

# London's Quality of Life Indicators

## 2008-09 Report





# London Sustainable Development Commission (LSDC)

The Commission was established in 2002 to advise the Mayor of London on ways to make London a sustainable, world-class city. The Commission is an independent body challenging policy makers to promote a better quality of life for all Londoners, both now and in the future, whilst also considering London's wider global impacts.

In 2003, the Commission published 'A Sustainable Development Framework for London'. This provides decision and policy makers with fourteen overarching objectives that they should seek to achieve with any strategy, policy or project they wish to progress. These objectives relate to the Commission's four areas of sustainable development:

- Taking Responsibility for the impact of one's actions on other people and the environment, and thinking longer term;
- Developing Respect for London's diverse communities and for London's environment;
- Managing Resources more prudently to reduce London's environmental impact and;
- Getting Results, which achieve social, economic, and environmental objectives simultaneously to improve the quality of life of Londoners now and in the future.

One of the ways the LSDC assists London is to identify priorities for improving sustainability and to provide an overview of how well London is progressing against a core set of key sustainability indicators. This report is part of that assistance.

---

## London Sustainable Development Commission

City Hall  
4th Floor  
The Queen's Walk  
London SE1 2AA

[www.londonsdc.org.uk](http://www.londonsdc.org.uk)

### Acknowledgements

The Commission would like to thank the following:

**GLA:** Nusrat Yousuf, Abbe Marks, Bryony Mathie, Patrick Feehily, Jonathan Gaventa, Gareth Piggott, Doreen Kenny, David Ewens, Jon Oliver, Sophie Easteal, Lorna Spence, Michael Dale, Ann-Marie Collins, Becky Upfold, Liz Charter, Julius Mattai, Andy Deacon, Simon Kyte, Grant Petitt, James Gleeson, Lovedeep Vaid, Suzanne LeMiere, Syed Ahmed, Abigail Burridge, John Archer, Alex Nickson, Richard Stanton, Rebecca Smith

**London ReMade:** Aminata Diaby, Graham Randles

**Environment Agency:** John Eastwood

**Bioregional:** Jane Hersey

### Greater London Authority, May 2009

Published by  
Greater London Authority  
City Hall  
The Queen's Walk  
More London  
London SE1 2AA

enquiries 020 7983 4100  
minicom 020 7983 4458

**ISBN 978 1 84781 177 6**

Copies of this report are available from [www.londonsdc.org.uk](http://www.londonsdc.org.uk)

Printed on Revive 100 paper: 100 per cent recycled fibre content from post consumer reclaimed material; FSC and NAPM certified.

# Contents

<b>Foreword</b> .....	<b>5</b>
<b>Introduction</b> .....	<b>7</b>
Sustainable Development in London .....	7
Why a Quality of Life Indicators report? .....	9
Context and structure of the report .....	9
New indicators .....	9
Next steps .....	10
<b>Results</b> .....	<b>11</b>
Results table .....	13
<b>Key Issues</b> .....	<b>19</b>
Consumption of resources and the resulting drag on the economy. 19	
Threats to community cohesion .....	23
The need to deliver change through innovative ways of working.....	25
<b>Future measurement and data gaps</b> .....	<b>28</b>
<b>Headline Indicators</b> .....	<b>29</b>
1. Electoral turnout .....	30
2. Participation in volunteering.....	31
3. Childcare .....	32
4i. Primary education.....	33
4ii. Secondary education .....	34
5. Green Procurement Code.....	36
6. Physical activity .....	37
7. Employment rates .....	40
8. Child poverty.....	43
9. Crime.....	45
10. Neighbourhood satisfaction .....	46
11. Income inequality .....	47
12. Fuel poverty .....	49
13i. London’s ecological footprint.....	52
13ii. Waste.....	53
13iii. Carbon dioxide emissions .....	54
14i. Bird populations .....	55
14ii. Access to nature .....	56
15. Household recycling .....	57
16. Traffic volumes.....	58
17. Travel to school.....	60
18. Air quality .....	61
19. Business survival.....	64

# Contents

---

20. Life expectancy .....	65
21i. Decent housing .....	67
21ii. Housing affordability .....	69
22. Flooding .....	70
23. Carbon efficiency .....	71
<b>Appendix 1 - The Wider Indicator Menu .....</b>	<b>74</b>
<b>Appendix 2 – Abbreviations .....</b>	<b>76</b>
<b>References .....</b>	<b>77</b>

## Foreword

---

London is well placed to be the exemplary sustainable city the world looks to when it wants to know how to develop a sustainable future.

The sustainability of London, while having global implications, will significantly impact on the quality of life of those living here. For example we know poor air quality affects health and the ability of people to travel to work and school and participate in the labour market; we know that a lack of affordable childcare limits parents' ability to enter or re-enter the workforce, and that low levels of recycling mean opportunities to re-use waste as a resource are lost.

In 2004, the London Sustainable Development Commission produced the first report on *London's Quality of Life Indicators*. We are pleased to introduce our third report. This performs the vital task of helping us understand what progress has been made towards a more sustainable London and what more needs to be done.

London's size, scale, density and unique governance structures present particular challenges and opportunities in delivering sustainable development. In many areas it is still too early to tell whether London's performance is improving or not. That said, it is pleasing to note the early signs that concerted regional action is making a difference. Examples of this include the introduction of congestion charging, a focus on childcare and recycling initiatives being championed by the Mayor.

On the other hand, there is clearly still much to do requiring sustained action from all sectors. This will require strong leadership from London's Mayor, its boroughs, Local Strategic Partnerships, businesses, the Voluntary and Community Sector and a range of public agencies. All are needed to create lasting improved change.

The Commission looks forward to working with this range of partners, especially pan-London bodies, who are vital in advancing the necessary rapid improvements in quality of life and sustainable development.

This report aims to inform and stimulate debate and, more importantly, lead to coordinated and sustained action to improve the quality of life of all Londoners, today and tomorrow.

Knowing is the first step towards taking effective action.



**Paul de Zylva**

Acting Chair, London Sustainable Development Commission (2008-09)



**John Plowman**

Chair, London Sustainable Development Commission



# Introduction

---

London is at a crucial stage in its history. Climate change may be the issue that makes us all think about our impact on the planet and change our behaviour, but we should not forget that environmental, social and economic issues are inextricably linked. The Commission wants to secure a healthy environment for future generations and make our city a just and equitable place through improving quality of life, reducing social and economic inequalities, and eradicating childhood poverty.

This means we need to develop lasting integrated economic, social and environmental solutions in our day-to-day lives to protect and conserve natural resources, improve wildlife and our environment, and to reduce inequality within society. In short we should learn to live and work in a more sustainable way and aim for long-term sustainable development and progress.

The primary purpose of this report is to provide a “snapshot” of London’s quality of life and the short and long-term sustainability issues London faces.

## Sustainable Development in London

London cannot continue along its current path, where, (despite some significant successes) economic, social and environmental improvements are often viewed in isolation and are traded-off against one another. London must choose a more sustainable path, which will bring significant long-term benefits for both London and the wider world.

Sustainable development ensures we have a better of quality of life now and for the future whilst protecting and enhancing the earth’s resources. Our vision for London articulates how this can be achieved and is contained in ‘A Sustainable Development Framework for London’<sup>1</sup>.

In practice, achieving a better quality of life is about:

- Having access to quality education, jobs, services, housing and leisure;
- Living in an environment which is healthy, resilient and stable now and into the future;
- Living and working within a society which is democratic, just, engaged, diverse, responsible, supportive and vibrant;
- Being fulfilled, healthy and with sufficient personal resources to enjoy life.

Whether as individuals, communities, businesses or governments, our journey towards sustainability means improving how we think about the social, economic and environmental impacts of everything we do. We must make the most out of available opportunities, designing out negative impacts and minimising them as a last resort.

Since The World Commission on Environment and Development first officially referred to sustainable development in 1987 in its report, ‘*Our Common Future*’, known as the Brundtland Report, sustainability has been conventionally divided into social, environmental and economic spheres. Whilst this definition may be useful in looking back it fails to identify the opportunities for integrated solutions in the future.

Under a traditional approach to sustainable development the Quality of Life Indicators that the Commission has chosen would be grouped as above:

Social	Environmental	Economic
Voting	Green Procurement Code	Employment
Volunteering	Household Recycling	Child Poverty
Childcare	Travel to School	Income Inequality
Primary Education	Ecological Footprint	Business Survival
Secondary Education	Waste	Carbon Efficiency
Physical Activity	CO <sub>2</sub> Emissions	
Life Expectancy	Bird Populations	
Decent Housing	Access to Nature	
Housing Affordability	Air Quality	
Neighbourhood Satisfaction	Traffic Volumes	
Fuel Poverty	Flooding	

**The Commission’s integrated approach to Sustainable Development:**

To understand how to get to grips with sustainability the Commission promotes an integrated approach in preference to this ‘3 pillars’ way of thinking.

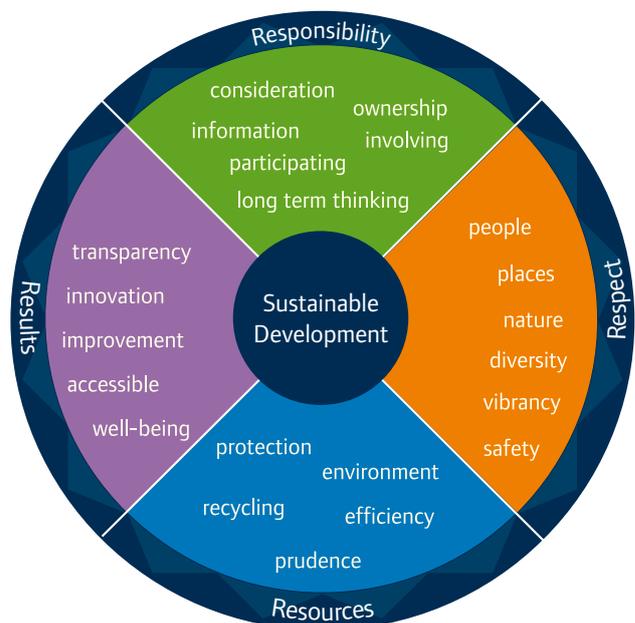
This approach sees policy makers and Londoners alike taking **Responsibility** for how their actions impact on other people and the environment, adopting an attitude which **Respects** London’s diverse populations and environment, and considering ways in which to manage the earth’s **Resources** more prudently, thereby achieving positive **Results**.

We see this integrated approach in terms of a ‘virtuous cycle’, where it makes more sense if opportunities and impacts, across these four “Rs”, are considered together and the benefits become mutually self-reinforcing.

For example, a well designed policy which aims to increase walking and cycling will not only see an increase in **Responsibility** of Londoners for their actions but should also lead to increased **Respect**

by targeting all communities. The policy would reduce consumption of the earth’s **Resources** such as finite fossil fuels, thereby delivering broader positive **Results**. These results would include reducing congestion as well as improving health (and reducing health inequalities) through the increase in daily physical exercise.

**The Four Rs Model**



## Why a Quality of Life Indicators Report?

This report is intended to:

- Provide a factual account of some key issues reflecting sustainable development and quality of life in London; to show how they compare over different areas (thematic and geographic); how they may have changed over time and where possible, to suggest how they may change in the future.
- Give an insight to the links and inter-relationships between the indicators so as to support more effective co-ordinated decision-making by the Greater London Authority (GLA) group, local authorities, business and other organisations.
- Help raise the awareness of decision makers and London's key stakeholders of the concept of sustainable development and what it means for London and to stimulate practical action to improve quality of life in London.
- Provide examples of success celebrating what Londoners have achieved and show how those actions can deliver on a broad agenda and on specific targets such as those within borough's Local Area Agreements (LAA).
- Support the Mayor's delivery of his statutory duties particularly those around sustainable development, so that the Mayor can influence as many of these indicators as possible, including those outside his direct control.

The report also provides the Commission with the timely evidence required to inform their work.

## Context and Structure of the Report

The LSDC's choice of indicators capture the breadth of the challenges facing London and provide a

simple yardstick of how London is performing against a number of measures that are viewed as key components of a well functioning, healthy, safe, sustainable city.

The data in this report comes from a variety of sources. In several cases some data and information is a few years old but still provides an indication of sustainability and direction of travel. By identifying data gaps and collection issues, we also hope to encourage others to make information more readily available for future reports.

This is the third edition of the LSDC's Quality of Life Indicators. Following previous releases in 2004 and 2005, the LSDC decided to release these indicators every four years<sup>2</sup>. The Commission has identified **23 headline Quality of Life Indicators** to be used to monitor London's progress towards becoming an exemplary sustainable world city. The 23 indicators have been chosen to reflect the integrated nature of sustainability and capture the key challenges facing London. These indicators should not be considered in isolation but as an integrated 'basket' reflecting the strong links and impacts between each.

Together the indicators provide a benchmark that helps us to gauge whether our collective actions are making London a better city to live in, now and for future generations. They can also help alert policy makers to unsustainable trends.

As well as reporting back on progress against the Quality of Life Indicators, a number of key issues have been identified that will seriously affect London's sustainability if not addressed.

## New Indicators

We have added four new indicators since the 2005 Quality of Life Indicators Report to reflect new challenges faced by London:

- Physical activity - the percentage of Londoners undertaking moderate exercise three times a week;
- Inequality of income - the percentage of Londoners in the bottom 10% and top 10% of income distribution;
- Adaptation to climate change - the number of properties at risk and Londoners signed up to the Flood Warning System; and
- Fuel poverty - the number of households in London living in fuel poverty.

We have also added a small number of supplementary indicators to provide more depth to the indicators used in the 2005 Report, including housing affordability and access to nature. We have also changed two existing indicators to reflect more up to date monitoring - children living in poverty and employment rates.

## Next Steps

Are these the correct key issues to identify as priorities for London? What case studies exist to illustrate solutions to the issues? And what actions will be required to solve these problems?

We want to hear your feedback on what you think of the indicators, the picture they show of progress, or otherwise against sustainability goals, and whether there are major barriers other than the ones identified here, that are impeding our ambition to become a world class sustainable city.

The Commission will use this information to inform its ongoing work programme and we will initiate a dialogue with key stakeholders in London to develop shared recommendations for action.

We will then produce a short report focussing particularly on the key issues, detailing best practice and setting a series of recommendations for action.

Contact us to give us your views and to obtain more copies of this report:

London Sustainable Development Commission  
Sustainable Development Team,  
Greater London Authority, City Hall,  
The Queen's Walk,  
London, SE1 2AA

T: 020 7983 4100  
F: 020 7983 4057

Email: [lsdc@london.gov.uk](mailto:lsdc@london.gov.uk)  
[www.londonsdc.org.uk](http://www.londonsdc.org.uk)

# Results

- ✓ significant change, in direction of meeting objective (improvement)
- ≈ no significant change (little or no change)
- ✗ significant change, in direction away from meeting objective (deterioration)
- insufficient or no comparable data



## Where is London doing well?

Compared with the results recorded in our 2005 Report, London has improved on 13 of the 23 indicators. Areas of notable improvement are:

- Percentage of pupils with 5 or more GCSEs (A\*-C) – a real improvement from 52.9% to nearly 60% and London is now above the national average;
- Household recycling rates – improvement of 9.7%;
- Crime levels continue to fall within London, reducing by 20% over the past 6 years. Substantial achievements have been made in reducing serious violence, knife and gun crime and burglary. Recent months have shown an increase in business crimes and this is thought to be linked to the recession. ;
- Bird populations – an overall positive picture, with improvement from 115 to 131 on the Breeding Bird Index and a 31% increase in some common bird species;
- Carbon efficiency for London has improved considerably and more than in the rest of the UK regions;
- Life expectancy has improved and is higher than the UK average; and
- Air quality – PM10 levels have improved.

## Hidden issues

Despite these improvements, London still lags behind the national average on many indicators (see headline indicators for details).

Good results on some indicators also ‘hide’ a number of issues – for example:

- Although child care places are increasing, the cost of child care remains high;
- Although GCSE results have improved across London as a whole results for Black, Asian and Minority Ethnic (BAME) groups’ results continue to be lower than average;
- Although life expectancy has improved and is above the UK average, disparities in life expectancy exist within and between boroughs. These differences reflect Londoners’ differential access to the determinants of good health such as good housing, financial security, and access to health services. In many cases, neighbourhoods where people experience multiple forms of deprivation exist right beside relatively wealthy neighbourhoods;
- Although household recycling rates have improved, the amount of waste collected has also risen;
- Although carbon emissions have reduced, much of this is a result of a decline in manufacturing industries with London importing significant levels of goods from abroad; and
- Although London’s air quality has improved, it is still the worst in the UK for most pollutants and has caused the first UK breaches of the EU limit values, which are designed to protect human health.

### Where is London underperforming?

Five of the indicators show areas where quality of life is in decline. Others show no real overall improvement. Areas of notable decline (or underperformance) are:

- Satisfaction with living in London - a fall from 75% to 73% in response to high costs of living and other factors;
- Percentage of children living in poverty - from 2004-07, there has been no sustained improvement since 2000, where two out of five children (41%) in London lived under the poverty line after accounting for housing costs. This accounts for over 650,000 children, the worst rate in the UK for child poverty. This is particularly acute in Inner London where nearly half (48%) of all children live in poverty after housing costs are taken into account;
- Income inequality - percentage of people in bottom tenth and top tenth of income - this new indicator shows the large income gap prevalent within London compared with the rest of the UK;
- Travel to school - a reduction from 50% to 44% in the number of children walking to school and an increase in the number travelling by car, though both were within 5% of the national average;
- Fuel poverty - this new indicator shows that fuel poverty is getting worse in London. This is further exacerbated in London with its high housing costs compared to the rest of the UK; and
- Housing affordability - this new indicator shows that housing costs in London are higher than the rest of the UK and have been getting worse over the past few years (before the recent economic

downturn). The average mortgage payments, as a percentage of average working household income is 26.4% compared with the UK figure of 21.7%.

### Table of Results

#### Is London heading in the right direction?

The 23 indicators in Table A have been chosen to reflect the integrated nature of sustainability and quality of life and capture the key challenges facing London. The indicators should not be considered in isolation but as an integrated 'basket' that reflect the strong links and impacts between each.

As well as ordering the table in terms of progress we have also highlighted the indicators in terms of whether they fit into social, environmental and economic issues and where they fit into the Commission's 4Rs - Responsibility, Respect, Resources and Results.

#### Key

The progress of each indicator is shown by one of the following symbols:

 Clear improvement

 Little or no change

 Clear deterioration

 Insufficient or no comparable data

Where indicators have changed or new ones included, attempts have been made to find data from previous years to show progress.

Table A – Summary of Quality of Life indicators compared to 2005

Indicator	Indicator	Measure in 2005 report	Measure in 2009 report	Movement / Progress	National average for 2009 report
1 Social/ Responsibility	<b>Voting</b>	37%	45%	<b>Electoral turnout %</b> Significant improvement at 8%, but still below national average. Mayoral elections are the source of the main improvement.	
2 Social/ Responsibility	<b>Volunteering</b>	37%	42%	<b>Formal volunteering %</b> Improvement at 5% but still marginally behind the national average.	44%
3 Social/ Responsibility	<b>Childcare</b>	14.9 per 100 70,900 places	15.8 per 100 81,900 places	<b>Childcare nursery places per 100 children</b> Significant improvement of 15.5% (comparing actual number of places). Despite the overall increase in the number of places available, the average costs of day nursery places in London are 20 to 25% higher than the England average.	20.7 per 100
4 (ii) Social/ Responsibility	<b>Secondary Education</b>	52.9%	59.4%	<b>Percentage of pupils 5+ GCSEs A*-C</b> Significant improvement at 6.5%. Percentage of pupils with 5 or more GCSEs. Overall GCSE results have improved in London, with increased numbers of pupils achieving higher grades across gender and ethnicity, building on the increases in previous years. The figure is above the national average.	59.1%
9 Social/ Respect	<b>Crime</b>	56,455	42,233	<b>Number of street crimes reported</b> Improving and real steady improvement in most areas.	
13 (iii) Environment/ Resources	<b>CO<sub>2</sub> Emissions</b>	44.8 million tonnes in 2002	43.9 million tonnes	<b>CO<sub>2</sub> emissions</b> Improving - emissions have generally decreased since 1990. <sup>3</sup>	



Indicator	Indicator	Measure in 2005 report	Measure in 2009 report	Movement / Progress	National average for 2009 report
14 (i) Environment/ Resources	<b>Bird Populations</b>	115 (Bird index)	131 (Bird index)	<b>Bird populations</b> Improving - Most bird populations are increasing at greater rates than in the rest of the English regions.	
15 Environment/ Responsibility	<b>Household Recycling</b>	13.3%	22.9%	<b>Household recycling rates</b> Significant improvement at 9.6%, but still below national average.	30.9%
18 Environment/ Resources	<b>Air Quality</b>	2991 tonnes (2003)	2822 tonnes	<b>PM<sub>10</sub> emissions</b> Improving - Decline in PM <sub>10</sub> emissions - but still the worst in the UK for most pollutants.	
20 Social/ Results	<b>Life expectancy</b>	80.8 women, 75.9 men	82.0 women, 77.4 men	<b>Life expectancy at birth</b> Improving and remains slightly higher than the UK average. However disparities exist between and within boroughs	
23 Economic/ Resources	<b>Carbon Efficiency</b>	252 tonnes	231 tonnes	<b>Carbon emissions / Gross Value Added (GVA)</b> £million Improving - London is more service-dominated than the rest of the UK and is more productive, generating increased output for each unit of CO <sub>2</sub> emitted.	530 tonnes for UK
4 (i) Social/ Responsibility	<b>Primary Education</b>	100.3	100.3	<b>Key Stage 2 Improvement measure</b> No significant change - Key stage 2 Value added measure - 19 of London's 33 boroughs were in the 25% of local authorities with the highest value added scores from KS1 to KS2.	100.0



Indicator	Indicator	Measure in 2005 report	Measure in 2009 report	Movement / Progress	National average for 2009 report
7 Economic/ Respect	<b>Employment</b>	N/A	58% BAME, 69% all	<b>Employment rates</b> Changed Indicator – Insufficient/incomparable – During 2006, 69% of working-age Londoners were employed, compared with a national average of 75%. The employment rate for Black, Asian and Minority Ethnic (BAME) Londoners averaged 58%. Between 2002-2006, overall employment rates in London have shown no improvement and the gap between rates in London and the rest of GB has remained wide, at around 5-6%.	75% all
8 Economic/ Respect	<b>Child Poverty</b>	N/A	41%	<b>Percentage of London's children in income poverty</b> Changed Indicator – Insufficient/ incomparable – Change in measure from ‘% of children living in workless households’ to ‘percentage of children in income poverty after housing costs are taken into account’. At 41% the highest level in the UK. There has been no consistent reduction in child poverty in the capital since the year 2000.	30%
16 Environment/ Resources	<b>Traffic volumes</b>	32.8 billion vehicle km	33.0 billion vehicle km	<b>Traffic volumes</b> No significant change – although nationally traffic volumes have increased by 4% during the same period.	
17 Environment/ Respect	<b>Travel to School</b>	50% walk, 20% bus, 22% car	44% walk, 23% bus, 26% car	<b>Travel to School</b> Mixed result – marginal increase in the number of children travelling by bus and slight increase in the number travelling by car. Decline in number of children walking to school.	46% walk, 31% car
19 Economic/ Results	<b>Business Survival</b>	63%	67%	<b>Business Survival, Percentage of companies surviving 3 years later</b> Improving. London's one-year survival rate has increased since 1999. However, it remains beneath that of the UK as a whole. (Figures are pre the present economic downturn).	71%

Indicator	Indicator	Measure in 2005 report	Measure in 2009 report	Movement / Progress	National average for 2009 report
21 (i) Social/ Results	Decent Housing	64%	64%	<b>Percentage of decent housing stock</b> No change - London is unusual among the regions in seeing no significant increase between 2001 and 2003 in the proportion of decent homes. The figure remains below the UK average.	70% England
10 Social/ Respect	Neighbourhood Satisfaction	75%	73%	<b>Satisfaction with living in London</b> Slight decrease in overall satisfaction.	
11 Economic/ Respect	Income Inequality	N/A	16% in bottom 10%; 18% in top 10%	<b>Percentage of Londoners in bottom 10% and top 10% of income</b> New indicator - Getting worse - Percentage of people in bottom tenth and top tenth of income. Numbers in the top quintile and bottom quintile are both growing meaning increasing polarisation of income.	
12 Social/ Resources	Fuel Poverty	Not used 176,000 (2003)	318,000 - full income 760,000 - basic income	<b>Number of households living in fuel poverty</b> New indicator - Getting worse. The number of households in fuel poverty rose in 2005 and again in 2008.	8.4% of all households
13 (ii) Environment/ Resources	Waste	3,326,000 tonnes	3,390,000 tonnes	<b>Waste (Household)</b> Getting worse. Overall levels of waste are increasing although levels of municipal waste have decreased slightly.	
21 (ii) Social/ Results	Housing Affordability	N/A	26.4% of average working household income	<b>Average mortgage payments as percentage of average working household income</b> New indicator - Getting worse. With house prices increasing for over a decade until the recent downturn, housing has become progressively less affordable in London.	21.7%



Indicator	Indicator	Measure in 2005 report	Measure in 2009 report	Movement / Progress	National average for 2009 report
5 Environment/Responsibility	Green Procurement Code	397	550	<b>Sign up to Mayor's Green Procurement Code</b> Incomparable. Although Improving before change in criteria - in 2006 550 organisations had signed up to the Code. New Code introduced in 2007.	
6 Social/Responsibility	Physical Activity	Not used	20.2%	<b>Percentage of Londoners participating in moderate exercise</b> New indicator - Insufficient/incomparable – similar to national average. 20.2% of Londoners participated in 30 minutes of moderate exercise 3 times a week. However the 2007/08 participation figures represent a 1.08% decrease in participation compared with previous figures from 2005/06.	21.3%
13 (i) Environment/Resources	Ecological Footprint	6.63 gha	5.48 gha	<b>London's Ecological footprint<sup>4</sup></b> Insufficient/incomparable - Not comparable with previous figures. However, if everybody used as many resources as are used in London we would need around three planets to survive.	5.30 gha
14 (ii) Environment/Resources	Access to Nature	N/A	24,962	<b>Hectares of London mapped as lying in an area of deficiency in access to nature</b> <b>New indicator</b> - Insufficient/incomparable - 24,962 hectares of London are classed as areas of deficiency for access to nature.	
22 Environment/Resources	Flooding	N/A	460,000 properties at risk from flooding 24,000 properties registered to receive flood warnings.	<b>Number of properties at risk from flooding and households signed up to flood warning system</b> <b>New indicator</b> - Insufficient/incomparable – In 2007, 460,000 properties were at risk from tidal and fluvial flooding within Greater London. Of these, approximately 24,000 properties are registered to receive flood warnings through the Environment Agency's Flood Warning Service.	

## Key Issues

This section looks at the links and inter-relationships between the different indicators and identifies the broad issues that will affect quality of life for Londoners in the future. The Commission arrived at these priorities having considered the evidence provided by the indicators. It is also worth reflecting that these are not the only issues facing London, just those cross cutting issues that have emerged from this new report.

Using the report the Commission has identified the following key cross cutting issues:

- Consumption of resources and the resulting drag on our economy
- Threats to community cohesion
- The need to deliver change through innovative ways of working

The report also identifies best practice and areas where our understanding of issues needs to improve.

The Commission will use this information to inform its future work and to initiate a dialogue with key stakeholders in London to develop shared recommendations for action.

### 1. Consumption of resources and the resulting drag on our economy

There is an urgent need to reduce the impact of London's consumption of resources, which has an impact within London but also on the surrounding area and overseas. Whilst CO<sub>2</sub> emissions have been reduced in London much of this has been due to the 'off-shoring' of manufacturing industry. This often results in more CO<sub>2</sub> emissions being associated with

the production and transportation of goods consumed in London.

To emerge from the current downturn more resilient to: volatile commodity prices, increasing competition from new economic powerhouses, the effects of diminishing natural resources, and climate change, London urgently needs to find better ways of doing more with less.

### Consumption of resources

One of the key issues emerging from the suite of indicators is the need to reduce the impact of London's consumption of resources. This impact is felt within London, on the surrounding area and overseas. For example whilst Carbon Dioxide (CO<sub>2</sub>) emissions (indicator 13iii) have declined in London, much of this has been due to the trend in UK manufacturing moving overseas, so-called "off-shoring". This often results in more CO<sub>2</sub> emissions being associated with the production and transportation of goods, which are still consumed in London.

One of the most significant recent impacts on Londoners has been the effect of the global 'credit crunch' including falling house prices and lower consumer confidence. Prior to the recession commodity prices were rising because of increased demand for raw materials, including food and fuel, in part due to the rapid development of new economic powerhouses such as China and India.

Irrespective of whether the economic situation leads to a longer-term recession or whether or not we have reached 'peak oil'<sup>5</sup>, London cannot be complacent about the performance of its economy. The imperative is to develop a resource efficient economy that will bring increased security from external shocks (such as rising oil prices) and deliver competitive advantage in an increasingly globalised market place. As a world class financial centre with leading academia and research facilities as well as

global design companies, London is well placed to lead such change and reap the benefits that it will bring.

Therefore in the face of volatile commodity prices, competition from new economic powerhouses, diminishing natural resources, the threat of climate change, and the increased polarisation between the rich and the poor within the capital, London urgently needs to find better ways of doing more with less. As well as economic and environmental benefits this can enable London to tackle some of its persistent social problems such as income inequality, worklessness, fuel poverty and obesity.

There are numerous examples across London where these issues are being tackled. The case study below demonstrates a project that effectively helps to reduce Londoners' consumption.

### **Case Study: London Car Clubs - sustainable transport**

By delivering mobility solutions offering private transportation, car clubs can service a large number of people with a small number of cars. Companies such as Streetcar and ZipCar offer a number of different sized cars and vans at various locations across London, charge per hour and include fuel, insurance, and sometimes congestion charges and reserved parking in their prices. The maintenance and upkeep of the cars are the responsibility of the car share company.

At the BedZed housing development in Sutton car use was reduced by 50% through green transport planning including access to a car on an 'as needed' basis. This suggests that the provision of such services can be applicable in outer London locations where a focus is required.

Streetcar, Zipcar and other car clubs are expanding rapidly by successfully attracting

residents who are environmentally aware and find car ownership inconvenient and expensive. Car clubs bring environmental and socio-economic benefits such as reduced numbers of cars on the roads while providing affordable access to vehicles.

### **Infrastructure investment**

If London is to succeed in reducing the impact of its consumption and production, investment in infrastructure and skills for the long-term sustainable development of the capital are necessary. These key elements were identified in our previous indicators report and still hold true today.

London-wide strategies (including the London Plan, the Economic Development Strategy and the Mayor's Transport Strategy) aim to develop London's infrastructure and skills for the delivery of services; regeneration and development; and economic progress.

In some areas like transport and education, this is starting to deliver immediate improvements, and can help to deliver economic, social, and environmental outcomes. In other areas, such as the integration of low carbon technologies into new build developments, childcare provision, support to new businesses, and waste and recycling, initiatives have been set in train, but improvements are slower.

A major mechanism for tackling this is by setting high quality standards and promoting more innovative practices within The London Plan as well as rewarding sustainable behaviour. The case study below illustrates how the provision of combined heat and power can provide positive, social and environmental benefits at competitive prices.

## Case Study: Southwark Multi Utility Services Company (MUSCo)

The energy sector is an area where more resource efficient solutions are emerging. Companies offering energy management services have operated in the UK for several decades, however, new Energy Service Companies (ESCOs) and Multi Utility Service Companies (MUSCOs) models are now being developed. These new models are expanding the range of 'decentralised energy' solutions they can offer to include renewable energy technologies, alongside standard energy services such as energy efficiency measures, energy metering and the procurement of gas and electricity.

In Southwark a MUSCO is being implemented as part of a wider regeneration scheme in the Elephant and Castle area. The MUSCO partner - Dalkia - will employ Combined Cooling and Heating Plant (CCHP), non-potable water for toilets and telecommunications by fibre-optic cables. The MUSCO will also service 6,000 residential units and 75,000m<sup>2</sup> of commercial floor space, all of which will be required to hook up to the MUSCO provided heat network.

Benefits include huge cost savings, which are made as utilities are being bundled together in an efficient way. The utilities combine heat and power and the provision of non-potable water to the entire Elephant and Castle regeneration area, offering an integrated solution to residents and businesses. The competitive prices of the MUSCO will support the borough's efforts to reduce fuel poverty.

The MUSCO highlights the number of benefits that can be delivered through a single programme; environmental benefits are afforded through the reduced CO<sub>2</sub> emissions associated with the CCHP system; and socio-economic

benefits may be realised through the reduced cost of heat and power to homes and the resultant positive effects on fuel poverty.

In terms of the ability to replicate this project across London, such projects are particularly pertinent for large-scale rebuild or new build schemes, requiring significant investment in utilities infrastructure.

### Behaviour change

Real effective change in the consumption of resources requires behaviour change. Low voting rates, recycling rates and participation in formal volunteering show that more needs to be done to connect citizens with government, to motivate people to engage in local community activity, and to improve their behaviour to be more environmentally and socially responsible. In turn such activities may help to increase neighbourhood satisfaction, and help to create a city which values diversity and responsible behaviour.

As well as infrastructure, delivery will require long-term creative campaigns, which make these types of lifestyles attractive to all Londoners and encourage long-term behaviour change. London's key stakeholders such as the Mayor, business leaders, and London's public bodies will need to develop, build on and communicate "call to action" messages, to engage London's diverse citizens and businesses in activities that promote and normalise environmental behaviours and facilitate social progress and community development. The case study below illustrates successful communication.

### Case Study: Broadcasting Green

Communicating sustainable development is big business and critical to changing behaviour. One of the Commission's London Leaders, Solitaire Townsend, Chief Executive of Futerra Sustainability Communications, has been working with national and London-based media companies to promote and develop 'Broadcasting Green'.

As part of her London Leaders commitment Solitaire set up Broadcasting Green, whose purpose is to promote green behaviour product placement and aims to encourage pro-environmental behaviours by normalising these in the television, film and advertisements that are watched by millions everyday. This is both a creative and technical challenge and Broadcasting Green aims to produce a set of guidelines backed by major media organisations that will help implement these sustainable behaviours on screen.

Social marketing<sup>6</sup> techniques are increasingly being applied to promote behaviour change for sustainable living. Social science research<sup>7</sup> demonstrates that motivating individuals, organisations and businesses to put sustainability into practice is most effective when done at the community level. When seeking behaviour change it is necessary to engage individuals from communities of interest to remove barriers to change whilst simultaneously enhancing the benefits of an activity.

Marketing materials and large-scale campaigns are useful for changing attitudes but studies show that they rarely transfer into changed behaviour. It is therefore essential to seek out established attitudes that can be harnessed to advance the principles of sustainable development. The case

study below illustrates how belief systems can support the efficient use of natural resources.

### Case Study: Using faith to improve resource efficiency

To improve recycling rates in the London Borough of Tower Hamlets (LBTH) a package of activities was developed to effectively engage with Muslim men, women and young people (45% of the population). The range of activities developed by London Sustainability Exchange in partnership with LBTH and the Islamic Foundation for Ecology and Environmental Sciences (IFEES) included:

- Engagement with Mosques across LBTH
- Delivery of sermons, after sermon information stalls and lectures at the Mosques
- Arts-based activities with young people
- Muslim women's groups holding recycling coffee mornings
- Strategic advice and capacity building throughout the project to develop and support LBTH staff
- Advice and support to LBTH in developing relevant communications material
- Supporting LBTH to monitor and evaluate the activities
- Production of a final report for wider dissemination

The activities included elements linking the environment with relevant passages in the Qur'an and with the Muslim faith generally. This faith

'hook' was identified by respondents as one of the reasons for taking up more environmentally friendly behaviours. The project also reinforced knowledge and experience of the key factors that encourage individuals and communities to make lasting and sustained positive behaviour – factors such as:

- Influence the influencers,
- Use trusted sources, and
- Employ community representatives to engage with the diverse groups you are working with.

Evaluation found that 94% of coffee morning attendees *learned* something about living a greener lifestyle and 94% said that they had been encouraged to actually *live* a greener lifestyle too. This demonstrates that using faith as a motivator to encourage behaviour change in relation to recycling and caring for the local environment can be significant when working with the Muslim community in Tower Hamlets. This result could be substantially improved if the message is reinforced and sustained in this way.

## 2. Threats to community cohesion

We recognise that experiences differ substantially amongst individuals, between communities and across different localities. However, what we all have in common is a desire to build a strong society where civility and courtesy are the norm, where people are at ease with change and are committed to being good neighbours and active citizens. A society where opportunities for advancement are there for the taking and prosperity is more evenly distributed.

A number of indicators within the report (such as worklessness and income inequality) demonstrate factors that may undermine efforts to deliver the type of strong, resilient, cohesive communities that we all wish to live in. In turn this could further impact on our communities through, for example, a reduction in willingness to volunteer, increased crime, and a reluctance to set up businesses. Whilst it is still difficult to judge what Londoners think their neighbourhoods will look like in the future, and whether they will choose to live there, there is evidence that they are becoming more dissatisfied with their local neighbourhoods.

Although attitudes to London as a place to live are mixed, it is difficult to say whether London's most disadvantaged communities are increasingly experiencing the benefits of living in a vibrant and wealthy city. As shown by the indicators, inequalities of access to childcare, green spaces, decent housing and barriers to employment continue to impact on the health and well being of many Londoners, disproportionately affecting particular geographical areas of London, BAME groups and women. More and better cross-working between London agencies responsible for delivery of health, regeneration, environment, housing, police services and education is needed to reduce inequalities in health and well-being across London's geography and its diverse communities. In addition there is a need to support and encourage research that accesses the population in such a way as to learn what their issues are and how we can produce a society where all can be treated equally.

Cohesion is about people finding such ways to live with each other, and integrating through equality and understanding. Addressing these issues and improving cohesion will make a substantial contribution to overall sustainability and quality of life and delivering a city where people continue to want to live and work.

Improving cohesion begins with people having an understanding of their rights and developing a sense of responsibility. Gaining a sense of identity 'as a Londoner' rather than just a part of a local neighbourhood alone is important in order to build better cohesion between different groups. Without such a sense of belonging, it is hard to feel that cohesion matters. The case study below illustrates how a sense of community can be built in a diverse neighbourhood.

#### **Case Study: The Coriander Club at Spitalfields City Farm**

In 2007 Lutfun Hussain, Project Coordinator of the Coriander Club at Spitalfields City Farm, was chosen as one of the Commission's first London Leaders. In 2000 Lutfun established the Coriander Club, a group of Bangladeshi women who meet regularly for gardening and cooking sessions. For many this is a rare opportunity to exercise and socialise; exchanging recipes, sharing health concerns, knowledge and heritage. The Club helps to empower its members and during 2008 the volunteers worked to develop and publish their own cookbook. In turn this will be used to empower more members of the Tower Hamlets community, forming part of the Farm's outreach work.

The Commission feels that London could use the promotion of basic human rights such as fairness, dignity and respect to build cohesion. When people feel they are competing for scarce resources such as wages and jobs, strong cohesion will be undermined, for example, by the belief that immigrants get preferential access to housing and services. Reducing the increasing income gap (indicator 11) would, for example, help to reduce such tensions and help build more cohesive communities.

#### **Case study: Brixton Green**

Philippe Castaing, restaurateur and Chair of Brixton Green, is another of the Commission's London Leaders who has worked hard with Lambeth Council and other community members to promote Brixton as the hub of green business.

Philippe believes that the Brixton community needs a new image, not one imposed from outside but one created and believed in by the existing community. It was this faith in Brixton combined with a broader vision for green industry to become the new industrial revolution that led to the concept of Brixton Green being born in the summer of 2006.

Brixton Green is using the concept of green business to bring greater cohesion to the business community, catalysing concerted action to foster the changes needed to encourage existing businesses to adopt more sustainable practices, and new green business to choose Brixton as their home, thereby creating community cohesion around a common purpose. With enthusiasm and commitment, the Brixton Green community may indeed make Brixton the 'silicon valley for green enterprise'.

London could also make better use of the resource provided by local people and the voluntary sector to instigate more sustainable projects and policies, address community concerns and ambitions and support the sense of respect and responsibility that reflects a cohesive community. The indicator on formal volunteering highlights the fact that although there has been an increase in volunteering in London, rates still lag behind the rest of the UK – also see issue 3 below.

### 3. The need to deliver change through innovative ways of working

To achieve lasting change in a complex city such as London, new and innovative ways of working are needed. These include:

- inspiring leadership at all levels - making change happen;
- capacity building - helping others to change;
- partnership - working with others;
- community participation - asking people what matters; and
- innovation - thinking and doing things differently.

London by its nature and history is a complex city with a complex governance structure and many competing interests that make tackling sustainable development and improving the quality of life for all Londoners a difficult task.

Many of the issues affecting Londoners' quality of life are determined and influenced by many levels of government and the resulting solutions are often made and influenced by a number of key stakeholders. Subsidiarity<sup>8</sup>, decision-making at the lowest possible level, has been put forward by many as a potential way to tackle sustainable development issues<sup>9</sup>.

The partnerships and strategies that develop through a process of real participation with communities and stakeholders are the key to successful and sustainable solutions to the problems facing society. Unless people feel they have played a part in determining programmes and policies that will affect their lives, all too often they feel no responsibility for their implementation. Various indicators show that Londoners are not as engaged as they perhaps could be. Indicators looking at electoral turnout and formal volunteering

show that although levels are increasing, London still lags behind the rest of the UK and Europe.

Although the concepts of empowerment and partnership working have long been components of government policy and practice, commentators have noted that the environment and sustainable development cannot be compartmentalised and that policy must reflect this situation. This maxim therefore demands that new forms of organisation and new approaches to decision-making and policy formulation must be established if local sustainable development policy is to be effective. The ideas of both holistic and integrative approaches to reflect the complexity of the agenda are paramount.

The Commission are intent on turning a sustainable vision into reality and in 2007 we commissioned research - *A Greater London: Making it happen*<sup>10</sup>, to investigate case studies from around the world and UK to see what London could learn from other cultures and cities. The report explored what integrated best practice for sustainability could be applied to London in support of the LSDC's vision for an exemplary city.

The research found key vital 'sustainability ingredients' necessary to create a sustainable London:

- **Leadership** - inspiring others to take action through leading by example;
- **Working together** - empowering and partnering with others in communities and organisations to catalyse positive action;
- **Integrated thinking** - considering and promoting the interlinked social, economic and environmental benefits of a sustainable approach to strategy and action;

- **Working for a collective common good** - that does more than just deliver an exclusive commercial advantage to any one organisation; and
- **Going beyond business as usual** - striving for innovative solutions that go beyond the bounds of any one organisation.

As a result of this research the 'London Leaders' programme was launched in October 2007.

### Case Study: London Leaders

The Commission launched its London Leaders programme ([www.londonsdc.org/londonleaders](http://www.londonsdc.org/londonleaders)) in 2007, to inspire and catalyse positive change by demonstrating sustainability in action and to increase London's capacity for sustainable development leadership and improve Londoners' quality of life now and in the future.

By bringing together sustainability leaders from all walks of life, the intention is to demonstrate the power of cross-sector working and innovation for tackling London's sustainability challenges. Each London Leader's goal is to motivate and empower individuals, organisations and communities to take responsibility and make the changes necessary to realise the vision of a world-class sustainable London.

Each year the LSDC appoints a group of Leaders who work with the Commission to deliver projects, some of which are mentioned in this report. The wider London Leaders network is open to all stakeholders and individuals and provides a forum for sharing best practice, developing cross-sector partnerships, learning and capacity building, with a view to supporting and catalysing projects and policies built on

the foundations of sustainable development principles.

A number of London Leader projects illustrated below demonstrate that partnerships and new ways of working can help drive and achieve real change on the ground to achieve long-term quality of life improvements.

### Case Study: Sustain 72 - London's Private Sector Housing Community

London Leader Mark Johnson, Operations Director of London Warm Zone, set up Sustain 72 ([www.sustain72.org.uk](http://www.sustain72.org.uk)) to both champion and bring wider integration to sustainable development issues that face London in its private housing stock.

72% of all London's homes are in the private sector and therefore many of the issues facing London such as climate change, fuel poverty, income maximisation, social inclusion, water conservation, and recycling, all need to be tackled in the private sector housing stock.

Members of Sustain 72, from across London's boroughs, utilities and NGOs, aim to work together to ensure the provision of quality services to help energy reduction, increase household incomes, and provide wider assistance to help promote quality of life and health. The network will share best practice, collaborate on joint projects and use their collective voice to champion the work of the private housing sector and maximise results.

### Case study: Southwark Handyperson Services

The Handyperson Service in Southwark has been identified by the LSDC as an example of the implementation of integrated virtuous cycle thinking. The Service Manager, Melanie Poyser became a London Leader in round 2.

Handyperson Services support elderly and vulnerable people by carrying out small improvements and repairs to their homes, specifically targeting residents over the age of 60, or those residents considered vulnerable due to a disability. The overall aim of the project is to assist in maintaining safe and independent living for these residents.

In addition to general home repairs and maintenance, there are a number of other tangible benefits that result from the handypersons services. These include:

- Elderly and vulnerable residents are less susceptible to bogus tradesmen;
- Visits from the handyperson provide some social interaction for residents;
- The service provides a “gateway” to other services available to elderly and vulnerable residents, such as other social and health services, organisations who can undertake larger home repair and organisations who can provide more assistance with energy efficiency improvements.

## Future measurement and data gaps

---

The indicators analysed in the report have shown that there are a number of data gaps and collection issues that need to be tackled in order to determine a better picture of Londoners' quality of life:

- Competing and conflicting methodologies for **Ecological 'Footprinting'** need to be reconciled.
- Inclusion of an indicator on London's **indirect CO<sub>2</sub> emissions** from goods and service imports would give us a wider understanding of London's CO<sub>2</sub> emissions.
- A more representative indicator for **climate change adaptation** is required.
- **Fuel poverty** - In future, London boroughs will be required to report on progress on fuel poverty as part of the New Performance Framework set out in the Local Government White Paper. However, the practical impact of this will depend on the detailed definition of the fuel poverty indicator and how it is measured.<sup>11</sup>
- Sustainable development is about achieving social, economic and environmental policy objectives in an integrated fashion. A set of **integration indicators** that could, for example, measure the social and environmental impact of prosperity would be clearly desirable.
- More recent and up to date data is needed for a number of indicators - particularly data on **decent housing**, where the most recent reliable data at the regional level is from 2003. This seems at odds with the Government's targets in this area.

# Headline Indicators

## Responsibility



**1. Electoral turnout**  
Positive change (8%)



**Turnout in 2008 London Mayoral and London Assembly elections was 45%, compared with 37% in the 2004 elections. Turnout in London increased in the 2005 General Election (58% in London, up 2.6% on the 2001 election) and in the 2006 London Borough elections (37.9%, up 6.1% on the 2002 elections)<sup>12</sup>.**



Sustainable development needs good government. It cannot be delivered solely through individual choices, business innovation or voluntary action. In a sustainable society the public is actively involved in local decision-making and has confidence that they can shape policies to improve the communities in which they live and work.

Participation in decision-making in a democratic society is difficult to measure but fundamentally it should be reflected in the number of people who take part in the electoral process. The number of people who vote (or abstain from voting) reflects satisfaction with local and national government and how effective the electorate feel their vote is. Electoral turnout is an indication of the extent that people are connected with those who govern their affairs and is also a proxy for citizen involvement in public matters.

Table 1 shows that turnout in all the elections held in London since 2004 has gone up. The number of Londoners voting in the 2008 London Mayoral elections was up 8% on 2004 turnout. Although these figures have all seen improvement it is still a cause for concern that fewer than half of Londoners chose to exercise their right to vote in Mayoral and Assembly elections.

Turnout figures in London are marginally lower than the rest of the country for general elections - Table 1 below shows that in the 2005 general election, the turnout for the UK was 61%, 3.5% higher than London.

London borough election turnout figures improved in 2006 after a period of declining turnout since 1990. Turnout in London was up by 6.1% from 2002, to 38% in 2006. This was higher than the 1998 turnout figure.

Table 1 - Percentage of Londoners voting in Mayoral, General and Borough elections

<b>Mayoral elections</b>	<b>2000</b>	<b>2004</b>	<b>2008</b>
	34.4	37	45
<b>General elections</b>	<b>1997</b>	<b>2001</b>	<b>2005</b>
London only	67.8	55.2	57.8
UK	71.2	59.2	61.3
<b>London Borough elections</b>	<b>1998</b>	<b>2002</b>	<b>2006</b>
	34.7	31.8	37.9

The low and only slowly increasing turnout in local, Mayoral and national elections is not unique to London, but reflects a national trend. The UK turnout is very low compared to some countries in Europe, which have turnouts in local elections of above 70% over the same time period, for example France and Germany.

There were no European elections in 2000 in the UK, however in the European elections held in 1999 turnout in London was 23.1% - similar to the UK average of 23.3%. Turnout however increased in 2004, to 37.7% when there were other elections (Mayoral) being held at the same time.

## 2. Participation in volunteering Positive change (5%)



**42% of Londoners took part in formal volunteering at least once during a 12-month period in 2005. This was an increase from 37% in 2003.**

**London is still slightly behind the average for formal volunteering in England as a whole, which has steadily increased to reach 44% in 2005<sup>13</sup>.**



This indicator supplements the electoral turnout indicator (Indicator 1) to give a fuller indication of Londoners' involvement in their community. People engage with their communities in a variety of ways

ranging from writing to a local MP or belonging to a choir, through to regular commitments like mentoring or giving time to a faith group. Many people do not associate these activities with formal volunteering.

High levels of participation in formal and informal volunteering are considered to be good indicators of healthy and well-functioning communities, where people actively participate and 'give back' to their local area. Measuring the levels and type of participation in community groups may be one way of measuring the "health of civic society", although this will only provide a limited picture of one particular moment in time.

The community sector is increasingly regarded as a resource, which offers major opportunities for sustainable economic, social and environmental development in partnership with other agencies in the private and public sector. Popular participation and community development are now central principles of this partnership approach with stakeholder involvement in urban regeneration work, health and education services. The network structures of the voluntary and community sector provide useful channels for information sharing and support. The development of this "social capital" is seen as an essential pre-requisite for sustainable development.

**Formal volunteering** is defined as 'giving unpaid help through groups, clubs or organisations to benefit other people or the environment'.

**Informal volunteering** is defined as 'giving unpaid help as an individual to someone who is not a relative'.

The Communities and Local Government 2005 Citizenship Survey identifies that the most common ways people volunteer formally in England are by 'organising or helping run an activity or event' (47%)

and 'raising or handling money or taking part in sponsored events' (51%). These had also been the most common activities in 2003. People who took part in informal activities at least once a month had spent an average of 11.9 hours in the four weeks before interview giving informal help.

London is now following an upward England wide trend in formal volunteering. Although the gap has narrowed London still falls below the national average, which has steadily increased from 39% in 2001, to 42% in 2003 to 44% in 2005.

The survey also found that people who did not have any formal qualifications were considerably less likely to participate in informal or formal voluntary activities.

Almost two-fifths (39%) of people who did not participate in formal voluntary activities or did so infrequently said that they would like to do so more often. The barriers to participation among those people were mainly related to the perceived time commitments involved. The most common barriers identified were work commitments (59%), followed by doing other things in your spare time (31%) and looking after the children or home (29%).

Nationally, the 2005 Citizenship Survey found that regular participation in formal volunteering was similar amongst white people (29%), black people (30%) and mixed race people (34%). However, regular participation in informal volunteering (defined as giving unpaid help as an individual to someone who is not a relative, including giving advice, transporting/escorting someone or baby sitting/child care) is higher amongst mixed race (44%) and black people (41%). White middle-aged people (35 to 64 year olds) were more likely to be engaged in civic participation rather than informal volunteering.

### 3. Childcare: nursery places Significant change 15.5%



**In December 2007, there were 81,900 places in day nurseries in London, an increase of 11,000 places on 2004 figures. This represents 15.8 places for every 100 children under 5, compared with an England average of 20.7 places per 100.**

**Provision in Inner London is 17.6 places per 100, an improvement on 16.0 places per 100 places in 2004. This is still slightly higher than in Outer London, which has seen an increase in places from 13.4 per 100 in 2004 to 14.5 in 2007. They both lag behind the England average<sup>14</sup>.**



The lack of affordable childcare limits the ability of parents and caregivers to access paid employment and training. Lack of paid employment has a major effect on quality of life and is a major contributing factor to London having the highest level of child poverty in the UK (after housing costs are taken into account).

Since December 2004, the number of day nursery places has increased in London by 15% compared with 21% in England overall.

The average **costs** of day nursery places in London are 20% to 25% higher than the England average due to higher land, property and staff costs. Parents also face difficulties in finding paid employment due to a lack of flexibility in childcare provision. Many parents with young children prefer to work part-time, but it can be difficult to find childcare available at the times they need and at a cost which is not disproportionately high. Launched in 2005, the London Childcare Affordability Programme has been piloting schemes to reduce the costs of childcare, including flexible childcare and to support parents with childcare while undertaking training or other preparation for work.

**The London Childcare Affordability Programme** was funded jointly by the London Development Agency and the Department for Children, Schools and Families to provide good quality affordable childcare for lower income families in the capital for three years from 2005 to 2008.

The Programme was delivered by the London Development Agency's Childcare Team, working with the London boroughs to pilot a number of approaches to provide more affordable childcare and thereby improve the employment rate of parents, particularly mothers, and reduce the numbers of children living in poverty. The Childcare Affordability Programme has so far subsidised the cost of childcare for over 8,000 low-income families and enabled their children to experience good quality care.

The March 2008 Budget announced that the pilots would be extended and the Mayor has agreed that the continuation of the programme is a priority. The new programme is due to begin later in 2009.

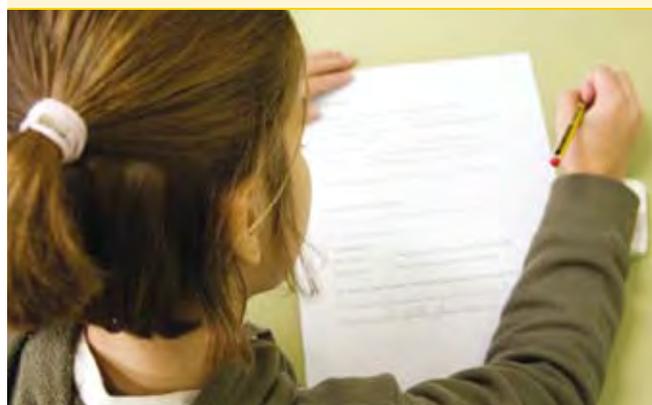
More information on the London Childcare Affordability Programme can be found at - [www.lda.gov.uk/server/show/ConWebDoc.1212](http://www.lda.gov.uk/server/show/ConWebDoc.1212)

## 4. Education

### 4 (i) Quality of Primary Education Static (no change)



**In 2007 London's average Key Stage 2 improvement measure was 100.3, slightly higher than the English average of 100.0 and no change on 2004 figures<sup>15</sup>.**



Education is the basis for people being provided with the skills to make a contribution to the economy and to society. Learning also makes a wider contribution to promoting active citizenship and social cohesion. Education remains a high profile issue in London and is strongly connected to issues of deprivation.

The Key Stage 1 (KS1) to Key Stage 2 (KS2) value added measure shows how much value each school has added based on the progress made by individual pupils from KS1 to KS2<sup>16</sup>. The amount of progress pupils make between the end of KS1 and the end of KS2 is used to measure the extent to which schools have 'added value' to a child's education.

Each pupil's **Value Added (VA)** score is based on comparing their KS2 attainment with the median attainment of other pupils with the same or similar results at KS1. Individual pupils' scores are averaged in each school, giving a score based around 100.

Levels greater than 100 indicate greater added improvement.

Although in London the VA average has remained static at just over 100 since 2003, the proportion of London local authorities with a VA score above 100 has increased since 2004. The VA score was above 100 in 88% of London local authorities, compared with 82% in 2004 and 42% in England as a whole. No London borough had a VA score below 100 in 2007.

Inner London's average of 100.5, is slightly above the average VA score of 100.2 amongst Outer London local authorities. This shows very little change from 100.4 in 2004 for Inner London and 100.2 for Outer London.

Nineteen of London's 33 boroughs were in the 25% of local authorities with the highest VA scores from KS1 to KS2. The 'top 10' English local authorities on the VA measure were all in London - Barnet, Camden, Hammersmith and Fulham, Islington, Kensington and Chelsea, Lambeth, Lewisham, Richmond upon Thames, Tower Hamlets and Wandsworth.

Provisional figures for 2007 KS1 assessments show that pupils in London were slightly less likely than pupils in England as a whole to reach nationally expected levels in KS1 Reading, Writing, Mathematics and Science assessments. The average attainment rates in 2007 in London for Reading (82%), Writing (78%), Maths (89%) and Science (86%) were all slightly below the national rates, and very similar to 2004 levels.

### Free school Meals

As a proxy measure of poverty, the performance of children in London in receipt of free school meals was significantly below that of those not entitled to meals in key assessment areas – Reading (70.1% achieved nationally expected levels of attainment

versus 85.1% of those not receiving free school meals); Writing (66% versus 82.4%) and Maths (80.4% versus 90%).

Despite high levels of child poverty in London (see Indicator 8), pupils in London's maintained primary schools tend to make more progress than pupils in maintained primary schools in England as a whole, and that progress is reflected in pupils' level of attainment at the end of compulsory schooling, covered in the next indicator.

### 4 (ii) Quality of Secondary School Education - Significant change (6.5%)



**In 2006, 59.4% of pupils in London aged 15 (or over) achieved five or more A\*-C grade GCSEs or equivalent, compared with the national average of 59.1%. This represents a 6.5% increase on 2004 London figures of 52.9%<sup>17</sup>.**



Overall, GCSE results have improved in London with increased numbers of pupils achieving higher grades across gender and ethnicity and building on increases in previous years. Despite an overall improvement, pockets remain where the divide in attainment consistently shows up. This is particularly in relation to white pupils outperforming black pupils, girls outperforming boys and Outer London outperforming Inner London.

Figure 4 shows that a higher proportion of girls (63.7%) than boys (55.1%) in London schools achieved 5 or more A\*-C grades – an increase in both sexes on 2004 figures. Black Caribbean pupils were amongst the groups least likely to achieve 5 or more A\*-C grades passes (44.1% in 2006, up from 36% in 2004) compared with 57.6% of white pupils in London (up from 53% in 2004), and 57.2% of white pupils in England as a whole.

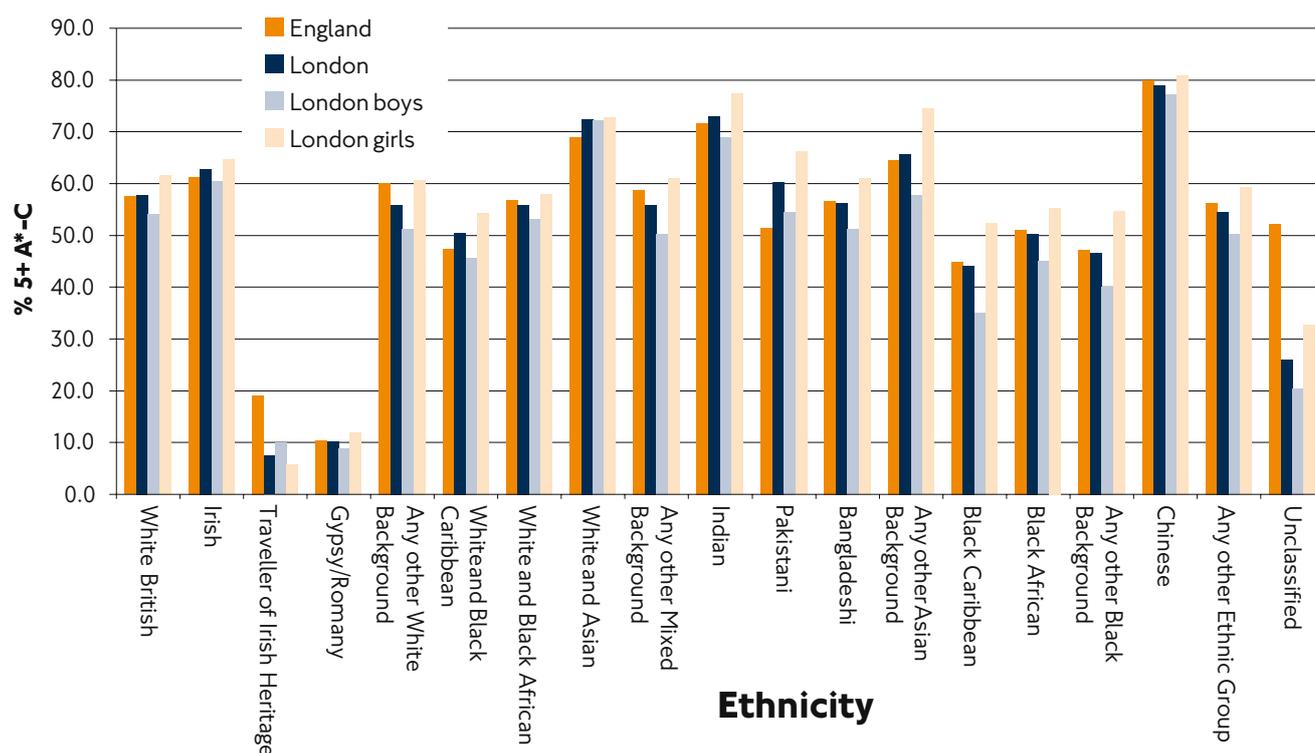
The percentage of pupils in Inner London state schools gaining 5 or more A\*-C grades has increased (from 47% in 2004 to 54.9% in 2007), but this still falls behind Outer London rates (61.4%). Sutton had the highest percentage (73.2) and Greenwich the lowest percentage (45.3) of pupils gaining five or higher grade passes - an improvement in both the highest percentage and lowest percentage from 2004.

Figure 4 shows most Black, Asian and Minority Ethnic (BAME) Groups, especially Black Caribbeans continue to achieve below the national average according to this measure.

Bangladeshi pupils in 23 of London's 33 local authorities with maintained secondary schools reached or exceeded the national average - the numbers decreased for Pakistani (22 out of 33 local authorities), White (12), and Black African pupils (11). By contrast, the percentage of Black Caribbean pupils achieving five or more higher grade passes (A\*-C) was below 57% in all but three London boroughs (Havering, Redbridge and Sutton).

The spread and impact of poverty on attainment is far greater for some groups than for others. In 2004, amongst London pupils aged 15 who were entitled to free school meals, 68.6% of Chinese pupils still managed to achieve five or more higher grade passes, compared with only 24.4% of white

Figure 4 - Pupils aged 15 gaining 5 or more higher grade GCSE, or equivalent, passes in 2006



British pupils, 53.1% of Indian pupils, 48.1% of Bangladeshi pupils, 43.8% of Pakistani pupils, 33.6% of Black African pupils, and 28.1% of Black Caribbean pupils.

**5. Sign up to the Mayor's Green Procurement Code**  
Significant change (72%)  
Not comparable for future years



**In 2006, 550 organisations had signed up to the Mayor's Green Procurement Code, compared with 397 in April 2005 and 316 in 2004<sup>18</sup>. However the code changed in 2007 and 117 organisations had signed up to the new code by 31st March 2008.**



Encouraging businesses to reduce the overall amount of resources they use and to opt for more resource efficient materials made from recycled or recovered products will help reduce London's overall rates of consumption and promote more sustainable forms of production. Over time it may also result in cost savings for companies and help develop larger markets for sustainable products.

The original aim of the Mayor's Green Procurement Code was to close the "recycling loop", by ensuring that used materials were usefully recycled into new products. In 2007, the Green Procurement Code was extended from its original focus on encouraging the purchase of recycled products to a wider remit

of offering businesses advice on how to use the procurement of goods and services to reduce their environmental impacts, for example in terms of increased energy and water efficiency.

Existing signatories to the Code were asked to re-sign the new Code, which introduced four new award levels (entry level, bronze, silver and gold). Businesses can work towards achieving these standards and make a commitment appropriate to their current environmental policy. Signing up to the new Code also requires organisations to monitor progress and report back on the proportion of green spend against total spend. By 31st March 2008 177 organisations had signed up to the new Code.

With the changes to the Code it is hard to compare to previous years results. However £181.3 million was spent on recycled products by signatories of the Mayor of London's Green Procurement Code in 2006/07, resulting in carbon savings of 215,645 tonnes and a marked increase on the £32 million spent in 2003/04.

Code signatories also diverted over 473,784 tonnes of waste from landfill in 2006/07, up from 375,000 tonnes in 2004, 380,000 in 2005 and 394,453 in 2006.

More information on the Mayor's Green Procurement Code can be found at - [www.greenprocurementcode.co.uk](http://www.greenprocurementcode.co.uk)

**6. Physical activity - participation in moderate exercise**  
New indicator



**In 2007/08, 20.2% of Londoners participated in at least 30 minutes of moderate exercise three times a week. This is just below the national average of 21.3%<sup>19</sup>.**



Regular exercise has a positive impact on physical and mental health and wellbeing. People who are physically active are more likely to live longer and encounter fewer health problems. Participating in moderate exercise (defined as at least three 30 minute sessions per week) can also encourage

interaction within communities, help develop self-esteem and confidence and result in greater use and enjoyment of local public spaces. Walking, running and cycling also provide alternative, more sustainable ways of moving around London<sup>20</sup>.

As a whole, Londoners aged over 16 years have a participation rate about the same as the national average. However the 2007/08 participation figures represent a 1.08% drop in participation compared with previous figures from 2005/06. Figures from 2005/06 also show that regular participation in exercise varies across different socio-demographic groups in London. Table 6 below illustrates that women, non-white people, people on low incomes and people with a limiting long-standing disability are least likely to participate.

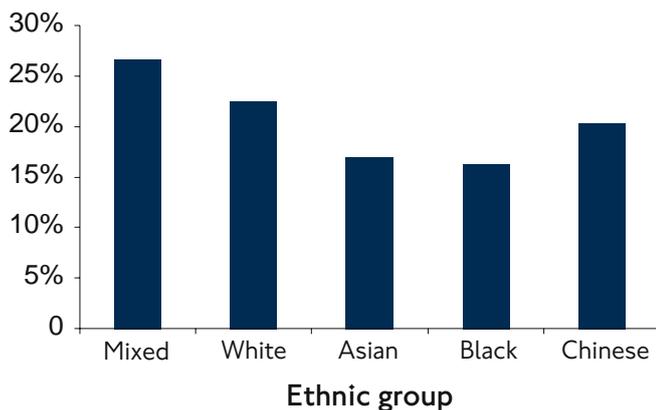
Of those groups classed as 'non-white', the lowest levels of moderate participation are amongst London's black population and the highest in London's mixed ethnicity population. Breaking these down further, the lowest levels of activity are amongst the Bangladeshi population at 11.8% participation.

Table 6 – Londoners participating in moderate exercise

<b>Gender</b>	<b>Males</b>	<b>Females</b>	
	23.0%	17.6%	
<b>Ethnicity</b>	<b>White</b>	<b>Non-white</b>	
	21.8%	16.8%	
<b>Age</b>	<b>16-34 years</b>	<b>35-54</b>	<b>55 years and over</b>
	25.9%	20.3	11.5%
<b>Limiting longstanding illness or disability</b>	<b>With</b>	<b>Without</b>	
	9.0%	21.9%	

Source: Active Participation Survey 2005/6, Sport England

**Figure 6: Participation in 30 mins of exercise three times a week by ethnicity in London**



Source: *Ethnic Minorities and Physical Activity in London report, Sporting Equals, August 2007*

The reasons behind such varied levels of physical activity can come down to factors such as income, family and child care responsibilities, perceived and actual levels of safety and cultural differences. As well as low rates of exercise within certain groups in London, there is a potentially greater issue with the high rate of Londoners undertaking no exercise at all. Those most likely to be undertaking no activity at all are Pakistani (59.9%), Bangladeshi (59.7%) and Black African (59.4%), compared with the London average of 49.3%<sup>21</sup>.

A number of initiatives have been started to get more Londoners involved in sport and regular exercise. The *'London Summer of Sport'* aims to increase participation in sport in London as part of the Olympic delivery plan 'to maximise the increase in London's sports participation at community and grass roots level' to ensure a sustainable legacy from the London 2012 Games. The *'Summer of Sport'* is aimed at those people and communities most under-represented in sport, particularly Black, Asian and minority ethnic communities and disabled people.

The *'Inclusive and Active'* initiative (commissioned by the Greater London Authority, Sport England London Region and London Sports Forum for Disabled People) also aims to encourage a further 8,000-9,000 disabled people into regular participation in sport and physical activity each year.

More information on Summer of Sport can be found at - [www.london.gov.uk/summer-of-sport/](http://www.london.gov.uk/summer-of-sport/)

More information on Inclusive and Active can be found at [www.london.gov.uk/mayor/equalities/inclusive-active/index.jsp](http://www.london.gov.uk/mayor/equalities/inclusive-active/index.jsp)



**7. Employment rates**  
No improvement - not comparable  
as changed indicator



**During 2006, 69% of working-age Londoners were employed, compared with 75% in the rest of Great Britain.**

**The employment rate for Black, Asian and Minority Ethnic (BAME) Londoners<sup>22</sup> averaged 58%, far lower than the employment rate for White Londoners (75%)<sup>23</sup>.**



Being in employment has an important bearing on a person's overall economic and general wellbeing. 'Employment rates' express the number

of Londoners of working age in employment as a proportion of the population<sup>24</sup>.

This is a different indicator from the 2004 and 2005 Quality of Life Indicator reports, which used two different labour market indicators: unemployment rates by ethnicity and economic activity rates. This new indicator replaces both indicators. It should also be noted that the data for this indicator predates the current economic downturn.

**Employment rates in London and Great Britain**

In 2006, 69% of working-age Londoners were employed. London's relative position is driven by low employment rates across Inner London boroughs where rates average 64%. Rates across Outer London average 72%, closer to the national average.

Table 7 shows that between 2002-2006, overall employment rates in London have shown no improvement and the gap between rates in London and the rest of Great Britain rates has remained wide (at around 5-6%). Longer-term trends (1999-2006) show that employment rates for women in London have been falling relative to the national trend, which shows a slow increase.

Table 7 Employment rates, persons of working age, London and GB, 2002-2006

	Greater London	Rest of GB (GB exc London)	Great Britain	Difference (London-Rest GB)
Mar 2002-Feb 2003	69.6	74.9	74.2	-5.3
Mar 2003-Feb 2004	69.3	75.1	74.3	-5.8
Jan 2004-Dec 2004	69.1	75.2	74.4	-6.1
Jan 2005-Dec 2005	69.1	75.3	74.5	-6.2
Jan 2006-Dec 2006	69.0	75.1	74.3	-6.1
CI (2006)	±0.7	±0.2	±0.2	

Source: Annual Population Survey/Annual Labour Force Survey

Confidence Interval (2006) = Approximate 95% confidence interval attached to 2006 estimate

Table 7.1 Employment rates by gender, London and GB, 1999–2006

	Males			Females		
	London	Rest GB	Difference London Rest GB	London	Rest GB	Difference London Rest GB
1999	77.1	78.9	-1.8	64.8	69.2	-4.4
2000	76.0	79.4	-3.4	63.5	69.9	-6.4
2001	76.2	79.5	-3.3	64.1	70.1	-6.0
2002	75.7	79.3	-3.6	63.4	70.3	-6.9
2003	75.7	79.4	-3.7	62.5	70.5	-8.0
2004	75.6	79.5	-3.9	62.3	70.7	-8.4
2005	74.8	79.3	-4.5	63.0	71.1	-8.1
2006	75.1	79.0	-3.9	62.5	71.0	-8.5
CI (2006 data)	±0.9	±0.3		±1.0	±0.3	

Source: Annual Labour Force Survey / Annual Population Survey

Confidence Interval = Approximate 95% Confidence Interval, in percentage points, attached to 2006 estimate

London's relatively large student population has some impact on employment rate comparisons. If students are excluded from employment rate calculations, the London-GB differential in rates reduces marginally from 6 to 5 percentage points.

### Employment rates by gender

Analysis of longer term trend data on labour force rates from 1999–2006 by gender show that employment rates for women in London have been falling relative to national trends, which show an increase (Table 7.1). Male employment rates have also fallen marginally relative to national rates.

The gap in female employment rates between London and Great Britain is mainly due to the fact that women with dependent children in London are less likely to be in work compared with mothers outside London. In 2007, 54% of London mothers were employed compared with 70% of mothers living in the rest of the UK<sup>25</sup>. This may be due

to the lack of affordable childcare in London compared to the rest of the UK (Indicator 3).

### Employment differentials by ethnicity

2006 estimates show that Black, Asian and Minority Ethnic (BAME<sup>26</sup>) Londoners have an average employment rate considerably lower than the employment rate for White Londoners. Table 7.2 shows the gap in employment rates between White and BAME groups between 2002–2006.

London's BAME population has a younger age structure than the white population and has a higher proportion of students. If students are excluded from employment rate calculations, the gap in rates between White and BAME groups reduces marginally from 16 to 14 percentage points.

These aggregate monitoring data disguise the considerable diversity of circumstances within the BAME population. It is not possible to assess progress at individual ethnic group level on an

annual basis, as the confidence intervals are too large. Here, to improve the reliability of the data, estimates have been averaged over a three-year period (2004-06)<sup>27</sup> and these provide a reasonably robust snapshot of differentials.

Within the BAME population, the employment rate ranges from 39% for Bangladeshi Londoners up to 69% for Indian Londoners. Within the Black population, the employment rate for Black African Londoners (54%) was significantly lower than the

employment rate for Black Caribbean Londoners (65%). The employment rate is highest for White Londoners – 75% of whom are in work.

**Relevant existing targets**

**London Plan Key Performance Indicator 9** – Age specific unemployment rates for BAME groups to be no higher than for the white population by 2016, 50% reduction of the difference by 2011.

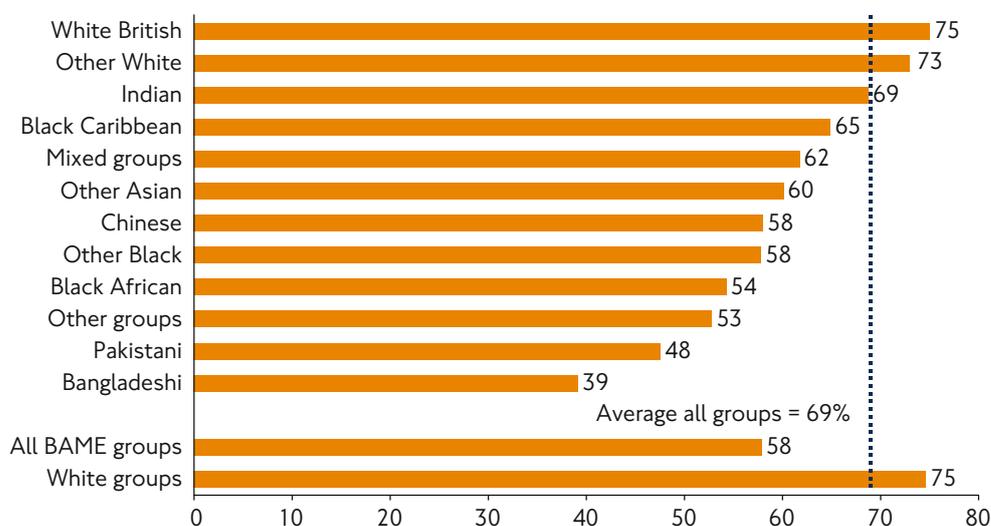
Table 7.2 Employment rates by ethnicity, Greater London 2002-2006

	Employment rate (%), persons working age			Difference (White-BAME rate)
	Persons	White Groups	BAME Groups	
Mar 2002-Feb 2003	69.6	75.1	57.1	18.0
Mar 2003-Feb 2004	69.3	74.7	57.3	17.4
Jan 2004-Dec 2004	69.1	74.6	57.4	17.2
Jan 2005-Dec 2005	69.1	74.7	57.9	16.8
Jan 2006-Dec 2006	69.0	74.6	58.4	16.2
CI (2006 data)	±0.7	±1.2	±2.0	

Source: Annual Population Survey / Annual Labour Force Survey data  
Confidence Interval (2006)=Approximate 95% confidence interval attached to 2006 estimate

Figure 7 Employment rates by ethnic group, persons of working age, Greater London, 2004-06 (three year average)

Source: Annual Population Survey 2004-06



## 8. Child Poverty

Little change - not comparable as changed indicator



**41% of London's children live under the poverty threshold after housing costs<sup>28</sup>, compared with 30% of children in the UK<sup>29</sup>.**



Despite London having some of the highest earners in the UK, the high cost of living here (including costs of travel, housing and childcare) has a major impact on incomes of parents and their ability to find and retain work. Our previous Quality of Life Indicator Reports have included 'children living in workless households' as a measure of child poverty. For this report, we have changed this indicator to reflect the official measure of child poverty used by the London Child Poverty Commission - 'Children Living in Income Poverty after housing costs'.

There has been no consistent reduction in child poverty in the capital since the year 2000. Household incomes, and hence the living standards of children, are strongly affected by the employment status of parents.

Table 8: Percentage of children living in households with below 60% median income 2004/5-2006/7

	Before Housing Costs	After Housing Costs	All children (millions)
England of which:	22	30	10.8
North East	28	33	0.5
North West	25	31	1.5
Yorkshire and the Humber	25	29	1.1
East Midlands	24	29	0.9
West Midlands	26	33	1.2
Eastern	15	25	1.2
<b>London of which:</b>	<b>25</b>	<b>41</b>	<b>1.6</b>
<b>Inner</b>	<b>31</b>	<b>48</b>	<b>0.5</b>
<b>Outer</b>	<b>22</b>	<b>37</b>	<b>1.0</b>
South East	15	25	1.7
South West	17	26	1.0
Scotland	21	25	1.0
Wales	25	29	0.6
Northern Ireland	24	26	0.4
Great Britain	22	30	12.8*

Source: Department for Work and Pensions, Households Below Average Income 2004/5- 2006/7

\* UK figure is based on a single year 2006/7

London's child poverty rates after housing costs are the highest in Great Britain. Approximately 650,000 children (two out of every five) in London live in households with income below 60% of the median after housing costs<sup>30</sup>. Inner London accounts for about 40% of London's population and even before housing costs are taken into account, over a third of Inner London children are in poverty. Once housing costs are taken into account this rises to nearly a half. If these trends continue, it is unlikely the Government's objective to halve the number of children in the UK living in poverty by 2010/11 will be met without more serious actions and interventions to address the root causes.

The percentage of children in London living under the poverty threshold is substantially lower before housing costs are taken into account than after as shown in Table 8 – 26% before (the same as the West Midlands region) versus 41% after. North East England has the highest regional rate of child poverty before housing costs (28%). The child poverty rate is higher in Inner London than for any region in Great Britain, before **and** after housing costs, at 35% and 48% respectively. In Outer London the before housing costs measure is around the same as the national average of 22%.

Factors associated with the housing benefit system are more likely to account for the differences in poverty measured before and after housing costs, rather than housing costs alone<sup>31</sup>.

Figure 8 shows the London and national trends on the child poverty rate after housing costs. Since 1994, the child poverty rate has fallen nationally. These improvements have been less evident in London, where there has been some variation in rates but no consistent downward trend since the three-year period 1999 to 2002.

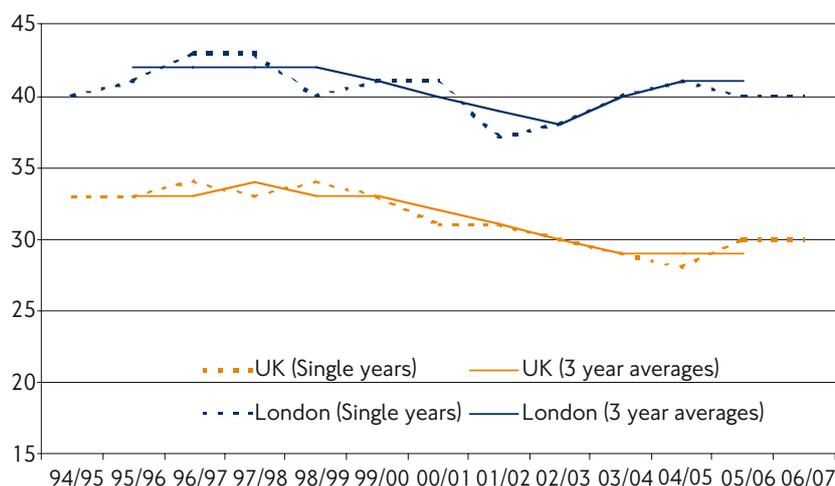
The London Child Poverty Commission (LCPC) was established in 2006 by the Mayor and London Councils, to find solutions to the problem of child poverty in the capital. The Commission identified worklessness in families, low pay and high costs as the major factors contributing to child poverty in London.

### Relevant existing target

UK Government target - to halve the number of children in the UK living in poverty by 2010/11.

**Figure 8: Percentage of children living in households with below 60 per cent median income (after housing costs), London and the UK, 1994-2007**

Source: Department for Work and Pensions, *Households Below Average Income*



**9. Crime**  
**Positive change**



**In 2008/09, 34,378 offences of street crime<sup>32</sup> were recorded. This is a decrease of 39% since 2003/04.**

**In total there were 844,245 crimes recorded by the Metropolitan Police during 2008/09, the lowest since comparable records started in 1998/99. Since 2003/04, overall recorded crime has reduced by 20% (or 216,685 fewer offences)<sup>33</sup>.**



A city is often judged by its levels of crime. Crime harms victims mentally, physically and financially and broadly affects people's feelings of safety and trust, daily routines, freedom of choice and the extent to which they feel they belong to a community. Crime also imposes economic costs on society, reinforces social exclusion and can contribute towards environmental degradation.

As shown in Table 9 between 2003/04 and 2008/09, total recorded crime in London fell by 20%. Total recorded crime in London is down by 2.2% or nearly 19,000 fewer crimes when comparing 2008/09 with 2007/08. The number of recorded crimes remains under 900,000 for the second consecutive year.

With the exception of business crime, the majority of crime categories show a year on year reduction. The Metropolitan Police Service (MPS) has seen a rise in theft from shops, which is thought to be connected with the recent economic downturn. The recent rise in rape reinforces the need for the recently released Mayor's Violence Against Women Strategy.

Overall, violence against the person<sup>34</sup> decreased by 6% between 2003/04 and 2008/09. The largest reductions however have been recorded for burglary (-11%), theft and handling (-30%) and criminal damage (-35%). More serious crimes have also shown a reduction in recorded offending. Murder dropped by 24% and gun and knife enabled crime have both decreased (-13% and -26% respectively).

However, since 2007, there has been a significant increase in teenage homicide, which often involves knives and occasionally firearms. The Mayor takes the issue of youth crime very seriously, and has made it his priority since being elected last year. Whilst every youth murder is a tragedy, there has been a reduction in the number of youth murders during 2008/09. Last year the Mayor launched Time for Action, which aims to address the complex long-term root causes of teenage violence by improving opportunities for young people and is designed to work along side anti-knife crime policing operations such as Blunt 2.

Although comparing London's crime levels with other areas is problematic because of its particular socio-economic, geographical and demographic factors, comparing London to similar forces in England and Wales, shows that for 2008/09 London had a crime rate of 112 per 1000 population. The average for similar forces is 102 per 1000 population.

Table 9 - Crime data 2003-2008/09

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	6yr % change	1yr % change
All crime	1060930	1015121	984125	921779	862866	844245	-20%	-2%
Violence against the person	186188	201926	197264	182355	172730	174554	-6%	1%
Burglary (domestic burglary)	105361	101474	103510	96728	93909	93528	-11%	0%
Theft and handling	67996	63084	64176	59933	59841	59155	-13%	-1%
Criminal damage	448818	412264	400387	365714	331976	313453	-30%	-6%
Homicide	147465	135684	122400	113938	102483	95230	-35%	-7%
Rape	204	182	168	162	163	156	-24%	-4%
Street crime	2571	2446	2398	2304	1904	2180	-15%	14%
Business crime	56455	51797	57564	55759	42246	34378	-39%	-19%
Youth violence					107349	119002		11%
Knife crime					22586	20377		-10%
Gun crime					14192	12310		-13%
Youth murder					2921	2168		-26%
					30	25		-17%

In addition to London Metropolitan Police data, figures for London are obtained from the British Crime Survey<sup>35</sup>. This shows reductions for personal crime (down from 11% to 8.2% since 2003/04) and household crime (down from 21% to 18.4% since 2003/04).

The Mori Annual London survey suggests that the majority of Londoners feel safe. The proportion of Londoners who feel safe walking alone at night increased from 59% in 2004 to 65% in 2009 and satisfaction with local policing has increased from 42% to 56% in 2009<sup>36</sup>.

**10. Satisfaction with living in London**  
Negative change



**In 2007, 73% of Londoners were very or fairly satisfied with London as a place to live, compared with 75% in 2004.**

**When asked about their particular neighbourhood, 81% of Londoners were very or fairly satisfied, compared to 83% in 2004<sup>37</sup>.**



Neighbourhood well being and feeling included in the city you live in is an important feature of sustainable communities. This survey-based indicator remains a simple and effective way to measure Londoners' view of their neighbourhood and of London as a whole.

The Annual London Survey interviews 1,400 people each year. Comparing 2004 and 2007 figures, both satisfaction with London as a place to live and satisfaction with neighbourhoods have declined slightly. Satisfaction with London as a whole has remained fluid, peaking at 80% in 2005, and reducing from there in 2006 and 2007.

According to the 2007 survey, the best things about living in the capital are broadly the same as the factors identified between 2004 and 2006, including the range of shops, job opportunities, transport and the diversity of people who live here. The worst things identified about London life are the cost of living, the cost of housing, crime and safety, and traffic congestion. However, there has been a steady fall in the number of people citing traffic congestion as one of the worst things - down from 54% in 2002 to 43% in 2007.

82% of people said they enjoy London's cultural diversity and 67% agreed that London is a city with good relations between different racial, ethnic and religious communities, compared to 75% in 2004. Since 2001, feeling safe in the local neighbourhood after dark has risen 11% to more than six out of ten people saying they feel safe. 30% of people surveyed said they had seen more police in their local neighbourhood in the past year – a rise of 6% since 2005.

For the second consecutive year, affordable housing came ahead of crime and safety as the top priority for improving London as a place to live, with 51% of people making this a priority. 83% of people surveyed said the cost of housing was a problem

regarding their quality of life. (This is discussed further under Indicator 21ii.)

### 11. Income Inequality in London Negative change - New indicator



**In 2005/06 there was a high level of income inequality in London with 16% of Londoners living with disposable income in the bottom tenth of the national income distribution and 18% of Londoners in the top decile. These are the highest proportions at each extreme compared to other regions in the UK<sup>38</sup>.**



A large gap exists between those on very high incomes and those on very low incomes in London. Large disparities in income mean that wealth and resources are not evenly distributed across the population. There is compelling evidence that for the evolution of healthy and sustainable societies, the gap between the least and most wealthy must be as narrow as possible.

Evidence shows that greater equality brings about quality of life benefits for all - not just those on lower incomes<sup>39</sup>.

Narrowing the gap is crucial for long-term sustainability. For London to be sustainable, the distribution of resources must be made more equal, and the gap narrowed so that every citizen

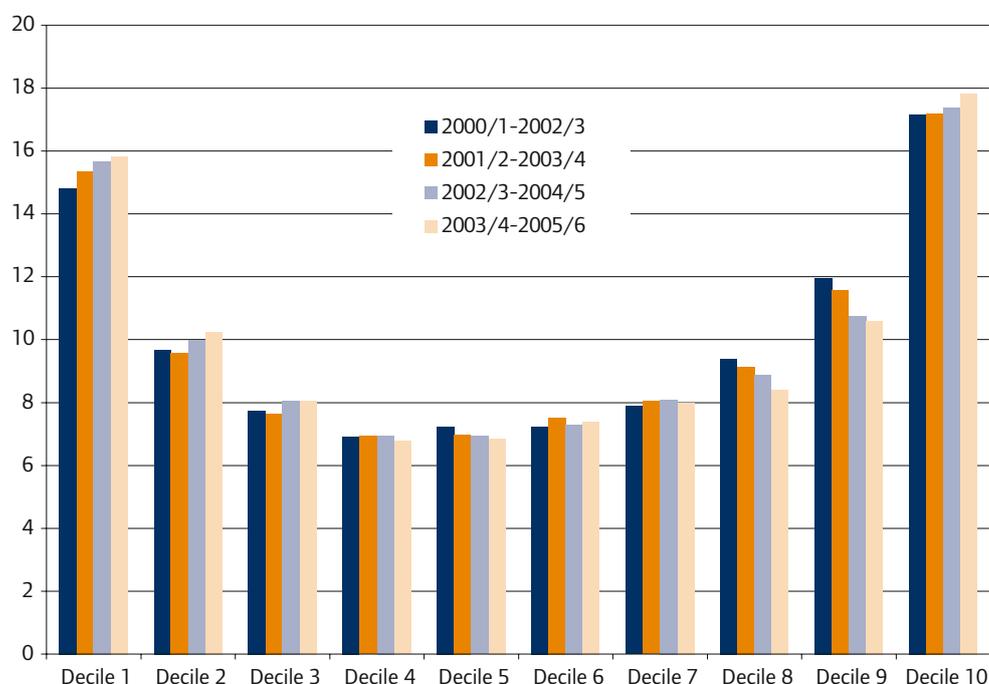
Table 11 - Decile distribution of net disposable household income for individuals (whole population) after housing costs<sup>40</sup>

Deciles	2000/1-2002/3		2001/2-2003/4		2002/3-2004/5		2003/4-2005/6	
	London	UK	London	UK	London	UK	London	UK
Bottom Decile	15	10	15	10	16	10	16	10
Decile 2	10	10	10	10	10	10	10	10
Decile 3	8	10	8	10	8	10	8	10
Decile 4	7	10	7	10	7	10	7	10
Decile 5	7	10	7	10	7	10	7	10
Decile 6	7	10	8	10	7	10	7	10
Decile 7	8	10	8	10	8	10	8	10
Decile 8	9	10	9	10	9	10	8	10
Decile 9	12	10	12	10	11	10	11	10
Top decile	17	10	17	10	17	10	18	10

Source: Household Below Average Income: McClements equalisation scale, Department of work and Pensions (DWP)

Figure 11 - Decile distribution of net disposable household income for individuals (whole population) in London, after housing costs

Source: Household Below Average Income: McClements equalisation scale, Family Resources Survey, Department of Work and Pensions



has the ability to earn a suitable wage on which to live and maintain a good quality of life. The present trend must be reversed.

This 'income gap' has been persistent in London for some time - Table 11 shows that the percentages in each decile have remained largely the same since 2001.

Between 2000/1 - 2002/3 and 2003/4-2005/6, income distribution in the UK has remained constant with an even distribution of income across all 10 deciles, as shown in Table 11. In contrast, the distribution across the deciles in London is more discernible with high concentrations of people at each end of the income spectrum.

Figure 11 above shows the proportion of the population whose disposable household income (after deducting housing costs) is in each national decile. This shows the large proportion of Londoners at each end of the income spectrum - in the bottom 10% (reflecting the lowest levels of disposable household income) and in the top 10% (reflecting high levels disposable household income), with a smaller number of Londoners falling in the 80% in between. In recent years, the number of people in the top decile has increased, as has the number in the bottom decile, suggesting the distribution of income is becoming more polarised, as more Londoners are getting wealthier at the same time as more are becoming poorer.

## 12. Fuel Poverty

Negative change – New indicator



**In April 2008 there were 760,000 fuel poor households in London based on the basic disposable income definition (where household income is assessed after housing costs have been met) and 318,000 fuel poor households based on the full income definition (where household**

**income includes housing subsidies such as housing benefit and income support for mortgage interest).**

**In 2005, 196,000 households (6.3% of all households) in London were estimated to be living in fuel poverty, according to the Mayor's basic income definition, compared with 176,000 in 2003. The national average is 8.4%<sup>41</sup>.**



'Fuel poverty' is defined by the Government as the need to spend 10% or more of household income on energy in order to maintain satisfactory indoor temperatures. Fuel poverty is a widespread and often hidden social problem identified as a causal factor in excess winter mortality, especially among the elderly and socially excluded vulnerable groups. Causes of fuel poverty include low income, high-energy prices and low energy efficiency standards of dwellings. The consequences of fuel poverty can be severe – in particular, children, older people and those who are sick or disabled, can suffer serious health implications.

Fuel poverty is a growing challenge. As energy prices increase, more households struggle to pay their bills. However, identifying households experiencing fuel poverty and ensuring that they receive the appropriate assistance remains complicated. This is not helped by the patchwork of fuel poverty and domestic energy efficiency

Table 12 - Households in London living in fuel poverty

	1996	2003	2004	2005	2008
Full income	475,000	108,000	119,000	120,000	318,000
Basic income	961,000	182,000	176,000	196,000	760,000

schemes that has developed across London and the UK. Additionally, cavity wall and loft insulation, which national schemes tend to focus on, are not appropriate for a large percentage of London's housing stock. This creates difficulties in tackling both fuel poverty and climate change, as energy efficiency measures are not applied.

The definition of household income has considerable impact on the total number of households considered to be fuel-poor. Table 12 shows that the number of households living in fuel poverty in London fell from 961,000 households in 1996 to 176,000 in 2003, although it rose again to 196,000 in 2005 using the Mayor's preferred definition of income<sup>42</sup>. The latest data shows that in April 2008 there were 760,000 fuel poor households in London based on the disposable income definition (where household income is assessed after housing costs have been met) and 318,000 fuel poor households based on the full income definition (where household income includes housing subsidies such as housing benefit and income support for mortgage interest)<sup>43</sup>.

The energy regulator Ofgem estimates that nationally fuel poverty increased significantly between 2005 and 2006 due to higher fuel costs, a trend that is likely to have been matched in London. The rises in August 2008 mean the number of households in fuel poverty in the UK will be over 5 million, according to National Energy Action (NEA) - the leading fuel poverty campaign organisation in England. This is approaching the highest number since recording began in 1996. This latest price rise effectively means that, since January 2008, prices had risen by 44% for gas and 27% for electricity

for domestic customers in the UK<sup>44</sup>. Fuel prices had been rising since 2003 (when incidence of fuel poverty was at its lowest both nationally and regionally) and so have the number of households in fuel poverty.

The Government's Fuel Poverty Advisory Group (FPAG) predicted that in 2007 there would be 2.5 million households in England in fuel poverty based on the Government's preferred definition<sup>45</sup>. The increase in fuel poverty in recent years (for example, from 1.8 million in 2005 to 3 million in 2007) is largely attributed to the rise in energy prices.

### Relevant existing indicator and targets

The UK Fuel Poverty Strategy, published in 2001, sets out the Government's overall objective of eradicating fuel poverty in vulnerable households<sup>46</sup> by 2010 and in all households in the UK by 2016.

London's targets, as set out in the Mayor's Energy Strategy (2004), with regard to fuel poverty include:

- London should work to eradicate fuel poverty in London based on disposable income, which should at least match progress nationally;
- There should be no occupied dwelling in London with a SAP<sup>47</sup> rating of less than 30 by 2010, and less than 40 by 2016<sup>48</sup>.

accessible

well-being

protection

environment

diversity

vibrancy

safety

recycling

efficiency

prudence

*Resources*

*Resources*

**13 (i) Ecological Footprint**  
Unable to make comparison



**In 2004, the average London resident had an Ecological Footprint of 5.48 global hectares (gha<sup>49</sup>). This is very similar to that of an average UK resident (5.30gha). However if everyone in the world lived like an average Londoner we would need three planets to support us.**



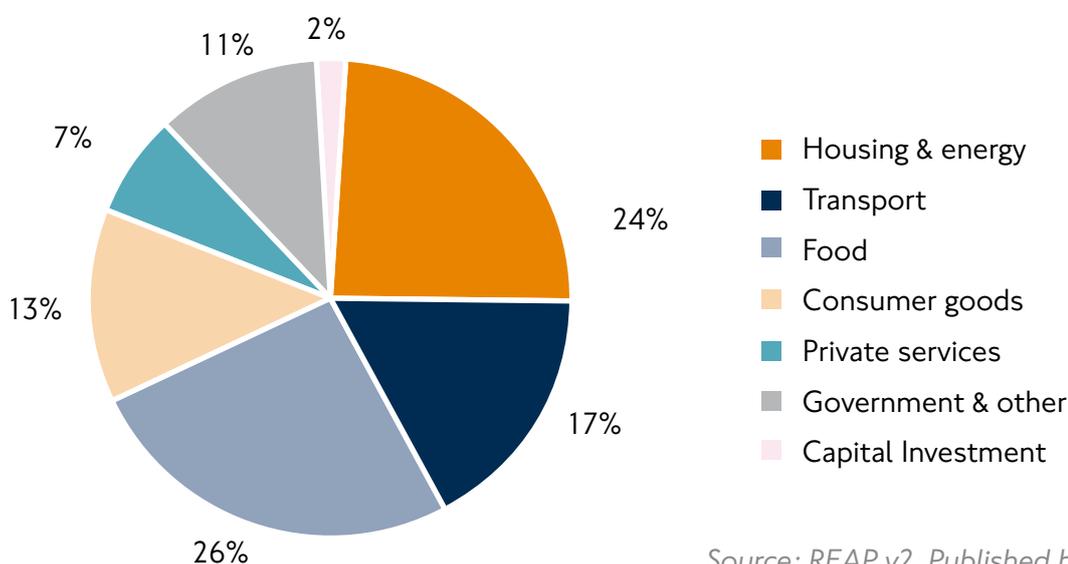
Ecological Footprinting is a calculation method that estimates the demand human activities place on the planet. The Ecological Footprint of a city

is defined as the area of land and sea required to supply its population with resources, such as food or timber products and to absorb its waste products. It is helpful because it is the only indicator that illustrates sustainability in terms of the fixed limits of the one planet we live on. Ecological Footprinting illustrates our demand on the natural resources of the world, but does not explain the reasons for the demand.

The Stockholm Environment Institute REAP methodology estimates that the average London resident's Ecological Footprint is around 5.5 global hectares. Two significant components of London's footprint - Waste (indicator 13 (ii)) and Carbon dioxide emissions (indicator 13 (iii)) - are looked at in more detail in this report. Figure 13 below provides a breakdown of the key components of the average Londoner's Ecological Footprint.

London has the third highest Ecological Footprint in the UK behind the South East region (5.63) and the of East of England region (with a footprint of 5.53).<sup>50</sup> London's Footprint follows the general pattern of many city areas. Its Footprint from

**Figure 13 - Ecological Footprint of the average London resident (2004)**



Source: REAP v2. Published by SEI 2008.

goods and services is high due to higher levels of consumption by householders and businesses. However, its transport Footprint is relatively low due to low car use, more use of public transport and shorter travel distances.

The 2005 Quality of Life Indicators Report used the 2002 Best Foot Forward 'City Limits' study to measure London's Ecological Footprint. This report has not been updated so a direct comparison with the Ecological Footprint quoted in that report cannot be made.

**13(ii) Waste**  
**Negative change**



**In 2006/07 3.390 million tonnes of household waste were collected, compared with 3.326 million tonnes in 2003/04, an increase of 64,000 tonnes.<sup>51</sup>**



Consumption of goods by households and business leads to waste accumulating in landfill sites in and around London. Current rates of waste to landfill are unsustainable and more action is required to prevent and reuse waste, increase recycling and generate energy efficiently using advanced waste technologies such as anaerobic digestion and gasification.

London produced 4.2 million tonnes of municipal waste in 2006/07, compared with 4.3 million tonnes in 2003/04. Municipal waste consists of household waste plus waste collected from businesses, litter and waste from municipal parks and gardens. The amount of municipal waste collected has fallen slightly (by less than 5%) since 2000/01.

London's municipal recycling performance is also improving, up from 8% in 2000/01 to 20% in 2006/07 (844,000 tonnes). However, London continues to incinerate more municipal waste than it recycles, resulting in a significant loss of materials and energy. 57% of municipal waste was landfilled (2.4 million tonnes) and 22% (929,000 tonnes) incinerated in 2006/07 (compared with 72% and 20% respectively in 2000/01).

Municipal waste accounts for less than 25% of all the waste produced in London. London's businesses produce the remaining 75%; in 2002/03 this comprised 7.2 million tonnes of construction, demolition and excavation waste and 6.6 million tonnes of commercial and industrial waste.

A high reuse and recycling rate for construction waste (85% was recycled in 2002/03) suggests effective practices in the sector. However, the majority of reuse and recycling involves crushing concrete and reusing demolition spoil as bulk fill which does not make the best use of construction materials. Just 45% of commercial and industrial waste was recycled in 2002/03, meaning there is a long way to go to reach the Mayor's London Plan target of achieving recycling or composting levels in commercial and industrial waste of 70% by 2020.

**Relevant existing targets**

**London Plan KPI 21** – 75% (16 million tonnes) of London's waste treated or disposed of within London by 2010.

Progress: Depends on achievement of quantified requirement for waste treatment facilities, which are yet to be fully tested.

**13(iii) Carbon dioxide (CO<sub>2</sub>) emissions**  
**Positive change**



**CO<sub>2</sub> emissions from London's domestic, commercial/industrial and transport sectors in 2004 were estimated at 45.3 million tonnes and 43.9 million tonnes in 2005<sup>52</sup>.**



Most carbon dioxide emissions are caused by industrial, transport and power generation activities. CO<sub>2</sub> emissions already present in the atmosphere will cause changes in our climate and weather for the next hundred years with strong consequences for Londoners' quality of life.

Since 1990, London's overall CO<sub>2</sub> emissions have reduced from just over 45 million tonnes per year.

This is despite a rise in London's population of 0.7 million people, and an increase in employment of 0.4 million over the same period. This change is largely due to a halving of industrial emissions, as industrial activity has relocated to other parts of the UK or overseas, along with a significant shift in the UK's electricity generating mix, with a reduced contribution from coal-powered generation plants and more from natural gas.

Given London's forecast economic and population growth, this may be a temporary improvement (due to a declining manufacturing base) as emissions are projected to increase by 15% to 51 million tonnes by 2025<sup>53</sup>. Further analysis for the Mayor's Climate Change Action Plan<sup>54</sup>, published in February 2007, has projected increased CO<sub>2</sub> emissions for 2006<sup>55</sup> of 44.3 million tonnes. To address this, a target of reducing emissions to 60% below 1990 levels by 2025 was set in the London Climate Change Action Plan.

Nationally CO<sub>2</sub> emissions for 2003 and 2006 respectively were 554.7 and 554.5 million tonnes<sup>56</sup>.

**Relevant existing targets**

**London Plan KPI 22** - Reduce emissions to 23% below 1990 levels by 2016. Progress: 9% reduction by 2003 suggests an optimistic chance of meeting the 23% target by 2016.

Table 13 - Breakdown of CO<sub>2</sub> emissions for London by sector

Sector	2004 (million tonnes of CO <sub>2</sub> )	2005 (million tonnes of CO <sub>2</sub> )
Domestic	16.8	16.2
Industrial/commercial	20.9	20.3
Rail	0.185	0.191
Road	7.4	7.3
Total	45.3	43.9

**London Climate Change Action Plan** - Reduce emissions to 60% below 1990 levels by 2025.

**UK Government Target** – Reduce emissions to 26% below 1990 levels by 2020 and 80% by 2050.

## Biodiversity

**14(i) Bird populations  
(number of bird species)  
Positive change**



**The London bird species index stood at 131 in 2006, compared with 115 in 2002<sup>57</sup>.**

**26 of our most common bird species were 31% more numerous in London in 2006 than they were in 1994, whereas in the two surrounding Government Regions the increase was only 7%<sup>58</sup>.**



Bird populations are a useful “surveillance” indicator, which can help alert us to changes in the health and diversity of the natural environment. Birds are particularly sensitive to positive or adverse impacts on their surroundings. High in the food chain and highly mobile, birds reflect changes to the plants, habitats and other animals that are their food and shelter.

Figure 14 below shows the trend in bird population for the 26 most common birds in the capital for

the period 1992–2006, and compares it with the surrounding Government regions<sup>59</sup>. The index suggests that the population of London’s birds remained unchanged from 1994 to 1998, after which it rose by about 30%. By contrast, population in the regions around London is only slightly higher than in 1994.

### Individual species in London

No species shows the precise pattern of change shown in Figure 14. Using the trends with annual year effects, 14 species<sup>60</sup> have significantly increased in London, while just four species<sup>61</sup> have decreased in the Greater London region between 1994 and 2006.

#### Species showing a greater increase in London

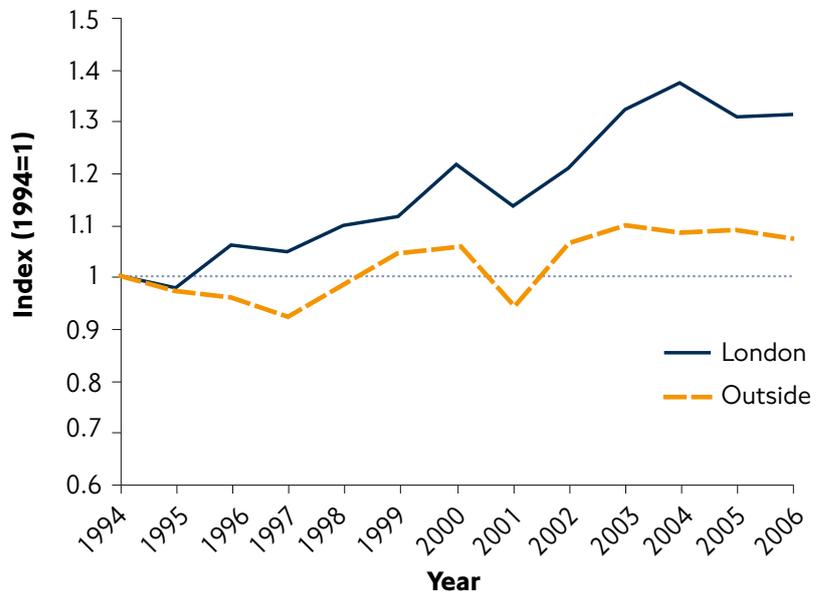
Five species increased in both London and in the surrounds, but significantly more in London (Chaffinch, Greenfinch, Great Tit, Robin and Woodpigeon). Wren numbers increased in London but decreased in the surrounding counties.

#### Species showing a greater decrease in London

Two species have fared worse in London than in the surrounds. Only one species decreased in both, but more in London than it did in the surrounds – the House Sparrow. This species decreased steadily for a number of years and in 2002 was at 30% of its 1994 population level. Since then, the population seems to have stabilised, and in 2006 was at 35% of the 1994 level. The decrease in the surrounding regions was to the more moderate level of 75% of the 1994 level over the same time period. The Blackbird decreased in London but not in the surrounding regions.

Bird populations are governed largely by the availability of food and suitable habitat, including nest sites. These in turn are influenced by land use and management, and by climate. These factors will affect different species in different ways, so it is not easy to determine the precise reasons for

Figure 14: Bird species population trend, London and outside regions, 1994 - 2006



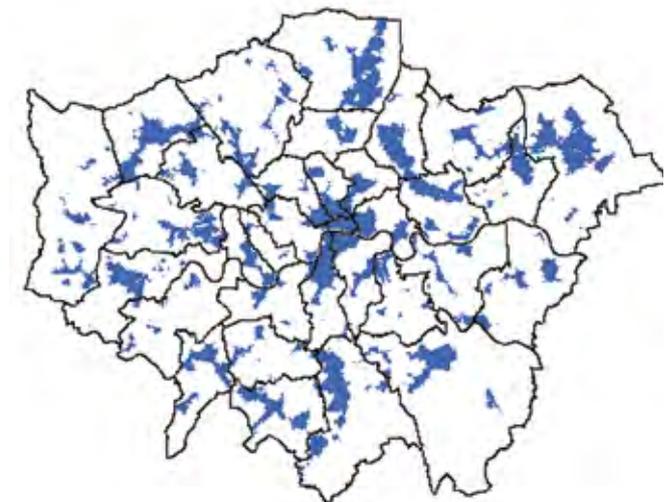
population changes. The much-publicised decline of the House Sparrow in London, for example, has still not been satisfactorily explained despite a considerable research effort. Nevertheless, it is clear that, on average, London's birds are not only increasing but are doing better than those in surrounding regions.

**14(ii) Areas of deficiency in access to nature by borough**  
New indicator



**In 2006, 24,962 hectares of London was mapped as lying in an Area of Deficiency in access to nature<sup>62</sup>.**

Areas of deficiency in access to nature



© crown copyright. All rights reserved (GLA)  
(LA100032379) 2008

Access to good quality green space where nature can be encountered is widely recognised as a significant factor in quality of life. Many parts of London have fine green spaces where people can watch a wide variety of birds and other wildlife in open areas, such as the Royal Parks, the ancient meadows and chalk grasslands in the Green Belt north and south of London, and city farms across the city. Equally, improving access to London's 'blue space' (canals/waterways/wetlands) may improve understanding of London's unique urban biodiversity and encourage greater interaction, health and wellbeing through leisure activities.

Fairly evenly spread across London there are areas severely lacking in green space with significant wildlife value. These are defined as 'Areas of Deficiency in access to nature' - localities where people live further than 1km walking distance from a green space which is designated as a Site of Importance for Nature Conservation at borough level or higher. In 2006, 23.3% of built-up London (excluding Green Belt and Metropolitan Open Land) comprising 24,962 hectares was mapped as lying within an Area of Deficiency in access to nature. The London Boroughs of Enfield and Havering have the highest percentage of non Green Belt and Metropolitan Open Land demarked as Area of Deficiency, at 38.8% and 37.5% respectively.

The Mayor's Biodiversity Strategy aimed to reduce the total Area of Deficiency by 500 hectares by the end of 2008, through enhancements to a number of green spaces together with improved linkages and access.

The GLA has been working with London boroughs to reduce the total Area of Deficiency through improving the wildlife interest of green spaces in these localities and improving connectivity so that walking distances to good sites are reduced. Priority sites for enhancement have been identified as part of the Further Alterations to the London Plan 2008.

Fourteen sites have been improved during 2006-2008, working in partnership with Natural England and the SITA Environmental Trust.

### 15. Household recycling rates Significant change - 9.6%



**In 2006/07, London householders recycled and composted 22.9% of their waste, an increase of 9.6% over 2003/04 figures.**

**This is compared with the average rate of recycling in England in 2006/07, which was 30.9%, an increase of 13.1% since 2003/04.**



Recycling and the reuse of materials saves resources, reduces the amount of waste going to landfill, reduces air and water pollution and saves energy. Readily recyclable or compostable products such as paper, glass, cans, plastic and food waste make up about 65% of the average household dustbin's contents.

Participation in household recycling services is one indication of people's commitment to leading more sustainable lifestyles. However, tackling the growing waste problem poses a significant challenge. Despite efforts to reduce and reuse waste, the overall quantity of waste produced by households in London has remained fairly consistent since 2000, with each household producing around a tonne of waste per year.

Recycling services across London have improved steadily since 2003/04 and 27 councils now provide a recycling service of at least two materials to over 90% of their households.

However, there continues to be wide variation in the recycling services that London local authorities offer, with the range of materials collected and collection systems used. This can create confusion for residents and particularly London's transient and mobile population.

**Relevant existing targets**

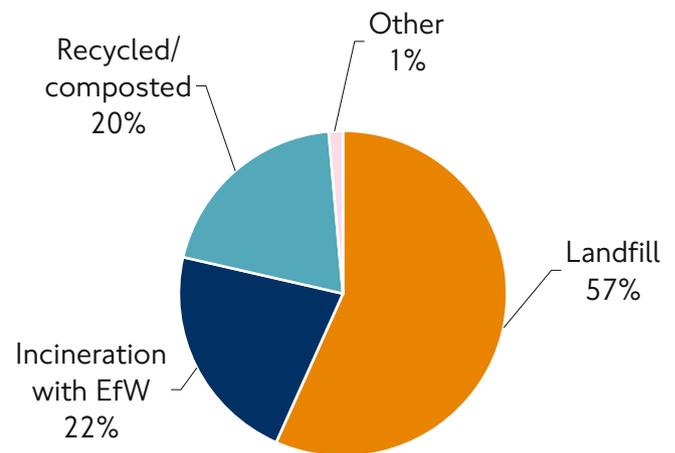
Targets in the consolidated London Plan are for London to exceed recycling or composting levels in municipal waste of:

- 35% by 2010
- 45% by 2015

These London Plan targets are for municipal waste, which is all the waste collected by a local authority (from both households and businesses). London's municipal recycling rate in 2006/07 was 20% compared with the England average of 31%. This shows that London's recycling and composting rate needs to dramatically improve in order to meet the 2010 and 2015 targets in the London Plan.

Figure 15 below shows how London's municipal waste was managed in 2006/07.

Figure 15 London's municipal waste 2006/07



**16. Traffic Volumes**  
No significant change



In 2006, levels of road traffic in London were 33.0 billion vehicle km, compared with 32.8 billion vehicle km in 2003<sup>63</sup>.



Transport is closely linked to economic growth, social inclusion and environmental quality so is a key quality of life indicator. Reductions in traffic volumes can help ease congestion and safety on the roads, as well as reducing vehicle emissions, which affect air quality.

Traffic volumes in London increased by less than 1% between 2002 and 2006, while nationally volumes have risen by almost 4%. Over a 10-year period the difference is more pronounced with traffic across the whole of Great Britain increasing by 15% compared with less than 5% for London.

On major roads in London there has been a general decline in daily traffic flows by cars and taxis since 2002. However bus, motorcycle and pedal cycle flows have increased. Car ownership levels in London remain lower than national levels and 38% of households did not own a car in 2006 compared to 25% across Great Britain<sup>64</sup>.

More general commuting patterns in London show a 5% reduction in the proportion of Londoners commuting by car or van between 2003 and 2006 (42% compared with 37% respectively), and an increase in the proportion using public transport (from 45% to 49%) and cycling (from 2% to 3%) with the proportion walking remaining the same (9%). This compares with a stable commuting pattern across Great Britain since 2003 (with 71% commuting by car or van, 14% by public transport, 3% by bike and about 11% on foot)<sup>65</sup>.

Since 2000, London has been the only major city in the world to achieve a shift from private car usage to public transport, cycling and walking. Transport emissions per capita in London are 45% lower than the UK average<sup>66</sup>. However, increased numbers of commuters put pressure on existing transport networks and long commutes put stress on employees. Solutions that reduce the need to commute at all, such as flexible working (including allowing employees to work from home), providing facilities such as teleconferencing and videoconferencing, and planning housing near to people's places of work to enable them to walk or cycle, are more sustainable options that should be promoted more actively.

Congestion charging was implemented in February 2003 and has reduced the number of vehicles with four or more wheels entering the Congestion Charging Zone by 21% between 2002 and 2006. The number of cars entering the zone decreased by 36% and pedal cycles increased by 49%<sup>67</sup>.

Transport for London and London borough councils are working with workplaces to reduce travel, particularly by unsustainable modes. Tools used include information and awareness campaigns to encourage modal shift, the staggering of work hours to reduce car trips or help shift some demand for public transport away from the busiest periods, and financial incentives to support the provision of facilities such as showers, lockers, drying facilities, cycle parking and pool bikes.

### Relevant existing targets

**London Plan KPIs 12** - 'Use of public transport per head grows faster than use of the private car per head'. Progress: Target being comfortably achieved as public transport use has grown and private transport use has reduced<sup>68</sup>.

**London Plan KPI 13** - From 2001-2011, 15% reduction in traffic in the Congestion Charging Zone, zero traffic growth in inner London, and traffic growth in Outer London reduced to no more than 5%. Progress: Overall decline of 5% in use of private vehicles since 2001.

**17. Travel to School**  
No significant change



**In 2005/6, 44% of children walked to school in London (compared with 50% in 2001), 23% travelled by local bus (compared with 20% in 2001) and 26% travelled by car (compared with 22% in 2001)<sup>69</sup>.**

**Nationally, in 2005/06, more children walked to school (46%) and slightly more cycled (2% versus 1% in London). However, a greater proportion of children were driven (31%)<sup>70</sup>.**



How children get to school is important for a variety of reasons. The more children that are taken to school by car, the more pollution and congestion is created. Ground-based transport is responsible for 22% of London's carbon dioxide (CO<sub>2</sub>) emissions<sup>71</sup> and 50% of weekday morning peak trips are due to "the school run". Therefore reducing dependence on cars for travel to school is a key component of the work needed to keep London moving whilst also meeting the challenge of climate change and improving London's environment and the health of its communities.

Walking or cycling to school is also healthy, provides regular exercise and as research shows can assist in countering obesity. Such regular exercise

can also aid school attainment rates with children being more alert and ready to learn.

Modes of travel to school in London changed only marginally between 2001 and 2005/06, with an increase in the number of children travelling by bus and travelling by car and a slight decrease in the number of children walking to school. The number of children cycling in London remains static at around 1%, which may be due to parental concerns about the ability of their children to travel safely on London's roads at peak times. A reduction in traffic volumes (see Indicator 18) may encourage the establishment of more safe crossing points.

Transport for London and the boroughs have been working with London schools towards a target for all schools to have a travel plan by the end of 2009 – a year ahead of the Department for Transport's national target. This school travel planning programme aims to bring about a change in home to school travel patterns in order to cut congestion and lower pollution levels, allow pupils to take regular exercise and to do this in a safe environment. At the end of April 2008, 71% of London's schools had approved school travel plans, and had achieved an average reduction in car trips of 6.4%.

The introduction of free bus and tram travel for all under 16 year olds in 2005 which has been taken up by approximately 470,000 young people, and free tube and DLR travel for under 11 year olds, have also helped to reduce the dependence on cars for the school run in London.

**18. Air Quality**  
Positive change



**2,822 tonnes of PM<sub>10</sub> (particulate matter of less than 10 microns in diameter) were emitted in London in 2004, representing a decrease of 169 tonnes on 2003 levels and 695 tonnes on 2001 levels<sup>72</sup>.**



Air quality affects human health - particularly the very young, older people and those with existing heart and lung conditions<sup>73</sup>. In addition to death and hospital admissions of those most vulnerable to the effects of air pollution, it is estimated that in the UK our life expectancy is reduced by an average of 7-8 months due to poor air quality<sup>74</sup>.

**i. Emissions of pollutants**

London's air quality has improved, but it is still the worst in the UK for most pollutants and has caused the first UK breaches of the EU limit values, which are designed to protect human health. Poor air quality in London is largely the result of pollution from human activity, such as emissions from cars (70% of PM<sub>10</sub> emissions in Greater London are from road transport), domestic and commercial gas use, industrial processes and construction.

Outer London PM<sub>10</sub> levels fell by 96 tonnes between 2003 and 2004, Inner London by

52 tonnes and Central London (corresponding to the original Congestion Charging Zone) by around 19 tonnes. The levels of PM<sub>10</sub> emissions, which were produced after 2004, are not yet known. However the London Atmospheric Emissions Inventory (2004) includes predicted emissions of 2,264 tonnes of PM10 in London in 2010, a decrease of 558 tonnes (20%) from 2004 levels.

**ii. Concentrations of pollutants in London's air**

Pollutant concentrations in London are affected by emissions in London, pollution from outside London and the UK, and other factors such as the weather. The trends in annual mean concentrations at ground level for pollutants in London over the period November 1996 to December 2006<sup>75</sup> were as follows:

- PM10 concentrations reduced by 24% (but still exceed the national and EU targets near major roads).
- Nitrogen Dioxide (NO<sub>2</sub>) concentrations fell by 14% but still exceed the national and EU targets near major roads, in central London and around Heathrow.
- Concentrations of oxides of nitrogen (NO<sub>x</sub>, which consists of NO<sub>2</sub> and NO, which forms NO<sub>2</sub>) and carbon monoxide (CO) have fallen by 41% and 60% respectively and meet the national and EU targets in London.
- Ozone (O<sub>3</sub>) concentrations increased by 51% mainly due to the reduction in NO<sub>x</sub> concentrations.
- Sulphur dioxide (SO<sub>2</sub>), from burning oil and coal and industrial processes, has fallen by 74% and meets the national and EU targets in London.

New EU legislation has been introduced to control even smaller particulates, PM<sub>2.5</sub> (less than 2.5 microns in diameter) and the exposure of the public to this pollutant.

The main causes for concern in London are particulates (PM<sub>10</sub> and PM<sub>2.5</sub>) and nitrogen dioxide (NO<sub>2</sub>), as concentrations of NO<sub>2</sub> and particulates exceed the UK national air quality objectives in central London, along major roads and in the areas around Heathrow Airport. The Mayor's Air Quality Strategy particularly aims to reduce concentrations of NO<sub>2</sub> and particulates to reduce the impact on the health of people who live, work or visit London.

Ground level ozone is also of increasing concern in London especially as the changing climate is likely to increase ozone episodes further. This is addressed by national targets and monitoring as the Mayor does not have any legal responsibility for addressing ozone pollution.

Various measures will help to reduce air pollution concentrations including:

- The London Low Emission Zone, introduced in February 2008, which aims to improve London's air quality, by deterring operators from using high-polluting vehicles.
- The use of cleaner vehicle technologies, such as hybrid buses, and low emission taxis.
- Reduced traffic congestion (more PM<sub>10</sub> is emitted at low stop-start speeds).
- Improved measures to reduce emissions from construction activity, including the London Best Practice Guidance aimed at reducing emissions and dust from construction and demolition.

Results

Results

Res

consider  
informatio  
particip  
long t

transparency  
innovation  
improvement  
accessible  
well-being

Su  
Dev

protecti  
recycling

p

R

**19. Business Survival**  
Slight improvement (1% and 4%)



**91% of London's businesses registering in 2004 were still trading one year later, compared with a UK figure of 92%.**

**67% of London's businesses registering in 2002 were still trading three years later, compared with a UK figure of 71%.**

**London's one-year survival rate has increased since 1999. However, it remains beneath that of the UK as a whole and fell between 2003 and 2004.<sup>76</sup>**

small business success of the city's economy. Small businesses help to foster entrepreneurship and innovation, which are essential in maintaining London's global competitive position. They may also be more likely than large businesses to recruit local labour and be based in their local communities offering opportunities for skills development for London residents.

London's one-year business survival rate has followed movements in the rate for the UK fairly closely over the 2000 to 2004 period, albeit within a range of 1 to 2 percentage points below the UK rate.

There are a number of factors, which should be taken into account when analysing and examining these figures. London has a higher proportion of very large businesses than the UK as a whole. Secondly, innovation requires risk and therefore innovative businesses may be more subject to failure. However, London's rate will also be influenced by the high costs associated with doing business in the city, capacity issues such as congestion and supply-side issues regarding staff recruitment. It should be noted that this data predates the current economic downturn.



© Belinda Lawley

London's business survival rate is important to quality of life as it gives a broad indication of the

**Figure 19 – One-year business survival rates**

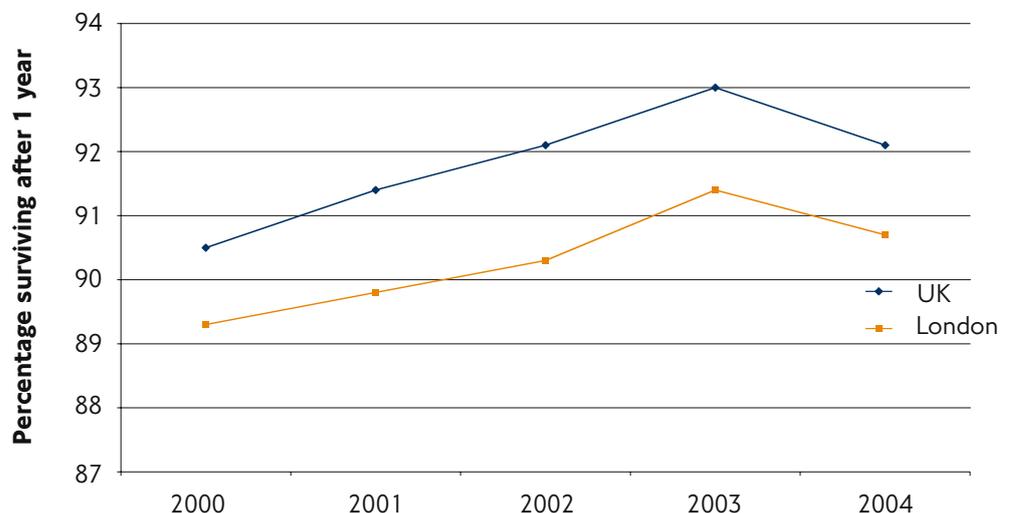
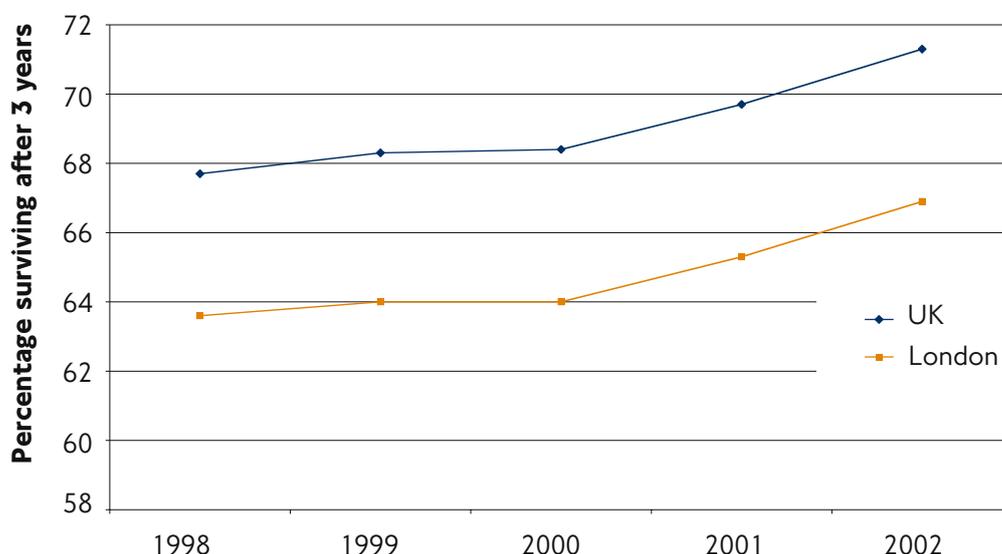


Figure 19.1 – Three-year business survival rates



Other factors influencing survival rates at the national level include:

- Age of business
- Size (i.e. number of employees)
- Firm and sector capital intensity
- Price-cost margins
- Firm and sector financial situation (including interest cover, debt to equity ratio, liquidity)
- Sector growth rate
- Entry rate

**20. Life expectancy at birth (years)**  
Positive change



**In the three calendar years 2004-06<sup>77</sup> life expectancy in London for women was 82.0 years and for men 77.4 years, an increase on the expectancies of 80.8 years and 75.9 years in 2000-02. These values are slightly higher than the national averages<sup>78</sup>.**



Life expectancy provides an indication of the quality of life standards of living in a particular area. This indicator is a standard ‘barometer’ of the health of a city’s citizens, which can be influenced by a range of factors captured in this report such as air quality, income inequalities and decent housing.

Life expectancy has continued to rise since 2000-02 across the UK in general but particularly in London where the increases in life expectancies over the four years have been 1.6 years for men and 1.2 years for women, compared with national increases of 1.3 years and 0.9 years respectively. London is the region with the most rapid increases. Life expectancies are generally higher in Outer London boroughs, but statistics are not published separately for Inner and Outer London.

There is significant variation in life expectancy across the London boroughs and even within boroughs. In 2004-06, Kensington and Chelsea had the highest life expectancies of all local authorities in the UK at 87.2 years for women and 83.1 years for men. At the other end of the scale, women in Newham had the lowest expectancy in London at 79.4 years and men in Islington had the lowest expectancy in London at 74.9 years.

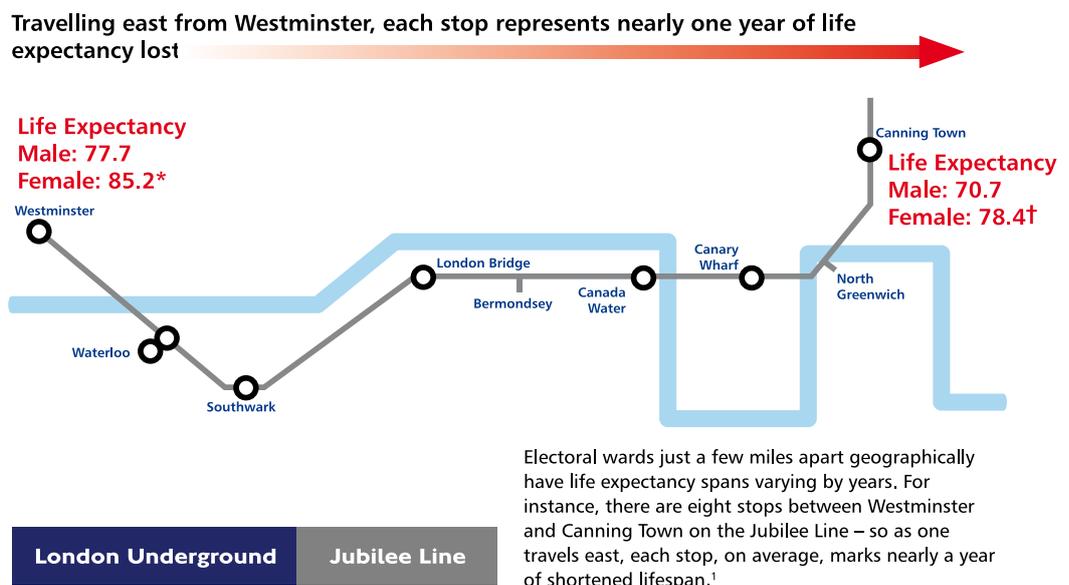
These values are both well above the lowest expectancies in the UK, which are found in Glasgow: 77.0 years for women and 70.5 years for men. The lowest expectancies in England are 78.3

years for women in Liverpool and 73.0 years for men in Manchester.

Disparities in life expectancy are evident within boroughs as well as between them. Within the borough of Camden female life expectancy at birth ranges from 76 years in Kentish Town ward to 84 years in Hampstead ward. Similarly, data from the Department of Health's Health Inequalities Intervention Tool 2008 shows that in Bromley there is a four-year difference in male life expectancy between the average for the borough as a whole and the most deprived quintile.

Figure 20, taken from the Mayor's Draft Health Inequalities Strategy<sup>79</sup> illustrates that differences in life expectancy can occur across very small distances. These differences reflect Londoners' differential access to the determinants of good health such as good housing, financial security and access to health services. In many cases neighbourhoods where people experience multiple forms of deprivation, exist right beside relatively wealthy neighbourhoods.

**Figure 20 – Differences in Life Expectancy within a small area of London**



<sup>1</sup> Source: analysis by the LHO using ONS data. Diagram produced by the Department of Health.

The Mayor's Draft Health Inequalities Strategy focuses primarily on these wider determinants of health and on improving all Londoners access to them. The strategy particularly emphasises the importance of reducing income inequalities, valuing good work, empowering local communities, increasing access to health services and improving the quality of Londoners' living environment.

### Relevant existing targets

In 2001 national targets for reducing health inequalities were announced. These targets are now part of the Department of Health's Public Service Agreement. The life expectancy target aims to see faster improvement in a 'fifth of areas with the worst health and deprivation indicators' - the target will be achieved if the gap in life expectancy between this group and others is reduced by 10% by 2010. Eleven London boroughs fall into this category - known as the 'London Spearhead Group'. They are: Barking and Dagenham, Greenwich, Hackney, Hammersmith and Fulham, Haringey, Islington, Lambeth, Lewisham, Newham, Southwark and Tower Hamlets. Although all boroughs in the London Spearhead Group will have increased their life expectancy by 2010 if current trends continue, not all will have increased enough to reduce their gap with England by 10%.

## 21. Housing

### 21(i) Decent Housing No change



**In 2003<sup>80</sup> 64% (2,005,000) of London's homes were above the Government's 'Decent Homes Standard', the same as in 2001. This is below the 70% recorded in England as a whole<sup>81</sup>.**



Housing is a key component of decent quality of life as poor quality housing can harm health and is often associated with a variety of social problems. A 'decent home' is defined as one that meets the statutory minimum standard, is in a reasonable state of repair, has reasonably modern facilities and services and provides a reasonable degree of thermal comfort. The Decent Homes Standard is not the only measure of housing conditions – a broader concept of decent housing could also take into consideration issues such as wheelchair accessibility.

London is unusual among the regions in seeing no significant increase between 2001 and 2003 in the number of decent homes although conditions have improved since 1996. Just 59% of London's social rented homes met the Decent Homes Standard in 2003 compared with 66% in the private sector.

More recent robust regional data on the overall trend in decent homes is not available. However, data covering council homes only suggest that the proportion of non-decent council homes in London has fallen significantly from 53% in 2003 to 34% in 2007<sup>82</sup>. Further data from the Regulatory Statistical Return indicate that around 10% of housing association homes in London do not meet the decent homes standard.

There are estimated to be 200,000 households in London that are overcrowded, 30,000 that need wheelchair accessibility improvements and nearly 100,000 that need redesigned or relocated bathroom facilities. A shortage of affordable, decent housing also limits the ability of refugees to integrate and feel a sense of place and contentment with their new communities.

Improved housing conditions in social housing are the result of investment by councils, housing associations and other registered social landlords, which depends in large part on funding allocated by central government. Unprecedented funding has been available for investment in the past five years, as the Government has sought to achieve its target of bringing all social housing above the Decent Homes Standard by 2010. But delays in making funding available to councils, often due to the requirement to transfer stock to housing associations or set up alternative arrangements, have delayed the programme and the decent homes 2010 target will not now be met. Improvements in private sector housing mostly come from investment by the property owner, as public sector funding for improvements to owner occupied or privately rented homes is very low compared to the scale of the issue.

Over the next three years funding has been put in place to address non-decent housing in London as follows:

- £440m in supported capital expenditure and up to £570m in Arm's Length Management Organisation funding for investment to bring council homes up to the Standard.
- Targeted Funding Stream, a £310m pot that will be allocated to projects contributing towards meeting housing needs in a variety of ways, including an Innovation and Opportunity Fund to support new approaches to improving the environmental performance of London's housing and to increase the pace of new housing development. In assessing bids to the Targeted Funding Stream, higher priority will be given to bids that seek to exceed the Decent Homes Standard and achieve environmental sustainability by addressing climate change issues.

The GLA is also carrying out research into a successor to the Decent Homes Standard that emphasises environmental sustainability, in particular the need to mitigate and adapt to climate change.

**21(ii) Housing affordability**  
**Negative change - New indicator**



**In London the average mortgage was 26.4% of average working household income in 2007, compared with 21.7% in England as a whole. This represents a rise in London from 12.8% in 1994 and 19% in 2002<sup>83</sup> showing that housing affordability has decreased.**



Although owning your own home is not a vital component of a more sustainable city, the ability of

all Londoners to purchase their own home provides an indication of equality of income and access to the housing market.

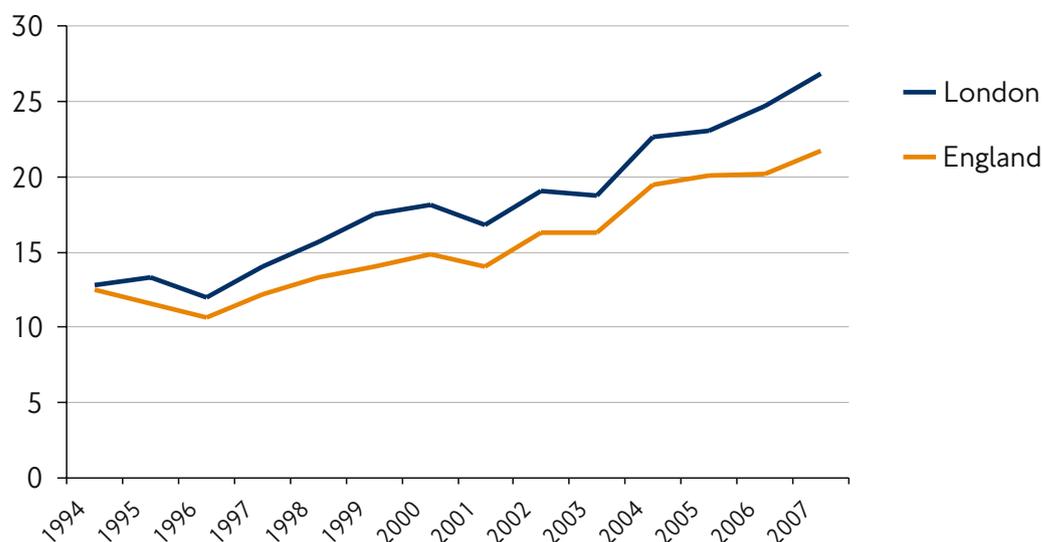
With house prices increasing for over a decade until the recent downturn, housing has become progressively less affordable in London. But in order to measure affordability accurately it is necessary to consider not just house prices and incomes but also the cost of acquiring and sustaining a mortgage.

The ROOF affordability index<sup>84</sup> combines information on average prices paid by first-time buyers, mortgage interest rates and the average incomes of working households to produce an indicator of average mortgage costs as a percentage of average household income.

The affordability of owner-occupied housing in London has deteriorated each year since the mid-1990s, with average mortgage costs more than twice as high as a percentage of average incomes as they were in 1994 and 41% higher than in 2002.

Figure 21 -  
Affordability Index

**Average mortgage repayment as percentage of average working household income in London**



In terms of the ROOF index, the affordability indicator in London has risen from a base figure of 100 in 1994 and 148.4 in 2002 to 209.4 in 2007, showing that housing has become less affordable. This is a faster increase than in England as a whole, where the affordability indicator has risen from 100 in 1994 to 130.4 in 2002 and 173.6 in 2007 showing that housing in the rest of the England has also become less affordable but to a lesser extent.

Although affordability analyses tend to focus on the owner-occupied sector, the private rented sector is also important. Trends in regionally comparable private rents are not available but in London successive private rent surveys by the GLA suggest that rents have risen in the past few years but not as much as house prices.

This indicator of affordability is likely to have improved when data for 2008 becomes available, due to the sharp price drops seen over the year. At the same time, however, mortgages have become significantly more difficult to obtain as lenders have reduced loan-to-value ratios, so the ‘accessibility’ of owner occupation may be no better overall.

Housing affordability is largely driven by wider macroeconomic factors such as employment and interest rates, but other things being equal the increased provision of new housing at or above the targets set in the London Plan should exert a downward pressure on prices.

## 22. Number of properties at risk and people signed up to flood warning system – New Indicator



**In 2007, there were approximately 460,000 properties at risk from tidal and fluvial flooding within Greater London. Of these, approximately 24,000 properties are registered to receive flood warnings through the Flood Warning Service<sup>85</sup>.**



Addressing climate change presents two challenges – limiting further climate change by reducing greenhouse gas emissions (mitigation) and preparing for the changes that are now inevitable and may increase further if we do not reduce our emissions (adaptation). The extent to which London is mitigating climate change is addressed in Indicator 13(iii) on carbon dioxide emissions (see page 54). This indicator aims to give a sense of how well London is adapting to climate change.

As London’s climate changes, the probability of flooding is expected to increase, with wetter winters with higher rainfall, an increase in the intensity and frequency of extreme weather events (such as heat waves, tidal surges and torrential rain) and sea level rises. London is vulnerable to flooding from four main sources (the tidal Thames, fluvial tributaries to the Thames and the non-tidal Thames, surface water flooding from heavy rainstorms, and overflowing sewers).

Although London is well protected from tidal flooding by the Thames Barrier and associated defences, some of the tributaries to the Thames have a much lower standard of protection, leaving 100,000 homes at significant risk of flooding. Climate change and London's ageing flood defence infrastructure raises the probability of increased flooding, while London's growth will mean that there may be more people and assets located in the flood plains of London's rivers. Londoners need to understand the new challenges this will present and be able to adapt to the changes that this different climate will bring without adversely affecting their quality of life.

Only 5% of at-risk properties in the Greater London Boundary are registered to receive the Environment Agency's Flood Warning Direct Service (FWD). This low percentage is partly because most of these properties are at risk from tidal flooding (where the impact of a flood would be high but the likelihood of it happening is low). It is not appropriate to offer the FWD service to most of the tidal at-risk population because of the high level of defence offered by the Thames Barrier. In this instance alternative methods are used to distribute warnings (such as over the radio network). This may also suggest Londoners in these properties are not aware of the flood risk or the FWD service, or are not taking sufficient steps to ensure they are adapting to the expected changes in London's climate.

Early warning systems are becoming increasingly important but Londoners also need to be more aware of risks to their health and their property and take responsibility for ensuring they have adaptation plans in place, particularly if they are at higher risk, such as the elderly or those with pre-existing medical conditions.

The FWD uses a number of mechanisms such as local TV and radio stations, the Environment

Agency website, text messages and fax to distribute flood alerts to the general public to send escalating flood warnings to those signed up to the service.

For more information and to sign up to the Floodline Warning Direct System, go to [www.environment-agency.gov.uk/subjects/flood/826674/1306207/?version=1&lang=\\_e](http://www.environment-agency.gov.uk/subjects/flood/826674/1306207/?version=1&lang=_e) or call 0845 988 1188.

### Relevant existing indicator

**London Plan KPI 23** - No net loss of functional flood plain.

Progress: Positive - No known development on floodplain although data is not supported by robust evidence<sup>86</sup>.

### 23. Carbon dioxide emissions per unit of output produced - Positive change



**In 2005, London emitted 231 tonnes of CO<sub>2</sub> for every £1 million of Gross Value Added (GVA) generated. This compares with 252 tonnes of CO<sub>2</sub> per GVA (£million) in 2000, and 530 tonnes for the UK as a whole<sup>87</sup>.**



Carbon Dioxide (CO<sub>2</sub>) emissions (measured from CO<sub>2</sub> content of energy consumption) per unit of Gross Value Added (GVA) provides a measure of the "carbon efficiency" of the London economy.

The premise of this indicator is that traditionally as the economy grows and economic activities expand, CO<sub>2</sub> emissions rise.

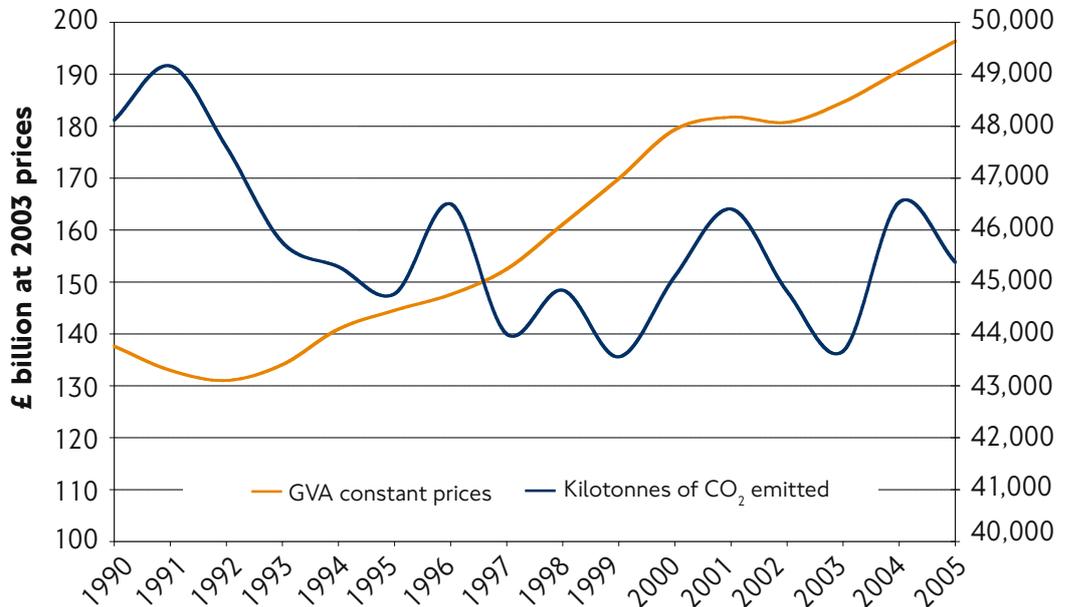
**Gross Value Added (GVA)** is a measure of the total value of good and services produced by an economy. It is the difference between the value of goods and services produced and the cost of

the inputs that are used in the production of those goods and services.

Between 1990 and 2005, London's GVA has risen by nearly 43% on a constant prices basis or around 2.8% per annum on average. Figure 23 shows that during the same period London's CO<sub>2</sub> emissions, whilst being rather erratic, have fallen by around 6%.

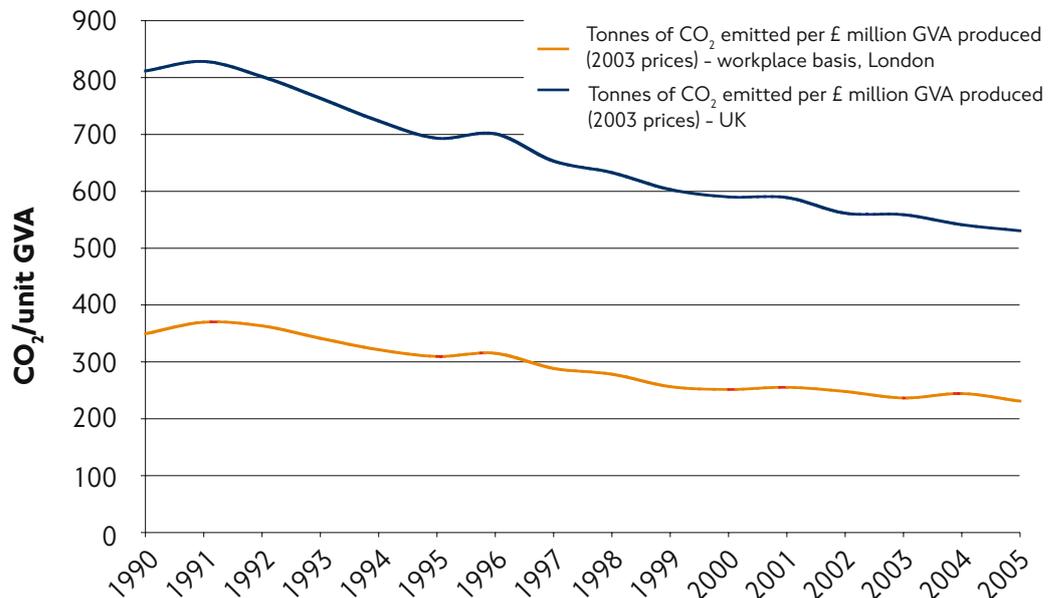
**Figure 23 – Carbon dioxide emissions and GVA in London 1990-2005**

Sources: GLA Environment, GLA Economics, Experian, ONS



**Figure 23.1 – Tonnes of CO<sub>2</sub> per million £ of GVA produced in London and the UK (Constant prices), 1990-2005**

Sources: GLA Environment, GLA Economics, Experian, ONS, Defra and AEA Energy & Environment



---

London has experienced a fall in the carbon intensity of economic activity since 2000, now mainly driven by GVA growth. Carbon intensity of economic activity can be affected either by changing levels of emissions or by increasing / decreasing GVA. With GVA rising and CO<sub>2</sub> emissions falling, there is a 'double effect'.

As both the London and the UK economies have shifted from manufacturing to being predominantly service-centred, London's economy has become progressively less energy intensive. London is more service dominated than the rest of the UK and is more productive, generating increased output for each unit of CO<sub>2</sub> emitted. That makes London around 2.3 times more carbon effective in the generation of its wealth than the UK as a whole.

Although the carbon efficiency of London's economic activity has improved, this is largely due to the production of manufactured goods (and resulting CO<sub>2</sub> emissions) shifting overseas to lower cost locations, often in developing countries, where plants have lower levels of production efficiency. London's continued consumption of these goods has increased as personal disposable incomes have increased, and there are often additional CO<sub>2</sub> emissions associated with the transport of such goods to the London market.

Until 2003, London managed to keep pace with or exceed the rate of decline of emissions per unit of output for the UK as a whole. One likelihood is that the rate of decline is likely to slow as heavy manufacturing's share of the London economy falls. Further cuts in CO<sub>2</sub> emissions would then have to come from other sources such as more efficient use of transport and increased energy efficiency in homes and offices. There are already some signs of such a scenario evidencing itself in the data both for the UK – where emissions increased between 2002 and 2003 and have subsequently been flat – and

in London – where there was a marked increase in emissions for 2004.

# Appendix I - The Wider Indicator Menu

This indicator report lists progress against 23 headline measures. These 23 measures are part of a wider menu of 58 indicators (shown below) recommended by the Commission for use by the main sectors in London (business, public, voluntary, households and individuals) in order to measure sustainability. Some of these may be new measures for which methodology and data sources will need to be developed.

Key Audience: B: Business sector; P: Public sector; V: Voluntary sector; H: Households and individuals

Taking Responsibility	Developing Respect	Managing Resources	Getting Results
% turnout at London elections (H)	Unemployment variation by ethnic group (B, P, V)	Ecological Footprint (P) Total quantity of household waste per household (H), Carbon dioxide emissions (H, P, V, B)	Labour force participation (B, P)
% participation in formal volunteering (at least once in last 12 months) (V)	Child poverty, workless households with children (P, V)	Index of London bird species (P, V)	Business survival: number of new businesses still trading after 3 years (B)
Child care: day nursery places per 100 children (P, V)	Violent crime (P)	Air quality: total emissions of particulates PM10 (tonnes per year) (P)	Life expectancy at birth (years) (P)
Education i) Primary school value added measure ii) Secondary school attainment (P,V)	% respondents very or fairly satisfied with London/their neighbourhood (H)	Carbon efficiency of economic activity (B)	% households living in decent housing (P)
Sign up to Mayor's Green Procurement Code (B)	Travel to school: trips to and from school by main mode (H)	Volume of road traffic (B, P)	% of new housing output that is affordable (P, V)
Household recycling rates % (H)	Gender pay gap (B, V)	Changes to sites of importance for nature conservation (B, P, V)	Infant mortality rate (P)
% market share of Fair Trade etc. products (B, P, V)	% London-based business undertaking Corporate Social Responsibility activities at local level (B)	River/canal water quality (P)	Number of confirmed TB cases per 1000 population (P)

<b>Taking Responsibility</b>	<b>Developing Respect</b>	<b>Managing Resources</b>	<b>Getting Results</b>
% market share of organic food (B, P, V)	Economic activity rate for disabled persons (B)	Public transport and walking as % of all travel in London (B, P, H)	% of young people (18-24 yrs) in FT education or employment (P)
Share of renewables in energy market (B)	Noise pollution using WHO standards (P)	Emissions of greenhouse gases per capita (P)	Number of fuel-poor households (P, V)
% turnover in new products introduced in last 1/3/5 years (B)	Areas of deficiency in accessible wildlife areas (P, V)	Number of new Building Research Establishment eco-homes and new buildings with BREAM rating as % all new build (B)	% children with easy access to formal and informal play space (P, V)
Measure of income inequality (P)	Light pollution (P)	Total waste generated in London per unit of GVA (B)	Satisfaction with public transport (B, P)
% adults surveyed who feel they can influence decisions affecting their local areas (H)	Perception of community safety (H)	Energy consumption per unit GVA (B)	Accessibility to public transport (P)
% London population with access to internet (H)	Accidents for all street and road users per 1000 daytime population (P)	Total quantity of construction waste per unit GVA (B)	% children eating 5+ fruit and vegetables per day (H, V)
Water consumption per household (H)		Alternatively fuelled vehicles (P)	
Number of companies with Green Travel Plans (B)		Access to Nature (P)	
Physical activity (P,V,H)		Flood warning system (P)	

## Appendix 2 - Abbreviations

---

BAME	Black, Asian and Minority Ethnic
CCAP	Climate Change Action Plan
CCHP	Combined Cooling and Heating Plant
CO <sub>2</sub>	Carbon Dioxide
ESCo	Energy Services Company
FPAG	Fuel Poverty Advisory Group
FWD	Flood Warning Direct Service
GLA	Greater London Authority
GVA	Gross Value Added
LAA	Local Area Agreement
LCPC	London Child Poverty Commission
LDA	London Development Agency
LFEPa	London Fire and Emergency Planning Authority
LSDC	London Sustainable Development Commission
LSP	Local Strategic Partnership
MPA	Metropolitan Police Authority
MUSCo	Multi Utility Services Company
NEA	National Energy Action
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Oxides of Nitrogen
O <sub>3</sub>	Ozone
PM <sub>10</sub>	Particulate Matter (of less than 10 microns in diameter)
SO <sub>2</sub>	Sulphur Dioxide
TfL	Transport for London
VA	Value Added

## References

- 1 [http://www.londonsdc.org/documents/lcdc\\_framework.pdf](http://www.londonsdc.org/documents/lcdc_framework.pdf)
- 2 The Commission has identified a menu of 58 Quality of Life Indicators for use in London (Appendix 2). These are coded for use by 'business', 'public sector', 'voluntary sector' and 'households and individuals'.
- 3 Although incorrect figure was quoted in 2005 Report
- 4 The Ecological Footprint of a city is defined as the area of land and sea required to supply its population with resources, such as food or timber products, and to absorb its emissions and waste products.
- 5 Peak oil is the point in time when the maximum rate of global petroleum extraction is reached, after which the rate of production enters terminal decline.
- 6 The National Social Marketing Centre identifies social marketing as the synthetic application of marketing concepts and techniques to achieve specific behavioural goals relevant to social good.
- 7 McKenzie-Mohr, D 2008, Quick reference: community-based social marketing, <[www.cbsm.com](http://www.cbsm.com)>.
- 8 In general, subsidiarity is the principle that governmental power should be exercised at the lowest possible level. For example, a national government should not legislate in areas more appropriate to a regional government.
- 9 Agyeman, J & Evans, B (eds) (1994) *Local Environmental Policies and Strategies*, Longman, Harlow
- 10 [www.londonsdc.org/documents/research/Making\\_it\\_happen\\_scn\\_12Oct07.pdf](http://www.londonsdc.org/documents/research/Making_it_happen_scn_12Oct07.pdf)
- 11 Boroughs currently use different methods (of varying accuracy) to assess progress on domestic energy efficiency and fuel poverty in their borough. The new indicator is the percentage of people receiving income-based benefits living in homes with a low and high-energy efficiency rating. And it will be measured by: the proportion of households on income-related benefits for whom an energy assessment of their housing has been carried out and have a SAP of below 35 or greater than 65. (see [www.defra.gov.uk/environment/localgovindicators/ni187.htm](http://www.defra.gov.uk/environment/localgovindicators/ni187.htm))
- 12 Source: London Elects
- 13 Source: Communities and Local Government 2005 Citizenship Survey: Active Communities topic report.
- 14 Source: Office for Standards in Education (Ofsted), GLA and Office for National Statistics
- 15 Source: Department for Children Schools and Families (DCSF).
- 16 The end of Key Stage 1 is the final year of infant school and the end of Key Stage 2 is the year before transfer to secondary school.<sup>17</sup> Source: Department for Children Schools and Families
- 18 Source: London ReMade
- 19 Source: Active People Survey 2, Sport England, 2008.
- 20 [www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4080994](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4080994) and referenced by Sport England: [www.sportengland.org/index/get\\_resources/resource\\_downloads/physical\\_activity\\_and\\_health.htm](http://www.sportengland.org/index/get_resources/resource_downloads/physical_activity_and_health.htm)
- 21 Ethnic Minorities and Physical Activities in London, Sporting Equals, August 2007.
- 22 Defined as non-white Londoners.
- 23 Sources: Office for National Statistics, Annual Population Survey/Labour Force Survey
- 24 All data and rates relate to the working age population (16-59 for women and 16-64 for men). All data are drawn from sample surveys and are subject to a certain degree of sampling variability and volatility. This means data need careful interpretation as differences in rates between individual years are not generally statistically significant and are best considered over several years. Confidence intervals are shown to give readers an idea of the error attached to different estimates.

- 
- 25 Source: Labour Force Survey quarterly household level dataset, Oct-Dec 2007
- 26 The BAME group is defined here as all those from non-White ethnic groups.
- 27 More information on how these data were calculated can be found in Data Management and Analysis Group (DMAG) Update 2008-01: Employment rates by ethnic group (GLA).
- 28 Based on three-year averages for the period 2003/04 to 2005/06
- 29 Source: Department of Work and Pensions
- 30 The commonly used definition of a household in income poverty is one whose income is below 60 per cent of median income. This is measured after taking account of the size and composition of the household, with no adjustment for differences in the cost of living between regions.
- 31 Based on a study for the London Child Poverty Commission by the Institute for Social and Economic Research.
- 32 Street crime traditionally comprises personal robbery and snatch theft.
- 33 Source: Metropolitan Police Service
- 34 Violence against the person includes murder, grievous bodily harm, actual bodily harm, common assault, possession of offensive weapons, harassment and 'other violence'.
- 35 <http://www.homeoffice.gov.uk/rds/pdfs08/hosb0708.pdf> - The British Crime Survey is foremost a long victimisation questionnaire completed by a representative sample of people (Londoners) who live in private residence and are aged 16 or over.
- 36 [http://www.london.gov.uk/mayor/annual\\_survey/2009/london-survey-topline-09.rtf](http://www.london.gov.uk/mayor/annual_survey/2009/london-survey-topline-09.rtf) - MORI Annual London Survey, 2009
- 37 Source: GLA/Ipsos MORI Annual London Survey 2007
- 38 Source: Department of Work and Pensions
- 39 Wilkinson R.G (2005) – The Impact of Inequality: How to Make Sick Societies Healthier, Routledge, 2005
- 40 Data is from Households Below Average Income, based on the Family Resources Survey. All data is equivalised (adjusted) to account for variation in household size and composition. The self-employed are included in the statistics. To improve its statistical reliability, the data is an average of three years.
- 41 Source: Department for Business, Enterprise and Regulatory Reform (BERR) /Department for Environment, Food and Rural Affairs
- 42 DEFRA/BERR, UK Fuel Poverty Strategy: fifth annual progress report, BERR, 2007, Annex: Fuel Poverty 2005: Detailed Tables, Table 62 p.17 [www.berr.gov.uk/energy/fuel-poverty/strategy/index.html](http://www.berr.gov.uk/energy/fuel-poverty/strategy/index.html)
- 43 Taken from: <http://www.london.gov.uk/mqt/public/question.do?id=22681>
- 44 [http://www.nea.org.uk/Media\\_Centre/News\\_releases/?article\\_id=478](http://www.nea.org.uk/Media_Centre/News_releases/?article_id=478)
- 45 Fuel Poverty Advisory Group (for England) Fifth Annual Report, 2006, Table 1 page 6 [www.berr.gov.uk/files/file38873.pdf](http://www.berr.gov.uk/files/file38873.pdf)
- 46 Vulnerable households are those who are most likely to feel the full force of fuel poverty in ways that can detrimentally impact upon health and well being. A vulnerable household is considered to be one containing children, or those who are elderly, sick or disabled.
- 47 SAP = Standard Assessment Procedure
- 48 Mayor of London, Green light to clean power: The Mayor's Energy Strategy, GLA, 2004 p 60-62
- 49 A global hectare is the same size as a standard hectare but with a biological productivity equal to the global average.
- 50 REAP v2 Experimental release: 15-10-08. Published by SEI 2008. Available at <http://www.resource-accounting.org.uk/downloads>
- 51 Source: Municipal Waste Management, Defra, November 2007
- 52 The London Energy and Greenhouse Gas Inventory (LEGGI) 2004-2005. Note: This excludes aviation, shipping and waste. It is also just for CO<sub>2</sub> and does not include the

- other greenhouse gas emissions. Please note that there has been no back casting on the 2002/03/04/05 figures so they cannot be directly compared. There are changes in the methodology for collecting this information (the changes mainly being instigated by DEFRA and BERR), which affect the figures. The GLA are currently preparing for back-casting work, once 2006 information has been processed.
- 53 Action Today to Protect Tomorrow - The Mayor's Climate Change Action Plan, 2007, p5.
- 54 <http://www.london.gov.uk/mayor/environment/climate-change/ccap/index.jsp>
- 55 The 2006 figure in the CCAP is a projection from 2003 LECl - London Energy and Carbon dioxide Inventory. - 44.3 million tonnes CO<sub>2</sub> (excluding aviation)
- 56 <http://www.defra.gov.uk/environment/statistics/globalatmos/alltables.htm>
- 57 Based on 1994 as a baseline – index of 100
- 58 Source: Breeding Bird Survey
- 59 The data comes from fifty selected areas in Greater London by volunteer ornithologists each year.
- 60 Moorhen, Woodpigeon, Collared Dove, Green Woodpecker, Great Spotted Woodpecker, Wren, Robin, Blackcap, Blue Tit, Great Tit, Magpie, Carrion Crow, Chaffinch and Greenfinch.
- 61 Blackbird, Mistle Thrush, Starling and House Sparrow
- 62 Source: Greener London – London State of the Environment Report, 2007
- 63 Source: Department for Transport (National Road Traffic survey)
- 64 London Travel Report 2007
- 65 London Travel Report 2004- 2007
- 66 Mayor's Climate Change Action Plan, 2007
- 67 London Travel Report, 2007.
- 68 London Plan Annual Monitoring Report 4, Greater London Authority, February 2008.
- 69 The remaining 7% comprises 'private bus', 'rail', and 'other' of which there is small variance year on year.
- 70 Source: Department of Transport
- 71 Excluding aviation, 2006 figures, The Mayor's Climate Change Action Plan, p 6.
- 72 Source: GLA & Transport for London
- 73 Cleaning London's Air: The Mayor's Air Quality Strategy, 2002, Greater London Authority
- 74 The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, 2007, Department for Environment, Food and Rural Affairs in partnership with the Scottish Executive, Welsh Assembly Government and Department of the Environment Northern Ireland
- 75 London Air Quality Network - [www.londonair.org.uk](http://www.londonair.org.uk)
- 76 Based on VAT-registered businesses only. Source: Department for Business, Enterprise and Regulatory Reform (BERR), February 2007
- 77 Centred on mid-2005
- 78 Source: GLA and Office of National Statistics
- 79 Living Well in London - The Mayors Draft Health inequalities Strategy for London - January 2008, GLA
- 80 The GLA has been unable to obtain more up to date regional data from CLG covering all tenure types.
- 81 Source: 2003 English Housing Condition Survey, Department for Communities and Local Government
- 82 GLA analysis of Business Plan Statistical Appendix data, 2002/03 and 2006/07.
- 83 Source: ROOF
- 84 Calculated by York University.
- 85 Source: Environment Agency
- 86 London Plan Annual Monitoring Report, Greater London Authority, February 2008.
- 87 Source: Experian Business Strategies (EBS), Office for National Statistics (ONS), GLA Economics, London Energy and Carbon Dioxide Inventory

## Other formats and languages

For a large print, Braille, disc, sign language video or audio-tape version of this document, please contact us at the address below:

### Public Liaison Unit

Greater London Authority  
City Hall  
The Queen's Walk  
More London  
London SE1 2AA

Telephone **020 7983 4100**  
Minicom **020 7983 4458**  
**www.london.gov.uk**

You will need to supply your name, your postal address and state the format and title of the publication you require.

If you would like a summary of this document in your language, please phone the number or contact us at the address above.

### Chinese

如果需要您母語版本的此文件，  
請致電以下號碼或與下列地址聯絡

### Vietnamese

Nếu bạn muốn có văn bản tài liệu này bằng ngôn ngữ của mình, hãy liên hệ theo số điện thoại hoặc địa chỉ dưới đây.

### Greek

Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος εγγράφου στη δική σας γλώσσα, παρακαλείστε να επικοινωνήσετε τηλεφωνικά στον αριθμό αυτό ή ταχυδρομικά στην παρακάτω διεύθυνση.

### Turkish

Bu belgenin kendi dilinizde hazırlanmış bir nüshasını edinmek için, lütfen aşağıdaki telefon numarasını arayınız veya adrese başvurunuz.

### Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ ਕਰੋ:

### Hindi

यदि आप इस दस्तावेज की प्रति अपनी भाषा में चाहते हैं, तो कृपया निम्नलिखित नंबर पर फोन करें अथवा नीचे दिये गये पते पर संपर्क करें

### Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি (কপি) চান, তা হলে নীচের ফোন নম্বরে বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

### Urdu

اگر آپ اس دستاویز کی نقل اپنی زبان میں چاہتے ہیں، تو براہ کرم نیچے دئے گئے نمبر پر فون کریں یا دیئے گئے پتے پر رابطہ کریں

### Arabic

إذا أردت نسخة من هذه الوثيقة بلغتك، يرجى الاتصال برقم الهاتف أو مراسلة العنوان أدناه

### Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં જોઈતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાધો.



