

Appendix G: Canopy Cover Calculation Methodology.

Our canopy cover project was carried out using TreePlotter Canopy by PlanIT Geo and Woodland Dwelling using BlueSky National Tree Map and Ordinance Survey 2021 data. The survey analysed how urban tree canopy cover (UTC) and potential planting areas (PPA) are distributed across West Northamptonshire's complete boundary, wards, parishes, and Lower Layer Super Output Areas (LSOAs) to show the existing baseline canopy cover on public and private land.

Our canopy map excluded the potential to plant trees in areas of competing land use types such as:

- a) high grade agricultural land
- b) areas of nature conservation, and
- c) areas such as sports playing fields.

West Northamptonshire's existing canopy is spread across a patchwork of different habitats and land use types, and within built-up areas of varying scale and density. The largest land cover is agriculture, predominantly arable farmland, which occupies 73% of the total land area. The remaining land area comprises a range of residential, commercial and industrial areas, with 6% classified as impervious services¹. Currently, 6.9% of the total area in West Northamptonshire is managed primarily for nature; this consists of nationally and locally designated sites, priority habitats and ancient woodland (which makes up 1.9% of the land area)².

The Canopy map also integrates the Woodland Trust's recently launched Tree Equity Metric³ Tree Equity is the practise of ensuring that all communities have equitable access to the benefits of trees where they live. While some areas enjoy plentiful greenery and tree cover, others lack these essential natural assets. Currently, the Tree Equity Metric only covers urban areas, but the data behind tree equity, such as heat island, pollution, employment and health information is contained within the canopy application, allowing us to look at how trees can improve these areas locally and to facilitate and prioritise the planting, care and protection of trees in areas of existing low tree cover. In this way, the prioritisation of tree planting can be needs-based.

Urban Tree Canopy (UTC) indicators:

- low existing UTC
- possible UTC planting
- impervious surfaces

¹ PlanIT Geo and Woodland Dwelling 2024, West Northamptonshire Tree Canopy Assessment Factsheet

² Rouquette, J. Hobbs, L. Zini, V. Grace, M. Fenn, T. Northamptonshire and Peterborough natural Capital Investment Plan (NCIP) (2023)

³ <https://www.woodlandtrust.org.uk/protecting-trees-and-woods/benefits-of-urban-trees/treeequity/#:~:text=The%20Tree%20Equity%20Score%20tool&text=This%20tool%20calculates%20a%20Tree,t%20ree%20equity%20has%20been%20achieved.>

- air quality
- stormwater reduction
- urban heat island mitigation
- education
- income
- health
- crime
- housing
- living environment

The overall suitability for tree planting score is based on an equally weighted formula that includes all of the planting prioritisation categories.