOAs in Havering, Hammersmith & Fulham and Kensington & Chelsea. Overall, the lowest rate, in Havering, was a population turnover of 44 persons per 1,000 resident population.

Generally, the areas with high inflow turnover rates also have high outflow turnover rates, and vice versa. The highest rate is in the same MSOA in Kingston upon Thames that exhibits the high inflow, with a turnover of 280 per 1,000 population. In Barnet, a MSOA showed an outflow turnover of 204, and MSOAs in Camden, Lambeth, Wandsworth and Westminster also showed high outflow turnover rates.

The lowest overall outflow rate was in a Havering MSOA, 42 persons per 1,000 resident population. Of the 15 lowest outflow rates, eight were in Havering. Low rates were also found in Bromley, Enfield, Kingston upon Thames, Kensington & Chelsea and Redbridge.

Chart 1 is a scatter graph showing the inflow and outflow rates for each MSOA in London. It clearly shows overall that low inflow turnover rates correspond to low outflow turnover rates. In fact, the correlation coefficient (where 0 indicates no correlation and 1 indicates complete correlation between two series) of 0.746 shows a strong correlation between inflow and outflow turnover rates.

Table 1: Comparison of lowest and highest rates and correlation between in and outflows, by broad age group

	All Persons	Age 1-14	Age 15-24	Age 25-44	Age 45-64	Age 65+
Min inflow <i>in borough</i>	44 <i>Havering</i>	22 <i>Camden</i>	38 <i>Kensington & Chelsea</i>	58 <i>Hammersmith & Fulham</i>	20 <i>Harrow</i>	4 <i>Havering</i>
Max inflow <i>in borough</i>	315 <i>Westminster</i>	189 <i>Greenwich</i>	1,283 <i>Westminster</i>	202 <i>Wandsworth</i>	109 <i>Greenwich</i>	101 <i>Greenwich</i>
Min outflow <i>in borough</i>	42 <i>Havering</i>	31 <i>Havering</i>	43 <i>Kensington & Chelsea</i>	68 <i>Havering</i>	24 <i>Croydon</i>	14 <i>Bromley</i>
Max outflow <i>in borough</i>	280 <i>Kingston</i>	273 <i>Redbridge</i>	1,019 <i>Kingston</i>	282 <i>Barnet</i>	136 <i>Barking & Dagenham</i>	92 <i>Newham</i>
Correlation coefficient	0.746	0.409	0.778	0.549	0.495	0.077

Chart 1: Scatter graph comparing inflow and outflow population turnover rates, all ages, London MSOAs

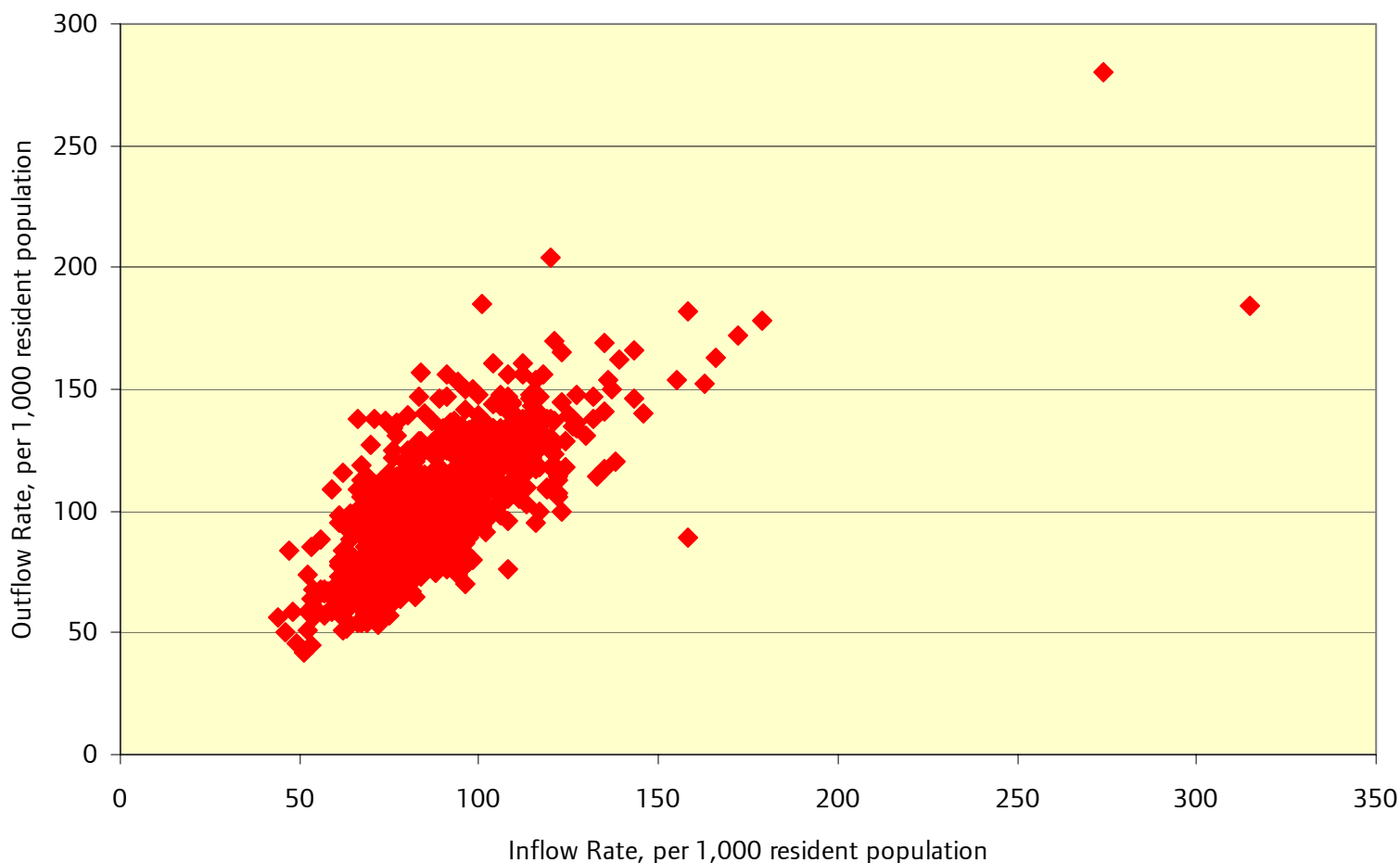


Table 1 shows that the range of the turnover rates and the correlation between inflows and outflows differs greatly according to the age of the population being considered. The inflow and outflow population turnover rates are highly correlated for the 15-24 year olds (correlation coefficient of 0.778), but for the other age groups the correlation is not strong, particularly for the 65+ group where there is virtually no correlation at all.

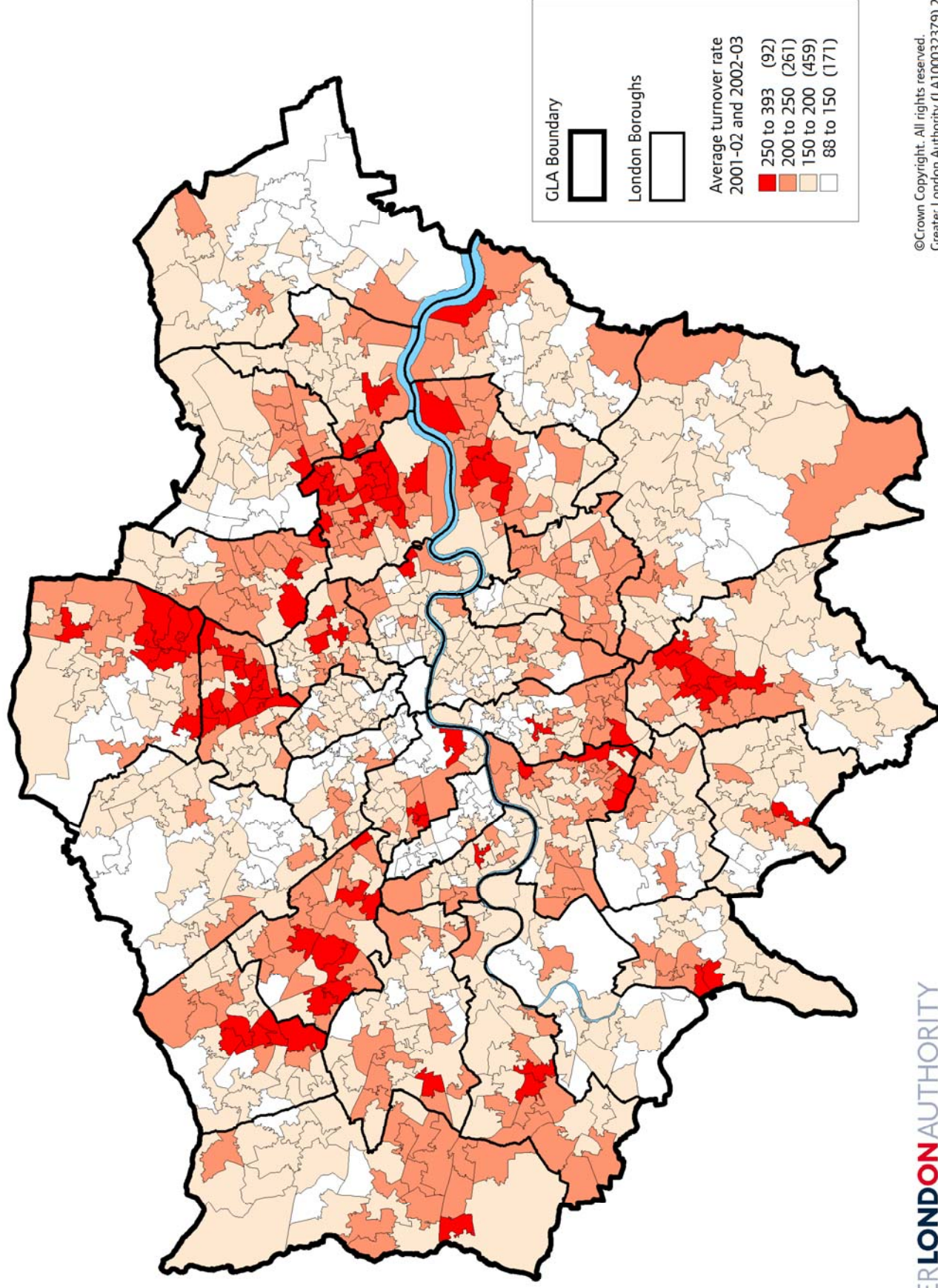
The highest population turnover rates are found in the 15-24 year old age group. The rates are significantly higher than in any of the other age groups, with particularly high rates for two MSOAs in Kingston upon Thames and Westminster.

Table 2: Top 5 population turnover rates for 15-24 year olds, rate per 1,000 population

Inflow			Outflow		
MSOA in...	MSOA code	Rate	MSOA in...	MSOA code	Rate
Hillingdon	E02000509	391	Wandsworth	E02000935	355
Hillingdon	E02000508	458	Barnet	E02000053	359
Richmond upon Thames	E02000799	468	Richmond upon Thames	E02000799	398
Kingston upon Thames	E02000606	1,214	Westminster	E02000977	506
Westminster	E02000977	1,283	Kingston upon Thames	E02000606	1,019

The highlighted areas above indicate the same MSOAs for the inflow as for the outflow. In the two MSOAs where one or both of the rates exceed 1,000 per 1,000 resident population, high migration is thought to have been due to the existence of university halls of residence.

Population Turnover Rate of 1-14 year olds

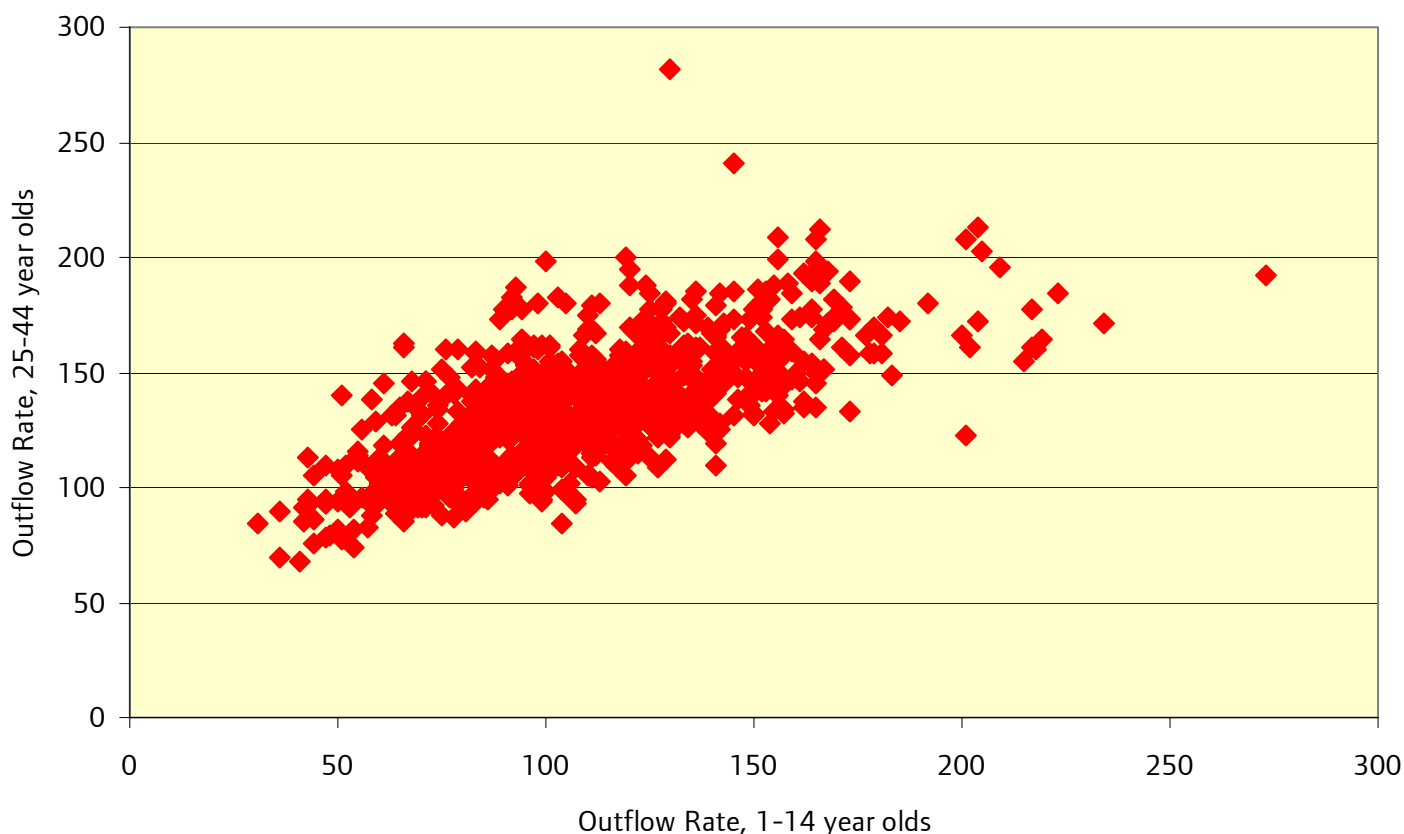


The population turnover rates of the 1-14 age group are of interest because they can highlight areas of London where schooling is more likely to be disrupted due to the high proportions of children joining and leaving schools at times other than the start (or finish) of the academic year. The map shows the total population turnover rates (ie inflow rate plus outflow rate) for 1-14 year olds for all MSOAs in London, using an average of 2001-02 and 2002-03 rates. The areas of darker colour indicate higher turnover, while the unshaded areas indicate low turnover.

In the majority of boroughs there are some areas of high turnover, although concentrated pockets of high turnover are more common in the north of London, particularly Newham, Enfield, Haringey, Brent and Harrow.

Comparing the rates of the children with those of the age group most likely to be their parents – 25-44 year olds – showed that there was a strong correlation between the outflow population turnover rates for the two groups. The correlation coefficient is 0.69, far higher than that for the corresponding inflow rates – 0.23.

Chart 2: Scatter graph comparing outflow population turnover rates for 1-14 year olds and 25-44 year olds, London MSOAs



This *Update* has looked at some specific aspects of the ONS population turnover data, specifically focussing on the most recent data for 2002-03. The full sets of data, for all available years, may be downloaded from the Neighbourhood Statistics part of the National Statistics website:

<http://neighbourhood.statistics.gov.uk/dissemination/>

Click on 'Topics' and then 'People and Society'. Select the 'Population and Migration' heading and then the 'Population Turnover Rates'. Once this has been selected, click the 'Next' button at the bottom of the screen and follow the instructions.

For more information please contact John Hollis, Data Management and Analysis Group, Greater London Authority, City Hall, The Queen's Walk, London SE1 2AA. Tel: 020 7983 4604 e-mail: john.hollis@london.gov.uk

Copyright © Greater London Authority. Data are reproduced in this *Update* with the permission of the Controller of Her Majesty's Stationery Office and is © Crown Copyright. Map is © Crown Copyright, GLA (LA100032379) 2006.