

Parks & Landscape Services
Community, Cultural Development & Well-being

TREES & URBAN FORESTRY Strategy 2021-31

A Climate for Trees: Human Well-being and Nature



PRE-DRAFT CONSULTATION : ISSUES PAPER

'Seeding the New Strategy'



CITIZEN SPACE

NOVEMBER 2020

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1. A NEW STRATEGY FOR OUR TIMES - CONSULTATION

The council is reviewing its "[dlr TREES Strategy \(2011-15\)](#)"¹, and is preparing a new strategy that will be designed to meet current and future challenges. The working title for the new strategy - ***A Climate for Trees: Human Well-being and Nature*** – is informed by best international practices and research on the multiple benefits of trees; and it reflects council's ongoing commitments to [Climate Action](#) and [Quality of Life](#). **In preparing a first draft of the new Strategy, the Council wishes to engage with a variety of people, especially residents, businesses and those studying and working in the county.**

This [Issues Paper](#) provides the basis for that engagement, inviting stakeholders to contribute to the emerging draft. The [Paper](#) outlines the **key findings of the review and poses some questions and opportunities** for your consideration. The project Roadmap is shown on page NN . For details of **How you can Make Your Submission see page 17**. Numbers in square brackets, [nn] refer to the list of [references](#) in [Appendix A](#).

2. TERMS OF REFERENCE

The council's [Local Economic and Community Plan \(L.E.C.P 2016-21\)](#) and its [Corporate Plan \(2019-24\)](#) both include high-level goals for environment, enterprise, health and social cohesion. The Corporate Plan recognises "*the need to enrich citizens' **quality of life** through supporting **vibrant, inclusive communities** and ensure the provision of adequate housing and amenities. Our '**Climate First**' stance has positioned us in a leadership role at the forefront of positive action. Our leadership in combating **Climate Change**, protecting our natural surroundings and encouraging biodiversity will be evident in our approach to implementing innovative energy use and **environmental enhancement policies**."*

Action no. 14 of dlr's [Climate Change Action Plan_\(2019-24\)](#) **commits the council to "Update dlr TREES 2011-2015 strategy" [1]**. The [County Development Plan \(CDP 2016-22\)](#) commits the Council "*to implement the objectives and policies of the Tree Strategy for the County to ensure that the tree cover in the County is managed and developed to optimise the environmental, climatic and educational benefits which derive from an 'urban forest'.*" The current CDP Review and preparation of the [new CDP 2022-28](#) coincides with the preparation of the [new Trees & Urban Forestry Strategy](#), providing an opportunity to link the documents. This includes strengthening both documents' policies and - more particularly - modernising the council's goals and objectives for the county's trees.

3. TREE BENEFITS: NATURE'S GIFTS ARE ALL-EMBRACING

In recent years, **the relationship of humans to Nature in Cities** has come increasing important to administrators, citizens, professionals and researchers [2,3,4]. Trees - as living

¹ download at: www.dlrcoco.ie/en/parks-outdoors/flora-fauna/dlr-trees

organisms - provide benefits to communities, society and economy and these are multi-faceted. Increasingly, evidenced-based research on **Urban Green Infrastructure** proves what we know intuitively - trees are good for us! **Moreover, the Health and Well-being benefits of Trees are vital to human resilience and social solidarity** [5 – 9]. These benefits are particularly relevant to current challenges around access to Nature, in respect of **Public Health/COVID and Sustainable Urban Placemaking**.



Fig. 1: *Ecosystems services* provided by trees. Nature Conservancy (nature.org)

4. A SHIFT IN EMPHASIS: ARBORICULTURE TO URBAN FORESTRY

Internationally, there's been a policy shift from *Arboriculture* to "*the Urban Forest*", as it offers public bodies, society, researchers and professionals a more holistic and systemic frame for **Resource Management and Planning**. The emphasis in *dlr TREES* was essentially arboricultural, focused on effective Tree Management, aiming "... to standardise and guide the Council's approach to trees throughout the county, provide clarity to actions and decisions, and encourage the balanced consideration of individual expectations, public amenity and best practice." It went on to state " out principles relating to how we will deal with trees, gather accurate information on them, raise their profile and improve communication with local communities and stakeholders. Once this has been achieved, we will be in a position to develop a more specific and longer-term approach."

Arboriculture and Urban Forestry – different but complimentary

"*Arboriculture* involves the care of individual trees, while **Urban Forestry deals with forests as systems** (groups of trees) in a developed setting. The science of *Arboriculture* focuses on proper tree planting, pruning, fertilizing, water and other maintenance issues. It also focuses on overall individual tree health. *Urban Forestry* is also a social science, " ... incorporates arboriculture.. " includes landscape level management such as urban forest

inventory, valuation, planning, policy, etc.”² *Urban Forestry (UF)* is “The art, science and technology of managing trees, forests and natural systems in and around cities, suburbs and towns for the health and well-being of all people”. (USDA Forest Service).

Arboriculture will remain inherently-important to a new strategy. **But shifting focus to UF’s canopy approach will better serve management of the entire tree resource and expansion of cover, to optimise *Ecosystem Services*³ and *Placemaking*.**

This shift is informed by best international practice, in key exemplars including *Melbourne, Grand Metropole Lyon, Greater Manchester, New York and Pittsburgh*, all reputable leaders in progressive Urban Forestry [10-14]. **In raising the council’s performance to match international practices, critical to success will be a consistent commitment to investing in adequate and appropriate human, financial and ITC resources.** That commitment would enable the local authority – in collaboration with private owners and other partners – to become an authentic leader in tree care, thereby fostering an inclusive *County Tree Culture*, with results evident ‘on-the-ground’.

5. WHAT WE HAVE – EXPLORING THE EVIDENCE BASE

5.1 Dublin Tree Canopy Study – DTCS [15]

With notable exceptions, dlr has substantial areas of trees, varying in species, age, diversity, health and quality. However, details of these characteristics – vital for resource management - is not available. To date, data collection has been largely ‘broad-brush’, typified by the DTCS, producing initial canopy baseline data for the first time (Figs.2, 3 and 4 below).

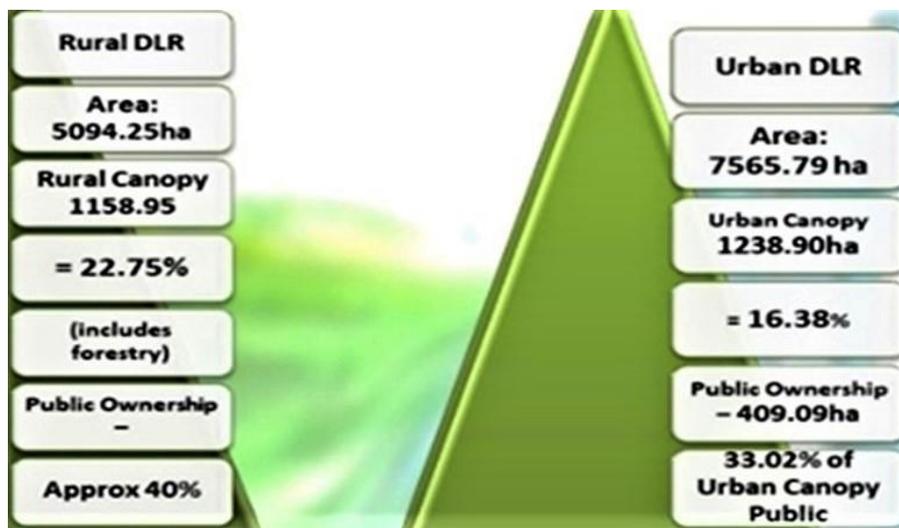


Fig.2: Statistical overview of dlr’s Tree Population – canopy assessments (source: DTCS)

² <https://trees-energy-conservation.extension.org>

³ *Ecosystem Services (ES)*: : “the benefits that people obtain from ecosystems” (Millennium Ecosystem Assessment 2005), comprising goods (e.g. timber) and services (e.g. air purification); e.g. a stand of trees reduces Air Pollution, purifies Water Supply, reduces Flood Risk, regulates Climate by capturing and storing CO².” EU Commission: <http://ec.europa.eu/science-environment-policy>

An appraisal of the DCTS study by dlr Parks & Landscape Services provides a generalised overview of the vital role played by the county's trees in providing **Ecosystem Services** that benefit people's health and well-being leading to a better **Quality of Life** (Fig.4).



Fig.3: Estimated benefits - Air Quality, Carbon and Ozone Sequestration, based on DTCS.

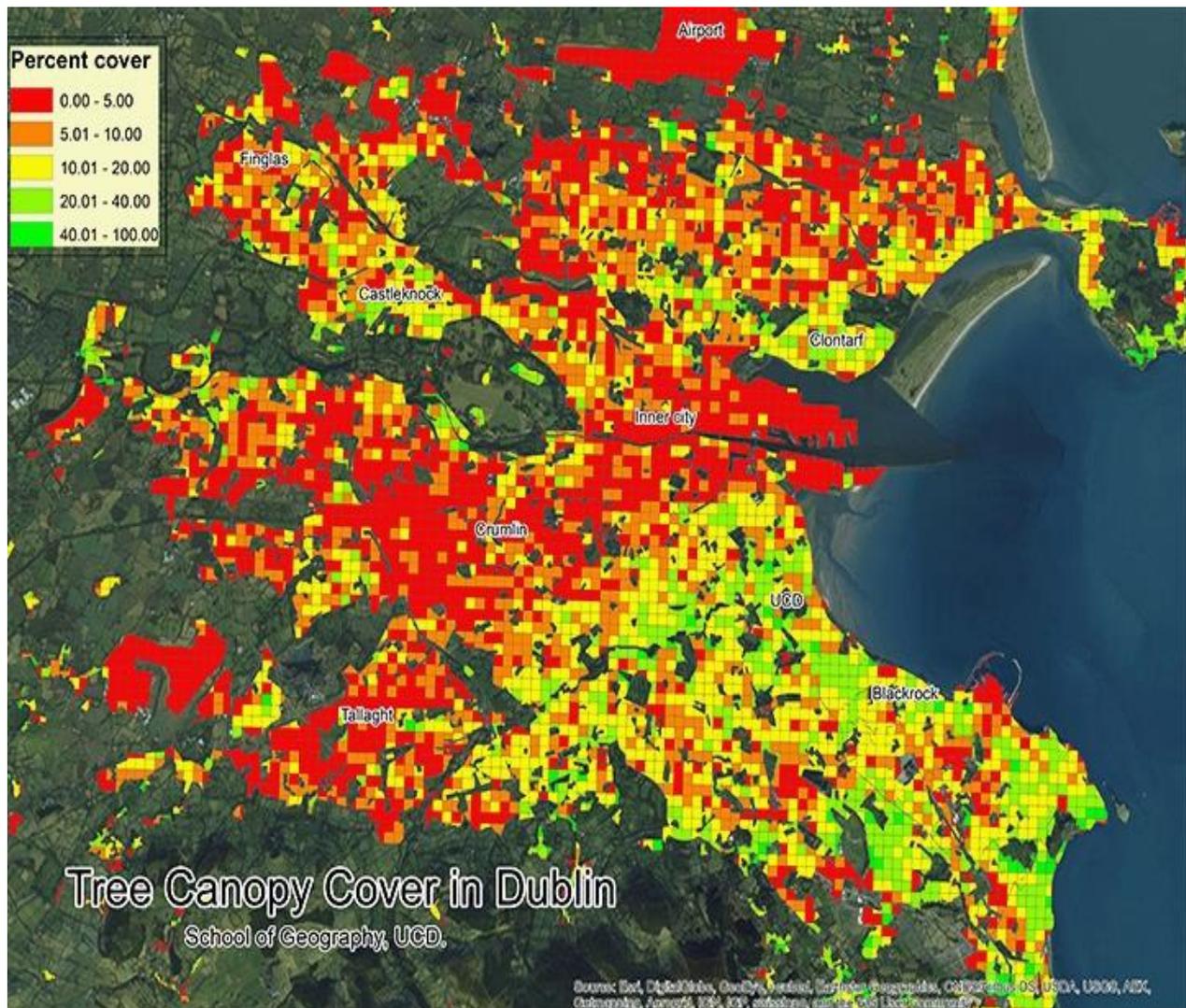


Fig.4: Dublin Tree Cover (DTCS. Fig. 5, UCD Dept Geography. 2017)

5.2 Social Equity and Disproportionate Tree Cover

DTCS' map reveals spatial correlation between low cover (red) and areas of social disadvantage and poor environmental quality in Dún Laoghaire-Rathdown (Figs.5, 6 below).

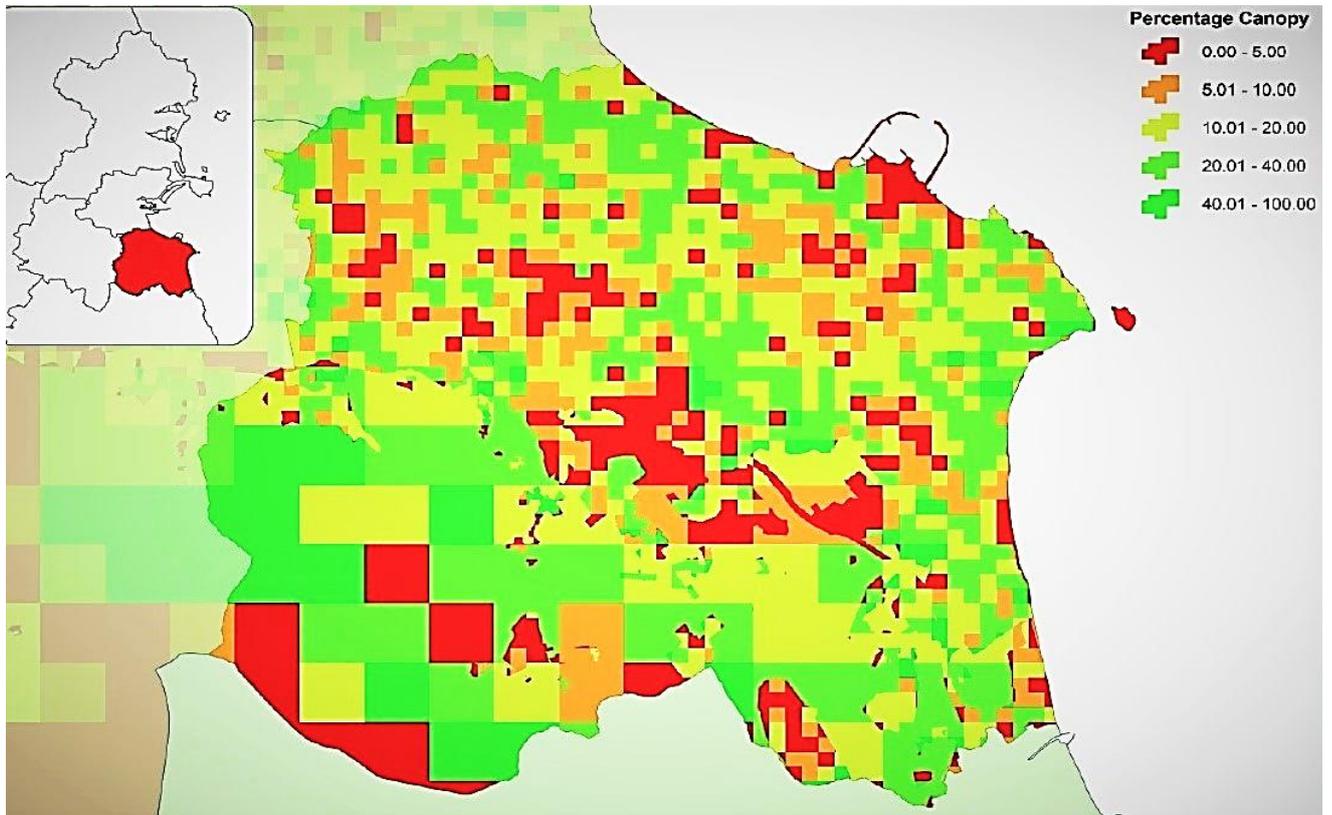


Fig.5: Estimated tree canopy cover across DLR, which is nearly 60% urbanised. The estimated overall tree canopy cover is 18.9% (DTCS Fig.5, pg. 7)

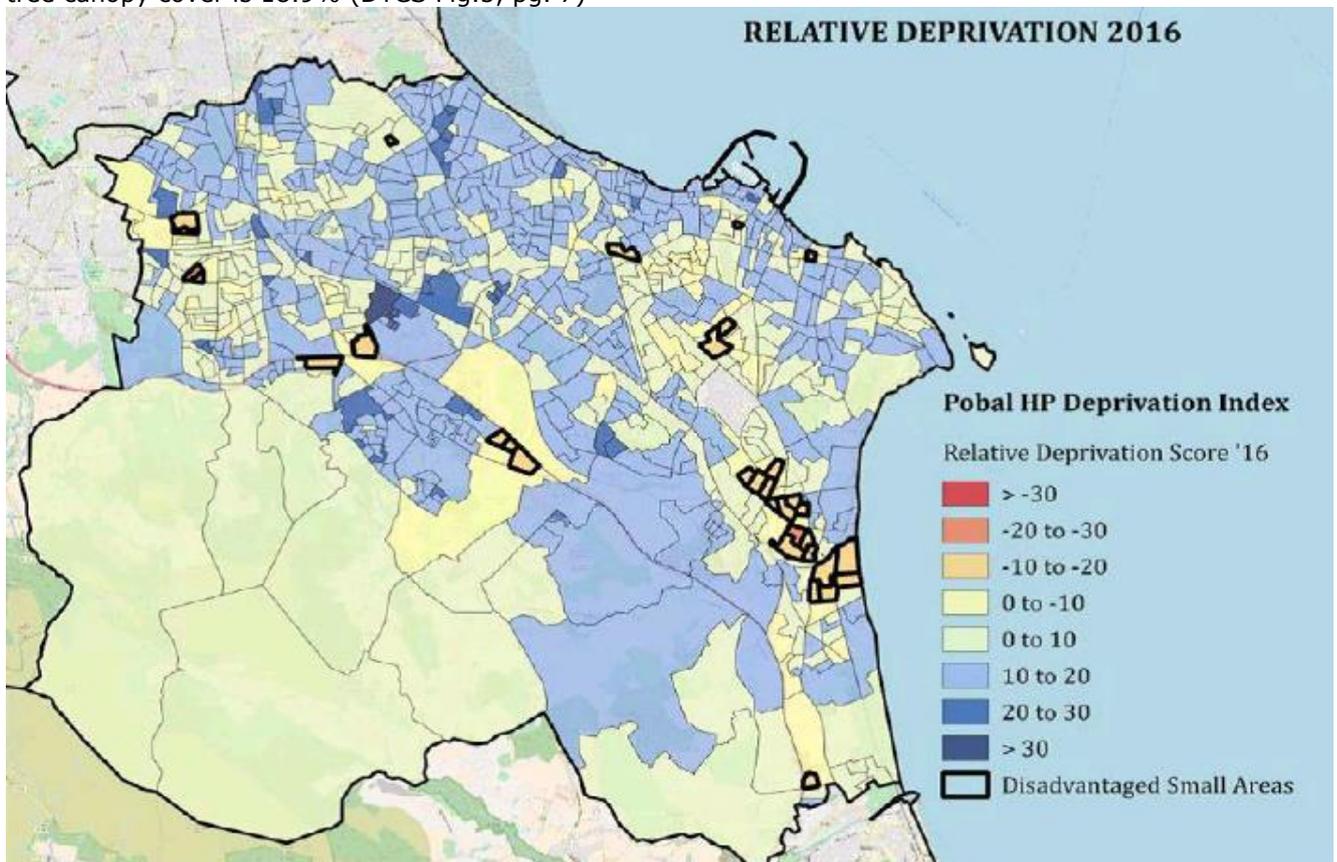


Fig.5: Deprivation index (Dlr Eds. 2016, source: <http://southsidepartnership.ie/dlr-demographics/>)

The mapping correlation is confirmed by ground-level photography showing significant gaps in tree cover and opportunities for substantial new planting (see photos below). It is particularly evident in certain neighbourhoods in [Dundrum-Windy Arbour](#), [Churchtown-Nutgrove](#), [Ballybrack-Loughlinstown](#), [Sallynoggin](#), [Mounttown-Dún Laoghaire](#) and [Sandyford](#).

There is an evident need to transform these neighbourhoods to more sylvan places, through placemaking projects that would address strikingly low environmental quality as well as car-dependency, child safety and poor mobility.

This would bring these neighbourhoods to par with more *'tree-rich'*, better quality areas such as Glenageary-Killiney, Foxrock, Monkstown, Blackrock and Mount Merrion.



Treeless neighbourhoods – opportunity for significant Placemaking project: public realm and streetscapes improvements to address poor environmental conditions - car dominance/parking, air

pollution, greenspace deficiency, impermeable paving, child safety). Residential estate: [St. Columbanus Road/St. Gall Gardens/Farrenboley Park - Dundrum-Windy Arbour](#) (21.10.2020)



Treeless roadscape: opportunities for substantial, large-size, high-quality tree planting. [Whitehall Road, Churchtown](#) (21.10.2020)



Low and absent tree cover: opportunities for substantial, large-size, high-quality tree planting. Mountainview Drive, [Churchtown-Nutgrove](#) (21.10.2020)



Low tree cover: opportunity for large scale, mixed urban woodland and large size, large canopy trees on large public open space, Churchtown-Nutgrove.

[5.1.1 Status of dlr Data Collection.](#) Detailed information on the council's trees stock is fragmentary and largely confined to sporadic surveys of street trees, using *Ezytreetm* software. Between 2011-2018, approximately 16,525 street trees were mapped, including 10,688 inspections of tree condition. **This work is an essential proactive practice – a keystone of dlr 'TREES' (rather than reactionary 'fire-fighting' operations) - for the annual dlr Tree Care Programme. The benefits - in terms of risk management and tree health – are considerable.** However, inconsistency in assigning adequate human resources to complete these tree surveys has impeded progress ([section 7. Review of 'dlr TREES'](#)). Data collection is insufficient and not comparable to best international standards.

[5.3 Resilience: Nature - Human Health & Well-being](#)

Trees are living organisms, though we may not always recognise or respect them as such. Along with their own inherent uplifting beauty, the county's trees perform vital roles in supporting and sustaining human well-being and environmental quality ([Fig.6](#)), both essential in adapting to a low-carbon future [16-18], and in meeting the council obligations under climate law. These roles are indivisible and collective, addressing the biodiversity crisis, greenhouse gas emissions, stormwater management and urban air quality. The latter is critical to the health of all those visiting, living and working in Dún Laoghaire-Rathdown.

[5.3.1 Expanding Tree Cover.](#) DTCS states: "*DLR has 821 km of road, suggesting space for a maximum of 41,000 street trees. Ballinteer, Dún Laoghaire, Stillorgan, Leopardstown and*

Streetside areas are among the areas which should be prioritised for tree planting, as many parts of these areas have less than 10% canopy cover.” [author’s emphasis]

5.3.2 Roadside Trees Improve Air Quality – Research

URBAN TREES, BETTER AIR QUALITY

Trees in cities can remove up to a quarter of the particulate matter pollution in their immediate vicinity. And when planted between a source of pollution and an apartment building, school or hospital, urban trees can help protect human health.

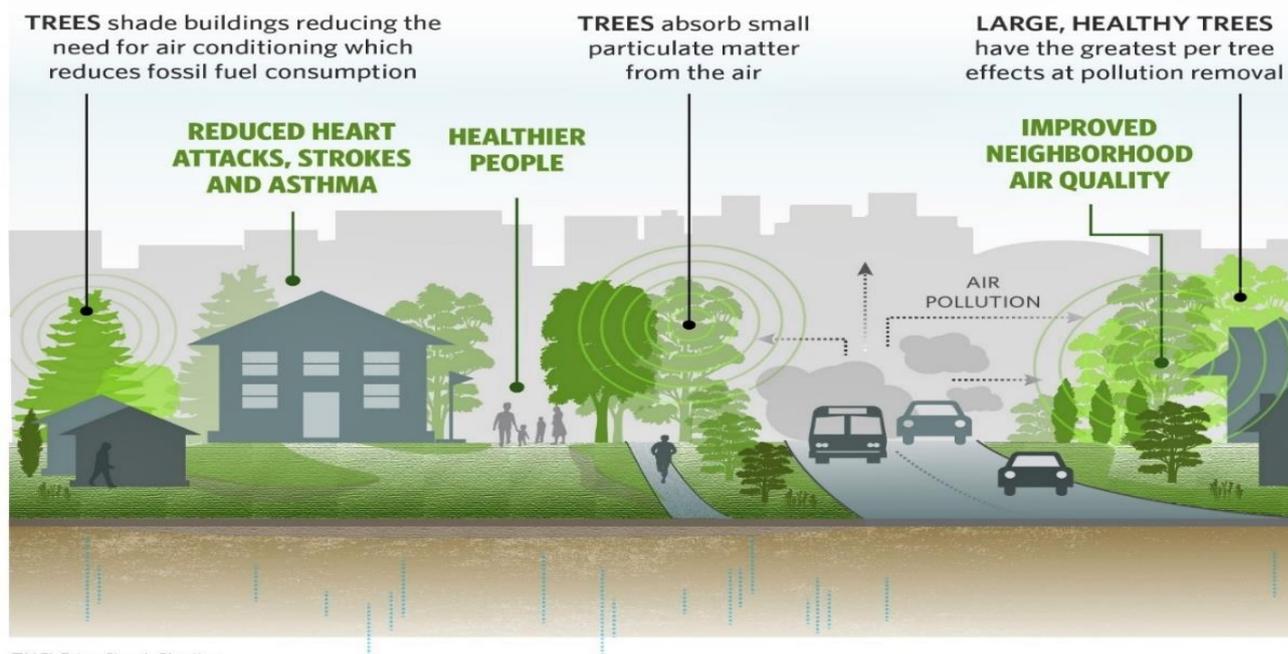


Fig.6: Urban Air Quality. Source: The Nature Conservancy, USA (nature.org)

A 2020 research study assessed the potential effect of urban trees in Dublin in removing particulate matter from the atmosphere (see [Appendix B](#)). It found that trees “do cause a degree of air quality improvement and can be used to inform several national clean air strategies aimed at reducing pollutant emissions.” Critically, the researchers found that “widening the scope of Ireland’s air quality policies to include urban greenery management could be an additional measure to help reach future emissions targets.” The study should inform dlr’s approach to the planning and design of public realm and placemaking interventions, particularly in transport infrastructural, including cycleways and greenways. This is particularly relevant to the council’s [Climate Action Plan \(2019-2024\)](#).

5.3.3 Roadside Landscape Planting

Since its inception, Dlr has a proven track record in undertaking landscape planting schemes that were integral to such projects as the M50/South-eastern Motorway, Ballinteer Road Improvement Scheme, Stonemasons Way (photos below) and Church Road, Killiney. These have reached maturity and contribute to air quality, CO² sequestration, habitat creation,

enriched biodiversity and visual amenity. In planning future projects, dlr will need to limit losses of existing mature vegetation and to implement well-designed planting programmes in accordance with best practice guidance, principally that published by the well-respected, trans-disciplinary **Tree Design and Action Group** (www.tdag.org.uk) [19].



Well-established, diverse planting forming a mature sylvan roadscape at Stonemason's Way, Rathfarnham-Ballinteer (21.10.2020)

5.4 Peri-urban and Rural Landscapes - Trees, Hedgerows, Woodlands

In addition to addressing county's urban forest, the new strategy should address the county's peri-urban and rural landscapes, which account for 40% of land area in the county. There are important tree belts, small woodlands and hedgerows in these landscapes. According to **DTCS** most of the county's tree cover "is on private land (67%) which means that *their management depends on the goodwill of the property owner*". Private landowners, including those in rural areas (e.g. farmers), have mature trees, woodlands and hedgerows

on their lands. The council does not have detailed information on this vegetation. DTCS noted: “For rural areas, being largely in private ownership, the policy options are limited to incentivisation. Currently existing incentives include the *Afforestation Grant and Premium Scheme 2014-2020*, *Native Woodland Scheme*¹² and the *FEPS Scheme*¹³ are aimed at increasing forestry cover; the local authorities could promote these incentives throughout their rural areas. In terms of direct action, the authorities could ensure that existing canopy, for example present in hedgerows, is retained through the strict enforcement of hedgerow cutting legislation.”



Peri-urban landscape: view from Ballyedmonduff eastward to Killiney/Dalkey and the coast, with private trees/woodlands in foreground and intense urbanisation evident in mid-ground (Carrickmines Retail Park and high-density apartment developments, Glenamuck Road (13.11.2020)

Summary categorisation of main types of private and institutional tree owners:-

- **Business and Enterprise:** some campuses have significant tree populations and/or potential for more tree planting. The most significant in the county are South County Business Park (I.D.A Ireland) and Sandyford Industrial Estate (incl. Sandyford B.I.D).
- **Educational (Institutional):** Several schools and colleges - mainly in urban and peri-urban areas – have substantial tree belts, groups of mature trees and small woodlands. Examples include U.C.D, I.A.D.T, Blackrock College and St. Columba’s College, Rathfarnham.
- **Sportsgrounds (private):** the county has many golf courses with substantial stocks of mature trees. Some other sports clubs have large grounds with substantial tree populations, e.g. St. Thomas’, Tibbradden.

6. FORWARD PLANNING - PROGRESS ON TREE PROTECTION

The **County Development Plan (2022-2028) Maps - Chief Executive's Draft** – include a systematic update of 1,010 mapping symbols with the objective to **"Protect and Preserve Trees and Woodlands"**. This objective represents the planning authority's statutory commitment to tree preservation through the Development Management process. The resulting dataset was compiled using smartphone GIS technology. **Tree Selection was made by applying objective Selection Criteria - see Appendix B** (pg.10). The dataset comprises 2,995 symbols - individual trees, groups of trees, hedgerows and woodlands. It will be available to developers' consultants (typically landscape architects and arborists) as essential information for incorporating trees in development proposals, as part of the **Pre-planning Application Stage**, and in accordance with the CDP's Development Standards. It also provides a baseline for the council in exploring potential **Tree Preservation Orders (Section 205, Planning and Development Act, 2000)**, subject to full arboricultural and environmental assessments in accordance with best practice.

7. RESULTS OF REVIEW OF 'dlr TREES' (2011-15)

Despite some successes, the overall implementation of **dlr TREES (2011-15)** has been **significantly-constrained by limited human resources. This is significantly inhibiting the Council's ability to fully execute - in a coherent and consistently manner – the dlr TREES' Action Plan (pg. 51-53)**. Of 14 Actions, 5 were fully or partially executed. The following are key findings of an audit of some significant actions:-

- Ø **Objective 1c, "appoint in-house Arboricultural Officer" - not met.** The absence of a full-time **Tree Officer** is severely limiting delivery of the Strategy's goals.
- Ø **Objective 1b, "Evaluate electronic Tree Management System ..."** **achieved in full.** *Ezytree™* software procured by Council and used sporadically (staffing constraints).
- Ø **Objective 1d, "Set priorities and survey, map and log Council-owned trees on a phased basis":** **Partially achieved, surveys sporadic** (staffing constraints); 16,525 no. trees mapped out of a total estimated 60,000 Street Trees (27.5%)
- Ø **Objective 2a, "Identify opportunities for strategic tree planting".** Partially achieved: preliminary desktop study conducted by consultants (JBA.2019)
- Ø **Objective 2b: planting target of 5,000 by 2015 : not fully met** (approx. 3,500)
- Ø **Objective 4, "Engage with Interest Groups": limited success - no Tree Officer**

The review also considered the strategy's **Policy Statements on Trees and Development** (pgs. 37-39), in the light of practical experience of negative impacts during construction stage of permitted developments [20]: -

- **D. 1 Development Management (DM):** tree losses are substantial and accelerating across the county especially in the peri-urban corridor between Rathfarnham-

Sandyford-Glenamuck-Carrickimines; with losses especially evident in both high-density infill and SHD schemes, sometimes in contravention of planning conditions. Compliance, inspection and enforcement are variable, weak and inadequately resourced, so that unnecessary losses persist. **There's an urgent need for more resources and a review of enforcement**, if effective tree preservation is to be achieved, in accordance with the County Development Plan's policies and standards.

- **D.2 Tree Planting and Development**: amelioration and mitigation through new planting has been somewhat successful, achieved by early and ongoing collaboration with developers' landscape consultants, up to and including construction stage
- **DM – Tree Bonds**: a robust methodology for the calculation and administration of *Tree Bonds* is urgently required for effective control permitted developments.

Note: strict application of dlr's [Standard Planning Conditions for Trees and Landscape design](#) (agreed between [Parks & Landscape Services](#) and [Planning](#) in 2013) can be a most effective tool in ensuring Tree Protection and new planting in permitted developments. However, in a number of important, inconsistency in the use of and/or absence of appropriate conditions by **An Bord Pleanála's (ABP)**, has significantly weakened the planning authority's ability to achieve effective control.

8. CONSULTATION: – ISSUES FOR DEBATE

8.1 Questions and Actions

- ∅ [How to undertake a complete, robust Evidence Base](#), i.e. mapping and analysing the county's trees, to inform effective Tree Management and Planting?
- ∅ [Is there sufficient interest from the public](#) in Citizen Science + Tree Stewardship?
- ∅ [Should set strategic-level Tree Canopy Cover and Tree Planting Targets?](#) if so, how and what resources would be needed to meet such targets?
- ∅ [How should the council fund Planting Programmes](#) that would bring tree benefits to all communities, enriching their experiences of Nature, and thereby establishing a [sustainable Urban Forest](#) for future generations?
- ∅ [How can the council reduce and mitigate ongoing Tree Losses](#), arising from to urbanisation (planning/development) and infrastructure projects?
- ∅ [Plant health and Diversity: how can we](#) apply future-proof practices against known and anticipated Pests and Diseases that pose risks to the health and sustainability of the county's trees?
- ∅ [What should be included in an Education & Awareness-raising programme?](#)

8.2 Opportunities – Suggested Initiatives

- ∅ **'Trees for All - All for Trees'** – a [County Trees Charter](#) to be signed by all tree owners and interested parties, committing to a [Tree Culture](#) and action plan, modelled on Greater Lyon's [Le Chartre d'Arbes \[10\]](#), with an ethos informed by the 13th.Century ['Charter of the Forest's \[21\]](#) principles of [The Common Good](#) and social solidarity.

- ∅ **Expand Canopy:** invest in and implement a design-led a 15-year *Urban Forest Masterplan* using modern, best practice planting methods, including prudent Tree Selection for diversity, stormwater management (Green Streets/Rain Gardens).
- ∅ **Communications & Awareness-raising:** create a dedicated *dlr Trees & UF Web* platform with publicly-accessible, interactive GIS dashboard of the county's trees
- ∅ **Citizen Science** [22] – develop a Pilot Scheme for Mapping Urban Trees, using mobile technology, with trained volunteers drawn from locally-active citizens and groups
- ∅ **Citizen Tree Stewards** [23,24] – develop a pilot Neighbourhood Scheme for the planting, care and establishment of trees in collaboration with council staff.
- ∅ **Trees and the Arts:** engage the county's creative community and other partners in programming a 1-day *dlr Tree Festival*⁴ to promote trees and a *Tree Culture*
- ∅ **Funding:** avail of the government's *Grant Scheme for Urban Woodlands*
- ∅ **Business and Enterprise:** develop a collaborate role for and with this sector (including Corporate Social Responsibility projects)

9. ROADMAP TO A NEW STRATEGY

The projects' **Key Stages** to date and next steps are as follows:-

Pre-draft Issues Paper (August 2020 – January 2021)

- Issues Paper finalised: Sept. - Oct. 2020
- *SPC Environment & Climate Action* – presentation given 4 Nov. '20'
- *SPC Community, Culture & Well-being*: presentation due Jan. 2021 (t.b.c)
- Internal Consultation [dlr service depts.]: mid-Nov. 2020 to mid-Jan. 2021)
- **External Consultation:** late-Nov. 2020 to late-Jan. 2021

Draft Strategy (February – June 2021)

- Review submissions on Issue Paper: mid-Jan. to early-Feb. 2021
- Prepare Draft Strategy: mid-Feb.to early-May 2021
- Circulate for Internal Consultation: May 2021
- Present to Council: early-June 2021
- **Public (External) Consultation:** mid-June to late-August 2021

Final Strategy (June – October 2021)

- Review Consultation Submission: August 2021
- Finalise Strategy report: Sept.- Oct. 2021
- **Present report to Council: early-Nov. 2021**
- Amendments post Council meeting: mid-Nov. 2021
- **Council adopts new Strategy:** late-Nov. 2021
- Publish and Promote Strategy: Dec. 2021 >>

⁴ For an example of a Tree Festival see <https://urbantreefestival.org/>

10. HOW TO MAKE A SUBMISSION

Please make your submission in only 1 of the following 3 ways.

- 1) Postal: Parks+Landscape Services, Level 3, County Hall, Marine Rd., Dún Laoghaire, Co. Dublin. Please mark your envelope, "dlr Trees & Urban Forestry Strategy".
- 2) Online: go to the **dlr Consultation Hub** at <https://dlrcoco.citizenspace.com/>
- 3) Email: xxx@dlrcoco.ie with "**dlr Trees & Urban Forestry Strategy**".
in the subject line of your message

Deadline: please submit by 5.00p.m, 31st. January 2021



Word Cloud of key tree strategy topics

APPENDIX A: REFERENCES and FURTHER READING

References

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23. [Trees and Youth in the City: Research on Urban Forest Stewardship & Positive Youth Development](#). Kathleen L. Wolf Ph.D, University of Washington Forest Resources, Seattle, WA, USA.

Resources and Further Reading

- Ø [***The Man Who Planted Trees***](#). *Lost Groves, Champion Trees, and an Urgent Plan to Save the Planet*. Chap.15-Ireland, Jim Robbins. Spiegel & Grau, New York. 2012.
- Ø [***Woodlands for Health***](#). www.getirelandwalking.ie/walkingprogrammes/woodlandsforhealth/
- Ø [***Sacred Trees of Ireland***](#). Christine Zuchelli. Collins Press. 2016
- Ø [***Irish Trees – Myths, Legends & Folklore***](#). Niall MacCoitir_
- Ø [Urban trees at the center of the Greater Lyon Authority’s Climate Change Adaptation Strategy](#). Frédéric Segur. 8 Février. Grand Lyon la Metropole, Fr.
- Ø [Building local identities through tree diversification](#). Greater Lyon, France. Species Diversification. T.D.A.G. 1992-on-going.
- Ø [Tree Species Selection for Green Infrastructure: A Guide for Specifiers](#), Issue 1.3. Trees & Design Action Group, U.K. Hiron, A.D, Sjöman, H (2019) download at:- www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_treespeciesguidev1.3.pdf
- Ø [Trees in the Townscape - A Guide for Decision Makers](#). T.D.A.G (2012)
- Ø [The benefits of large species trees in urban landscapes: a costing, design and management guide](#). Tom Armour, Mark Job, Rory Canavan Arup. Extract: www.ciria.org. London. March 2012.
- Ø [Stormwater to Street Trees- Engineering Urban Forests for Stormwater Management](#). EPA, U.S.A. www.epa.gov/sites/production/files/2015-11/documents/stormwater2streettrees.pdf

APPENDIX B: MAPPING TREES AND WOODLANDS FOR PRESERVATION AND

PROTECTION CDP 2016-22: Objective: "To protect and preserve trees and woodlands".

SELECTION OF TREES – METHOD STATEMENT

Scope and Purpose

The scope is countywide – urban, peri-urban and rural – with a particular priority to survey trees on private, institutional lands (a minority on public land)⁵. The survey categories (under "Situation" filed in GIS Collector App.) are: -

- Avenue (trees forming part or all of a vehicular or pedestrian formal, linear route)
- Individual Tree (large, separate specimens)
- Woodland (mixed or monocultural)
- Hedgerows (urban or rural; mature, well-formed and established)
- Other (e.g. groups or belts or lines of trees)

Background

Symbols shown on the 14 maps date from dlr's first CDP after its establishment (Jan.1994), and include symbols inherited from Dublin County Council. The symbols have never been systematically reviewed and updated. Joint action to do so was agreed between Dlr Parks+LS and Planning (2010), during preparation of *TREES 2011-15*. Unfortunately, for reasons unknown – likely due to resource constraints – work was not commenced until the early in the current CDP Review (2022-28). In autumn 2019, Dlr Planning agreed to a recommendation from Dlr Parks+Landscape Services that the work was essential.

Work Package and Deliverables

Trees Selection - Criteria

Trees must meet certain qualifying values criteria. Inclusion is not an absolute commitment to preservation, as it is based on an initial observational assessment. Final decision-making as to actual preservation and protection are subject to full Arboricultural Assessment (BS 5837-2012) – including a study of retention feasibility - as and when development proposals arise. Feasibility is undertaken in accordance with best arboricultural practice and landscape design practices. Selected trees may also be significant candidates for Tree Preservation Orders, again subject to full assessment and justification, pending assignment of staff.

⁵ > **67% of the county's trees are in private and institutional ownership**. This presents a strategic challenge in terms of protection and sustaining cover, bearing in-mind development and infrastructural pressure, land-use change. Dlr's effective control of what happens to private trees is limited to persuasion and negotiating with landowners, except where those trees come with the Planning | Development Management process.

Trees Selection - Criteria

Five simplified criteria were developed for the work package. To qualify for inclusion, trees, hedgerows, woodlands must meet at least one of the following specific criteria: -

1. **Visual** – locally visible in neighbourhood, district, roadscape, or wider landscape
2. **Amenity** – residential (e.g. screening, framing, etc.), contribute to quality of urban or rural place; beautiful appearance (form, flowers, stature, sculptural quality)
3. **Habitat** – of ecological value or species significance (e.g. Oak’s association with large no. of insects; pollinator benefits; native species; hedgerows for wildlife)
4. **Heritage** – cultural (e.g. artistic or historic connection, commemoration), built (e.g. within curtilage/attendant grounds of a Protection Structure or Monument)
5. **Other** – an unusual or rare Genus and/or Species in the county

Exclusions

- Trees in poor condition, with evident structural defects and deformities)
- Trees with likely remaining lifespans of 12 years or less.
- Trees to be removed as part of permitted development (at survey date)
- Trees in the line of road reservations (CDP Road 6-Year Objectives)
- Trees in line of proposed '**Bus Connects' "Preferred" Core Corridor 13** (March 2020) **are to be shown** as per our current objective "To preserve and protect".

Task 1: review existing **1,010 no. symbols** using ArcGIS Collector App.

- delete where trees no longer existing assessment ("Yes/No" field selector)
- record data where symbols to be retained

Task 2: add new, proposed symbols for trees meeting the qualifying criteria

Resources – Materials and Equipment

- Desktop analysis – 14 no. hard copy CDP Maps, Google Map (2D, 3D, Street View)
- Fieldwork - ArcGIS Collector App. (survey device: android smartphone)
- Cherrywood SDZ Scheme – Map 5.2: Vegetation
- Dataset 1: Tree Register of Ireland (T.R.O.I), Tree Council (2001) – national champion and veteran trees - converted to ArcGIS Map
- Dataset 2: Dlr Tree Preservation Orders – converted to ArcGIS Map

Timeframe: Nov. 2019 – Aug. 2020 for 1st. Draft of new CDP 2022-28