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Data Management and Analysis Group

Claimant Count Model 2007: Technical Note

Guidance note to accompany published data tables

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Claimant Count Model: Technical Note 2007

Overview

- The claimant count measures the number of people claiming Jobseeker's Allowance (JSA). The data represent a subset of the unemployed (those claiming JSA) and provide a useful - albeit partial - measure of unemployment. Despite their limitations, they have a number of applications and are widely used.

- The GLA maintains a model that generates claimant count rates by age and gender for London boroughs and wards. These data are produced monthly and are designed to complement and add value to statistics already published by the Office for National Statistics (ONS).

- GLA rates are different to ONS rates. GLA rates express the claimant count as a proportion of the resident labour force, whereas ONS rates express the claimant count as a proportion of the population. Additionally, GLA rates are available by age and are derived from a labour force base that is updated annually.

- The model is regularly updated to incorporate the best data available and is revised on an annual basis. In addition to regular revisions of the labour force base, the model has also been redesigned to incorporate changes in ward boundaries, ONS rounding of claimant data and new data on projected changes in economic activity rates.

- The latest 2007 revision, which comprises a update of the labour force base, has led to some discontinuities in claimant count rates for certain groups and areas (eg young claimants in Camden and Croydon). This is a result of improvements to the population modelling methods used for the GLA 2006 round population projections, which underpin the labour force base.

- This and previous revisions lead to discontinuities in the data which make it difficult to compare rates over time on a 'like for like' basis. This is the main limitation of the model which is primarily designed to provide snapshot data every month as opposed to long term trend data. These discontinuities occur in the January of each year and to assist users, January data are run for both the old and the new base so users can see the impact of the change over to the new base.

- This guidance note explains the basis of the current 2007 model and accompanies the monthly tables which are made available on the GLA's data website every month. The note also summarises available historical data.

Introduction

The claimant count is based on the number of people claiming Jobseeker's Allowance (JSA)[1] and provides a useful - albeit partial - measure of unemployment. The Office for National Statistics (ONS) publishes a range of data on the number of claimants but data published in the form of percentage rates are more limited. For this reason, the GLA's Data Management and Analysis Group (DMAG) produces its own labour-force based rates for London. These rates are designed to complement the official population-based rates already produced by ONS.

To produce these rates, DMAG maintains a spreadsheet-based model that generates monthly claimant count rates by age and gender for London boroughs and wards. In addition, the model summarises data on duration of claims. These data are made available via the GLA's dedicated data sharing web site (https://extranet.london.gov.uk/).

This note explains the basis of the current 2007 model and is designed to accompany the published tables. Specifically, the note outlines:

- What the claimant count measures
- How GLA and ONS rates are calculated
- Why GLA and ONS published data differ
- Data available on the website every month
- Rounding of claimant count data, categories and precision of estimates
- Revisions to the model & discontinuities over time
- Guide to available data
- Guidance on reproducing this data in reports and on websites: copyright issues

What the claimant count measures

The claimant count measures the number of people claiming JSA. As the claimant count is a by-product of the benefits administration system, it only counts those unemployed people who are claiming JSA. GLA analysis has highlighted that some unemployed people are more likely to be missed by the claimant count than others; these include women, young people and those living in higher income households. This largely reflects the eligibility criteria for JSA. **For this reason, the claimant count is best viewed as an unemployment indicator not a comprehensive unemployment measure.**

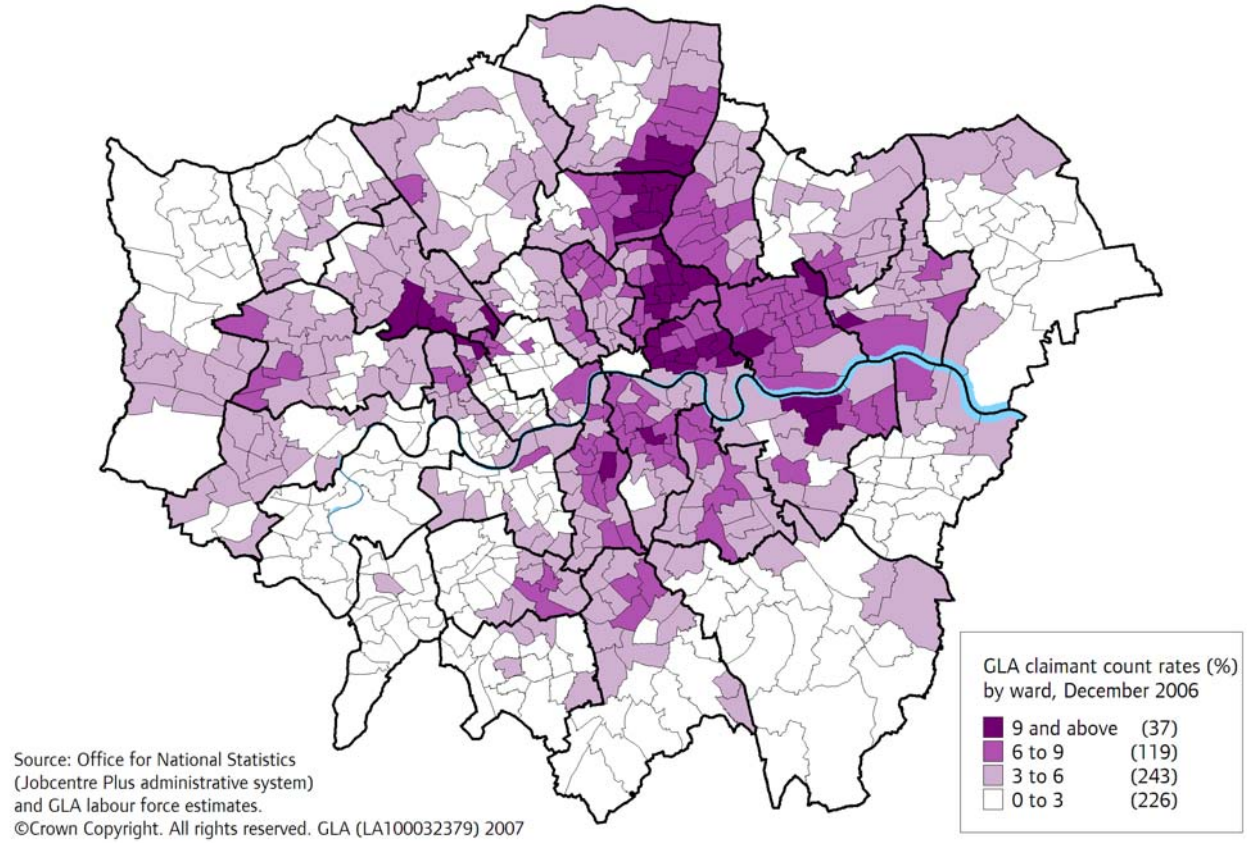
The Government's official and preferred measure of unemployment is currently ILO[2] unemployment as measured by the Annual Population Survey (formerly the Labour Force Survey). ILO unemployment measures those people out of work, who are actively looking for work and are available to start work. This measure is more comprehensive than the claimant count as it includes the many unemployed people who are not eligible for or not claiming JSA. Recent data for London suggested that the ILO unemployment estimate was 301,000 for Sept-Nov 2006[3], almost double the size of the November claimant count figure (165,000).

[1] JSA claimants include those who sign on for National Insurance credits but receive no benefit.
[2] ILO stands for International Labour Organisation.
[3] Seasonally adjusted figure from the ONS Labour Market Statistics Press Release (January 2007)

Despite its limitations, the claimant count is widely used because it is timely (data are available monthly around 4/5 weeks after the date of the count) and importantly, because it is available at **ward level** (Map 1). ILO unemployment estimates are not available for wards and even borough level ILO estimates (modelled and surveyed based) have high confidence intervals and cannot be generated by age or gender with any degree of reliability. ILO unemployment data for London boroughs can be found in: DMAG Briefing 2006/30 (Londoners and the labour market: Key facts).

Provided users are clear about what the claimant count does and doesn't measure, it can be a very useful tool for local area profiling and has a range of applications. Research[4] by ONS has suggested that the claimant count is a leading indicator of labour market turning points in the economy. More detail on the basis of the claimant count can be found in DMAG Briefing: *Measuring Unemployment: A guide to different sources of data on unemployment (DMAG Briefing 2004/9).*

Map 1 GLA claimant count rates (%) by ward, December 2006



[4] *Labour Market Turning Points, Craig Lindsay,* Labour Market Trends, November 2003

Official ONS claimant data and rates

Claimant count data are made available every month by ONS via NOMIS, a website for official labour market statistics (www.nomisweb.co.uk). Data on the number of claimants are available by age, duration of claim and gender, down to ward and super output area level. All data by age and duration are rounded to the nearest five.

In addition to counts, ONS publishes percentage rates. **ONS rates, also referred to as 'proportions', express the claimant count as a proportion of the working age population**. From May 2004, ONS rates have been available down to ward level. While population-based rates can be useful, there is also demand for labour force-based rates.

Which type of rate is most appropriate really depends on the aim of the exercise in question (ie why the data are being compared). Rates that express claimants as a percentage of the labour force are sometimes preferred as they provide more sophisticated controls for differences in the composition of local populations. This is an important issue in London as economic activity rates differ significantly between areas and groups within the population. In contrast, ONS population based claimant count rates can be very useful for consideration alongside other benefits data (eg Incapacity Benefit and Income Support) which are often expressed as a proportion of the population.

Figure 1 Derivation of GLA and ONS claimant count rates

$$\text{ONS claimant count rate (\%)} = \frac{\text{Claimant count}}{\text{Population}} \%$$

$$\text{GLA claimant count rate (\%)} = \frac{\text{Claimant count}}{\text{Persons economically active (excluding full-time students)}} \%$$

NB: GLA rates are calculated for a range of age groups within the working age population.

ONS population based claimant rates have two other limitations. First, they are not published by age and second, in the case of wards, the population base is static. Currently, ONS ward based rates use a mid-2001 population base. So local population changes will not be reflected in the rates. The design of GLA rates overcomes both these limitations.

Table 1. ONS and GLA claimant count rates for boroughs, December 2006

	Claimant rates (%)	
2006 base	ONS (% population)	GLA (% labour force)
City of London	1.1	2.2
Barking & Dagenham	3.8	5.5
Barnet	2.4	3.3
Bexley	2.2	2.8
Brent	4.2	5.8
Bromley	1.9	2.4
Camden	2.9	4.6
Croydon	2.7	3.6
Ealing	2.9	3.9
Enfield	3.7	5.1
Greenwich	3.8	5.3
Hackney	5.8	8.5
Hammersmith & Fulham	2.9	4.0
Haringey	5.2	7.5
Harrow	2.2	2.9
Havering	1.9	2.4
Hillingdon	2.2	2.9
Hounslow	2.3	3.0
Islington	4.3	5.9
Kensington & Chelsea	1.8	3.0
Kingston upon Thames	1.2	1.6
Lambeth	4.6	6.0
Lewisham	4.2	5.4
Merton	2.2	2.9
Newham	5.2	7.7
Redbridge	2.9	3.8
Richmond upon Thames	1.2	1.7
Southwark	4.4	6.2
Sutton	1.8	2.2
Tower Hamlets	5.8	8.6
Waltham Forest	4.4	6.3
Wandsworth	2.3	3.0
Westminster	2.1	3.4
Greater London	3.2	4.4

Source: GLA & Office for National Statistics

GLA claimant rates

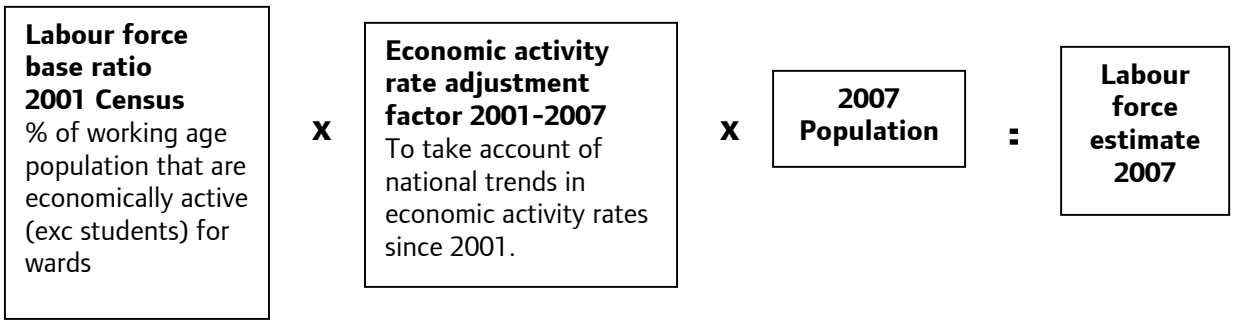
The GLA rates are designed primarily for monitoring labour market exclusion and this is the main rationale for using a labour force-based rate. The rates are intended to provide an indication of how the resident workforce is faring in the labour market and to provide like for like area comparisons. **The GLA percentage rates express the claimant count in a borough or ward as a percentage of economically active residents in that area, excluding economically active full-time students.**

Economically active people are those who are either in work or who are unemployed and looking for work (ie the labour force). Full-time students who are economically active are excluded from the base as they are largely ineligible for unemployment-related benefits and also because their exclusion provides a more meaningful comparison between areas as the student population is not uniform across London or within boroughs. As the GLA base is the labour force, which is a subset of the population, GLA claimant rates are higher than ONS rates (See Table 1).

How the GLA calculates local labour force estimates

The labour force data used in the model are estimates produced by the GLA's Demography Team. The 2007 estimates are generated by applying 2001 Census data on economic activity, adjusted for changes in national economic activity rates between 2001 and 2007[5], to the 2007 GLA ward population projections.

Figure 2 Derivation of 2007 labour force base for local areas



Note: All calculations age and gender specific

The **population adjustments** are age and gender specific and are updated annually (usually in January) to come into line with the latest population projections for that year. Currently, 2007 labour force estimates are consistent with GLA 2006 round of population projections[6]. Additional revisions to the base can take place mid-year should improved labour force data become available.

The **economic activity rate adjustment** is a new feature of the model that was introduced in 2006. The current adjustment takes account of changes in economic activity rates between

[5] *Projections of the UK Labour Force Trends 2006-2020,* Labour Market Trends, January 2006

[6] RLP low used. RLP=Review of London Plan. See DMAG Briefing 2006/32 *GLA 2006 Round Demographic Projections* for more information.

2001 and 2007 and is based on ONS national labour force projections. Using these, the change in economic activity (EA) rates by age and gender between 2001 and 2007 has been used to update the 2001 Census ratios. These take on board factors such as the increasing participation rates of women aged over 50.

Appendix 1 provides more technical detail on the modelling process.

Differences between GLA claimant count totals and ONS published statistics
As well as differences in rates, claimant count totals can also differ. Borough and ward totals generated by the model will differ slightly from headline claimant count data published by ONS. This is due to (i) the issue of computerised claims and (ii) ONS use of out of date (ie 1991) borough boundaries:

- **Computerised and clerical claims**
  All claimant count data used in the GLA model are based on computerised claims, these exclude manually processed claims that are not in the system at the time of the count. Computerised claims represent around 99 per cent of all claims, so count totals presented in the GLA model are sometimes slightly lower than ONS headline totals (See Table 2). Age and duration data is only available for computerised claims, which is why the model uses this as its base.

- **Inconsistent borough geographies**
  The way in which ONS and the GLA deal with borough level geography is different and this is another reason why ONS and GLA borough totals are slightly different. The GLA model is entirely based on current ward and borough boundaries (in the case of London: boundaries in place at December 2002 consistent with 2001 Census geographies).

  ONS prefers to publish borough and regional claimant count totals on the basis of 1991 boundaries. This is because ONS wanted to maintain consistent time-series data at borough and regional level. For the most part, borough level differences in ONS and GLA counts are trivial with the exceptions of the City, Redbridge and Barking & Dagenham. Table 2 illustrates these issues by comparing GLA and ONS borough counts on various bases.

Monthly data tables currently available via the website
The final output of the model is a large Excel spreadsheet of 266 data tables. Eight data tables are made available every month for the 32 London boroughs. In each case data is presented for wards with borough totals. In addition, a summary table is published for the London boroughs, that also has comparator data for Greater London, Inner London, Outer London, England, England & Wales and Great Britain, this also includes data for City of London. No ward tables are produced for the City of London due to the small size of its resident population. A summary of ward rankings is also produced on the basis of the overall claimant rates by gender. Data are also available for GLA constituency areas on request.

Table 2 Comparison of GLA and ONS claimant count data for London boroughs and the City of London, December 2006

	Claimant count				Difference due to boundaries (GLA-ONS, all claims)		Computerised as % of all claims (current boundaries)
	ONS published statistics (1991 boundaries)		GLA derived totals (current boundaries)				
	All claims	Comput-erised	All claims	Comput-erised*	No.	%	
City of London	82	80	121	120	39	48	99
Barking & Dagenham	3,814	3,805	4,063	4,055	249	7	100
Barnet	5,069	5,035	5,063	5,030	-6	0	99
Bexley	2,972	2,970	2,968	2,965	-4	0	100
Brent	7,732	7,570	7,582	7,420	-150	-2	98
Bromley	3,436	3,430	3,438	3,430	2	0	100
Camden	4,856	4,840	4,857	4,840	1	0	100
Croydon	6,010	5,990	6,005	5,985	-5	0	100
Ealing	5,879	5,865	5,941	5,925	62	1	100
Enfield	6,542	6,520	6,635	6,610	93	1	100
Greenwich	5,705	5,685	5,667	5,645	-38	-1	100
Hackney	8,075	8,010	8,070	8,005	-5	0	99
Hammersmith & Fulham	3,848	3,835	3,807	3,795	-41	-1	100
Haringey	8,060	7,980	8,061	7,980	1	0	99
Harrow	2,988	2,935	3,030	2,975	42	1	98
Havering	2,589	2,585	2,587	2,585	-2	0	100
Hillingdon	3,494	3,440	3,508	3,450	14	0	98
Hounslow	3,325	3,325	3,303	3,300	-22	-1	100
Islington	5,598	5,580	5,579	5,565	-19	0	100
Kensington & Chelsea	2,504	2,495	2,539	2,530	35	1	100
Kingston upon Thames	1,265	1,250	1,271	1,255	6	0	99
Lambeth	8,809	8,730	8,754	8,680	-55	-1	99
Lewisham	7,102	7,025	7,152	7,075	50	1	99
Merton	2,839	2,810	2,840	2,810	1	0	99
Newham	8,375	8,315	8,344	8,285	-31	0	99
Redbridge	4,565	4,560	4,365	4,360	-200	-4	100
Richmond upon Thames	1,503	1,490	1,520	1,510	17	1	99
Southwark	7,946	7,880	7,988	7,925	42	1	99
Sutton	2,008	2,000	2,004	1,995	-4	0	100
Tower Hamlets	8,601	8,555	8,584	8,540	-17	0	99
Waltham Forest	6,553	6,535	6,545	6,525	-8	0	100
Wandsworth	4,770	4,695	4,786	4,715	16	0	99
City of Westminster	3,760	3,740	3,782	3,760	22	1	99
Greater London	**160,674**	**159,560**	**160,759**	**159,645**	**85**	**0**	**99**

Source: Office for National Statistics & GLA calculations (*The GLA model uses this measure)

Notes: Data on computerised claims are only available rounded (to the nearest five).

Age and duration categories

The model generates data by ward by gender, age and duration of claim. Data by age is presented for three age groups within the main claimant age group (16 to pensionable age) as shown in Table 3. Very few unemployed 16 and 17 year olds are eligible for Jobseeker's Allowance (unless special circumstances apply) so this group tends to be significantly under represented in the claimant count. Each month, a table on young claimants by age is published to illustrate this point. In December 2006, of all London claimants aged 16 to 24, only 3 per cent were aged 16 or 17. If users require more detailed count data by age and duration, this is available direct via NOMIS (more detailed data is only available via NOMIS for counts only not rates).

Table 3. Monthly tables and age and duration categories used (2007 model)

Tables	**Age groups**	**Duration of claim**
Table 1 Claimant count and rates by gender Table 2 Claimant count and rates by age, persons Table 3 Claimant count and rates by age, males Table 4 Claimant count and rates by age, females Table 5 Claimant count, young claimants by age Table 6 Claimant count by duration, persons Table 7 Claimant count by duration, males Table 8 Claimant count by duration, females	16-24 25-44 45-59/64 (59 women & 64 for men)	Up to 13 weeks 14-26 weeks 27-52 weeks 53-104 weeks Over 104 weeks
Table 9 Summary ward rankings	Gender split only	
Table 10 Labour force ward denominators	Reference table by age & gender	

Claimant count data for Super Output Areas

The GLA model uses ward geography. However since October 2004, ONS has published claimant count data by age and duration down to lower level Super Output Area (SOA). While these data are useful, their application is limited (when analysed by age and duration) as the numbers are very small and are rounded to the nearest five. The GLA has no plans to incorporate data by SOA into the model as it would be very difficult to produce meaningful or reliable rates by age at this level. However, count data are available freely on NOMIS, where data for larger areas of interested can be constructed.

Rounding of claimant count data, categories and precision of estimates

In June 2004, ONS started rounding claimant count data by age and duration to the nearest five. As counts were no longer precise, rates based on very low counts were less reliable. This and other technical issues associated with rounding led to a review of the GLA model design and a consequent reduction of the number of categories used.

The intention of the redesign was to limit the publication of poor quality data. Despite the redesign, in the case of some wards and age groups (especially for females), claimant numbers are still very low (eg under 20). In these cases, rate estimates are likely to be less reliable, in general, the smaller the count, the less accurate the derived rate.

Even when considering data for larger groups, users need to bear in mind that GLA rates are estimates NOT precise measures. The count is rounded and the labour force base is an estimate, so all rates have a degree of error attached to them.

Historical changes to the model and discontinuities over time

Claimant count rate data on the GLA website are available from January 2002 onwards. However, the basis of the model has been revised several times since then:

- **February 2004: Change to new ward boundaries and radical overhaul of the model**
  In 2004, ONS started to publish ward claimant count data on the basis of current ward boundaries (previously data had been based on 1991 boundaries). At this time, the GLA decided to substantially revise its model to reflect both the new geographies and to take account of more up to date resident labour force data (used to derive the rates). The new model improved on its predecessor, as the labour force base was dynamic and designed to be updated annually (unlike the old model which had a static base).

- **January 2005: Change of design of model to accommodate rounding and 2005 labour force base**
  In 2005, the model was further revised to incorporate the rounding of claimant count data, as already mentioned. The result of this was a reduction of the number of age and duration categories, taking effect from June 2004. Additionally, the labour force base was updated to 2005. *Age and duration tables were suspended for some time whilst re-modelling took place but these were later re-instated.*

- **January 2006: Revision of model to accommodate new 2006 labour force base plus introduction of economic activity rate adjustment**
  In 2006, model underwent its annual revision of the labour force base to be consistent with 2006 population data. However in addition to this, a new adjustment factor was introduced which takes account of changes in economic activity rates since 2001, based on ONS national labour force projections. The first of these adjustments (the move to 2006 population data), led to large discontinuities in the data for young people aged 16-24, as the population projections for the number of young people in London fell significantly relative to the previous years projections[7]. This led to claimant count rates for this age group increasing considerably for many areas.

- **January 2007: Regular updating of the labour force base to be consistent with 2007 population data**
  The most recent revision to the model was in January 2007, which was the regular updating of the labour force base to bring it into line with 2007 population data. The economic activity rate adjustment was also updated to incorporate changes in economic activity rates between 2001 and 2007.

[7] The GLA 2005 Round Interim projections were the first to incorporate the migration age and gender structure from the 2001 Census.

The new 2007 population data has led to some discontinuities in rates (though not quite as marked as in 2006). These are due to the differences in the modelling process underpinning the population projections, which have led to changes in the base economically active populations between 2006 and 2007 for some boroughs. Croydon and Camden in particular have seen large losses in projected population, while Richmond upon Thames has seen an increase. These differences are mostly due to improvements to the population modelling method. The impact has been that the claimant rates for some groups and areas have changed. For example, in the case of Camden and Croydon, the claimant rates for young people have increased as a result of the reduced population in those areas.

Data for January 2007 have been run on the new and old labour force, so users can see the impact of the change to the new base.

Comparing data over time

The first of these revisions listed, which changed the ward boundary basis, means that data from February 2004 onwards are not comparable **in any way** with data from the old GLA model. This is because the two models use different geographies, have entirely different labour force bases and additionally use slightly different age categories and table layouts. The January 2004 count was the last to be released on the basis of 1991 ward geography and ONS has decided not to make retrospective data available due to concerns about disclosure control.

Later revisions, while less radical, still lead to considerable discontinuities in the data over time which can make it difficult to compare rates on a 'like for like' basis. This is the main limitation of the model which is designed primarily to provide snapshot data every month as opposed to long term trend data. Discontinuities are most likely to occur when the January data is released each year, which is the first to incorporate the new labour force data for that year. Users who use the data to look at trends are strongly advised to highlight the discontinuity on any charts and tables that present time series data.

Historical data availability

Table 4 summarises exactly what monthly data are available and on what basis. Data from 2002 are available on the GLA extranet, though rates derived from the old model (pre February 2004) carry significant health warnings. This is due to the fact that the labour force based in the old model was static and related to the size of the labour force as at 1991. Consequently, reliability of rates can be poor, especially for wards that experienced high population change between 1991 and 2001. Users wishing to use this data are encouraged to contact the GLA for further advice on this issue. All data prior to 2002 are available on request.

Table 4: GLA claimant count modelled estimates: a guide to available data

	Claimant count data for months:					
Date:	Aug 1999 - January 2004	February to December 2004		Jan–Dec 2005	Jan-Dec 2006	Jan 2007 onwards
Model	Old 1991 based model*	Current model (2004 base)		Current model (2005 base)	Current model (2006 base)	Current model (2007 base)
Ward boundaries	1991	2002		2002	2002	2002
Labour force	1991	Mid-2004		Mid-2005	Mid-2006	Mid-2007
Age categories	16-19 20-24 25-34 35-44 45-54 55-59 60+	*Feb-May:* 16-24 25-34 35-44 45-54 55-PA** *Due to rounding, the number of groups was reduced.*	*Jun–Dec:* 16-24 25-44 45-PA	Working age 16-24 25-44 45-PA	Working age 16-24 25-44 45-PA	Working age 16-24 25-44 45-PA
Duration categories (in weeks)	Up to 6 wks 7-13 wks 14-26 wks 27-52 wks 53-104 wks 105-156 wks Over 156 wks	Up to 6 wks 7-13 wks 14-26 wks 27-52 wks 53-104 wks 105-156 wks Over 156 wks	< 14 wks 14-26 wks 27-52 wks 53-104 wks 105 wks+	< 14 wks 14-26 wks 27-52 wks 53-104 wks 105 wks+	< 14 wks 14-26 wks 27-52 wks 53-104 wks 105 wks+	< 14 wks 14-26 wks 27-52 wks 53-104 wks 105 wks+
Where is the data?	Data from January 2002 are available on the GLA data extranet. Older data are available on request.					

Notes:

* Rates based on the old GLA model (data for months prior to February 2004) were derived using a 1991 labour force base. Consequently, rates have poor reliability, especially for wards where population change between 1991 and 2001 was high. Further advice on the use of this data is available on request.

** PA=up to pensionable age (59 for women and 64 for men)

How to access data via the GLA's website

Data tables from the model are made available every month via the GLA's dedicated data sharing website: https://extranet.london.gov.uk/ under the topic area 'Social Exclusion'. To get access to the site, you must first register your details then you will receive a password and username that will enable you to download data each month. The site is intended for regular users. For one-off enquiries, the GLA will email data direct.

Additionally, official claimant count data direct from the Office for National Statistics is available via NOMIS (www.nomisweb.co.uk).

Reproducing this data in reports and on websites: copyright issues

As monthly data tables are based on data from both the Office for National Statistics and the GLA, users are advised to take care over reproducing data and ensure they follow copyright guidance. Specifically if organisations want to reproduce this data (via reports or websites) they must:

- Ensure that they have permission to reproduce ONS data as they are Crown Copyright. Most organisations do this by obtaining a 'click-use' licence: (www.clickanduse.hmso.gov.uk).
- Ensure that the relevant source is acknowledged/visible on each table.
- Ensure that the data are reproduced accurately and not misrepresented in any way.
- Ensure that appropriate copyright statements are visible somewhere in the report:
  (i) Claimant count data are © Crown Copyright and are reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland
  (ii) Copyright © Greater London Authority, 2007

The GLA is happy to share the data with local authorities and other agencies and will give permission for tables to be made available via other organisations websites provided organisations ensure the above conditions are met. Additionally the GLA require:

(i) That this guidance note is made available to accompany the tables.
(ii) That the data are made **freely** available to others (ie not sold on).

Further information

Other information on the subject of unemployment indicators can be found it three DMAG Briefings:

DMAG Briefing 2003/26	Unemployment in London: An analysis of 2001 Census
DMAG Briefing 2004/9	Measuring Unemployment: A guide to different sources of data on unemployment
DMAG Briefing 2006/30	Londoners and the Labour Market: Key facts

If you have comments about the data or would like further information, please contact Lorna Spence of the DMAG Social Exclusion Team on 0207 983 4658 or by e-mail: *lorna.spence@london.gov.uk*

Appendix 1. GLA local area labour force estimates for the 2007 model

This appendix explains how the resident labour force base, which underpins the GLA claimant count model, is calculated.

The model

The 2007 resident labour force populations are derived using data from the 2001 Census, GLA population projections and ONS Labour Force (LF) projections.

From the 2001 Census for each ward the ratio of economically active persons (excluding full-time students) to resident population was calculated for appropriate age-groups and by gender. These are the economic activity (EA) ratios.

In calculating the base for the claimant count model up to 2005, the Census EA ratios were applied to the appropriate projected population figures. However, in January 2006, ONS released national labour force projections for 2006 to 2020. These enabled the GLA claimant count model to build in data on projected EA rates for the first time. These were incorporated from January 2006.

For the 2007 model, the projected changes in EA rates between 2001 and 2007 were used to update the 2001 Census EA ratios for each ward. For 16-24 year olds, the projected rates used relate only to those not in full-time education, to ensure consistency with the Census base.

The ratios were age and gender specific to take account of differences within the population. In keeping with the standard 'working-age' definitions, rates have been calculated for ages 16-17, 18, 19, 20-24, 25-29, … 55-59 and 60-64 (males only) and accumulated to age groups 16 to 24, 25 to 44 and 45 to 64 year olds for males and 16 to 24, 25 to 44 and 45 to 59 year olds for females. The total labour force figures are calculated by summing the age/gender groups. Borough totals are sums of the ward level labour force estimates.

2001 Census EA = Total economically active – Economically active full-time students

$$\textbf{Census Ratio} = \frac{\text{2001 Census EA}}{\text{2001 Census population}}$$

$$\textbf{EA rate adjustment factor} = \frac{\text{EA rate}_{2007}}{\text{EA rate}_{2001}} \times 100$$

LF Adjusted Ratio = Census Ratio x EA rate adjustment factor

2007 EA Base = 2007 population x LF Adjusted Ratio

Table A1. Economic activity rate adjustment factors, based on ONS Labour Force projections

	Age									
	16-17	18-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64
Males	94.2	98.6	99.0	98.8	99.5	99.2	100.3	100.9	102.9	108.8
Females	89.4	99.0	101.7	101.5	99.5	100.1	101.0	104.7	110.9	NA

The GLA's population projections

Every year, the GLA produces population projections by borough and ward. The projections are produced using a model that takes account of many factors, including births, deaths, migration, electorates and new housing. The housing data come from the London Development Database (up to March 2006) and the London Housing Capacity Study (LHCS). The current study was carried out in 2004 and is being used in the first draft alterations to the Mayor's *London Plan*.

This set of population projections has been produced as part of the 2006 round of GLA demographic projections and incorporates ONS mid-year estimates and the components of population change – such as births, deaths and migration – for years 2001 to 2005. DCLG 2003-based household projections, released in March 2006, have also been incorporated to provide the link between population and households.

In October 2006 two sets of projections were produced: RLP[8] Low and RLP High. RLP High was produced in order to show the potential longer-term implications for London of recent migration trends. In particular the projection assumes that London will continue to have the 1999-2004 proportions of total UK international inflows and outflows that have been assumed in the Government Actuary's Department's 2004-based projections. RLP Low has been based directly on known and assumed additional homes available in each borough since 2001 and therefore should be used in preference to RLP High for shorter-term work. It is RLP Low that has been used in the claimant count model. For more information on the two projections see *DMAG Briefing 2006/32 GLA 2006 Round Demographic Projections*.

Discontinuities

Due to the differences in the modelling process there are some boroughs with large changes in the base economically active populations between 2006 and 2007. Croydon and Camden in particular have seen large losses in projected population, while Richmond upon Thames has seen an increase. These differences are mostly due to improvements to the population modelling method. Table A.2 gives the difference in the economically active population bases between the 2006 and 2007 models.

[8] Review of London Plan

Table A.2 Differences in economically active populations: 2006 and 2007 compared

	All persons	Males						Females					
	16-RA	16-64	16-24	25-34	35-44	45-54	55-64	16-59	16-24	25-34	35-44	45-54	55-59
City of London	451	226	17	73	89	37	11	225	12	111	81	21	-1
Barking and Dagenham	-934	-541	-133	-289	-189	108	-37	-393	-196	-187	-80	150	-78
Barnet	791	486	57	-423	333	278	242	305	1	-105	244	337	-171
Bexley	-1,365	-791	-217	-93	-309	1	-174	-573	-229	21	-232	162	-294
Brent	-2,507	-1,691	-293	-1,529	-154	227	58	-816	-269	-835	-14	271	31
Bromley	1,406	880	346	108	-79	462	43	526	280	221	-51	410	-333
Camden	-5,893	-3,411	-466	-2,146	-643	-81	-74	-2,482	-419	-1,666	-268	-2	-127
Croydon	-3,794	-2,284	-933	-748	-314	-55	-233	-1,511	-801	-263	-426	351	-370
Ealing	-1,864	-1,304	-212	-1,257	-218	238	144	-560	-186	-692	30	314	-26
Enfield	1,315	650	108	-165	201	387	119	665	47	180	130	397	-88
Greenwich	585	233	-89	-217	126	374	39	352	-104	-2	212	329	-83
Hackney	693	273	-38	-10	74	180	67	420	-30	215	-3	270	-33
Hammersmith and Fulhan	-882	-620	-77	-794	203	65	-18	-262	-82	-385	184	81	-59
Haringey	1,663	785	46	77	320	280	62	877	46	453	179	223	-23
Harrow	825	391	45	-103	206	157	85	435	66	129	95	232	-87
Havering	726	509	203	177	-26	175	-20	217	92	322	-65	105	-237
Hillingdon	-1,002	-671	-254	-243	-259	117	-32	-331	-179	-97	-119	308	-243
Hounslow	-429	-436	-146	-543	-19	151	121	7	-87	-207	100	197	4
Islington	147	-71	-68	-226	86	136	1	218	-74	102	78	175	-62
Kensington and Chelsea	-1,504	-936	-99	-741	-66	8	-38	-568	-134	-449	86	76	-147
Kingston upon Thames	-2	-104	-63	-290	109	117	23	102	-49	6	78	152	-85
Lambeth	1,870	675	36	-457	595	366	135	1,194	49	346	356	434	9
Lewisham	-1,817	-1,251	-244	-641	-446	94	-14	-566	-141	-121	-441	249	-113
Merton	124	-64	15	-553	129	224	121	188	14	-181	77	318	-41
Newham	-2,247	-1,592	-356	-822	-290	-75	-50	-654	-337	-70	-190	-7	-50
Redbridge	-2,233	-1,440	-277	-918	-134	-35	-77	-793	-296	-325	-111	115	-176
Richmond upon Thames	2,385	1,372	266	265	266	322	252	1,013	234	385	135	321	-63
Southwark	296	-133	-89	-403	-7	308	58	430	-151	345	-37	351	-79
Sutton	185	107	59	-229	50	216	12	77	73	-32	10	251	-226
Tower Hamlets	40	-304	-189	-774	369	287	4	344	-157	-63	393	133	39
Waltham Forest	-1,304	-955	-214	-877	-99	215	19	-349	-166	-387	-48	341	-89
Wandsworth	2,677	1,297	68	-242	1,012	398	61	1,380	95	332	621	415	-83
Westminster	-54	-279	-130	-645	299	203	-5	225	-124	-73	416	123	-116
Inner London	-4,560	-5,341	-1,589	-7,752	1,594	2,205	200	781	-1,446	-924	1,455	2,542	-845
Outer London	-7,091	-5,654	-1,731	-7,928	-379	3,677	707	-1,437	-1,756	-2,050	-35	5,060	-2,656
Greater London	-11,651	-10,995	-3,320	-15,680	1,216	5,882	907	-656	-3,202	-2,974	1,419	7,601	-3,501

To create the denominators for the claimant count rates, the latest available population projections for that particular year will be used. For illustrative purposes, using females aged 25 to 29 in wards in Camden, Table A3 shows how the 2007 labour force figures were calculated.

Taking Gospel Oak as an example:

2001 Census Ratio = $\frac{\text{2001 Census EA}}{\text{2001 Census population}} = \frac{421 - 15}{559}$ = **0.73**

LF Adjusted Ratio = $\frac{\text{2001 Census Ratio x EA rate adjustment factor}}{100}$

= $\frac{0.73 \times 101.7}{100}$ = **0.74**

2007 EA Base = 2007 population x LF Adjusted Ratio =624 x 0.74 = **461**

Table A3. Deriving the 2006 labour force base for Camden wards, females aged 25-29

	2001 Census ('EA' = Economically Active)					ONS LFS Projections adjustment	GLA 2006 Round RLP Low Projections	
Females, aged 25-29[1]	Population	Persons EA	EA full-time students	Base[2]	Ratio[3]	Adjusted Ratio[4]	2007 population	2007 Final Base[5]
Belsize	887	704	24	680	0.77	0.78	659	514
Bloomsbury	611	433	36	397	0.65	0.66	869	574
Camden Town with Primrose Hill	641	493	19	474	0.74	0.75	713	536
Cantelowes	665	508	20	488	0.73	0.75	884	660
Fortune Green	896	743	15	728	0.81	0.83	738	610
Frognal and Fitzjohns	831	656	21	635	0.76	0.78	611	475
Gospel Oak	559	421	15	406	0.73	0.74	624	461
Hampstead Town	686	556	25	531	0.77	0.79	558	439
Haverstock	777	552	24	528	0.68	0.69	678	468
Highgate	549	454	13	441	0.80	0.82	496	405
Holborn and Covent Garden	645	430	17	413	0.64	0.65	922	601
Kentish Town	810	632	40	592	0.73	0.74	754	561
Kilburn	747	570	11	559	0.75	0.76	630	480
King's Cross	812	403	55	348	0.43	0.44	1,136	495
Regent's Park	698	435	20	415	0.59	0.60	973	588
St. Pancras and Somers Town	610	361	8	353	0.58	0.59	999	588
Swiss Cottage	1,039	842	26	816	0.79	0.80	694	555
West Hampstead	1,069	905	15	890	0.83	0.85	686	581
Camden	**13,532**	**10,098**	**404**	**9,694**	**0.72**	**0.73**	**13,623**	**9,590**

[1]Labour force data have been derived for detailed age bands then amalgamated to broader groups needed for the model

[2] EA Base = Economically active persons (excluding economically active full-time students) = Economically Active 'All persons' – Economically Active 'full-time students'

[3] Ratio = 2001 Census Base \2001 Census Population

[4] The 2001Census ratio was adjusted to take account of the ONS national labour force projections. The change in the economic activity rates by age and gender between 2001 and 2007 was calculated and applied to all wards, boroughs and Greater London.

[5]2007 EA = 2007 Population * Adjusted Ratio

More information

A full working copy of the spreadsheet used to produce the denominators is available on request. For more information about the modelling process, please contact Caroline Hall of the DMAG Demography Team on caroline.hall@london.gov.uk or 020 7983 4347.

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