MAYOR OF LONDONLONDONASSEMBLY

Tree canopy cover in London


View of Victoria Park pond and trees

Key information

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Introduction

The Mayor's 2018 London Environment Strategy set a target to increase tree canopy cover in London by ten per cent by 2050.[1]

In 2024, the Greater London Authority (GLA) produced updates to the tree canopy cover assessments produced in 2018.

In this post, the Research Unit's Becka Storer examines the latest data for canopy cover in London, including differences in canopy cover across the capital. This post provides background for the London Assembly Environment Committee's investigation into London's trees in a changing climate.

Background

Research has indicated a number of benefits of urban trees, including:[2]

- air purification
- lowering temperatures by alleviating the urban heat island effect[3]
- reducing flood risk
- having a positive impact on people's stress and wellbeing

- creating habitats for wildlife.

London contains an estimated 8.4 million trees in public and private spaces.[4]

Over 1.1 million public realm trees are mapped by the GLA in the London tree map. In this map, the GLA standardises borough tree data using the simplified common name for tree types. On 12 May 2025, the GLA published the most recent update to this data; it showed that cherry trees were the most prolific public tree type recorded in London. Collectively, the top ten tree types by simplified common name accounted for 64 per cent London's public realm tree data.

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1. Source: GLA, London Public Realm Trees, May 2025

In July 2022, the Mayor established the £3.1 million Trees for London programme. This programme has since planted more than 115,000 trees with the aim of improving London's climate resilience.[5]

Between coming to office in May 2016 and March 2024, the Mayor had funded the planting of approximately 555,314 trees.

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2. Source: GLA, Tree Planting Record (1), September 2024. Please note 2023-24 numbers are provisional pending finalisation.

The GLA jointly chairs the London Urban Forest Partnership with the Forestry Commission. The partnership published a London Urban Forest Plan (LUFP) in November 2020, followed by an Actions Update in February 2025 that provided a new set of priorities for the partnership. Included within this, the Actions Update amended the Mayor's canopy cover target to 22 per cent of land area covered by trees at least 4 metres tall by 2050.[6] Ensuring equitable access to trees is one of the four key principles guiding the updated actions of the LUFP. Other principles include resilience, collaboration, and capacity.

Canopy cover in London

In 2024, the GLA produced canopy cover estimates for London, primarily based on 2022 data.[7] The figures estimated that London's tree canopy cover was 19.56 (±0.3) per cent.[8]

The GLA has produced and published London's Green Cover map, which includes a detailed breakdown of canopy cover across London. Canopy cover data is also published on the GLA's Cool Spaces map, which tracks spaces for Londoners to shelter from the sun in hot weather.

Variations in canopy cover

The GLA's tree canopy modelling shows significant variations in canopy cover by borough. As a percentage of borough area, Camden, which is home to Hampstead Heath, has the highest percentage of canopy cover at 28.36 per cent. Richmond upon Thames, home to the large green spaces of Wimbledon and Putney Commons and Richmond Park, comes second with 27.31 per cent canopy cover.

At the other end of the scale, the City of London has the least canopy cover relative to its size (4.03 per cent), followed by Barking and Dagenham (8.24 per cent). In general, boroughs in the northeast of London tend to have lower levels of tree canopy cover.

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3. Source: Research Unit analysis of GLA, Tree canopy cover 2024.

There is also correlation between deprivation and tree coverage in London, with more deprived boroughs tending towards lower levels of canopy cover. The most significant outlier to this trend is the City of London, which has a relatively low deprivation score (signifying a less deprived area) but the lowest canopy cover relative to land area.

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4. Source: Research Unit analysis of GLA, Tree canopy cover 2024 and Ministry of Housing, Communities & Local Government, English indices of deprivation 2019, File 11: upper-tier local authority summaries, 2019. The Index of Multiple Deprivation (IMD) is the official measure of relative deprivation in England. Higher IMD scores indicate a higher level of relative deprivation.

Previous canopy cover estimates

The GLA first produced a large-scale model of canopy cover in London in 2018. Previous estimates of canopy cover relied on statistical sampling, which did not show the location and distribution of trees. [9] The 2018 model estimated that London's canopy cover was 21.06 (±0.2) per cent of total land area, based on 2016 data. [10]

However, the GLA has stated that in some instances the 2018 modelling overestimated canopy cover, due to detecting general vegetation as tree canopy. The use of height data in the 2024 modelling has led to the reclassification of these areas, so that only trees over 4 metres in height are included in canopy cover estimates. The GLA concludes that it has no "practical way" of analysing the impact of this reclassification on the results. [11]

It reports that there is "no statistically significant change in canopy cover across London" between the 2018 and 2024 results.[12] Indeed, while the LUFP commits the GLA to produce canopy cover estimates every 5 years,

trends in canopy cover are only likely to be seen over longer time periods. This is due to the uncertainty inherent in this type of modelling and the time it takes for newly planted trees to reach an established height.[13]

References

[1] GLA, London Environment Strategy Proposal 5.1.1.e, 2018, p.167

[2] Woodland Trust, Is There Tree Equity Where You Live? and World Economic Forum, 5 reasons why cities need a healthy tree cover, both accessed 13 May 2025.

[3] The Urban Heat Island effect causes cities to be warmer than surrounding rural areas as a result of the sun's rays being absorbed by hard surfaces instead of trees, plants and grass. See, UK Green Building Council, How the urban heat island effect makes cities vulnerable to climate change, accessed 21 May 2025.

[4] GLA, Trees and woodlands, accessed 13 May 2025

[5] GLA, London Climate Resilience Review, 17 July 2024.

[6] GLA, London Urban Forest Plan — 2025 Actions Update, February 2025.

[7] The London Environment Strategy Implementation Plan requires that the GLA produce and publish canopy cover data every five years, to track progress to the 2050 aim. It further commits the GLA to publish the number of trees planted on an annual basis.

[8] GLA, Tree Canopy Cover 2024, accessed 21 May 2025.

[9] GLA, Green infrastructure maps and tools, accessed 13 May 2025

[10] GLA, Methodology Report, Canopy & Green Cover, June 2024

[11] GLA, Methodology Report, Canopy & Green Cover, June 2024, p.35

[12] GLA, Methodology Report, Canopy & Green Cover, June 2024, p.35

[13] GLA, Green infrastructure maps and tools, accessed 13 May 2025

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