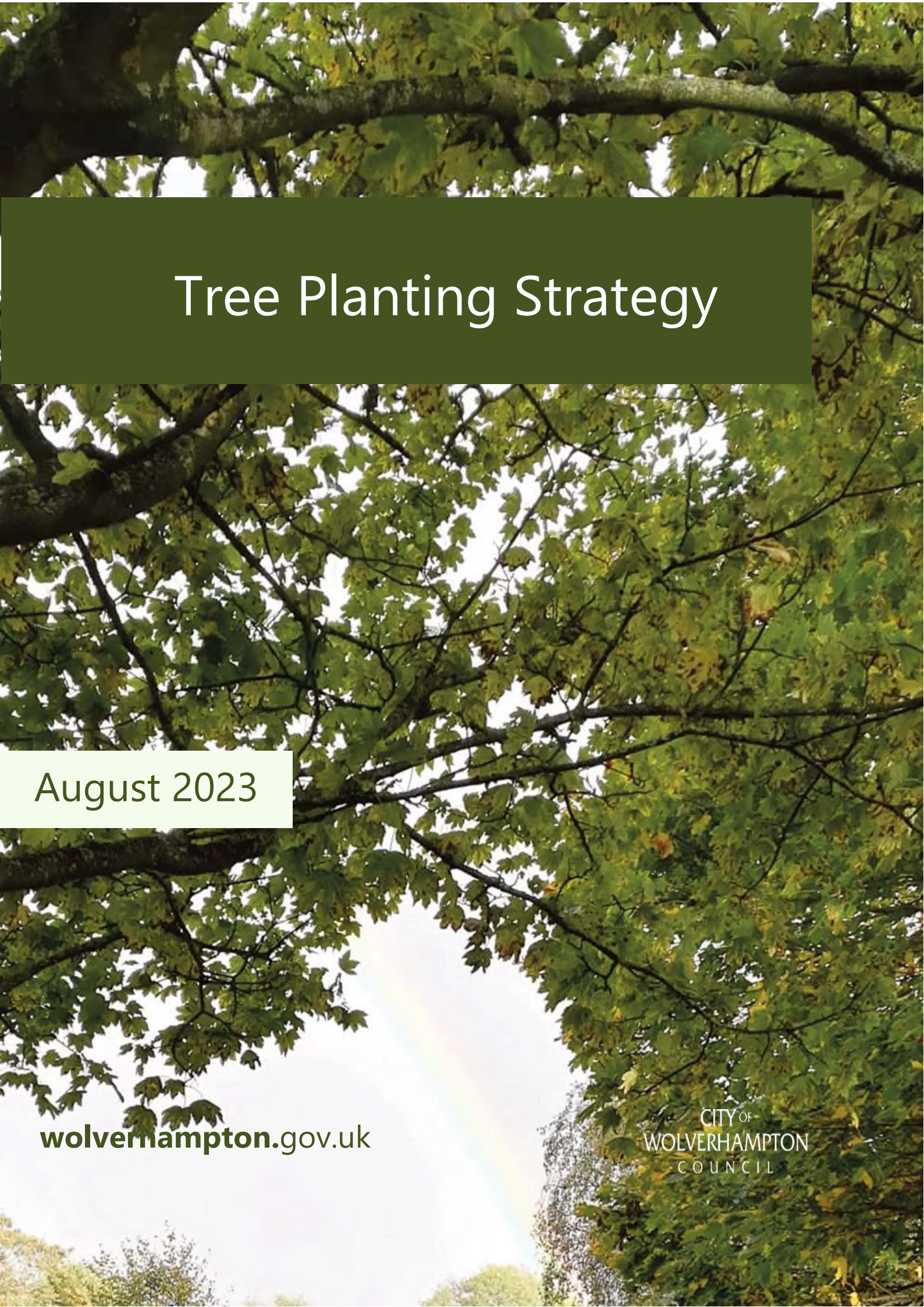

# Tree Planting Strategy

August 2023

wolverhampton.gov.uk

CITY OF WOLVERHAMPTON COUNCIL

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# 1 Executive Summary

Trees in the City of Wolverhampton Council (CWC) provide a number of social, environmental, and economic benefits and are an integral part of the historic environment.

Trees play a fundamental role in the landscape and whilst relatively long-lived, all trees have a finitie lifespan. So in order to maintain and enhance the trees stock of Wolverhampton, and their associated benefits, it is vital that there is a a plan in place to ensure that appropriate tree planting is undertaken to ensure we are successful in estabilishing of the next generation of trees.

City of Wolverhampton Council (CWC) is committed to becoming carbon-neutral by 2028 and deliver on the promises made when we declared a climate emergency at Full Council in 2019. The document, entitled - Future Generations: Our Climate Commitment provides details on how the council proposes to meet this commitment; this Tree Planting Strategy is integral to meeting this goal.' (the commitment is for the council to be carbon neutral by 2028 and the aim is for the city as a whole to be carbon neutral by 2041).

Climate change and associated biodiversity loss now require our generation to respond more boldly, taking us far beyond where we are today. Planting vastly more trees in England and protecting and improving our existing woodlands is key to the Government's plan to achieve net zero and to create a Nature Recovery Network across the length of England.

Trees are considered as having a crucial part to play in helping to offset emission and sequester carbon from the atmosphere. Additionally, trees have the potential to limit some of the impacts of climate change by helping to cool the urban environment, reducing the need for air conditioning during hot summer months. It is therefore important that Wolverhampton maximises both canopy cover where possible close to where people live, work, and play in the city, and create new green spaces across the city for residents and visitors to enjoy.

# 2 Introduction

Trees play a fundamental role in the landscape of Wolverhampton, providing significant value to the residents and visitors to the city. This document provides an evolving dynamic strategy that will change and develop to meet the management of our tree planting to ensure we deliver on our vision for the future.

The Council's "Our City: Our Plan", sets out how the Council will continue to work to improve outcomes for local people. The Council managed tree stock of Wolverhampton can make a significant contribution towards achieving the priorities of the plan. In particular, trees can make a significant contribution to the 'Healthy, inclusive communities;' 'Good homes in well-connected neighbourhoods,' and 'Thriving economy in all parts of the city' priorities set out within the plan.

The COVID-19 pandemic brought home the vital role nature plays in improving wellbeing and mental health and is often most valuable when close to, and part of, the places we live, work and play. Trees and woodlands can sequester carbon, cool our settlements, improve air quality, contribute to community cohesion, and create a sense of place.

There are 258,195 trees inspected and managed in the city of Wolverhampton, which includes street trees, in parks, cemeteries, and open spaces and approximately 11,500 on land managed by Wolverhampton Homes, (excluding private gardens).

While in general trees have a long-life expectancy, they will not live indefinitely, and it is therefore important that the benefits of the tree stock are preserved, maintained, and enhanced, with new replacement planting to secure the next generation of trees for the future.

It is a widely recognised fact that a significant proportion of newly planted trees fail to survive to maturity. The *Trees in towns II* report commissioned by the Department of Communities and Local Government highlighted that as much as 25% of all planting undertaken in the public sector fails. Although there has not been any comparable survey undertaken in the private sector, anecdotal evidence indicates that the failure rates are similar.

Therefore, the production of this strategy is important to identify where and how we plant our trees, shaping our treescape, ensuring long term sustainable diverse tree coverage and the associated benefits provided by them.

In 2021-2022 iTree Eco study was commissioned by the Black Country Consortium and provides detailed information on the scale of benefits provided by the natural capital in Wolverhampton and the other districts in the Black Country, expressing the value of some of those benefits that trees provide.

The study recommended that Wolverhampton should increase the total tree canopy cover from the current levels of 16.5% to above 20% in Wolverhampton. Whilst the i-Tree study has helped us identify how we can do that, we must even this cover out, so all wards have equitable tree cover by using data from National Map Tree Equity Score.

The canopy cover of the urban forest is a key component of natural capital. Canopy cover is measured differently to green space as it is not an exclusive land use. Other activities take place and often thrive under the urban tree canopy. Its measurement does not include grassy parkland, playing fields and gardens.

Wolverhampton has a good level of diversity, and strong populations of native tree species. These species are important for biodiversity and the ecology of the landscape; however, the population of non-native trees will become increasingly important in a changing climate.

# 3 Our Vision

This policy will help deliver priorities of Council's "Our City: Our Plan", in providing Good Homes in Well Connected Neighbourhoods and Healthy, Inclusive Communities. It is also key to the Councils principle for Climate Action.


# Our principles

Our six overarching priorities are supported by three cross cutting principles.

### CLIMATE CONSCIOUS

The climate emergency remains one of the biggest long-term challenges facing the world today. Our climate change strategy 'Future Generations' sets a target to make the City of Wolverhampton Council carbon-neutral by 2028. We are committed to delivering on the recommendations of our Climate Citizen Assembly and to upholding the promises we made when the Council declared a climate emergency in 2019.

### DRIVEN BY DIGITAL

The city is at the forefront of digital infrastructure and innovation. Wolverhampton is one of the first cities in the world to host a 5G accelerator hub making us truly a world leader in emerging technology. Now more than ever digital skills and connectivity are vital to ensure our residents can access services, interact with friends and family, and enter the job market.

### FAIR AND EQUAL

We will continue to tackle the inequalities in our communities which impact on the opportunities of local people. The Council's 'Excellent' rated equalities framework is at the heart of this plan. Everybody in our city, whatever their background, should have a pathway to achieve their potential and succeed. No community will be left behind as we transform our city together.

City of Wolverhampton Council strives to ensure that all the people and communities of Wolverhampton have easy access to the health, nature and climate benefits of trees and that Wolverhampton's urban forest continues to grow and thrive as a robust, resilient, living asset that:

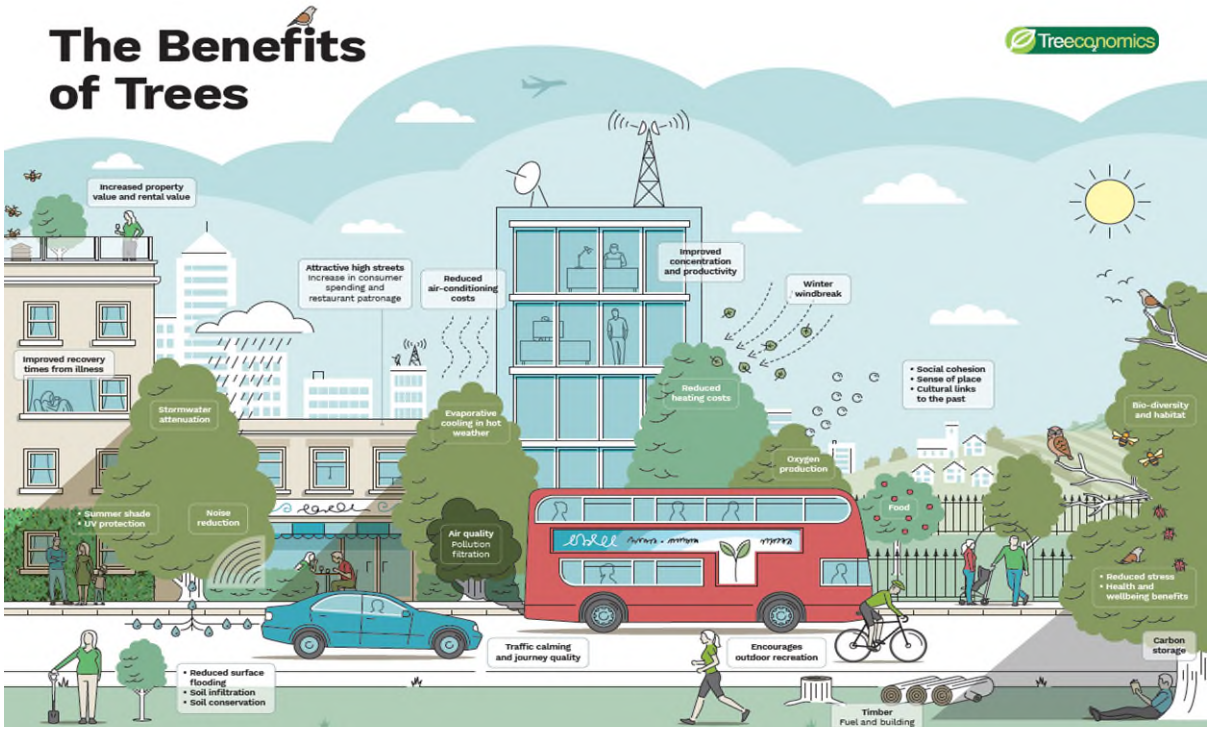
- Earns the city a reputation for their high-quality open spaces, in developments and on the highway.
- Helps to support regeneration and attract investment.
- Helps to improve air quality and to adapt to and mitigate climate change.
- Supports social inclusion through their location in all communities.
- Supports health and wellbeing through their accessibility and proximity to where people live, work, play and shop.
- Forms a healthy, widespread, resilient, and diverse tree stock with trees of all ages and sizes.
- Has high amenity value and promote biodiversity.
- Ensures that where trees need to be removed before the end of their safe and useful life expectancy these removals are mitigated for by the provision of an appropriate and equitable level of replacement trees.

The Council will achieve this vision by making tree planting decisions based on the best, most up-to-date information and evidence available about the distribution, condition, and suitability of the existing tree stock in order to:

- Identify and prioritise areas where tree numbers and canopy cover levels need to be increased above the existing 16.5%, not just city wide but increase equity in all wards.
- Ensure that where trees are planted, they will be selected, planted, and maintained in accordance with best practice to maximise the benefits that the trees can provide to the residents and visitors across the city.
- Developing opportunities to work with partners outside the council to identify, promote and achieve tree planting opportunities beyond areas of council ownership.

- Measuring progress toward achieving this vision by providing a number of Key Performance Indicators by which successes and future priorities can be identified.

# 4 The Benefits of Trees




The benefits include a tier contribution to the amenity and landscape character, a positive impact on the air quality, and, perhaps most importantly the mitigation of the increasing impacts of climate change and the positive effects on peoples mental and physical health.

Trees are integral to most natural land-based ecosystems, providing a wide range of ecosystem services to humankind, including mitigating the harmful effects of climate change as well as assisting with climate adaptation. They also bring communities together, playing a part in their cultural and spiritual values and aesthetic appreciation.

Whilst trees are widely valued for their aesthetic contributions to the landscape of an area, and their intangible contribution to the heritage and character of an area are often keenly felt, trees also provide a number of 'ecosystem services' such as the removal of pollutants from the air, the interception and retention of stormwater runoff and the sequestration of carbon from the atmosphere. These ecosystem services all have a tangible and measurable benefit to the areas in which the trees are located as they reduce the need for costly investment in mitigation measures for air quality, flood prevent and climate change mitigation, respectively.

Trees have a crucial part to play in helping to offset emission and sequester carbon from the atmosphere. Additionally, trees have the potential to limit some of the impacts of climate change by helping to cool the urban environment, reducing the need for air conditioning during hot summer months. It is therefore important that Wolverhampton maximises canopy cover where possible within the city.

As the climate changes, trees in the city are likely to come under increased stress through periods of drought and higher average temperatures. Wolverhampton are already working to increase the diversity of trees within the city, making the future urban forest more resilient to

climate change. Tree planting choices will change over the coming years as species suited to a hotter, drier climates will be better suited to the urban environment.

The Government has committed to increasing tree planting rates across the UK to 30,000 hectares per year by the end of this Parliament. To achieve this, they are intending to spend over £500 million of the £640 million Nature for Climate Fund on trees and woodlands in England between 2020 and 2025 to support this ambition. And by planting the right trees in the right places for the right reasons, it can do so much more than just sequester carbon.

Trees, including hedges, are a key part of green infrastructure, defined by Natural England as:

"...a strategically planned and delivered network comprising the broadest range of high-quality green spaces and other environmental features." (Natural England, 2009)

# 5 Wolverhampton's Urban Forest and iTree Project Results

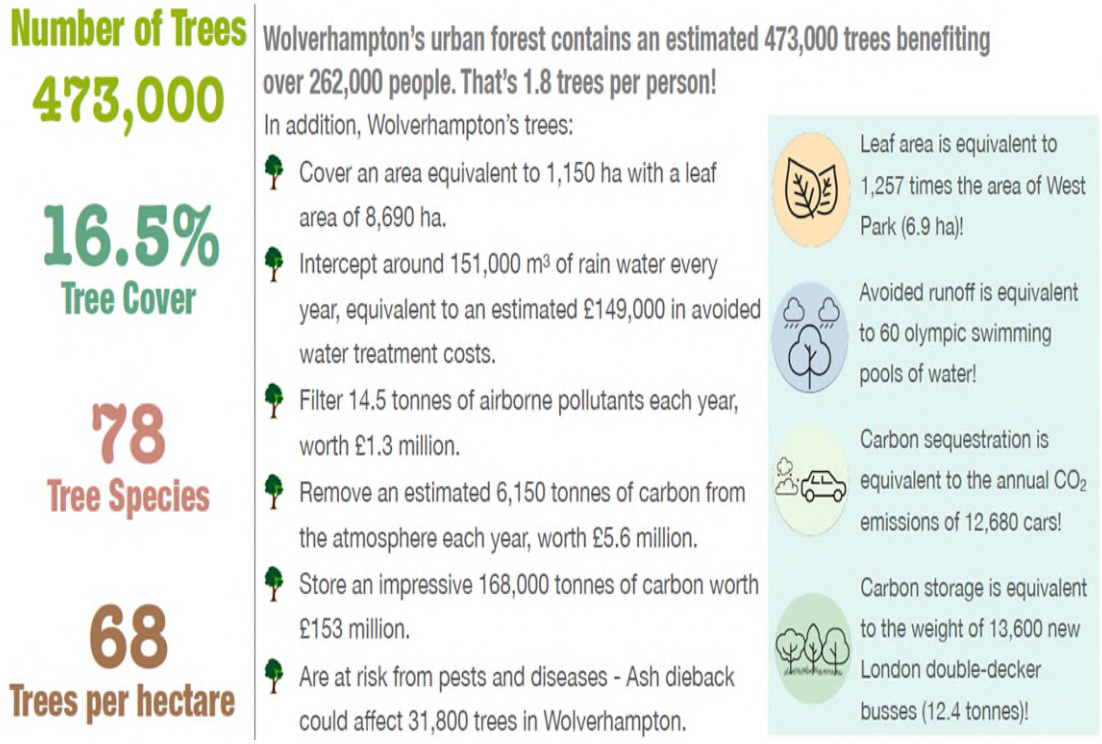
In 2021-2022 iTree Eco study was commissioned by the Black Country Consortium and provides detailed information on the scale of benefits provided by the natural capital in Wolverhampton and the other districts in the Black Country, expressing the value of some of those benefits.

## The recommendations from this study include:

- Continue to plant a wide diversity of species and consider producing a tree planting strategy, which complements the existing Tree and Woodland Strategy, whilst highlighting the most beneficial areas to plant within the urban environment.
- Retain large, mature trees wherever possible.
- Increase planting in areas that have lower canopy cover to achieve a greater green equity.
- Use Capital Asset Valuation Assessment for Trees (CAVAT) to highlight amenity values to developers and communities.
- Set up community tree care schemes to engage local people and help to ensure the good health of young trees.
- Using the data within the report to inform further reports, strategies, and policies.

A key finding was for the whole of the city the existing canopy is only 16.5%. This cover is not evenly distributed and is below the 20% recommended as a good aspiration for towns and cities. It is worth noting that tree coverage is recognised 'as most valuable when close to and part of the places we live, work and play.'

The survey also showed that 15.6% of land within the plots could (in theory) be planted with trees. Utilise available space to increase canopy cover is one way to reduce air and noise pollution and increase carbon sequestration.



The iTree Natural Capital Valuation was able to identify the current extent, diversification, distribution, and ecosystem service value of Wolverhampton's urban forest.

This study provides a snapshot of the urban forest at the present time, it does not consider how the urban forest has or might change over time, or the reasons for this change. Its purpose is to provide a means to make an informed decision on how the urban forest could and should change in the future, and how to ensure that it remains healthy and resilient.

The headline results of the iTree survey of Wolverhampton are summarised as:

This study investigates the structure and composition of Wolverhampton's urban forest and the benefits it delivers. The report provides baseline information which can be used to inform future decision making and strategy. Understanding the structure and composition of the urban forest is vital to its conservation and development, and by showcasing the economic value of benefits provided by Wolverhampton's trees, increased awareness can be used to encourage investment in Wolverhampton's natural capital and wider environment.

The report made the following recommendations in relation to the management of the urban forests.

- Continue to plant a wide diversity of species (with consideration to local site factors) to replace the future loss of ash, to reduce the likelihood of severe impact from any given pest or disease outbreak.
- Continue new planting to maintain a healthy size diversity within Wolverhampton to avoid significant losses in ecosystem service provisions in the future, and aim to retain large, mature trees wherever possible, as large trees provide the most benefits.
- Consider the equity of how trees and the benefits they provide are distributed; increase planting and management in areas that lack canopy cover, particularly area with high deprivation and which experience high pollution, surface flooding, limited green space, or lack of shade, as well as looking at additional planting alongside main roads, and joining up/filling in gaps within the existing urban forest to enhance wildlife corridors and connect pathways through green infrastructure. Neighbourhood level analysis of the urban forest would be beneficial.
- Use Capital Asset Valuation Assessment for Trees (CAVAT) to highlight amenity values of threatened trees to developers and communities, and to leverage compensation or sufficient replacement planting for amenity trees that are removed. This will be through using a study from Leeds, what is "like for like"? An assessment of tree replacement rates needed to maintain carbon sequestration parity, includes a formula for tree replacement.
- Set up community care tree schemes to encourage engagement by local people and help ensure the good health of young trees, particularly new planting as they are at the most risk from external factors such as drought, disease and even vandalism.

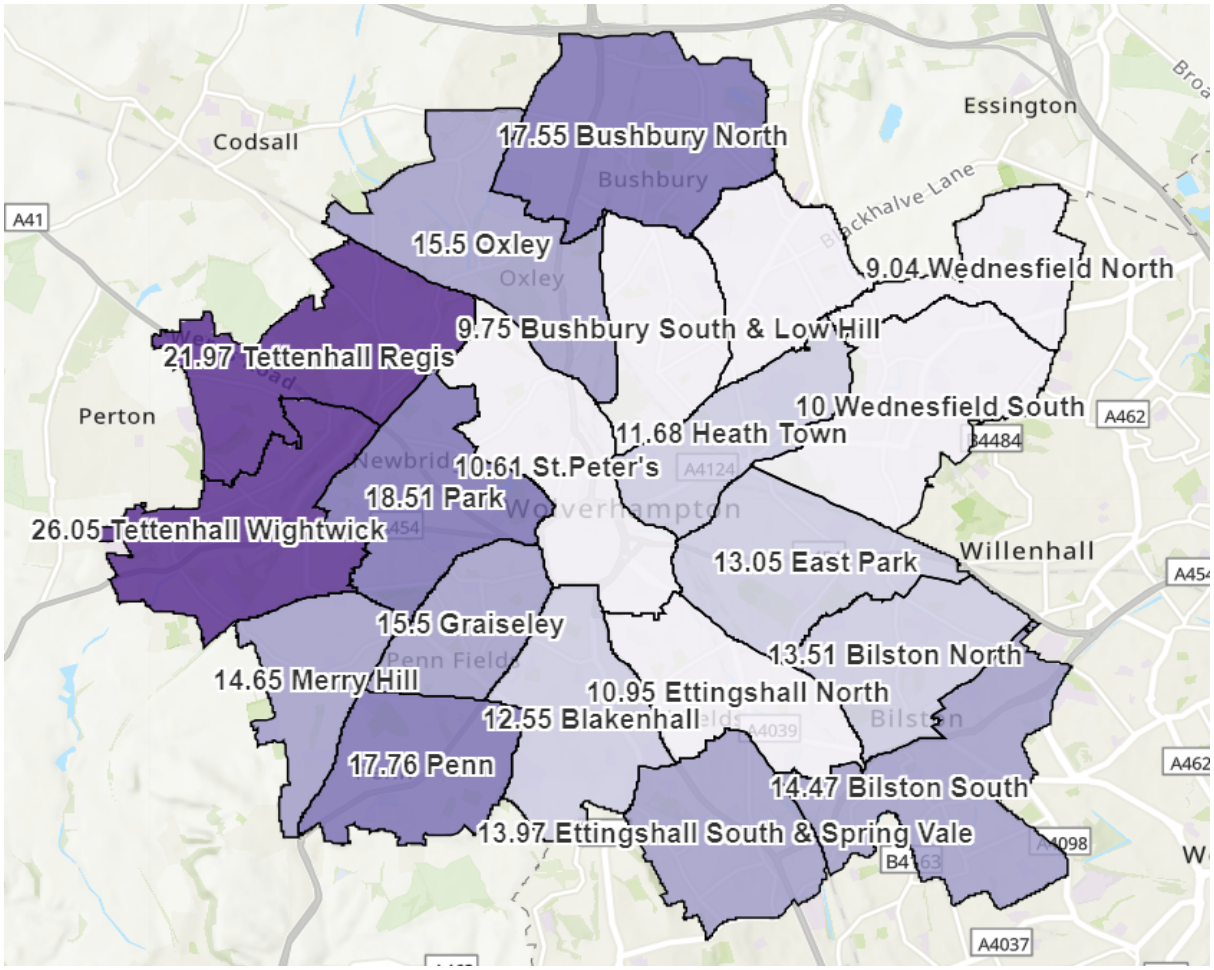
# 6 Our Aims and Objectives.

## Aim 1. Increase Tree Canopy Cover

*Tree canopy cover is "the layer of leaves, branches, and tree stems that cover the ground when viewed from above" (Treeconomics, 2017).*

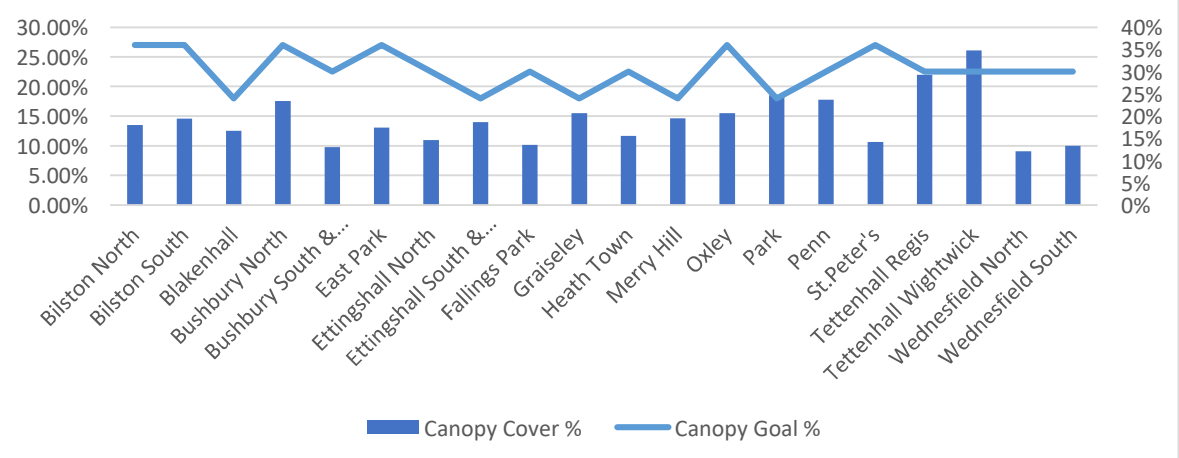
Numerous benefits derived from trees are directly linked to the amount of healthy leaf surface area that they have. A high value shows which species are currently delivering the most benefits based on their population and leaf area. These species currently dominate the forest structure and are therefore the most important in delivering benefits. The Dominance Value is calculated by considering the leaf area and relative abundance of the species. In Wolverhampton, the most dominant species are lime, sycamore, and silver birch, predominantly because they have the largest leaf area.

The distribution map below provides a visual representation of the % canopy cover across the city wards, with areas of the city centre and more deprived parts of the city where canopy cover is below 20% aspiration for towns and cities.



A key finding from the iTree and BlueSky study Bluesky's National Tree Map provides a unique, comprehensive database of location, height and canopy/crown extents for every single tree 3m and above in height. It was used to identify canopy cover for the whole of the city, which is currently at 16.5%. This cover is not evenly distributed and is below the 20% recommended as a good aspiration for towns and cities. The table below identifies % coverage per ward and a canopy goal based on Tree Equity Score and National Map information extrapolated from i-Tree study. The Canopy Cover Goal is an aspiration, we want to be able to increase canopy cover to meet the 20% recommended but aspire to meet the Canopy Cover Goals in the below table.

| Ward Location | Existing Canopy Cover % | Canopy Cover Goal % |
|---|---|---|
| Bilston North | 13.51% | 36% |
| Bilston South | 14.57% | 36% |
| Blakenhall | 12.55% | 24% |
| Bushbury North | 17.55% | 36% |
| Bushbury South & Low Hill | 9.75% | 30% |
| East Park | 13.05% | 36% |
| Ettingshall North | 10.95% | 30% |
| Ettingshall South & Spring Vale | 13.97% | 24% |
| Fallings Park | 10.15% | 30% |
| Graiseley | 15.50% | 24% |
| Heath Town | 11.68% | 30% |
| Merry Hill | 14.65% | 24% |
| Oxley | 15.50% | 36% |
| Park | 18.51% | 24% |
| Penn | 17.76% | 30% |
| St.Peter's | 10.61% | 36% |
| Tettenhall Regis | 21.97% | 30% |
| Tettenhall Wightwick | 26.05% | 30% |
| Wednesfield North | 9.04% | 30% |
| Wednesfield South | 10.00% | 30% |



The table below provides people population density. A Lower Layer Super Output Areas (LSOA) show a geographic hierarchy for small area statistics in England and Wales. The table shows population density per square kilometre per ward area which when compared to canopy cover indicates where population densities are high when compared to other wards and canopy cover is low, for example: Bushbury south ward has population density of 15500 and 5509/kilometre square and canopy cover density of 9.75%, this concludes necessary planting is appropriate in these areas.

| Row Labels | Sum of LSOA Population (Best Fit) | Area (Square KM) | Pop Density (Usual residents per square kilometre) |
|---|---|---|---|
| Bilston North | 11322 | 3.007623225 | 3764 |
| Bilston South | 16393 | 4.578335592 | 3581 |
| Blakenhall | 12614 | 3.418349675 | 3690 |
| Bushbury North | 12996 | 5.147573444 | 2525 |
| Bushbury South & Low Hill | 15500 | 2.813696206 | 5509 |
| East Park | 13995 | 3.658386849 | 3825 |
| Ettingshall North | 14193 | 3.058776743 | 4640 |
| Ettingshall South & Spring Vale | 13075 | 3.268188719 | 4001 |
| Fallings Park | 12733 | 2.598602741 | 4900 |
| Graiseley | 12944 | 2.242065375 | 5773 |
| Heath Town | 13770 | 2.738603884 | 5028 |
| Merry Hill | 12371 | 2.45808871 | 5033 |
| Oxley | 13039 | 4.473537656 | 2915 |
| Park | 14233 | 3.617936772 | 3934 |
| Penn | 12854 | 3.079030843 | 4175 |
| St Peters | 13566 | 3.950485238 | 3434 |
| Tettenhall Regis | 11174 | 4.47780151 | 2495 |
| Tettenhall Wightwick | 12529 | 4.255345545 | 2944 |
| Wednesfield North | 10527 | 2.257449922 | 4663 |
| Wednesfield South | 13902 | 4.331893024 | 3209 |
| **Grand Total** | **263730** | **69.43177167** | **3798** |

As the benefits trees provide are proportionally linked to canopy size it is desirable to increase canopy cover. To develop a canopy cover target, the council needs to consider what the carrying capacity of the city is (i.e. how many trees can be supported and achieve their full potential while balancing current and future use).

This is difficult to do as there are variables that are hard to measure for example tree mortality rates; the effect of climate change; the effect of invasive pests and diseases; current and future land use; privately owned trees; quality and availability of planting space.

# Objectives.

Increase Canopy Cover in all wards to reach above 20% city canopy cover by 2035 and to aspire to meet Canopy Cover Goal by 2045 by:

- Prioritising tree planting in locations where the greatest gains can be made in areas where people live, looking at population density and existing canopy cover.
- Prioritising tree planting in ward areas where existing coverage is low currently below Canopy Cover Goal identified on the Tree Equity Score Map and Tree Planting Opportunities Map.
- Replace all trees removed where they have been identified as dead, dying, and dangerous unless the location is unsuitable.
- Ensuring new planting locations are identified during cyclical inspections when trees are identified for removal.
- Liaise with Highways, the Council's Community Investment Program, Green Space Investment Programmes, Planning Department and utility companies on tree planting projects to encourage more tree planting in any design project etc.
- Discuss appropriate planting locations, species choice, planting techniques, engineered approaches for example SuDs, soil volumes, planting pits design etc.
- Liaise with schools to avoid loss of trees and propose new tree planting in school grounds.
- Encourage residents/organisations, businesses to sponsor/support new planting and take ownership of new trees in public spaces and help in formative establishment.
- Offering an opportunity for residents and organisations to use the Councils tree planting interactive map detailed on tree planting webpages, where they can plot new planting locations and offer to sponsorship or adopt a new tree and help establishment through watering.
- Work with the tree planting coordination group on funding and planting opportunities and community groups and organisations such as Forest of Mercia and West Midlands Combined Authority (WMCA).

## Aim 2: Improve diversity and resilience in tree stock.

Species selection is based upon “the right tree, for the right place and the right reasons” and considering improvements in air quality, biodiversity, and amenity etc or negative effect of trees excessive fruit fall, subsidence and lifting of pavements/ walls etc.
This provides a better equipped treescape that will be able to manage the effects of climate change and reducing the risks of introduced pest and diseases.

## Objectives:

- Measure species, size and age, distribution, and dominance diversity at a ward level to help guide species selection.
- Base species selection on the principle of “the right tree for the right place and right reasons.” New trees chosen for their intrinsic properties for example shape, habit, flowering, climate change tolerance etc.
- Increase species distribution by planting species that make up less than 10% of Wolverhampton’s tree population.
- Ensure Council departments liaise with the Arbor department to ensure advice on the best species to plant when not directly planted by the Arbor team, especially for private development.
- Create a list of species to put on the website with advice on which species are recommended for planting to aid species selection by residents, businesses, and developments.

## Aim 3: Maximise Tree benefits.

To maximise a tree's benefits the council needs to consider the negative impact if trees are planted in the wrong place. Disservices can be avoided, and benefits maximised through considered design and species selection.

Considered design in tree planting can help reduce emissions by creating a more pleasant environment. The council will use opportunity and pollution maps to help target tree planting and choose species known to improve air quality.

## Objectives:

- Use planting opportunity map provided by the i-Tree study.
- Use pollution maps to help prioritise new tree surveys in the priority wards.
- Prioritise species known to improve air quality in areas with high pollution, while still trying to increase the species diversity.
- Indicate in a species list if species is known to improve air quality.
- Select planting sites and species to help avoid pollutants being trapped at street level.
- Select planting sites, techniques, and species to reduce the risk of damage to infrastructure and property.
- Biodiversity will be considered when selecting species.
- The allergenic nature of the tree will be a consideration when selecting species.
- Maximise social and economic benefits for example trees in retail areas and development by working with other departments on proposed development and landscape design.
- Tree replacements on development sites to include planting ratios for carbon sequestration in accordance with the document "What is "like for like"? An assessment of tree replacement rates needed to maintain carbon sequestration parity within the city of Leeds." And the emerging draft policy ENV4 which is proposed for inclusion in the Wolverhampton Local Plan.
- Planting to reduce water runoff issues, planting pit design to include rain gardens, attenuation tanks etc.
- Planting pits, to favour designs for maximising establishment success and long-term health for example sufficient soil volumes and permeable surfacing.

## Aim 4: Increasing the Recording of Tree Planting

The Council is not the only organisation that is planting trees in Wolverhampton. Private development also takes place, which is more difficult to manage and record, However, the council will work with colleagues in the planning department to explore ways to check tree planting numbers and increase awareness of the aims and objectives of this strategy.

Measuring canopy cover is the best way of monitoring how successful tree planting and tree maintenance has been and will include trees not owned by the council. Our ongoing surveys and data capture in confirm will aid monitoring in tree planting and measuring canopy cover, but also health and mortality rates.

## Objectives:

- Include recording for trees planted by conservation groups.
- Include recording for trees planted through other council projects.
- Include recording for trees planted by West Midlands Combined Authority (WMCA), community groups in Wolverhampton, and interactive virtual mapping. https://www.wmvirtualforest.co.uk/
- Explore opportunities to record trees planted by internal and external developments in accordance with the emerging policy ENV4 which is proposed for inclusion in the Wolverhampton Local Plan.

## Aim 5: Better Tree Planting and Aftercare

All trees will be planted in accordance with 'BS8545 Trees: from nursery to independence in the landscape 2014' and be monitored by the council to check they have been planted to this and the council's specification. Any that do not meet the specification will be replanted by the contractor at no extra cost to the council. The size of trees the council prefers to plant are standards at 8-10 and 10-12cm girth, which are 2 to 3 metres tall, because they have smaller root systems and are easier to accommodate into the pavement. They require less water than a larger tree would and become independent in the landscape quicker.

All trees will receive three years of aftercare which consists of watering and young tree maintenance after this time they should be independent in the landscape and after 7 years are considered as established.

These standards should be imbedding in any planting schemes, either by CWC or private developments.

The council encourage residents and organisations to adopt new trees and offer support in the planting and establishment, and to include financial donations and participation in community planting schemes.

By supporting the Council residents and organisations can help the council to nurture these trees in the first three years of planting. To help in the watering the trees in times of drought, watering-bags will be installed on all new trees. "Please Water me and Please/Please Befriend this Tree" signs will be attached to the trees. The council also encourage residents and organisations to adopt new trees and offer support in the planting and establishment, to include funding and participation in community planting schemes.

All new trees will be plotted on Confirm data base system and assigned formative aftercare management.

## Objectives:

- Monitor 100% of the trees planted by the council, contractors, and community groups.
- All trees to receive a minimum of three years formative aftercare.
- Introduce biodegradable hessian ties to remove plastic and rubber ties.
- Encourage residents to help water new trees.
- In parks liaise with managers, rangers and community groups to water the trees.

## Aim 6: Biosecurity

Wolverhampton's urban forest performs well in terms of its structure, with a wide variety of species. No single species exceeds 10% of the total population, which is in line with the guideline, indicating that the urban forest will be more resilient to pests and diseases. The most prominent threats in this regard are Ash Dieback, Asian Longhorned Beetle, Ramorum disease and *Phytophthora kernoviae*.

The current tree population may not be resilient to these new pests and diseases as they would not normally meet them under natural circumstances. This can have devastating consequences on tree numbers and canopy cover, which will reduce the benefits the council relies on trees to provide for residents.

## Objectives:

- Source trees from UK based nurseries. Select species that are grown in UK or imported species that have followed the most recent biosecurity procedures.
- Continual professional development of arboricultural managers/tree inspectors to recognise current and potential pests and diseases.
- Sharing information with other public land managers on new pests and diseases found in the city.
- Biosecurity measures by following guidance set out by the forestry commission https://www.gov.uk/guidance/prevent-the-introduction-and-spread-of-tree-pests-and-diseases#public

## Aim 7: Increasing Planting on Private Land

Tree planting in private land and private gardens is necessary to increase canopy cover in Wolverhampton.

To help developers and resident make the correct decisions on planting trees the council shall provide information on Wolverhampton City Council website of areas we aspire to increase planting in and species we would recommend for their positive attributes within those and wider areas of the city.

## Objectives:

- Share information on Wolverhampton's canopy cover and planting opportunities map on the council website and provide guidance on species selection.
- Work with tree planting coordination group and partners on new planting in people's gardens and offer advice.
- Consultation on planning schemes that include landscape designs that include trees on public land as part of planning conditions and agreements.

## Aim 8: Including the Community

Research has shown that people who connect with nature are more likely to exhibit pro-conservation behaviour. One way of fostering a connection with nature is through planting and caring for a tree.

The council is happy to consider any tree planting proposal for public owned land in accordance with emerging policy ENV4 which is proposed for inclusion in the Wolverhampton Local Plan, to allow for carbon off setting for businesses, but also residents are encouraged to plant in their own gardens or locations identified on our tree planting pages though the interactive mapping.

We also ask for support sponsoring a tree from individuals and businesses to include establishment through formative management for example watering, removing stakes and ties etc.

## Objectives:

- Offer community tree planting provided through Tree Planting Coordination Group and Forest of Mercia for residents who wish to volunteer.
- Tree planting requests via our website for individuals, organisations, and groups with sponsorship arrangements.

# 8. Key Performance Indicators (KPI's) and Goals

To determine the progress toward the aims and objectives of this strategy a number of KPIs have been identified for each aim.

| Strategy Aim | Objective | KPI Target | How is progress measured |
|---|---|---|---|
| Increase tree canopy cover. | Increase Canopy cover to above 20% per ward by using canopy cover and planting opportunity mapping (i-Tree data) | Numbers of trees per ward increased above 20% by 2035 | Repeat canopy cover survey every 3 years |
| | Tree Equity – No tree less streets | None by 2045 (Where achievable) | Produce annual report on street tree planting and updated on Confirm. |
| | Replace all trees removed through programme maintenance unless the location is unsuitable. | 95% of all trees removed replaced within next available planting season. | Annual reporting via Confirm |
| Improve diversity and resilience in the tree stock. | Species Diversity – maximum share of a single species per ward. | Maximum of 10% of total tree numbers in ward represented by one species | Repeat species monitoring every 3 years on Confirm. |
| | Increase species distribution by planting species that make up less than 10% of Wolverhampton's tree population. | At least 80% of newly planted trees to come from species with less than 10% representation | Annual reporting via Confirm. |
| Maximise tree benefits. | Use pollution maps to help prioritise new tree surveys in the priority wards. | 20% of annual planting to be undertaken within 100m of pollution hotspots | Annual reporting via Confirm and GIS (Geographical Information System). |
| No. of community sites planted. | Community Participation. No. of individuals/organisations and Tree Planting Requests. | Above 2 per year by 2035 | Annual monitoring and liaison. |
| Increase recording of public tree planting requests | Community Participation. No. of individuals/organisations and Tree Planting Requests. Website tree planting request page and interactive mapping | Above 60 per year | Annual monitoring and liaison. |
| Increasing Planting on Private Land. | Monitoring and management of newly planted trees less than 3 years | Offer advice to landowners on formative management information. | Quarterly |
| Including the Community | Monitoring and management of newly planted trees over 3 years. | Coordination/tree planting groups to monitor tree establishment. | Annually |

| | | | |
|---|---|---|---|
| Better tree planting and aftercare. | Tree Establishment 3 years post planting. Advice leaflets to individuals, groups, and organisations for tree planting aftercare. | Above 90% success rate. | 3 yearly reporting. |
| Biosecurity | Source trees from UK based nurseries. Select species that are grown in UK or imported species that have followed the most recent biosecurity procedures. | Ensure all stock comes with necessary documents and each nursery is assessed for compliance. | Annually |

## Goals:

- Ward Level: every ward in Wolverhampton with less than 20% canopy cover is increased to meet the canopy cover goal by 2035.
- Healthy Trees: to see an increase in the number of healthy trees in the streets and in its publicly owned open spaces and make these numbers available to residents and ward members as part of the tree interactive mapping.
- Community Engagement and Public Awareness:
    - Tree planting and establishment programmes to involve local communities, individual requests, and organisations where possible.
    - Involve local communities in the planning and planting process, fostering a sense of ownership and pride in the initiative, and providing educational opportunities about the importance of trees.
    - Launch awareness campaigns to highlight the benefits of the tree planting strategy, encourage public involvement, and highlight the positive impact on the environment and the community.
    - Ward members will be provided with information on existing canopy cover, expected canopy aspirations and members to identify new planting locations on the interactive tree planting mapping.
- Establishment: to be more diverse, healthy, and resilient to pest, diseases, and future climate in Wolverhampton.
- Ensure appropriateness: every planting project that the species are identified “right Tree, Right Place and Right Reasons.”
- Deadline for new tree planting proposals to be submitted by August for it to be included in the planting programme for that planting season Oct - March.
- Funding opportunities: establish and procure from the CWC and initiatives e.g., government, emergency tree fund etc.
- Resource Management: Develop a plan for acquiring necessary resources like tree saplings, tools, equipment, and labour, ensuring efficient utilization of available resources.
- Planting Techniques: Implement best practices for tree planting, considering factors like proper spacing, planting depth, and mulching to promote healthy tree growth.
- Maintenance and Monitoring: Establish a plan for regular tree maintenance, including watering, pruning, and protection against pests and diseases. Additionally, set up a

monitoring system to track the progress of the planted trees and assess the strategy's overall effectiveness.

- Sustainability: Integrate sustainable practices, including water-efficient irrigation methods, use of organic fertilizers, and exploring long-term funding options to ensure the continuation of the initiative.
- Evaluation: Regularly assess the outcomes of the tree planting strategy against the set objectives, adjusting as needed to optimise its effectiveness.

# 9. Relevant Supporting Documents

| Area of Focus | International | National | CoWC (City of Wolverhampton Council) |
|---|---|---|---|
| Relative tree canopy cover | 2030 Agenda for Sustainable Development | UK's Nationally Determined Contribution | Future Generations: Climate Commitment 2019 |
| | The Paris Agreement | The UK Climate Change Act | Sustainability Strategy 2013-2018 |
| | FAO Guidelines on Urban and Peri-urban Forestry | | Local Development Scheme 2023 - 2026 |
| | FAO Green Cities Initiative | The 25 Year Environmental Plan | Development and Site Allocations Local Plan |
| | Post-2020 Global Biodiversity Framework | | Air Quality Status Report 2019 |
| | UN Decade on Ecosystem Restoration | Clean Air Strategy | Tree and Woodland Strategy 2020 |
| | UN Habitat -The New Urban Agenda | | Black Country Core Strategy 2011 |
| | The UN Strategic Plan for Forests | Clean Growth Strategy | Wolverhampton Unitary Development Plan 2001 – 2011. |
| | | | Highways Technician Guidance Note Appendix F: Preserving trees when carrying out roadworks and building new developments. |
| Age diversity (or size) | FAO Guidelines on Urban and Peri-urban Forestry | 25 Year Environmental Plan | Tree and Woodland Strategy 2020 |
| | UN Decade on Ecosystem Restoration | England Trees Action Plan 21-24 | |
| | The UN Strategic Plan for Forests | | |
| Species diversity | 2030 Agenda for Sustainable Development | 25 Year Environmental Plan | Tree and Woodland Strategy 2020 |
| | FAO Guidelines on Urban and Peri-urban Forestry | England Trees Action Plan 21-24 | Local Development Scheme 2023-26. |
| | UN Decade on Ecosystem Restoration | | |
| | The UN Strategic Plan for Forests | | |
| Species suitability | FAO Guidelines on Urban and Peri-urban Forestry | 25 Year Environmental Plan | Tree and Woodland Strategy 2020 |
| | The UN Strategic Plan for Forests | England Trees Action Plan 21-24 | |
| Trees managed intensively | FAO Guidelines on Urban and Peri-urban Forestry | 25 Year Environmental Plan | Tree and Woodland Strategy 2020 |
| | FAO Green Cities Initiative | | Tree Risk management Policy 2023 |
| | UN Habitat -The New Urban Agenda | England Trees Action Plan 21-24 | Highways Technician Guidance Note Appendix F: Preserving trees when carrying out roadworks and building new developments. |
| | The UN Strategic Plan for Forests | | |
| Publicly owned natural areas | FAO Guidelines on Urban and Peri-urban Forestry | 25 Year Environmental Plan | Tree and Woodland Strategy 2020 |
| | FAO Green Cities Initiative | England Trees Action Plan 21-24 | Tree Risk management Policy 2023 |

| | | | |
|---|---|---|---|
| (trees managed extensively) | UN Habitat -The New Urban Agenda<br>The UN Strategic Plan for Forests | | Future Generations: Climate Commitment 2019 |
| Trees on private property | FAO Guidelines on Urban and Peri-urban Forestry | 25 Year Environmental Plan | Tree and Woodland Strategy 2020 |
| | FAO Green Cities Initiative | | |
| | UN Habitat -The New Urban Agenda | | Tree Risk Management Policy 2023 |
| | The UN Strategic Plan for Forests | | |
| Other elements of the UF; shrubs, hedges, green walls and roofs, plants, animals, and water | FAO Guidelines on Urban and Peri-urban Forestry | 25 Year Environmental Plan | Tree and Woodland Strategy 2020 |
| | FAO Green Cities Initiative | Clean Air Strategy | |
| | UN Habitat -The New Urban Agenda | | |
| Tree benefits (including biodiversity) | 2030 Agenda for Sustainable Devt | UK's Nationally Determined Contribution | Tree and Woodland Strategy 2020 |
| | FAO Guidelines on Urban and Peri-urban Forestry | UK Climate Change Act | Tree Risk Management Policy 2023 |
| | FAO Green Cities Initiative | 25 Year Environmental Plan | Air Quality Status Report 2019 |
| | Post-2020 Global Biodiversity Framework | England Trees Action Plan 21-24 | |
| | UN Decade on Ecosystem Restoration | Clean Air Strategy | |
| | UN Habitat -The New Urban Agenda | | |
| | The UN Strategic Plan for Forests | | |

# 10 Conclusions

The decisions made now concerning new tree planting will shape and define the benefits and structure of the future urban forest. This includes the choice of species planted, having a good diversity within a population can help to improve resilience to changes of the climate and threats from pests and diseases. With a greater range of species, there will be increased quality of benefits delivered by those trees.

By understanding the tree equity across wards new tree planting opportunities can be examined and achieved by taking evidence-based decisions, increasing canopy cover in the city by planting “the right tree for the right place and the right reasons” ensuring sustainability. All while maintaining and promoting species diversity, in areas where the council can maximise the benefits that trees give to the community. This is not something the council can do alone, and the council will need community involvement, private investment, and public bodies to work with us.

# 11 Appendices

TBC to include planting specifications, species list for climate adaptation, working documents and policies.

# 12 References


- BS8454:204 – trees from nursery to independence in the landscape – recommendations.
- Natural England – Biodiversity Net Gain – An introduction to the benefits.
- Camden Tree Planting Strategy – 2020 – 2025
- The England Trees Action Plan 2021 – 2024
- i-Tree Ecosystems Analysis 2023
- i-Tree City of Wolverhampton Natural Capital Valuation 2021 – 2022
- Forestry Commission Leaflet – England's Urban Forest "Using Tree Canopy Cover Data to Secure the Benefits of Urban Trees."
- City of Wolverhampton – Future Generations: Our Climate Commitment.
- Green Blue Urban – "Street Tree Cost Benefit Analysis"
- National Planning Policy Framework (NPPF 131).
- Trees and Design Action Group (TDAG) – Tree Species Selection for Green Infrastructure (A guide to Specifiers)
- "What is "like for like"? An assessment of tree replacement rates needed to maintain carbon sequestration parity within the city of Leeds." Report prepared by the UBoC funded team at the University of Leeds for Leeds City Council. 30th June 2021 Version 1.5.
- Tree Equity Score American Forests National Map (TES UK).