

London well-being scores at ward level

Intelligence Update 16-2011

Background to Well-being

In November 2010, the Prime Minister asked the Office for National Statistics (ONS) to develop measures of national well-being and progress. The Government was seeking 'a re-appraisal of what matters' that would 'lead to government policy that is more focused not just on the bottom line, but on all those things that make life worthwhile' (Number 10, 2010). The Cabinet Secretary Sir Gus O'Donnell confirmed the need for 'developing new and better ways to understand how policy and public services affect well-being', indicating a commitment to make real policy change. He is overseeing a programme of work to ensure well-being becomes fully embedded in the policy process across Government.

Between November 2010 and April 2011 the ONS undertook a national debate on what mattered most to participants. A further ONS consultation relating to national well-being was launched on 31 October 2011. The ONS will include both subjective and objective measures of well-being. Subjective measures include feelings of happiness and other aspects of subjective well-being, such as feeling that one's activities are worthwhile, or being satisfied with family relationships.

The ONS work highlighted that the following things should be reflected in measures of well-being:

- health
- good connections with friends and family
- job satisfaction and economic security
- present and future conditions of the environment
- education and training

From April 2012 onwards, ONS will publish measures of well-being on a dedicated area of the ONS website.

Small area data

It is important for London policy makers to consider well-being at a local level ie, smaller than borough level because of the huge differences within boroughs. Local authorities rely on small area data in order to target resources, and with local authorities currently gaining more responsibilities from government, this is of increasing importance. But small area data is also of interest to academics, independent analysts and members of the public with an interest in the subject of well-being.

Ward level is considered to be the best geographical level for small areas for three reasons. Firstly, wards are still easily identified by name eg, Finsbury Park, compared with LSOA and MSOAs which only have a code eg, E01002730 or Islington 007A, which makes them more difficult to use/analyse. Secondly, boroughs still monitor ward level

data more than other small area data primarily because their councillors are elected to wards. Finally, the Indices of Deprivation (IMD) from CLG is created for all LSOAs in England, and while this is not a measure of well-being per se, it is a composite measure of deprivation that would include many of the indicators considered in this tool, while no such single measure exists for wards.

The IMD is a useful tool for researchers and is widely used. However, it is not updated annually, and is only available at LSOA level.

The well-being scores combine 12 of the most relevant indicators in order to calculate a single score at ward level.

Not all small area indicators are available at ward level. Many are only available at either LSOA or MSOA level. Therefore, it has been necessary to model some of the data. The technique for this was to break down results into output areas, then re-apportion the results based on the output areas that are within a ward. It is important to emphasise that the well-being scores created are indicators, and are not exact measures of well-being. Furthermore, the well-being indicators are not causes of well-being but they do indicate whether the resident population of a ward is more or less likely to be satisfied with life which could in turn affect their mental and physical well-being.

Which indicators have been used?

At a national and regional level, the ONS will be using some subjective data to measure well-being. However, this is not available for small areas as no surveys, other than the Census, are large enough for this level of detail and so this work includes more objective approaches.

As with any use of data for the purpose of measuring the well-being of a population in a certain area, it can only be a general indicator. No measure is perfect and therefore areas that have scores that are not statistically significantly different from one another cannot be described for certain as having better or worse well-being within its resident population. This is especially the case with small area scores. However, by using a number of measures across a number of years, this increases the reliability of the well-being scores. Data availability at this level of geography is far more limited than for districts, and this means the indicators that the scores are based on are not perfect measures of well-being, though they are the best available.

It is important that well-being scores can be updated regularly eg, annually. This is so trends can be analysed in order to measure changes in small areas relative to each other. Therefore datasets that are available on an annual basis have been prioritised over those that are published less frequently.

The ONS consultation reflects national views but it is thought it may undervalue issues that are particularly important to Londoners. The Annual London Survey 2010 results indicate these issues would include Housing, Crime (safety) and Transport (access).

Combining the ONS research with the ALS results the following themes have been used: Health, Economic Security, Safety, Education, Children, Families, Environment, Housing, Access, and Community.

Table 1 The well-being measures

Theme	Indicator	Available annually	Measures
Health	Standardised Mortality Ratio	Yes	Measure of health of population
Health	% population claiming Incapacity Benefit	Yes	Measure of health of population
Economic security	% of population claiming income support	Yes	Measure of economic security
Safety	Crime rate	Yes	Measure of community safety
Education	Average capped GCSE score (modelled)	Yes	Measure of educational levels of children
Education	Unauthorised pupil absence (modelled)	Yes	Measure of children's happiness with school
Community	% dependent children in lone parent families	Yes	Measure of strength of families
Economic security	% dependent children in out-of-work families	Yes	Measure of children's economic stability and family role models
Environment	Air quality/emissions (modelled)	No	Measure of air quality and its related impacts on physical health
Housing	Mean house prices ¹	Yes	Measure of how attractive an area is to live in
Access	Time/Distance to nearest foodstore	Yes	Measure of access to everyday services
Community	Turnout at last election	Varies	Measure of engagement with society and government

NB A full description of each indicator is given in the Appendix.

There are 12 measures of well-being in Table 1. Each of these measures has been turned into an index score where 0 is the London average, and scores higher than 0 represent higher well-being. The 12 scores are combined and averaged to make an overall score.

Most of the above indicators produce scores where a higher result equals lower well-being. However, three of them are the inverse of this, where higher scores would mean higher well-being, and they are house prices, turnout, and GCSE scores. In these cases the score been reversed so that figures greater than 0 indicate better well-being.

Research showed that many people thought access to 'greenspace' was important to them. However, it is considered that a measure of greenspace from land use data for

each ward could possibly be misleading here since it would not give an idea of proximity to greenspace outside a person's ward of residence ie, is there a large open space in the adjacent ward or is it much further away? There would need to be some way of measuring access/distance to greenspace, which is not currently available.

Note 1: House prices are used here to measure the attractiveness of an area or 'quality of place', where high prices equal better well-being. This is because high prices normally reflect the quality of an area eg, transport links to central London, shops, greenspace, safety etc. It is important to note that high house prices are an indicator of well-being but are *not a cause* of increased well-being.

This measure is opposite to housing affordability where cheaper housing would reflect higher well-being. It is felt that tenure is not necessarily a big influence on a person's day to day happiness or well-being, though it may reflect long-term economic stability. However, high property prices do not automatically lead to low ownership levels. Indeed there is little correlation between property prices and levels of home ownership at borough level. Therefore it is felt house prices are a reflection on the quality of an area regardless of whether a high or low proportion of the residents own their home. The fact that an individual lives in a neighbourhood and has access to whatever is there is a bigger indicator of a person's well-being.

While home ownership levels may indicate economic security it is also likely to indicate other things such as how transient a population is, and marital/family status. Well-being, as measured by economic security, is covered by other more reliable indicators.

House prices demonstrate change in an area over time and house prices are probably one of the most reactive indicators so trend data here is valuable for future years.

Well-being tool

The index data for the 12 measures has been loaded into an excel spreadsheet, and the scores combined to make a single well-being score. Users are able to interact with the tool to change the importance (weight) of each measure depending on how they view the significance of each one. The spreadsheet shows the suggested weightings to begin with. The weights in the table below are based on the spread of the data within each indicator ie, the Standard Deviation (SD). Some indicators have a much larger spread than others, which if weighted equally as those with a small spread would have a proportionally much larger influence on the overall well-being score. To negate this, the indicator with the lowest SD (GCSE) is given the highest weight of 10 and all other weights are calculated in relation to this. The interactive weightings set this tool apart from the IMD where scores cannot be adjusted depending on a user's needs or focus at that time.

Table 2 Suggested weightings for core product:

Indicator	Standard deviation*	Suggested Weight
Standardised Mortality Ratio	24.4	4
% population claiming Incapacity Benefit	39.7	2
% of population claiming Income Support	51.9	2
Crime rate	48.1	2
Average capped GCSE score (modelled)	8.8	10
Unauthorised pupil absence (modelled)	38.6	2
% dependent children in lone parent families	40.0	2
% dependent children in out-of-work families	43.5	2
Air quality/emissions (modelled)	14.4	6
Mean house prices	13.4	7
Time/Distance to nearest foodstore	9.7	9
Turnout at last election	15.8	6

*Average Standard Deviation from 2005 to 2009.

Appendix

Description of each indicator

Standardised Mortality Ratio (SMR) measures deaths in the resident population. This takes into account the age of the population ie, an older population would expect to have more deaths. If there are more deaths than expected for the age of the population, a score over 100 is generated. E&W=100.

Sources: Number of Deaths from ONS, Population by age is from GLA 2010 Round Projections (SHLAA).

Incapacity Benefit or Severe Disablement Allowance claimant rate. Incapacity Benefit (IB) is paid to people who are incapable of work and who meet certain contribution conditions.

Severe Disablement Allowance (SDA) is paid to those unable to work for 28 weeks in a row or more because of illness or disability. SDA was removed for new claims in April 2001. Time period used is a snapshot of May from each year. Demominator is population aged 16-64.

Source: IB/SDA from DWP, Population from GLA 2010 projections.

Income Support claimant rate. Income Support (IS) is a non-contributory benefit paid to people who have low incomes and who are not required to be available for employment.

Time period used is a snapshot of May from each year. Demominator is population aged 16-64.

Source: IS from DWP, Population from GLA 2010 projections.

Crime rate. Index scores of overall notifiable offences per 1,000 population. Very high scores above the 98th percentile have been constrained to a minimum of -300. This is because areas with very high crime rates tend to be areas with high daytime populations (ie, non-resident) and therefore do not directly reflect the well-being of the resident population. In 2009, this affected 12 wards with a maximum crime rate of 2009.

Source: MPS, Home Office, and Population from GLA 2010 projections.

GCSE average point scores. GCSE and Equivalent point scores for pupils at the end of Key Stage 4 (KS4) in maintained schools (Referenced by Location of Pupil Residence). Capped Point Scores are based on the best eight results made by each pupil. Ward data calculated by apportioning Lower Layer Super Output Area (LSOA) data.

Source: DfE (on Neighbourhood Statistics).

Unauthorised pupil absence. Pupil absence in all maintained schools (Referenced by Location of Pupil Residence). Unauthorised absence is absence without permission from a teacher or other authorised representative of the school. Ward data calculated by apportioning Lower Layer Super Output Area (LSOA) data. Data only available from 2007 onwards. 2007 data repeated for 2005 and 2006.

Source: DfE (on Neighbourhood Statistics).

Children in lone parent families - % dependent children receiving child tax-credit and in lone parent families. Child Tax Credit Brings together income-related support for children and for qualifying young people aged 16-19 who are in full-time non-advanced education or approved training, into a single tax credit, payable to the main carer. Families can claim whether or not the adults are in-work. Ward data calculated by apportioning Lower Layer Super Output Area (LSOA) data.
Source: HMRC.

Children in out-of-work families - % dependent children receiving child tax-credit in out-of-work families. Child Tax-Credit brings together income-related support for children and for qualifying young people aged 16-19 who are in full-time non-advanced education or approved training, into a single tax credit, payable to the main carer. Families can claim whether or not the adults are in-work. Ward data calculated by apportioning Lower Layer Super Output Area (LSOA) data.
Source: HMRC.

Air emissions. This is an average of Particulate Matter (PM10), Nitrogen Oxide (Nox) and Nitrogen Dioxide (NO2). Emissions data are modelled and based on cells (20 metre grid squares). GIS was used to match centre points of cells to wards.
Source: GLA London Atmospheric Emissions Inventory 2008

Average (mean) house prices. Ward data calculated by apportioning Middle Layer Super Output Area (MSOA) data. Scores had an upper limit of 50 due to small number of very high prices, which would otherwise skew the overall result. This applied to 14 wards.
Source: ONS (on Neighbourhood Statistics)

Access to foodstore by public transport/walk. The proportion of households with access to foodstores within a reasonable travel time by public transport/walk. Foodstores are grocery/supermarkets or convenience stores. The ward results are averages calculated using Lower Super Output Area (LSOA) data.
Source: Department for Transport, Accessibility Indicators

Elections turnout. Data for 2005 and 2006 is taken from the 2006 Borough elections, data for 2007 and 2008 is taken from the Mayoral election and data for 2009 is from the 2010 Borough elections.
Source: London Boroughs and Greater London Authority

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