

The fourth annual **Bank of Scotland Quality of Life Survey** tracks where living standards are highest in Scotland and across Great Britain by ranking local performance across key indicators of the labour market, the housing market, the environment, education and health. The index examines data at a local authority level (LA). Data has been gathered from sources including the ONS, DEFRA, the Scottish Executive and the HBOS house price database.

## Quality of Life – Technical Details

### VARIABLES

The quality of life reading for each local authority has been created by summing scores across 15 variables within 6 broad groups.

Group	Variable	Period covered
<b>Labour</b>	Employment rate %	April 2008- March 2009
	Gross weekly Earnings £s	Apr-09
<b>Housing</b>	Owner Occupation rate %	2007. Regional data for 2001-07 used to project forward 2001 Census.
	No of rooms in house	Scottish House Condition Survey 2004-2007
	% of houses with central heating and sole use of bathroom	Scottish House Condition Survey 2004-2007
<b>Urban environment</b>	Traffic flows per square km	2008
	Burglary rate per 1000 population	2008-09 Scotland
	% of Vacant Properties	2008
	CO2 Emissions per tonne per capita	2006 from Experian Plc
<b>Physical environment</b>	Average annual Rainfall	Average 2001/2008
	Annual sunshine hours	Average 2001/2008
<b>Health</b>	% in good health	2001 Census
	life expectancy at birth for males	2007
<b>Education</b>	No. of pupils in primary school class	2008- Scotland
	% of S4 group achieving 5 or more SCQF awards at level 4	2008/09 Scotland

Each local authority is given a score out of 10 for each variable contained in the index. Scores within each of the broad groups are averaged and then the six group scores are summed to create an overall quality of life score.

## Scoring process

The following formulae have been used to derive individual quality of life scores.

$$S_a = 5 * V_a / [(V_{max} - V_{min})/2 + V_{min}]$$

$$S_i = S_a + (V_i - V_a) / \text{s.d.}(V_n)$$

$$\text{Max} = 10, \text{Min} = 0$$

$$G_i = \sum S_i / n$$

$$Q_i = \sum G_i$$

$S_a$  = average score,  $V_a$  = average value,  $V_{max}$  = highest reading,  $V_{min}$  = lowest reading

$S_i$  = individual score,  $V_i$  = individual value,  $V_n$  = all values, s.d. = standard deviation

$G_i$  = group score,  $n$  = number of values,  $Q_i$  = Quality of Life score

For each variable the average value in the series is given a score out of 10 related to its position relative to the maximum and minimum values in the series. i.e. an average value which is mid way between the maximum and minimum values is given a score of 5.

A score for each LA is then determined by adding or subtracting 1 point for each standard deviation the reading is away from the average value in the series. For variables where higher values denote a better quality of life, points are added for values higher than average in the series. For variables where lower values denote a better quality of life, points are deducted for values higher than the average in the series.

Scores within each of the broad groups are then averaged and the six group scores are subsequently summed to create an overall quality of life score.

The index has been produced at a local authority level for all 408 LAs in Great Britain, including 32 in Scotland.

## Quality of Life Variables

### Labour Market

#### Employment rate

- proportion of working age population in employment
- data covers period April 2008-March 2009
- source : Office for National Statistics

#### Gross Weekly Full-Time Pay

- average full-time gross weekly pay for all workers by residence
- data as at April 2009
- source: ASHE survey Office for National Statistics

## HOUSING

### Owner Occupation rate

- % of households which own their home either outright or with a mortgage
- Regional % change between 2001 and 2007 has been used to project forward the base data as at April 2001 to 2007.

- source: Census, Office for National Statistics; General Registers for Scotland

### **Number of rooms per household**

- total number of rooms per dwelling
- data for 2004 -2007
- source: Scottish Housing Conditions Survey

### **Central Heating**

- % of households with central heating and sole use of a bathroom
- data for 2004 -2007
- source: Scottish Housing Conditions Survey

## **URBAN ENVIRONMENT**

### **Traffic Flows**

- Traffic flows per square kilometre
- data covers year to December 2008
- source Department for Transport, Office for National Statistics

### **Vacant Properties**

- % of dwellings vacant with a local authority
- Includes both empty homes and second homes
- data as at 2008
- source Scottish Executive

### **Burglary rates**

- Burglary rates per 1,000 population
- data covers 2008/09 for Scotland
- source: Scottish Executive

### **Carbon Emissions**

- CO<sub>2</sub> Emissions per tonne per household
- data covers 2006
- source: Experian plc

## **Physical Environment**

### **Sunshine hours**

- average sunshine hours per annum
- data is an average for the period 2001-2008
- source: Met Office

### **Rainfall**

- average rainfall in millimetres per annum
- data is an average for the period 2001-2008
- source: Met Office

## Health

### Good Health

- % of people in good/fairly good health
- data as at April 2001
- source: Scottish Executive

### Life Expectancy

- Life Expectancy at birth for males
- data covers period 2007
- source: Office for National Statistics

## EDUCATION

### Primary class size

- Average Primary school class size
- data as at Dec 2008
- source Scottish Executive

### High School Results

- In Scotland % of S4 students gaining 5 SCQF awards at level 4 or better
- data covers 2007/08 for Scotland
- source: Scottish Executive

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