

GLA Wellbeing and Sustainability Measure

Summary report



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Introduction: why does wellbeing matter?

Policymakers across the globe are increasingly focusing on wellbeing as the ultimate goal of policy – to improve the lives of their citizens.

Many current indicators of societal progress place significant emphasis on economic growth – with Gross Domestic Product (GDP) the most widespread metric used around the world.

It is true that rising economic growth has lifted millions out of poverty and is associated with huge increases in standards of living and life expectancy, but the focus on increasing GDP risks ignoring or downplaying other social and environmental concerns such as climate change, inequality and mental health.

National and local governments around the world are increasingly acknowledging that they cannot properly develop public policy by relying on economic indicators alone. Notable initiatives to broaden perspectives include the Organisation for Economic Co-operation and Development (OECD)'s Better Life Initiative, the UK Office for National Statistics' Measures of National Well-being, the New Zealand Living Standards Framework, and at more local scales, initiatives such as the UCL's Institute of Global Prosperity's Citizen Prosperity Index.

The Covid-19 pandemic also made many societies reflect on the importance of life beyond just economic growth – to the broad range of things we really care about as residents and human beings – our social connectedness, our health, our opportunities and the quality of our environment.

The Mayor of London in his 2021 manifesto acknowledged the problems associated with narrow economic measurements and committed to developing a more holistic measure of progress for the capital:

"Now is also the right time to look afresh at how we measure our success as a city. For years, we've measured prosperity — like most cities and countries — in terms of material wealth that is generated by our economic activity. But the strength, sustainability and wellbeing of our economy and society are not currently properly reflected. So I'll work with others to establish a new measure of wellbeing in London as the core indicator of our city's success as a place to work and live for all its residents."

Consequently, at the GLA we've created a wellbeing measure for London – a unique place-based measure, developed through an 18-month process of engagement and deliberation with a range of Londoners.

The London Wellbeing and Sustainability Measure is a bold step forward in addressing the whole wellbeing of Londoners. It also aligns closely with the UN Sustainable Development Goals (SDGs), measuring London's progress on a range of SDG priorities including tackling inequalities, enhancing our environment, and building a sustainable economy. This helps connect the wellbeing of London – a truly global city – with the international effort of the SDGs to create a world fit for future generations.

This summary report details the background to developing the measure and the data behind the indicators. It is intended for use by GLA stakeholders, borough and regional policymakers, and analysts interested in wellbeing in London.

Background: developing the measure

1 What is wellbeing and sustainability?

Wellbeing is how we're doing as individuals, communities and nations and how sustainable that is for the future.

There are many ways to measure wellbeing depending on how you define it. It's a valueladen concept in that defining what is good for someone involves subjective judgement.

There is also an ongoing debate around whether wellbeing is subjective or objective, with the former being around whether someone feels they are living well such as how they report their satisfaction with life, and the latter is whether pre-determined criteria are met, for example whether you have access to healthcare and a decent income. London's Wellbeing and Sustainability Measure brings together both subjective and objective elements of wellbeing.

Although the term has been interpreted in different ways, put simply, 'sustainability' is whether the way we are meeting our current wellbeing needs is compatible with future generations meeting theirs. Therefore, in addition to this new measure that looks at current wellbeing, City Intelligence are also looking at how to measure London's future wellbeing using the concept of capital stocks and will report on this later in 2024.

2 How has the London Wellbeing and Sustainability Measure been developed?

The London Wellbeing and Sustainability Measure is a multi-dimensional measure featuring 64 indicators under seven policy domains that make up London's wellbeing.

The measure has been developed through various stages from Summer 2021 to Summer 2023 (see Figure 1).

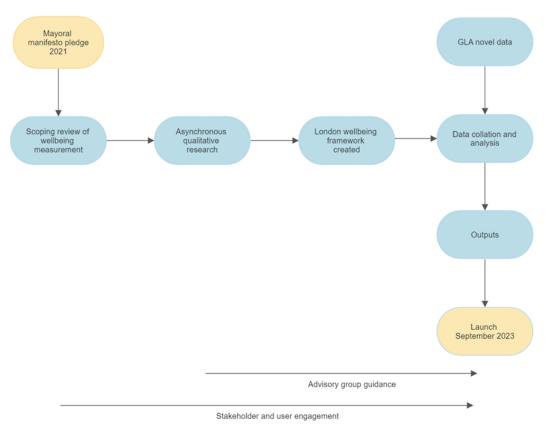


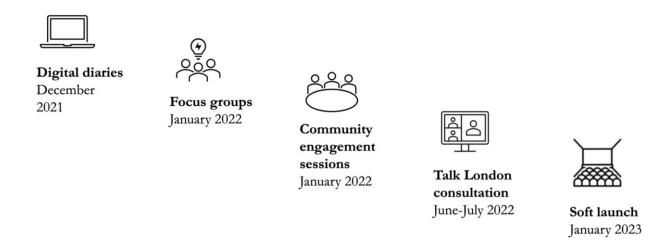
Figure 1: Development process of the London Wellbeing and Sustainability Measure

The development of the measure started with a review of existing frameworks and measures. This was followed by consultation with stakeholders who were potential user organisations as well as measurement experts. From these sessions, an expert advisory group was created to guide the subsequent development of the London measure to ensure it was conceptually rigorous and met user needs.

Second, the qualitative research process began. City Intelligence used various participatory approaches to understand from Londoners working and residing in the city what are the most important factors to them for living a good quality of life.

A range of Londoners were engaged through various methods of input – from digital diaries, to focus groups, community engagement sessions and an online consultation. (see Figure 2).

Figure 2 – Qualitative research process



Qualitative research

Hearing directly from Londoners as to what matters for living well in London was important given the subjectivity around the concept and to understand the things that matter to Londoners specifically, given the unique challenges people in the city face.

For a more detailed report on the qualitative research stages City Intelligence underwent to develop the measure, please visit the London Wellbeing and Sustainability Measure page on the London Datastore.

The key findings from this phase of research are set out below:

- Londoners see quality of life as two levels: an 'essential' and then a 'good' quality of life.
- The pandemic has led to a greater appreciation of community and the outdoors. It
 also showed what 'success' could look like, in certain aspects of life in London, for
 example the emptier streets, peace and quiet, and less congested public transport.
- There are many features of London that Londoners appreciate, such as London's cultural offering, diversity, public transport, and local amenities. However, cost of living, traffic, and crime are the key downsides and are pronounced in London.
- This qualitative research identified a number of key domains to consider when creating a Wellbeing Measure for London:
 - Foremost, health and wellbeing, personal finances, housing, and work and employment are seen to be crucial to quality of life in London and are the most important domains to include in a Wellbeing Measure.
 - Transport, environment, neighbourhoods, public services and government, people and communities, and crime and safety are also important to quality of life, but their ranking varied among participants.
- Access and equality underpin many of the domains. 'Equality' is seen to be more important to measure than 'inequality'.

- There is some caution about including Londoners' behaviours in the measure.
- Geographical inequalities are seen as the key structural factor affecting quality of life, for example with varying access to transport, green spaces, and the prevalence of crime and traffic.

The community engagement sessions were undertaken with participants who represented a number of different communities in London (see Table 1).

Table 1 - Community Engagement Session participants

Table 1 - Community Engagement Session participants
Organisation representing this group of Londoners
Vulnerable and disadvantaged young people
People aged 7-70 receiving Caribbean food but mainly the older generation
Iraqi Londoners
Individuals who attend food banks and that experience poverty
Gypsy and Traveller communities in London
Bangladeshi Londoners
Individuals in need of signposting to support services
Hong Kong Londoners
Individuals in need of reaching health and wellbeing goals
Somali Londoners
Black women from low-income backgrounds

The key findings from this phase of research are set out below:

- Offers of support, social connections, and access to public services were valued by Londoners.
- Inequality and poverty were by far the biggest challenges discussed.
- Future hopes and concerns are centred on support, equal opportunities and improved local authority communication.
- The diversity of high streets was valued, especially the presence of ethnically diverse food shops.
- The pandemic has also highlighted the importance of community driven support and access to services.
- Having basic needs met were key factors contributing to good quality of life.

One of the key findings from this initial phase of research was that Londoners envision wellbeing in two component parts – the idea there are basic needs that need to be met as a foundation for wellbeing, and there are supporting factors that are needed to enable fuller flourishing. The wellbeing measure has been developed to represent this dimension of 'core' and 'supporting' wellbeing factors.

This concept was endorsed by the advisory group as giving the wellbeing measure some structure without building a hierarchical model of wellbeing which we believed to be too prescriptive given the subjective nature of people's wellbeing.

Talk London consultation

The GLA launched a public consultation of the draft Wellbeing and Sustainability Measure for London. The consultation ran on Talk London, City Hall's online community, from 13 June 2022 to 10 July 2022.

Londoners were shown a visual of the draft Measure setting out the domains and individual measures. They then had the opportunity to complete an online survey, where they were asked to rank the individual measures for each domain and provide comments, as well as take part in an online discussion thread.

In total, 852 Londoners completed the survey and there were 113 comments in the online discussion. The general comments from this consultation exercise are set out below:

- Overall, two thirds of Londoners who responded to the consultation (67%) broadly agreed with the content of the draft Measure.
- Though some respondents to the survey and discussion thread were unsure what the purpose of the Measure was.
- Some also misunderstood it, seeing the domains more as a set of objectives for the Mayor / GLA rather than a way to measure London as a place to live. As such, throughout the survey, many respondents commented on their priorities and what the Mayor / GLA should do, rather than what should be measured in the Wellbeing and Sustainability Measure.

Soft launch

On 24 January 2023, the GLA hosted a key stakeholder consultation which formed the final round of consultation before the measure was finalised. This included stakeholders from London boroughs, London Councils, the London Sustainable Development Commission, and within the GLA and Mayor's Office.

For a more detailed report on the issues that were raised in this consultation and the actions that were taken, please visit the London Wellbeing and Sustainability Measure page on the London Datastore.

Data collation

Following this input from Londoners and interested stakeholders, City Intelligence conducted a data collation exercise of bringing together London's best data on wellbeing and sustainability in Spring 2023. To explore this data, please visit the data explorer tool on the London Datastore.

Data breakdowns

Across all indicators, City Intelligence have sought to use the best quality data available for London. As this multidimensional measure brings together 64 different datasets, most of which are public and produced by national independent bodies including the Office for National Statistics (ONS) and the Office for Health Improvement and Disparities (OHID), they are not consistent in the time series available, the demographic breakdown, and the geographical breakdown. The GLA have presented all data that is available, which varies from London-only, to at the London borough level, to demographic breakdown, from 2016 to 2022/2023.

There has been one occasion where due to the absence of data the indicator has been removed despite this being highlighted in the qualitative research as being important to Londoners' wellbeing. This is 'healthy diet'. As the measure continues to be refined, the GLA will continue to look for statistically robust proxies to capture the diet of Londoners for the population as a whole.

The data

The domains of the London Wellbeing and Sustainability Measure

The London Wellbeing and Sustainability Measure represents 64 indicators across seven policy domains in one composite measure. These domains have been developed based on what Londoners told us matters to them. We have used the language people resonated with to ensure this measure represents the perspective of Londoners, culminating in this multi-dimensional framework.

The seven domains Londoners decided are key to wellbeing are: 'Good employment and opportunities to succeed', 'Having a decent home', 'Being healthy', 'Positive connections and belonging', 'Accessible services and safe neighbourhoods', 'Improving our environment', and 'Feeling financially secure'. Within these domains are various measurable indicators – for example the housing domain includes data on the quality of housing as well as its affordability. The indicators are split into 'core' and 'supporting', reflecting the views of Londoners during the research that basic needs must be met before further flourishing can occur. The majority of domains and indicators are reported in terms of a positive wellbeing outcome – for instance 'having a decent home'; 'good physical health'. Note that in some cases this means that the measure is presented as the inverse to how it may be presented in other reports. For instance, 'not living in poverty' is the same measure more commonly reported as those who are living in poverty (see Figure 3).

Figure 3 – London's Wellbeing and Sustainability Measure

London's Wellbeing and Sustainability Measure

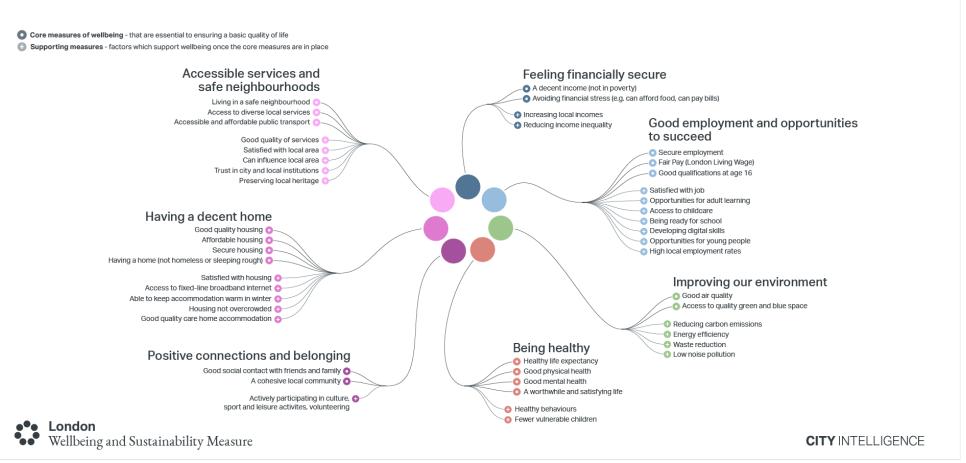


Table 2 contains the metadata about each of the 64 indicators within the seven domains of wellbeing.

Table 2 – metadata for each of the London Wellbeing and Sustainability Measure's individual indicators

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Feeling financially secure	Core	A decent income (not in poverty)	Proportion of households not in relative poverty (after housing costs) - percentage of individuals in households with equivalised income after housing costs measure below 60% national median	London only	Age group	2016-2022, with last available 2019/20- 2021/22 but note 2020/21 is missing	DWP Family Resources Survey (HBAI publication). Available at: https://www.g ov.uk/govern ment/collectio ns/household s-below- average- income-hbai 2	
Feeling financially secure	Core	Not living with financial stress - household food security	Proportion of households /Londoners aged 16+ that are food secure ¹	London only	Age group, gender, disability, ethnicity, deprivation quintile	2021-2022	DWP Family Resources Survey. Available at: https://www.g ov.uk/govern	GLA Survey of Londoners 2021-22. Available at: https://data.lo ndon.gov.uk/

¹ The London figures measures the proportion of London households that are food secure, the demographic breakdowns measure the proportion of Londoners aged 16+ that are food secure.

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							ment/collectio ns/family- resources- survey2	dataset/surve y-of- londoners- 2021-22
Feeling financially secure	Core	Not living with financial stress - up-to-date with household bills	Proportion of households upto-date with all household bills	London and Borough	Tenure, household composition	2016-2021	Understandin g Society. Available at: https://www.u nderstanding society.ac.uk/	
Feeling financially secure	Supporting	Reducing local income inequality	Extent of variation in household income ²	London and Borough	By local area deprivation	2016-2022	London level data from DWP's Households Below Average Income (HBAI). Available at:	Derived from DWP/HMRC admin data and ONS mid-year estimates. Available at: https://www.gov.uk/govern

² London measure is ratio of household income at the 90th percentile to 10th percentile (after housing costs). Borough level data are difference between maximum and minimum ward-level estimates of children in low income families (before housing costs). Note using % children in low-income families for the Borough measure is subject to the following assumptions: patterns of BHC and AHC poverty are the same; patterns of child poverty and all people poverty are the same; inequality for wards within a borough is indicative of perceived inequality (i.e. cross border inequality is not taken into account); issues with ONS denominators with counts of children and 22 estimates are from 2020 (pre-pandemic).

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Feeling	Supporting	Increasing	Weekly	London-		2016-2010,	https://www.g ov.uk/govern ment/collectio ns/household s-below- average- income-hbai 2 GLA analysis	ment/collecti ons/children- in-low- income- families- local-area- statistics
financially secure	Supporting	household income	household income (£) - median disposable household income (after housing costs)	only (not always robust)		with last available 2017/18- 2019/20 no disaggregatio n possible by characteristic or area.	of DWP Family Resources Survey data. Available upon request.	
Good employment and opportunities to succeed	Core	Secure employment	Proportion of employees in secure employment	London only	Age, disability, ethnicity, sex, religion	2016-2021	ONS Annual Population Survey. Available at: https://www.n omisweb.co.u	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							k/datasets/ap snew	
Good employment and opportunities to succeed	Core	Fair pay (London Living Wage)	Proportion of employees earning above the London Living Wage ³	London and Borough	Sex	2016-2022	ONS ASHE for London and Borough estimates. Available at: https://www.nomisweb.co.uk/sources/ashe/	APS for subgroups. Available at: https://www.n omisweb.co. uk/datasets/a psnew
Good employment and opportunities to succeed	Core	Good qualifications at age 16	Average Attainment 8 Score	London and Borough	Free School Meal eligibility status (FSM), ethnicity, sex, Special Educational Needs (SEN) status, English as Additional	2016-2022	DfE. Available at: https://data.lo ndon.gov.uk/ dataset/gcse- results-by- borough	

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³ Use of resident-based analysis as opposed to workplace-based analysis.

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
					Language status (EAL)			
Good employment and opportunities to succeed	Supporting	Satisfied with job	Proportion of employed Londoners satisfied with their present job	London and Borough	Age, ethnicity, sex, work sector, disability	2016-2021	Understandin g Society. Available at: https://www.u nderstanding society.ac.uk/	
Good employment and opportunities to succeed	Supporting	Opportunities for adult learning	Proportion of adult Londoners (19+) participating in education and training ⁴	London and Borough	Age, sex, ethnicity	2019-2022	GLA Adult Learner Participation https://data.lo ndon.gov.uk/ dataset/gla- adult- education- budget	
Good employment and	Supporting	Being ready for school	Proportion achieving a good level of	London and Borough	FSM eligibility status,	2016-2019; 2021-2022	DfE. Available at: https://explor	

⁴ Calculated learner participation rate using GLA 2021 trend-based population projects and ONS Annual Population Survey for population breakdown by ethnicity. Controlled for age 19-64 (upper cap) as majority of learners within this age bracket not elderly reduce distortion despite being available to anyone 19+.

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
opportunities to succeed			development at age 5		ethnicity, EAL status, SEN status, sex		e-education- statistics.serv ice.gov.uk/fin d- statistics/earl y-years- foundation- stage-profile- results/2021- 22	
Good employment and opportunities to succeed	Supporting	Access to childcare	Proportion of children aged 0-4 using any childcare	London			DfE Early Years and Childcare Survey. Available at: https://explor e-education- statistics.serv ice.gov.uk/fin d- statistics/chil dcare-and- early-years-	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							provider- survey/2022	
Good employment and opportunities to succeed	Supporting	Developing digital skills	Proportion of Londoners who achieved Life Essential Digital Skills (EDS)	London			Lloyds Bank Essential Digital Skills for Life. Available at: https://www.ll oydsbank.co m/banking- with- us/whats- happening/co nsumer- digital- index/essenti al-digital- skills.html	
Good employment and opportunities to succeed	Supporting	Opportunities for young people	Proportion of young people aged 16-24 in Employment, Education or Training	London			ONS Annual Population Survey. Available at: https://www.n omisweb.co.u	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							k/datasets/ap snew	
Good employment and opportunities to succeed	Supporting	High local employment rates	Unemployment rate for 16+	London / Borough - unemploy ment by claimant count	Disability, sex	2016-2022	ONS Labour Force Survey. Available at: https://www.n omisweb.co.u k/datasets/ap snew. ONS Annual Population Survey. Available at: https://www.n omisweb.co.u k/datasets/ap snew	DWP Claimant Count. Available at: https://www.n omisweb.co. uk/sources/c c
Having a decent home	Core	Good quality housing	Proportion of new London housing meeting the Decent Homes Standard	London	Tenure	2016-2021	DLUHC English Housing Survey. Available at: https://beta.u	

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							kdataservice. ac.uk/datacat alogue/series /series?id=20 0010kdataser vice.ac.uk/dat acatalogue/s eries/series?i d=200010	
Having a decent home	Core	Affordable housing	Proportion of London households' income remaining after subtracting housing costs (median) ⁵	London and Borough	Tenure	2016-2022	English Housing Survey for London trend. Available at: https://beta.u kdataservice. ac.uk/datacat alogue/series	Tenure breakdown via DWP HBAI. Available at: https://www.g ov.uk/govern ment/collecti ons/househol ds-below-

⁵ The London trend data shows the proportion of income remaining after subtracting housing costs (median). The demographic breakdowns for different tenure types come from the same source as the overall London trend and show income remaining after subtracting housing costs (median) by tenure type. The borough data shows the proportion of median pay remaining after subtracting one-bed accommodation rents, sourced from Trust for London. Note this is not showing the actual rent burden of renting households and does not take account of households with more than one earner or of the variation in earnings within London.

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							/series?id=20 0010	average- income-hbai2 / Borough breakdown - Trust for London. Available at: https://www.tr ustforlondon. org.uk/data/r ent- https://trustfo rlondon.org.u k/data/rent- affordability- borough/
Having a decent home	Core	Secure housing	Proportion who have kept up with rent or mortgage payments without any	London	Age, sex, ethnicity, disability, tenure type	2023 (poll)	GLA polling / YouGov. Available upon request.	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			difficulties in the last six months					
Having a decent home	Core	Having a home	Number of households owed a prevention or relief duty	London (only those with children)	Ethnicity, household type	2018-2022	DLUHC Statutory Homelessnes s. Available in tables at: https://www.g ov.uk/govern ment/statistic al-data- sets/live- tables-on- homelessnes s	
Having a decent home	Core	Not being homeless or sleeping rough	Number of rough sleepers	London and most Boroughs	Age, ethnicity, nationality	2016-2022	CHAIN rough sleeper reports. Available at: https://data.lo ndon.gov.uk/ dataset/chain -reports	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Having a decent home	Supporting	Satisfied with housing	Proportion who are fairly or very satisfied with their accommodation	London	Tenure	2016-2020	DLUHC English Housing Survey. Available at: https://beta.u kdataservice. ac.uk/datacat alogue/series /series?id=20 0010	
Having a decent home	Supporting	Access to broadband internet	Proportion of Londoners who connect to the internet at home through broadband (including using their mobile phone)	London	Age, disability, ethnicity, sex, tenure	2018-2022	Ofcom Technology Tracker. Available at: https://www.o fcom.org.uk/r esearch-and- data/data/ope ndata	
Having a decent home	Supporting	Good quality residential accommodation	Proportion of residential care homes ranked at least 'good',	London and Borough	Type of care home	2016-2023	Care Quality Commission Care data with ratings.	

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			derived from CQC ratings ⁶				Available at: https://www.c qc.org.uk/abo ut- us/transparen cy/using-cqc- data	
Having a decent home	Supporting	Able to keep accommodation warm in winter	Proportion of households able to keep their accommodatio n warm enough in winter	London and Borough	Tenure, household composition	2016-2021	Understandin g Society. Available at: https://www.u nderstanding society.ac.uk/	
Having a decent home	Supporting	Household accommodation has sufficient space	Overcrowding rate (bedroom standard) (London) / Proportion of households with a room occupancy	London and Borough	Tenure	2016-2021	English Housing Survey. Available at: https://www.g ov.uk/guidan ce/english- housing-	Borough breakdown. ONS Census 2021. Available at: https://census.gov.uk/cen

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⁶ Calculated percentage of homes meeting at least 'Good' standard. Exclusion of any boroughs for any given year with 3 or fewer homes to reduce distortion.

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			rating of negative 1 or less (boroughs) ⁷				survey- datasets-and- bespoke- analysis	sus-2021- results
Being healthy	Core	Healthy life expectancy	Healthy life expectancy at birth (years) ⁸	London and Borough	Age, ethnicity, sex	2016-2020	Public Health Outcomes Framework. Available at: https://fingerti ps.phe.org.uk /profile/public -health- outcomes- framework/	
Being healthy	Core	Good physical health (no long- term limiting illness or disability)	Proportion of Londoners who do not have a long-lasting health condition or illness that reduces their	London and Borough	Age, ethnicity, sex		ONS Annual Population Survey. Available at: https://www.n omisweb.co.u	

⁷ The London trend data are based on the 'bedroom standard' and Borough data based on a room occupancy rating "negative 1 or less". Use of 2021 Census data for snapshot of overcrowding rate by borough and use of EHS data for backdated time series at London level.

8 Calculated at birth, separate indicators for male and female as per standard reporting.

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			ability to carry out day-to-day activities				k/datasets/ap snew	
Being healthy	Core	Good mental health - adults	Proportion of Londoners reporting low or very low levels of anxiety	London and Borough	Age, disability, ethnicity, sex		ONS Annual Population Survey. Available at: https://www.n omisweb.co.u k/datasets/ap snew	
Being healthy	Core	Good mental health - children	Rate of Londoners aged under 18 attending community or outpatient hospital services for mental health issues (per 100,000)	London and Borough	Area deprivation only		Public Health Outcomes Framework . Available at: https://fingerti ps.phe.org.uk /profile/public -health- outcomes- framework	

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Being healthy	Core	A worthwhile and satisfying life	Proportion of Londoners reporting high or very high levels of life satisfaction	London and Borough	Age, disability, ethnicity, sex		ONS Annual Population Survey. Available at: https://www.n omisweb.co.u k/datasets/ap snew	
Being healthy	Supporting	Healthy behaviours - healthy weight (adults)	Proportion of adults who are not overweight or obese ⁹	London and Borough	Age, ethnicity, sex		Public Health Outcomes Framework . Available at: https://fingerti ps.phe.org.uk /profile/public -health- outcomes- framework	

⁹ City Intelligence is aware the use of this statistic as opposed to healthy weight excludes underweight populations, though these numbers are so low impact is minimal.

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Being healthy	Supporting	Healthy behaviours - healthy weight (children)	Proportion of Year 6 children who are not overweight or obese ¹⁰	London and Borough	Sex, ethnicity	2016-2022	Public Health Outcomes Framework. Available at: https://fingerti ps.phe.org.uk /profile/nation al-child- measurement - programme/d ata	
Being healthy	Supporting	Healthy behaviours - physically active adults	Proportion of adult Londoners (19+) who have done at least 150 moderate intensity equivalent (MIE) minutes of physical	London and Borough		2016-2021	Public Health Outcomes Framework. https://fingerti ps.phe.org.uk /profile/public -health- outcomes- framework/da ta#page/4/gid	

¹⁰ See previous footnote.

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			activity per week in bouts of 10 minutes or more in the previous 28 days				/1000042/pat/ 15/ati/6/are/E 12000007/iid/ 93014/age/29 8/sex/4/cat/- 1/ctp/- 1/yrr/1/cid/4/t bm/1	
Being healthy	Supporting	Healthy behaviours - physically active children	Proportion of children aged 5-16 who have done an average of at least 60 minutes moderate to vigorous intensity activity per day across the week ¹¹	London and Borough		2017-2022	Public Health Outcomes Framework. Available at: https://fingerti ps.phe.org.uk /profile/physic al- activity/data# page/6/gid/19 38132899/pat /6/par/E1200	

¹¹ Percentage of children aged 5 to 16 that meet the UK Chief Medical Officers' (CMOs') recommendations for physical activity (an average of at least 60 minutes moderate to vigorous intensity activity per day across the week). Many boroughs have no estimate reported as the value is missing due to small sample sizes. Data suppression may be due to insufficient data to report (less than 30) or the number of schools in a borough is two or fewer, or the unweighted base for the question being less than 150.

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							0007/ati/401/ are/E090000 02/iid/93570/ age/246/sex/ 4/cat/-1/ctp/- 1/yrr/1/cid/4/t bm/1	
Being healthy	Supporting	Healthy behaviours – drug misuse	Age standardised mortality rate from drug misuse per 100,000 population	London and Borough	Sex		Public Health Outcomes Framework. Available at: https://fingerti ps.phe.org.uk /search/death s%20from%2 Odrug%20mis use#page/3/g id/1/pat/6/par/ E12000007/a ti/401/are/E0 9000002/iid/9 2432/age/1/s ex/4/cat/- 1/ctp/-	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							1/yrr/3/cid/4/t bm/1	
Being healthy	Supporting	Healthy behaviours - alcohol abuse	Hospital admissions for alcohol related conditions	London and Borough	Sex		Public Health Outcomes Framework. Available at: https://fingerti ps.phe.org.uk /search/alcoh ol	
Being healthy	Supporting	Fewer vulnerable children	Number of referrals to social care services by local authorities	London and Borough	Age, gender, ethnicity		DfE Children in Need. Available at: https://www.g ov.uk/govern ment/collections/statistics-children-in-need	
Positive connections and belonging	Core	Good social contact - with friends and family	Proportion of Londoners who reported meeting up in person with	London	Age, disability, ethnicity, sex, deprivation quintile	2016-2021	DCMS Community Life Survey. Available at: https://www.g	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			family members or friends about once a week or more often				ov.uk/govern ment/collectio ns/communit y-life-survey 2	
Positive connections and belonging	Core	Good social contact - social care users with good social contact	Proportion of people who use care services who reported that they had as much social contact as they would like	London and Borough	Age, sex	2016-2022	ASCOF - Adult Social Care Analytical Hub - NHS Digital. Available at: https://digital. nhs.uk/data- and- information/p ublications/st atistical/adult- social-care- outcomes- framework- ascof/2021- 22	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Positive connections and belonging	Core	Good social contact - not lonely	Proportion of Londoners who never feel lonely	London	Age, disability, ethnicity, sex, deprivation quintile	2016-2021	DCMS Community Life Survey. Available at: https://www.g ov.uk/govern ment/collectio ns/communit y-life-survey 2	
Positive connections and belonging	Core	A cohesive local community - belonging to neighbourhood	Proportion of Londoners who feel they belong to their neighbourhood very or fairly strongly	London	Age, disability, ethnicity, sex, deprivation quintile	2016-2021	DCMS Community Life Survey. Available at: https://www.g ov.uk/govern ment/collectio ns/communit y-life-survey 2	
Positive connections and belonging	Core	A cohesive local community -	Proportion of population not experiencing a	London and Borough		2016-2023	Mayor's Office for Policing and Crime	Using 2021 trend- based mid-year population

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
		freedom from discrimination	hate crime in the last year ¹²				(MOPAC) Hate Crime Dashboard. Available at: https://www.l ondon.gov.uk /programmes - strategies/ma yors-office- policing-and- crime/data- and- statistics/hate -crime- dashboard	projections. Available at: https://data.lo ndon.gov.uk/ dataset/trend -based- population- projections
Positive connections and belonging	Core	A cohesive local community - extent to which	Proportion who agree that this local area is a place where	London and Borough	Age, disability, ethnicity, sex	2016-2022	MOPAC Public Attitude Survey.	

¹² All criminal offences perceived by the victim or any other person, to be motivated by hostility or prejudice based on a person's race or perceived race; religion or perceived religion; sexual orientation or perceived sexual orientation; disability or perceived disability and any crime motivated by hostility or prejudice against a person who is transgender or perceived to be transgender. Percentage of hate crimes out of total population, including from birth as per standard reporting. Using 2021 trend- based mid-year population projections.

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
		different backgrounds get on	people from different backgrounds get on well together				Available at: https://data.lo ndon.gov.uk/ dataset/mopa c-surveys	
Positive connections and belonging	Supporting	Active participation - volunteering	Proportion of Londoners who have formally volunteered in the last 12 months	London	Age, disability, ethnicity, sex, deprivation quintile		DCMS Community Life Survey. Available at: https://www.g ov.uk/govern ment/collectio ns/communit y-life-survey 2	
Positive connections and belonging	Supporting	Active participation - cultural participation	Proportion of Londoners who have engaged with arts physically or digitally during the last 12 months	London	Age, disability, ethnicity, sex, deprivation quintile	2021-2022	DCMS Participation Survey. Available at: https://www.g ov.uk/guidan ce/participati on-survey	

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Positive connections and belonging	Supporting	Active participation - sport	Proportion of adult Londoners (16+) who have participated in sport in the last year	London and Borough	Age, disability, ethnicity, sex	2016-2021	Active Lives survey. Available at: https://activelives.sportengland.org/	
Positive connections and belonging	Supporting	Active participation - leisure activities	Proportion of adult Londoners (respondents) who have participated in any leisure activity over the past month ¹³	London	Sex, age, ethnicity, disability, tenure	2023 (poll)	GLA polling / YouGov. Available upon request.	
Accessible services and safe neighbourho ods	Core	Living in a safe neighbourhood - violence and sexual offences	Proportion of population not experiencing mid or high-level violence	London and Borough		2016-2022	Metropolitan Police Service (MPS). Available at:	

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¹³ Definition of leisure includes: Spent time with friends/family; Gone to a pub/bar/club; Gone to a park; Played sport; Exercised; Gone to the cinema; Attended a place of worship; Visited a museum/gallery; Gone to a theatre/music concert; Attended a local community festival and/ or event; Pursued hobbies related to arts or culture (e.g. dance, literature, music groups, theatre groups, visual arts, etc.)

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Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			against persons or rape in the last year ¹⁴				https://data.lo ndon.gov.uk/ dataset/recor ded_crime_s ummary	
Accessible services and safe neighbourho ods	Core	Living in a safe neighbourhood - feelings of safety at night	Proportion who feel very safe or fairly safe walking alone in their local area after dark	London and Borough	Sex, age, ethnicity, disability, tenure	2016-2022	MOPAC Public Attitude Survey. Available at: https://data.lo ndon.gov.uk/ dataset/mopa c-surveys	
Accessible services and safe neighbourho ods	Core	Access to diverse local services - high street diversity	Average number of retail category types appearing in London's high streets within a	London and Borough		2017- 2020;2021- 2022	GLA High Streets Data Partnership - based on Local Data Company.	

¹⁴ Indicator aggregates mid and high-level violence offences with high level sexual offences (Rape). Standard MPS reporting excludes sexual offences from violence statistics.

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			borough (out of nine). London is the borough average.					
Accessible services and safe neighbourho ods	Core	Access to diverse local services - GP appointment waiting times	Proportion of GP appointments that take place within 14 days of booking	London and Borough		2022-2023	NHS Digital. Available at ICS level https://digital. nhs.uk/data- and- information/p ublications/st atistical/appoi ntments-in- general- practice/octo ber-2022 Borough breakdown available upon request.	
Accessible	Core	Accessible and	TfL public	London			TfL. Available	
services and safe		affordable	transport accessibility	and Borough			at: https://tfl.gov.	

GLA Wellbeing and Sustainability Measure: Summary report

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
neighbourho ods		public transport - accessibility	levels (PTALs) 15				uk/info- for/urban- planning-and- construction/ planning- with- webcat/webc at	
Accessible services and safe neighbourho ods	Core	Accessible and affordable public transport - affordability	Proportion of total household expenditure not spent on public transport	London		2017-2021	London Travel Demand Survey or ONS Living Costs and Food Survey. Available at: https://beta.u kdataservice. ac.uk/datacat alogue/series /series?id=20 00028	

¹⁵ TfL PTAL groups scaled between 0 and 1, with 0 representing the worst and 1 representing the best accessibility. London is the borough average.

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Accessible services and safe neighbourho ods	Supporting	Good quality of services	Proportion of Londoners who are satisfied with local services and amenities	London	Age, disability, ethnicity, sex, deprivation quintile	2016-2021	DCMS Community Life Survey. Available at: https://www.g ov.uk/govern ment/collectio ns/communit y-life-survey 2	
Accessible services and safe neighbourho ods	Supporting	Satisfaction with local area	Proportion of Londoners who are satisfied with this local area as a place to live	London	Age, disability, ethnicity, sex, deprivation quintile	2016-2021	DCMS Community Life Survey. Available at: https://www.g ov.uk/govern ment/collectio ns/communit y-life-survey 2	
Accessible services and safe	Supporting	Can influence local area	Proportion of Londoners who agree they can influence	London	Age, disability, ethnicity, sex,	2016-2021	DCMS Community Life Survey. Available at:	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
neighbourho ods			decisions affecting their local area		deprivation quintile		https://www.g ov.uk/govern ment/collectio ns/communit y-life-survey 2	
Accessible services and safe neighbourho ods	Supporting	Trusts city/local institutions	Proportion of Londoners who think their Borough council is trustworthy	London	Sex, age, ethnicity	2022-2023	GLA polling / YouGov. Available upon request.	
Accessible services and safe neighbourho ods	Supporting	Preserving local heritage	GLA Heritage at Risk indicator - proportion of Historic England listed buildings classified as heritage not at- risk	London and Borough			Historic England Count data. Available at: https://histori cengland.org. uk/advice/her itage-at-risk/ Proportional data available upon request.	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Improving the environment	Core	Good air quality	Weighted air quality index combining NO2 and PM2.5 concentrations using London Atmospheric Emissions Inventory (2019) measured to World Health Organization (WHO) 2021 guideline thresholds (0 is the worst performing and 1 is the best performing)	London and Borough		2019	London Atmospheric Emissions Inventory 2019 data. Available at: https://data.lo ndon.gov.uk/ dataset/londo n- atmospheric- emissions- inventory laei2019 For calculated Index contact Tranquil City or CIU FOI request.	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
Improving the environment	Core	Access to quality green and blue space	Greenspace proximity and quality index compiled of quality green cover (forest, woodland, meadow, cemetery, allotments, grass, scrub), blue cover, and tree canopy cover (0 is the worst performing and 1 is the best performing)	London and Borough		2023	London Tree Canopy Cover. Available at: https://data.lo ndon.gov.uk/ dataset/curio- canopy?_gl= 1%2a183wsy 8%2a_ga%2 aMjkxNDM2 MjEuMTY3O TA1NTc2Mg%2a_ga_PY 4SWZN1RJ %2aMTY4M DAXOTY3NC 4xLjAuMTY4 MDAXOTY3NC 4xLjAuMTY4 MDAXOTY3N C42MC4wLjA .London .Combined with green and blue	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							cover data available at: https://data.lo ndon.gov.uk/ dataset/green -and-blue- coverOpenSt reetMap: https://data.lo ndon.gov.uk/ dataset/open streetmap	
Improving the environment	Supporting	Reducing carbon emissions	London's historic trend consumption- based greenhouse gas emissions per capita (tonnes CO ₂ e per capita)	London and Borough		2016-2022	Leeds University, ReLondon and London Councils consumption- based emissions. Available at: https://data.lo ndon.gov.uk/ dataset/londo	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							n-s- consumption- based- greenhouse- gas- emissions	
Improving the environment	Supporting	Energy efficiency	Proportion of domestic buildings scoring at least 'C' in domestic energy efficiency ratings	London and Borough		2016-2023	Ministry of Housing, Communities & Local Government. Available at: https://data.lo ndon.gov.uk/ dataset/dome stic-energy- efficiency- ratings- borough	
Improving the environment	Supporting	Waste reduction	Proportion of household waste sent for reuse, recycling or composting	London and Borough		2016-2021	DEFRA. Available at: https://www.g ov.uk/govern ment/statistic	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
							al-data- sets/env18- local- authority- collected- waste- annual- results-tables	
Improving the environment	Supporting	Low noise pollution	If overall noise level (road, rail, aircraft) > 55 dBA. Noise pollution score calculated so that 0 is the worst performing and 1 is the best performing, based on Department for Environment, Food & Rural Affairs (Defra)	Will be averaged for the purpose of our measure but also available down to individual streets		2017	Tranquil City Index - Defra Strategic Noise Mapping Round 3 (2017) and DfT Airport noise exposure contours. Available at: https://www.g ov.uk/govern ment/publicat ions/strategic	

Domain	Core or supporting	Measure	Sub-title	Lowest geography	Demographic breakdown	Time period	Source	Supplementa ry source for Borough or sub-group breakdowns
			Strategic Noise Mapping Round 3 (2017) and Department for Transport (DfT) Airport noise exposure contours for specialist users				-noise- mapping- 2019 https://www.g ov.uk/govern ment/collectio ns/airport- noise- contours	

Methodologies of the complex measures

Some of the measures in Table 2 above are more complex than others. This section explains in detail how some of these more complex measures were created for use in London's Wellbeing and Sustainability Measure.

1. Tranquil City Index disaggregated

Produced by Tranquil City (2023). Available upon request.

Greenspace Quality: Methodology (Version 1)

Data: London Tree Canopy, Green and Blue Space, OpenStreetMap classes

The greenspace quality measure is based on both green, blue and tree cover densities, as well as classifications of land use. A final percentage score is calculated so that 0 is the worst performing and 1 is the best performing.

Greenspace Quality Score

Green points (maximum of 4)

If green cover is > 5% AND

Land use type (>5%) is forest or woodland or meadow then 4

Land use type (>5%) is cemetery or allotments or green cover is > 50% then 3

Land use type (>5%) grass or scrub or green cover is > 25% then 2

else 1

Blue points (maximum of 1)

If blue cover is > 5% then 1

Tree points (maximum of 4)

If tree canopy cover is > 30% then 4

If tree canopy cover is > 20% then 3

If tree canopy cover is > 10% then 2

If tree canopy cover is > 0% then 1

Final percentage score = Green + Blue + Tree points (from above) /9

Greenspace Score Methodology

Exposure to green space is significantly associated with both good health and mental wellbeing in a range of studies¹⁶. More than simply the amount of greenery, wellbeing effects depend on exposure to different types of green space¹⁷. The above method score applies a base score for green cover and then additional points for the specific type of green space. Exposure to blue space is significantly associated with both good health and mental wellbeing in a range of studies¹⁸. The score applies an additional point where a blue space is present. Tree cover is expected to have a strong relationship between the quality of green space and the wellbeing benefits reported¹⁹. There is some evidence for a 'plateau effect' regarding increasing tree cover above 50%. Increasing points are applied up to a maximum of 50% tree cover²⁰.

Air Quality: Methodology (Version 2)

Data: London Atmospheric Emissions Inventory (2019) measured to WHO 2021 guideline thresholds

The air quality measure is based on annual average NO₂ and PM_{2.5} concentrations. It combines these measures to form an air quality index (see method below) weighted based on the associated risks to health. Additional points are deducted if the WHO guideline thresholds are exceeded for each pollutant. A final percentage score is calculated so that 0 is the worst performing and 1 is the best performing.

Air Quality Score

If AQindex > 1 then -1

+ If $NO_2 >= 10$ and $PM_{2.5} < 5$ then -1

+ If NO_2 < 10 and $PM_{2.5}$ >= 5 then -2

¹⁶ Hartig, T., Mitchell, R., de Vries S., & Frumkin, H. (2014). Nature and health. Annual Review of Public Health, 35, 207-228. https://doi.org/10.1146/annurev-publhealth-032013-182443

¹⁷ Natural England. (2019). Monitor of Engagement with the Natural Environment: Headline report and technical reports 2018 to 2019. https://www.gov.uk/government/statistics/monitor-of-engagement-with-the-natural-environment-headline-report-and-technical-reports-2018-to-2019

¹⁸ Hartig, T., Mitchell, R., de Vries S., & Frumkin, H. (2014). Nature and health. Annual Review of Public Health, 35, 207-228. https://doi.org/10.1146/annurev-publhealth-032013-182443

¹⁹ Natural England. (2019). Monitor of Engagement with the Natural Environment: Headline report and technical reports 2018 to 2019. https://www.gov.uk/government/statistics/monitor-of-engagement-with-the-natural-environment-headline-report-and-technical-reports-2018-to-2019

²⁰ Jiang, B., et al. (2015). A dose–response curve describing the relationship between tree cover density and landscape preference. Landscape and Urban Planning, 139, 16-25. https://doi.org/10.1016/j.landurbplan.2015.02.018

+ If $NO_2 >= 10$ and $PM_{2.5} >= 5$ then -3

Final percentage score = total (from above) /4 + 1

Air Quality Index Methodology

AQIndex = ((0.3*NO₂/2) + (0.7*PM_{2.5}))/5

The original idea behind the Air Quality Index was to have something similar to the Citeair index. It was decided to base the weightings on the Defra air quality damage costs, which account for the relative effects of different pollutants on health (and therefore cost to health services). These damage costs have recently been updated, but the 2015 prices, when Tranquil City did the index originally were £58,125 for PM_{2.5} and £25,252 for NOx, which gives the ratio of 0.7/0.3 (see Table 23 of the damage cost document). These have since been updated to give a ratio of 0.95/0.05 (same table). Tranquil City argues it can justify maintaining the same ratio as before as PM_{2.5} is much more dominated by background/regional pollution, so the "signal" from roads would be much lower. Tranquil City say that NO₂ is an ideal pollutant to represent traffic pollution, so should keep that influence in the measure. The document also states "COMEAP concluded that PM_{2.5} was the most appropriate index of particulate air pollution for use in quantitative assessments." This supports the use of PM_{2.5} rather than PM₁₀.

Lastly, the NO_2 is divided by two as the WHO guideline threshold is $10\mu g/m^3$, whilst the $PM_{2.5}$ guideline threshold is $5\mu g/m^3$. The total weighted sum is divided by 50, as this is the resulting WHO guideline threshold ($5\mu g/m^3$) following the NO_2 normalisation. Therefore an Air Quality Index of 1 would be the upper level of compliance with the guideline thresholds.

Noise Pollution: Methodology (Version 1) - daytime

Data: Defra Strategic Noise Mapping Round 3 (2017) and DfT Airport noise exposure contours for specialist users

The noise pollution score applies a base score if the overall noise level (road, rail, aircraft) is above 55 dBA. Additional points are applied if overall noise > 65 dBA, and if aircraft noise is > 45 dBA and road traffic is > 53 dBA. All dBA daytime measures are in L $_{Aeq,16hour}$. A final percentage score is calculated so that 0 is the worst performing and 1 is the best performing.

Noise Pollution Score

If Total dBA (day) >= 55 then -1

- + If Total dBA (day) >= 65 then -1
- + If Aircraft dBA >= 45 then -2
- + If Road dBA >= 53 then -3

Final percentage score = total (from above) /7 +1

Noise Pollution Score Methodology

There is considerable evidence linking environmental noise to deficits in wellbeing, particularly through anxiety and annoyance, although quality of the evidence varies²¹. Annoyance appears greatest overall in response to levels of road traffic noise, then aircraft, then railways, although these comparisons should be interpreted cautiously due to limited available evidence regarding railway noise²². Thresholds are based on WHO Environmental noise guidelines for the European Region (2019)²³.

2. GLA High Street indicator

High Street diversity

The wellbeing measure includes an indicator of High Street diversity to reflect the priority that Londoners place on having access to a diverse range of shops and services within their local area.

To evidence this, City Intelligence took data from the Local Data Company which audit the occupancy of every retail and leisure unit according to a detailed classification²⁴.

For each of London's 600 High Streets (as defined by the GLA's Regeneration team), we measured diversity by counting how many of 11 mid-level retail category types were included on each High Street²⁵. Examples of mid-level categories include 'food and drink', and 'clothes and fashion'. We excluded two categories: 'hotels' on the basis that local residents were less likely to use these and also 'vacant properties'. High Streets received a score of 1 or 0 for each category that was present or not. We did not count the total number of properties within each category as the aim was to measure the diversity rather than quantity of units.

We calculated the number of categories for each London High Street and then the average for London as a whole, for each Borough, and for each of these over time.

Data were available for the following years 2017, 2018, 2019, 2021, but were not collected for 2020 due to the pandemic.

²¹ Clark, C., & Paunovic, K. (2018). WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Quality of Life, Wellbeing and Mental Health. International Journal of Environmental Research and Public Health, 15, 2400.

²² Miedema, H. M., & Oudshoorn, C. G. (2001). Annoyance from transportation noise: relationships with exposure metrics DNL and DENL and their confidence intervals. Environmental Health Perspectives, 109, 409-416. https://dx.doi.org/10.1289%2Fehp.01109409

²³ Clark, C., & Paunovic, K. (2018). WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Quality of Life, Wellbeing and Mental Health. International Journal of Environmental Research and Public Health, 15, 2400.

²⁴ https://www.localdatacompany.com/retail-and-leisure-location-data

²⁵ https://data.london.gov.uk/dataset/gla-high-street-boundaries

High Street retail categories used:

- Food and Drink
- Clothes and Fashion
- Health & Beauty
- Home & Garden
- · Pubs, Bars and Clubs
- Shops and Amenities
- Restaurants
- Taxis and Transport
- Events and Attractions

3. GLA General Practice (GP) Borough data

Methodology

Indicator: Proportion of GP appointments that take place within 14 days of booking, by borough, October 2022 to January 2023.

Overview/justification: This is a national government target and reflects Londoners' desire to have easy access to local services. The initial indicator that was selected was based on Accident & Emergency waiting times, however given the crisis of A&E departments across London and the country over the winter of 2022/23 City Intelligence, in conjunction with policy advisors in the GLA's Health team, decided this would not be a reliable proxy of easy access to local services.

Data sources:

Table 2b, Annex 1: https://digital.nhs.uk/data-and-information/publications/statistical/appointments-in-general-practice

GP Practices file last updated 24 February 2023:

https://digital.nhs.uk/services/organisation-data-service/export-data-files/csv-downloads/gp-and-gp-practice-related-data

Methodology: Data published by NHS Digital is not made available at the London borough level, instead at the Integrated Care Board (ICB) and Clinical Commissioning Group (CCG) level generally. The recent publication of practice level data is therefore new and allows aggregation up to the borough level, needed for consistent comparison of indicators by borough for the London Wellbeing and Sustainability Measure. This required the mapping of Organisation Data Service (ODS) codes at the practice level to postcode data. The GLA used a third party to conduct this step. Using the postcodes, the practices were then aggregated up to the borough level. A small number of practices did not map onto postcodes and therefore were not included in the final figures as these GP practices are likely registered outside London.

This was done for all data available on the NHS Digital page as of late March 2023. At this time the latest data published was up to January 2023. As monthly data continues to be uploaded, the GLA will update the borough figures annually.

4. GLA heritage at risk indicator

Overview: The Royal Society of Arts' Heritage Index was produced in 2020 and is a composite measure compiling 92 indicators across various domains of cultural heritage including the historic built environment and natural landscape. This was initially thought to be a good indicator for 'Preserving local heritage' however upon closer inspection it quickly became clear this would not be possible for the following reasons:

- · Rank data, across England not just London
- Too many indicators have missing values
- · Just 2020, no time series
- Too complex to maintain given the number of indicators
- Some domains not relevant to London or would be distorting e.g. natural landscape
- Heritage at risk indicator presented as a count.

We need the rate to understand the proportion of listed buildings within any given borough that is at risk. Rationale was to reduce any distortion around the higher number of listed buildings in inner London, such as the City of London. Calculating the rate that is at risk gives a better idea of council investment into protecting the site and lends itself to monitoring change over time in a more dynamic way than just the number of listed buildings.

Data used: The source for the total number of listed buildings is Historic England's National Heritage List for England (NHLE). This is the only official and up to date register of all nationally protected historical buildings and sites in England. It is updated annually.

The source for the total number of listed buildings at risk is Historic England's Heritage At Risk Register (HAR). This is updated annually and provides an understanding of the overall state of England's heritage assets.

Methodology: Both datasets were filtered to only retain features of interest:

- For year of interest, HAR is provided as separate datasets for each year as the dataset is only updated annually i.e. the data is already filtered by year.
- The NHLE data is provided as a single dataset that is updated daily, with information on when each listed building was added. To filter for a year of interest, all buildings with a year of listing greater than the year of interest were excluded.
- Both datasets contain information on several types of assets, including conservation areas, monuments, listed buildings, and others. All assets classified as anything other than Listed Building were excluded.

• Both datasets were filtered to London only by spatially joining them to London borough boundary data and only keeping those buildings that fell within London.

The calculation was carried out as described below:

- After spatially joining as described above, each listed building was located within a borough.
- The count of total listed buildings was derived by aggregating the number of buildings that were within a borough, using the filtered NHLE dataset.
- The total of total listed buildings at risk was derived in the same manner, using the filtered HAR datasets.
- The proportion of buildings at risk within each borough then was calculated by dividing the number of buildings at risk in a borough by the total number of listed buildings in the borough.

The output from the calculation was a dataset containing the percentage of listed buildings that were designated at as at risk in each borough, for all years from 2016 to 2022.

Conclusion

The London Wellbeing and Sustainability Measure marks a step forward for the Greater London Authority (GLA) in measuring the quality of life of Londoners.

City Intelligence plans to update the London Wellbeing and Sustainability Measure on an annual basis. The next iteration of the Measure will include data from 2022/23 upon release.

In the meantime, you can explore the latest data on London's wellbeing using our data explorer tool available at https://apps.london.gov.uk/wellbeing. You can read the participatory research reports at https://data.london.gov.uk/dataset/draft-london-wellbeing-and-sustainability-measure.