Infrastructure Strategy

Hackney Council

Project number: 60627741 December 2021

Delivering a better world

AECOM

Hackney Green

Quality information

Prepared by	Checked by	Verified by	Approved by
Sam Griffiths	Kathryn Whitmore	Michael Henderson	Jon Rooney

Revision History

Revision	Revision date	Details	Authorized	Name	Position
First draft	07/05/2021	For client review	SG	Sam Griffiths	Project Manager
Second draft	28/06/2021	For client review	JR	Jon Rooney	Project Director
Third draft	19/07/2021	For client approval	SG	Sam Griffiths	Project Manager
Final draft	09/12/2021	Final	SG	Sam Griffiths	Project Manager

Distribution List

Association / Company Name

Matthew Carrington – LB Hackney

Prepared for:

Hackney Council

Prepared by:

AECOM Limited Aldgate Tower 2 Leman Street London E1 8FA United Kingdom aecom.com

© 2021 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

Execut	tive Summary	. 7
1.	Introduction	. 9
2.	Why a green infrastructure strategy?	11
3.	Baseline and Needs Assessment	19
4.	Objectives and Opportunities	36
5.	Delivering the Green Infrastructure Strategy	43
6.	Monitoring and review	68
Appen	dix A National Planning Policy	70
Appen	dix B Health and demographic maps	72
Appen	dix C Consultees	76

Figures

Figure 1 Strategy structure	9
Figure 2 Policy Context	14
Figure 3 Existing Green Cover	
Figure 4 Main Areas of Public Open Space	
Figure 5 Tree Cover and Tree Preservation Orders	24
Figure 6 Rivers and Flood Risk	
Figure 7 Sites of Importance for Nature Conservation	
Figure 8 The strategic green infrastructure network	30
Figure 9 Composite Needs Distribution	33
Figure 10 Opportunity Areas and Area Action Plans	
Figure 11 Elements contributing to delivery	
Figure 12 Hackney Spatial Framework	
Figure 13 Spatial Framework Proposed Green Link 1	
Figure 14 Spatial Framework Proposed Green Link 2	
Figure 15 Spatial Framework Proposed Green Link 3	
Figure 16 Spatial Framework Proposed Green Link 4	
Figure 17 Spatial Framework Proposed Green Link 5	
Figure 18 Spatial Framework Proposed Green Link 6	
Figure 19 Spatial Framework Proposed Green Link 7	
Figure 20 Spatial Framework Opportunities in area of deficiency	
Figure 21 Population Density	72
Figure 22 Indices of Multiple Deprivation	73
Figure 23 Cardiovascular Disease	74
Figure 24 NO ₂ Concentrations	75

Tables

Table 1 Delivery of Proposed Green Link 1	50
Table 2 Delivery of Proposed Green Link 2	
Table 3 Delivery of Proposed Green Link 3	54
Table 4 Delivery of Proposed Green Link 4	56
Table 5 Delivery of Proposed Green Link 5	58
Table 6 Delivery of Proposed Green Link 6	60
Table 7 Delivery of Proposed Green Link 7	62
Table 8 Delivery of Proposed Improvements to the South West of the Borough	64

Executive Summary

Executive Summary

Hackney Council recognises the significant threats posed by the impending climate and biodiversity crises, and an emerging health crisis. A range of strategies and programmes are in place to address them.

This strategy brings together our aims and objectives for the borough's green infrastructure to ensure that it is planned, designed and managed to better meet our commitments to addressing the impacts of climate change, poor health and biodiversity loss.

Hackney is fortunate to be a relatively green inner-city borough. Successive strategies, plans and policies have tried to ensure the protection of the most important spaces for people and habitats for wildlife. However, in recent years it has become increasingly well documented that our parks and green spaces, rivers, wetlands, street trees, natural habitats, gardens, green roofs and walls can provide a wide range of societal benefits if they are considered in a more holistic way as a network of green infrastructure.

For example, parks have traditionally been designed and managed to provide opportunities for sport, recreation and conservation of built or landscape heritage. But the need to address contemporary and future challenges suggests that the design and management of parks needs to pay more attention to their role in combatting climate change, biodiversity loss and improving public health in a more proactive way. Similarly, the large parts of the borough's public realm dominated by streets designed for motor vehicles will also need to change to accommodate more active forms of travel in greener, climate resilient settings. And buildings, the very essence of the city's shape and form, have a role to play too by incorporating features such as green roofs and walls and sustainable drainage.

An approach based around the concept of green infrastructure requires a strategy that looks across physical boundaries, departmental programmes, and policy objectives. This is needed to identify opportunities for more holistic initiatives and projects that help to adapt the borough to the effects of climate change, support the physical health and mental wellbeing of residents and provide a network of habitats to enable wildlife to thrive.

Consequently, this strategy identifies the issues across the borough that green infrastructure can help to address and sets out a series of spatially located projects, based on a high-level needs assessment, that are most likely to provide the greatest benefits as part of a multi-functional network. These projects and other interventions include proposals in parks, housing estates, the street network and other areas of public realm.

The strategy also highlights the need for further organisational development and policy changes that will contribute to a more integrated approach to the delivery of green infrastructure across the borough by promoting inter-disciplinary and cross-departmental collaboration, supporting and facilitating action by civic groups and community-based organisations, and providing clear policy guidance to developers and other managers of space that is part of the public realm.

This green infrastructure strategy provides a framework for decision making and resource allocation that will enable the transformation of neighbourhoods in Hackney that are resilient to the effects of climate change, provide a network for wildlife to thrive and support the physical health and mental wellbeing of residents. The strategy will be implemented through more detailed plans, including the annualised plans of the Hackney Parks and Green Spaces Strategy, and the Hackney Local Nature Recovery Plan and Hackney Urban Forest Plan, and by application of key policies in the Hackney Local Plan, such as 'Protection and Enhancement of Green Infrastructure'; Liveable Neighbourhoods' 'Overheating and Adapting to Climate Change'; 'Health and Wellbeing' and 'New Open Space'.

Introduction

1. Introduction

- 1.1 This Green Infrastructure Strategy (hereafter referred to as 'this Strategy') provides a framework for protecting, improving, expanding and connecting Hackney's green infrastructure and identifies mechanisms for delivery.
- 1.2 Although the borough is densely developed and populated, Hackney remains one of the greenest inner London boroughs.¹ Hackney's parks and green spaces vary in size, ranging from large areas of Metropolitan Open Land (MOL), such as Hackney Marshes, to informal pockets of amenity grassland around housing estates. This network of open space, combined with the borough's street trees, gardens, wetlands and waterways, and built green features, such as green roofs and walls; form the green infrastructure network. It can be planned, designed and managed to provide a wide range of environmental, social and economic benefits. Planned and managed strategically it can help deliver the following vision:

"By 2040 Hackney will be a series of liveable neighbourhoods that are resilient to the effects of climate change, provide a network for wildlife to thrive and support the physical health and mental wellbeing of residents."

- 1.3 This Strategy demonstrates how the policies in Hackney Council's Local Plan 2033,² in combination with other borough strategies such as the Transport Strategy, can make a significant contribution to increasing and improving green infrastructure across Hackney. It provides an overarching approach to green infrastructure and will inform a series of operational plans, which set out actions for improving specific elements of green infrastructure; in particular, parks through the annual action plans of the Hackney Parks and Green Spaces Strategy,³ wildlife habitat through the Hackney Local Nature Recovery Plan and trees in the public realm through a forthcoming Hackney Urban Forest Plan.
- 1.4 Figure 1, sets out the structure of this Strategy.



Figure 1 Strategy structure

¹ https://www.london.gov.uk/sites/default/files/11015viv natural capital account for london v7 full vis.pdf

² <u>https://hackney.gov.uk/lp33</u>

³ https://drive.google.com/file/d/1JZ89BH7kxJiHshYebhB8qs6xxw6_ebWe/view

Why a green infrastructure strategy?

2. Why a green infrastructure strategy?

Introduction

- 2.1 This is a time of significant change in the borough. The forecast population growth over the next 20 years, and the Council's targets set as part of the declaration of a climate emergency, will require the borough's green infrastructure to provide an increased range of functions and benefits in the coming years. In addition, the Covid-19 pandemic has further highlighted the importance of Hackney's green infrastructure; in particular the need for open spaces that allow people to socialise and exercise outdoors.
- 2.2 Green infrastructure comprises a stock of physical assets (such as green spaces, street trees, natural habitats and features such as green roofs), which can deliver benefits to the health and well-being of Hackney's residents; as well as adapting to the effects of climate change, providing habitat for wildlife and supporting a more sustainable pattern of growth for the borough.
- 2.3 These benefits can be assigned an economic value. The London Natural Capital Account⁴ calculates that Hackney's parks provide benefits to the value of £646 per person per year which is a benefit cost ratio of 1:36.
- 2.4 Whilst expressing the monetary value and benefit cost ratio of Hackney's green infrastructure highlights it's economic benefit it is important to note that not all the potential benefits of green infrastructure can be expressed in monetary terms. Many green infrastructure benefits can also be characterised by equally important social, cultural and ethical values.

Hackney's Climate Change Declaration included the resolution to, amongst other things:

- tell the truth about the climate emergency we face;
- pursue our declaration of a climate emergency with the utmost seriousness and urgency;
- do everything within our power to deliver against the targets set by the IPCC's October 2018 1.5 degrees report, across our functions (including a 45% reduction in emissions against 2010 levels by 2030 and net zero emissions by 2040), and seek opportunities to make a greater contribution;
- involve, support and enable residents, businesses and community groups to speed up the shift to a zero carbon world;
- work closely with them to establish and implement successful policies, approaches and technologies that reduce emissions across our economy while also improving the health and wellbeing of our citizens;
- conduct an annual Citizens' Assembly with a representative group of local residents to allow for public scrutiny of the Council's progress and explore solutions to the challenges posed by climate change; and
- work with other local governments (in the UK and internationally) to discover the best methods to limit climate change and put them into practice.

Key benefits of green infrastructure

Health and Wellbeing

2.5 An active and healthy lifestyle can contribute to overall good health and wellbeing, including cardiovascular and mental health. Based on a survey of residents who undertake moderate or vigorous physical activity in a given week, 62% of Hackney's population exercise regularly in a local park,⁵ demonstrating both the importance of green spaces to encourage physical activity but also the need to provide similar or equivalent opportunities for outdoor exercise provision in parts of the borough where there are fewer parks.

⁴ <u>https://www.london.gov.uk/sites/default/files/11015viv_nca_by_borough.pdf</u>

⁵ https://hackneyjsna.org.uk/wp-content/uploads/2019/06/Hackney-Health-and-Wellbeing-Survey-2019-Report.pdf

- 2.6 Outdoor air pollution is thought to be among the biggest causes of ill-health and premature death in the borough. Some areas are above the EU limit values (annual average exceeding 40ug/m3) and World Health Organisation guidelines for air quality. This is largely caused by emissions from vehicles on the road network. As well as the cost to human health, the financial impact of poor air quality on the population's health was estimated to be £30.3m and £19.9m for PM2.5 and NO₂ respectively in 2019, based on 2016 population estimates.
- 2.7 The urban heat island effect also affects the health of residents, with Hackney being in the top three areas in England most vulnerable to heatwaves.⁶ Excessive heat can result in an increase in deaths and ill-health particularly affecting the very old and very young or those with long term illness. As summers become hotter it will be increasingly necessary to cool the borough's streets and public realm.
- 2.8 The Covid-19 pandemic has highlighted the importance of providing adequate space in Hackney's parks, green spaces and public realm for local people to travel, socialise and exercise safely. Hackney's immediate response included temporary measures to allow social distancing in the urban environment and extending the implementation of Low Traffic Neighbourhoods.⁷
- 2.9 The benefit extends beyond the mitigation of pressures associated with the pandemic. In 'Gear Change: A bold vision for cycling and walking',⁸ the Department of Transport sets out how *"increasing cycling and walking can help tackle some of the most challenging issues we face as a society improving air quality, combatting climate change, improving health and wellbeing, addressing inequalities and tackling congestion on our roads."* It goes on to explain that the *"recent COVID -19 restrictions"* have shown *"the public's desire to be more active, and the rise in popularity of cycling and walking"* and highlights that *"now is the opportunity to "embed those changes in peoples travel behaviour"*.

Climate Change

- 2.10 In June 2019, Hackney Council declared a climate emergency, committing to deliver net zero emissions across council functions by 2040⁹ ten years earlier than the target set by central government. In addition to working towards net zero there is also a need to put in place measures that will mitigate the impacts of climate change which are already manifest such as increased stormwater flooding and heatwaves.
- 2.11 The importance of green infrastructure in helping to adapt to the impacts of climate change is highlighted in the Hackney Labour's 2018 manifesto commitments. The manifesto aims to ensure "the selection and spatial distribution of our trees and plants is driven by the best available research to improve Hackney's resilience to climate change-induced extreme weather events, such as floods and heatwaves and contribute towards fighting the borough's poor air quality."¹⁰

Nature Recovery

- 2.12 There is now a widely-acknowledged biodiversity crisis. The UK State of Nature report indicates that the abundance and distribution of species has, on average, declined over recent decades, and many measures suggest this decline is continuing.¹¹
- 2.13 The green infrastructure network in Hackney supports a wide range of wildlife. The majority of species use a range of semi-natural and amenity green spaces and the areas of open water in the borough, but the built environment can provide wildlife habitat too.
- 2.14 Hackney's most valuable wildlife habitats are designated as Sites of Importance for Nature Conservation (SINC). The protection and management of these areas remains the most important requirement for the conservation of Hackney's wildlife. But establishing a network of additional habitats and ecological corridors across the borough will also be necessary to support and encourage a nature recovery.

Sustainable Growth

2.15 Hackney's population is expected to grow from an estimated 279,700 people in 2019 to 320,000 by 2033,¹² and 335,000 by 2041;¹³ an increase of approximately 20%. Hackney's green infrastructure

⁶ Future of London, "Managing London's ExposurE to CLiMatE ChangE," 2016.

⁷ https://news.hackney.gov.uk/emergency-road-safety-measures-further-20-roads-set-to-close-to-through-traffic/

⁸ <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-</u> bold-vision-for-cycling-and-walking.pdf

⁹ https://hackney.gov.uk/climate-emergency-declaration

¹⁰ http://www.hackney-labour.org.uk/local-manifesto-2018/

¹¹ State-of-Nature-2019-UK-full-report.pdf (wildlifetrusts.org)

¹² https://drive.google.com/file/d/1TKvAt6008MP0aTDcdBeMnoJ25C2VUB8R/view

¹³ https://drive.google.com/file/d/170iEsn79cuLapAguGVyovqMwpvQ6lC07/view

therefore needs to have greater capacity if Hackney is to enjoy the same, or greater, level and quality of provision over the next 20 years.

- 2.16 Hackney is also expected to experience increased development in the coming years. The City Fringe and Upper Lee Valley Opportunity Areas, which extend over large parts of the borough, have been identified by the Greater London Authority (GLA) as having significant capacity for regeneration and development.¹⁴ Increased development and densification can put additional pressure on the exiting green infrastructure network, but it can also provide a mechanism for increased urban greening and transformation of the public realm.
- 2.17 Each part of the borough has a distinct urban character. Some areas require conservation or improvement. This is described in the Hackney Characterisation Study (2018)¹⁵ and London's Natural Signatures (2011).¹⁶ Consultation completed as part of the Characterisation Study concluded that "Hackney 'feels' green and that there is a successful amount of tree planting in the streets... but there was a need for more green space in the western part of the borough".
- 2.18 Well-designed green infrastructure can make a significant contribution to the character of the urban realm. For example, the Study highlights the need for tree-planting along the A10 corridor and greening of the boroughs housing estates to help soften some of the harsher parts of the built environment.
- 2.19 It is important to recognise that there are some areas of the borough, particularly areas with a strong historic typology, that would require a particularly sensitive approach to new green infrastructure. Such areas include the setting of significant landmarks including St Leonard's Church, Shoreditch, the Castle at Stoke Newington and St Augustine's Tower. However, well-designed green infrastructure should typically be considered as a means of improving townscape character, including the historic environment.

https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/opportunity-areas/what-are-opportunity-areas
 https://drive.google.com/file/d/1iHOc7NyJd9Gf2YzrLhIHhuTab9OpL-H7/view

http://publications.naturalengland.org.uk/publication/6540238365130752#:~:text=Downloads%20available%20for%20this%20re cord%20%20%20%20%202014%2F06%2F03%20%2025%20more%20rows%20 – see 9. North Thames Gravels

Policy context

2.20 This document is a borough-wide strategy and therefore part of a wider policy and land use planning framework. The relationship of this Strategy to the wider policy framework is set out in Figure 2 Policy Context'. Policy relevant to this Strategy is summarised below.

National Policy and Strategy		National Planning Policy Framework and Planning Practice Guidance		25 Year Environment Plan		
Regional Policy		London Plan 2020				
Regional Strategy and Guidance		London Environment Strategy		Mayor's Transport Strategy		
		All London Green Grid		London's Health Inequalities Strategy		
Borough Planning Policy		Hackney Local Plan				
Borough Strategies	Transport Strategy		Green Infrast			Surface Water Management Plan
Borough Operational Plans	Local Nature Recovery	Plan	Parks and Green Spaces Strategy		Urban Forest Plan	

Figure 2 Policy Context

National Policy

National Planning Policy Framework (NPPF), February 2021¹⁷

2.21 The NPPF sets out the Government's planning policies and how these are expected to be applied. Paragraph 8, section b, articulates the Government's environmental objective:

"to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy ."

2.22 Paragraph 20 sets out that:

"Strategic policies should set out an overall strategy for the pattern, scale and design quality of places, and make sufficient provision for... conservation and enhancement of the natural, built and historic

17

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.p

environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation. "

- 2.23 The Government's Natural Environment Planning Policy Guidance was updated in 2019.¹⁸ Paragraphs 004 008 provide guidance about green infrastructure, including the promotion of *"green infrastructure frameworks or strategies prepared at a district-wide scale*" to inform *"the location of existing and proposed green infrastructure networks and set out appropriate policies for their protection and enhancement*".
- 2.24 Further pertinent paragraphs from the NPPF, as well as extracts from the Government's 25 Year Environment Plan and the emerging Environment Bill are provided in Appendix A.

Regional Planning Policy

The London Plan 2021¹⁹

- 2.25 The London Plan was adopted in March 2021 and sets out the policy framework for the development of London over the next 20-25 years.
- 2.26 Chapter 8 focuses on Green Infrastructure and Natural Environment. Policy G1 'Green Infrastructure' states that London's network of green and open spaces should be protected and enhanced, and that boroughs should prepare green infrastructure strategies to identify key green infrastructure assets and opportunities for strategic green infrastructure interventions. Chapter 8 goes on to list policies that provide greater detail on specific aspects of green infrastructure, including: trees and woodlands, natural habitats and greening of the built environment.

The London Environment Strategy 2018²⁰

- 2.27 The London Environment Strategy provides an overarching framework for the protection, management, and improvement of London's environment, including London's green infrastructure and natural environment.
- 2.28 It sets out the mechanisms available to the Mayor, and the initiatives the GLA will deliver, to protect, enhance and increase London's green infrastructure. This includes policies and programmes to:
 - green streets and buildings, by increasing the extent of green roofs, green walls and sustainable drainage;
 - develop programmes and projects to ensure that London's urban forest is maintained and expanded;
 - develop a biodiversity net gain approach for London; and
 - promote wildlife-friendly landscaping in new developments and promoting the concept of natural capital accounting to encourage more investment in green infrastructure.

The Mayor's Transport Strategy 2018²¹

- 2.29 One of the key objectives of the Transport Strategy is to promote more active travel making journey's through walking or cycling. The strategy acknowledges that green infrastructure in streets and public realm encourages this necessary behaviour change.
- 2.30 The Transport Strategy also recognises the key role the transport network has in providing new green infrastructure in London, for example creating opportunities for new street tree planting and implementation of Sustainable Urban Drainage Systems (SuDS).

The London Health Inequalities Strategy 2018²²

2.31 The London Health Inequalities Strategy confirms that living in greener places is linked to longer life expectancy and better mental and physical health and that living in greener areas may reduce the impact of low incomes on health. Consequently, it recognises that it is essential that all Londoners have access to good quality green space and a greener public realm.

¹⁸ <u>https://www.gov.uk/guidance/natural-environment</u>

¹⁹ <u>https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf</u>

²⁰ https://www.london.gov.uk/sites/default/files/london_environment_strategy_0.pdf

²¹ https://www.london.gov.uk/sites/default/files/mayors-transport-strategy-2018.pdf

²² https://www.london.gov.uk/sites/default/files/health_strategy_2018_low_res_fa1.pdf

Borough Planning Policy

Hackney Local Plan (LP33)

- 2.32 The Local Plan is the Council's key strategic planning framework, setting out an approach to managing land use, alongside planning policy for development sites, places and neighbourhoods.²³
- 2.33 Policy **PP1** 'Public Realm' sets out principles that will inform the design and management of public spaces across the borough. At the heart of this policy is the need for development to contribute to improving open spaces and urban greening.
- 2.34 Policy **PP2 PP10** comprise specific place policies that "*provide strategic guidance for the Council to develop the area based plans and guide new development in these areas*". These place policies are, in turn, supported by Area Action Plans and Supplementary Planning Documents.
- 2.35 Policy **LP1** 'Design Quality and Local Character' sets out the requirement for developments to incorporate elements which enhance design quality and local character including biodiversity, urban greening features, and street design driven by the Healthy Streets approach. Green infrastructure is a central component in the Healthy Streets design checklist, which has been produced to guide schemes to deliver the greatest value across the initiatives.
- 2.36 Policy **LP9** 'Health and Wellbeing' focuses on the health and wellbeing benefits that can be delivered through regeneration and new development, with a clear acknowledgment of the role that the greening of the built environment plays in supporting better public health outcomes.
- 2.37 Policy **LP41** 'Liveable Neighbourhoods' provides greater detail on how developments will contribute to delivering improved health, carbon reductions, improve air quality and cohesive communities. There is clear reference to the role of urban greening to contribute to a healthier environment that provides climate resilience benefits.
- 2.38 Policy **LP42** 'Cycling and Walking' highlights that to create a pedestrian environment, high quality and attractive public realm is needed, delivered through *"increased tree and vegetation coverage"*.
- 2.39 Chapter 11 of the Plan focuses on Hackney's green and open spaces. Its objective is to protect and enhance existing open space and develop and improve links between these spaces. LP49 sets out five potential green chains. LP46 clearly stipulates that new development should enhance the borough's network of green and blue infrastructure, specifying the requirement of living roofs for new developments over 100m².
- 2.40 **LP47** sets an objective of delivering biodiversity net gain across the borough, emphasising the role of new development in delivering wildlife corridors. Policy **LP48** establishes Urban Greening Factor thresholds for development proposals of 10 or more units. It further sets out functionality criteria which new open spaces should meet including maximising biodiversity benefits and being provided onsite.
- 2.41 Chapter 12 sets out policies to support the transition to a low carbon and climate resilient borough, including reductions in flooding (LP53) and urban heat (LP54). Both highlight the importance of green infrastructure in helping to meet these objectives.
- 2.42 Finally, **LP58** discusses a variety of pollution concerns that must be tackled to promote health and wellbeing of residents. Green infrastructure should be used to reduce the impacts of pollution sources on Hackney's population, for instance appropriate tree planting to disperse street level air pollution or reduce construction pollution and the perception of noise, demonstrating the role of nature in enhancing the health and wellbeing of residents.

Hackney Transport Strategy 2015 – 2025²⁴

2.43 The ambition is for the borough's transport system to be:

"...an exemplar for sustainable urban living in London. It will be fair, safe, accessible, equitable, sustainable and responsive to the needs of its residents, visitors and businesses, facilitating the highest

²³ https://drive.google.com/file/d/1TKvAt60O8MP0aTDcdBeMnoJ25C2VUB8R/view

²⁴ https://hackney.gov.uk/transport-strategy

quality of life standards for a borough in the Capital and leading London in its approach to tackling its urban transport challenges of the 21st Century."

- 2.44 The Transport Strategy establishes a movement hierarchy with the needs of pedestrians considered first, followed by cyclists and car borne commuters last. This will result in the "*reallocation of road space*", with "*many schemes to encourage more pedestrian, cycling and public transport use*".
- 2.45 The vision and objectives of the Transport Strategy are, therefore, aligned with the green infrastructure aspirations of the borough and provide key opportunities to enhance and expand the green infrastructure network.

Hackney Surface Water Management Plan²⁵

2.46 The Hackney Surface Water Management Plan (SWMP) outlines the preferred surface water management strategy for the borough. It identifies nine Critical Drainage Areas (CDAs) within the borough. The SWMP sets out methods for managing surface water flooding, both within and outside of the CDAs. Management methods relevant to this Strategy include the implementation of SuDS which include green roofs, swales, ponds and wetlands.

Hackney Health and Wellbeing Strategy²⁶

2.47 The Hackney Health and Wellbeing Strategy 2022-2026 Consultation Draft aims to improve health in the borough and reduce health inequalities. The Strategy explains that our physical environment, including the natural environment and green spaces, is amongst the most important driver of health. The Strategy identifies three priority areas, namely improving mental health, increasing social connection and supporting greater financial security.

Hackney Community Strategy

2.48 The Hackney Community Strategy 2018 – 2028 directs the Council's decision making with regard to partnerships with residents, businesses, local organisations and community groups. The Strategy sets out a number of cross cutting themes, including "A greener and environmentally sustainable community which is prepared for the future". This theme includes the aim of enhancing existing green spaces and improving their connection to the wider environment, making "other spaces greener through community greening projects" as well as developing "a public realm green infrastructure plan to link up our green spaces to build Hackney's resilience to climate change".

Summary

2.49 The review of national, regional and borough planning policies and strategies highlights the importance of protecting and enhancing green infrastructure, both at a strategic and local scale. The review identifies that improving the quality and quantity of green infrastructure is a key means of adapting to the effects of climate change, and that interventions are required across the urban environment including the greening of streets and buildings. New and enhanced green infrastructure is demonstrated to play a role in improving the character of the built environment, improving public health and building climate resilience.

²⁵ https://drive.google.com/file/d/1HE1byXxKqJxINUNhtvVkGKZGzY3gqpUB/view

²⁶ <u>https://consultation.hackney.gov.uk/health-and-wellbeing/health-and-wellbeing-strategy/user_uploads/consultation-draft - hackney-22_26-hwb-strategy-8.pdf</u>

Baseline and Needs Assessment

3. Baseline and Needs Assessment

Introduction

- 3.1 Hackney's existing green infrastructure comprises a variety of different elements and components, including both public and privately-owned assets. This Strategy focuses on publicly-owned assets since these are under the Council's control. However, where data allows, the baseline highlights all major green infrastructure assets, regardless of ownership, in order to provide a comprehensive baseline understanding of existing provision.
- 3.2 Whilst green infrastructure can provide a range of benefits wherever it is provided, it can be planned, designed and managed to optimise these benefits in areas where there are particular needs. This section also identifies, in strategic spatial terms, where green infrastructure is most likely to provide the greatest benefit for health and well-being; climate adaptation and nature recovery.

Baseline: Hackney's existing green infrastructure

Extent of existing green infrastructure

- 3.3 The London Borough of Hackney covers approximately 1,900ha., making it London's fifth smallest borough. Hackney is the third most densely populated borough in London with 129 people per hectare (ha.).²⁷ With reference to Figure 3 almost 40% of Hackney is classified as green cover,²⁸ amounting to 739ha.
- 3.4 The green cover extent alone does not necessarily correspond to the quality or function of the borough's green infrastructure. The following section of this Strategy describes the different types of green infrastructure provision, considerers their distribution, their form and function.

²⁷ https://data.london.gov.uk/dataset/land-area-and-population-density-ward-and-borough

²⁸ https://maps.london.gov.uk/green-cover/

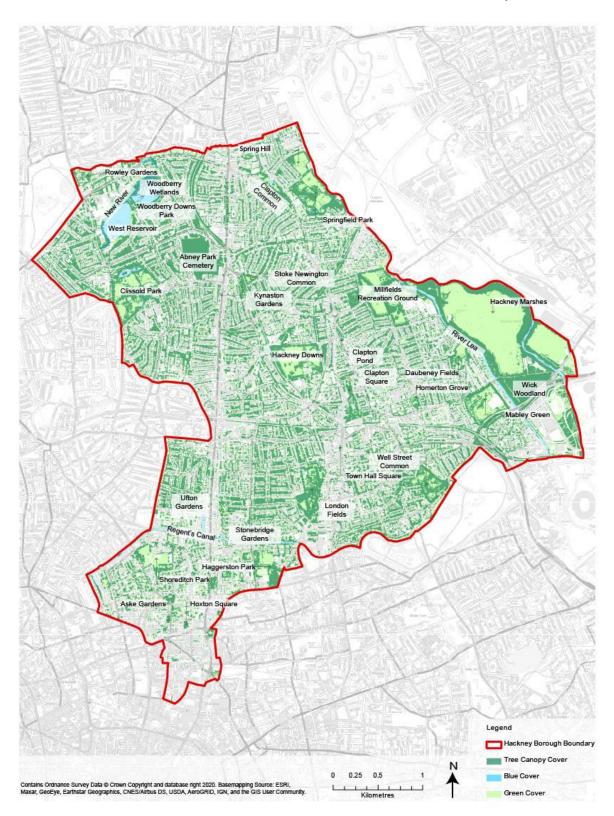


Figure 3 Existing Green Cover

Parks and amenity green spaces

- 3.5 Parks and green spaces are primarily used for formal and informal recreation. This is particularly important in Hackney since approximately three quarters of Hackney's residents do not have access to a private garden.²⁹
- 3.6 Hackney's Open Space Assessment, 2018, recorded a total of 198 publicly accessible open spaces, amounting to 359.66ha, (19% of the borough). This equates to an average of 1.36ha of open space per 1,000 head of population. The main areas of public open space are shown in Figure 4.

²⁹ https://drive.google.com/file/d/1m89T95OmJTvZATR MEZNIYhWhTcojQT/view

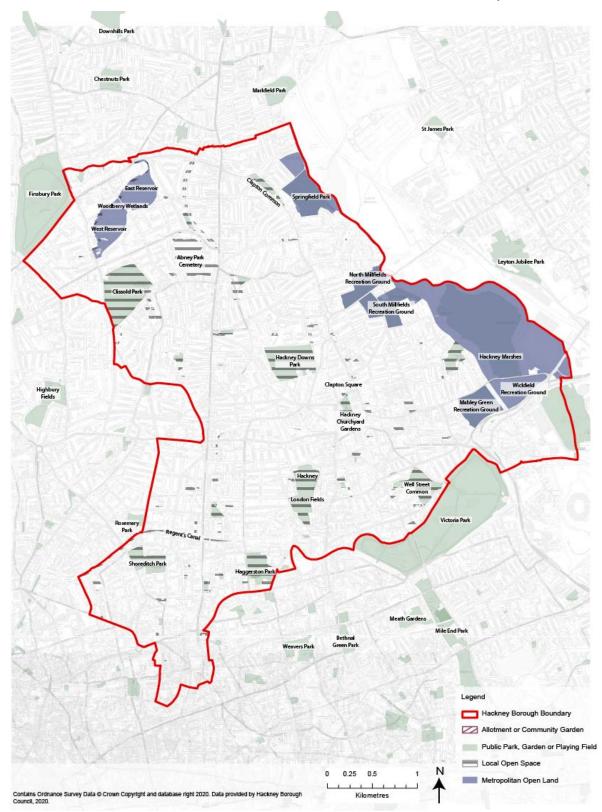


Figure 4 Main Areas of Public Open Space

Trees and woodland

- 3.7 Trees and woodlands cover about 23% of the borough see Figure 5. This comprises over 350 different tree species giving rise to the borough's anecdotal reputation as an 'urban arboretum'.
- 3.8 Approximately 11,700 street trees, 6,600 trees within communal areas of housing estates and 10,300 trees within parks contribute to the borough's overall tree canopy cover. Many of the trees within parks are large mature specimens, contributing to the historic character of the local area. Trees within private gardens also make a substantial contribution to overall tree coverage. Additionally the borough includes areas of woodland, notably Wick Woodland and Abney Park Cemetery.
- 3.9 Some railway corridors provide narrow linear belts of woodland with notable examples between Stamford Hill and Stoke Newington Stations in the north of the borough, and Clapton and the River Lea in the east. These linear woodlands form valuable ecological corridors allowing wildlife to move through the urban environment, spanning beyond the borough boundary.
- 3.10 A number of Hackney's trees and woodlands are directly protected through Tree Preservation Orders which are shown on Figure 5.

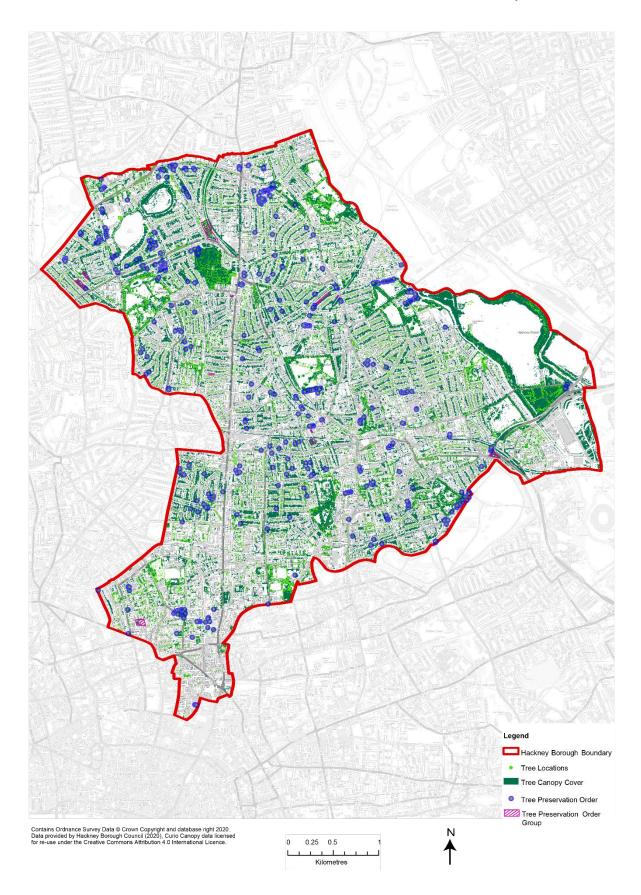


Figure 5 Tree Cover and Tree Preservation Orders

Rivers and wetlands

- 3.11 The borough's rivers and wetlands are key components of the green infrastructure network. They are continuous features that provide connectivity through the urban environment, provide habitat for wildlife and help to mitigate the urban heat island. They can be rapidly degraded, by pollution for example, or enhanced by removing manmade structures and restoring natural profiles.
- 3.12 The River Lea flows south along the eastern edge of the borough toward the River Thames. The River Lea Navigation Channel divides from the main river north of the Middlesex Filter Beds Nature Reserve, along the western boundary of Hackney Marshes.
- 3.13 Regent's Canal stretches for a total of 13.8km from Kensington in the west, to the Thames near Limehouse in the east. Running west to east through Hackney the canal provides connectivity for wildlife and a recreational route along the towpath.
- 3.14 The New River is effectively a canal, built to supply water to Stoke Newington Reservoirs (now known as Woodberry Wetlands), The New River runs along the northern boundary of the borough after running through the adjacent Finsbury Park.
- 3.15 The Woodberry Wetlands Reservoirs comprise the largest waterbodies in the borough, covering approximately 4.5ha. The Wetlands form a key ecological asset (designated a Metropolitan SINC) and provide recreational space. Smaller waterbodies are found within Clissold Park and Springfield Park.

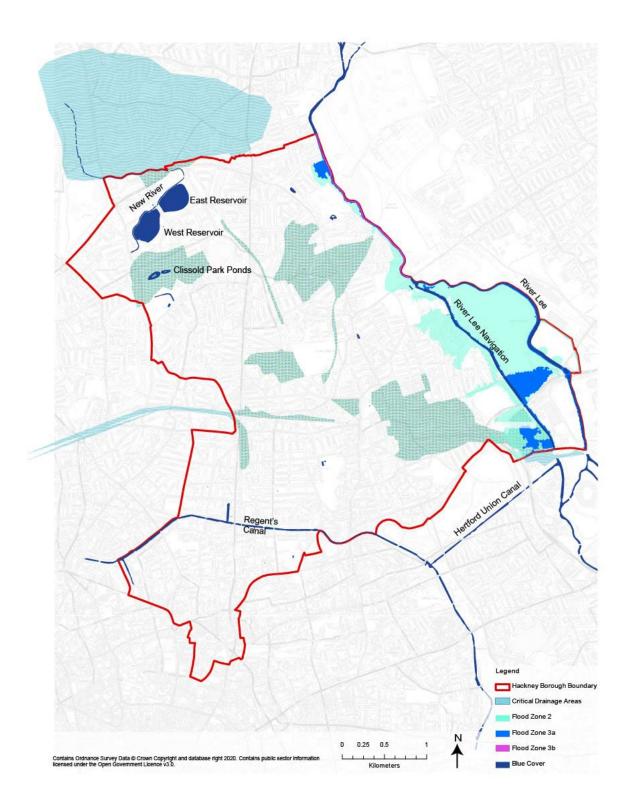


Figure 6 Rivers and Flood Risk

Housing Estate Grounds and Domestic Gardens

- 3.16 It is estimated that 18% of Hackney's green space is made up of green space associated with housing estates and private domestic gardens.³⁰
- 3.17 Green space associated with housing estates represents a substantial asset within the borough's green infrastructure network. However, it typically comprises close mown grass which has limited amenity value and low ecological function. Many of these spaces are also inaccessible to tenants and visitors and poorly connected to the wider green infrastructure network.
- 3.18 Domestic gardens play an important role within the borough's green infrastructure network, providing key ecological links. The level of care committed to the maintenance of domestic gardens can often result in greater structural diversity and a wide range of flowering and fruiting plants which provide a range of habitats and food sources for wildlife. This Strategy does not focus on domestic gardens, since they are outside of the council's management; however it should be noted that <u>Wildlife Gardening Guides</u> are available from London Wildlife Trust³¹, providing guidance on managing domestic gardens for biodiversity.

Green Roofs and Walls

- 3.19 Green roofs and walls are becoming an ever more important element of green infrastructure networks given the need for increasingly dense urban development. According to a study published by 'Living Roofs',³² there are 9.3ha of green roof in Hackney, a 59% increase from 2016. Green roof coverage is concentrated in the west of the borough with a notable concentration in the south west where ground level greening is notably sparse.
- 3.20 The benefits of green roofs and walls can vary significantly depending on their design. Extensive green roofs typically require little maintenance and would comprise a shallow substrate to support low growing species such as sedums or moss. Intensive green roofs required a deeper substrate depth, typically in excess of 150mm, and can be designed to provide a greater diversity of vegetation, as well as seasonal interest and amenity space.
- 3.21 In the most densely developed parts of the borough increasing the extent and coverage of green walls will be one of the most important and practical ways of extending the amount of green infrastructure.

Sites of Importance for Nature Conservation

- 3.22 Many of the borough's open spaces are designated as Sites of Importance for Nature Conservation (SINCs). This highlights those parts of the green infrastructure network that are of particular value for wildlife. SINCs are graded into sites of Metropolitan, Borough, or Local value depending on their relative importance see Figure 7 Sites of Importance for Nature Conservation and includes proposed changes to the SINC network as identified in the 2021 SINC review.
- 3.23 Figure 7 demonstrates that there is a higher concentration of SINCs in the northern and eastern parts of Hackney, with relatively few in the south and west. The figure also shows that the network is mostly fragmented, with few connections between large sites.

³⁰ https://hackney.gov.uk/biodiversity-estates-gardens-and-

meadows#:~:text=About%2018%25%20of%20the%20open%20space%20in%20Hackney,a%20network%20of%20green%20in frastructure%20throughout%20the%20borough.

³¹ Garden for a living London | London Wildlife Trust (wildlondon.org.uk)

³² https://livingroofs.org/wp-content/uploads/2019/04/london-borough-of-hackney_hotspot.pdf

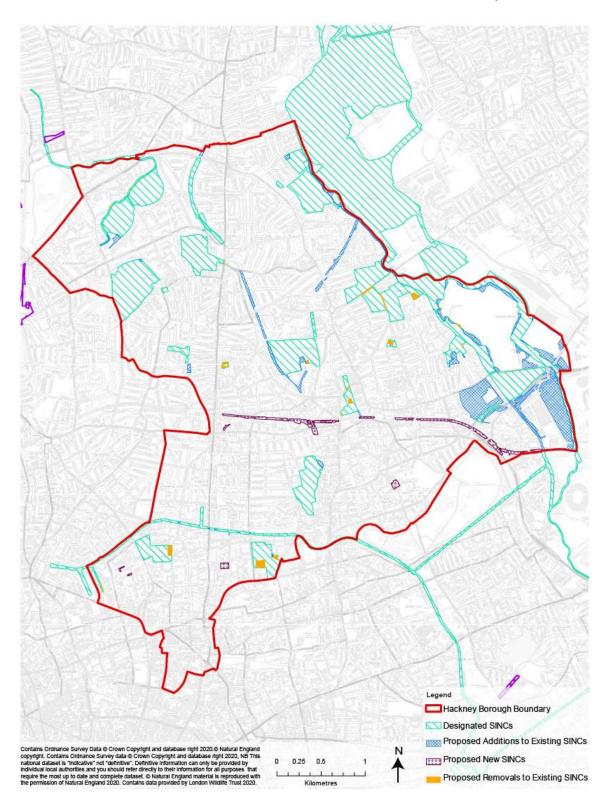


Figure 7 Sites of Importance for Nature Conservation

Key green infrastructure assets beyond the borough boundary

- 3.24 Elements of Hackney's green infrastructure connect with a strategic green infrastructure network that stretches across the borough boundary see Figure 8. The strategic green infrastructure network, described below, provides ecological corridors and recreational/active travel connections beyond the borough boundary.
- 3.25 This strategic network changes as new projects are implemented in adjacent boroughs. For example, the proposed Liveable Neighbourhood and changes to Cycleway 27 in Waltham Forest as part of the Coppermill Area enhancements will provide a safe route for walking and cycling *"through the Coppermill area between St James Street and the borough boundary with Hackney"*.³³

Lee Valley Regional Park

- 3.26 The Regional Park, managed by the Lea Valley Regional Park Authority, is one of London's largest green infrastructure assets, forming a green corridor stretching over 4,000ha from Ware in Hertfordshire to the southern boundary of Hackney and down to the River Thames. It includes the Queen Elizabeth Olympic Park, which is managed by the London Legacy Development Corporation.
- 3.27 The River Lea borders Hackney Marshes and flows through the Queen Elizabeth Olympic Park. Large and varied green spaces flank the water course including Springfield Park, Walthamstow Marshes, Walthamstow Wetlands, the Middlesex Filter Beds, Hackney Marshes and the Waterworks Nature Reserve. Collectively, the assets form the green corridor on the eastern edge of the borough, comprising Hackney's most significant green asset.
- 3.28 The Lea Navigation towpath and routes across Walthamstow Marshes to Walthamstow Wetlands and from Hackney Marshes to the Queen Elizabeth Olympic Park connect provide walking a cycling routes into the Regional Park.

Regent's Canal

- 3.29 Regent's Canal, managed by the Canal and River Trust, stretches for 14km from Little Venice in West London to the River Thames, providing a near continuous, albeit narrow, ecological corridor through the urban environment.
- 3.30 It crosses the southern part of the borough between Angel (in Islington) in the west to Victoria Park (in Tower Hamlets) in the east providing an important area of aquatic habitat and an east west walking and cycling route.

The New River, Finsbury Park and Parkland Walk

- 3.31 The New River enters Hackney in the north western corner of the borough, flowing towards Woodberry Wetlands. The New River Path follows the river stretching its course from Hertford in the north to Islington in the south.
- 3.32 Finsbury Park, located north west of Hackney in the London Borough of Haringey, provides amenity space and a physical link to the Parkland Walk. The 7km green route is designated a Local Nature Reserve and extends west through Haringey, along a disused railway line, terminating at Alexandra Palace.

Victoria Park

3.33 Victoria Park is a Registered Park and Garden located on the boundary of Hackney and Tower Hamlets. The park was planned to "*serve the expanding population of the suburbs*"³⁴ in 1840. Covering 87ha. the park is a substantial amenity asset for residents in the south of the Hackney. Victoria Park is located at the convergence of the Regent's Canal with the Hertford Union Canal. Victoria Park also forms a green link to Mile End Park which extends south through Tower Hamlets toward the Limehouse Basin.

³³ https://enjoywalthamforest.co.uk/cln/

³⁴ https://historicengland.org.uk/listing/the-list/list-entry/1000178

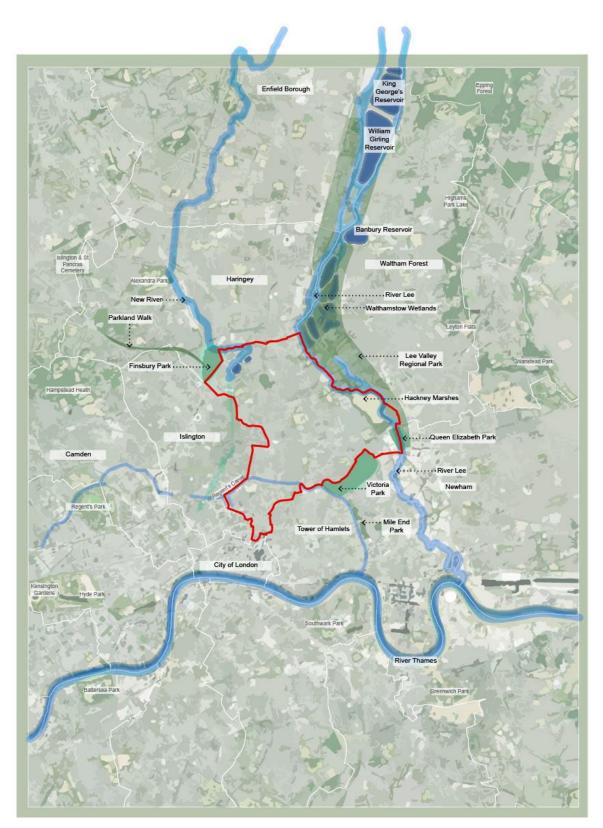


Figure 8 The strategic green infrastructure network

Needs assessment - where is more and better green infrastructure needed?

Green infrastructure for health and wellbeing

3.34 Green infrastructure can deliver many benefits including mitigating the impacts of climate change, improving water quality, storing carbon and improving biodiversity and ecological resilience. It can also directly benefit people, addressing a number of issues that contribute to poor health within the borough, namely a localised lack of access to open space, physical inactivity, poor air quality and urban heat.

Access to public open space

- 3.35 The Hackney Open Space Assessment³⁵ found that much of the south-west of the borough was deficient in access to at least one level (Metropolitan, District, Local) of public open space. This is limiting people's ability to participate in outdoor exercise or seek respite from heat, noise, or air pollution. The areas of greatest need are:
 - **Shoreditch:** is almost devoid of open space and with very little tree canopy cover. Urban greening associated with new development, plus some street greening, provides the most likely opportunity for increasing the amount of green infrastructure.
 - **De Beauvoir:** is primarily residential where, with the exception of De Beauvoir Square, the green infrastructure is typically private gardens or green space within estates. The southern part of the ward includes the De Beauvoir Estate which is located close to the Regent's Canal and Kingsland Basin and contains a range of amenity green spaces, which could be enhanced to provide a wider range of functions. The northern part of the ward is deficient in all three levels of open space.
 - **Haggerston:** is also a residential area. The western part of the borough has been identified as being deficient in open space. Similarly to De Beauvoir, opportunity for new green infrastructure is expected to be best delivered through the enhancement of existing green assets, in particular housing estates.
 - **Hoxton:** includes some small areas of open space but is deficient, particularly in the south of the ward in proximity to the City of London. Urban greening delivered through new development and new pocket parks are likely opportunities for new green infrastructure.
 - **London Fields:** includes London Fields park, however the western portion of the ward remains deficient in three levels of open space.
 - **Dalston**: is largely deficient in all levels of open space. Being one of the borough's growth areas, embedding the need to deliver new public green space through growth and regeneration is a key opportunity.
 - **Hackney Central**: similarly to Dalston, this is also a key growth area and therefore the delivery of new public green space should be delivered through growth and regeneration.
- 3.36 A number of the wards identified as being deficient in access to open space are also identified as being set to experience high levels of population growth and development. This will put increasing pressure on the existing network of open space.
- 3.37 It is therefore important to protect the existing open space provision, maintaining the quality and distribution of spaces; as well as creating new open spaces within new developments as they are built. Given the existing pressure on space within the borough, and the expectation for developments to become increasingly dense to meet the needs of an increasing population, new green space will need to be delivered through innovative solutions as an alternative to traditional parks. This may include publicly accessible green roofs and small scale pocket parks, as well as greening of the streetscape and the wider public realm. Where there is very limited opportunity for any new green space it will be necessary to provide safe green links for people to access the existing network of open spaces.

Cardiovascular disease

3.38 Cardiovascular disease is the most common cause of death in Hackney³⁶. An active and healthy lifestyle can contribute to good cardiovascular health. Since 62% of Hackney's population exercise in a Local Park

³⁵ https://drive.google.com/file/d/170iEsn79cuLapAguGVyovqMwpvQ6lC07/view

³⁶ Cardiovascular-Disease.pdf (hackneyjsna.org.uk)

and 41% exercise outdoors, but not in a park³⁷ it is important to provide adequate access open space to meet this demand. In addition to addressing the disparity in access to open space explained above, it is also important to manage existing parks to continue to provide space for recreation, and also improve the network between the existing parks to encourage more physical activity and active travel.

3.39 There are higher concentrations of cardiovascular disease in the south, west and central areas of Hackney. Hoxton East and Shoreditch. De Beauvoir and Haggerston are the wards with the highest level of cardiovascular mortality (2018 data). See Appendix B.

Mental Health

3.40 Access to green space has been found to have a positive impact on people's mental health in London³⁸. In particular green space can reduce stress and improve confidence and self-esteem³⁹, as well as promoting positive social interactions and boosting creativity. This further highlights the importance of providing green assets that are accessible to the borough's residents.

Air quality

- 3.41 Some areas of the borough remain above the EU limit values (annual average exceeding 40ug/m3) and World Health Organisation guidelines for air quality. This is largely caused by emissions from vehicles on the road network and is considered to be a major contributor to ill health and premature death in the borough. It has also been found to disproportionately affect people living in economically deprived circumstances.
- 3.42 The south west of the borough has the highest levels of NO2 see Appendix B. This part of the borough is also the most deficient in access to open space. The strategic road network is also highlighted as experiencing high levels of air pollution; however, this typically dissipates over a short distance from the road corridor.
- 3.43 This highlights the need to protect people who live and travel in proximity to the strategic road network from harmful emissions.

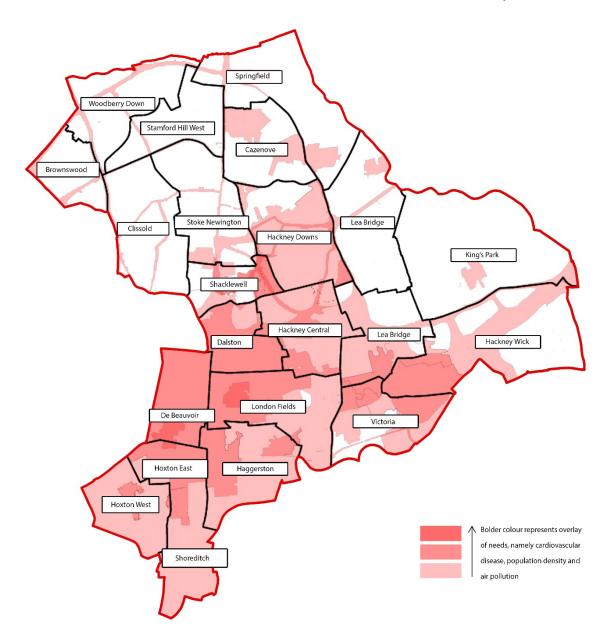
Summary

3.44 Green infrastructure provides important and tangible benefits to people, wildlife and the regulating the urban environment. As such it is important that opportunities for enhancing the green infrastructure network are sought across the whole borough. However, the analysis above demonstrates that the areas of greatest need relating to cardiovascular disease and poor air quality are broadly located in the same area of greatest deficiency in access to public open space. This is summarised on Figure 9 below. Whilst the benefits of green infrastructure are maximised when delivered at scale, as part of the wider network, the needs assessment highlights the importance of focussing resources in the south western part of Hackney to enhance existing green infrastructure assets, and create new ones.

³⁷ https://hackneyjsna.org.uk/wp-content/uploads/2019/06/Hackney-Health-and-Wellbeing-Survey-2019-Report.pdf

^{38 11015}viv_natural_capital_account_for_london_methodology_v2.pdf

³⁹ How nature benefits mental health | Mind, the mental health charity - help for mental health problems



For full detailed maps see Appendix B.

Contains Ordnance Survey Data © Crown Copyright and database right 2020. ONS Crown Copyright Reserved, 2020. NO2 data provided by Hackney Borough Council. Mortality data provided by ONS Crown Copyright Reserved (NOMIS July 2020).

Figure 9 Composite Needs Distribution

Green infrastructure for climate adaptation

Flooding

- 3.45 Climate change results in more frequent periods of intense rain fall. Across Hackney, 22,500 residential properties and 4,000 non-residential properties are at risk of surface water flooding during a severe rainfall event.⁴⁰
- 3.46 The River Lea poses a flood risk in the east of the borough; with notable surface water flood-risk areas around Hackney Wick, including to the east of Stamford Hill see Figure 6. In total approximately 12% of the borough is within a flood zone, as defined by the Environment Agency. Specifically, 2.1% of the borough is within Flood Zone 3a and therefore has a 'high probability'⁴¹ (a 1 in 100 chance each year) of river flooding.
- 3.47 Nine Critical Drainage Areas (CDAs) have also been identified within Hackney. These are locations where multiple sources of flood risk (surface water, ground water, sewer and/or river) often cause flooding during severe weather. The Hackney Surface Water Management Plan⁴² notes that "*surface water flooding is often highly localised and complex*". As such there is not a single solution for managing this flood risk; however the implementation of SuDS, such as rain-gardens and green roofs are one method of source control that can reduce the rate and volume of surface water runoff.

Urban Heat

3.48 Excessive heat can also have major health impacts across the borough, with an increase in deaths and illhealth during hot weather, with the greatest impacts being on the very old and young or those with long term illness. The GLA's Green Infrastructure Focus Map⁴³ shows that the urban heat island is amongst the factors in most need of mitigation across the whole the borough. As summers become hotter it will be increasingly necessary to cool the borough's streets through increased shading. Large areas of green space and proximity to water are also proven to help cool urban environments.

Green infrastructure for nature recovery

- 3.49 Hackney is the third most densely populated borough in London. The number of homes required across is set to increase to accommodate the growing population. The network of SINCs protect the most valuable ecological resources, however the function of these sites can be compromised by competing functions, such as providing space for recreation. The sites are also largely fragmented, hindering the movement of wildlife between green assets.
- 3.50 The State of Nature (England) report⁴⁴ explains that there has been no "*no let-up in the net loss of nature in the UK.*" As set out in the Hackney Local Nature Recovery Plan, this national trend has been mirrored in London. There is a need to continue working to protect and enhance the existing SINC network to promote biodiversity within the borough; as well as providing space for new and enhanced habitat resource, embedding features designed to meet the needs of wildlife in the wider green infrastructure network. This could be delivered, for example, through careful selection of species for planting in parks and green spaces, and though the provision of new or enhanced green links between the existing SINC network.

⁴⁰ <u>https://drive.google.com/file/d/1-s6jNonsaNh_Y48mJOI7onhLcM4Xgx84/view</u>

⁴¹ https://www.gov.uk/guidance/flood-risk-and-coastal-change#flood-zone-and-flood-risk-tables

⁴² https://drive.google.com/file/d/1HE1byXxKqJxINUNhtvVkGKZGzY3gqpUB/view

⁴³ https://maps.london.gov.uk/green-infrastructure/

⁴⁴ https://nbn.org.uk/wp-content/uploads/2019/09/State-of-Nature-2019-UK-full-report.pdf

Objectives and Opportunities

4. Objectives and Opportunities

Introduction

4.1 This section sets out the intended high-level outcomes of implementing the Strategy and the opportunities for delivering the change. These objectives and opportunities should shape and inform the wide range of future projects and interventions that will deliver improved and new green infrastructure throughout the borough.

Objectives

To improve residents' health and well-being

- 4.2 Increased levels of physical activity will be encouraged by creating green links to connect parks and open spaces to promote active travel.
- 4.3 An overall increase in green infrastructure will help to improve air quality. At the street level, the main benefit of green infrastructure is to provide a barrier to pollutants or to funnel polluted air away from the most sensitive locations such as school playgrounds.⁴⁵ There is no standard approach that is suitable for every situation. However, 'First Steps in Urban Air Quality' ⁴⁶ indicates the range of different green infrastructure solutions that can deliver beneficial effects when used in the right context.
- 4.4 Providing new cul-de-sac parks, pocket parks or better quality green space within housing estates, especially in areas with least open space provision, can provide cool, tranquil and less polluted environments which are of particular benefits to the elderly and the very young who are often less able to access traditional parks and green spaces. It is important that new green routes and spaces, and their benefits, are communicated widely in order to maximise the benefit to the local community.

To be more resilient to the impacts of climate change

- 4.5 Green infrastructure will provide a major contribution to adapting to climate change. The planting of more trees in the public realm (especially large canopy tree species) will assist in providing shade in hot weather. In addition, an increase in green roofs can reduce the amount of hard-surface that stores and radiates heat from solar gain which contributes to the heat island effect.
- 4.6 SuDS, planned and delivered as part of a network, mimic natural systems by managing rain water as close as possible to where it falls. This requires SuDS to be delivered as part of a 'management train' whereby a sequence of interventions work together to manage surface water. This management train can be used to "create green corridors, link habitats together and add fun, education and amenity value".⁴⁷
- 4.7 Individual features most likely to deliver multifunctional green infrastructure include green roofs, swales, bioretention systems and trees, all of which can be integrated into the wider SuDS management train.

To reduce deficiency in green open space

- 4.8 The areas of the borough identified in the needs assessment as being in greatest need of improved access to open space are also amongst the most densely populated and expected to experience further population growth in the next 20 years.
- 4.9 Opportunities for the creation of new local or district parks should always be sought; however, such opportunities are very limited due to the existing density of development. As an alternative, the greening of buildings and the public realm (including streets) will help mitigate for the lack of traditional parks. This should include the development of new pocket parks to serve the needs of local communities, especially in locations where people do not have access to private gardens. The creation of new publicly accessible roof gardens will be encouraged as a design solution where space at ground level is especially limited.

⁴⁵ https://www.london.gov.uk/sites/default/files/green_infrastruture_air_pollution_may_19.pdf

⁴⁶ http://epapers.bham.ac.uk/3069/1/Ferranti_etal_2019_FirstStepsAQ.pdf

⁴⁷ http://www.scotsnet.org.uk/documents/NRDG/CIRIA-report-C753-the-SuDS-manual-v6.pdf

4.10 Increasing the provision of new urban greening through new developments and on existing streets will also provide benefits. Whilst this may not provide space for recreation, such greening can provide improve people's mental health and well-being, enhance the character of the townscape, and provide opportunities for food growing. The provision of new green links to provide access to existing parks and green spaces via safe and less polluted routes will also help people to access the existing network of open spaces.

To increase ecological connectivity

- 4.11 The ecological value of existing sites of importance for nature conservation is maximised when they are connected by areas of complementary or supporting habitats in the form of green corridors or 'stepping stones' i.e. habitat that allows some species to move through the urban environment. This supporting habitat also provides wildlife a wider range of opportunities for meeting their foraging or breeding requirements.
- 4.12 Key requirements for increasing ecological connectivity will be:
 - protecting the SINCs from loss and damage by strengthening planning policy, and implementing appropriate site management;
 - improving the quality and extent of the most valuable habitats with existing SINCs to ensure core populations have the potential to expand;
 - identifying a network of green corridors where wildlife habitat needs to be enhanced and/or increased;
 - creating new wildlife habitats in the larger green spaces to supplement those within the SINC network;
 - securing net gains for biodiversity in new developments, especially those that are adjacent to SINCs or which could strengthen a green corridor; and
 - avoiding the application of herbicides in the wider public realm.

Opportunities

Modifying existing parks and amenity green spaces

- 4.13 Parks have to provide a wide-variety of functions and services. Traditionally these have focused on sport, recreation and conservation of landscape heritage. But the need to address public health, climate and the ecological crisis suggests that the design and management of parks needs to shift to respond to these more contemporary demands.
- 4.14 These shifts could include:
 - integrating the active travel network with the parks and green spaces network.
 - blurring the boundaries between park and built environment by greening the public realm surrounding
 parks and creating more seamless transitions between park and street.
 - increasing the structural and species diversity of vegetation to improve habitat for wildlife.

Case Studies: Park Enhancement

Integrating the active travel network with parks

Quietway 2 connects Bloomsbury, in the west, to Walthamstow in the east. The route has been integrated into both London Fields and Millfields Park, providing a safer and greener route for cyclists.

Blurring the boundaries between parks and the built environment

The redesign of Nevill Road, located next to Butterfield Green, introduced new high quality block paving and new street trees. The route provides a connection for pedestrians and cyclists and is an example of extending parkland character into the adjacent public realm.

Increasing the species diversity

A series of meadows were created across Hackney Downs, London Fields and Millfields Park. The meadows were created to diversify the habitat for insects and pollinators as part of the Council's plan to create 10,000m² of new meadow in the borough.

- 4.15 There are over 200 housing estates within Hackney, many of which include areas of amenity green space with limited function. Maximising the range of benefits this green space provides has the potential to improve the function and overall resilience of the borough's green infrastructure.
- 4.16 This could include, for example, structural planting to provide a barrier to air and noise pollution, provision of areas for community food growing, rain-gardens to store and release stormwater run-off, and wildlife gardens to improve contact with nature. Where housing greenspace adjoins existing park and public green spaces management should be integrated to increase the environmental footprint of both spaces.

Case Studies: Estate Enhancement

Climate-Proofing Social Housing Landscapes, Hammersmith and Fulham

Spanning three different social housing contexts, the project retrofitted green and blue infrastructure as part of an integrated approach to climate adaptation.

This included the creation of new green spaces and corridors in urban areas, water sensitive urban and building design and the development of awareness campaigns. Specific interventions included low level green roofs; rain gardens; swales, food growing beds; and tree and shrub planting. The project team found that retrofitting open spaces in social housing environments is both necessary and cost-effective.

Hackney Grow Spaces

There are 45 Grow Spaces across Hackney's housing estates. In partnership with Hackney Housing Services, resident-led community groups implement and maintain the growing spaces. Welshpool Community Garden is a 2 year initiative working with the Tenant Resident Association to improve the communal garden and develop a Grow Space to diversify and increase the usage of the communal grounds. Funding for the project was provided through 'Aerial Mast', with contributions through corporate volunteer days contributions and Chelsea Flowers Show plant donation through Chris Beardshaw and ING Baring Bank. Training was provided on how to grow vegetables which continues remotely during Covid restrictions through 'how to grow' guides. The scheme has attracted residents who were previously unengaged with food growing initiatives. Usage of the communal grounds has increased which has furthered the sense of community spirit, local pride and ownership.

Transforming streets and public realm

Streets and civic spaces comprise a considerable part of the existing public realm. The introduction of Low Traffic Neighbourhoods and School Streets to reduce the dominance of traffic in those streets which need to provide more space for pedestrians and cyclists provide an opportunity to create greener areas of public realm.

Case study: Transforming Streets

Colvestone Crescent

Colvestone Crescent is the first proposed 21st Century Street in Hackney. The project will promote active travel and adaptions in response to the climate crisis. Existing parking spaces and clutter on the street will be replaced with new play elements, new areas of vegetation including new trees, cycle storage, electric vehicle charging points, SuDS and community planting schemes. Colvestone Crescent extends past Colvestone Crescent primary school and will therefore also form part of the Council's School Streets programme.

4.17 Specific opportunities include:

Pocket Parks

4.18 Several cul-de-sacs have been identified throughout the borough that are excess to the requirement for vehicular movement. Space currently dedicated to the parking of vehicles could be re-purposed as pocket parks to provide amenity space and enhance local green infrastructure.

Green links and green corridors

- 4.19 Improving green links (active travel routes) and green corridors (connecting habitat for wildlife) can significantly improve the capacity of existing parks and nature conservation areas by extending their reach beyond their current boundaries.
- 4.20 Green links can be established between existing major green infrastructure assets (e.g. parks) by creating more legible and greener routes along streets and through development sites along the link, especially where Low Traffic Neighbourhoods are being implemented. There is also potential for housing estates to

play a role in the creation of green links; however such changes would require in-depth consultation and must respect the role of the existing landscape to provide privacy and amenity space for residents.

4.21 Green corridors can be established and improved by creating pockets of wildlife habitat between existing SINCs. Throughout most of the borough, habitat creation should simply aim to increase the species and structural diversity of vegetation in parks, amenity green spaces and the public realm to provide 'steppingstones' to enable a wide variety of relatively common species to move between parts of the SINC network. However, at the interface with the Lea Valley Regional Park, and along the Regent's Canal and the New River, habitat creation should focus on increasing and enhancing the contiguity of existing habitats. Further details are provided in the Hackney Local Nature Recovery Plan.

Case Study: Green links

Murrain Street, Kings Crescent Estate

The design of Murrain Street was a key element in the regeneration of the Kings Crescent Estate. The playable street provides a clear route to Clissold Park, integrating the Estate into the wider green infrastructure network with an avenue of deciduous trees and a series of smaller green spaces including gardens for community food and flower growing.

Street trees

4.22 Street trees have long been a feature of urban environments and can help to form green links between the network of parks and green spaces. Often street trees have been a means to soften a suburban street by planting at 10 metre intervals, especially along residential streets. Future street tree planting should consider planting at different scales, densities and locations (i.e. not necessarily in the pavement) according to the local need or opportunities.

Promoting urban greening

- 4.23 Regeneration and development provides an opportunity for more targeted and coordinated delivery of green infrastructure that goes beyond the incremental 'site by site' greening that will be delivered as development comes forward in the rest of the borough. This is particularly relevant especially within Opportunity Areas and parts of the borough covered by Area Action Plans⁴⁸ see Figure 10. Urban greening needs to be embedded in the development frameworks for these strategic growth areas, especially as they cover parts of the borough lacking in existing open space or at risk of flooding.
- 4.24 Urban greening should not be simply an adornment to new built structures. Rather the design should consider its location within the wider network, and how urban greening, as a contribution to the green infrastructure network, can contribute to the most pressing needs of the local area. For example, most buildings and streets drain to a sub-surface piped network which in turn drains into the sewer network or outfalls into rivers and watercourses. As well as contributing to downstream flooding many of these drains also contribute to water pollution. In areas of regeneration and development there is an opportunity to modify the highway and public realm to introduce more sustainable drainage solutions as described in 'SuDS for London'⁴⁹.

Case Study: Urban Greening-

Woodberry Down

4,700m² of green roofs were installed as part of the first phase of the Woodberry Down regeneration project. The green roofs provide habitat for local wildlife, providing a connection to the adjacent reservoirs. The green roofs are also a key part of the water management system and were highly commended at the CIRIA susdrain SuDS awards in 2018.

⁴⁸ Opportunity Areas are London's major source of brownfield land which have significant capacity for development Almost half of the borough is within the City Fringe and Upper Lea Valley Opportunity Areas. In addition, Area Action Plans (AAPs) are high-level planning documents which provide a comprehensive framework for the next 15 years, managing existing pressures and shaping future growth in a sustainable manner. AAPs are being developed for Shoreditch and Stamford Hill. ⁴⁹ <u>SuDS in London – a guide (tfl.gov.uk)</u>

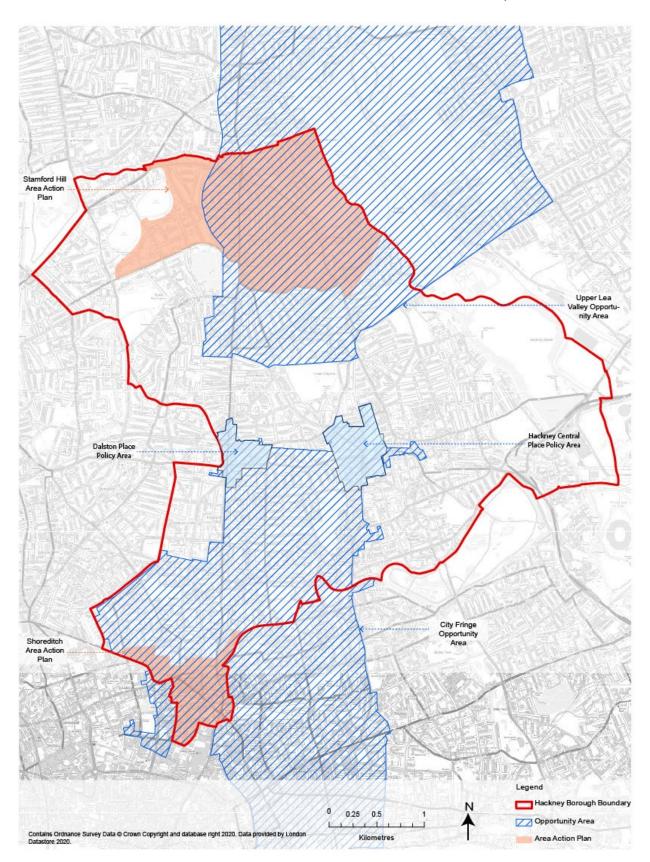


Figure 10 Opportunity Areas and Area Action Plans

0.0 vering the structure the G een 6 Strategy

 CTAXXXXXX

0000000

NAME AND A DAY OF A DAY OF A DAY

Nº1

Providence and an and a providence of

And a state of the state of the

ļ

SALVEN PS 1

18

P .

Y

The second of the second of

ARCHICERCORE CARSERS

0

STATES AND ADDRESS

CARL STATE OF THE PARTY OF THE

CANCEL STREET

SALVAN SALVAN

-

Ê

 $\langle \rangle$

5. Delivering the Green Infrastructure Strategy

- 5.1 The concept of green infrastructure demands a considered approach to planning, designing and managing the borough's green assets to ensure the services and benefits provided are optimised. Likewise the delivery of green infrastructure also needs a strategic approach to ensure that priorities are identified spatially, as well as thematically, and that there is a better alignment between policy and projects.
- 5.2 This section identifies **key projects** that should be undertaken by Council departments to realise the objectives of this Strategy. It sets these within a **spatial framework** that helps to identify where improved or new green infrastructure will have the most impact with respect to public health, climate adaptation and nature recovery. It also identifies key **governance and policy** improvements that would support better delivery. This is set out diagrammatically below.

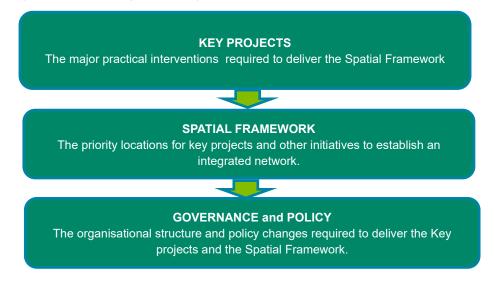


Figure 11 Elements contributing to delivery

Projects

21st Century Streets

- 5.3 The current arrangement of Hackney's streets is orientated toward the movement (and parking) of vehicles. Whilst this will remain a primary use, the borough's streets can be improved to provide a wider suite of services to residents including safer cycling and walking infrastructure, greener civic space, and increased canopy cover. These enhancements could also serve to enhance ecological connectivity across the borough.
- 5.4 Hackney's Low Traffic Neighbourhoods are a powerful force for transforming the borough's streets. Low Traffic Neighbourhoods have potential to deliver particular benefit as part of this Strategy, they have been identified in the Spatial Framework as either being an opportunity to deliver a pocket park (in areas deficient in access to public open space) or where the Low Traffic Neighbourhoods could form part of a proposed green link. The precise interventions will vary depending on location and the needs of the local community which should be established through future consultation.
- 5.5 Possible locations for 21st Century Streets have been identified on the Spatial Framework according to their potential to contribute to the proposed Green Links, however the final locations would be subject to further analysis. In addition new pocket parks should be created within the Low Traffic Neighbourhoods, with a particular focus in the south west of the borough. These are also shown on the Spatial Framework.
- 5.6 This Strategy also proposes the implementation of a coherent green link along Curtain Road, extending along Hoxton Street and Great Eastern Street, introducing new vegetation along the route suitable to the immediate context. This proposal builds on the project presented in the Draft Future Shoreditch Area Action Plan⁵⁰ that includes new tree planting, removal of parking and improving cycle access in the area.
- 5.7 Improvements to streets should take account of Hackney's Child Friendly Places SPD⁵¹, in particular the child friendly design principles including 'Doorstep play', 'Play on the way' and 'People before cars'.

Green Estates

- 5.8 Enhancement of Hackney's housing estates offer a substantial opportunity to improve the borough's green infrastructure. Key interventions may include:
 - improving habitat for wildlife in line with the recommendations in the Hackney Local Nature Recovery Plan;
 - transformation of underused areas of hard surface to create new communal green space;
 - planting trees and other vegetation to create cool, tranquil spaces; and
 - creating additional food-growing areas.
- 5.9 Some housing estates are situated in strategic locations that provide the opportunity to form a green link for people and wildlife between two larger green assets. In such situations it may be appropriate to consider the removal of some barriers to movement, such as fences and walls, to create more permeable and obvious through routes. Comprehensive consultation with residents would be required from the outset of such enhancements and interventions. Designs should be of high quality and must be sensitive to the existing function of green spaces, in particular the safety and privacy of residents. Interventions must not impinge on private residential spaces. Improvements must be designed to avoid negative impacts on residents, and rather serve to enhance the estate landscape.
- 5.10 Housing estates in the west of the borough are priorities for the enhancement, but other housing estates that sit within a strategic location on a green link or green corridor are also identified in the Spatial Framework.

⁵⁰ <u>https://drive.google.com/file/d/1u99NHzdhqAGr9aF135L7lexOAkemhosP/view</u>

⁵¹ growing-up-in-hackney-child-friendly-places-spd.pdf - Google Drive

Hackney urban forest

- To assist in meeting Hackney's ambition to plant 36,000 trees⁵², plans are already in place to plant 5,000 5.11 new street trees and 31,000 trees within park and green spaces.
- 5.12 Based on the needs identified in this Strategy, street tree planting should include the following priority areas:
 - creating or strengthening green links along: a)
 - Spring Hill; •
 - Dunsmure Road;
 - A105 between Clissold Park and the New River Path;
 - Grayling Road;
 - Northwold Road;
 - Rectory Road;
 - Lea Bridge Road; •
 - Kenworthy Road / Mabley Street; •
 - Hoxton Street; and
 - Curtain Road. •
 - increasing overall canopy cover in the following wards: b)
 - Shoreditch: •
 - Dalston;
 - Hoxton:
 - Hackney Central; and ٠
 - Shacklewell.
 - mitigate the effects of poor air quality along the strategic road network, particularly the A10, by c) following the guidance in 'First Steps in Urban Air Quality' 53.

Greening the Grey

5.13 Major public realm improvement projects provide an opportunity for a new approach to urban design that sees green infrastructure as part of the solution to any problems that need to be addressed rather than being considered primarily as soft landscaping. Consequently, they can be important catalysts for change and can result in additional incremental and complementary green infrastructure improvements in the surrounding area and for delivering the Green Links identified in the Spatial Framework.

Stoke Newington Gyratory

Proposals for improvement of the Stoke Newington Gyratory include transport interventions for vehicles, 5.14 cyclists and pedestrians and new areas of public space. The project is an important catalyst for bringing about enhancement to the fragmented green infrastructure network in this part of the borough and contributing to proposed Green Link 4 in the Spatial Framework which aims to improve the connection between Abney Park Cemetery and Hackney Downs.

Hackney Central

5.15 The regeneration of Hackney Central includes public realm improvements in the Morning Lane Triangle. The site is primarily commercial and has a limited amount of existing green infrastructure. The regeneration of the area should, therefore, be seen as a catalyst for connecting to the wider green

⁵² https://www.hackney-labour.org.uk/hackney-launches-the-largest-street-tree-and-mature-parks-tree-planting-programme-inthe-country/ 53 http://epapers.bham.ac.uk/3069/1/Ferranti_etal_2019_FirstStepsAQ.pdf

infrastructure network, namely St. John's Churchyard to the north and London Fields and Homerton railway line to the south west.

Dalston

5.16 The regeneration proposals provide the potential for the implementation of new green infrastructure tying into the existing mosaic of green assets, such as the Dalston Eastern Curve Garden. The development should also provide publicly accessible open space, seeking to address the local deficiency.

Lea Bridge Road Roundabout

5.17 The Lea Bridge Roundabout is a key element of proposed Green Link 5 in the Spatial Framework. The project is a key vehicle for the delivery of the green link, providing a green route accessible for people to move between Hackney Downs and Millfields Park.

A Spatial Framework

- 5.18 The Spatial Framework provides a space-based visualisation of the locations that should be considered as a priority to implement the projects identified above, plus other more localised interventions that would contribute to strengthening the core green infrastructure network across the borough.
- 5.19 These space-based projects are framed around a series of proposed Green Links that provide the focus for the proposed change. Figure 12 shows these at the borough scale, and Figure 13 to Figure 19 show the respective Green Links in more detail. The south-west of the borough has been identified as being the most in need of new green infrastructure; proposals for this area are shown in more detail in Figure 20.
- 5.20 It should be noted that, whilst the Spatial Framework highlights priority areas, the objectives and opportunities listed in Section 4 should be applied elsewhere when significant opportunities arise.

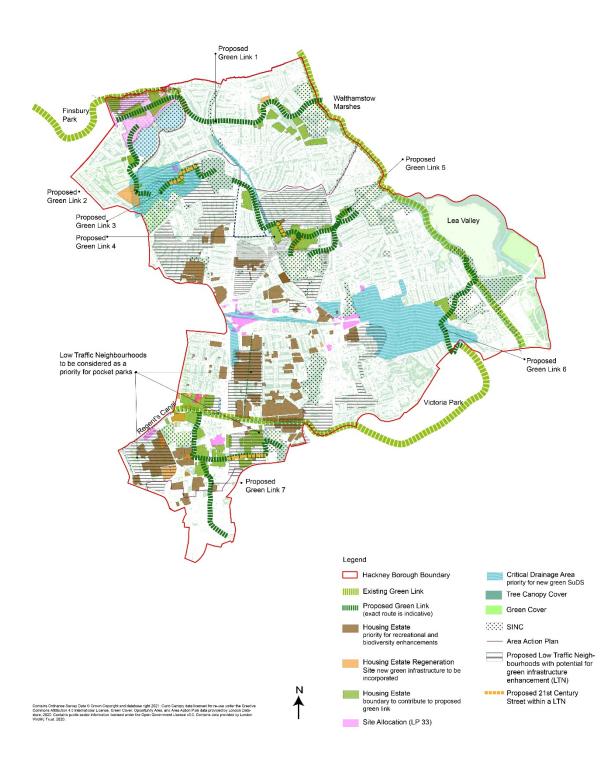


Figure 12 Hackney Spatial Framework

Proposed Green Link 1

1. Link from Finsbury Park to Walthamstow Wetlands – enhancement of the <u>Wetlands to Wetlands</u> <u>Greenway</u>.

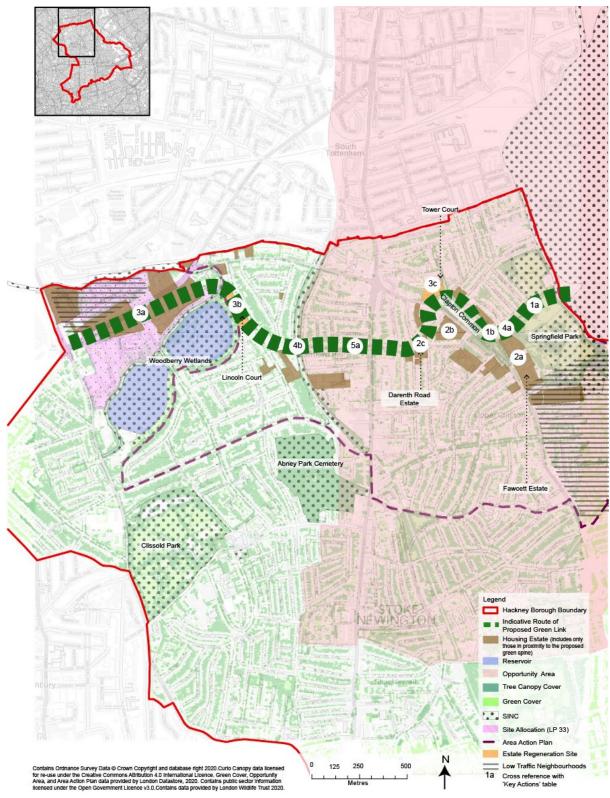


Figure 13 Spatial Framework Proposed Green Link 1

Implementing Green Link 1:

Table 1 Delivery of Proposed Green Link 1

	Delivery of Proposed Green Link 1	
Map ID	Key Actions	
	Enhancement of Parks	
1a	Improve the access to Springfield Park in line with the Connecting Green Spaces Report and the parkland character along Spring Hill with new tree planting.	
1b	Return Spring Hill (which bisects Clapton Common) to green space in line with the Connecting Green Spaces Report.	
Enhancement of Estate Green Spaces Enhance the boundary landscape of the following housing estates to contribute to the proposed green link (Note: the enhancement of boundaries does not necessarily involve the introduction of public thoroughfares, rather the contribution that new planting can make to existing public routes).		
2a	Fawcett Estate	
2b	Summit Estate	
2c	Darneth Road Estate	
	Estate Regeneration and Development	
3a	Include a legible green link through Woodberry Down Estate from east to west that includes opportunities for recreation and active travel	
3b	Improve the legibility and greening of the street edge fronting the public realm as part of the Lincoln Court Estate regeneration	
3c	Create a green buffer on the southern boundary of Tower Court that contributes to the biodiversity and character of the overall green link.	
	Public Realm and Streets	
4a	New tree planting along Spring Hill to connect Springfield Park to Clapton Common	
4b	New tree planting along Dunsmure Road, between Cranwich Road and Glaserton Road	
Land-use Planning		
5a	New development fronting onto the proposed green link within the Stamford Hill AAP should deliver ground level urban greening that contributes to a coherent green character and disperse air pollution. This requirement should be embedded in the Stamford Hill AAP and included in pre-app discussions with applicants.	

Proposed Green Link 2

2. Link from Woodberry Wetlands to Clissold Park.

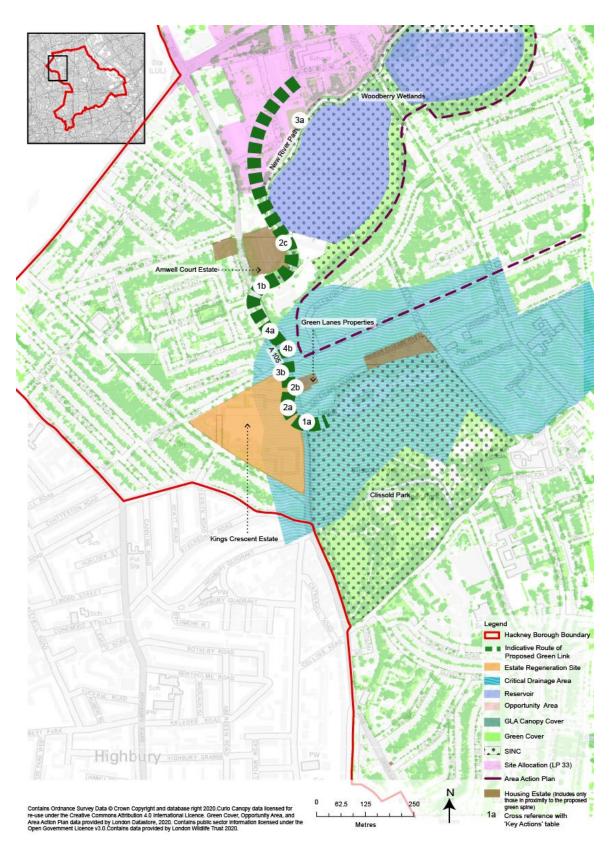


Figure 14 Spatial Framework Proposed Green Link 2

Implementing Green Link 2:

Table 2 Delivery of Proposed Green Link 2

Delivery of Proposed Green Link 2		
Map ID	Key Actions	
	Enhancement of Parks	
1a	Review the north western entrance to Clissold Park to encourage pedestrians into the park instead of walking along the A105. Also consider softening the park's western boundary through buffer planting.	
1b	Enhancements to the New River Path, in particular it's junction with the A105, seeking to increase its use as an open and safe route.	
	Enhancement of Estate Green Spaces	
Enhance the boundary landscape of the following housing estates to contribute to the proposed green link: (Note: the enhancement of boundaries does not necessarily involve the introduction of public thoroughfares, rather the contribution that new planting can make to existing public routes).		
2a	Kings Crescent Estate	
2b	Green Lane Estate	
2c	Amwell Court Estate	
	Estate Regeneration and Development	
3a	Implement improvements to the New River Path as part of the Woodberry Downs regeneration.	
3b	Enhance the green space on the eastern edge of the Kings Crescent Estate to contribute to the green character of the route and promote biodiversity value.	
	Public Realm and Streets	
4a	Plant new trees in the gaps along the A105 between Clissold Park and the New River Path.	
4b	Introduce new multifunctional SuDS within the CDA on A105. Planting implemented as part of the SuDS should be designed to disperse pollutants away from pedestrians.	

Proposed Green Link 3

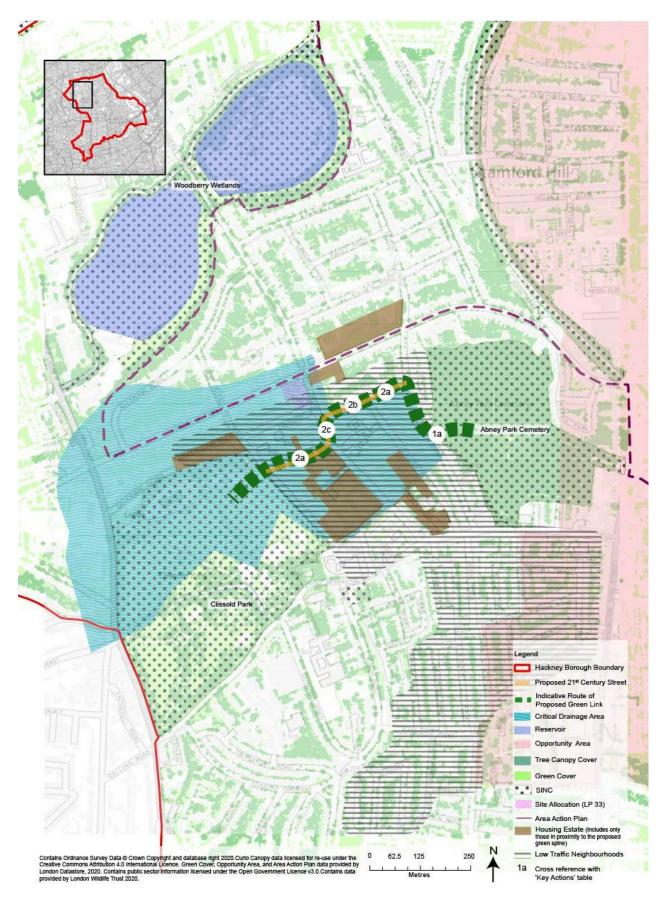


Figure 15 Spatial Framework Proposed Green Link 3

Implementing Green Link 3:

Table 3 Delivery of Proposed Green Link 3

	Delivery of Proposed Green Link 3	
Map ID	Key Actions	
	Enhancement of Parks	
1a	Provide pedestrian access to Abney Park Cemetery on the western boundary at the Park's western most point.	
	Public Realm and Streets	
2a	Upgrade Grazebrook Road and Grayling Road to a 21st Century Street.	
2b	Plant new trees along Grayling Road.	
2c	Introduce new SuDS along the proposed green link as part of the 21 st Century Streets programme.	

Proposed Green Link 4



Figure 16 Spatial Framework Proposed Green Link 4

Implementing Green Link 4:

Table 4 Delivery of Proposed Green Link 4

Delivery of Proposed Green Link 4		
Map ID	Key Actions	
	Enhancement of Parks	
1a	Extend the influence of Hackney Downs northwards by creating a new access on northern boundary to link with proposed route through the Nightingale Estate regeneration.	
	Enhancement of Estate Green Spaces	
2a	Integrate a coherent east - west green link through the Nightingale Estate.	
Estate Regeneration and Development		
3a	Establish a coherent north – south green link from north to south through the regeneration of the Nightingale Estate.	
	Public Realm and Streets	
4a	Development of Benthal Road into a 21 st Century Street (tying into the proposal to be a School Street).	
4b	Plant new trees along Northwold Road (A10) and Rectory Road.	
4c	Integrate new urban greening along Rectory Road as part of the Stoke Newington Gyratory project.	

Proposed Green Link 5

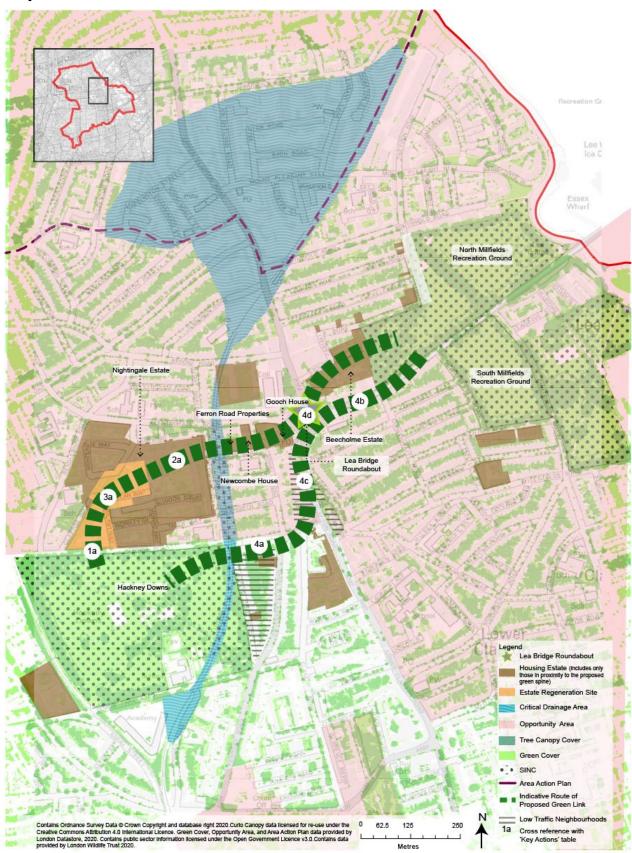


Figure 17 Spatial Framework Proposed Green Link 5

Implementing Green Link 5:

Table 5 Delivery of Proposed Green Link 5

	Delivery of Proposed Green Link 5	
Map ID	Key Actions	
	Enhancement of Parks	
1a	Extend the influence of Hackney Downs north by creating a new access on northern boundary to link with proposed route through the Nightingale Estate regeneration.	
	Enhancement of Estate Green Spaces	
2a	Integrate a coherent east - west green link through the Nightingale Estate.	
Estate Regeneration and Development		
3a	Establish a coherent north – south green link from north to south through the regeneration of the Nightingale Estate.	
	Public Realm and Streets	
4a	Reduce the extent of car parking along Downs Road, utilising space for with new greening, thereby creating a coherent link with the parkland character of Hackney Downs.	
4b	Extend the parkland character of Millfields along Lea Bridge Road through new tree planting	
4c	Implementation of new greening along Downs Road, Lower Clapton Road or Powell Road, and Lea Bridge Road	
4d	Embed urban greening in the public realm improvements as part of the Lea Bridge Roundabout project.	

Proposed Green Link 6

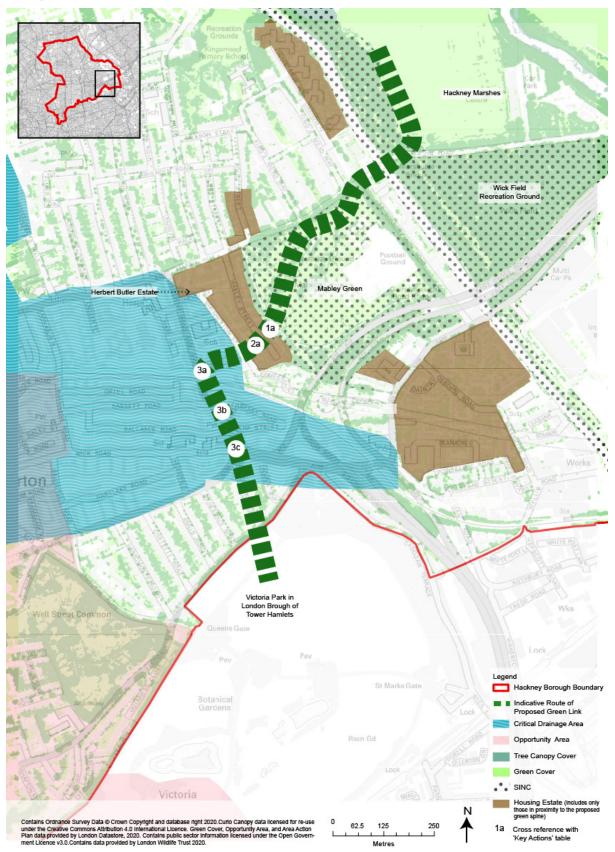


Figure 18 Spatial Framework Proposed Green Link 6

Implementing Green Link 6:

Table 6 Delivery of Proposed Green Link 6

Delivery of Proposed Green Link 6		
Map ID	Key Actions	
	Enhancement of Parks	
1a	Extend the influence of Mabley Green by creating an entrance that aligns with a new green connection through the Herbert Butler Estate.	
	Estate Regeneration and Development	
2a	Enhance the Herbert Butler Estate to create a new green link. This should utilise existing public routes, for example along Mabley Street.	
	Public Realm and Streets	
3a	The Kenworthy Road, A102 will form a key part of this green link and will therefore require new street level greening to create a coherent green link. Greening should be designed to minimise the effects of air pollution on people adjacent to the road.	
3b	Plant street trees along A102, Kenworthy Road and/or Mabley Street	
3с	Introduce a new green SuDS feature along A102, Kenworthy Road and/or Mabley Street.	

Proposed Green Link 7

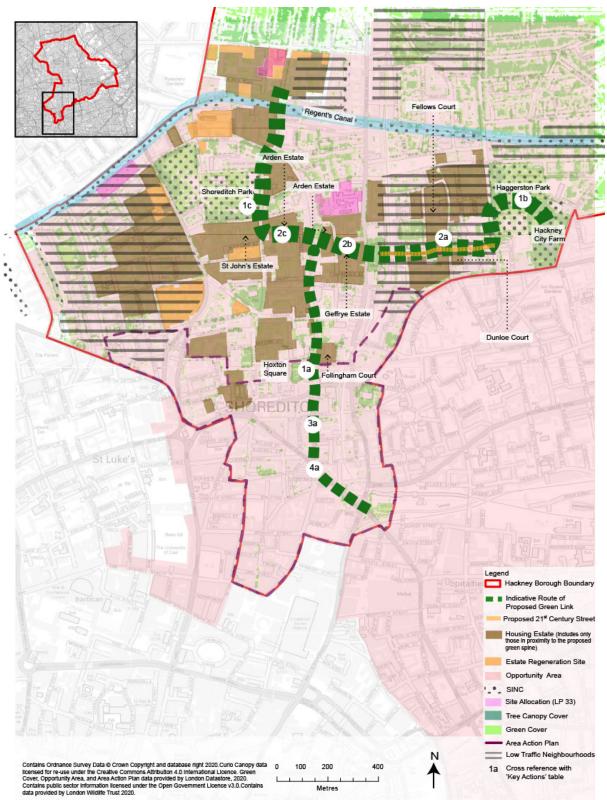
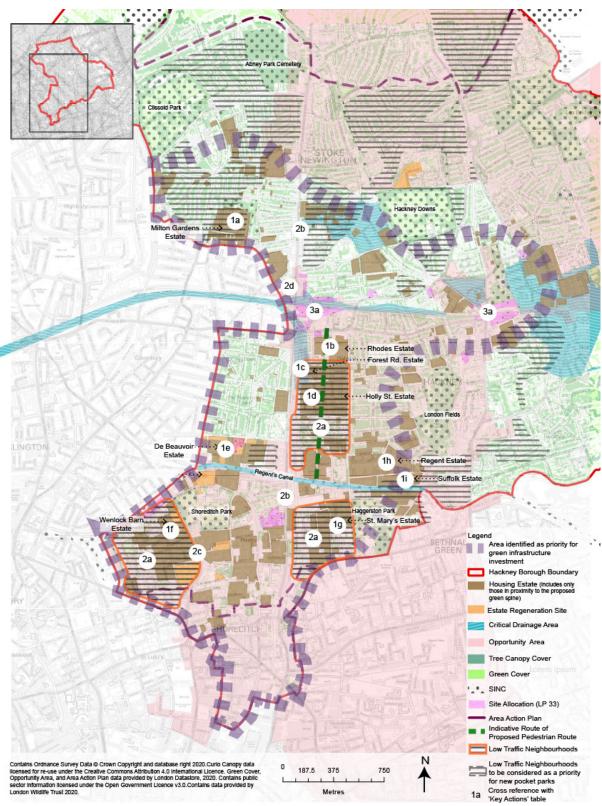


Figure 19 Spatial Framework Proposed Green Link 7

Implementing Green Link 7:

Table 7 Delivery of Proposed Green Link 7

	Delivery of Proposed Green Link 7	
Map ID	Key Actions	
	Enhancement of Parks	
1a	Enhance Hoxton Square in line with the Connecting Green Spaces Report, considering a new entrance from Old Street	
1b	Enhance Haggerston Park, returning the old depot site to parkland	
1c	Planting and biodiversity enhancements to Shoreditch Park	
	Enhancement of Estates Green Spaces	
Enhance the boundary landscape of the following housing estates to contribute to the proposed green link: (Note: the enhancement of boundaries does not necessarily involve the introduction of public thoroughfares, rather the contribution that new planting can make to existing public routes. Where the creation of thoroughfares may be appropriate, these should seek to enhance existing public routes where possible).		
2a	Create a coherent green link through Fellows Court	
2b	Create a coherent green link through Geffrye Estate	
2c	Create a coherent green link through Arden Estate	
	Public Realm and Streets	
3a	Introduce new green features along Curtain Road, Hoxton Street and Great Eastern Street. This should seek to create a green link between the proposed development at Bishopsgate Goods Yard and the proposed east / west green link through housing estates. Subject to agreement with TfL.	
Land-use Planning		
4a	Development fronting onto the proposed green link within the Shoreditch AAP area should deliver ground level urban greening that contributes to a coherent green character and disperse air pollution. This requirement should be embedded in the Shoreditch AAP and included in pre-app discussions with applicants.	



Wider Green Infrastructure Enhancement

Figure 20 Spatial Framework Opportunities in area of deficiency

Table 8 Delivery of Proposed Improvements to the South West of the Borough

	Delivery of Proposed Enhancements in the south west of the borough	
Map ID	Key Actions	
	Enhancement of Estate Green Space	
estat acces	The area includes many housing estates and a limited number of parks. On account of their size and location, the following estates should be considered as a priority for enhancement to increase biodiversity value and the functional area of accessible green space: (Note: the enhancement of the following estates is not intended to include new public thoroughfares, rather the improvement and expansion of existing green assets to increase the number of functions provided).	
1a	Milton Gardens Estate	
1b	Rhodes Estate	
1c	Forest Road Estate	
1d	Holly St. Estate	
1e	De Beauvoir Estate	
1f	Wenlock Barn Estate	
1g	St. Mary's Estate	
1h	Regent Estate	
1i	Suffolk Estate	
1j	Green spaces across this entire area should be considered as a priority for new tree planting.	
	Public Realm and Streets	
2a	The area includes nine newly proposed Low Traffic Neighbourhoods, providing a significant opportunity for new, small- scale community gardens and pocket parks. Given the lack of access to green space the Low Traffic Neighbourhood highlighted on Figure 21 should be the priorities for new pocket parks or 21st Century Streets. A new pedestrian route, indicatively shown on Figure 20, would provide an alternative route for pedestrians away from A10.	
2b	The A10 runs the length of this area from north to south. The majority of the A10 is devoid of any green infrastructure and has been highlighted as a key contributor to poor air quality. Whilst the corridor will retain its primary function as a transport route, it is proposed new green infrastructure is introduced on the public realm flanking the carriageway with the goal of improving air quality.	
2c	New tree planting along East Street designed to improve air quality as part of the East Street Boulevard Scheme.	
2d	Consider the greening of Gillett Square, sensitive to its urban character.	
Land-use Planning		
3a	Dalston Town Centre and Hackney Central are both located within this area of deficiency. Proposals for each should seek to include new publicly accessible open space to address the deficiency in the area. Further information is provided in the Projects section of this Strategy in Section 5.	

Governance and Policy

5.21 The identification of space-based projects is essential to ensure that physical interventions are strategically located to deliver the widest range of benefits possible. However, without changes to governance and policy it is unlikely that these alone will achieve the best possible outcomes. This section sets out some key changes that will improve delivery of this Strategy.

Governance

Green Infrastructure Task Force

- 5.22 Traditionally planning teams and parks departments have been considered to have the primary responsibility for green infrastructure policy and implementation. However, as the concept of green infrastructure has developed, there is wider recognition that other local authority departments can also have a significant role in increasing green infrastructure provision.
- 5.23 An internal Green Infrastructure Task Force, sponsored by an appropriate Director, should be established to promote and encourage joint-working on plans and projects at the earliest opportunity, and establish regular inter-disciplinary workshops and training. The objective should be inter-departmental collaboration rather than inter-departmental consultation.
- 5.24 As the green infrastructure network extends beyond the borough boundary, part of the Green Infrastructure Task Force's role should be to foster partnership working with neighbouring London boroughs and other key stakeholders. A sub-group should be established to identify strategic projects across borough and land-ownership boundaries. The sub-group should include representation from neighbouring boroughs, Transport for London, Lea Valley Regional Park and the Canal and River Trust. Fully integrated design and management across boundaries is not always practical or feasible because other considerations, such as safe operation of the railway for example, will restrict the opportunity for bespoke projects or management. However, there should be regular assessment of potential opportunities for partnership working.

Development of an interactive version of the Spatial Framework

- 5.25 The Spatial Framework presents planning data on maps to identify opportunities for new green infrastructure implementation. It also can be used by the development management team to identify the specific function of greening that a development application should deliver. The Spatial Framework should be consulted early in the development application process, ideally at the pre-application stage, to inform design development. The Spatial Framework presented in this Strategy represent a snapshot in time. The details of proposed interventions and the nature of opportunities will inevitably change in the coming years.
- 5.26 It is therefore proposed that the Spatial Framework is web hosted so that it can be easily updated and is made user friendly for Council officers, partners and stakeholders and applicants .
- 5.27 Presentation of the Spatial Framework as an interactive map will require:
 - Production by the Hackney GIS department;
 - A data-sharing agreement with Greenspace Information for Greater London (GiGL);
 - An annual review with the GIS team and other departments to update data and the proposed interventions; and
 - Publication of the interactive map to internal officers and external applications.

Hackney Green Infrastructure Forum

- 5.28 A variety of locally based organisations and community groups already play a role in the planning, design, delivery and maintenance of the borough's green infrastructure, delivering social as well as environmental value. The council has established a number of different local partnership and forums through which to engage with these groups. Some have a thematic focus (e.g. Hackney Biodiversity Partnership) whilst others have a site-specific or spatial focus (e.g. the various parks user groups) or a practical delivery focus (e.g. Tree Musketeers). But there are overlaps and gaps in both thematic and spatial coverage.
- 5.29 To support existing groups and to mobilise additional community action the council should establish a 6monthly Hackney Green Infrastructure Forum. Its purpose would not be to supplant existing groups and

partnerships but to foster more collaboration, partnerships and joint projects between. The Forum would be a celebration of ideas and action, based on the 'gatherings' model promoted by London National Park City⁵⁴.

Policy

Urban Greening Factor and offsetting

- 5.30 The new London Plan indicates that urban greening should be a fundamental element of site and building design and delivered on site, as part of a proposed development. Consequently, the new Hackney Local Plan includes a policy requirement for major residential developments to achieve an Urban Greening Factor Score (UGF) of at least 0.4; and for mixed-use or commercial developments to achieve a score of 0.3. The UGF is a method for expressing the quality, function and quantity of urban greening proposed as part of an application. By setting a minimum target, it aims to ensure that urban greening is a fundamental element of site and building design.
- 5.31 The Local Plan identifies a number of key growth areas, several of which (including Dalston, Hackney Central and Shoreditch) are identified as being in particular need of new green infrastructure. Urban greening is a significant delivery mechanism for these areas. However, there will be circumstances where, due to site constraints or other overriding policy considerations, meeting the required target score is not feasible. Given the anticipated level of development in these areas, and the urgent need for new green infrastructure, it is proposed that any the shortfall should be met via a financial contribution which is ring fenced for the implementation of new urban greening beyond the development boundary. It is recommended that this is embedded into location specific policy documents such as the Shoreditch AAP.

Herbicide use

- 5.32 Hackney has taken steps to reduce the amount of herbicide used in the maintenance of streets and greenspace by reducing the number of sprays to three per season, removing weeds by hand across town centres, and spraying via individual operatives, rather than vehicles.
- 5.33 During 2019 Hackney Council trialled a 'herbicide-free neighbourhood' in Homerton. It is proposed that the Council expand the 'herbicide free neighbourhoods' to the wider borough.

⁵⁴ https://www.nationalparkcity.london/component/content/article/37-whats-on/174-gathering-29-feb-2020?Itemid=1116

Monitoring and Review

6. Monitoring and review

Monitoring progress

- 6.1 Successful implementation of this Strategy would result in improved environmental and social wellbeing; specifically, by 2040 the borough will:
 - Be more resilient to the effects of climate change;
 - Have a green infrastructure network for wildlife to thrive; and
 - Enhance the physical and mental health of the borough's residents.
- 6.2 Success cannot be measured purely by a measure of increased green cover or completed projects but rather how the Council have sought to implement change in order to pursue the realisation of this vision. Once prepared, the Forward Plan will provide target timings for the projects and changes to governance and policy required. These timings will provide a bench mark against which the implementation of this Strategy will be measured. As such, an annual review should be undertaken to determine progress toward each of the elements of the forward plan. The annual review should also include:
 - reflections on lessons learnt from the previous year;
 - review the 'needs' of the borough by reviewing the latest health data, data concerning deficiency in access to open space and nature, and the GLA's green infrastructure focus map; and
 - consider any new opportunities for enhancing green infrastructure.
- 6.3 The annual review should be undertaken by the Green Infrastructure Task Force.
- 6.4 In addition to the annual review, this Strategy should be reviewed after five years to determine whether an update is required to maximise green infrastructure delivery.



-1

0

Appendix A National Planning Policy

National Planning Policy Framework and Guidance

A.1 The NPPF sets out that:

- ...safe, accessible and well-planned green infrastructure can enable and support healthy lifestyles and can address any local health and well-being needs (Chapter 8, Paragraph 91).
- ...plans and policies should support measures to mitigate and adapt to climate change to ensure future resilience of communities and infrastructure. In areas that are vulnerable, care should be taken to ensure that risks of new development can be managed, for example through the planning of green infrastructure (Chapter 14, Paragraph 149 and 150).
- ...plans should take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries. (Chapter 15, Paragraph 171).

A.2 National planning practice guidance further explains how green infrastructure can support the objectives of the NPPF. The following documents are pertinent to this strategy:

- Air quality (November 2019): sets out that the provision and enhancement of green infrastructure provides opportunities to improve air quality or mitigate impacts.
- Climate change (March 2019): explains the statutory duty for local authorities to include policies in their Local Plan designed to tackle climate change. This may be achieved, in part, through multi-functional green infrastructure, which can reduce urban heat islands, manage flooding, help species adapt to climate change and contribute to a pleasant environment which encourages walking and cycling.
- Natural environment (July 2019): highlights the breadth of green infrastructure, why green infrastructure is important and how it can be considered in planning decisions. It explains that green infrastructure supports a strong and competitive economy, achieve well-designed places, promote healthy and safe communities, mitigate climate change and conserve and enhance the natural environment.
- A.3 Green infrastructure strategies prepared at a district wide scale can be a useful tool to support the implementation of green infrastructure networks. These strategies are evidence base documents and include an assessment of the quality of current green infrastructure and any gaps in provision.

UK Government's 25 Year Environment Plan

A.4 The 25 Year Environment Plan was published in January 2018 and sets out the Government's long-term approach to protecting and enhancing the UK's natural landscapes and habitats. The plan aims to deliver cleaner air and water, protect threatened species and provide richer wildlife habitats.

A.5 Chapters of particular relevance to this Green Infrastructure Strategy are:

- Chapter 2 'Recovering nature and enhancing the beauty of landscapes' states that green infrastructure can extend wildlife corridors into towns and cities.
- Chapter 3 'Connecting people with the environment to improve health and well-being', states that the
 provision of green infrastructure will make towns and cities attractive places to live and work. Green
 infrastructure will also promote local social interaction and help create strong community networks.
 The chapter states that its necessary to explain what 'good' green infrastructure actually looks like.
 The plan states that it will support local authorities to assess green infrastructure provision against
 standards developed by Natural England and will look at how green infrastructure can be incorporated
 into national planning policy and guidance.

Environment Bill 2020 (Draft)

A.6 The Environment Bill sets out how the Government plans to protect and improve the natural environment in the UK. It acts as one of the key vehicles for delivering the vision set out in the 25 Year Environment Plan. The Bill states that environmental considerations will be central to the policy development process across government and that the Government will set out legally binding targets to help deliver long term

environmental improvement. These will focus on four priority areas of the natural environment: air quality, waste and resource efficiency, water and nature.

- A.7 The Environment Bill explains that nature plays a vital role in climate change mitigation, pollination, flood alleviation, public health and well-being. The Environment Bill requires public authorities to carry out strategic assessments. The Bill lays the foundation for the Nature Recovery Network which establishes spatial mapping and planning tools to help inform nature recovery. This will include identification of existing nature assets and key opportunities for enhancement within local areas. The tool will support strategic planning for green infrastructure and help direct net gain investment so that it has maximum benefit for local wildlife and people.
- A.8 Local authorities must be empowered to play a role in delivering the environmental action needed in local areas. Many environmental issues require a localised response. This is why the Bill supports and enables action on the ground through a collaborative approach between stakeholders at all levels. The Bill provides stronger abilities to improve health and social outcomes for local citizens and provides support to local authorities as 'place shapers' through new tools and data for effective spatial planning.

Appendix B Health and demographic maps

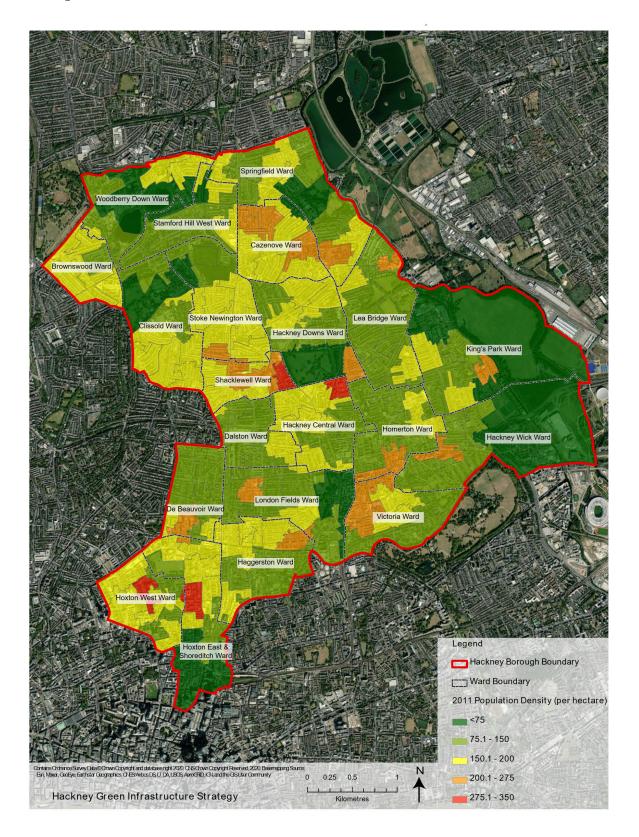


Figure 21 Population Density

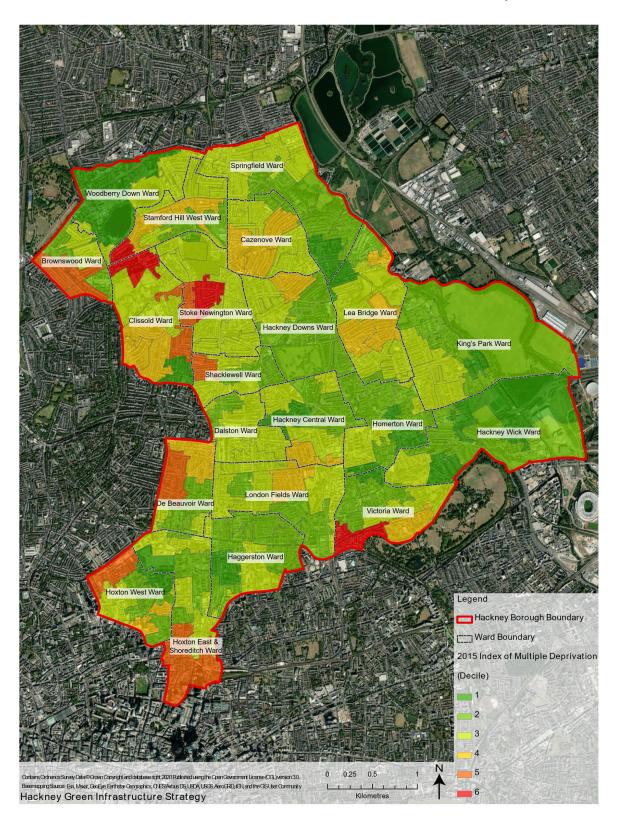


Figure 22 Indices of Multiple Deprivation

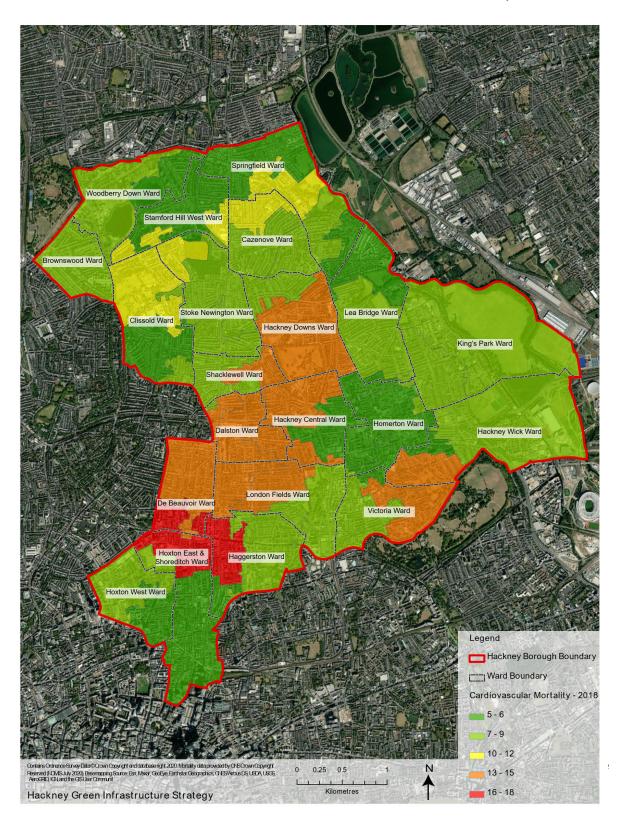


Figure 23 Cardiovascular Disease

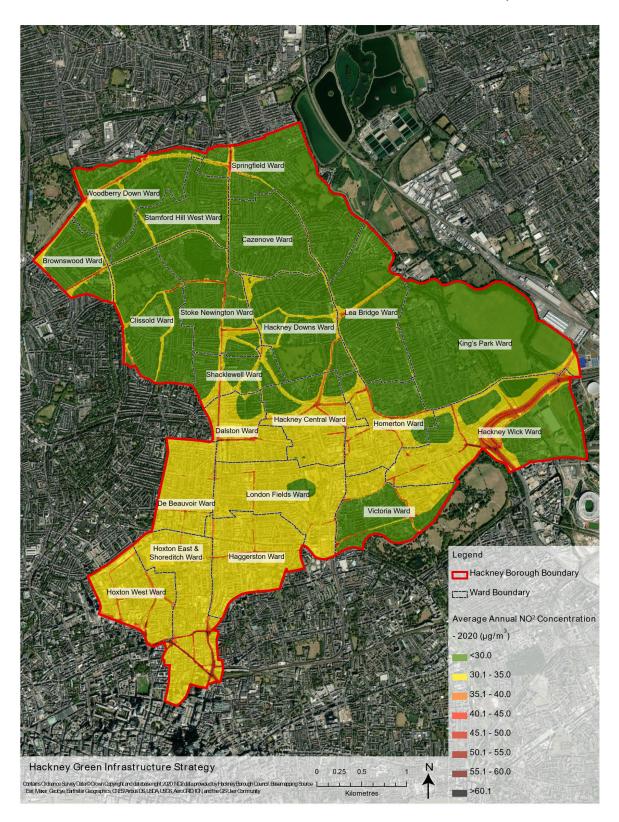


Figure 24 NO₂ Concentrations

Appendix C Consultees

- C.1 This Strategy has been prepared in collaboration with a Project Steering Group which comprised representatives from:
 - Hackney Strategic Planning Department;
 - Hackney Public Realm Department;
 - Hackney Policy and Strategic Delivery team;
 - London Wildlife Trust; and
 - Greater London Authority.
- C.2 A wider Project Working Group have also provided input via three workshops in June 2020, September 2020, and March 2021; as well as one to one conversations. This has comprised representatives from:
 - Hackney Public Health Team;
 - Hackney Streetscene, Public Realm;
 - Hackney Public Realm Division (SuDS, Highways);
 - Hackney New Homes and Regeneration Teams;
 - Hackney Energy and Carbon Management Team;
 - Hackney Housing Services;
 - Hackney Arboricultural Team;
 - Hackney Parks and Green Spaces Service; and
 - Hackney Parking Services.
- C.3 Hackney Biodiversity Partnership were also been kept informed of the Strategy's development through sessions at their regular group meetings.

aecom.com