GREATER LONDON AUTHORITY

Data Management and Analysis Group

ONS Mid-year Population Estimates: 1991 to 2003

DMAG Briefing 2004/23
October 2004

John Hollis and Georgia Hay

ISSN 1479-7879

DMAG Briefing 2004/23

October 2004

ONS Mid-year Population Estimates: 1991 to 2003

For more information please contact:

Georgia Hay

Data Management and Analysis Group
Greater London Authority
City Hall (5 East)
The Queen's Walk
London SE1 2AA

Tel: 020 7983 4347
georgia.hay@london.gov.uk

ISSN 1479-7879

ONS Mid-year Population Estimates: 1991 to 2003

Introduction

During September and October 2004, ONS released revised mid-year estimates for all years from 1992 to 2002, as well as the new estimates for 2003. There is now a consistent series running from 1991, which had previously been revised and finalised, to 2003.

On 9 September, *DMAG Briefing 2004/20: ONS Mid-year Population Estimates: 2001 and 2002 (revised) and 2003* was published, outlining the background to the revisions to 2001 and 2002 mid-year estimates. This *Briefing* will cover the background to the subsequent revisions for 1992 to 2000, and look at some summary results.

The mid-year estimates for 1992 to 2000 were revised in view of the Longitudinal Study (and other) adjustments to the 2001 estimates published in September 2003 as well as the ONS Local Authority Population Studies adjustments published in July and September 2004. ONS carried out in-depth research to decide the best methodology with which to produce the back series. A report is available at www.statistics.gov.uk/downloads/theme_population/Methodology_backseries.pdf

Revisions 1992 to 2000

Before the results of the 2001 Census were released, the mid-year estimates for 1992 to 2000, were rolled forward from the 1991 estimates, which had themselves been rolled forward from the 1981 estimates based on the 1981 Census with due attention to the results of the 1991 Census.

In September 2002, the results of the 2001 Census were published, identifying a difference between the Census-based estimates of usual residents and the mid-2000 estimates rolled forward from 1991: the rolled forward estimates were 1.1 million greater for England & Wales than the 2001 Census.

Subsequent work by ONS resulted in some of this difference being explained:

- 351,000 (downward) adjustment to the 1991 mid-year estimate (February 2003)
- 305,000 resulting from (downward) adjustments to the net international migration estimates for the 1990's (September 2003)
- 193,000 (upward) adjustment to the 2001 estimates from the *Longitudinal Study* and other revisions (September 2003)
- 80,000 net (upward) adjustment to the 2001 estimates from the *Local Authority Population Study* (103,000 upwards) and *Longitudinal Study Consequential) Adjustment* (23,000 downwards) (September 2004)

However, in spite of these adjustments, there is still an unexplained intercensal difference of 209,000 in 2001. The difficulties in measuring international migration, coupled with the differing definitions of 'usual residence' are likely to be responsible for this difference. To produce a series for 1992 to 2000, which is also consistent with 1991 and 2001, the 209,000 was allocated back over the decade.

The method of allocation used was the 'cohort' method, which assumes the differences accumulated over time in age-sex cohorts. There were also 'period' adjustments made to ages 18 and 19 only, because of the different migration behaviour of these ages. In

some areas, the period adjustment, which assumes the difference relates to a particular age group, was removed. For example, in Kensington & Chelsea, the period adjustment led to distortions at younger ages, and so was removed.

The tables and charts following, summarise the differences between the first and current sets of revised estimates.

Table 1: 1991 to 2000 Mid-year Estimates (thousands)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
England & Wales										
Post 2001 Census	50,748.0	50,854.2	50,944.5	51,051.5	51,175.2	51,289.1	51,412.6	51,550.4	51,730.1	51,897.3
Revised (07-10-04)	50,748.0	50,875.6	50,985.9	51,116.2	51,272.0	51,410.4	51,559.6	51,720.1	51,933.5	52,140.2
Difference		21.4	41.4	64.7	96.8	121.3	147.0	169.7	203.4	242.9
Greater London										
Post 2001 Census	6,829.3	6,822.6	6,831.5	6,843.8	6,859.8	6,901.3	6,927.7	6,968.8	7,041.3	7,104.4
Revised (07-10-04)	6,829.3	6,829.4	6,844.5	6,873.6	6,913.1	6,974.4	7,014.9	7,065.5	7,154.0	7,236.8
Difference		6.8	13.0	29.8	53.3	73.1	87.2	96.7	112.7	132.4

The differences between the two series are small for England & Wales; a maximum of around 0.5%. The differences for London are greater, up to around 1.9% increase, which reflects the fact that the shortfall in the Census count was concentrated in London. Charts on pages 3 and 4 show the changes made to the mid-year estimates for England & Wales and London.

Most London boroughs have small changes, however, there are large increases in Southwark, Wandsworth and Westminster as would be expected from the results of Local Authority Population Studies, as well as above average increases in Kensington & Chelsea. The Inner London boroughs contribute more to the increase than the Outer boroughs, however this is driven by the Central boroughs. The table below shows the percentage difference between the original post-2001 Census revised estimates and the estimates revised in October 2004.

Table 2: Percentage increases between the two sets of revisions

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Central	0.6	1.5	2.5	3.5	4.3	5.0	4.6	5.3	5.6
Rest of Inner	0.0	0.0	0.2	0.6	0.9	1.2	1.8	1.9	2.4
Inner	0.1	0.3	0.6	1.1	1.6	1.9	2.3	2.6	3.0
Outer	0.1	0.2	0.3	0.6	0.8	0.8	0.8	1.0	1.1

The chart on page 5 shows the mid-year estimates for the Central boroughs.

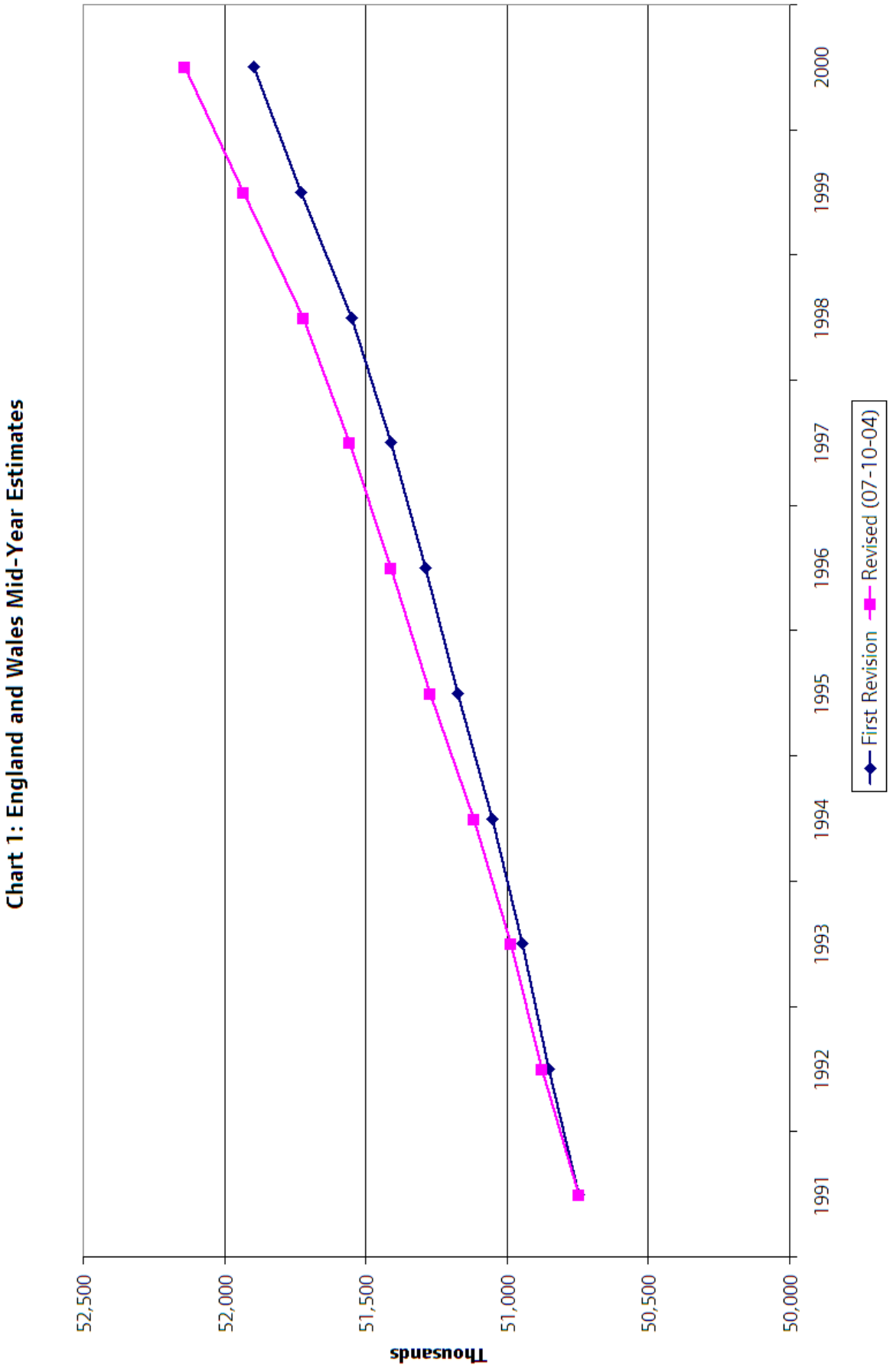


Chart 1: England and Wales Mid-Year Estimates
Thousands
52,500
52,000
51,500
51,000
50,500
50,000
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
First Revision
Revised (07-10-04)

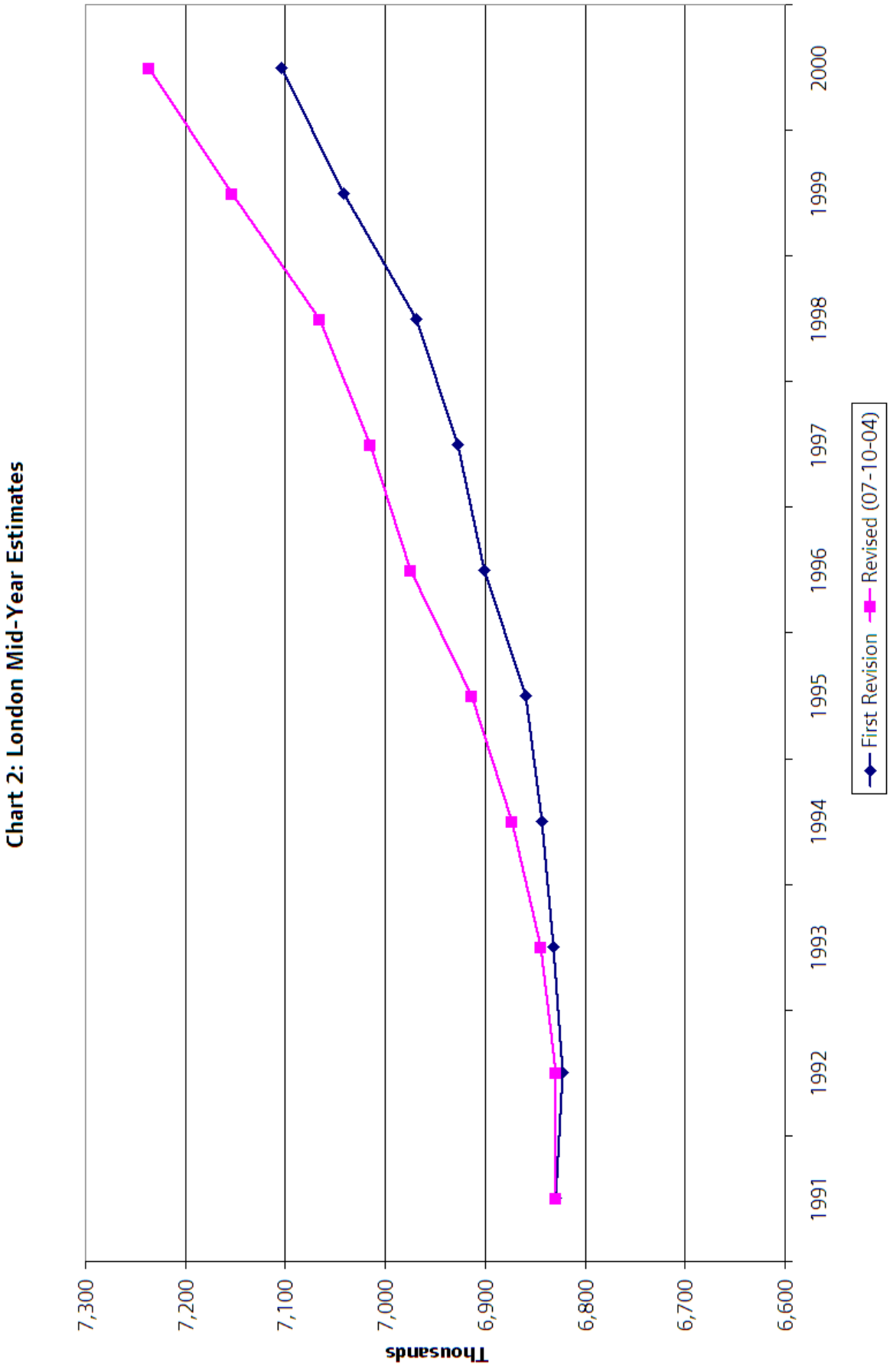


Chart 2: London Mid-Year Estimates
Thousands
7,300
7,200
7,100
7,000
6,900
6,800
6,700
6,600
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
First Revision
Revised (07-10-04)

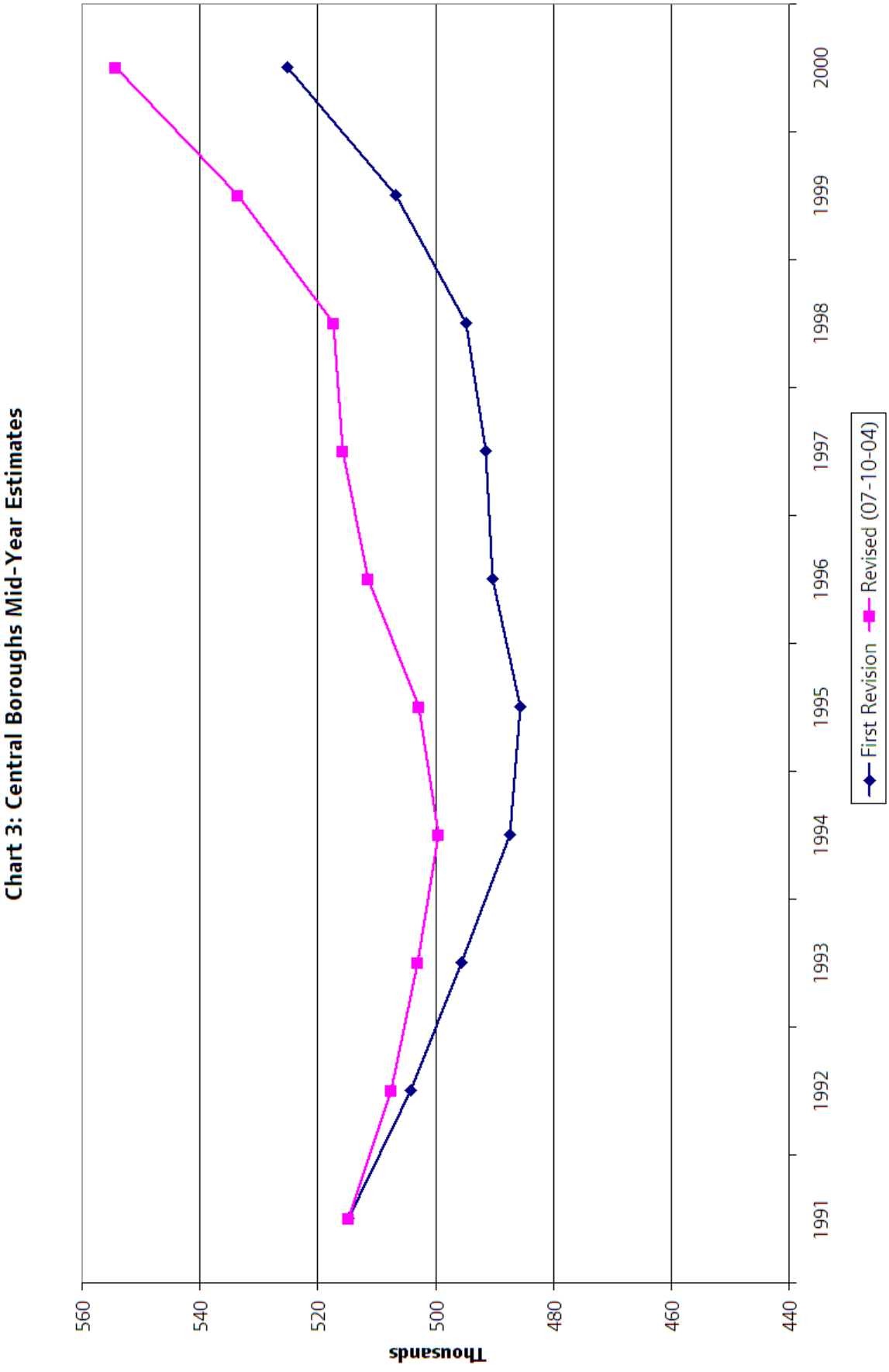


Chart 3: Central Boroughs Mid-Year Estimates
Thousands
560
540
520
500
480
460
440
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
First Revision
Revised (07-10-04)

1991 to 2003 Mid-year Estimates – Current Series

Similarly to the previous mid-year estimates, the current series shows that the population of the country is increasing. The population of England & Wales has increased by over 2 million since 1991, to 52,793,700. The increase in England & Wales is driven by increases in the over 30's, which accounts for nearly 3.5 million. This is offset by a fall of around 400,000 in 0-4 year-olds and over 1.5 million in the 20-29 year-olds. In short, the nation's population is getting older.

The population change in London shows a similar pattern with an overall growth of 559,000 and the over 30's showing large increases; over the period 1991 to 2003, the number of 30-59 year-olds increased by 621,000. London has also experienced a reduction in the number of 20-29 year-olds of 111,000. In London, as in England & Wales, these movements are partly related to migration, for example, the 20-29 year-old age group is particularly mobile, but also reflect variation in past cohort sizes. For example, the 20-29 year-olds in 1991 were born between 1961 and 1971, years of the highest number of births in the UK since the late-1940s. By 2003, the 20-29 year-olds were born between 1973 and 1983, years including those with the lowest numbers of births in the UK since the Second World War.

In contrast with England & Wales, London has seen a fall in some of the older ages; there has been a fall of nearly 111,000 in 60-84 year-olds, reflecting a propensity of older people to move out of London when they retire. There has, however, been an increase in the number of over 85 year-olds, which partly reflects the increasing life expectancy.

Although most of the boroughs are showing a similar pattern to that of Greater London, there are some results that indicate the very different types of population within London. Havering is the only borough that has shown a decreasing population, with a fall of 6,300 (2.7%) since 1991. There has been a fall of 12,000 in the number of under 45 year-olds, while the over 70 year-olds have increased by nearly 6,000. This partly reflects the situation that the offspring of families that moved to Havering in the 1960's and 1970s find it hard to remain in the borough with its current relatively low annual increases in the housing stock, while their parents remain within the original family home. Hence average household size has fallen quite rapidly in the borough. Havering has very low levels of in-migration as a consequence.

Conversely, Camden has an increasingly young population driven by high levels of migration from both the rest of the UK and overseas. There has been an increase of over 35,000 in the number of people aged under 60, which is partly offset by the fall 5,400 in the over 60's.

Tower Hamlets experienced the highest growth. It had an additional 40 thousand residents (over 24% increase) with very high growth at ages 15-29 and 30-44.

Table 3 following, shows the mid-year estimates for selected years, while Table 4 presents the changes over the period 1991 to 2003 by 15-year age band.

Table 3: Total Mid-year Population Estimates (thousands)

	1991	1993	1996	2001	2003
England and Wales	**50,748.0**	**50,985.9**	**51,410.4**	**52,360.0**	**52,793.7**
Greater London	**6,829.3**	**6,844.5**	**6,974.4**	**7,322.4**	**7,387.9**
Inner London	**2,599.3**	**2,601.7**	**2,656.4**	**2,859.4**	**2,904.6**
Camden	180.7	179.3	186.3	202.6	210.7
City of London	5.4	5.3	5.6	7.4	8.0
Hackney	185.0	188.2	193.1	207.2	208.4
Hammersmith and Fulham	153.8	152.5	155.0	169.4	174.2
Haringey	207.0	206.5	211.6	221.3	224.7
Islington	171.8	172.9	174.7	179.4	180.1
Kensington and Chelsea	143.6	141.5	141.1	162.2	174.4
Lambeth	255.0	254.6	259.7	273.4	268.5
Lewisham	240.2	240.4	243.1	254.3	248.3
Newham	216.3	222.3	229.9	249.4	250.6
Southwark	227.2	231.4	236.6	256.7	253.8
Tower Hamlets	166.3	169.0	180.3	201.1	206.6
Wandsworth	262.0	260.9	261.1	271.7	274.1
Westminster	185.0	176.9	178.5	203.3	222.0
Central Boroughs	514.7	503.0	511.5	575.5	615.1
Rest of Inner Boroughs	2,084.6	2,098.7	2,145.1	2,283.9	2,289.3
Outer London	**4,230.0**	**4,242.8**	**4,318.1**	**4,463.0**	**4,483.3**
Barking and Dagenham	155.5	156.2	157.3	165.7	165.9
Barnet	297.7	296.6	303.0	319.5	324.4
Bexley	218.1	218.3	217.7	218.8	219.1
Brent	240.8	241.7	252.0	269.6	267.8
Bromley	293.5	289.9	291.7	296.2	298.3
Croydon	315.9	319.2	329.4	335.1	336.7
Ealing	283.8	285.8	292.8	307.3	305.0
Enfield	260.1	260.8	265.0	277.3	280.3
Greenwich	210.9	211.3	209.8	217.5	223.7
Harrow	203.0	206.3	207.2	210.0	210.7
Havering	230.9	229.4	227.1	224.7	224.6
Hillingdon	234.4	235.7	242.0	245.6	247.6
Hounslow	203.9	202.0	206.0	216.0	212.9
Kingston upon Thames	136.1	136.1	139.2	149.0	150.4
Merton	170.9	173.7	180.6	191.1	191.4
Redbridge	222.0	224.7	232.8	241.9	245.1
Richmond upon Thames	166.6	164.6	168.7	174.3	179.2
Sutton	170.1	172.6	175.7	181.5	178.5
Waltham Forest	215.9	218.0	220.0	222.0	221.6
SRDFs					
Central London	1,425.3	1,417.5	1,438.0	1,549.3	1,583.6
East London and the Thames Gateway	1,850.6	1,865.1	1,896.7	1,988.0	2,000.3
West London sub-regoin	1,319.7	1,324.0	1,355.0	1,417.9	1,418.2
North London sub-region	980.7	981.9	999.6	1,040.1	1,051.0
South London sub-region	1,253.1	1,256.1	1,285.3	1,327.2	1,334.5

Table 4a: Population Change 1991 to 2003, by age (thousands and per cent)

		All Ages	0-14	15-29	30-44	45-59	60-74	75+
ENGLAND AND WALES	Thousands	2045.7	26.7	-1376.9	1260.0	1709.4	-33.6	460.1
	Per cent	4.0	0.3	-12.2	11.7	20.3	-0.5	12.9
LONDON	Thousands	558.6	90.5	-51.8	464.4	156.3	-80.7	-20.0
	Per cent	8.2	7.1	-3.0	30.7	15.1	-9.8	-4.5
Inner London	Thousands	305.3	41.3	16.8	263.9	46.7	-43.4	-20.0
	Per cent	11.7	8.8	2.2	45.5	12.9	-14.9	-13.1
City of London	Thousands	2.6	0.4	0.7	1.1	0.7	-0.1	0.0
	Per cent	48.1	133.3	53.8	100.0	63.6	-10.0	0.0
Camden	Thousands	30.0	5.0	8.2	18.1	4.2	-3.2	-2.2
	Per cent	16.6	18.4	16.1	42.8	15.7	-15.1	-18.0
Hackney	Thousands	23.4	3.7	0.7	18.3	4.8	-3.0	-1.3
	Per cent	12.6	9.0	1.4	44.1	20.3	-15.5	-13.3
Hammersmith and Fulham	Thousands	20.4	3.8	-1.1	16.9	2.9	-1.2	-0.9
	Per cent	13.3	16.7	-2.2	47.7	13.6	-7.5	-9.8
Haringey	Thousands	17.7	2.9	-2.7	18.3	2.5	-1.0	-2.4
	Per cent	8.6	7.5	-4.6	38.5	8.4	-4.9	-21.2
Islington	Thousands	8.3	-1.3	-0.9	14.8	1.4	-3.8	-1.8
	Per cent	4.8	-4.2	-1.9	37.7	5.9	-19.5	-18.9
Kensington and Chelsea	Thousands	30.8	6.2	0.2	15.5	5.4	2.5	1.1
	Per cent	21.4	32.5	0.5	44.3	22.4	16.1	12.6
Lambeth	Thousands	13.5	0.8	-7.5	25.8	2.8	-6.0	-2.6
	Per cent	5.3	1.7	-9.6	44.6	8.7	-22.2	-19.4
Lewisham	Thousands	8.1	2.3	-10.7	20.7	4.4	-6.1	-2.7
	Per cent	3.4	5.1	-16.3	39.4	13.3	-21.5	-17.4
Newham	Thousands	34.3	7.4	7.8	19.1	5.4	-3.5	-1.7
	Per cent	15.9	14.6	13.5	42.0	19.1	-15.4	-15.3
Southwark	Thousands	26.6	3.5	-2.4	26.0	6.2	-5.8	-1.0
	Per cent	11.7	8.0	-3.8	52.6	20.8	-20.9	-7.7
Tower Hamlets	Thousands	40.3	2.3	18.7	22.2	2.0	-4.0	-0.9
	Per cent	24.2	5.8	42.1	68.7	9.3	-20.2	-10.5
Wandsworth	Thousands	12.1	0.6	-2.7	23.4	0.2	-6.3	-2.8
	Per cent	4.6	1.5	-3.3	38.7	0.6	-22.0	-16.7
Westminster	Thousands	37.0	3.5	8.9	23.5	3.7	-1.7	-1.1
	Per cent	20.0	14.5	16.0	59.2	12.4	-7.4	-8.7
Central	Thousands	100.4	15.1	18.0	58.2	14.0	-2.5	-2.2
	Per cent	19.5	21.4	12.1	49.3	17.1	-4.1	-6.5
Rest of Inner	Thousands	204.7	26.0	-0.8	205.5	32.6	-40.7	-18.1
	Per cent	9.8	6.5	-0.1	44.5	11.7	-17.7	-15.3

Table 4b: Population Change 1991 to 2003, by age (thousands and per cent)

		All Ages	0-14	15-29	30-44	45-59	60-74	75+
Outer London	Thousands	253.3	49.3	-68.7	200.5	109.6	-37.3	-0.1
	Per cent	6.0	6.2	-6.9	21.5	16.2	-7.0	-0.0
Barking and Dagenham	Thousands	10.4	4.9	-2.4	9.5	4.4	-6.7	0.7
	Per cent	6.7	15.6	-6.6	30.8	20.0	-28.0	6.3
Barnet	Thousands	26.7	4.8	-0.8	15.3	10.2	-2.0	-0.9
	Per cent	9.0	8.6	-1.1	23.6	22.1	-5.4	-3.8
Bexley	Thousands	1.0	0.4	-9.5	3.3	4.2	0.2	2.1
	Per cent	0.5	1.0	-19.7	6.9	11.3	0.7	14.5
Brent	Thousands	27.0	1.2	0.0	18.8	4.3	3.0	-0.2
	Per cent	11.2	2.6	0.0	36.1	11.4	11.6	-1.5
Bromley	Thousands	4.8	4.6	-12.2	7.4	5.7	-3.4	2.7
	Per cent	1.6	9.1	-19.7	11.5	11.0	-7.9	12.2
Croydon	Thousands	20.8	5.7	-8.7	15.5	9.3	-1.4	0.4
	Per cent	6.6	9.4	-11.5	21.9	18.2	-3.7	2.0
Ealing	Thousands	21.2	0.5	-1.4	17.7	7.0	-1.8	-0.7
	Per cent	7.5	0.9	-1.9	27.2	16.2	-5.7	-4.1
Enfield	Thousands	20.2	4.9	-3.7	14.7	6.0	-0.5	-0.9
	Per cent	7.8	9.9	-6.1	26.2	14.2	-1.6	-4.8
Greenwich	Thousands	12.8	-0.4	-0.1	12.9	5.6	-5.0	-0.1
	Per cent	6.1	-0.9	-0.2	28.4	18.7	-18.7	-0.7
Harrow	Thousands	7.7	-0.5	-2.4	5.9	4.9	1.1	-0.8
	Per cent	3.8	-1.3	-5.2	13.2	14.4	4.6	-5.2
Havering	Thousands	-6.3	-1.9	-9.9	-0.5	4.0	-3.0	4.9
	Per cent	-2.7	-4.4	-20.5	-1.0	9.8	-8.6	34.3
Hillingdon	Thousands	13.2	3.5	-4.1	9.2	5.4	-1.5	0.6
	Per cent	5.6	7.9	-7.4	17.9	14.2	-5.1	3.9
Hounslow	Thousands	9.0	0.1	-2.6	10.0	4.9	-2.0	-1.4
	Per cent	4.4	0.3	-5.0	21.6	15.8	-8.7	-11.4
Kingston upon Thames	Thousands	14.3	2.5	2.2	6.8	5.2	-2.2	-0.4
	Per cent	10.5	10.7	6.8	21.7	24.2	-12.9	-3.8
Merton	Thousands	20.5	3.8	-0.1	13.5	6.1	-2.3	-0.6
	Per cent	12.0	12.6	-0.2	34.4	23.6	-10.7	-4.8
Redbridge	Thousands	23.1	6.7	0.0	10.0	8.5	-2.0	-0.1
	Per cent	10.4	16.0	0.0	20.6	23.7	-6.9	-0.6
Richmond upon Thames	Thousands	12.6	4.0	-1.0	8.1	6.1	-3.5	-1.7
	Per cent	7.6	14.7	-2.9	19.6	21.8	-16.3	-12.4
Sutton	Thousands	8.4	2.8	-6.0	8.3	5.0	-1.3	-0.2
	Per cent	4.9	8.9	-15.6	22.4	18.0	-5.9	-1.5
Waltham Forest	Thousands	5.7	1.4	-6.5	14.4	3.0	-3.2	-3.8
	Per cent	2.6	3.3	-11.5	31.1	9.6	-13.1	-24.5

Migration 1991 to 2003

By using the natural change analysis previously provided by ONS, it was possible to calculate a net migration (and other changes) figure for each year, 1991-1992 to 2002-2003. Although this is crude, and does not enable differentiation between within UK and international moves nor between in-flows and out-flows, the majority of these changes are true 'migration' rather than 'other changes' such as armed forces, prisoners or boarding pupils. It does indicate some of the issues behind rises or falls in the population.

Of London's total growth of 558.6 thousand over the 12 years, 505.1 thousand was natural change, leaving just 53.5 thousand as net migration and other changes. London has been a consistent net exporter of people to the rest of the UK over this period. Whether London has annually been an overall net importer or exporter has been determined by the strength of the net inflow from Overseas.

At the beginning of the 1990's, London was seeing net outwards migration to the rest of the UK and to Overseas. This reflected net outflows from both Inner and Outer London, although proportionately to its size, Inner London showed a higher migration loss. In 1991-92 only three boroughs showed a net migration inflow – Newham, Redbridge and Sutton – although these were all fewer than 1,000.

Since 1997-1998, migration flows have been positive in Greater London as a whole, as well as in both Inner and Outer London. The net inflows peaked between 1998 and 2001 at an average of 41,600 net migrants per year, but in 2001-2002 net migration fell to 1,900. This was reflected by the large positive net migration into the Central boroughs counteracted by net migration outflows from the Rest of the Inner boroughs and the Outer boroughs.

In 2002-2003, London returned to experiencing net outward migration. The level of net loss was greater than any year since 1991-92 and has been split between both Inner and Outer London, but again, the Central boroughs showed a large net inflow. The levels of net inflow to Westminster in the past two years have been the highest over the 12-year period. This partly reflects the decision of ONS not to persist with the use of 'unattributable population change' (UPC) in preparing the post-2001 estimates. In the original 2002 estimates UPC provided a brake on the estimates for individual authorities getting out of kilter with the presumed trends from 1991 to 2001. Removing this 'safety valve' in the revised estimates means that those authorities (notably Westminster) where the original mid-2000 estimates were shown by the Census to be too high have been allowed to continue on a (false?) high growth path. Conversely, most London boroughs had actually been underestimated at 2000 and so UPC had helped to maintain their populations. Brent is the borough to have suffered most through the removal of UPC, and the considerable net losses estimated for 2001-02-03 reflect this.

A more detailed analysis of borough migration flows since 1991 by whether the moves were within the UK or with Overseas is being prepared and will be published as a *DMAG Briefing*.

Chart 4: Net Migration 1991-92 to 2002-03

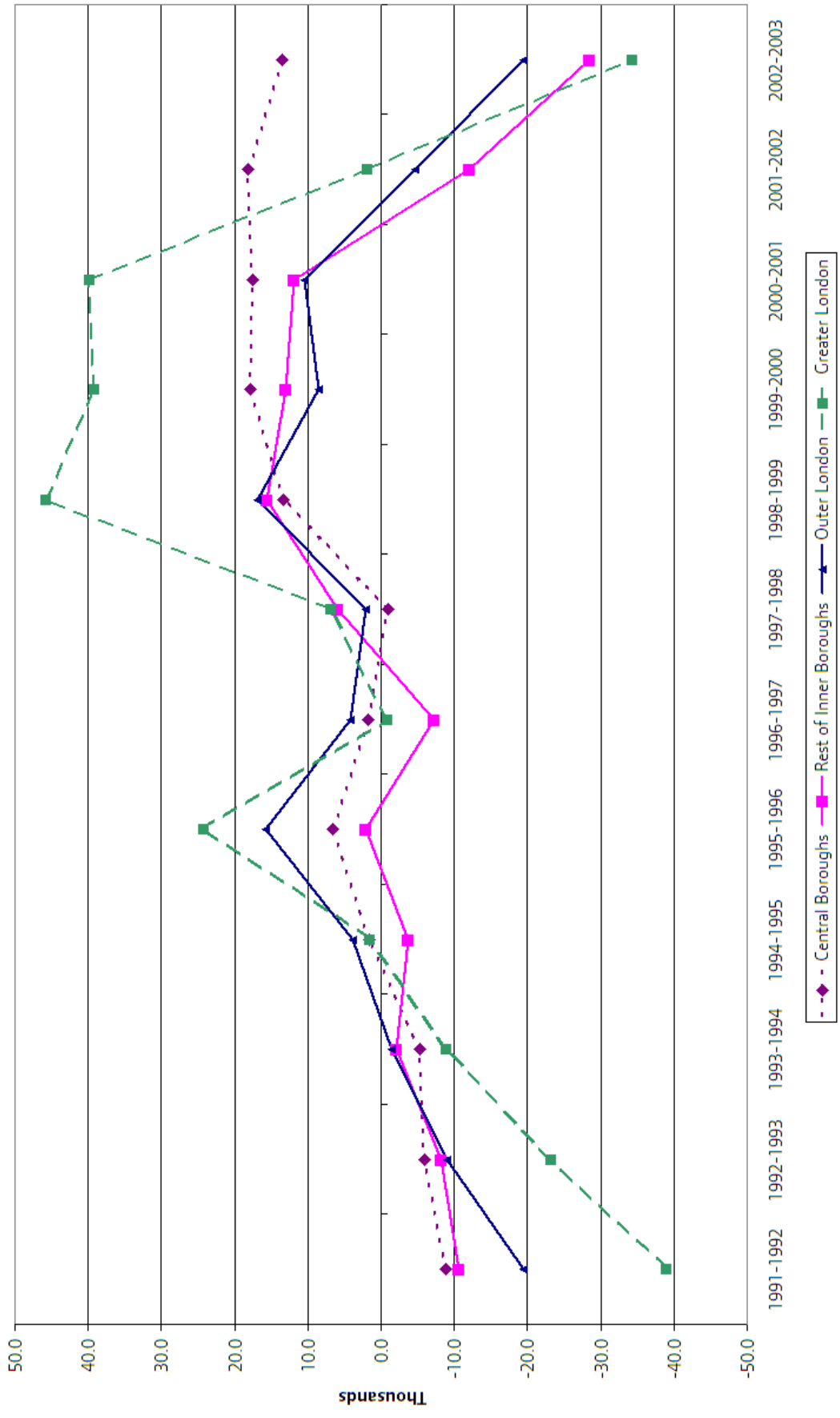


Table 5a: GLA Calculated Net Migration 1991-1992 to 2002-2003, thousands

	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997
Greater London	**-38.9**	**-23.1**	**-8.8**	**1.6**	**24.3**	**-0.8**
Inner London	**-19.5**	**-14.2**	**-7.3**	**-2.3**	**8.6**	**-5.2**
Camden	-2.1	-0.4	0.1	1.9	3.1	-1.1
City of London	-0.2	0.1	0.1	0.1	0.1	0.1
Hackney	-0.2	-0.5	0.2	0.6	-1.8	-4.0
Hammersmith and Fulham	-1.2	-1.7	0.4	-1.1	0.6	-0.8
Haringey	-2.9	-0.8	-0.8	-0.2	1.0	1.6
Islington	-0.2	-0.8	-0.5	-1.4	0.7	-0.0
Kensington and Chelsea	-2.0	-1.2	-2.1	0.0	-0.2	0.3
Lambeth	-1.4	-3.1	0.0	-1.5	0.4	-2.1
Lewisham	-2.1	-0.8	0.3	-3.0	1.4	-0.7
Newham	0.4	0.5	0.2	0.6	-0.9	-1.8
Southwark	-0.6	1.1	-1.7	3.3	-2.3	0.2
Tower Hamlets	-0.6	0.1	0.8	1.9	3.4	2.5
Wandsworth	-1.6	-2.2	-1.0	-3.0	-0.4	-2.1
Westminster	-4.6	-4.6	-3.4	-0.4	3.7	2.5
Central Boroughs	-8.9	-6.0	-5.4	1.6	6.6	1.8
Rest of Inner Boroughs	-10.6	-8.1	-2.1	-3.6	2.1	-7.3
Outer London	**-19.5**	**-9.0**	**-1.5**	**3.9**	**15.7**	**4.2**
Barking and Dagenham	0.0	-0.7	-0.1	-0.0	-0.6	0.4
Barnet	-1.9	-1.3	-0.5	0.5	2.9	0.5
Bexley	-1.0	-0.6	-0.6	-0.8	-1.3	-2.8
Brent	-2.4	-0.7	2.0	0.7	1.7	1.2
Bromley	-2.5	-2.7	-0.5	-0.6	1.2	0.7
Croydon	-0.5	0.1	2.0	2.2	1.1	-0.3
Ealing	-0.8	-1.0	-1.4	0.3	2.3	-0.7
Enfield	-1.0	-1.2	-2.0	1.4	0.9	1.9
Greenwich	-0.3	-1.7	-2.0	-1.9	-0.4	0.6
Harrow	-0.2	1.7	0.2	-1.1	-0.6	-1.1
Havering	-2.3	-0.1	-1.0	-1.3	-0.6	-1.1
Hillingdon	-1.1	-0.1	1.7	0.2	0.9	-0.4
Hounslow	-3.2	-1.4	-1.5	0.6	1.0	2.6
Kingston upon Thames	-0.4	-0.4	-0.0	1.0	1.1	1.6
Merton	-0.2	1.1	1.2	0.9	1.9	-0.0
Redbridge	0.7	0.3	1.0	1.1	3.3	1.3
Richmond upon Thames	-1.9	-1.0	-0.0	1.2	1.6	0.6
Sutton	0.1	1.1	-0.3	0.6	1.0	0.8
Waltham Forest	-0.8	-0.3	0.6	-1.2	-1.8	-1.6
SRDFs						
Central London	-12.5	-11.1	-8.7	-1.1	5.0	-2.4
East London and the Thames Gateway	-5.6	-3.4	-1.2	-2.7	2.5	-5.5
West London sub-regoin	-9.0	-3.2	1.5	-0.4	5.9	0.8
North London sub-region	-6.7	-3.7	-2.8	0.6	3.1	2.4
South London sub-region	-5.3	-1.8	2.3	5.2	7.9	3.4

Table 5b: GLA Calculated Net Migration 1991-1992 to 2002-2003, thousands

	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003
Greater London	**6.9**	**45.8**	**39.3**	**39.8**	**1.9**	**-34.3**
Inner London	**4.8**	**28.8**	**30.9**	**29.4**	**6.5**	**-14.9**
Camden	-3.3	5.0	5.1	5.2	2.9	2.2
City of London	0.0	0.9	0.4	0.4	0.2	0.3
Hackney	0.9	1.9	1.9	1.2	-1.2	-3.4
Hammersmith and Fulham	-0.7	3.9	2.5	3.7	1.8	0.0
Haringey	-0.5	-0.1	-0.9	-0.8	0.6	-1.9
Islington	1.0	-3.3	0.9	0.2	-0.5	-1.4
Kensington and Chelsea	0.1	3.7	6.2	6.4	5.1	4.8
Lambeth	1.6	0.6	0.8	0.9	-4.9	-5.4
Lewisham	1.6	1.6	0.1	0.5	-4.2	-5.4
Newham	1.2	2.7	1.9	0.7	-0.9	-4.6
Southwark	0.9	3.5	2.6	1.7	-3.6	-4.1
Tower Hamlets	1.0	3.5	1.6	1.8	1.1	-0.5
Wandsworth	-1.2	1.3	1.6	1.9	-0.2	-1.8
Westminster	2.2	3.7	6.2	5.6	10.0	6.2
Central Boroughs	-1.0	13.3	17.9	17.6	18.2	13.5
Rest of Inner Boroughs	5.9	15.5	13.1	11.9	-12.0	-28.5
Outer London	**2.1**	**16.8**	**8.4**	**10.4**	**-4.6**	**-19.5**
Barking and Dagenham	2.0	0.8	1.0	1.1	-0.5	-0.8
Barnet	2.6	3.9	1.1	2.6	1.4	0.4
Bexley	-0.0	0.6	0.6	-0.5	-0.7	0.0
Brent	2.6	-1.6	2.3	2.6	-2.1	-4.4
Bromley	-2.1	2.7	-0.2	0.3	0.3	0.6
Croydon	0.3	-2.7	0.4	-0.9	-0.8	-1.0
Ealing	0.2	4.0	0.1	0.8	-1.6	-5.1
Enfield	-1.1	2.5	1.1	0.7	1.3	-1.3
Greenwich	-0.1	-1.2	1.0	1.9	2.2	1.2
Harrow	-1.2	0.4	0.4	-0.0	0.3	-1.6
Havering	-2.6	1.9	-0.5	-0.4	-0.1	0.3
Hillingdon	-0.7	0.3	-0.3	-1.5	0.0	-0.4
Hounslow	0.8	0.3	-1.0	-0.1	-2.1	-4.1
Kingston upon Thames	2.0	1.7	0.7	1.3	0.6	-0.2
Merton	-0.4	1.7	2.1	1.7	-0.6	-1.5
Redbridge	-0.0	1.2	0.7	0.9	-0.5	1.3
Richmond upon Thames	-1.0	2.0	-0.7	0.4	1.3	1.5
Sutton	0.4	1.1	0.6	0.6	-1.6	-2.2
Waltham Forest	0.8	-2.6	-1.4	-0.9	-1.7	-2.1
SRDFs						
Central London	1.3	24.9	23.4	21.9	8.8	0.5
East London and the Thames Gateway	4.0	26.2	8.8	7.7	-4.6	-11.6
West London sub-regoin	1.1	16.1	4.0	5.4	-3.7	-15.6
North London sub-region	1.8	9.7	-0.1	1.7	1.6	-4.9
South London sub-region	-0.9	11.6	2.9	3.5	-0.8	-2.8

Mid-Year Estimates by Gender

The mid-year estimates indicate that the gender gap is closing, ie the traditional female surplus in the population is reducing. In 1991, females comprised 51.36% of the population in England & Wales and 51.73% in London. Since then, the proportion of females has fallen. In fact, in all boroughs, except Barking and Dagenham, Bexley and Havering, the proportion of females has fallen. In 2003 there were proportions of females below 50% in eight boroughs – the City of London, Brent, Ealing, Hounslow, Lambeth, Lewisham, Newham, Southwark and Tower Hamlets. Westminster had female proportions below 50% for 2001 and 2002, rising slightly to 50.01% in 2003.

This fall in the relative size of the female population of London – males have increased by 10.7% since 1991, while females have only increased by 5.9% – is most likely to be related to the migration of females within the UK. Women tend to register with GP's more readily than men and so their migration patterns are likely to be picked up more readily. In other words, male migration may not be as accurately represented in the figures.

The ratio of males to females differs by age, as does the change in the ratios over the decade. For example, in 1991 females made up 50.2% of those aged 30-34 compared with only 47.9% in 2003. There is a similar effect seen for 25-29 and 35-39 year olds, whereas in those aged 50-69 there has been a rise in the female proportion.

The sex ratios in the original 2001 mid-year estimate shows a closer resemblance to the pattern for 1991 and 1996, though with fewer males. This is particularly evident in the ages 25-39 where the proportions of females were actually greater than in 1991. This suggests that there could have been overcompensation for the 'missing men' in the subsequent revisions to the 2001 mid-year estimates. The table below shows the difference by age between the original 2001 estimate and the September 2004 revised 2001 estimate.

Table 6: Revisions to 2001 mid-year estimates by age, thousands

	0-19	20-24	25-29	30-34	35-39	40-44	45-49	50-69	70+
Male	1.9	9.9	39.6	39.5	15.3	3.3	3.3	3.4	1.5
Female	1.5	1.5	2.0	2.2	1.8	0.5	1.4	3.4	2.5

This shows that in the ages 25-39, and to a lesser extent 40-49, the revisions to males, based largely upon a national demographic analysis using the Longitudinal Survey, were considerably greater than those to females. It is possible that the method used to allocate the approximately 160 thousand missing males to individual local authorities may have been too favourable to London.

Chart 5 on the following page shows the differences in the female proportions by age since 1991, including the original 2001 estimates for comparison. This chart only shows up to age 69 because after age 70, the ratio of males to females shows a more expected pattern. It clearly shows that the gender ratios for the latest estimates for 2001 and 2003 are very much lower than in previous years at ages 25-39.

In 2003 females represent 54.0% of the 70 to 74 year olds, rising to 70.3% of those aged 85 and over. There has been a fall in the female proportions since 1991, which can be partly accounted for by the increase in life expectancy, which has been improving at a faster rate for males than for females.

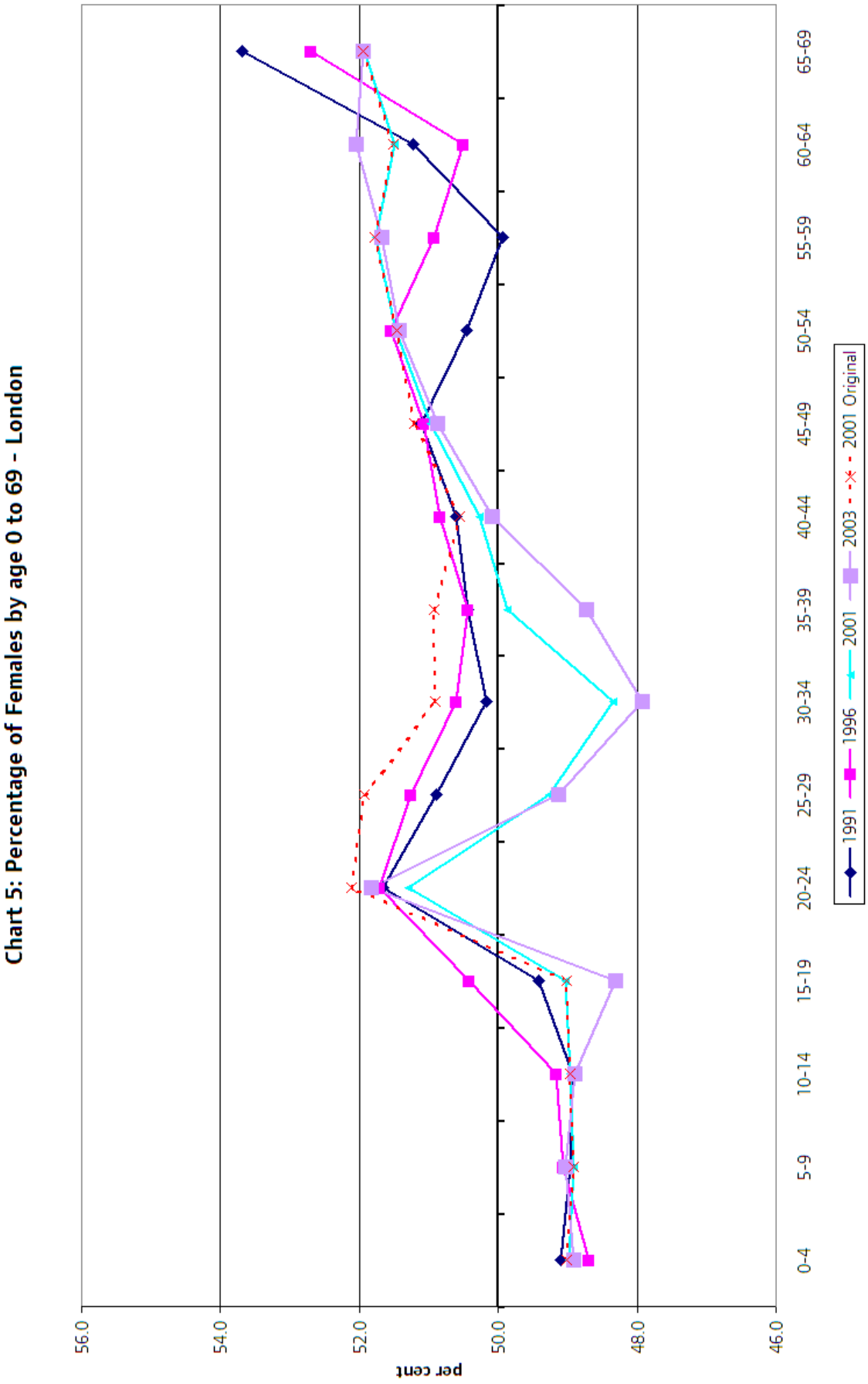


Chart 5: Percentage of Females by age 0 to 69 - London
per cent
56.0
54.0
52.0
50.0
48.0
46.0
0-4
5-9
10-14
15-19
20-24
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
1991
1996
2001
2003
2001 Original

Compared with England & Wales as a whole, London shows a very different pattern. Since 1991, England & Wales has seen a fall in the female percentage from 51.36% 51.05%. London has fallen by over 3 times as much; from 51.73% to 50.62%.

However, comparing the pattern in the current series for London with that of the original, pre-2001 Census series of 1991 to 2000 mid-year estimates, shows that the rate at which the gender gap is closing has been greatly reduced. Original estimates showed the 1991 proportion at 51.35% falling to 50.07% in 2000, much of this fall occurring since 1998. The current estimate for 2000 gives a female proportion of 51.13, with the same pattern of a sharper fall between 1998 and 2000. Chart 6 shows the comparison between the current England & Wales and London series as well as the pre-2001 Census series of mid-year estimates for London.

The pre-2001 Census estimates had consistently reduced the excess female population of London. In 1991 the excess had stood at 186 thousand and by 2000 was estimated to have been whittled away to only 10 thousand. The latest 2001 estimates show the excess to have been 128 thousand but in two years this has been estimated to be reduced to 92 thousand. The changes in London are completely at odds with the national trend and the ONS estimates may have a consistent bias in them regarding the interpretation of the age structure of internal migration.

Looking at individual London boroughs helps to explain some of what is happening in London as a whole. Data for Kensington & Chelsea, Tower Hamlets and Havering have been presented on Chart 7 as examples of some of the different patterns seen in London.

The City of London has consistently had the lowest proportion of females, however, because of its very small population it has been disregarded in this analysis.

Since 1995, the population of Tower Hamlets has been weighted towards males, decreasing from 50.20% female in 1991 to 49.91% in 1995 and 48.67% in 2003. There may be two reasons explaining this. Firstly, migration: there is a high level of international migration into the borough and recently more inward international migrants tend to be women. Secondly there is a high Bangladeshi population in Tower Hamlets – 42.6% of London's Bangladeshis live in Tower Hamlets, making up 33.4% of the borough population. The Bangladeshi population in the UK is known to have a surplus of men, due to the pattern of Bangladeshi men migrating to Britain some years before women and families came.

The age structure of Tower Hamlets shows more clearly the effects. The general pattern is similar to that of London, but the figures are more extreme. In 2003, in the population aged 35-39, in Tower Hamlets only 43.08% is female, compared with 48.70% in London. There is also a higher male population in the 65-74 year old population. Data on ethnicity by age from the 2001 Census clearly shows the effect of the age structure of the Bangladeshi population in Tower Hamlets. In all ages 60 and over there are more men than women, falling to only 25% women in the 70-74 age group. This indicates the different past migration behaviours of men to women. The large dip in the 30's to mid-40's suggests that there may be a second wave of male only Bangladeshi in-migration.

Chart 8 shows the age structure in Tower Hamlets compared with that for London.

Only three boroughs in London had an increase in the proportion of females since 1993. Barking and Dagenham, Bexley and Havering have all increased slightly, by less than 0.5 percentage points. These three boroughs are all likely to be affected by in-migration from nearby boroughs and all have older population structures. The population of these boroughs are more settled with less migration turnover. The older age structure, and the higher life expectancy for women than for men, means that there will be a higher proportion of women.

In 2003, Bromley had the highest proportion of women at 51.95%, having fallen by only 0.20 percentage points since 1991. However, for the whole of the 1990's, Kensington & Chelsea had the highest female proportions in London. Similarly to Tower Hamlets, the age structure of Kensington and Chelsea helps in explaining the situation. The group aged 20 to 24 shows a proportion of 55.76% female compared with 51.80% for London. There are also comparatively high female proportions in the 55-59 and 60-64 age groups.

Migration has a considerable impact on the age structure of Kensington & Chelsea, and there are two factors at work here. Firstly, there is high inward migration to the borough; in 2002-2003 there was a net inflow of 4,800, however, due to higher propensity of women to register or re-register with GP's it is likely that men are under-represented in this total. Secondly, there is probably an effect due to the type of housing available in the borough. Kensington & Chelsea has many rental houses and flats that are attractive to students and young professionals due to the central location to places of work and study. Single women appear to be more likely than single men to live in flat/house shares, therefore boosting the borough's young female population. This type of accommodation is also attractive to older single and divorced women. Chart 9 shows the age structure of Kensington and Chelsea as compared to that of London.

Charts 6-9 are on the following pages.

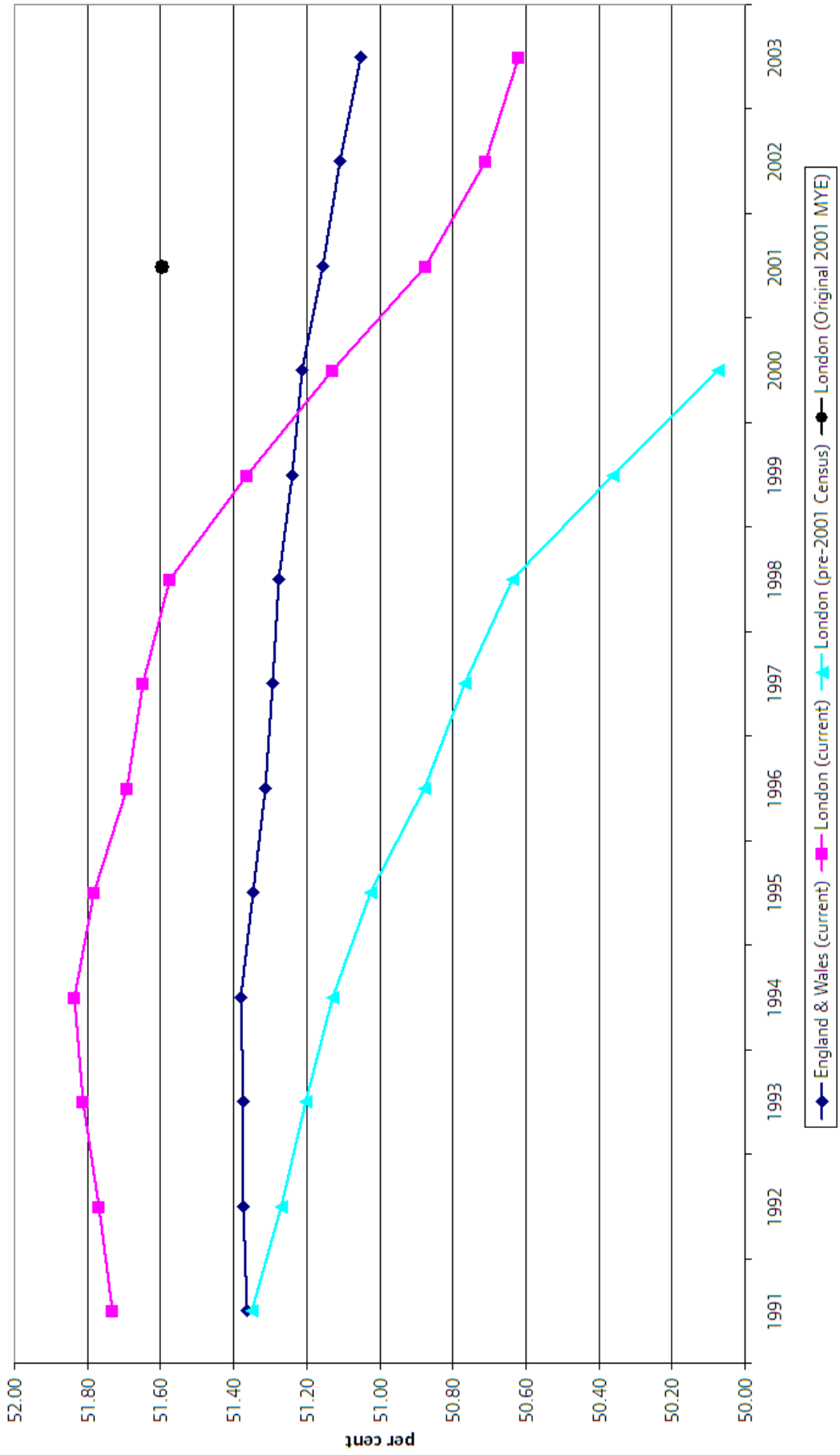
Future Mid-Year Estimates

This new set of mid-year estimates should now mark the end of the revisions, and the mid-year estimates should now be produced annually as before and published in the September of the following year to which they relate.

Availability of data

Data for all year's 1991 to 2003 are available on the ONS website:
http://www.statistics.gov.uk/statbase/Product.asp?vlnk=601&More=N.
In addition, data and GLA analysis are available on the Demography Extranet. Data by single year of age are available for 1991, 2001, 2002 and 2003. Currently data for 1992 to 2000 are only available by 5-year age band and are also on the Extranet. As soon as the single year of age data are released they will replace the 5-year data.

Chart 6: Percentage of Females



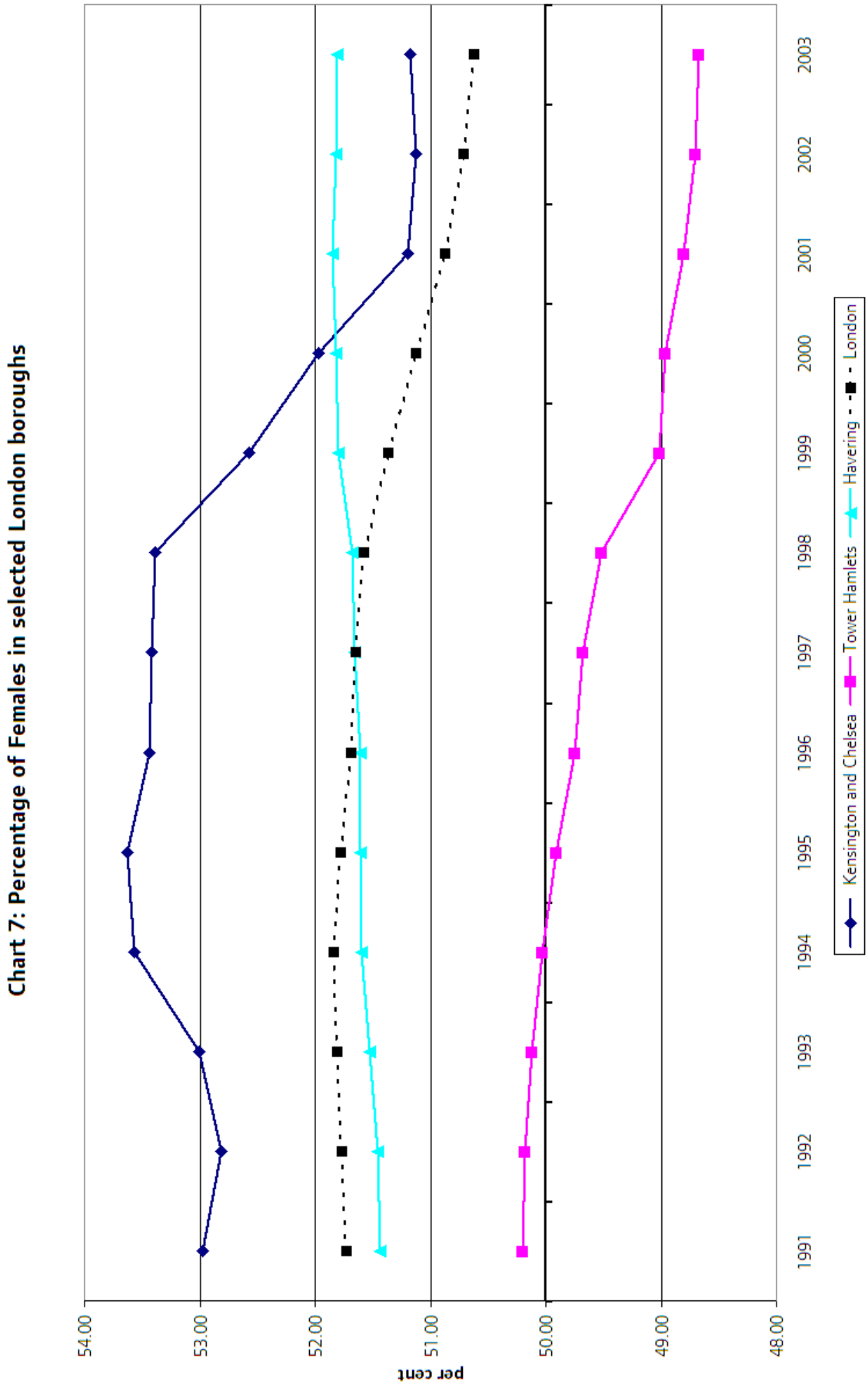


Chart 7: Percentage of Females in selected London boroughs
per cent
54.00
53.00
52.00
51.00
50.00
49.00
48.00
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
Kensington and Chelsea
Tower Hamlets
Havering
London

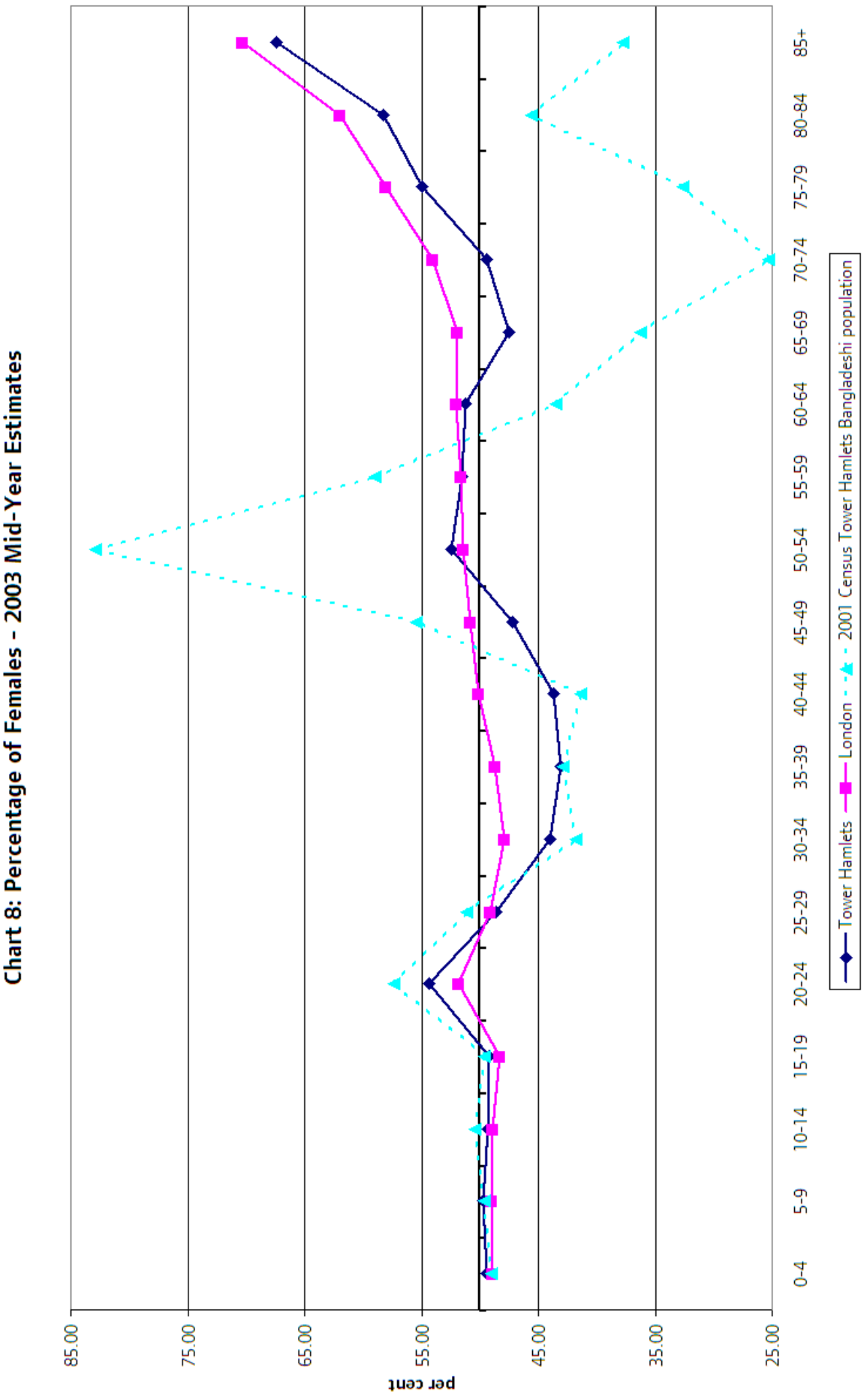


Chart 8: Percentage of Females - 2003 Mid-Year Estimates
per cent
85.00
75.00
65.00
55.00
45.00
35.00
25.00
0-4
5-9
10-14
15-19
20-24
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70-74
75-79
80-84
85+
Tower Hamlets
London
2001 Census Tower Hamlets Bangladeshi population

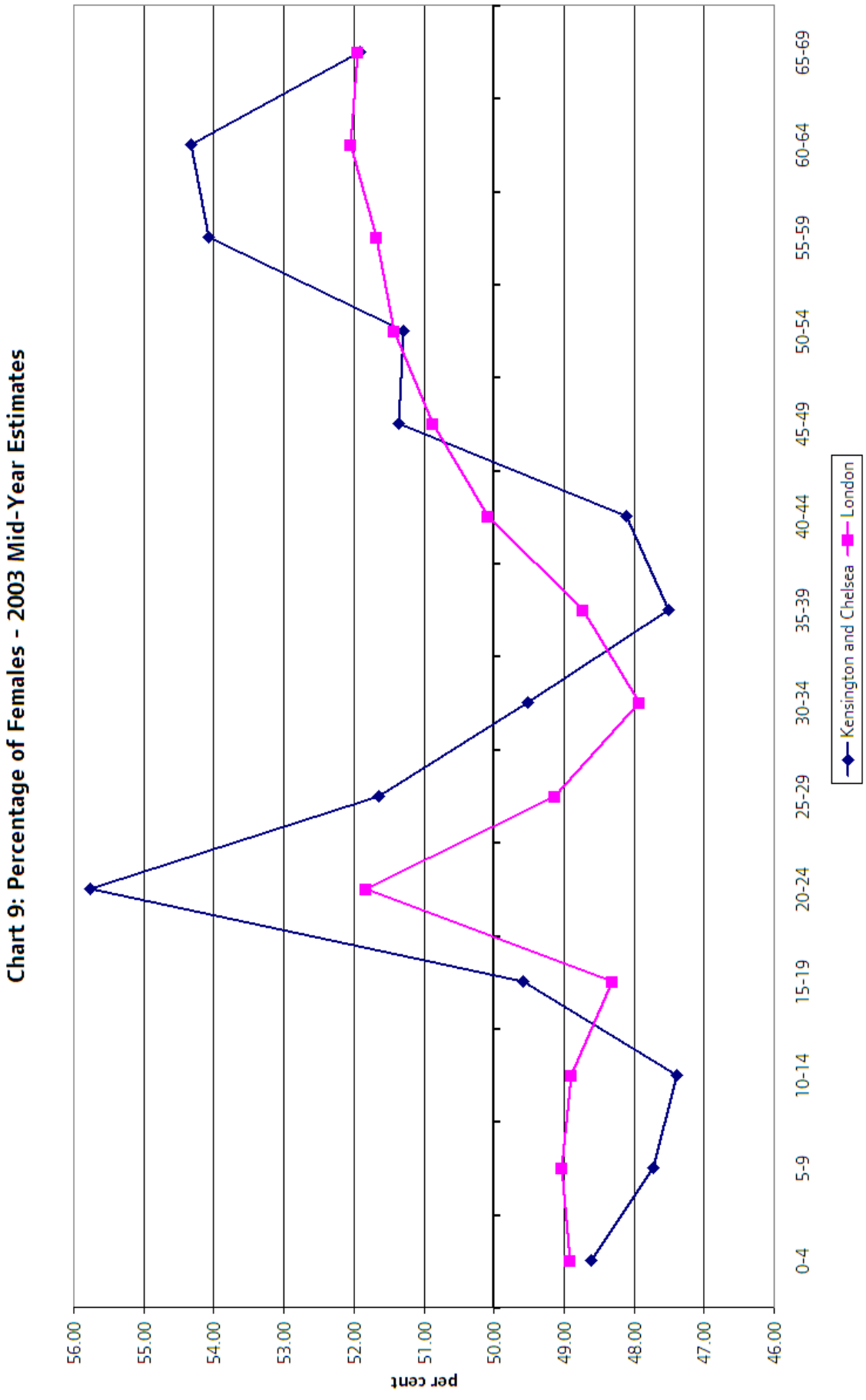


Chart 9: Percentage of Females - 2003 Mid-Year Estimates
per cent
56.00
55.00
54.00
53.00
52.00
51.00
50.00
49.00
48.00
47.00
46.00
0-4
5-9
10-14
15-19
20-24
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
Kensington and Chelsea
London

Regular Briefings from the GLA Data Management and Analysis Group

Recent DMAG Briefings:

DMAG 2004/1	2003 Round Ward Population Projections	Georgia Hay
DMAG 2004/2	London's Workers Part 1: 2001 Census results	Eileen Howes
DMAG 2004/3	Borough Demographic Profiles	Georgia Hay
DMAG 2004/4	DMAG Annual Review 2003	Jackie Maguire/ Rob Lewis
DMAG 2004/5	2003 Round Demographic Projections	John Hollis
DMAG 2004/6	Londoners' Qualifications: Analysis of 2001 Census data	Gareth Piggott
DMAG 2004/7	The Parliamentary General Election, 2001	Michael Minors/ Dennis Grenham/ Jackie Maguire
DMAG 2004/8	Constituency Demographic Profiles	Georgia Hay
DMAG 2004/9	Measuring Unemployment	Lorna Spence
DMAG 2004/10	Measures of Income	Rachel Leeser/ Lorna Spence
DMAG 2004/11	2001 Census Profiles: The Irish in London	Eileen Howes
DMAG 2004/12	Health in London Age-standardised Rates	Gareth Piggott
DMAG 2004/13	Data Sources on Refugees and Asylum Seekers	Ed Klodawski
DMAG 2004/14	Census Information Note 2004-1	Eileen Howes
DMAG 2004/15	2001 Census: Local Authority Population Studies	John Hollis
DMAG 2004/16	2001 Census Profiles: Bangladeshis in London	Gareth Piggott
DMAG 2004/17	London Plan Sub-Regional Demographic Profiles	Georgia Hay
DMAG 2004/18	Indices of Deprivation 2004	Rachel Leeser
DMAG 2004/19	2001 Census Profiles: Muslims in London	Eileen Howes
DMAG 2004/20	ONS Mid-Year Population Estimates: 2001 and 2002 (revised) and 2003	John Hollis/ Georgia Hay
DMAG 2004/21	School Register	Shen Cheng
DMAG 2004/22	Census Information Note 2004-2	Gareth Piggott

If you would like copies of previous briefings, please contact Jackie Maguire at the GLA, jackie.maguire@london.gov.uk

Contact details for the Data Management and Analysis Group are as follows:

Rob Lewis (020 7983 4652) is **Head of the Data Management and Analysis Group**. rob.lewis@london.gov.uk

Bill Armstrong (020 7983 4653) works in the **Census Team** with particular responsibilities for **commissioned tables**, **workplace data** and **mapping**. bill.armstrong@london.gov.uk

Gareth Baker (020 7983 4349) works in the GIS Team. gareth.baker@london.gov.uk

Baljit Bains (020 7983 4613) works in the **Demography Team** and is responsible for **ethnic demography**, including **ethnic group projections**. baljit.bains@london.gov.uk

Shen Cheng (020 7983 4889) works in the **Education Team** and is responsible for school roll projections. shen.cheng@london.gov.uk

Hywel Davies (020 7983 4696) is responsible for the **SASPAC** project and for the development of **GIS** work. hywel.davies@london.gov.uk

David Ewens (020 7983 4656) is responsible for **education research and data analysis** and school roll projections. david.ewens@london.gov.uk

Giorgio Finella (020 7983 4328) works in the **Census Team.** giorgio.finella@london.gov.uk

Dennis Grenham (020 7983 4532) works mostly on **statistical compendia**, **election statistics** and **special publications**. dennis.grenham@london.gov.uk

Georgia Hay (020 7983 4347) works in the **Demography Team** and is responsible for **ward level projections,** the **Demography Extranet** and **borough liaison**. georgia.hay@london.gov.uk

John Hollis (020 7983 4604) is responsible for the work of the **Demography Team** and the **Social Exclusion Team**, and particularly for **demographic modelling.** john.hollis@london.gov.uk

Eileen Howes (020 7983 4657) is responsible for the work of the **Census Team**. eileen.howes@london.gov.uk

Ed Klodawski (020 7983 4694) works in the **Demography Team.** His post is joint with the **London Health Observatory** and specialises in **ethnic** and **health** issues**.** edmund.klodawski@london.gov.uk

Rachel Leeser (020 7983 4699) works in the **Social Exclusion Team** with particular responsibilities for **indicators** and **income data**. rachel.leeser@london.gov.uk

Alan Lewis (020 7983 4348) is a member of the **SASPAC Team**. alan.lewis@london.gov.uk

Jackie Maguire (020 7983 4655) is responsible to the Group Head and co-ordinates the administrative and financial work of the Group. jackie.maguire@london.gov.uk

Michael Minors (020 7983 4654) is responsible for the work of the **General Statistics and Education Team**. michael.minors@london.gov.uk

Gareth Piggott (020 7983 4327) works in the **Census Team**. gareth.piggott@london.gov.uk

Lorna Spence (020 7983 4658) is a member of the **Social Exclusion Team**, with particular responsibilities for the **Labour Force Survey** and **benefits data**. lorna.spence@london.gov.uk

Please use the above descriptions in deciding whom to contact to assist you with your information needs.