

**Integrated Impact Assessment of the Royal Docks and Beckton Riverside
Opportunity Area Planning Framework**

IIA Scoping Report – Consultation Version

January 2022

1. Introduction

This chapter sets out the background, purpose and the status of the IIA Scoping Report and provides an overview of the contents of the rest of the report.

1.1 Overview

1.1.1 An integral part of establishing the **Royal Docks and Beckton Riverside** Opportunity Area Planning Framework (OAPF) is the requirement to undertake an Integrated Impact Assessment (IIA). This scoping report is the first stage of the Integrated Impact Assessment and incorporates the statutory and non-statutory requirements of:

- Strategic Environmental Assessment (SEA)
- Sustainability Appraisal (SA)
- Equalities Impact Assessment (EqIA);
- Health Impact Assessment (HIA); and
- Community Safety Assessment (CSA)
- Habitats Regulation Assessment (HRA);

1.2 Purpose of this IIA Scoping Report

1.2.1 This IIA Scoping Report sets out, for the purposes of consultation, the proposed scope of issues to be addressed in the IIA and the approach to be undertaken in assessing them. The document aims to outline the baseline information and evidence which is needed to inform the IIA of the emerging Royal Docks and Beckton Riverside OAPF objectives and policies. This is based on identification review of plans and programmes which are relevant to the study area and an assessment of the environmental, economic and social baseline information.

1.2.2 From an assessment of the baseline, this IIA Scoping Report identifies key social, environmental and economic issues facing London and provides a framework for assessing the likely impacts of the Royal Docks and Beckton Riverside OAPF in terms of how it will contribute to resolve such issues and ultimately how it will contribute to sustainability. The framework consists of IIA objectives and guide questions which will examine whether the spatial approach to development and policies set out in the Royal Docks and Beckton Riverside OAPF are sustainable.

1.2.3 The IIA Scoping Report provides consultees with an early opportunity to comment on the IIA process in accordance with the Office of the Deputy Prime Minister (ODPM)

SEA Guidance, A Practical Guide to the Strategic Environmental Assessment Directive (2005).

1.2.4 The Scoping Report aims to provide sufficient information to key stakeholders on the proposed approach to the IIA for the OAPF. The final results of the IIA will be described in a full IIA report that will be published at the same time as the OAPF. A full public consultation process will be undertaken for the document and stakeholders and the public will be provided with the opportunity to comment on the IIA Report.

1.3 Engagement and Consultation

1.3.1 Regulation 4 of the Environmental Assessment of Plans and Programmes Regulations 2004 defines certain organisations with environmental responsibilities as consultation bodies. In England the statutory consultation bodies are Historic England, Natural England and the Environment Agency.

1.3.2 This IIA Scoping Report will be provided for comment to the statutory consultees as well as other key stakeholders for a period of five weeks. If you would like to comment on any part of this document, please respond by any of the following means:

- a) by e-mail to: rdoapf@london.gov.uk
- b) by post to:

Royal Docks and Beckton Riverside OAPF IIA Scoping Report
Growth Strategies and Urban Design Team
City Hall, Greater London Authority
Kamal Churchie Way
London, E16 1ZE

- The consultation period will run from 25hJanuary 2022 to 1st March 2022 for a 5-week period.

2. The Royal Docks and Beckton Riverside OAPF

This chapter gives an overview of the Royal Docks and Beckton Riverside OAPF, its current status and the need to develop a strategy. It describes the proposed approach to bringing forward sustainable development and provides an account of its scope.

2.1 About OAPFs in London

- 2.1.1 Opportunity Area Planning Frameworks (OAPF) are strategic planning frameworks that set out planning, regeneration and design guidance for Opportunity Areas (OAs). OAPFs are informed by policy and guidance from national to local level.
- 2.1.2 Through the Opportunity Area Planning Framework (OAPF) process, the Greater London Authority (GLA) and Transport for London (TfL) offer strategic planning and design expertise to London boroughs to define, support and deliver Good Growth in London's Opportunity Areas. Working in partnership with strategic stakeholders and local communities, OAPFs complement local and strategic planning policies in addressing the challenges and opportunities in OAs and identify the necessary physical and social infrastructure to support growth.
- 2.1.3 The OAPF is Supplementary Planning Guidance (SPG) to the London Plan, and is adopted by the Mayor of London as such. While the OAPF does not establish new policies, the framework does provide a direction of travel for forthcoming Local Plan and policy reviews at both regional and local level. It will be a material consideration in planning decisions, the plan making process and Section 201 negotiations. An OAPF can also be adopted by a local planning authority as a Supplementary Planning Document (SPD).
- 2.1.4 The OAPF sits alongside the London Plan's strategic policies and the more detailed policies of Newham's Local Plan. It must be read in the context of the relevant statutory planning policy which apply to development proposals in the OAPF area.

2.2 About the Royal Docks and Beckton Riverside OAPF

- 2.2.1 The Royal Docks and Beckton Riverside Opportunity Area Planning Framework (OAPF) is being prepared as a long-term planning framework to support and guide emerging development in the Royal Docks and Beckton Riverside Opportunity Area up until 2041.

- 2.2.2 This framework has been prepared to ensure that future investment and growth in the Royal Docks and Beckton Riverside OA is planned for on the basis of its potential to improve the health and quality of life for both existing and new residents in the area.
- 2.2.3 The area is identified in the London Plan with indicative capacity for 30,000 new homes and 41,500 new jobs. Para 2.1.48 of the London Plan states “This area sits at the heart of the Thames Gateway presenting one of the largest regeneration opportunities in London. It benefits from the presence of important existing industry and attractors such as ExCEL and City Airport, and will soon see an Elizabeth line station at Custom House. The Royal Docks will become a vibrant new London quarter, creating a worldclass business, industrial, cultural and residential district. Key to delivering this will be ensuring high-quality development with new infrastructure, homes and workspaces, including creative cultural, evening and night-time economy uses, in recognition of the Mayor’s aspiration for a Thames Estuary Production Corridor for culture and creative industries.”

3. The Proposed Approach to the Integrated Impact Assessment of the Royal Docks and Beckton Riverside OAPF

This chapter describes the purpose of the IIA, its role in the decision-making process and outlines the IIA process. The IIA is an integral part of good plan-making that identifies and reports on the likely significant effects of the OAPF and the extent to which implementation of the OAPF will achieve sustainable development. This chapter describes how this will assist the Mayor in fulfilling the objective of meeting the legal requirements for a Strategic Environmental Assessment and other requirements to have regard to economic, environmental and social impacts, and also explains the benefit of integrating different methods of appraisal and evaluation into a coherent single impact assessment.

3.1 Purpose of the IIA

- 3.1.1 The purpose of the IIA is to promote sustainable development through better integration of sustainability considerations into plan preparation and adoption. IIA is an integral part of good plan-making and should not be seen as a separate activity. It is an iterative process that identifies and reports on the likely significant effects of a plan or strategy and the extent to which implementation of the plan or strategy will contribute towards sustainable development.
- 3.1.2 The aim of the IIA is to help to identify and assess different strategic options and help advise on the most sustainable solutions. It also aims to minimise negative impacts, optimise positive ones, and compensate for the loss of valuable features and benefits. The IIA informs decision-makers about the environmental and sustainability consequences of the OAPF which can then be considered alongside financial, technical, political and other concerns. Thus, IIA adds an additional dimension to the decision-making process. The IIA process is, in many ways, a model for good plan-making. The more the plan-making and assessment processes are integrated, the more effective the assessment is likely to be.

3.2 What is IIA?

3.2.1 The aim of facilitating sustainable development requires the use of different disciplinary approaches to the impact assessment of plans and programmes, which can give a balanced consideration to the multidimensional nature of sustainable development targets.

3.2.1 The IIA is an assessment tool which uses an integrated appraisal approach across a number of topics to measure the potential impacts of the OAPF. The IIA delivers SEA and SA requirements as well as looking in more depth into the issues of health, equality and community safety. By adopting this approach, the IIA provides for a thorough assessment of the respective aspects of sustainability.

3.2.2 The IIA is a strategic-level quantitative and qualitative assessment and is based on broad assumptions and judgements. It gives consideration of the significant environmental/sustainability effects of the OAPF and of reasonable alternatives that takes into account the objectives and the geographical scope of the strategy. The IIA is a tool for improving the strategic action proposed by the OAPF, which may be changed as a result of the IIA, with a focus on different objectives, different means of achieving these objectives, and different forms of implementation¹. It also promotes participation of other stakeholders in the decision-making process and focuses on key environmental/sustainability constraints.

3.3 Approach to IIA

3.3.1 The proposed policies within the Royal Docks and Beckton Riverside OAPF will be subject to the following assessments, of which the findings will be collated into the overall IIA Report:

- Strategic Environmental Assessment (SEA);
- Sustainability Appraisal (SA)
- Equalities Impact Assessment (EqIA);
- Health Impact Assessment (HIA);

¹ Therivel, R. (2010) Strategic Environmental Assessment in Action. 2nd Edition. Earthscan: London.

- Community Safety Impact Assessment (CSIA).
- Habitats Regulation Assessment (HRA);

3.3.2 The requirement for each assessment is discussed in more detail in Appendix A.

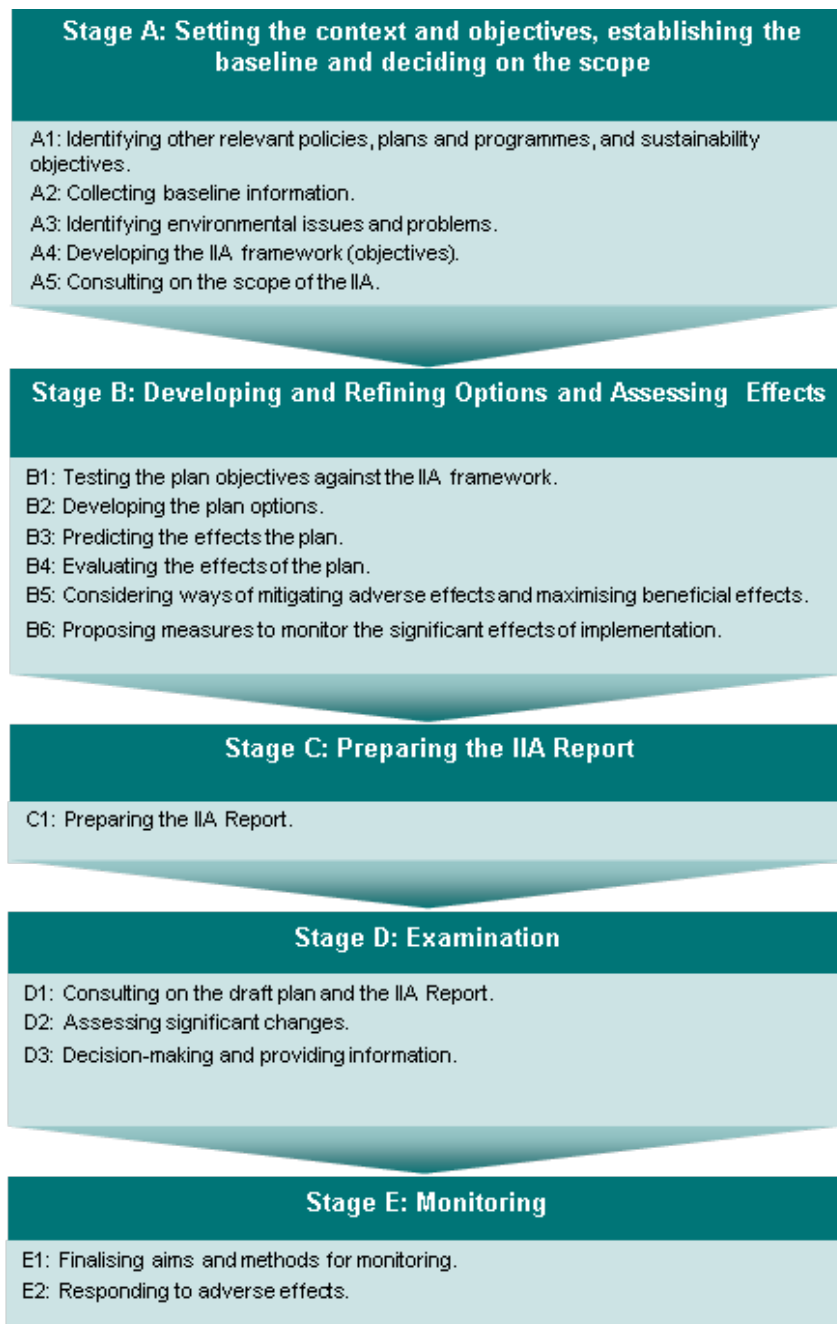
3.4 IIA Process

3.4.1 This IIA Scoping Report follows key legislation, policy and guidance including:

- Directive 2001/42/EC 'on the assessment of the effects of certain plans, and programmes on the environment' (European Commission, 2001) i.e. the SEA Directive.
- Environmental Assessment of plans and programmes Regulations 2004 (SI 2004 No 1633)
- A Practical Guide to the Strategic Environmental Assessment Directive (ODPM, 2005);
- Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment (4th April 2013 European Commission);
- Historic England guidance (2016) on Sustainability Appraisal and Strategic Environmental Assessment Planning Advisory Service (PAS) Good Plan Making Guide. Plan Making Principles for Practitioners (2014);
- National Planning Policy Framework (NPPF)
- National Planning Practice Guidance
- Crime and Disorder Act 1998 (as amended)
- Police and Justice Act 2006
- HUDU Planning for Health (June 2015) Rapid Health Impact Assessment Tool
- Equality and Human Rights Commission (November 2009) Equality impact assessment guidance A step-by-step guide to integrating equality impact assessment into policymaking and review.
- The Equalities Act 2010
- Greater London Authority Act (1999)
- Greater London Authority Act (2007)

3.4.2 The approach to IIA ensures that commonalities, inter-related issues and synergies between the above assessments are identified in a systematic manner and used to inform the development of the Royal Docks and Beckton Riverside OAPF. In doing this, the IIA will contribute to development of a better informed OAPF which will be enhanced by giving greater consideration to a range of sustainability issues and will identify opportunities to maximise the contributions to sustainable development that the OAPF can make. The Scoping Report prepared for the Royal Docks and Beckton Riverside OAPF has also been reviewed to ensure consistency with this assessment approach.

Figure 3.1 Stages of the IIA process

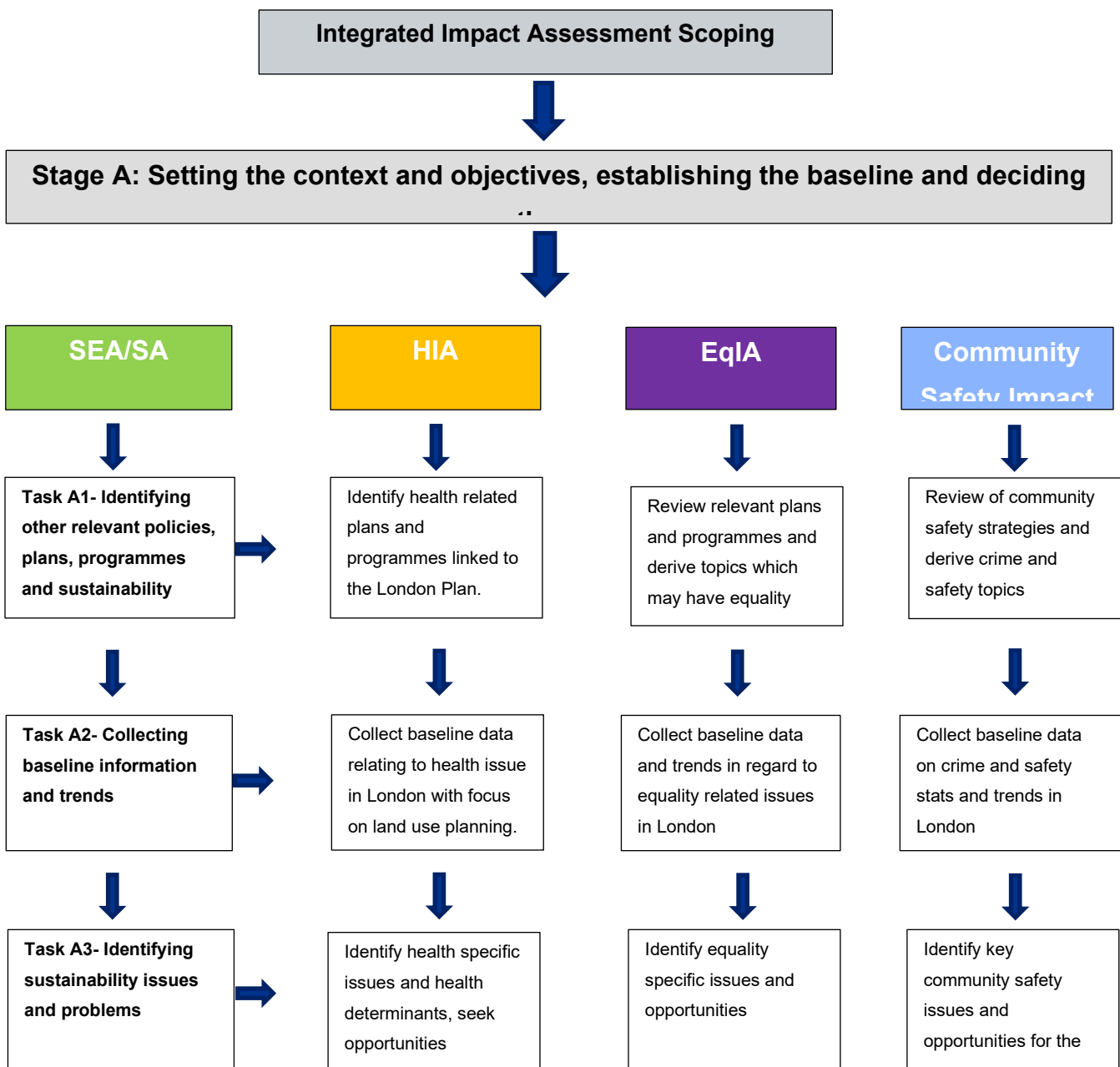


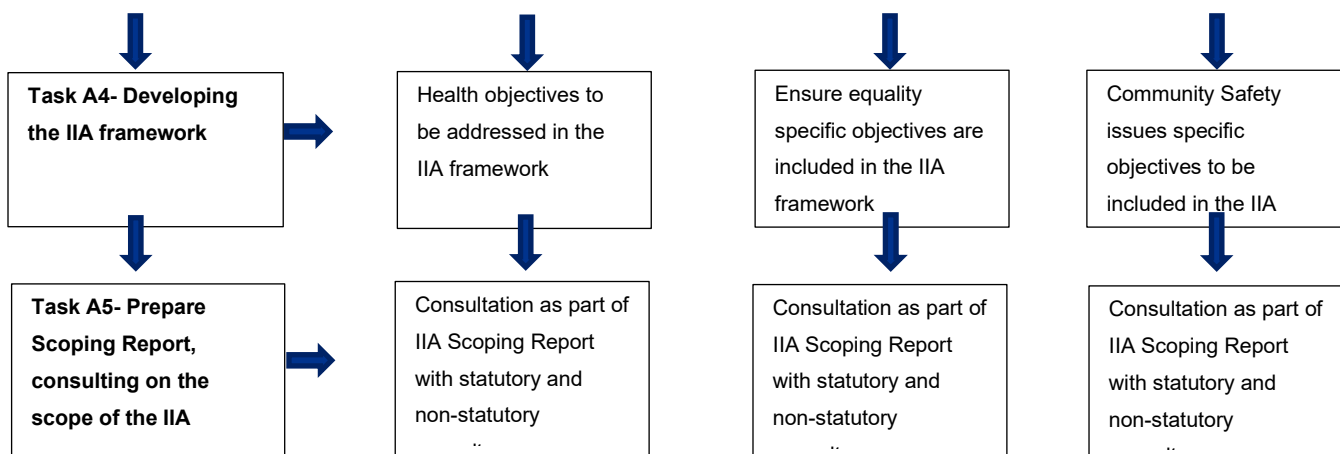
3.4.4 The scope of the IIA includes environmental, economic, and social issues (including health, equality, and community safety) to provide a wide-ranging assessment of the

potential effects of implementing the Royal Docks and Beckton Riverside OAPF. In order to produce this Scoping Report, the IIA process requires a review of relevant plans and programmes as well as the collation and analysis of relevant baseline information. This will help identify key issues and will inform the development of a set of sustainability objectives that will be used in the framework to assess the Royal Docks and Beckton Riverside OAPF.

3.4.5 A detailed process of IIA at the Scoping stage A is illustrated in **Figure 3.2** below:

Figure 3.2 IIA Scoping detailed process





3.4.6 **Stage B** includes developing and refining alternatives and assessing impacts. This will commence following consultation on this Scoping Report, taking into account the responses of those consulted.

3.4.7 **Stage C** includes preparing the IIA report. This will involve the integration of the assessments from all work streams into a single document.

3.4.8 **Stage D** includes the publication for wider public and stakeholder consultation of the Royal Docks and Beckton Riverside OAPF and associated IIA report, which assesses the likely significant impacts of the proposed Royal Docks and Beckton Riverside OAPF.

3.4.9 The responses to the consultation on both the Royal Docks and Beckton Riverside OAPF and IIA Report will be analysed by the GLA and a report prepared for the Mayor, with recommendations for potential changes (if any).

3.5 Integrating the SDGs

3.5.1 The UN Sustainable Development Goals (SDGs) were agreed by global leaders in 2015 as part of 'Agenda 2030' to create transformative social, economic and environmental improvements by 2030.

3.5.2 According to the International Association for Impact Assessment (IAIA): "Applying SDG targets will help make IA more objectives driven, rather than process- or

impacts-oriented, thus helping to overcome fragmented approaches in planning and decision-making.”²

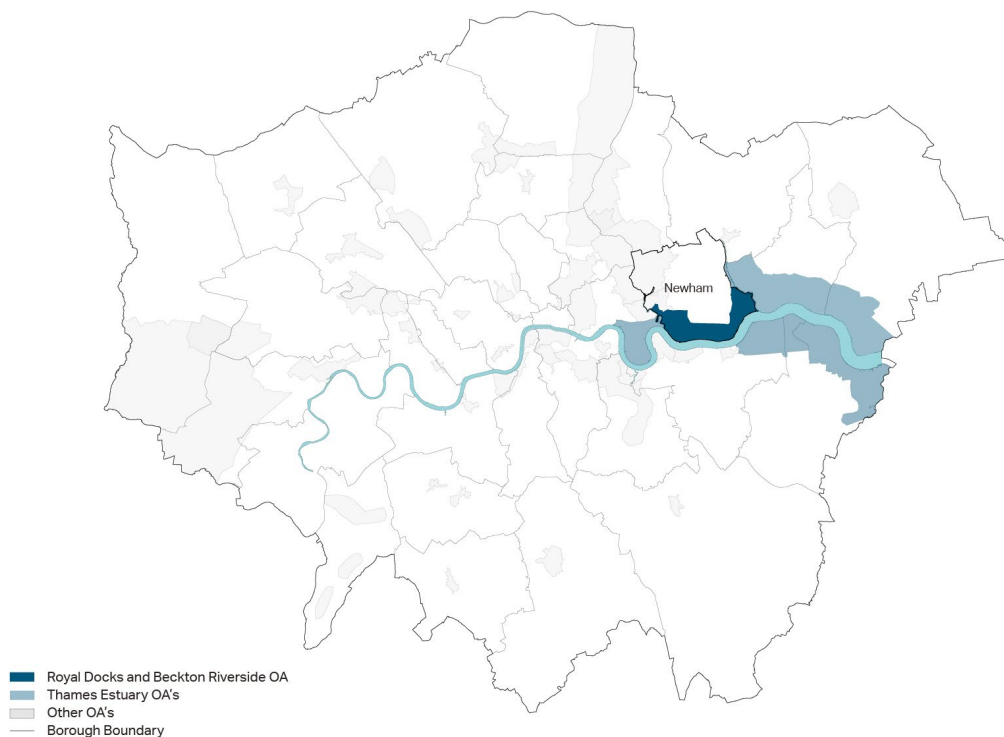
3.5.3 This IIA seeks to engage with the SDGs, by integrating the SDG indicator set developed by the London Sustainable Development Commission (LSDC) into the IIA objectives and guide questions. Developing clear links between the SDGs and the IIA will help to establish a clear assessment framework that will contribute to the delivery of sustainable development.

3.6 Spatial and temporal Scope of the IIA

3.6.1 The spatial scope refers to the geographic area that will be covered by the IIA. The principal spatial scope for the IIA will be the Royal Docks and Beckton Riverside area and the London borough of Newham. The IIA will also take account of potential impacts on wider areas as appropriate, beyond the boundaries of the London borough. The Royal Docks and Beckton Riverside OAPF area in the context of wider London is shown in **Figure 3.3** below.

² IAIA, 2019 ([Fastips_19 SDGs.indd \(iaia.org\)](#))

Figure 3.3 Royal Docks and Beckton Riverside in relation to Greater London



3.6.2 The Royal Docks and Beckton Riverside OAPF covers the period to 2041 and this will therefore also be the timeframe for the IIA. Where possible, significant effects identified will be categorised as short term (0-5 years), medium term (6-15 years) and long term (16 years+).

4. Identifying other plans, programmes and sustainability objectives (Task A1)

This chapter describes the process and the need to identify other plans and programmes relevant for the Royal Docks and Beckton Riverside OAPF, their objectives and targets, and provides a summary on their implications for the OAPF. The most relevant plans that will require detailed consideration are summarised below and presented in Appendix B.

4.1 TASK A1

4.1.1 Task A1 requires that all relevant policies, plans, programmes and environmental and sustainability objectives are analysed to:

- Identify any external social, environmental or economic objectives that should be reflected in the IIA process;
- Identify external drivers that may influence the preparation of the Royal Docks and Beckton Riverside OAPF;
- Identify how the preparation of the Royal Docks and Beckton Riverside OAPF might influence other external drivers; and
- Determine whether the policies in other plans and programmes might lead to cumulative or synergistic effects when combined with the Royal Docks and Beckton Riverside OAPF.

4.1.2 A plan or programme may be influenced in various ways by other plans or programmes, or by external environmental protection objectives such as those laid down in policies or legislation. The IIA process takes advantage of potential synergies and addresses any inconsistencies and constraints. The IIA also aims to recognise the inter-relationships between topic areas to identify synergies and combination effects to highlight opportunities for cross-topic policy approaches. This IIA Scoping Report presents a summary analysis of the objectives of the key

policies, plans and programmes (including legislation) that are relevant to the London Plan and the IIA assessment process.

4.1.3 The most relevant plans are summarised and presented in **Appendix B**. They have been scoped as of October 2019. These are presented by their geographic scope, from international to local.

4.2 Implications of the Plans, Programmes and Policies Review

4.2.1 The review of relevant plans, programmes and policies has identified a number of key messages that need to be taken into consideration when developing the Royal Docks and Beckton Riverside OAPF and IIA objectives:

- **Demography** – the population in the OA is significantly increasing and the composition is changing, becoming more diverse.
- **Equality and Social Integration** - reducing inequalities and the promotion of inclusion and participation opportunities for those groups with protected characteristics to promote social integration and cohesion.
- **Health and Health Inequalities** - a need to improve the overall health and healthy life expectancy within the population of the OA and reduce health inequalities. Promotion of active travel and the Mayor's Healthy Streets approach. Responding and recovering from the impacts of the COVID-19 pandemic and implementing LB Newham's Towards a Better Newham recovery strategy.
- **Crime, Safety and Security** – the design of the built environment and mix of activities can significantly impact on fear and actual crime.
- **Housing** – to significantly increase the delivery of housing, including a mix of size, tenures, affordable products and choice. The complexity of issues around barriers to housing delivery.
- **Sustainable Land Use** – ensure the most efficient use of land which adheres to the principles of sustainable development and considers OAPF's relationship as part of the city region.

- **Connectivity** – Integration of land use and transport planning to ensure growth is sustainable and optimises connectivity throughout the area and its relationship with London as a whole. The green network also provides connections which has many health and environmental benefits.
- **Accessibility** – the need for people to be able to access jobs, housing, public spaces, education, public transport, healthcare and amenities easily and independently; and be able to easily and independently navigate their way through the built environment.
- **Economic Competitiveness** – the importance of London’s position as a leading global city and to support a strong, diverse, and resilient economic structure providing opportunities for all. The Royal Docks is London’s only Enterprise Zone, and has the potential to expand its economic role significantly.
- **Employment** – employment growth in different sectors ensuring a diverse economy providing opportunities for all.
- **Education and Skills** – the importance of ensuring adequate access to education as the local population expands quickly over time, to ensure that locals have the right skills to access a diverse range of jobs.
- **Culture** – the economic and social benefits of culture.
- **Air quality** – the urgent need to meet mandatory standards for air quality and meet the Mayors air quality priorities through the promotion of air quality neutral and positive developments and reduce exposure to toxic air and minimise health impacts.
- **Climate Change** – the need to design buildings and spaces to adapt and mitigate the effects of climate change, including overheating, flooding, droughts and more extreme weather events. The Mayor has a commitment to reduce London’s CO2 emissions by 60 per cent by 2025. Review options to achieve zero net carbon emissions by 2050.
- **Energy Use and Supply** – Widening supply and demand gap. Greater efficiencies, use of renewable energy sources, and the importance of low carbon economy.

- **Water resources and quality** – identified need to focus on the protection, improvements and sustainable use of the water environment.
- **Flood Risk** – A need to ensure that development is designed where possible to reduce flood risk, to encourage the use of Sustainable Urban Drainage Systems (SUDS) and that all elements of policy require review to ensure that flood risk is integrated with the management of the rest of London’s Environment.
- **Natural Environment and Natural Capital** –facilitating opportunities to integrate biodiversity and the network of green spaces to provide a range of sustainability benefits, i.e. healthy living, improving air and water quality, cooling the urban environment, enhancing biodiversity and ecological resilience. This could include both enhancing existing habitats and providing new areas for biodiversity as opportunities arise. The principle of ‘net gain’ in accordance with the London Plan and 25 Year Environment Strategy should be acknowledged.
- **Townscape, Landscape and Public Realm**– the importance of creating and maintaining a safe and attractive, well designed public realm which encourages people to walk and cycle, promoting a sense of place and reducing the need to travel.
- **Historic Environment** – the importance of the social, cultural and economic benefits of the historic environment and the importance of conserving and enhancing designated and non-designated heritage assets and their settings.
- **Geology and Soils** – a need to focus on prevention and remediation of environmental damage, including land contamination. Need to increase efforts to reduce soil degradation and remediate contaminated sites.
- **Materials and Waste** – A need to apply principles of circular economy when aiming for waste reduction, reuse, re-manufacturing and recycling in all construction and operational practices. Review of London’s waste management capacity projected alongside expected waste arisings to inform infrastructure gaps and need.
- **Noise and Vibration** – a need to minimise noise and vibration levels and the number of people exposed to high levels of noise from development, activities and use.

5. Baseline Information and Key Sustainability Issues in London (Tasks A2 & A3)

This chapter sets out the baseline data across all IIA topics. The baseline data has been aggregated into themes representing three dimensions of sustainable development - social, economic and environmental. Significant interlinkages exist between the thematic issues and cross-cutting issues such as air quality, health and equality which have been identified across many sustainability topics and addressed in an integrated way which can assist in the development of coherent policy guidance to inform the OAPF review process.

5.1 Overview

- 5.1.1 The baseline data for the IIA includes existing relevant environmental and sustainability information from a range of sources which is both quantitative and qualitative. This information provides the basis for assessing the potential impact of the proposed policies in the Royal Docks and Beckton Riverside OAPF and will aid development of appropriate mitigation measures, together with future monitoring indicators.
- 5.1.2 The baseline information in this chapter is set out in relation to topics relevant to each of the individual assessments which comprise the IIA. It can be seen from **Table 5.1** that the majority of these topics are applicable to more than one of the assessments. This table is an indicative marker of different inter-relationships between sustainability topics and the individual assessments which together make up the IIA.
- 5.1.3 The Opportunity Area covers 5 different wards within the London Borough of Newham. Much of the baseline data uses information collected at MSOA, ward and borough level.
- 5.1.4 For the purposes of the IIA scoping report and the later stages of the IIA assessments, including scrutiny of individual policies, ward level data will include all five wards which overlap with the OAPF area as illustrated in **Figure 5.1**.

Figure 5.1 The Royal Docks and Beckton Riverside OAPF boundary

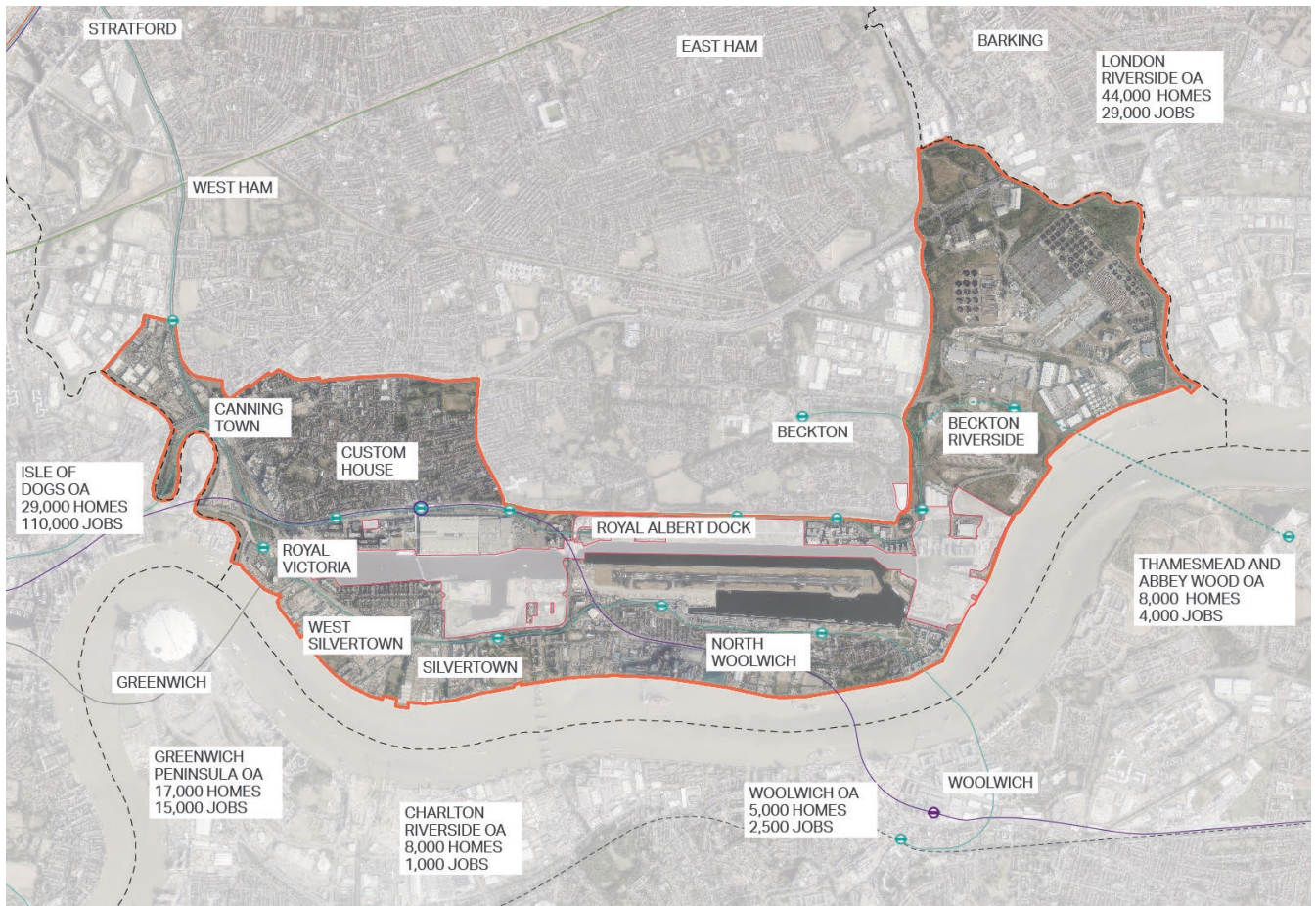


Figure 5.2 Ward boundaries within the Royal Docks and Beckton Riverside OA



Table 5.1 Key issues (and subsequent topic areas) for baseline

Topic	Sustainability Appraisal (SA)	Strategic Environmental Assessment (SEA)	Equalities Impact Assessment (EqIA)	Health Impact Assessment (HIA)	Community Safety Assessment (CSA)
Demographic	•		•	•	•
Social Integration and Inclusion	•		•	•	•
Health and Health Inequalities	•	•	•	•	
Crime, Safety and Security	•		•	•	•
Housing	•	•	•	•	
Sustainable Land Use	•	•	•	•	
Connectivity	•	•	•	•	•
Accessibility	•	•	•	•	•
Economic Competitiveness	•		•		
Employment	•		•	•	
Education and Skills	•		•	•	
Culture	•		•	•	
Air Quality	•	•	•	•	

Topic	Sustainability Appraisal (SA)	Strategic Environmental Assessment (SEA)	Equalities Impact Assessment (EqIA)	Health Impact Assessment (HIA)	Community Safety Assessment (CSA)
Climate Change	•	•	•	•	
Energy use and supply	•	•	•	•	
Water Resources and Quality	•	•		•	
Flood Risk	•	•		•	
Natural Environment and Natural Capital	•	•	•	•	
Townscape, Landscape and Public Realm	•	•	•	•	•
Historic Environment	•	•	•	•	
Geology and Soils	•	•		•	
Materials and Waste	•	•		•	
Noise and Vibration	•	•	•	•	

6. Demographic Change

The growth and composition of the population

- 6.1** London is experiencing huge population growth. In 2015, London's population peaked at 8.6 million people, equalling the previous peak which was last reached in 1939.
- 6.2** Some of the most significant changes to the 2011 London Plan contained in the London Plan were a result of the significant increase in the projected growth in London's population to 2041. This became apparent as a result of the release of 2011 Census data. The census showed that London's population has been increasing at the average of 87,000pa in the previous decade, which is nearly double the rate of that had been assumed previously and planned for in the 2011 London Plan. Current population projections suggest London's population is likely to continue to grow and anticipates an additional 3 million more people by 2050, reaching 10.5 million by 2041³, the equivalent of c70,000 pa.
- 6.3** The overall population of London grew from the 1990s, but Newham's grew at an even faster rate than average, rising from 216,300 in 1991 to 323,400 in 2013 (GLA 2013, Demographic Projections). This growth partially helps explain why Newham has the 10 highest average household size in London (three in 2011, compared with just over two nationally, and two and a half in London) (Census, 2011), and the steep rise in population density, from 69 in 2001 to 89 in 2011 people per hectare (GLA 2013, Demographic Projections). This is still far below the density of crowded inner boroughs like Islington, Camden or Kensington and Chelsea, or neighbouring boroughs such as Hackney or Tower Hamlets. (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)

³ ONS Census (historic data), GLA 2015 trend-based population projections (long-term migration scenario)

6.4 Newham continues to have a younger population profile than other areas, the GLA’s 2016-based population projections estimate that in 2016 over 65s account for 7.1% of the population compared to 9.0% for Inner London and 11.6% for London overall. Conversely, those under 25 account for around 35.8% of the population compared to 30.34% for Inner London and 31.3% for London overall. By further comparison ONS statistics indicate even older age profile for England and Wales, with 30.1% under 25 years and 18% over 65 years. (Source: [Newham Local Plan Integrated Impact Assessment Feb 2018](#))

6.5 Royal Docks and Beckton Riverside Population Projection

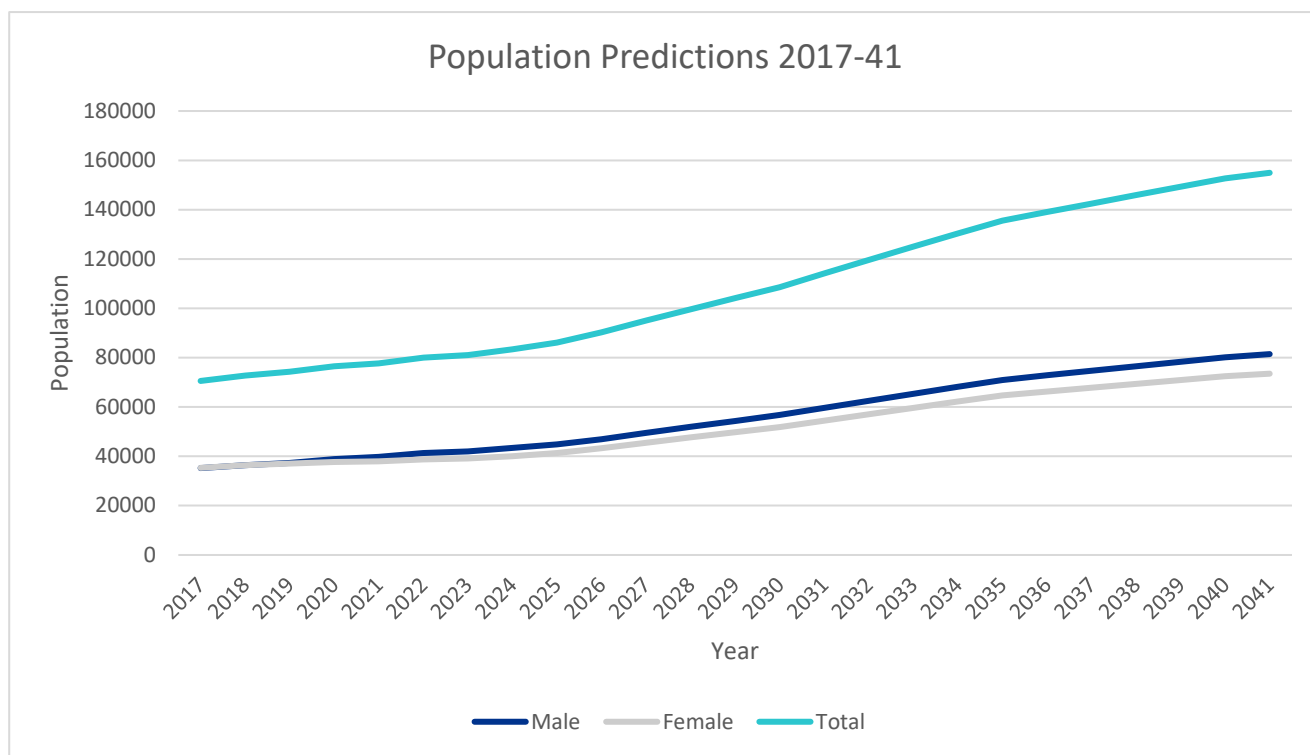


Figure 6.1 Royal Docks and Beckton Riverside OAPF projected population, 2017-2041
 (Source: GLA 2018-based ward-level GLA population projections based on Beckton, Canning Town North, Canning Town South, Custom House and Royal Docks wards)

6.5.1 GLA Ward-level population projections for the wards of Royal Docks, Canning Town North, Canning Town South and Beckton, illustrate that the population is expected to increase from 70,562 in 2017 to a population of 154,940 by 2041⁴. The

⁴ London Data store GLA 2018-based ward level population projections

anticipated growth in the local population accounts for a 120% increase over the course of the OAPF plan period.

6.6 Royal Docks and Beckton Riverside Ward Population Projections

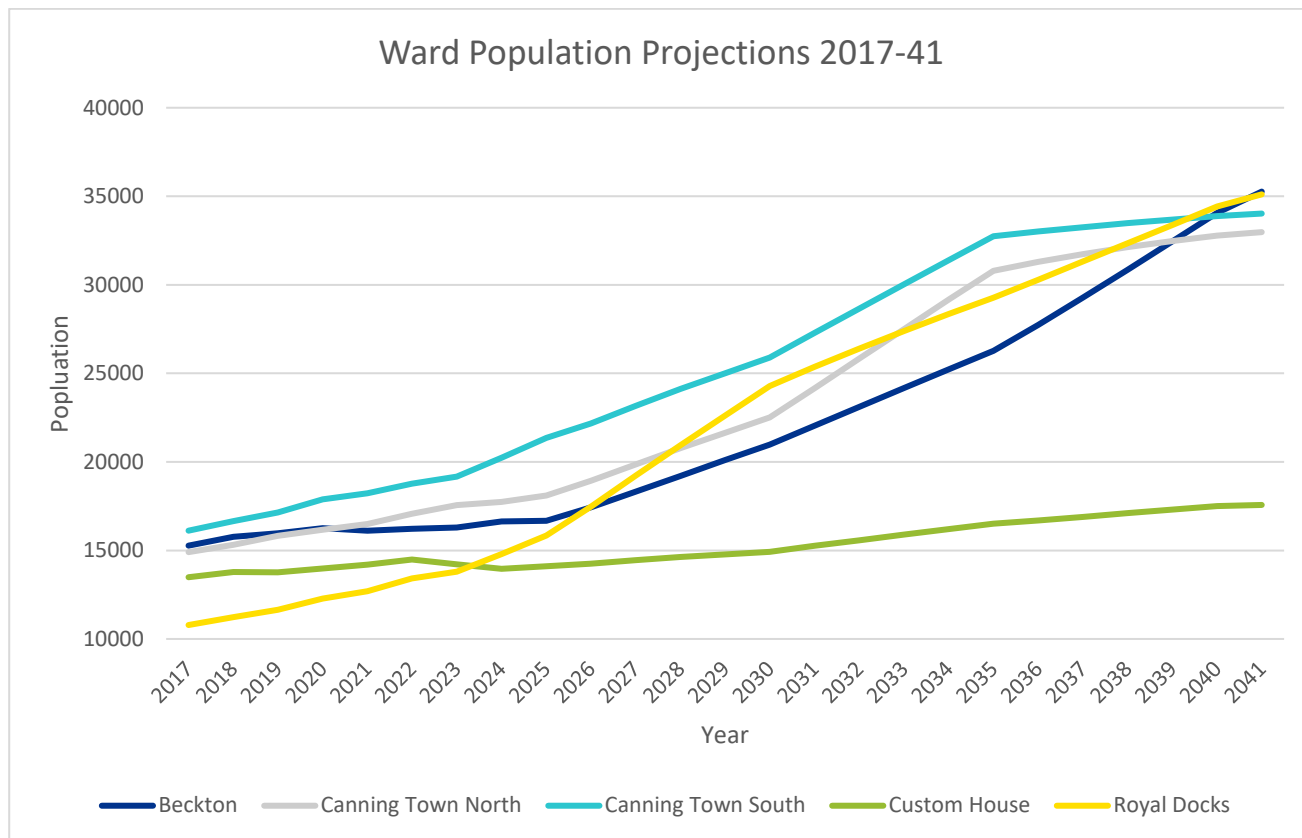


Figure 6.2 Population distribution by ward 2017 – 41

(Source: GLA 2018-based ward-level GLA population projections based on Beckton, Canning Town North, Canning Town South, Custom House and Royal Docks wards).

6.6.1 The population projections suggest that the ward with the greatest population is Beckton, which is estimated to achieve a population of 35,264 by 2041.

6.6.2 Canning Town North and Canning Town South start with the highest population levels. Together with Beckton, they are expected to result in the greatest population levels in 2041. The ward which is expected to experience the greatest increase in population is Royal Docks, which is expected to see an increase of 225%. In

contrast, Custom House is expected to observe a population increase of about 30% over the same time period.

6.6.3 The resulting OAPF and resulting policies in the borough’s Local Plan, will potentially alter the spatial distribution of this growth. While Canning Town South currently has the largest population, by 2041 it is expected to have the third largest population having been overtaken by Beckton and Royal Docks, with the former having the largest population by the end of the plan period.

6.7 Royal Docks and Beckton Riverside Age Structure Projections

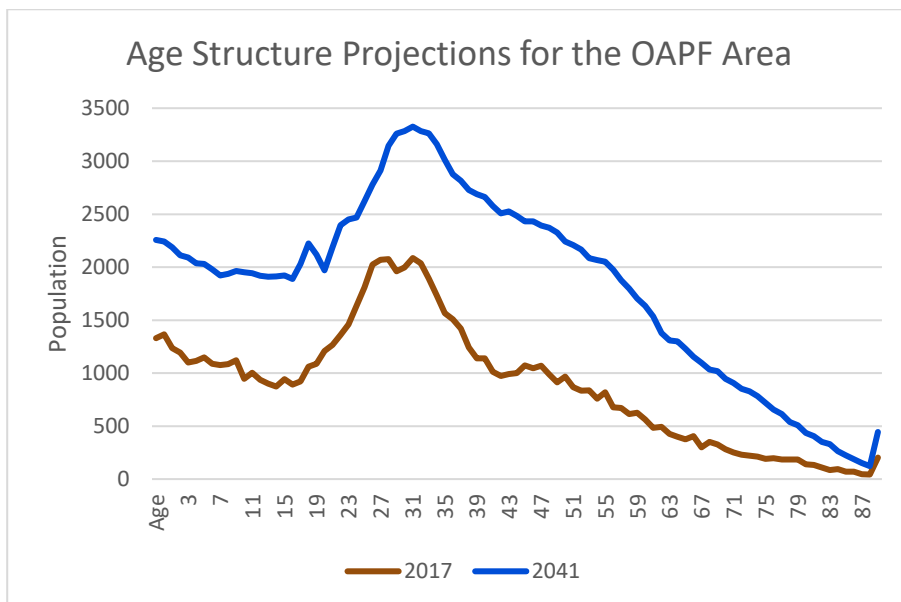


Figure 6.3 Age Structure Projections up to 2041

Source: GLA Housing Led Population Projections by Ward: 2018 from London Datastore 2019

- 6.7.1 Current population data suggests the OAPF area has a higher proportion of 0-15-year olds than the London average (22.2% vs 20.5% for London as a whole) and lower than average proportion of over 65's (6.2% vs 11.8% for London as a whole).⁵
- 6.7.2 **Figure 6.3** compares the age structure of the local population within the five wards of Beckton, Canning Town North, Canning Town South, Custom House and Beckton in 2017 with the projected age structure for the same area in 2041. As illustrated there will be a significant increase in population across all age groups and particularly those between the ages of 40 and 50.
- 6.7.3 For this period the group aged between 65 and 90 is projected to increase by 224%, an increase of approximately 11800 individuals. For the same period the 0-15 and 16-64 age groups are projected to increase by 85% and 102% respectively.

⁵ London data store 2011 Census (ward level data)

6.8 Royal Docks and Beckton Riverside Migration and Natural Change:

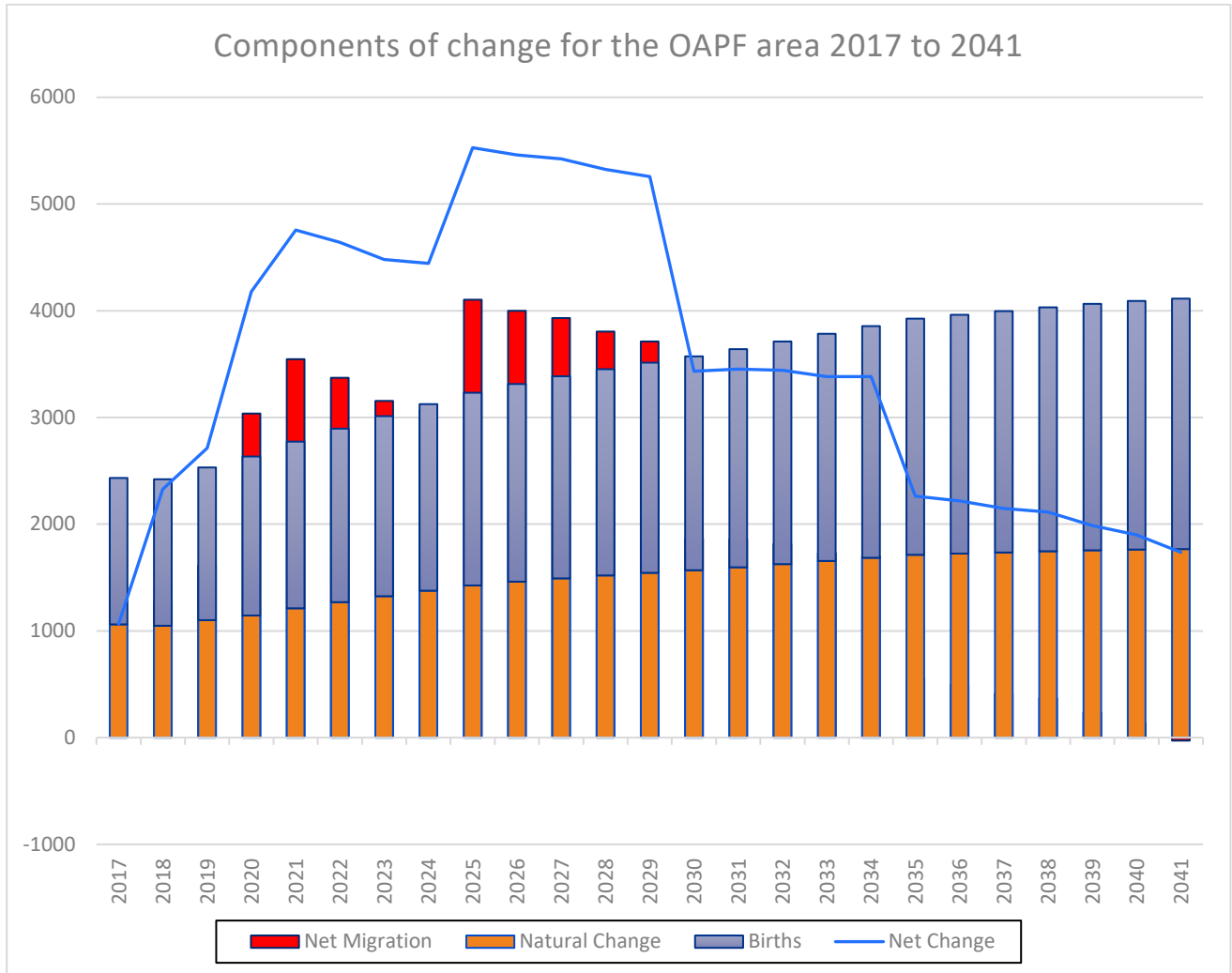


Figure 6.4 Component of population change in the OAPF area up to 2041

Source: GLA Housing Led Population Projections by Ward: 2018 from London Datastore 2020

6.8.1 Housing led population projections illustrate that net changes to population size within the OAPF area (the five wards) varies over time. Net migrations into the

wards are expected from 2020 until 2029. Birth rates and natural change are expected to increase over the plan period.

6.8.2 The rate of new registrations of migrant workers varies considerably across Royal Docks and Beckton Riverside. It ranges from a rate of 48.3 in Royal Docks to 103.3 in Canning Town North. This compares to the London average of 45.8.⁶

⁶ London data store 2011 Census (National Insurance Number Registrations of Overseas Nationals, ward level data)

Key issues	<ol style="list-style-type: none"> 1. Significant anticipated increase in the local population of 120% 2. The changing spatial distribution of the population and growth with Beckton and Royal Docks being home to the greatest population by 2041. 3. Ageing and more diverse population especially the increases in the over-40 and over-65 populations.
Opportunities	<ul style="list-style-type: none"> • To ensure that the benefits of growth are more fairly and sustainably distributed
Implications of the Plans and Programmes Review	<ul style="list-style-type: none"> • Accommodating growth must be a central objective of the Royal Docks and Beckton Riverside OAPF.

Suggested IIA Objectives	<p>To make the best and most efficient use of land so as to support sustainable patterns and forms of development</p> <p>To ensure the OAPF area has socially integrated communities which are strong, resilient and free of prejudice.</p>
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7. Social Integration and Inclusion

Characteristics of the local resident population

7.1 Diversity

- 7.1.1 The GLA also projects that London's population will change in composition in future years. It will continue to be younger than elsewhere in England and Wales but, at the same time, the number of people over 64 is projected to increase by over 60% to reach nearly 1.5 million by 2036. London's population will also continue to diversify. Black, Asian and other minority ethnic communities are expected to grow strongly as a result of natural population growth and continued migration from overseas. By 2036, an additional twelve London boroughs are likely to have a majority of their population from these groups, joining Brent and Newham which have had such majorities since 2001. (Source: Quality of Life report, 2017)
- 7.1.2 In 2016-17, 91% of Londoners surveyed agreed that their local area is a place where people of different backgrounds get on well together. This compares with 81% of adults in England in 2016-17. The percentage varies from borough to borough, with the highest rates recorded in 2016-17 in Westminster and Hammersmith and Fulham and the lowest rates in Newham and Barking and Dagenham. (Source: Quality of Life Report, 2017)
- 7.1.3 Newham has historically been one of the most disadvantaged boroughs in London. Since the steady decline of the docks beginning in the 1960s it has suffered from high unemployment and a high turnover in population, changing from a primarily white working class area in the 1980s and 1990s to the area with the highest concentration of Black and Minority Ethnic (BME) groups in the country, making up over 73% of the population in 2014 – a significant increase from 61% in 2001 (GLA 2013, Round Ethnic Group Projections). Forty-one per cent of the population over three years-old do not have English as their main language (Census, 2011). Within the population, Indian is the largest group with a 14% share, followed by Bangladeshi (13%), Black African (12%) and Pakistani (10%) (GLA 2012, Round

Ethnic Group Projections). (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)

- 7.1.4 Newham, in common with many inner London authorities is a visibly (and audibly) diverse and young borough, which in relation to equalities groups means that Varied ethnic groups are more prominent than elsewhere in England, and even than in many parts of London. At the last census from 2011 71% of Newham's population were from BAME groups, indicating an increase in diversity across the borough since the 2001 Census. The 2016/17 Annual Population Survey indicated a decrease to 66.5%, mainly driven by increased international migration from Eastern Europe. The annual School Census 2016 found that 74.2% of primary school pupils (and 66.3% of secondary school pupils) in state-funded schools within the borough did not have English as their first language. (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)
- 7.1.5 Christian and Muslim faith groups are the most prominent, (39.9% and 31.9% of the population respectively according to the latest census from 2011), with Christianity less commonly practised than elsewhere, and Islam more common; Hindus and Sikhs are also present in relatively high numbers (8.7% and 2.0% respectively). However, people with no faith equate to 9.5% of the population according to the 2011 Census⁷ or 17% according to the more recent Newham Householder Panel Survey (2016). (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)
- 7.1.6 As the latest census showed, there are relatively high levels of people in routine and semi-routine occupations (22.3% of the total of working age residents) and relatively low levels of people in higher managerial and professional occupations. (Source: Newham Local Plan Integrated Impact Assessment Feb 2018, Appendix 5 – EQIA: Equalities and the Local Plan)

Ward Level

- 7.1.7 Newham has a higher than average proportion of BAME residents than the London average as well as a slightly higher proportion of residents that were born outside the UK. This is particularly the case in Canning Town North where 59.2% of residents identify as BAME. This compares to the London average of 40.2%. All wards have a higher than London average of households that have no one that speaks English as a first language such as Beckton (23.5%), Canning Town South (19.9%) and Custom House (19.6%), Canning Town North (18.6%) and Royal Docks (18.1%). However, these numbers are lower than the boroughs average of 24.3% and compares with London average of 12.9%.⁷
- 7.1.8 All five wards have higher proportion of Black or Black British residents than the London average (approximately 26% vs 13% for the London average).⁸ The majority of the Black or Black British residents identify as Black Caribbean. The OAPF area has a higher proportion of Asian or Asian British residents than the London average (approximately 21% vs 18.5% for London as a whole).⁹
- 7.1.9 A higher proportion of the OAPF residents identify as Christian than the London average (approximately 56% vs 48% for the London average). Additionally, a high proportion of residents in the OAPF area identify as Muslim. Particularly in Beckton and Canning Town North with 19%, followed by Canning Town South (15%), Custom House (14%) and Royal Docks (13%), compared to 12% London wide. A lower proportion of residents identify as Hindu compared to the London average. In Canning Town North (2%), Custom House (2.1%), Canning Town South (3.4%) and Beckton (3.9%). Royal Docks, on the other hand, equals to the London average of 5%. There is a significantly lower proportion of Jewish residents than the London average (approximately 0.1% compared to 1.8% London wide).¹⁰

⁷ London data store 2011 Census (ward level data)

⁸ London data store 2011 Census (ward level data)

⁹ London data store 2011 Census (ward level data)

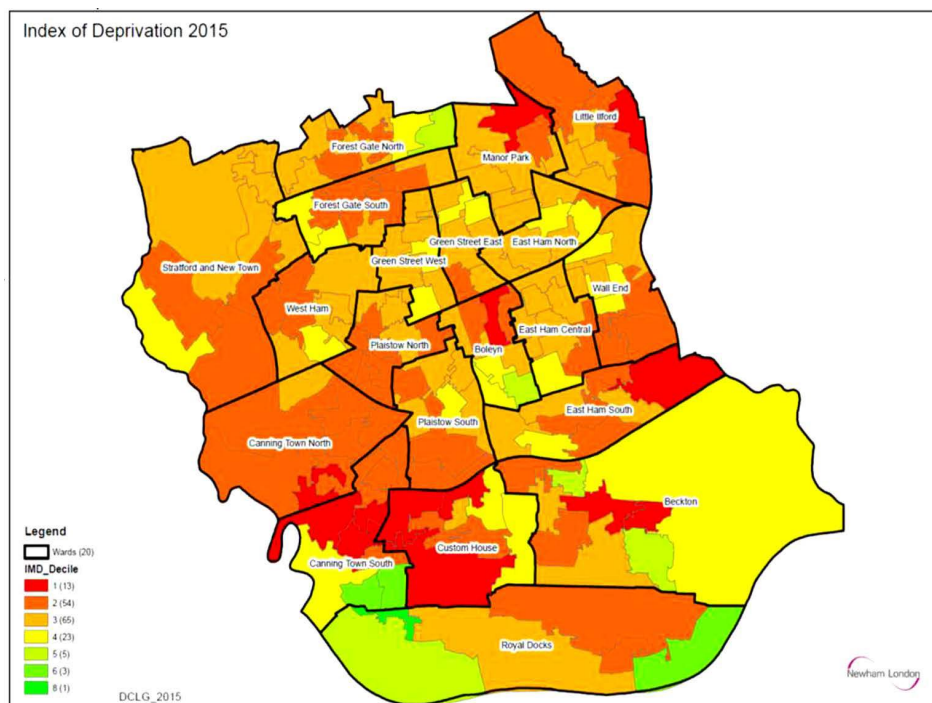
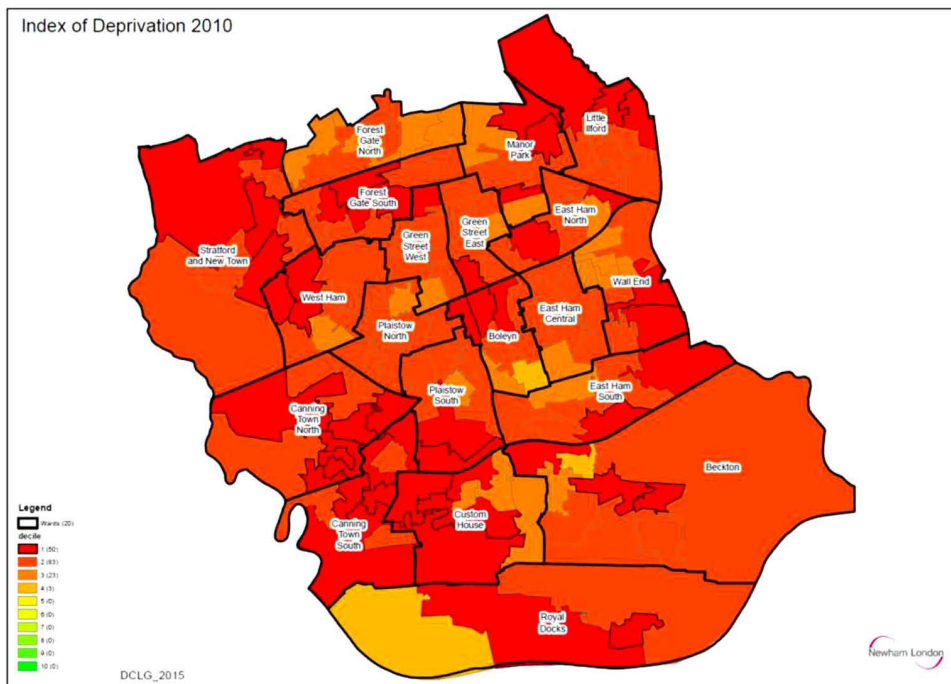
¹⁰ London data store 2011 Census (ward level data)

7.2 Deprivation

- 7.2.1 Just over half (56%) of Newham residents receive some benefits (NHPS, 2016). Fifty-one per cent of children in Newham live in households in poverty before housing costs (this rises to two-thirds when housing is considered). Comparing this to national figures (which find that 17% of children live in poverty) suggests that children in Newham are three times more likely to live in poverty (NHPS 2016).
- 7.2.2 While Newham was considered the 2nd most deprived local area in both London and England when assessed by the Index of Multiple Deprivation 2010, the 2015 release of the Index showed improvement, with Newham now being ranked as the 4th most deprived local authority in London, and 8th in England. When measured by extent of population living in most deprived LSOAs, Newham is now ranked 25th in England, up from 2nd. Mapping of deprivation at LSOA level is included as figure 7.1 for the Index of Multiple Deprivation 2010 and the Index of Multiple Deprivation 2015. The domains that have seen the least improvement include Income, Barriers to Housing and Services, and Crime. The latest Newham Household Panel Survey identified that 35% of residents were living in poverty, rising to 46% after considering housing costs. (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)

Royal Docks and Beckton Riverside Opportunity Area Planning Framework

Integrated Impact Assessment: Scoping Report



Source: Newham, 2016, based on data from DCLG, The English Indices of Deprivation 2015

- 7.2.3 Absolute poverty levels have fallen since 2013, almost two-in-five households in Newham (37%) are in absolute poverty before housing costs, compared to 44% in 2013. But, again poverty levels still far exceed the national incidence of 17% (NHPS 2016). One in five households suffer fuel poverty (18%) (NHPS, 2016). One in eight (12%) are at least two months behind with their rent or mortgage. Only one in eight residents (11%) say they are “comfortable”; a quarter of all residents (26%) are struggling to manage financially; and a third (32%) are just “getting by”. (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)
- 7.2.4 Particular factors that influence child poverty include growing up in lone parent households, low-income households; low parental qualifications; family instability; having a large family (family size) and parental ill health and disability. Another significant contributing factor that is often cited is the high costs of childcare in London¹¹. A high percentage of children under 16 in Newham live in low income families; 20.8% live in families with absolute poverty compared with London’s average of 14.1% and 25.7% live in families with absolute poverty compared with London’s average of 17.6%.¹²

Ward Level

- 7.2.5 A higher proportion of children than the London average live in poverty in this area (ranging from 30.3% in Beckton to the highest rates in Canning Town North with 37.8% and Canning Town South with 38.9%). This compares to 26.5% London wide. However, similar to the London wide trend, rates of children living in poverty are reducing. This is particularly the case in Beckton, which saw rates reduce by an average of 15% between 2006 and 2012.¹³ Within the Opportunity Area, an average of 8.3% of households with dependent children have no adults in employment

¹¹ GLA Economics (2016), Economic Evidence B

¹² Newham Info (<https://www.newham.info/deprivation/>)

¹³ London data store 2011 Census (ward level data)

according to the 2011 data.¹⁴ This compares with Newham's average of 8.2% and is higher than the London average of 5.7%.

7.2.6 There are also a higher proportion of single parent family households in the Opportunity Area. For the five wards covering the OAPF area, an average of 17.3% of households are lone parent households in 2011. This compares to 12.7% for London as a whole.¹⁵

7.3 Population Churn

7.3.1 There is a mixture of people coming into, leaving and moving around London for all sorts of reasons: natural change through births and deaths; movements of people within an area, into or out of the area from other parts of the country or overseas on both a short-term or long-term basis all contribute to 'population churn'. This can impact on people's sense of belonging to an area and community cohesion. In 2014, roughly 50% of the 400,000 people moving to London were from abroad with the remaining 50% moving from other regions within the UK.

7.3.2 The 2011 Census showed that the top three countries of birth for those born outside of the UK were from India, Bangladesh and Pakistan.¹⁶ The largest migrant population that arrived into the borough in 2015/16 is from Romania, followed by Poland and Italy.¹⁷

7.3.3 The latest population projections (2018) show that in 2018 23,626 people migrated into the borough from other areas in the UK and 12,228 migrated from outside the UK (total of 35,854). Whilst 32,602 migrated out to other areas in the UK and 4,006 migrated to outside of the UK. This established a net outward migration of 27,632 people and a net inward migration of 35,854 people.¹⁸

¹⁴ London data store 2011 Census (ward level data)

¹⁵ London data store 2011 Census (ward level data)

¹⁶ ONS 2011 Census <https://www.newham.info/infographic-february-2020/>

¹⁷ London data store (Borough Profile)

¹⁸ London data store (Housing-led population projection 2018-based)

Key issues	<ol style="list-style-type: none"> 1. Increasingly diverse population by ethnicity 2. Multiple Deprivation overall is high compared to London and England 3. High rates of child poverty especially in Canning Town 4. High proportion of single parent families 5. Population churn is erratic and could impact community cohesion and social capital
Opportunities	<ul style="list-style-type: none"> • Development should meet the highest standards of inclusive design, to ensure it is suitable for the diversity of London’s population • Design of the built environment to encourage social cohesion and reduce isolation – inclusive neighbourhoods • Implications of an ageing and diverse population for public service delivery, urban design and housing provision. • Diverse population may require more community infrastructure and support services. • Link with other strategies to address wider determinants of deprivation, access to jobs, good quality housing and choice, provision of open space, access to amenities and services
Implications of Plans and Programme review	<ul style="list-style-type: none"> • Reducing inequalities and the promotion of inclusion for those groups with protected characteristics to promote social integration and cohesion.

Suggested IIA Objectives	<ul style="list-style-type: none"> • To ensure the OAPF area has socially integrated communities which are strong, resilient and free of prejudice • To make the area inclusive by reducing inequality and disadvantage and addressing the diverse needs of the population
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	<ul style="list-style-type: none">• To ensure that provision of environmental, social and physical infrastructure is managed and delivered to meet population and demographic change in line with sustainable development and to support economic competitiveness
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8. Health and Health Inequalities

The health of the population in terms of general health, lifestyle, life expectancies and other health determinants

- 8.1** Health can be influenced by a range of factors, and the quality and accessibility of the health care system is generally recognised to account for only a minority of the variation in overall health. Wider factors such as socio-economic status, the environments in which people live and the influence of these social and environmental factors on people's behaviour have a profound impact on people's physical and mental health. Include something about the wider determinants of health.
- 8.2** The health status of Newham's residents is, in general, worse than the London average due to a higher mortality rate from circulatory diseases and diabetes, lower than London average life expectancy, poor cancer survival rates and high incidence of respiratory illnesses and mental health problems. Newham suffers from poor air quality and fails to meet national air quality standards, which impacts on human health particularly the old, the young and those with existing lung and heart conditions. Newham also has one of the highest rates of physically inactive adults and one of the highest rates of obese children in London. Limiting long-term illnesses are also prominent within the population. While there has been some progress, there is still a long way to go to address health inequalities and improve local health outcomes.¹⁹
- 8.3** 1.5% of the population in Newham have reported very bad health compared to 1.2% for both London and England.²⁰
- 8.4** Life expectancy for male is 78.5 and for female 83.0 compared with the England average of 83.2 and 79.5 respectively.²¹

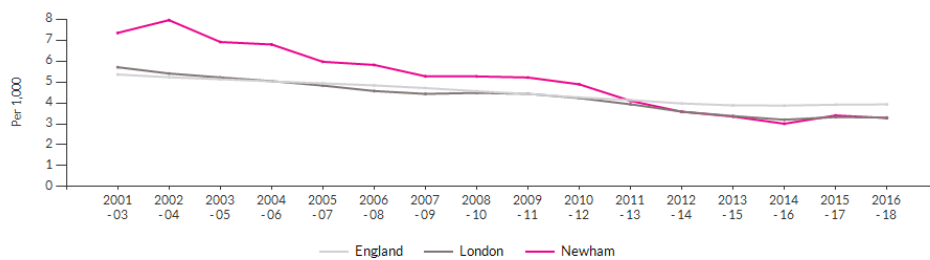
¹⁹ [Newham Clinical Commissioning Group annual report for 2019/20](#)

²⁰ Newham info (<https://www.newham.info/health-and-social-care/>)

²¹ London data store borough profiles (2012-2014)

8.5 Newham's Infant mortality has been decreasing between 2001-2016 with a rate of 3.3 per 1,000 population between 2018-2018, which is now lower than the England Average (since 2011).²²

Figure 8.1 Newham's Infant Mortality Rate



Source: Office for National Statistics

8.6 In Year 6, 42.7% of children are classified as overweight (including obesity), worse than the average for England.²³

8.7 The rate of alcohol-related harm hospital stays is 417 per 100,000 population which is better than the England average. Estimated levels of physical activity are worse than the England average.²⁴

8.8 The borough's Health and Wellbeing Strategy²⁵ identifies four key commissioning priorities, including:

- Promoting healthy behaviours, such as not smoking, eating healthily and taking exercise
- Tackling mental health barriers to employment to help people access and stay in employment 3)
- Tackling long term health conditions like cancer, cardiovascular diseases, respiratory diseases and diabetes
- Building child health and wellbeing

²² Newham info (<https://www.newham.info/health-and-social-care/>)

²³ Newham info (<https://www.newham.info/health-and-social-care/>)

²⁴ Newham info (<https://www.newham.info/health-and-social-care/>)

²⁵ [Newham's Health and Wellbeing Strategy](#)

8.9 According to the Newham Clinical Commissioning Group annual report for 2019/20, one of the key issues in Newham is the failure to improve the quality of primary care service provision and ensure the delivery of safe services to patients, which could result in the closure of practices and potential access concerns for patients²⁶.

Ward Level

8.10 The average life expectancy for residents within Royal Docks and Beckton Riverside is lower than the London average life expectancy. Ward level data shows that the male and female life expectancy is lower in Custom House (75.2 and 78.4 for males and females respectively) and Canning Town South (76.4 and 81.8 for males and females respectively) and highest in Beckton (78.1 and 83.5 for males and females respectively) and Royal Docks (77.3 and 87.3 for males and females respectively). This compares to the male and female London wide average of 79.7 and 83.8 respectively.²⁷

8.11 The OAPF area has a higher proportion of children who are obese than the London average. For instance, 15.0% of children in reception are obese in Canning Town North compared to the London average of 10.8%. The wards with the lowest rate of obese reception children is Custom House at 12.2%. Like the national trend, rates of obesity continue to worsen into year 6 children. Rates range from the highest 31.4% in Royal Docks to the lowest 21.4% in Beckton. This compares to the London average at 22.5%.²⁸

²⁶ [Newham Clinical Commissioning Group annual report for 2019/20](#)

²⁷ 2011 Census (Ward Level data 2009-2013)

²⁸ 2011 Census (Ward Level Data 2010/11-2012/13)

8.12 Ward level data shows that variations in self-reported health levels exist within the OAPF area. While residents in Royal Docks have rated their health better than other wards, Canning Town North and Custom House have rated their health as the worst within the OAPF area.²⁹ There are also variations in limited day-to-day activities reported by residents within the OA. Again, residents in Royal Docks have lower levels of limited activities than other wards and Canning Town North has the highest levels of limited day-to-day activities.³⁰

Air Quality

8.13 Whilst air quality in London is improving; in the last fifteen years the concentrations of all local air pollutants in London have decreased, London is failing to meet limits for NO₂ with specific concerns over particulate matter, which is damaging to health at any level. Children, older people, and people already suffering from lung or heart issues are particularly vulnerable. Nearly 25% of all school children in London are reported to be exposed to levels of air pollution that exceed legal limits.

8.14 The London Health Commission states that 7% of all adult deaths in London are attributable to air pollution. Mortality is not the only air pollution related health effects, in 2010 - London air pollution was associated with over 3,000 hospital admissions, an increased sensitivity to allergens, pre-natal exposure linked to low birth weight and increased risks of chronic disease later in life are also associated with issues of air quality.

8.15 Further detail on air quality and emission rates can be found under section 18 of this report.

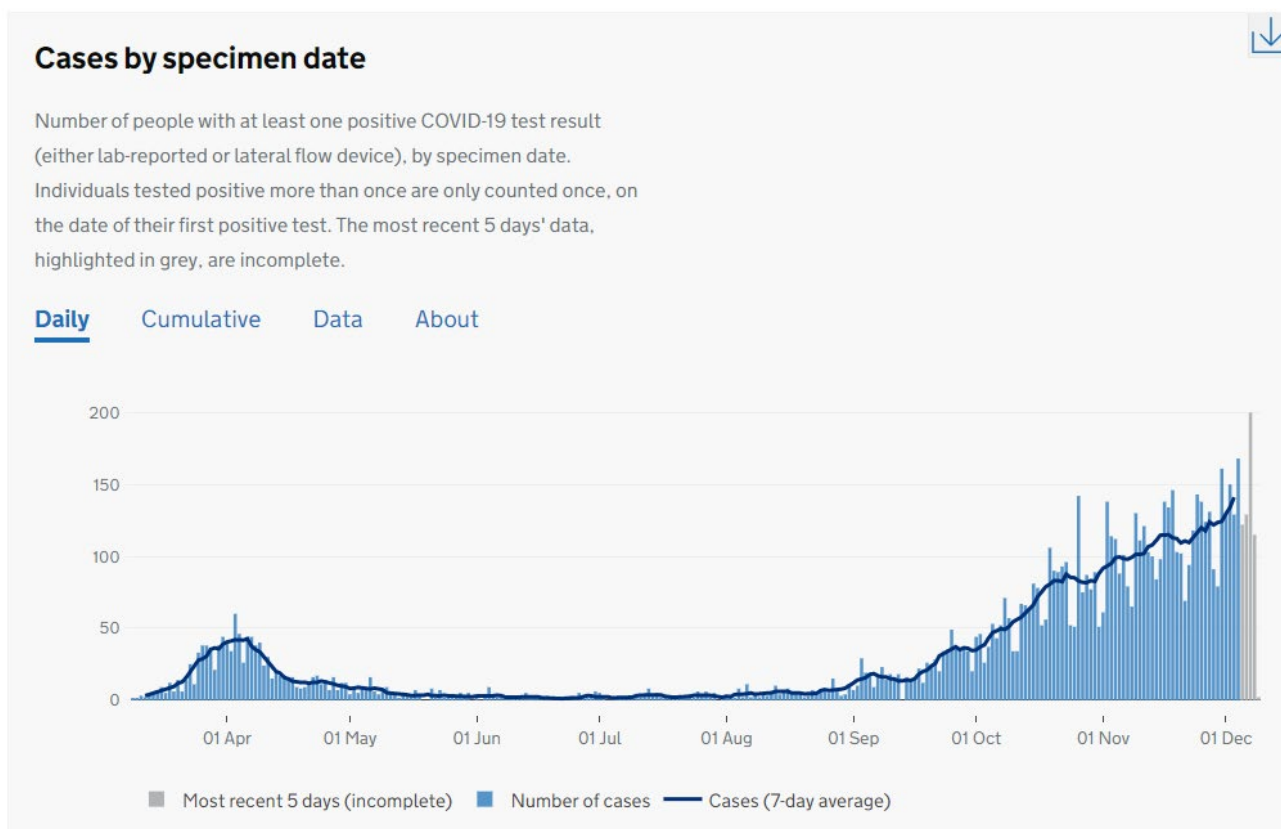
²⁹ 2011 Census (Ward Level data)

³⁰ 2011 Census (Ward Level data)

COVID-19

8.16 COVID-19 cases in Newham were relatively high compared with London. According to the government data dashboard Newham's cumulative cases by specimen date calculate on average as 4-5% of London's cumulative cases by specimen date³¹.

Figure 8.2 COVID-19 cases by specimen date in Newham



³¹ UK Government data dashboard (<https://coronavirus.data.gov.uk/details/cases?areaType=region&areaName=London>)

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Increasing health inequalities across the population 2. Lower than London average life expectancy 3. High mortality rate from circulatory diseases and diabetes, poor cancer survival rates and high incidence of respiratory illnesses and mental health problems 4. Childhood obesity is an issue within the OAPF area 5. Exposure of the population to harmful levels of air pollution across the OAPF boundary 6. High rates of physical inactivity 7. Open space deficiency 8. High rates of COVID-19
<p>Opportunities</p>	<ul style="list-style-type: none"> • Development should be meet the needs of wide range of peoples • Increased co-ordination of the provision of different service delivery to meet requirements of an ageing and more diverse population • Design of the built environment to promote health lifestyle choices especially with regard to air quality • Link with other strategies to address wider determinants of health, access to jobs, good quality housing and choice, provision open space, access to amenities and services • The currently open nature of the area presents excellent opportunities to separate cycle routes and pedestrian walkways from road transport, thus separating pedestrians and cyclists from transport-related air pollutants, with a significant effect on health. • The preparation of an air quality assessment and action plan for the whole of the Opportunity Area in order to improve air quality and reduce health exposure and health impacts

	<ul style="list-style-type: none"> Explore the potential role of the Thames in improving air quality in the OA. The PLA’s Vision for the Tidal Thames (Thames Vision), 2016 identifies the need to encourage the uptake of new and green technologies to reduce the port’s environmental impact, with a focus in the first instance on air pollution, and the aim of reduction of diesel emissions from all commercial vessels that use the river. In addition, with the introduction of the ultra-low emission zone in Central London in 2019, which applies to all cars, motorcycles, vans, minibuses, coaches and HGV’s, river transport will play its part and will assist in reducing exhaust emissions. The PLA also published its first Air Quality Strategy in 2018, which must also be considered.
<p>Implications of plans and programmes review</p>	<ul style="list-style-type: none"> A need to improve the overall health of the local population and reduce inequalities in the health of the population.

<p>Suggested IIA Objectives</p>	<p>To improve the mental and physical health and wellbeing of Londoners and to reduce health inequalities across the City and between communities.</p>
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9. Crime, Safety and Security

Actual crime, perceived risk of crime, anti-social behaviour (ASB) and threats to security / major incidents.

- 9.1** London is a relatively safe city when compared to other global cities and the likelihood of being a victim of crime is low in London. However, as a global city it is at higher risk of terrorist attacks than other cities in the UK.
- 9.2** Recorded crime statistics are published on the Metropolitan Police Service website each month and are broken down into 32 different crime types: including violence with injury, robbery, theft from person, burglary, theft of motor vehicle, theft from motor vehicle and criminal damage.
- 9.3** According to the latest MoPAC performance report for Q1 2019/20 total notifiable offences recorded by police have increased since the summer of 2014. Most crime types have seen an increase in recorded levels since last year, bar theft. However, national data to March 2018 shows that in all cases apart from burglary and vehicle offences, the increases in London are lower than the rest of England and Wales.
- 9.4** Fear of crime can be a barrier to walking or using public transport. A recent TfL survey (2014) indicates that 31per cent of Londoners are put off using public transport because of concerns about anti-social behaviour³². BAME groups and women are most likely to say that their frequency of travel is affected 'a lot' because of concerns over ASB³³. Fear of antisocial behaviour can be stressful and can limit people's access to activities and contribute to social isolation.

³² TfL Safety and Security Survey, Future Thinking 2015

³³ Greater London Authority. Crime on public transport. March 2016.

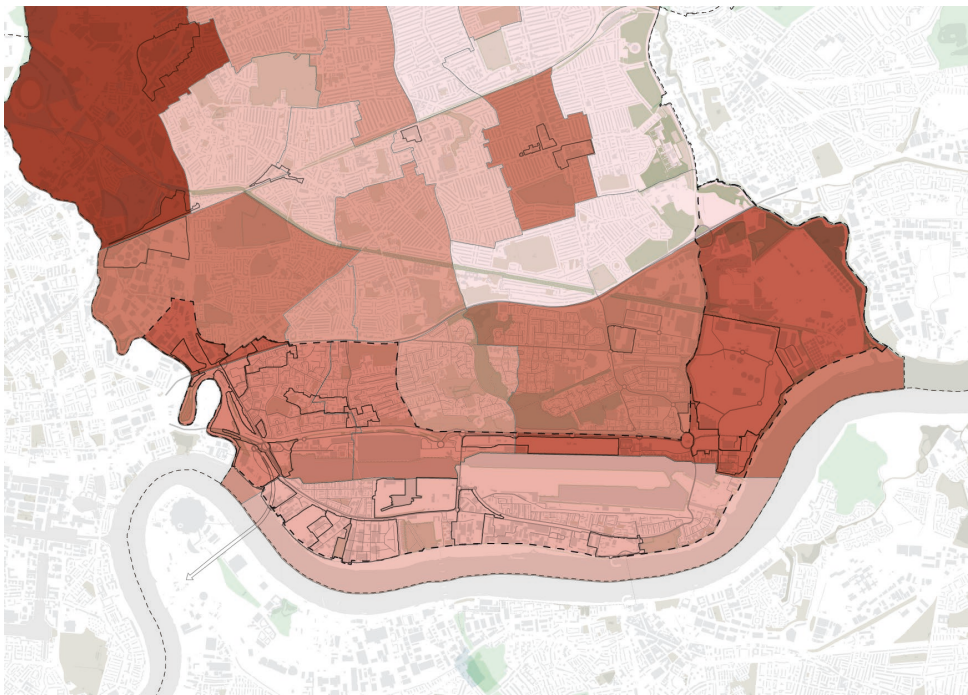
- 9.5** The design of the build environment can help to minimise risk of criminal behaviour through passive surveillance. Sometimes there is a balance between designing a place to make it feel safe and secure and allowing places to be permeable and attractive which can aid walking and movement. Ensuring that places are appropriately lit can also help to minimise risk of crime and add to perceptions of safety.
- 9.6** Safety concerns are a barrier to active travel and contribute to inactivity which, in turn, has impacts on health and wellbeing.
- 9.7** The evening and night time economy is a key driver of the economic and cultural regeneration of town centres. However, whilst an increase in night-time activities may provide greater ‘passive-surveillance’, it can also lead to an increase risk in crime, anti-social behaviour and community safety problems which, without appropriate management and mitigation, can impacts on the quality of life of local residents, workers and customers. Perceptions of safety may also disproportionality impact certain vulnerable groups. As well as the social effects of crime and perceptions of safety, there are costs to business such as impacts of crime/fraud, cost of insurance and additional security measures which can affects London’s global reputation.
- 9.8** Fly tipping, littering and other environmental crime associated with managing wastes impact on local quality of life. Mitigation measures might include a duty of care for contractors during the construction phase, to ensure wastes are managed properly and issues such as fraud arising from the misdescription of waste are mitigated against.
- 9.9** According to Newham’s Community Safety Partnership (CSP) Plan 2019-2022, Newham’s CSP priorities for 19/20 are: youth safety, weapon based crimes and violence, exploitation and vulnerability, reducing reoffending, anti-social behaviour, and targeting crime hotspots.

- 9.10** According to the perception of crime comparator, 76% of residents perceiving that the police are doing a good job in Newham South³⁴, which covers the opportunity area boundary.
- 9.11** As per the Council's own research surveys, 43% of all Newham residents were worried about being a victim of crime in their local area in 2016, this represents a considerable rise since 2015 (37%) and 2014 (40%) surveys³⁵. (source: Newham Local Plan Integrated Impact Assessment Feb 2018, Appendix 5 – EQIA: Equalities and the Local Plan)
- 9.12** For the period Oct 2018 to Sep 2020 the crime rate in the Opportunity Area was higher than the London average. Of the wards that form the majority of the Opportunity Area, Canning Town South has the lowest crime rate at 168.8 per 1000 population. This is followed by Royal Docks at 187.55 per 1000 population and Custom House at 192.18 per 1000 population and Canning Town North at 221.3 per 1000 population and Beckton with the highest rate at 261.5 per 1000 population. Violence Against the person is the most reported crime. This compares to theft which is the most commonly report crime London wide. A relatively high proportion of crimes are also recorded under theft and vehicle offences.³⁶

³⁴ <https://maps.london.gov.uk/NCC/>

³⁵ LBN (2017), Newham Survey 2016

³⁶ Met police data – Safer Neighbourhood ward profiles



Source: GLA, 2020

9.13 Emergency service provision for the Royal Docks and Beckton Riverside is located at:

- Plaistow Police Station
- East Ham and Plaistow Fire Stations
- Silvertown Ambulance Station

Key issues	<p>Perceptions of safety</p> <ol style="list-style-type: none"> 1. Fear of crime creating barrier to activities leading to increased social isolation 2. Vulnerability of different groups of people at greater risk of crime
Opportunities	<ul style="list-style-type: none"> • Designing out crime should be integral to development proposals and considered early in the design process • Use of lighting and passive surveillance to help improve perceptions of safety • Need to balance aspects of permeability and legibility with concerns of safety and security • Promote the use of private spaces for the public
Implications of the plans and programmes review	<ul style="list-style-type: none"> • The design of the built environment can significantly impact on people’s fear of and actual crime.
Suggested IIA Objectives	To contribute to safety and security and the perceptions of safety

10. Housing

A person's home / shelter

Housing need

Table 10.1: Net annualised requirement for new homes in London 2016 to 2041

	1 bedroom	2 bedrooms	3 bedrooms	4+ bedrooms	Total	% of total
Market	10,682	2,043	4,101	6,210	23,037	35%
Intermediate	4,334	3,434	2,409	1,693	11,869	18%
Low cost rent	21,318	5,311	2,462	1,881	30,972	47%
Total	36,335	10,788	8,971	9,783	65,878	100%
% of total	55%	16%	14%	15%	100%	

(Source: The 2017 London Strategic Housing Market Assessment)

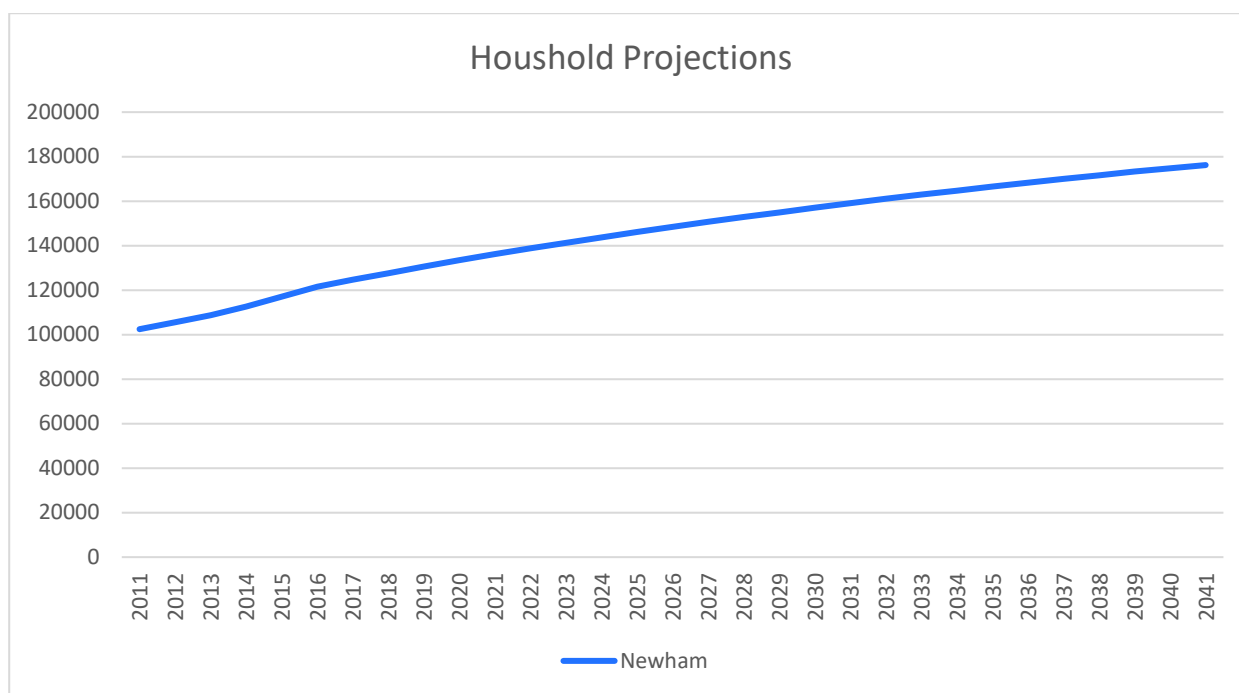
- 10.1** The London Strategic Housing Market Assessment (SHMA) 2017 establishes that between 2016 and 2041 when backlog need, affordability and the likely rate of second and vacant homes are considered, the net requirement for new homes in London is estimated to be around 65,900 homes a year. Of that total, 47% would need to be 'low cost rent' (social affordable rent) and 18% intermediate (e.g. shared ownership and London Living Rent) based on standard affordability tests. These tests assume that housing costs as a share of household income should return to benchmark levels that are well below what many households in London currently pay.
- 10.2** Based on the GLA's 2014 Round Long-term trends (based on 10 years migration trends) household projections suggests that Newham will experience net household growth of 51,749 over the 2011-2033 period.

10.3 The most up to date Strategic Housing Market Assessment (SHMA) for Newham was conducted in 2016 as part of the Outer North East London SHMA 2016. In 2011 33.3% of dwellings were owner occupied, the lowest proportion in Outer North East London.

In contrast, the proportion of private renting (34.1%) was the highest in the sub-region. 29.6% of dwellings were social rented and is among the highest in the sub-region after Barking and Dagenham (33.7%).

The fall in owner occupation in the period between 2001-2011 has been above the national average and the growth in the private rented sector is above the national average.

Figure 10.1 Borough Household Projections for Newham



Source: London Datastore Central Trend (households, 2017 -based)

Housing supply

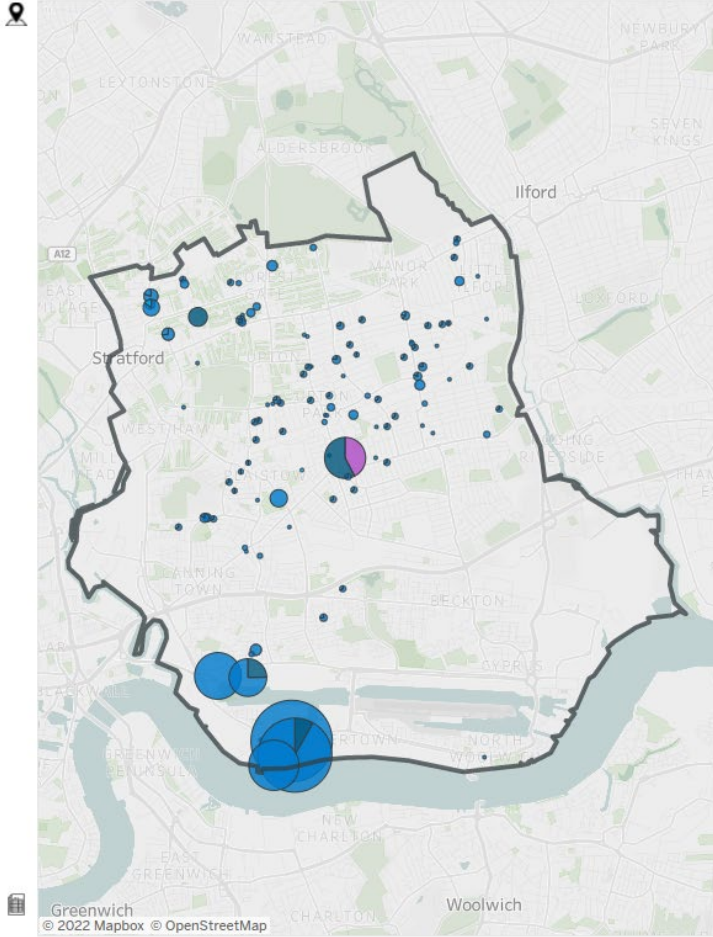
- 10.4** Over the last 10 years, London has delivered on average around 25,000 net conventional homes each year. This includes new build housing as well additional housing from conversions and change of use. This figure rises to around 27,500 housing units a year when other non-self-contained housing units are included. It includes bedrooms in student halls of residence, hostels and large houses in multiple occupation. Where vacant homes returning to use are accounted for, the average overall net housing supply in London has been c29,500 units a year.
- 10.5** Completions of new housing in LB Newham have fallen behind annual housing targets but permission rates remain high. The reasons for this gap include low market 'absorption rates' (the rate developers will release homes onto the market to prevent price falls), high costs of infrastructure and remediation, complex land ownerships and viability constraints.
- 10.6** Delivery of affordable housing has fallen below LB Newham's adopted strategic target. However, approval rates of affordable homes are improved and should translate into increased completion rates in future years.
- 10.7** The delivery of family-sized homes has not kept pace with approval rates. However, existing policy protections for existing housing stock and family-sized homes have proved effective, being upheld through multiple appeal decisions.

Table 10.6: Housing delivery in LB Newham

Residential Completion Dashboard

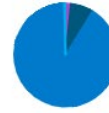
Newham

Market: 87.7% | Starter Homes: None | Social Rent: 0.2% | Affordable Rent (not LAR) 3.1% | London Affordable Rent: None | Intermediate: 9.1% | London Intermediate: None | Self-Build and Custom Build: None



Bedrooms per Tenure

Bedrooms: 3,182
 Bedrooms Gained: 2,850



Units per Tenure

Units: 1,842
 Units Gained: 1,728



Unit Type

1st Apartment
 Maisonette



House or
 Bungalow



Studio Bed..



One Bedroo..



Two Bedroo..



Three
 Bedroom



Four Plus
 Bedroom



Bedrooms Per Unit



Annual Housing Growth Against Target

Housing Gained (Accumulated when multiple years selected): 1,728 (86.7%) | LP 2015-2025 Target: 1,994

Newham

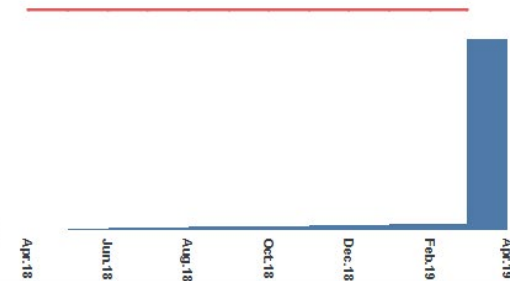
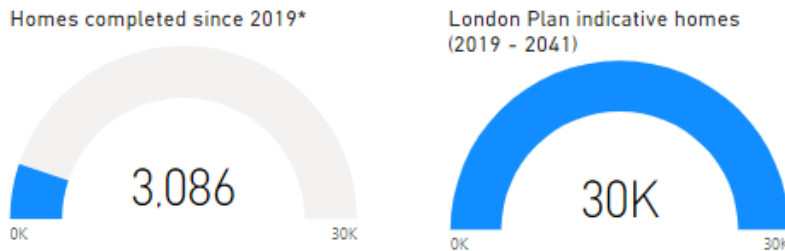


Table 10.7: Housing delivery in Royal Docks and Beckton Riverside OA

Figure 3: Net Homes completed since 2019 against the London Plan homes capacity figure*

*The London Plan 2021 homes figures are based on capacity from 2019 to 2041. As such, 2019 is used as the starting point for measuring housing completions in the OA. Source: Strategic Housing Land Availability (SHLAA, 2017).

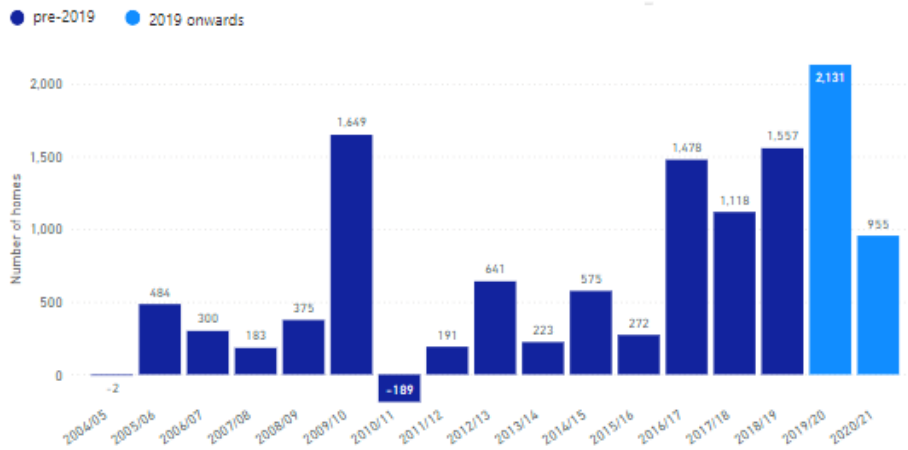


3,086
Total homes completed in the OA since 2019*

30K
London Plan indicative homes (2019 - 2041)

[Click to compare OA data](#)

Figure 4: Net homes completed since the OA was designated



12K
Total homes completed since OA designation

2004
London Plan designation year

[Click to compare OA data](#)

[Click for 5-year trend](#)

Housing Targets

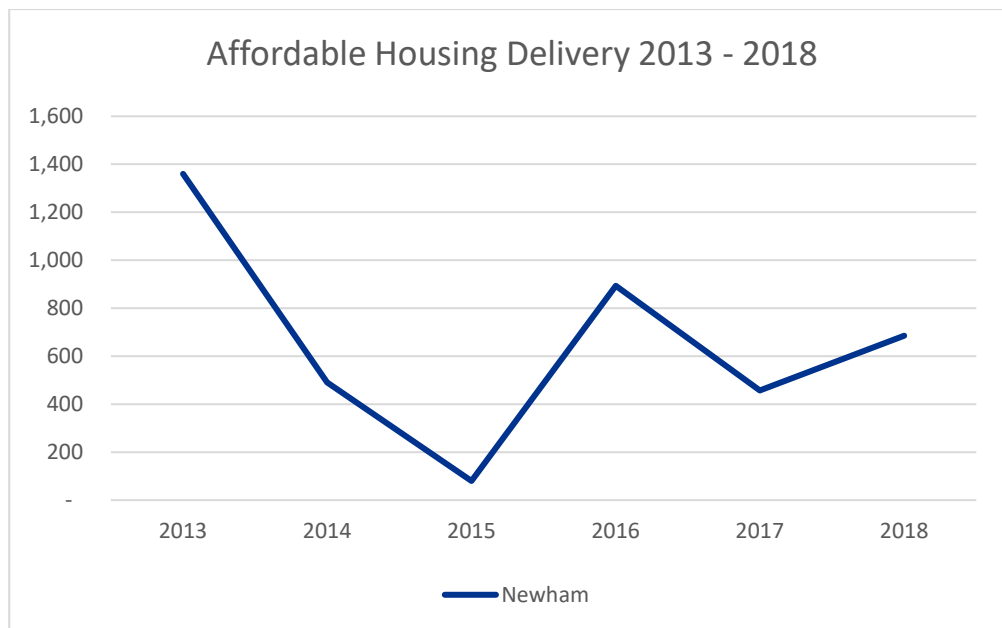
10.8 The housing target set out in the London Plan for Newham is for the delivery of 32,800 new homes for the ten-year period from 2019 to 2029. That is equal to 3,280 new homes a year. The housing target is comprised of two parts, one being for the delivery of small housing sites in accordance with the London Plan. The small housing sites target for Newham is for the delivery of 865 new homes a year on sites below 0.25 hectares up to 2029.

- 10.8** Newham's previous housing target as set out in the 2016 London Plan was for the delivery of 1,994 new homes a year. This means that the need to deliver new homes in the borough has significantly increased since 2016.
- 10.9** Local Housing Need for Newham based on the National Standard method for calculating housing need. In 2017 the MHCLG published local housing need figures for all Local Authorities in England. The published figure for Newham, following MHCLG's standard method for calculating housing need, is for the delivery of 3,808 new homes a year. (Source: <http://www.bartonwillmore.co.uk/Knowledge/Intelligence/2019/New-PPG-clarifies-methodology-for-assessing-housin-2019>).
- 10.10** The indicative residential target for the Royal Docks and Beckton Riverside OA is 30,000 new homes up to 2041 as set out in the London Plan. A target which is based on the ability for this area to accommodate a greater level of growth brought about by the opening of the Elizabeth Line. The Mayor is also considering increasing the number of Thames river crossings and is considering an extension of the DLR across the river from Gallions Reach Thamesmead and beyond. If this extension is to go ahead, it could further increase the area's capacity to accommodate growth.

Affordable housing delivery

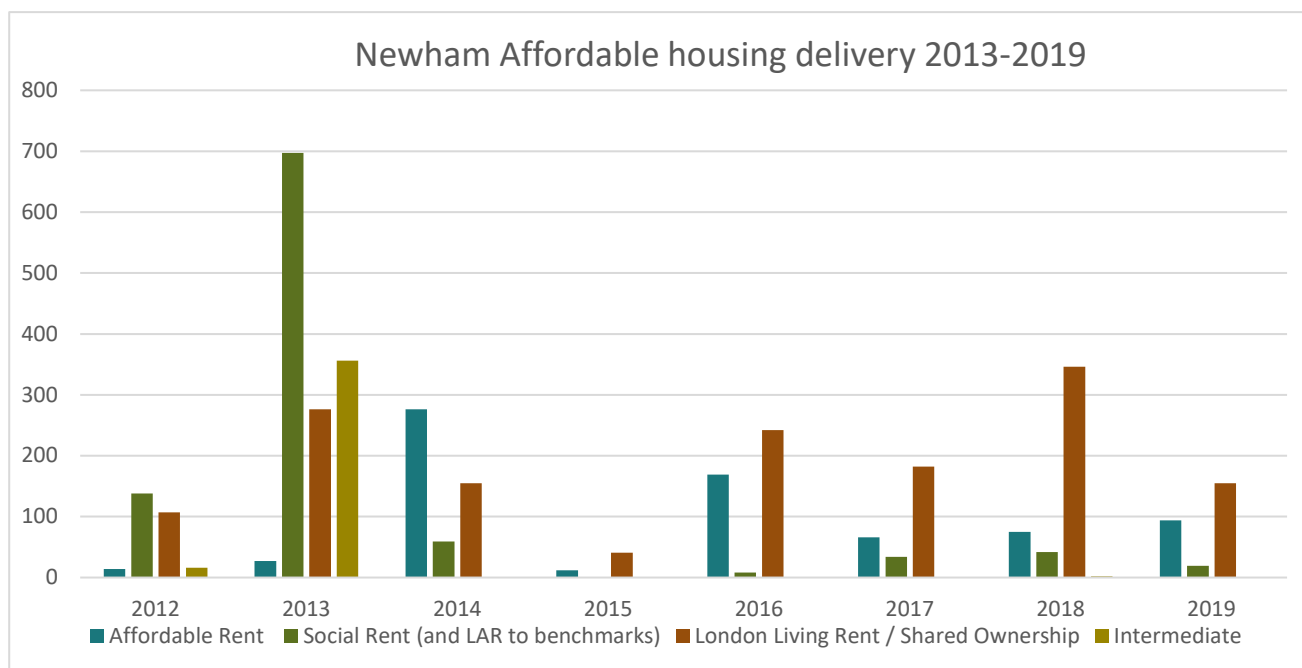
- 10.11** Between 2013 and 2018 Newham delivered 3,966 net additional affordable dwellings. 2013 experienced the greatest delivery of affordable housing achieving 1,360 net additional affordable dwellings. In contrast 2015 experienced a significant drop in delivery with only 80 affordable dwellings.

Table 10.8 Net affordable housing delivery 2013 to 2018



(Source: GLA London Development Database 2019)

Table 10.9 Affordable housing delivery by type in Newham

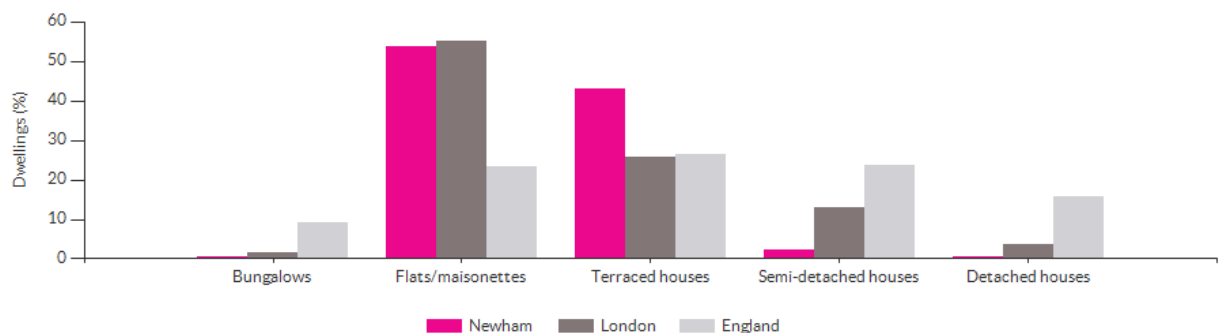


(Source: GLA London Development Database 2019. The data relates to housing programmes delivered by the GLA and excludes detail from borough managed programmes.)

10.11 The table above illustrate that Newham’s affordable housing delivery dropped significantly in 2015. In 2018 the borough completed the delivery of the highest amount (346 units) of London living rent/ shared ownership dwellings between 2013 and 2019. Intermediate rent housing was not completed in the borough since 2013.

Residential density, typology and stock

10.12 In terms of dwelling type, in 2019, 53.6% of dwellings in Newham were flats or maisonettes, over twice the national average (23.3%) and just below the London average (55.1%). A relatively high proportion of dwellings are terraced houses (42.8%), over twice the national average (26.3%) and the London average (25.7%). Correspondingly, there were very small proportions of semi-detached (2.1%) and detached houses (0.5%).



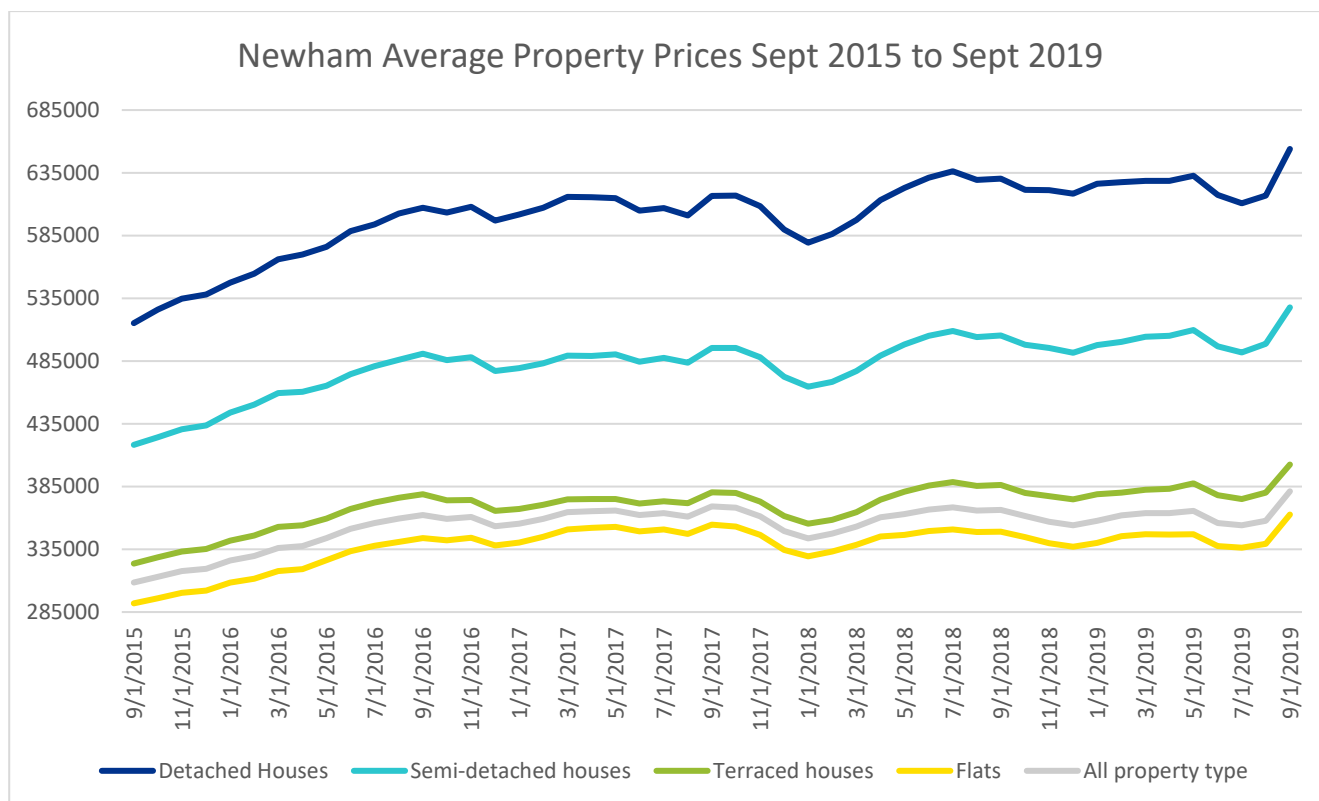
Date: 2019 Source: Valuation Office Agency

Housing Affordability Household incomes in Newham remain significantly below the national average. The median net equivalised household income before housing costs in Newham equates to £358 per week compared to the national level of £453 per week (NHPS 2016). This is exacerbated further by high housing costs meaning that median net equivalised household income *after* housing equates to £278 per week compared to £386 nationally (NHPS 2016). (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)

10.14 Housing is a dominant problem in Newham, and across London, but the level of poverty and low income in Newham make pressures on the poorest particularly acute. The share of owner occupiers has fallen (43% in 2001; 28% in 2012) along with the share of social housing tenants (37% in 2001; 34% in 2012). But there has been a steep rise in private renting, more than doubling since 2001 from 17% to 37%. In 2012 there were 16,600 more private rented properties than in 2001, and the figure is rising. Private rents have also risen and private tenants have seen incomes after housing costs fall since 2009 (NHPS, 2014). The proportion of owner occupiers (29%) is far below the London average of 50%, and less than half the national average (64%). Meanwhile house prices, remain far below the London average (£236,000 compared with £404,000). (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)

10.15 According to the Outer North East London SHMA (2016) 46% of single person households aged under 25 in Newham could not afford housing, compared to 18% of couples of the same age; and for those aged 25 to 34, the proportions were 30% and 10% respectively.

Table 10.1 Average Property Prices in Newham



(Source: [UK House Price Index](#) 2019)

10.16 According to the UK House Price Index the average price of a property in Newham in September 2015 was valued at £308,543 and includes terraced, semi-detached, detached and flats. By September 2019 the average property price in Newham had risen to £381,220. This equates to a rise of 24% in just four years.

Affordable Housing Need

10.17 According to the Outer North East London SHMA (2016) the total need for affordable housing in Newham between 2011-2033 is assessed at 983 units per annum, accounting for 48.3% of the total need for housing in Newham. The largest demand in affordable housing mix is for 3-bedroom units, followed by 2-bedroom and 4-bedroom units, while there is no additional demand for 1-bedroom units.

Overcrowding

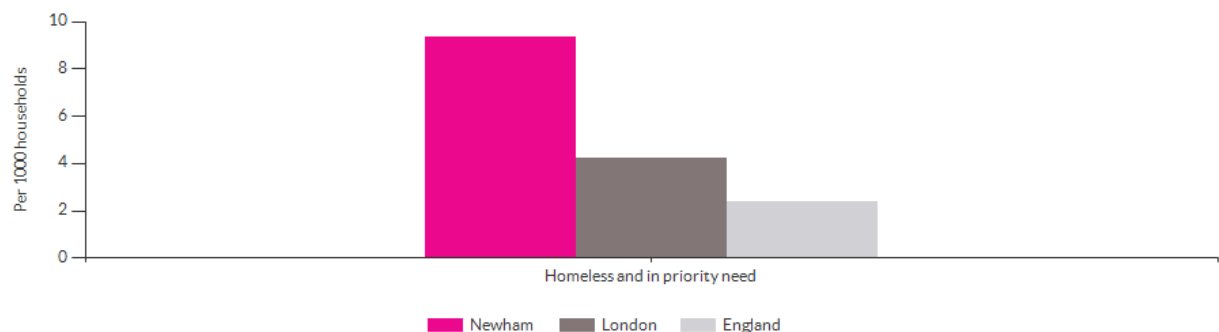
10.18 According to the Outer North East London SHMA (2016), overcrowding in Newham has increased from 24,150 to 35,431 households over the 10-year period 2001-2011. This represents a growth of 33%, which is higher than the national increase for England (23%). The equivalent growth in overcrowding for Outer North East London is 49%.

Rough sleeping and homelessness

10.19 724 people were seen rough sleeping in the borough in 2019/20. This represents a 18% increase when compared to 2018/19. (source: [Rough Sleeping in London CHAIN reports](#)).

10.20 Homelessness in Newham is significantly higher than the national average. 9.4% homeless and in priority need per 1,000 households between 2017-2018.

Figure 10.2 Homeless and in priority need for Newham between 2017-2018



Date: 2017-2018 Source: MHCLG

Decent homes and fuel poverty

10.21 According to MHCLG provisional estimates of 'non-decent' homes in England for 2009 to 2010, in Newham 27% of Local Authority homes are non-decent. These figures are significantly higher than the national average and above the London average (25%). (Source: Local Authority non-decent homes: provisional estimates 2009 to 2010).

Gypsies and travellers

10.22 The London Plan includes a new definition for gypsies and travellers which goes beyond the existing Government planning definition. The new definition recognises:

- Gypsies and Travellers who have ceased to travel permanently due to; a lack of available permanent pitches, transit sites, or stopping places; frequent enforcement action (evictions), or lack of opportunities and barriers to work
- Gypsies and Travellers who live in (bricks and mortar) housing due to the lack of sufficient, affordable and good quality caravan site provision; or
- Due to their own or their family's or dependents' educational or health needs or old age. This is most likely to affect Gypsies and Travellers who face multiple and intersecting inequalities (for example older people, disabled Gypsies and Travellers, women and single parents).

10.23 In 2008, the GLA commissioned Fordham Research to undertake a city-wide Gypsy and Traveller Needs Assessment (GTANA) and was required due to Gypsies and Travellers being among the most disadvantaged sectors of society in terms of their accommodation.

10.24 The Gypsy and Traveller Accommodation Assessment published by Newham in 2016 concludes that: *“Based upon the evidence presented in this study the estimated additional pitch provision needed to 2027 for Gypsies and Travellers in Newham who meet the new definition of a Traveller is for no additional pitches. There is also no additional need for pitches for the period 2027-2032.”*

- 10.25** This study was published prior to the London Plan in December 2017 and doesn't consider the new definition. According to the London Plan Newham should update the needs assessment based on the new definition as part of their Local Plan review process.
- 10.26** The Accommodation Assessment identifies Parkway Crescent as the only existing site with 15 pitches. There are no private sites with permanent planning permission, no sites with temporary planning permission and no transit provision. There are also no unauthorised sites or Travelling Show people yards. Parkway Crescent sits outside of the OA boundary
- 10.27** In the Royal Docks and Beckton Riverside 0.15% of residents identify as part of the White Gypsy or Irish Traveller community, similar to 0.1% of London's population identify as White Gypsy or Irish Traveller.

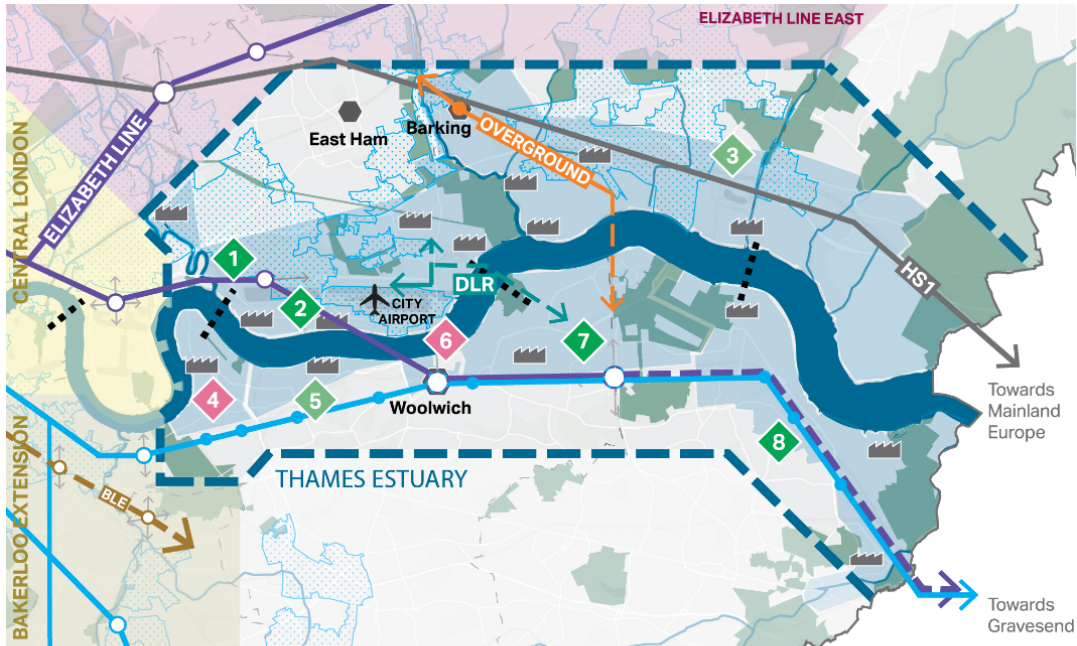
<p>Key issues</p>	<ol style="list-style-type: none"> 1. Housing targets and needs have increased significantly, and delivery will have to be escalated in order to meet requirements 2. Great disparity between wages and property prices (between 12 and 15 times the average local household income) means that there is a massive need for affordable housing. 3. Increasing costs of housing relative to wages 4. London Plan SHMA establishes greatest need for low cost rent and much lower need for intermediate affordable housing. 5. Overcrowding is an issue in Newham
<p>Opportunities</p>	<ul style="list-style-type: none"> • Update local housing data • Address identified disparities between average salaries and property prices in the area • Provide greater certainty within the planning system, particularly around the level of affordable housing required. • Identify and reduce occurrences of overcrowding.
<p>Implications of the plans and programmes review</p>	<ul style="list-style-type: none"> • To significantly increase the delivery of housing, including a mix of size, tenures and affordable products
<p>Suggested IIA Objectives</p>	<p>Support existing communities and strengthen social integration and local character</p>

11. Sustainable Land Use

The use of land that is developed or undeveloped, brownfield and greenfield, agricultural or urban and the associated density of development

- 11.1** The London Plan proposes more efficient uses of the city's land. The key to achieving this will be taking a rounded approach to the way neighbourhoods operate, making them work not only more space-efficiently, but also better for the people who use them. This will mean creating places of higher density in appropriate locations to get more out of limited land, encouraging a mix of land uses, and co-locating different uses to provide communities with a wider range of services and amenities. Policy GG2 promotes the development of brownfield land in opportunity areas.
- 11.2** The areas that will see the most significant change are identified in the plan as Opportunity Areas (OAs). Many of these are already seeing significant development, and they all have the potential to deliver a substantial amount of the new home and jobs that London needs. Royal Docks and Beckton Riverside OA is identified as part of the Thames Estuary growth corridor, with indicative capacity for 30,000 new homes and 41,500 jobs to 2041.

Figure 11.1 Thames Estuary North and South OAs



■ Opportunity Areas See figure 2.3 for key
 ● Stations
 ○ Interchange stations
 - - - Potential/ proposed/ planned river crossings

<p>1 Poplar Riverside OA</p> <p>🏠 9,000</p> <p>🏢 3,000</p>	<p>4 Greenwich Peninsula OA</p> <p>🏠 17,000</p> <p>🏢 15,000</p>	<p>7 Thamesmead and Abbey Wood OA</p> <p>🏠 8,000</p> <p>🏢 4,000</p>
<p>2 Royal Docks and Beckton Riverside OA</p> <p>🏠 30,000</p> <p>🏢 41,500</p>	<p>5 Charlton Riverside OA</p> <p>🏠 8,000</p> <p>🏢 1,000</p>	<p>8 Bexley Riverside OA</p> <p>🏠 6,000/</p> <p>🏢 19,000</p>
<p>3 London Riverside OA</p> <p>🏠 44,000</p> <p>🏢 29,000</p>	<p>6 Woolwich OA</p> <p>🏠 5,000</p> <p>🏢 2,500</p>	

Town Centres in the OA

11.3 Town Centres are also of fundamental importance to the capital and are the focus for a wide range of uses including shopping and leisure, arts and culture, housing and employment, civic and social infrastructure. They also serve as community hubs, providing a sense of place and identity. **Figure 11.2** shows the spatial network of town centres within and around the OA.

11.4 Current London Plan policy highlights town centres generally as a focus for growth however it is likely that there will be even greater emphasis for higher density residential growth in the future, potentially with a more targeted approach to identifying specific town centres to help target resources more effectively to increase delivery.

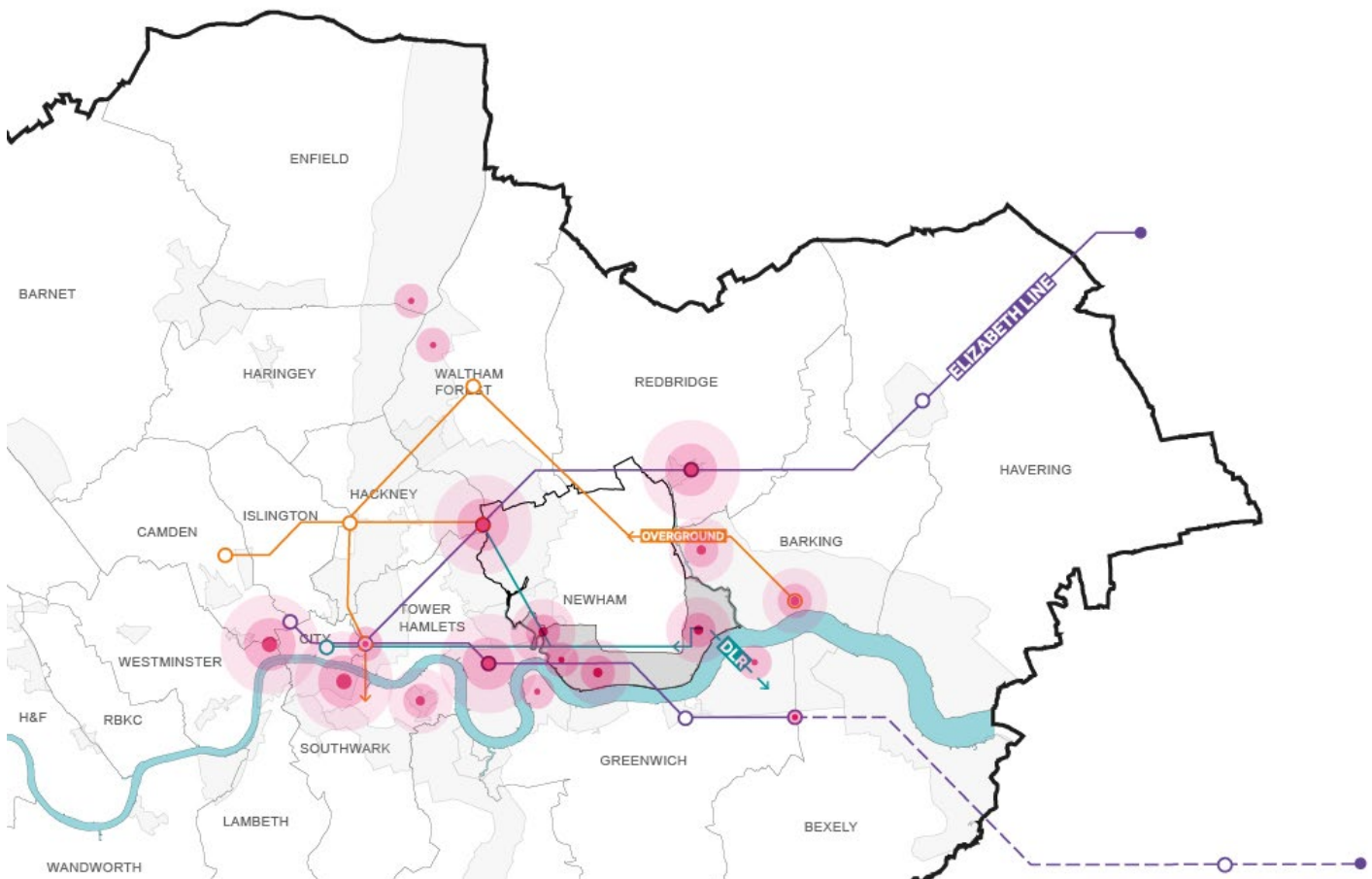


Figure 11.2 Town Centres in and around the Royal Docks and Beckton Riverside OA

Source: GLA, 2020

Industrial Land in the OA

11.5 London's Strategic Industrial Land (SIL) forms the capital's main reservoirs of land for industrial, logistics and related uses. SIL is given strategic protection because they are critical to the effective functioning of London's economy. Over the period 2001 to 2015, more than 1,300 hectares of industrial land (including SILs, LSIS and Non-Designated Industrial Sites) was released to other uses. This was well in excess of previously established London Plan monitoring benchmarks. Research for the GLA indicates that there will be positive net demand for industrial land in London over the period 2016 to 2041, mostly driven by strong demand for logistics to service growth in London's economy and population. The London Plan provides guidance on the approach to be taken to the management of industrial floorspace capacity at borough level. Newham is in the scope for the limited release of industrial land in combination with co-location and intensification, following the general principle of no net loss across designated SIL and LSIS.

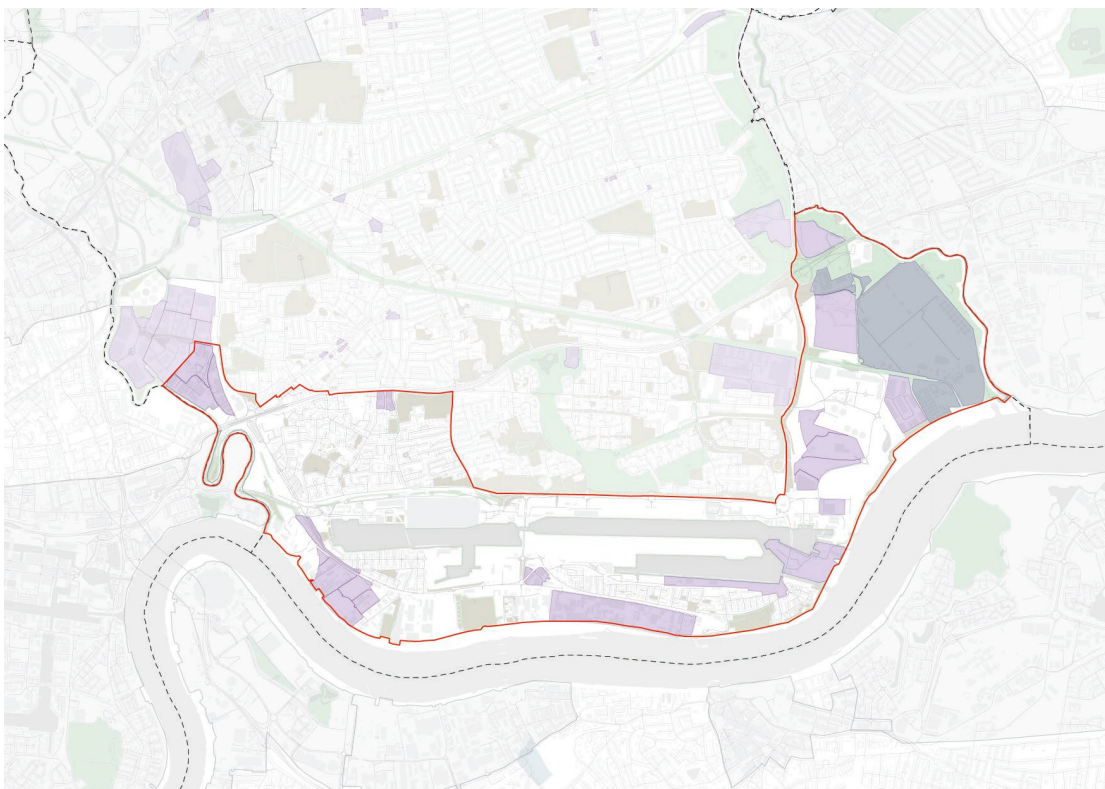


Figure 11.3 Industrial Land in Royal Docks and Beckton Riverside

Source: GLA, 2020

Accommodating Growth

- 11.6** There are both advantages and disadvantages to higher densities. Economic advantages of higher densities include improving a city's economic efficiency and employment opportunities through agglomeration of businesses, increases in productivity levels and the provision of a critical mass to support social and physical infrastructure, including a more viable and efficient public transport network. Higher densities can also lead to a greater choice of homes thereby reducing social inequality; however higher densities can also have impacts on the valued character of places, lead to more cramped living conditions, a loss of privacy, increases in noise and nuisance, contribute to a lower overall sense of community and have an impact on people's mental health and wellbeing. As with many impacts, these vary depending on the circumstances of the individual.
- 11.7** Ensuring a strong relationship between the scale and intensity of development and connectivity of public transport will continue to be a central axiom of the London Plan. In order to close the gap between need and capacity, outer London boroughs are likely to have to make a more substantial contribution to meeting their projected housing growth and overall housing need.

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Higher density developments 2. Competing pressures for land impacts on ability to provide social, physical and environmental infrastructure 3. Non-efficient use of land 4. Integration of land use and transport
<p>Opportunities</p>	<ul style="list-style-type: none"> • Intensification of industrial uses on designated Sil/LIL sites
<p>Implications of the Plans and Programmes Review</p>	<ul style="list-style-type: none"> • Ensure the most efficient use of land which adheres to the principles of sustainable development and considers London's relationship as part of a city region
<p>Suggested IIA Objectives</p>	<p>To make the best and most efficient use of land so as to support sustainable patterns and forms of development</p> <ul style="list-style-type: none"> • Plan for efficient use of employment land and safeguard protected industrial capacity.

12. Connectivity and Transport

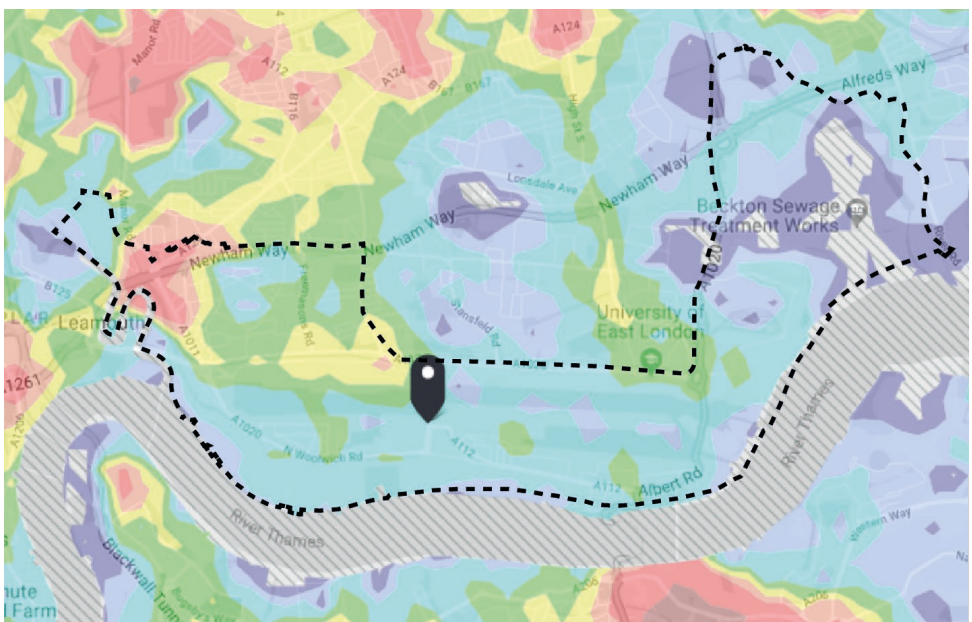
One's ability to reach employment, education, shops, recreation, friends, family and health and social services measured by whether the infrastructure is in place and whether it is able to accommodate demand

- 12.1** According to Transport for London's PTAL data, the majority of the Opportunity Area has a PTAL rating of 2 to 3. Accessibility improves closer to Canning Town and Custom House stations.
- 12.2** Within the Opportunity Area, Census data from 2011 shows that 50.5% of households do not own their own car. 40.9% own one car and only 8.6% own 2 or more cars. This is lower than the London average where 17.8% own 2 cars or more.³⁷
- 12.3** Census data from 2011 shows that 69.6% of individuals aged 16-74 in employment use public transport (train, tube and bus) to get to work. This is higher than the London average which is 49.9%. The proportion of residents within the OA that travel to work by bicycle is 1.7% which is the same as Newham's average. However, this is a lower proportion when compared to the London average (1.7% compared to 4% for London as a whole).³⁸

³⁷ London Data Store for OAPF area (based on the 87 output areas within OAPF boundary)

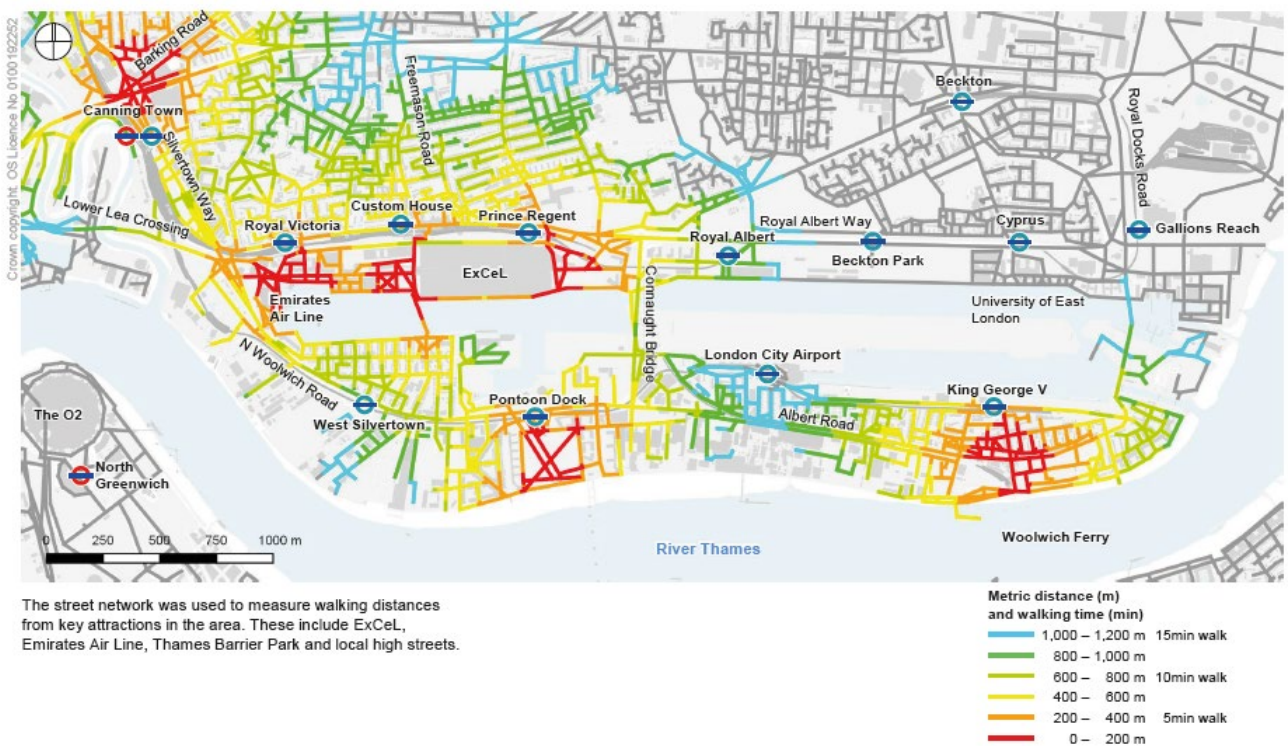
³⁸ London Data Store for OAPF area (based on the 87 output areas within OAPF boundary)

Figure 12.1 Public transport connectivity within Greater London, 2031 (Forecast)



Source: [Transport for London WebCAT](#)

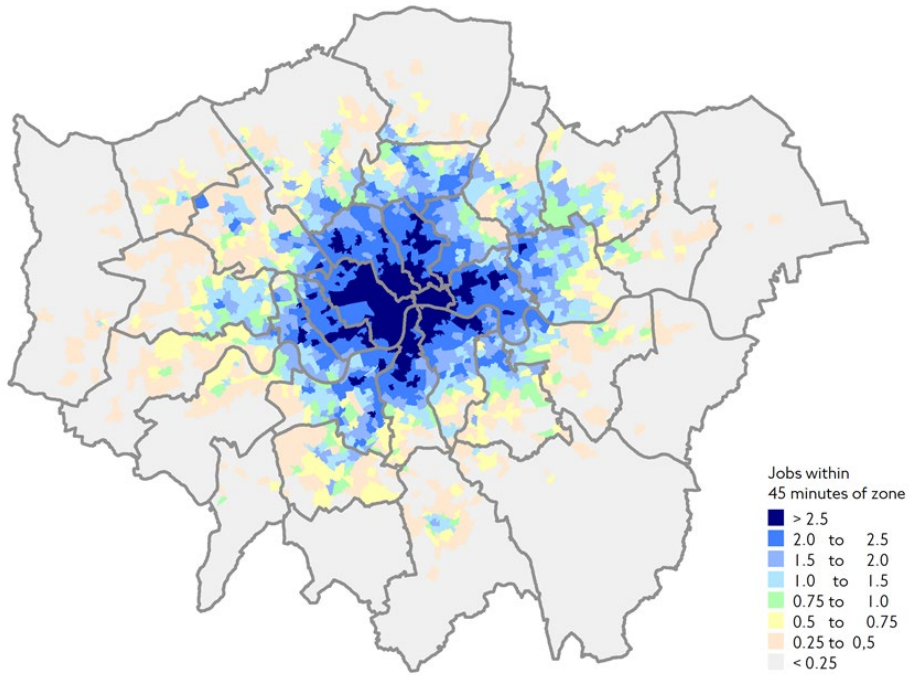
Figure 12.2 Walking distance to public transport



Source: Royal Docks Public Realm Framework Appendices

- 12.4** It is important to note that PTAL scores do not consider crowding or the ease of interchange. However, these elements affect connectivity as they impact on the ‘ease’ of reaching employment, services and facilities by public transport.
- 12.5** Another measure of connectivity is the number of jobs (whether filled or currently vacant) that are potentially available within a given travel time – 45 minutes by the principal public transport modes.
- 12.6** **Figure 12.3** reflects the concentric pattern of employment density and also the primarily radial orientation of the public transport networks. In 2015, typically for people living in outer London, between 0.25 and 0.5 million jobs are potentially within 45 minutes travel time. This rises to around 2.5 million jobs potentially available to a resident of central London.³⁹ **Figure 12.4** below shows availability to these results for 2031. The expansion of job catchment is noticeable, reflecting the expansion of the transport network such as The Elizabeth Line (Crossrail) and as well as increased number of jobs in the CAZ. The speed and reliability of journeys to employment opportunities is particularly important in terms of London’s economic competitiveness.

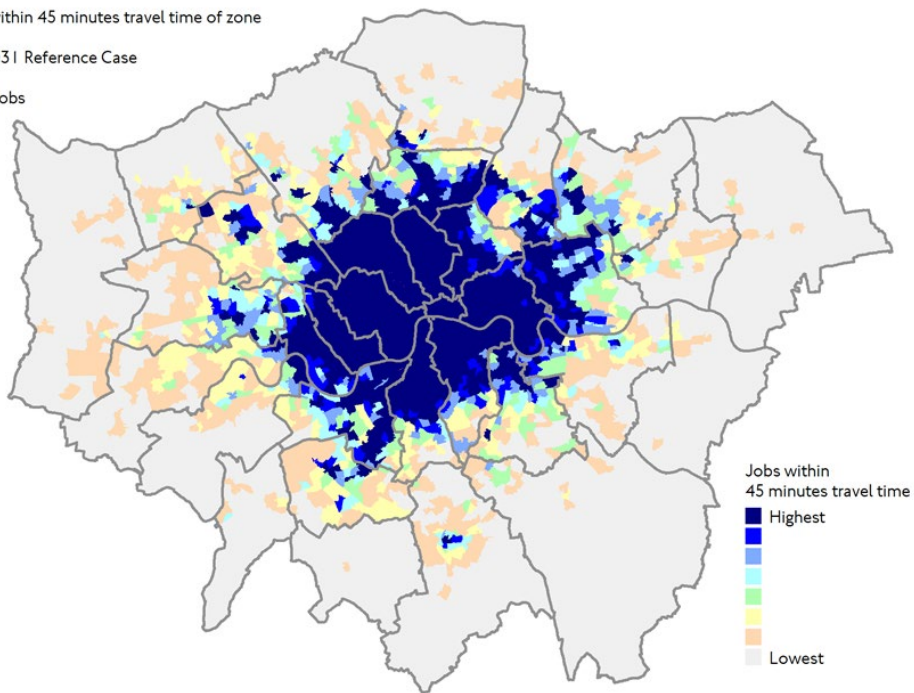
³⁹ Transport for London (2015) Travel in London. Report 8



Jobs within 45 minutes travel time of zone

RRP 2031 Reference Case

2031 Jobs



- 12.7** The use of public transport including buses, Underground, DLR and Tramlink has risen to its highest levels since the 1950s. It has continued to grow faster than the use of private cars, with a 36 per cent increase in public transport journeys per head of population between 2001 and 2014, as compared to a 21 per cent decrease in car journeys per head over the same period⁴⁰. By 2041, total trips by public transport are predicted to increase from 9.5 million (in 2014) to 12.3 million⁴¹.
- 12.8** There is particularly poor connectivity in east London, largely due to the River Thames which acts as a barrier due to limited river crossings when compared with river crossings in west and central London. There are 20 crossings in west London, 19 in central London and 12 crossings east of Tower Bridge, of which only three are highway crossings. The cross-river bus network in east London is also poor with only one bus route east of Tower Bridge, compared with 47 bus routes that cross the river west of Vauxhall⁴². This is likely to impact the most deprived Londoners living in east London as they tend to use the bus more than other modes of public transport such as the Underground.
- 12.9** Fewer connections across the river in east London has spatial economic impacts with residents living in east London having fewer employment options, facilities and services available to them. Levels of economic activity are lower and unemployment rates higher in east London compared with the rest of the city and the UK⁴³.
- 12.10** There is also issue on the lack of orbital connectivity around London, particularly from one outer London borough or 'high street' centre to another. Access to jobs is also poorer in parts of London predominantly dependant on the National Rail network.

⁴⁰ London Plan AMR 2014/15 KPI 13

⁴¹Transport for London (2016) Mayor's Transport Strategy 2016. PowerPoint, 18 February 2016.

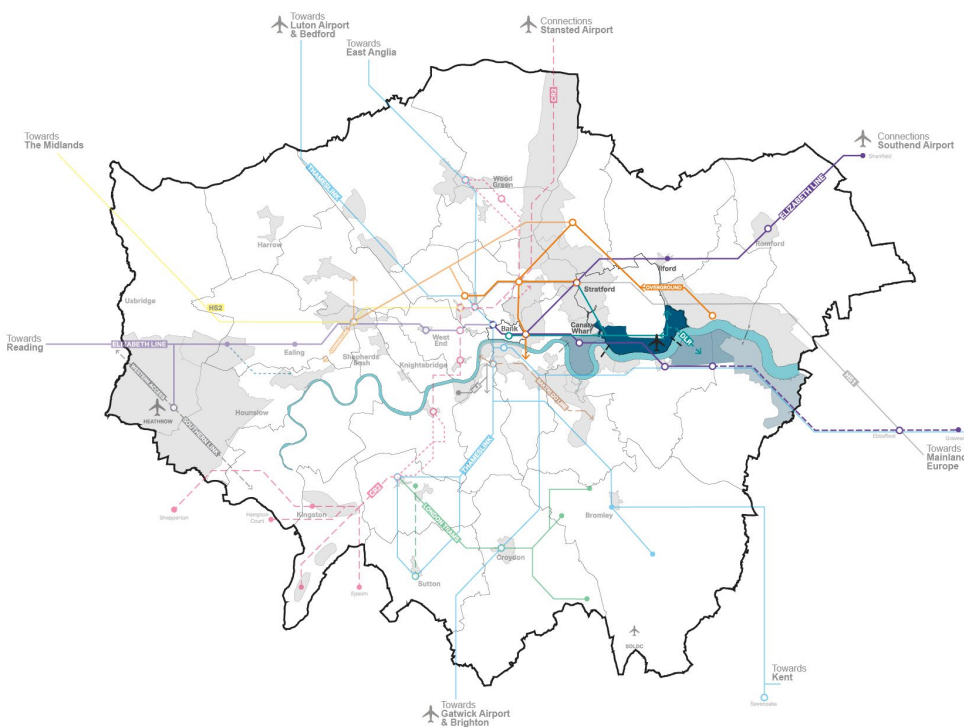
⁴² Transport for London (2015) Connecting the Capital. Our plan for new river crossings for London. December 2015.

⁴³ Transport for London (2015) Silvertown Tunnel Preliminary Regeneration and Development Impact Assessment, October 2015.

Document reference: ST150030-PLN-ZZZ-ZZ-RP-PC-0019

12.11 Overcrowding on public transport is a serious concern. GLA's 'The Big Squeeze, Rail overcrowding in London' (February 2009) reported that overcrowding on trains was a significant problem in 2009 and that the most overcrowded trains were carrying around 40 per cent more passengers than they should have been during the morning and evening peak periods. Since 2009, the growth in public transport trips has increased significantly, maintaining or heightening concerns over overcrowding.

12.12 Employment growth in central London places significant pressure on the public transport network, and in particular on the rail network. A million additional daytime public transport trips are expected by 2041 to/from/within central London. With demand increasing faster than supply, by 2041 the number of passenger-km exceeding a standing passenger density of two people per square metre, is expected to increase by 60 per cent on London Underground and 150 per cent on National Rail⁴⁴.



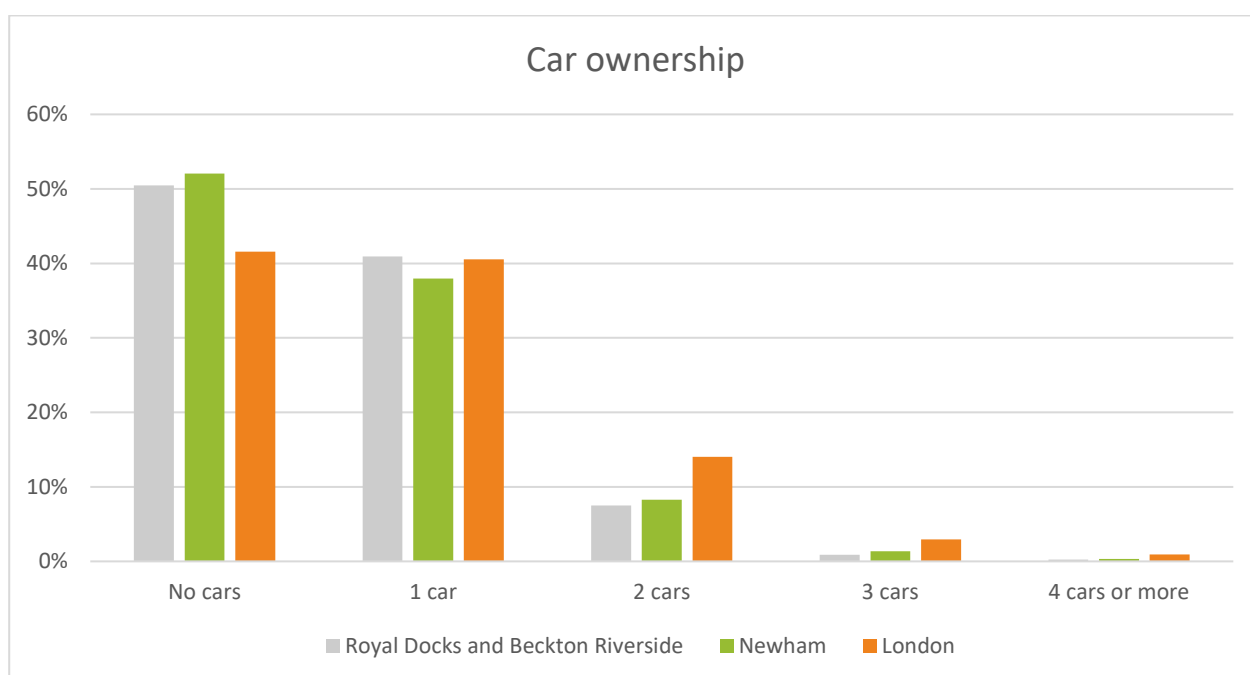
Source: GLA, 2020

⁴⁴ TFL London Transport Studies Model, 2016

Private transport

12.13 London has an extensive road network. Roads and streets in London account for 80 per cent of public spaces in London, 80 per cent of all journeys and 90 per cent of all goods moved⁴⁵. Congestion on the road network makes for a more hostile road environment, reducing the ease of reaching employment, services and facilities by private transport and increasing the costs and inconvenience for business and people. Congestion is caused by high usage of the road but also as a result of incidents which cause delay (maintenance or accidents) and has adverse impacts across the wider road network. Increased congestion can also worsen localised air quality, disproportionately affecting more vulnerable groups.

Figure 12.6 Car Ownership in Newham



Source: London Data Store for OAPF area (based on the 87 output areas within OAPF boundary)

⁴⁵ Transport for London. (2015). Roads Task Force. Progress report: a successful first year. April 2015.

Cycling

- 12.14** In 2014 over 615,000 journeys were made each day by bicycle equating to the equivalent of 10 per cent of bus passenger journeys, one fifth of tube passenger journeys or 100 per cent of all journeys on the District Line⁴⁶. In 2014, across London cycling rose by 10.3 per cent; between 2008 and 2014 cycling on TfL controlled main roads rose by 63 per cent and cycling on all roads rose by 31.9 per cent⁴⁷. Even though there has been a significant growth in cycling, there still remain significant barriers with the number one deterrent for 75 per cent of those thinking about taking up cycling relating to ‘safety’ and ‘perception of safety.’⁴⁸
- 12.15** Following the success and inspiration of the Olympic Games, Newham engaged with TfL to deliver some of the first infrastructure working towards the high standard envisioned, in the form of the extension of Cycle Superhighway 2 from Bow to Stratford which opened in late 2013. Subsequently, Newham, along with all other outer London boroughs, were invited to bid to TfL under the MiniHolland programme for major transformation to conditions for cycling across the borough.⁴⁹



Figure 12.7 Newham Cycling Strategy

⁴⁶ GLA Economic Evidence Base 2016, Chapter 3, page 126

⁴⁷ Greater London Authority. (2016). Human Streets. The Mayor’s Vision for Cycling, three years on. March 2016.

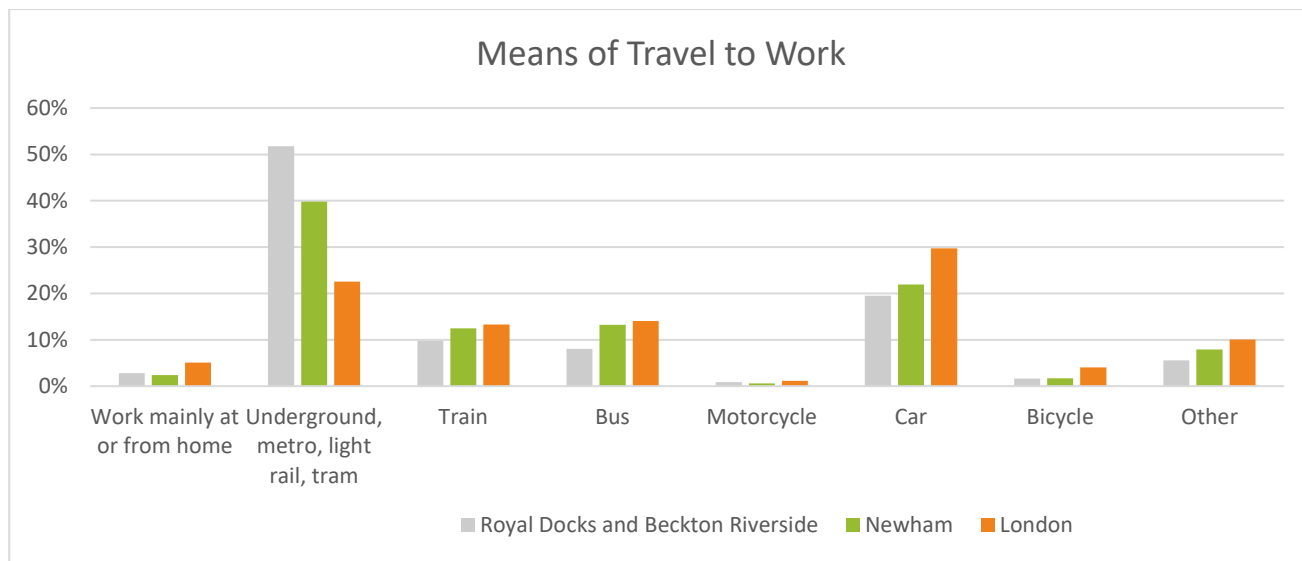
⁴⁸ TfL, December 2010, ‘Analysis of Cycling Potential: Policy Analysis Research Report

⁴⁹ [Newham Cycling Strategy](#)

Source: [Newham Cycling Strategy](#)

- 12.16** The relatively small increase in the share of trips by bicycle masks the increase in the absolute number of people cycling due to the significant increase in population in Newham over the same period. Whilst census data suggests the proportion of trips by bicycle to work increased by 18% between 2001 and 2011, the overall population increased by approximately 26% (some additional 64,000 residents), and thus the absolute number of Newham residents cycling to work increased from 1,188 in 2001 to 2,153 in 2011, an increase of 81.1%. Thus, observers would be correct in thinking that there appear to be far more people cycling in Newham now than ten years ago. More recent data from the London Travel Demand Survey suggests the absolute numbers of cycling trips 11 has increased from around 3,800 per day (2007-10) to 14,595 per day (2013-16). TfL's Strategic Cycling Analysis (June 2017) illustrates significant current cycle flows in Newham based on the output of the Cycle Network for London (Cynemon) model. Significant east-west current cycle flows can be seen from Ilford to Stratford and from the Royal Docks towards Canning Town, along with significant north-south cycle flows between Leyton, Stratford and the Royal Docks.
- 12.17** However, whilst levels of cycling have increased in Newham, levels remain the lowest of any inner London borough and below the inner London average (3.6%), and greater London Average (2.7%). Given Newham's location in relation to inner London, and proximity to boroughs with much higher levels of cycling, it is fair to say that levels of cycling are below what should be expected and that are very realistically achievable in the short term.

Figure 12.8 Means of Travel to Work



Source: London Data Store for OAPF area (based on the 87 output areas within OAPF boundary)

12.18 According to the London Travel Demand Survey (LTDS) the proportion of trips by bicycle made by Newham residents (and originating in Newham) has increased from 0.7% in 2007-10 to 2.1% in 2013-16, an increase of 200%.⁵⁰

12.19 This is in the context of an increasing proportion using rail and underground (from 11% to 15.4%) and bus (from 15.9% to 17.9%), a decline in walking (from 38.5% to 36.2%), and a steadily declining proportion using car and taxi (from 33.8% to 28.2%), with overall share of trips by sustainable modes (active travel and public transport) increasing from 66.1% to 71.6% in that period.⁵¹

⁵⁰ [Newham Cycling Strategy](#)

⁵¹ [Newham Cycling Strategy](#)

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Poor orbital connectivity by all modes of public transport in outer London 2. Poor connectivity across the River Thames in east London 3. Reduced transport connectivity across the OA because of local severance and the Docks water 4. Reduced connectivity across the OA by walking because of local severance and the Docks water 5. Deficiencies in access to open space 6. Poor connectivity to green infrastructure for all
<p>Opportunities</p>	<ul style="list-style-type: none"> • Increase the number of river crossings in the east of London • Motorisation to help improve frequency of services – link up with interchanges • Integration of maintenance works to reduce disruption, congestion and consequences impacts on business and people • Improve connectivity by all modes of public transport across London • Promote more orbital connections • Promoting rail and water transportation for freight. • Design of built environment to improve green connections • Promote sustainable modes of transport and Healthy Streets in support of local environmental improvements
<p>Implications of the Policy Review</p>	<ul style="list-style-type: none"> • Integration of land use and transport planning to ensure growth is sustainable and optimises connectivity throughout London. The green network also provides connections which has many health and environmental benefits.

Suggested IIA Objectives	Improve connectivity and access to opportunities within the OA and to areas of significant employment growth, such as the Royal Docks Overcome severance and promote safe, accessible routes for active travel
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13. Accessibility

Ability of all people to access the built environment, transport system and its infrastructure, including those with physical, sensory or cognitive impairments

- 13.1** Everyone should be able to live, participate and work in a safe, healthy, supportive and inclusive environment and enjoy opportunities the city has to offer. They should be able to be able to access public transport and active travel modes (including walking, cycling and public transport), to services and facilities that are relevant to them that offer healthy choices, and that accommodate and provide effectively for the diversity of population.
- 13.2** The design of the spaces between buildings, public space, open space and amenity areas are just as important as the buildings themselves, and if designed well can enable people to navigate their way easily around their neighbourhood and the city through high quality barrier free spaces to inclusive buildings and facilities.
- 13.3** “Analysis of the English Housing Survey identifies that currently 19 per cent of the population of London (circa 1.5m) has a long-standing illness, disability or infirmity⁵². However, London’s population is set to change in composition, which could significantly increase this proportion. London will continue to be younger than elsewhere in England and Wales – there will be 17 per cent more school age Londoners in 2036 and 28 per cent more aged 35-64. At the same time, the projected number of people over 64 is projected to increase by 64 per cent (nearly 580,000) to reach 1.49 million by 2036. The over 90s are expected to grow in number, by 89,000, as medical advances, improvements in lifestyles and new technologies support improved life expectancies.⁵³ Social infrastructure will need to be planned to address the needs of this changing population.

⁵² GLA analysis of English Housing Survey 2008/09 to 2011/12

⁵³ ONS Census, GLA 2015 trend-based population projections (long-term migration scenario)

- 13.4** The current London Plan sets out a commitment to ensuring equal life chances for all Londoners; emphasising and recognising that this is key to tackling the huge issue of inequality across London. It is therefore essential to identify the physical and social barriers which act to ‘disable’ and prevent people participating in society.
- 13.5** The design of the external environment and the public realm can also significantly impact on people health and well-being, their ability to access services and participate in civic life. However, there is currently a lack of quantitative data available about the accessibility of the built environment.
- 13.6** For many people the availability of accessible and reliable public transport is needed to lead an active and independent life. People can often feel excluded from using public transport if they are concerned about safety due to anti-social behaviour or if they are unable to easier understand where or how to make public transport journeys, especially pertinent to people with cognitive impairment, (whether lifelong or associated with dementia), lack of literacy or mental illness.⁵⁴
- 13.7** Seven groups of people who typically face increased barriers to public transport use include⁵⁵ :
- Black, Asian and minority ethnic people (BAME) (40per cent of Londoners);
 - Women (51 per cent of Londoners);
 - Older people (aged 65 or over) (11per cent of Londoners);
 - Younger people (under the age of 25) (32 per cent of Londoners);
 - Disabled people (14 per cent of Londoners);
 - People living in a lower income household (income of less than £20,000 per year) (37per cent of Londoners);
 - Lesbian, gay and bisexual people (LGBT) (2.5 per cent of Londoners).

⁵⁴ Transport for London (2015) Your accessible transport network. Our commitment to making it even easier for you to travel around London. May 2015 update

⁵⁵ Transport for London (2015) Travel in London: Understanding our diverse communities. September 2015.

- 13.8** TfL's 'Your accessible transport network' (2012 and May 2015 update) identifies barriers to people being physically able to access public transport, including:
- Inability to get to the train platform i.e. no step-free access;
 - Inability to get onto the train carriage or bus e.g. large gap between platform and carriage, uneven access or no ramp;
 - No designated wheelchair space;
 - No audio and/or visual announcements;
 - BAME Londoners (65per cent), 16-24 year-olds (62 per cent) and women (59 per cent) are most likely to mention overcrowding as a barrier to using public transport⁵⁶.
- 13.9** Out of 270 currently functioning stations across TfL's Underground and Overground network, 67 tube stations and 56 London Overground stations have step-free access; including all DLR stations are step-free. This therefore leaves a significant proportion of the public transport network inaccessible to many including many disabled people, those carrying heavy luggage, people accompanied by a child under 5 (and therefore probably using a buggy or pram) and older people with mobility issues⁵⁷. The number of step-free stations is expected to increase with plans to make more stations step-free over the next ten years: New stations built as part of the Metropolitan line extension, Northern line extension and the Elizabeth line (Crossrail) will have step-free access. TfL acknowledge that more work is needed to make London's transport network more accessible and they are investing money to make improvements, including providing alternative services to help alleviate physical accessibility related impacts.

⁵⁶ Transport for London (2015) Travel in London: Understanding our diverse communities. September 2015.

⁵⁷ Transport for London (2012) Your accessible transport network. The Mayor's commitment to making it even easier for you to travel around London.

13.10 Passengers with sensory or cognitive impairments ('hidden' or 'non-physical' disabilities) also face a range of obstacles to the use of the public transport network or the build environment generally. These could include a lack of confidence and/or understanding. This alternative form of communication (including travel information on how to undertake a fully accessible journey), signage, lighting, and permeable and legible routes can help.

Key issues	<ol style="list-style-type: none"> 1. Poor design of the built environment, not adopting an inclusive design approach from the outset. 2. Barriers to using public transport
Opportunities	<ul style="list-style-type: none"> • Development of 'inclusive neighbourhoods' • Provision of more inclusive public transport system
Implications of the plans and programme review	<ul style="list-style-type: none"> • The need for people to be able to easily access jobs, housing, green spaces, education, healthcare and amenities and be able to easily navigate their way through the built environment.

Suggested IIA Objectives	Overcome severance and promote safe, accessible routes for active travel
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14. Economic Competitiveness

The relative economic performance of the OAPF area in relation within London and the wider south east.

- 14.1** When compared to the London region, Newham is characterised by notably higher levels of industrial activity. Industrial heritage and activity is evident in the area, particularly along the River Lea, and south and northeast of the Royal Docks. These industrial areas complement key economic assets of the OA, including ExCeL London, Tate and Lyle Sugars, University of East London and London City Airport.
- 14.2** Between 1971 and 2015 Newham had moved into the upper quartile in London for manufacturing jobs. (Source: London's Boroughs: borough by sector jobs, data and methodology. GLA Economics 2017)
- 14.3** Newham has approximately 14,000 businesses, dominated by micro sized enterprises employing nine or fewer staff. Over 94% of businesses in Newham are of this size.⁵⁸
- 14.4** Business growth has been strong over the past five years, increasing by 5,100 since 2015 (78%), which is twice the rate of growth in London overall (31%). The highest growth has been in business support services.⁵⁹
- 14.5** At 48% Newham has a relatively low proportion of 'resilient' businesses compared with other areas and the figure for Inner London is 69%.⁶⁰
- 14.6** Newham has the benefit of lower rent for business workspace than the London average but it is rapidly catching up with office rental values, increasing by 105% between 2013 and 2018, compared to the London average of 38% (GLA 2019).⁶¹

⁵⁸ [Newham Community Wealth Building](#)

⁵⁹ [Newham Community Wealth Building](#)

⁶⁰ [Newham Community Wealth Building](#)

⁶¹ [Newham Community Wealth Building](#)

Enterprise Zone

14.7 Parts of the OA and the Royal Docks in particular have seen significant recent investment - supported by the designation of London's only Enterprise Zone.

14.8 The Royal Docks Enterprise Zone (EZ) Delivery Plan proposes an investment of £314.3m for the five-year delivery period from 2018/19 to 2022/23 to transform the Royal Docks and accelerate the delivery of commercial space within the EZ.⁶²

Town Centres

14.9 The Strategic Sites allocated through the Core Strategy (2012) to deliver new Local Centres are:

- S08-Thames Wharf
- S11-Parcelforce
- S19-Albert Basin
- S21-Silvertown Quays
- S22-Minoco Wharf
- S29-Plaistow North

Local Plan (2018) has allocated two further strategic sites that will contribute to the town centres network:

- S20-Lyle Park West, to deliver a small local centre adjacent the DLR station;
- S01-Beckton Riverside, which will deliver, inter alia, on the long-standing aspiration of a new major town centre building on the strengths of Gallions Reach Shopping Park.⁶³

⁶² [The Royal Docks Enterprise Zone Delivery Plan](#)

⁶³ [Newham Town Centres Monitoring Bulletin 2012/13 to 2018/19](#)

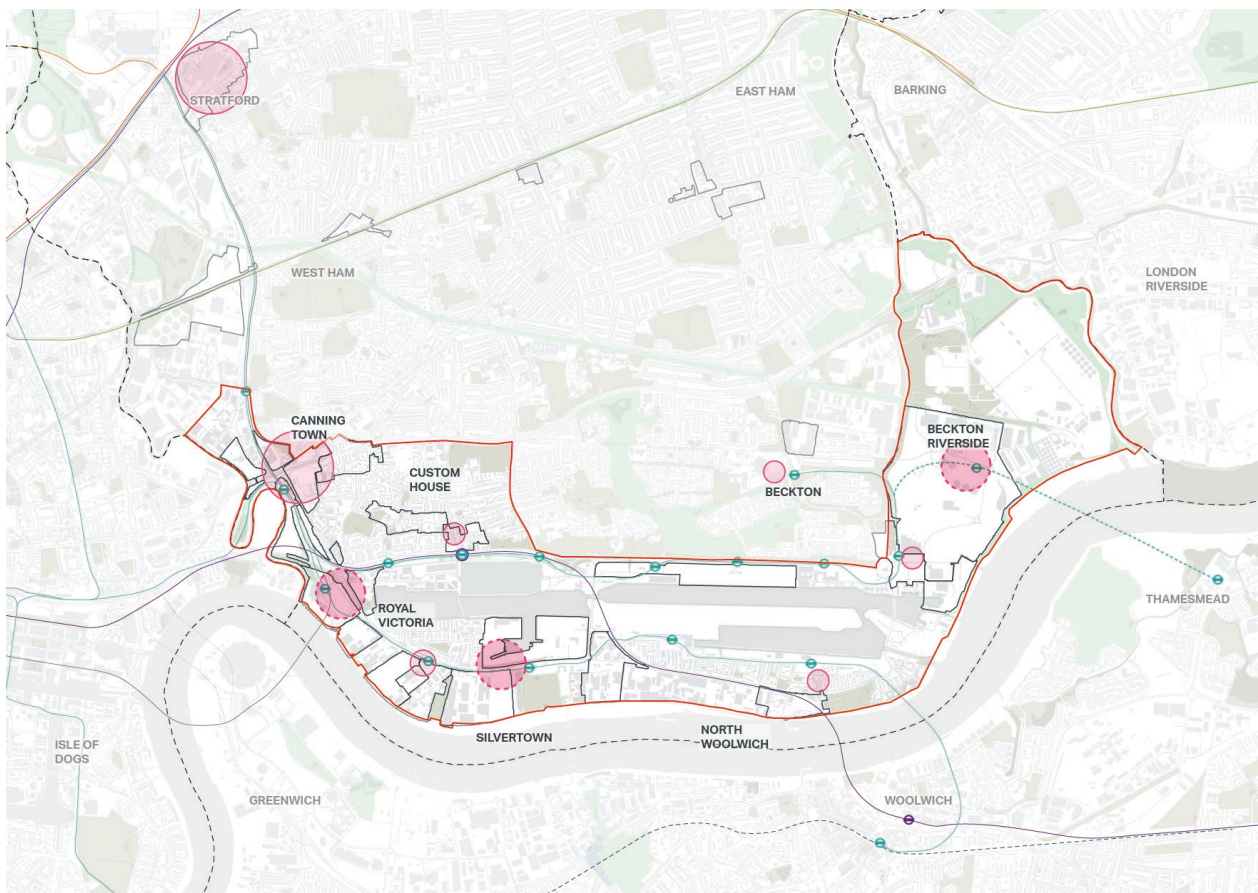


Figure 14.1 Town Centres in Royal Docks and Beckton Riverside

Source: GLA, 2020

14.10 Canning Town has continued to perform poorly across both comparison and convenience retail trade draw and market share, with trade leaking to Stratford and Beckton area while regeneration is under way. Careful monitoring will be needed to review improvements as significant development is completed and becomes occupied.⁶⁴

⁶⁴ [Newham Town Centres Monitoring Bulletin 2012/13 to 2018/19](#)

- 14.11** In Canning Town extensive redevelopment around Rathbone Market and Hallsville Quarter (Strategic Site S14) are significantly altering the scale and type of commercial offer of the town centre. However, the staged delivery means that the town centre remain in transition, with high vacancy rates including much of Rathbone Market (part of the PSF) as well as the superstore at Hallsville Quarter. Given that the town centre’s regeneration programme will, overall, deliver significantly more capacity than identified as needed for this area by the Town Centre and Retail Study 2016 Update (see Indicator INF-OP5 above), vacancies may in part be attributed to insufficient local market demand. Therefore, in addition to ongoing monitoring, the need for robust market testing and marketing strategies (in line with revised Policies INF and J1 of the Local Plan 2018) is highly relevant for further commercial development of Canning Town Town Centre.⁶⁵
- 14.12** Within the OA boundary there are a number of important ‘city’ assets which support London’s global links and competitiveness: the ExCel Centre (which hosted 4 million visitors in 2018), London City Airport (which accommodated 4.8 million passengers in 2018), and the University of East London (with students spanning 120 nationalities).⁶⁶

⁶⁵ [Newham Community Wealth Building](#)

⁶⁶ [Royal Docks Economic Purpose](#)

Start-up Businesses

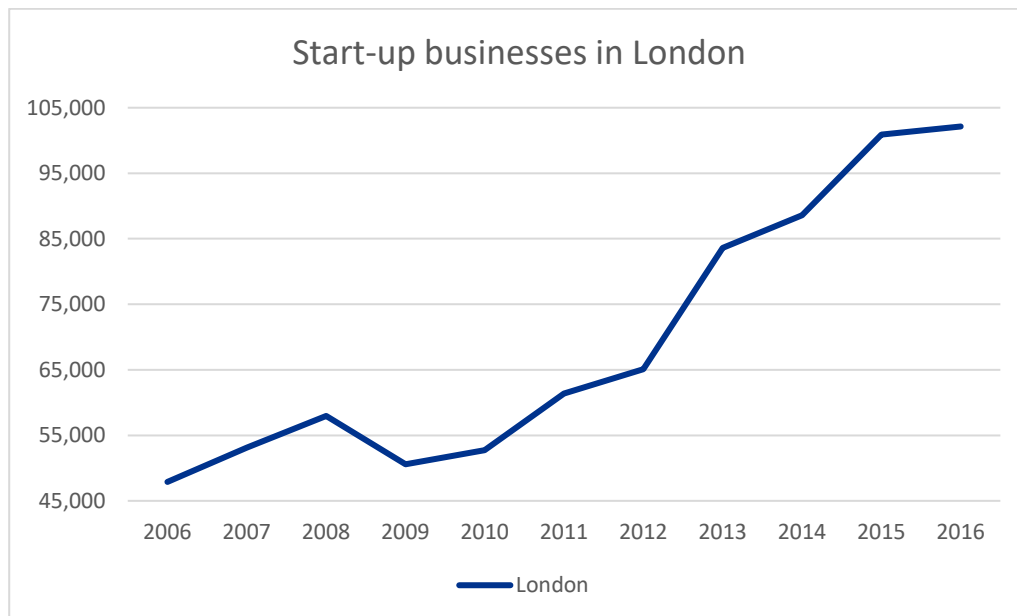


Figure 14.2 Start-up businesses in London

Source: London Datastore Business Demographics 2019

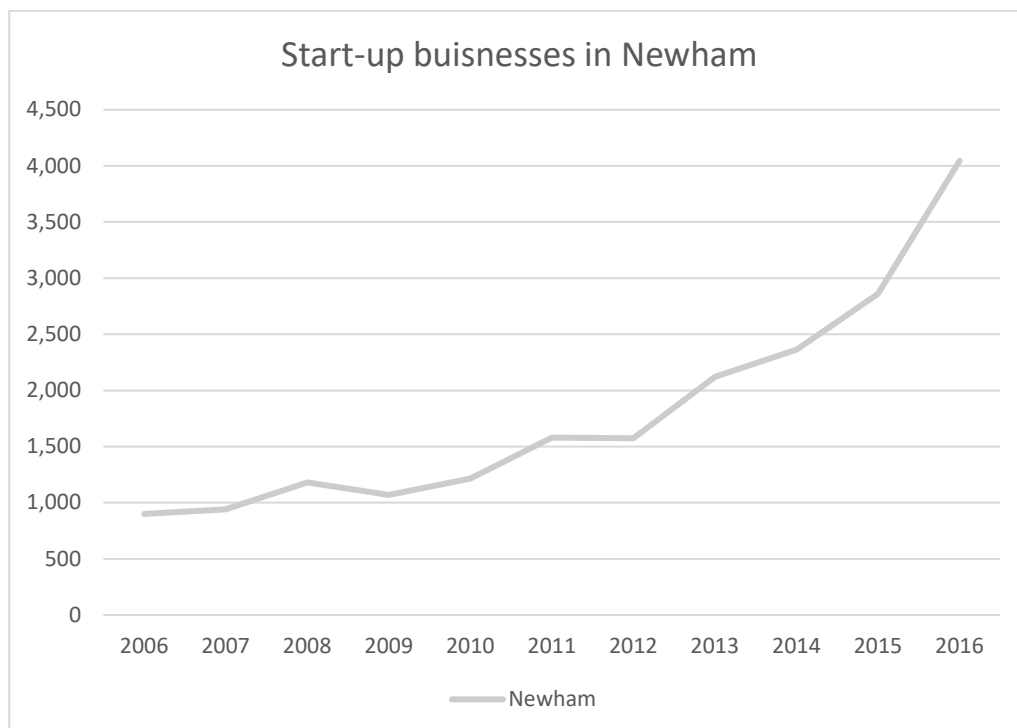


Figure 14.3 Start-up businesses in Newham

Source: London Datastore Business Demographics 2019

14.13 Analysis of data regarding business start-ups in the area illustrate that over the period 2006 to 2016 for Newham the number of businesses starting up each year increased by 350%, from 900 in 2006 to 4,045 in 2016. When compared with London as a whole, the growth in business births follows a similar trajectory but achieves an overall increase of 113% over the then year period.

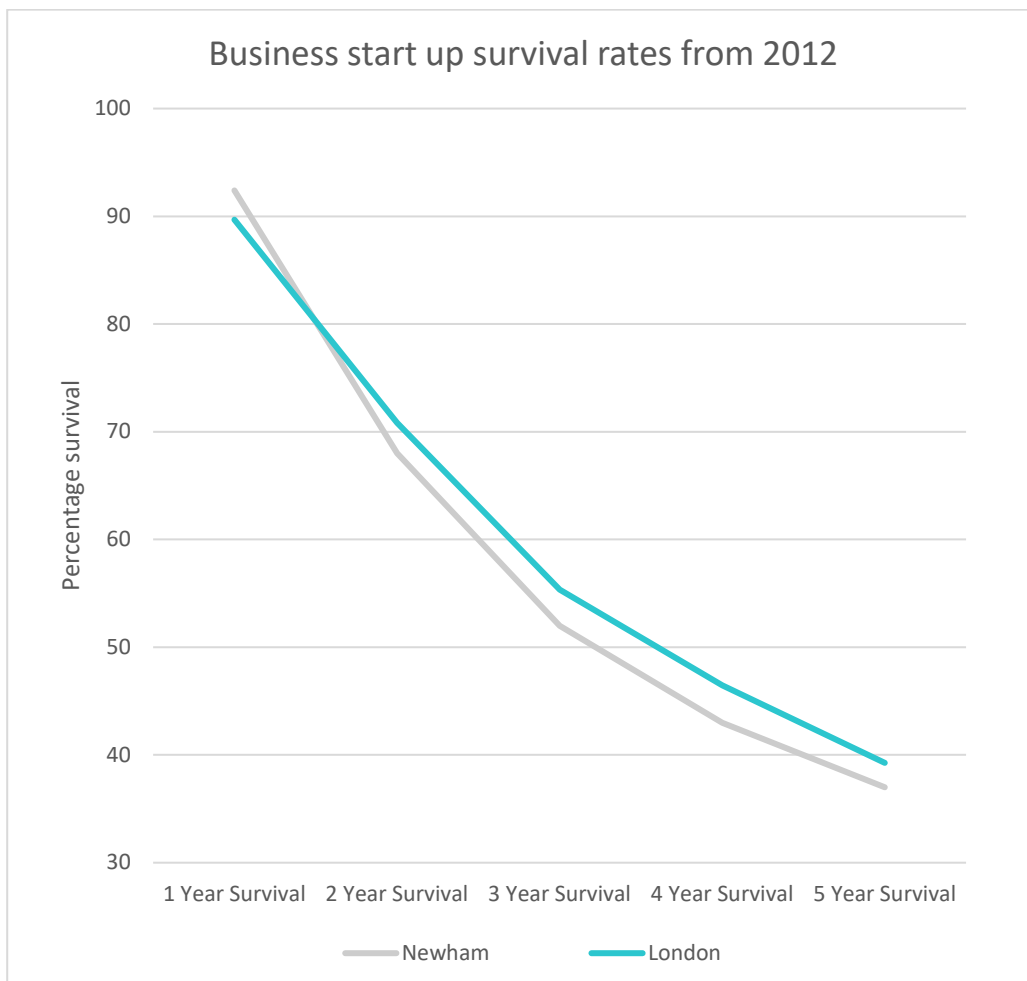


Figure 14.4 Business Start-up survival rates

Source: London Datastore Business Demographics 2019

14.14 Business data as illustrated in **Figure 14.4** above, demonstrates that start-up businesses in Newham generally fare worse than London as a whole. For Newham, 37% of businesses survived for at least five years compared to the London average of 39%.

Office Space

14.15 Historically, the Royal Docks has played less of a role as an office location: currently only around 6% of commercial space locally is characterised as office space and partly reflecting this, the local concentration of activity in more productive ‘knowledge’ activities is less than half the London average.⁶⁷

Industry

14.16 LB Newham is characterised by a high number of small, local businesses, with a relatively high failure rate. This drives a demand for affordable, flexible commercial space which is currently not being met. (Include This demand could be partly met in the OA, making use of its land values, Enterprise Zone status, and available space. It is notable that the only significant office floorspace completion in the borough was in the OA. All other office floorspace provision consisted of smaller scale ancillary floorspace supporting the functions of industrial premises.

14.17 Across the borough there has been an increase in approvals and completions for industrial, storage and distribution floorspace. This indicates continued demand for industrial uses in LB Newham on designated industrial sites. The quantity and accessibility of SIL/LIL land within the OA means that it is well placed to service this demand.

14.18 The demands that the increasingly mixed-use nature of the OA make, as well as placemaking and Community Wealth Building priorities, mean that new industrial development in the OA should be innovative in design, function, and access.

14.19 The growing significance of culture and culture-related industry in the OA mean that this could be an area of specialism on parts of SIL/LIL sites. Good access to central London, local performance/event spaces, and town centres will be required, with sites at Canning Town, Silvertown and North Woolwich well suited to this role. The impacts of office to residential Permitted Development Rights are reducing year on year, with small scale losses to residential taking place outside of any designated employment land. The introduction of Class E suggests that a more market-led employment offer is likely. Flexible internal fit-outs, service access, and floor-to-ceiling heights will be critical to ensuring Class E space is sustainable and meets future market demands.

The data and digital sectors are fast growing and should be explored in the Royal Docks in its role as a testbed for innovation and enterprise. Accommodating the data and digital sector may mean providing space for new infrastructure, including data centres and sub-stations, as well as suitable business space. [\(see Unlocking Good Growth with Infrastructure for more.\)](#) Growth in the digital economy is also about the jobs it creates, particularly for young people and securing long-term future-facing economic opportunities for residents

Thames Estuary Production Corridor

- 14.20** Launched by the South East Local Enterprise Partnership and the Mayor in 2017, the Thames Estuary Production Corridor is an ambitious industrial vision to develop a world class hub for cultural and creative production along the Estuary – leading global innovation, creating new jobs, developing talent and supporting the rapid growth of the creative economy.
- 14.21** Building on the area’s manufacturing legacy, this programme will develop a series of large scale, state of the art creative and cultural production centres, creating opportunities for strategic skills programmes
- 14.22** In 2019, the Thames Estuary Production Corridor was awarded £4.3m from the Department for Digital, Culture, Media & Sport to unlock long term growth across the area.

The River Thames and Industry

- 14.23** There are a number of safeguarded wharves in the Royal Docks and Beckon Riverside OA, including:
- Mayer Parry Wharf - Safeguarded
 - Peruvian Wharf - Safeguarded
 - Royal Primrose Wharf - Expected Safeguard

These sites are safeguarded and protected under the current (policy 7.26: Increasing the use of the Blue-Ribbon Network for Freight Transport) and

emerging (Policy SI15: Water Transport) London Plan and by Ministerial Direction.

- 14.24** The environmental implications of these sites, specifically in relation to the Agents of Change principle, introduced in paragraph 182 of the National Planning Policy Framework (NPPF) and Policy D12 (Agents of Change) of the emerging London Plan (2018) should be acknowledged in future development. As part of any development in close proximity to safeguarded wharves and other riverside based facilities, developers should engage with the Port of London Authority (PLA) and Wharf Operators at an early stage, particularly to agree on how noise assessments will be undertaken to ensure all activities, noise sources and other environmental implications are captured and evaluated, to enable appropriate mitigation measures to be designed into any new development scheme at an early stage.

<p>Key issues</p>	<ol style="list-style-type: none"> 1. There are high levels of industrial activity especially within the logistics, construction and manufacturing sectors. 2. Business start-ups are very high 3. Business survival rates in Newham are lower than the London average 4. Co-location development on industrial land could jeopardise the integrity and operation of 24-hour industrial activity. 5. Co-location and other development could negatively impact industrial land values making industrial intensification development less viable. 6. Low industrial rental values limits viability for industrial intensification development generally 7. Low vacancy rates in industrial areas means limited choice for prospective businesses wishing to move into the area.
<p>Opportunities</p>	<ul style="list-style-type: none"> • Opportunities for redevelopment and funding through the Royal Docks Enterprise Zone. • Opportunities to grow industry for low carbon goods and services. • Improve conditions within designated and non-designated industrial land to drive up the viability of industrial development including those for intensification and associated typologies. • Explore opportunities to support the tourism economy in the OA • Thames Estuary Production Corridor provides opportunities for the creative industries and funding from the Department for Digital, Culture, Media & Sport. • Opportunities for industrial intensification.
<p>Implications of the plans and programmes review</p>	<ul style="list-style-type: none"> • The importance of London’s position as a leading global city and to support a strong, diverse and resilient economic structure providing opportunities for all.

Suggested IIA Objectives	<ul style="list-style-type: none">• To enhance the existing economy by improving conditions for business to thrive• To ensure that non-industrial development does not negatively impact existing industrial activity• To improve viability conditions to enable industrial intensification to take place
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15. Employment

The operation of London's labour market

- 15.1** Newham has had historically high unemployment – more than double the national average in 1991 (Census, 1991). Thirty-one per cent of children lived in out-of-work families in 2012, compared with 19% across England (GLA 2013, Tax Credits), and the Income Support claimant rate was higher than in London or England in 2013 (GLA 2014, Income Support Claimants). Although official unemployment has fallen faster than the London and national average (from 13.1% in 2010-10% in 2015) and the rate of employment is now comparable with the national average, median pay is significantly lower, at only three quarters of the national average (NHPS, July 2016). There is a significant gender gap in employment levels, with working-age women more likely to define themselves as unemployed compared to working-age men (13% compared to four per cent – NHPS, July 2016). Nearly a quarter of working age residents (23%) have not worked in the last 12 months (NHPS, 2014). Underemployment is also an issue in Newham, particularly among part-time workers, one-third (33%) of whom would like to work longer hours at their current rate of pay (NHPS, 2016). The number of part-time jobs rose from 23,000 in 2009 to 28,300 in 2012 (NOMIS). Since 2007 Workplace, Newham's job brokerage service, has helped over 20,300 residents into work. Half of the residents helped into work by Workplace are long-term unemployed (Newham Workplace, 2014). (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)
- 15.2** In 2015, 22.4% of those who were working earned less than the London Living Wage (LLW), which was then £9.40 per hour. This has risen significantly since 2005, when only 13.3% were earning less than the LLW. The headline figures masks significant variation between boroughs. The lowest figures for 2015 are for Richmond-upon-Thames at 12.5% and Wandsworth at 13.2%. In comparison, in 2015 37.8% of respondents in Newham were earning less than the LLW and 33.5% in Brent. (Source: Quality of Life report, 2017)

15.3 Newham is growing and its demographic make-up, its economy and its educational attainment are changing. It is the poorest London borough through a combination of: low-paid, low-skilled work with one-fifth earning less than the minimum wage; a fast growing, highly insecure and often poor quality private rented market with renters' income levels falling as a share of the national median (NHPS, 2014); a high level of benefit dependency, both among those in work and those not working. (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)

Figure 15.1 Working age population in Nehwam

	Royal Docks and Beckton Riverside (%)	Newham (%)	London (%)
All people aged 16-74	72.1%	67.2%	71.7%
Males aged 16-74	77.5%	74.9%	77.5%
Females aged 16-74	66.4%	58.5%	66%

Source: Economic Activity, 2011 Census

15.4 The working age population in The Royal Docks and Beckton Riverside OA is just very slightly higher than the average for London making up 72.1% of the resident population. The split between males and females is also very close to the London average, accounting for 77.5% and 66.4% respectively of the working age population.

15.5 Employees in Newham make an average salary of £24k. Popular jobs in Newham include Primary School teacher, Teaching Assistant (TA), Nursery Worker, Receptionist, Administrative/Office Manager, Admissions Officer and Commissioning Manager which pay between £10k and £48k annually. (Source: Payscale.com September 2020)

Table 15.1 Employment and unemployment in Newham

Employment and unemployment (Jul 2019-Jun 2020)				
	Newham (Numbers)	Newham (%)	London (%)	Great Britain (%)
All People				
Economically Active†	194,900	75.6	79.2	79.4
In Employment†	182,600	70.7	75.5	76.2
Employees†	147,800	57.2	62.3	65.2
Self Employed†	33,900	13.1	12.8	10.8
Unemployed (Model-Based)§	10,900	5.6	4.6	3.9
Males				
Economically Active†	124,600	83.3	84.3	83.4
In Employment†	115,300	76.9	80.1	79.9
Employees†	85,400	57.2	63.6	65.6
Self Employed†	29,400	19.4	16.2	14.0
Unemployed§	#	#	4.9	4.1
Females				
Economically Active†	70,400	64.8	74.0	75.3
In Employment†	67,300	61.9	70.8	72.6
Employees†	62,400	57.2	61.0	64.8
Self Employed†	#	#	9.4	7.5
Unemployed§	#	#	4.2	3.6

Source: ONS annual population survey

Sample size too small for reliable estimate (see definitions)

† - numbers are for those aged 16 and over, % are for those aged 16-64

§ - numbers and % are for those aged 16 and over. % is a proportion of economically active

15.6 The employment / unemployment figures of Newham are lower than the London average with 70.7% of the resident population being in employment compared to the London average of 75.5%. The percentage of self-employed at 13.1% is slightly higher than both the British average and the London average. The rate of unemployment for the financial year 2019/20 was measured as 5.6% which is higher than the London average of 4.6%. While the number of economically active male (83.3%) is very similar to the London average (84.3%), the number of economically active female is lower than the London average measuring only 64.8% compared to a London average of 74%.

Table 15.2 Economic inactivity in Newham

Economic inactivity (Jul 2019-Jun 2020)				
	Newham (Level)	Newham (%)	London (%)	Great Britain (%)
All People				
Total	61,500	24.4	20.8	20.6
Student	19,700	32.0	30.4	26.3
Looking After Family/Home	20,600	33.5	26.1	21.5
Temporary Sick	!	!	1.9	1.8
Long-Term Sick	12,900	21.0	18.5	23.3
Discouraged	!	!	#	0.5
Retired	!	!	7.0	13.6
Other	#	#	15.8	12.9
Wants A Job	7,700	12.5	22.5	21.5
Does Not Want A Job	53,800	87.5	77.5	78.5

Source: ONS annual population survey

Sample size too small for reliable estimate (see definitions)

! Estimate is not available since sample size is disclosive (see definitions)

Notes: numbers are for those aged 16-64.

% is a proportion of those economically inactive, except total, which is a proportion of those aged 16-64

15.7 Economic inactivity is a measure of those people who are neither in employment nor unemployed. This group includes, for example, all those who were looking after a home or retired. The percentage of those economically inactive is almost 4% higher than the average for London. The majority of this group are students and those looking after family or the home.

Table 15.3 Employment by occupation in Newham 2020

Employment by occupation (Jul 2019-Jun 2020)				
	Newham (Numbers)	Newham (%)	London (%)	Great Britain (%)
Soc 2010 Major Group 1-3	92,500	51.2	61.0	49.0
1 Managers, Directors And Senior Officials	24,400	13.4	13.7	11.7
2 Professional Occupations	46,000	25.2	28.3	22.2
3 Associate Professional & Technical	22,100	12.1	18.7	15.0
Soc 2010 Major Group 4-5	33,900	18.8	15.5	19.5
4 Administrative & Secretarial	10,200	5.6	8.9	9.8
5 Skilled Trades Occupations	23,700	13.0	6.5	9.7
Soc 2010 Major Group 6-7	21,100	11.7	12.4	15.9
6 Caring, Leisure And Other Service Occupations	7,300	4.0	6.7	9.0
7 Sales And Customer Service Occs	13,800	7.5	5.6	6.9
Soc 2010 Major Group 8-9	33,300	18.4	11.1	15.5
8 Process Plant & Machine Operatives	12,300	6.7	3.7	5.8
9 Elementary Occupations	21,000	11.5	7.4	9.7

Source: ONS annual population survey
 Notes: Numbers and % are for those of 16+
 % is a proportion of all persons in employment

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15.8 The Office for National Statistics (ONS) annual population survey illustrates that employment by occupation in Newham is very similar to that of London except for Standard Occupation Classification 2010 (Soc 2010) Major Group 1-3 and Major Group 8-9. Group 1-3 is significantly lower than the average for London, 51.2% for Newham compared to the London average of 61%. This group includes managers, directors, senior officials, professional occupations and associate and technical professions. However, the number of those employed in Group 8-9 are significantly higher than those for London as a whole, measuring 18.4% compared the London average of 11.1%.

Table 15.4 Educational achievement in Newham

Qualifications (Jan 2019-Dec 2019)				
	Newham (Level)	Newham (%)	London (%)	Great Britain (%)
NVQ4 And Above	110,800	44.0	54.2	40.3
NVQ3 And Above	139,900	55.6	67.0	58.5
NVQ2 And Above	168,500	67.0	78.5	75.6
NVQ1 And Above	189,000	75.1	85.0	85.6
Other Qualifications	37,200	14.8	8.3	6.7
No Qualifications	25,500	10.1	6.7	7.7

Source: ONS annual population survey
 Notes: For an explanation of the qualification levels see the definitions section.
 Numbers and % are for those of aged 16-64
 % is a proportion of resident population of area aged 16-64

15.9 The recent annual population survey conducted by ONS illustrates that the level of educational achievement differs from the London average. Those of working age population with NVQ4 and above, includes those who hold an HND, Degree, Higher Degree level qualifications or equivalent and for Newham is significantly lower than the London average, measuring 44% compared to London's which is 10.2% higher. The proportion of achieving NVQ3 and above is also significantly lower than the London average 55.6% compared to 67%, which is 11.4% lower. The Newham average of those with no qualification at all is higher than both London and Britain, with 10.1% in Newham compared with 6.7% in London and 7.7% in Britain.

Key issues	<ol style="list-style-type: none"> 1. Average salaries for Newham working age population is considerably lower than the London average 2. Unemployment rates in Newham are relatively high compared with the London average, yet unemployment rates have fallen faster than the London average 3. Income inequality in Newham is worse than the London average
Opportunities	<ul style="list-style-type: none"> • Provision of suitable employment space to meet different sectors requirements
Implications of the plans and programmes review	<ul style="list-style-type: none"> • Employment growth in different sectors ensuring a diverse economy providing opportunities for all.

Suggested IIA Objectives	<p>To maintain and strengthen the area’s economic position especially with regard to logistics, manufacturing and the Thames Estuary Production Corridor vision.</p> <p>Plan for efficient use of employment land and safeguard protected industrial capacity</p>
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16. Education and Skills

The education system and educational and vocational attainment

16.1 Newham’s educational gains are the most striking achievement of the last decade. London schools have improved their GCSE attainment with five A*-C grades including English and Maths at a faster rate than the national average. Newham has accelerated its improvements since 2008, overtook England in 2011 and 2012, is rapidly catching up 11 with London as a whole, and does well on measures of value-added (DoE, 2014). However, 42 per cent of residents have no formal qualifications. This compares to just nine per cent of people living in London and 13 per cent in the UK, and represents an increase on 2013 levels (when it was 35%). At the same time, just a quarter of Newham residents (25%) have a Higher Education qualification, compared with almost half of Londoners (46%) and over a third of people in the UK (36%) (NHPS 2016). (Source: Newham Local Plan Integrated Impact Assessment Feb 2018)

Table 16.1 Educational attainment in Royal Docks and Beckton Riverside⁶⁸

HIGHEST LEVEL OF QUALIFICATION, 2011 CENSUS		
Total: Population aged 16 years and over	22,272	
No qualifications	4,082	21.0%
Level 1	2,108	13.7%
Level 2	2,388	14.7%
Apprenticeships	241	1.6%
Level 3	2,408	9.3%
Level 4 and above	8,277	29.9%
Other	2,768	9.8%

⁶⁸ London Data Store (based on the 87 output areas within OAPF boundary)

16.2 Survey data reveals large differences in reported volunteering data by local authority area in London. While Richmond upon Thames had the highest reported volunteering levels in London (53% of the adult population) over the three-year period 2013/14-2015/16, Newham had the lowest (9%). (Source: Quality of Life report, 2017)

16.3 Young people in Newham are high achievers with 65.8% of pupils achieving a level 4 or above (equivalent to a grade C or better) in both English and Maths GCSEs in 2017-18 (compared with 64.2% for England).⁶⁹

Increasing demand for school places to meet growing needs

Figure 16.1 Primary and Secondary places shortfall 18/19 – 22/23

Figure 5: Primary shortfall 2018/19 to 2022/23

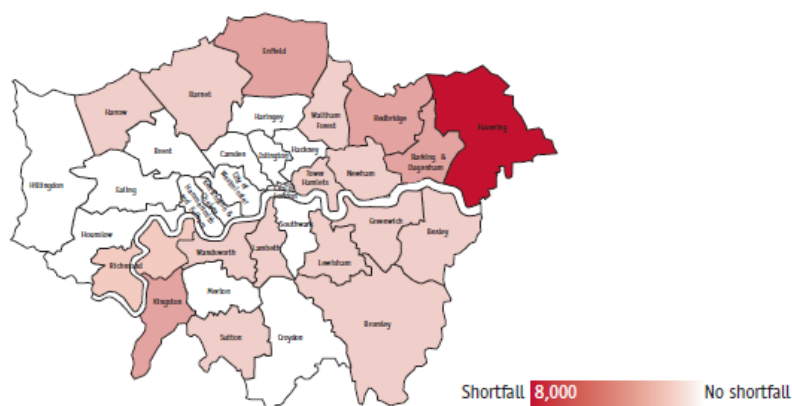
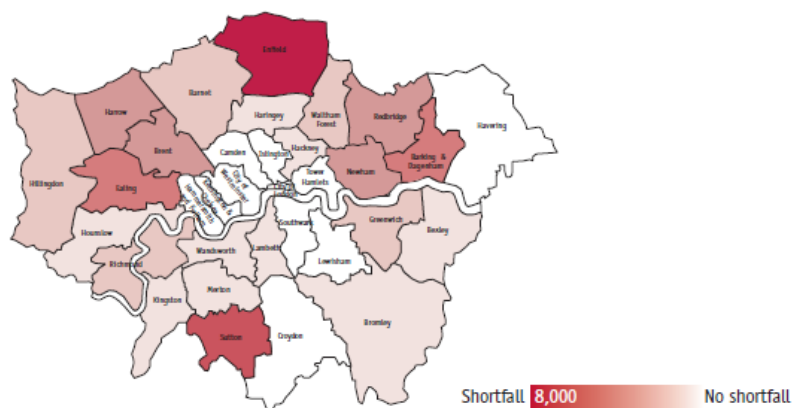


Figure 6: Secondary shortfall 2018/19 to 2022/23



⁶⁹ [Newham Community Wealth Building](#)

Expensive and insufficient childcare provision

16.4 The number of pre-school age children (0-4 years) in London has also increased by over 100,000 since 2001. The numbers are now projected to stay around this level (approximately 620,000) for the next 25 years with higher numbers of this age group in outer London boroughs such as Newham (28,000), Enfield (25,000) and Waltham Forest (22,000). The Family and Childcare Trust reports that childcare in London for under 2's is 34 per cent more expensive than childcare in the rest of England. Although there are legal requirements for councils to meet childcare needs of local constituents, a recent survey conducted by the Family and Childcare Trust found that 17 local authorities in London did not have enough free early education places. The relatively high cost of childcare as well as lack of availability in some areas, significantly impacts on parents returning to work after having children, particularly mothers.⁷⁰

Large spatial variations in educational performance across London

16.5 Education attainment in London is generally high and better than in England. In 2014/15, 59 per cent of pupils in inner London and 62 per cent in outer London achieved five A*-C grades (including English and Maths) at GCSE level, compared with 53 per cent across England as a whole. However, there is a large variation in educational achievement at GCSE level between London boroughs, ranging from 51.3 per cent in Lewisham to 73 per cent in Kensington and Chelsea achieving Grade A-C.

16.6 In London, given London's excellent key stage 4 performance the results at key stage 5 are not as good as would be expected. Outcomes in further education and on apprenticeships also lag behind national figures.

⁷⁰ Family and Childcare Trust, 'Childcare Costs Survey 2015'

Higher Education

- 16.7** London is home to more than 40 universities and specialist higher education (HE) institutions. London's universities make a significant contribution to its economy and labour market. HESA records show that around 370,000 students studied at a London Higher Education institution in 2014/15 (16per cent of all UK students).
- 16.8** Data from London Higher found that over 100,000 overseas students study in London, comprising 28 per cent of all students in the capital; with 24 per cent of all overseas students in the UK study in the capital. With the cost of living so high in London it is important that adequate provision of student accommodation is made to reflect students' needs across London. The London Plan estimates that there could be a requirement for some 20,000 – 31,000 places between 2015 to 2025.
- 16.9** Data from six months after graduation for the 2012/2013 cohort highlights the dominance of London as a graduate employer with 35.6 per cent of graduates in London neither lived nor studied in the area previously, higher than in any other UK region. Almost 85 per cent of these had professional and managerial jobs.⁷¹

Londoners struggle with the transition from education to work

- 16.10** Whilst London attracts a significant number of graduates from elsewhere into the workplace, for Londoners themselves, the transition from education into the labour market for young people in London comes with its challenges, with a youth unemployment rate of 17.9 per cent for 16-24 year olds compared to the England average of 14.4 per cent.⁷² There is a lack of support for transitions from education to work, especially for young women, and many young people therefore struggle with this.

⁷¹ GLA Economic Evidence Base 2016, chapter 8,

⁷² GLA Economic Evidence Base 2016, Chapter 9

Businesses unable to access the right skills to meet their growth needs

- 16.11** London has the most skilled professionals in the UK with over 57 per cent of Londoners possessing an NVQ level 4 or higher compared to 41.6 per cent of the rest of UK. Approximately three in every five (60.2 per cent) workers in London had tertiary education as their highest qualification in 2014. This is higher than many other global cities such as New York, Tokyo and Paris. A further 25.3 per cent of workers in London had upper secondary or post-secondary education which is the equivalent of GCSE grades A*-C and A Levels. The remaining 14.6 per cent of London's workforce had lower secondary school education (i.e. GCSE grades D-G) or less as their highest qualification. Only 4.6 per cent of Londoners have no qualifications compared to 5.1 per cent nationally⁷³.
- 16.12** According to the London Business Survey, 70 per cent of businesses in London rate the capital highly as a place to do business in terms of the availability of skilled staff with only 5 per cent of businesses rating the capital poorly on this⁷⁴. However, despite these generally positive perceptions of London's labour market, there is evidence of skills shortages, particularly at middle and high skill level occupations. In total, there are almost 223,000 cases where London employers considered existing staff not to be fully proficient in their roles (equivalent to 5 per cent of all those employed). As a proportion of all employment, these skills gaps are most prevalent in administrative/ clerical, sales and customer service, and elementary occupations with around half of affected employers experiencing loss of business to competition and/or delays in developing new products as a result⁷⁵.

⁷³ GLA Economics, 2016, 'London in comparison with other global cities'.
Current Issues Note.

⁷⁴ GLA, 2014, 'London Business Survey 2014', London as a business location, Table: LBL1

⁷⁵ UKCES Employer Skills Survey 2015, May 2015, table 72/1.

16.13 London has a higher proportion of workers born in EU countries than the rest of the UK⁷⁶. London's ability to attract skilled workers is an important factor in its success but some businesses are concerned that the supply of skilled labour is a potential constraint to future growth. Businesses have sought assurance on the status of current EU staff in London as there is a concern that stricter immigration controls limiting the free movement of labour from the EU, which seem likely given the Referendum outcome, may restrict the supply of labour to the London economy.

⁷⁶ GLA Economic Evidence Base 2016, Chapter 6, page 270

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Insufficient school places to meet growing needs 2. Large variations in educational performance across London 3. Lack of support for transition from education to work, especially for young women 4. Maintaining London's status as an international city of learning, research and development
<p>Opportunities</p>	<ul style="list-style-type: none"> • More co-ordinated approach to work with local authorities to ensure sufficient good quality school places in the right locations
<p>Implications of the plans and programme review</p>	<ul style="list-style-type: none"> • The importance of ensuring a world class education system and that Londoners have the right skills to access a diverse range of jobs
<p>Suggested IIA Objectives</p>	<p>To ensure the education and skills provision meets the needs of London's existing and future labour market and improves life chances for all</p>

17. Culture

London's culture and cultural tourism

- 17.1** London's culture sector and the creative industries deliver both economic and social benefits for the capital. As well as one of London's fastest growing sectors, culture also plays a role in bringing people together and generating civic pride.
- 17.2** In 2012, the GVA of the creative industries in London was estimated at £34.6 billion, accounting for just under half (47.6 per cent) of the UK total (£72.7 billion); the creative industries group contributed 10.7 per cent of total GVA in London London's creative industries specialise in music, performance, and visual arts (75.8 er cent of total UK GVA generated in London), and Film, TV, video, radio and photography (66.4 per cent of total UK GVA generated in London).⁷⁷
- 17.3** The EU is the largest export market for the UK creative industries, totalling 56 per cent of all overseas trade in the sector.⁷⁸ The creation of the EU Digital Single Market is expected to contribute £3b to the economy and create 3.8m jobs. Since 2011, over 60 international cities have launched aggressive policy initiatives to increase their position as creative and cultural capitals.⁷⁹ It is unclear what impact leaving the EU will have on cultural and creative industries.

⁷⁷ GLA Economics, The Creative Industries in London, October 2015

⁷⁸ <http://www.creativeindustriesfederation.com/news/david-cameron-meets-the-fed-as-members-vote-remain> (follow up with Eliza on origin of stat)

⁷⁹ Cities are Good for You, Leo Hollis

- 17.4** Culture is the reason 4 out of 5 visitors choose to visit the capital. 18.6m international and 12.9m domestic visitors visited London in 2015 making it a record breaking year at 31.5m visits. In 2013, GLA Economics estimated that cultural tourism supported 80,000 jobs and contributed £3.2 billion of GVA to London, just under a third of the overall contribution from the tourism sector as a whole. London's night-time economy - a key element of the London's culture - contributed £17.7bn to £26.3bn in Gross Value Added (GVA) to the UK economy in 2014⁸⁰. The opening of the night tube in August 2016 is expected to increase the value of the night time economy significantly further with TfL suggesting c£77m per year.
- 17.5** In 2014, there were 795,800 jobs in the creative economy in London, equivalent to 16.3 per cent of total jobs in the capital (compared to 7.4 per cent of the total number of jobs in the rest of the UK).⁸¹ 80.2 per cent of the total number of jobs in the creative economy were filled by people from the White ethnicity group compared to 19.8 per cent of jobs filled by BAME groups⁸². London's unique and skilled creative workforce, however, is under threat as the rising costs of living are forcing talent out of London. The UK's exit from the European Union may also have a huge impact on London's ability to attract and retain the best international creative talent.
- 17.6** London has 857 art galleries, 241 theatres, 860 cinema screens, hosts 271 festivals or events, 10 major concert halls, 13 national museums, 339 night clubs, 320 live music venues, 4 UNESCO world heritage sites and 353 public libraries.⁸³ Many of London's cultural facilities and spaces are heritage assets. Culture plays a significant role in place-making with 84 per cent of Londoners thinking that the city's cultural scene plays an important role in ensuring a high quality of life. 75 per cent of Londoners are satisfied with the city's cultural offer and say that it is London's cultural offer that makes living in London 'worth it' despite big problems, like housing⁸⁴.

⁸⁰ London's 24 Hour Economy, London First & EY

⁸¹ GLA Economics, The Creative Industries in London, October 2015

⁸² GLA Economics, The Creative Industries in London, October 2015

⁸³ [World Cities Culture Report 2015, BOP consulting](#)

⁸⁴ GLA Intelligence, London Annual Survey, 2015

- 17.7** However, despite this positive general picture, London has low levels of participation in culture from resident Londoners - particularly with Londoners from low socio-economic backgrounds. London diverse population also experiences inequality in terms of access to cultural venues and activities and there is patchy levels of cultural provision across London's boroughs. BME groups were less likely to have visited a heritage site in the previous years compared with the white group (56 per cent compared to 75 per cent respectively), less likely to have engaged with the arts (68 per cent compared to 78 per cent respectively), and less likely to have visited a museum or gallery (43 per cent compared to 53 per cent respectively), but more likely to have visited a library (47per cent compared to 33 per cent respectively)⁸⁵. In 2010, 39 per cent of Londoners said they took part in culture at least weekly. This dropped to 23 per cent in 2016.
- 17.8** London's cultural infrastructure is also not sufficient to allow the industry to grow and thrive. It is losing essential spaces and venues for live cultural production and consumption including pubs, clubs, and music venues. Over 103 grassroots music venues have been lost in the last 8 years, pubs in London are closing at a rate of 10 per week⁸⁶and it is set to lose 30 per cent of creative workspaces over the next 5 years⁸⁷.
- 17.9** Red tape and licensing is also stifling London's creativity and cultural growth. Creative businesses and artists struggle to secure long term financing and business support as their activities are perceived to be 'risky' or of non-commercial value. A 2010 survey found that, nationally, 79 per cent of studio spaces were rented and 21per cent owned. Many buildings were on short-term leases, with 64 per cent on leases of less than five years. In London these pressures are particularly severe with over 30 per cent of current London studios set to disappear within 5 years impacting some 3,500 artists.⁸⁸

⁸⁵ Understanding the Value of Arts and Culture, Crossick & Kasznyck, AHRC

⁸⁶ Campaign for Real Ale, <http://www.camra.org.uk/home>

⁸⁷ Making Space: Developing and Sustaining Affordable Artists' Studios and Creative Workspaces, 2016

⁸⁸ Making Space: Developing and Sustaining Affordable Artists' Studios and Creative Workspaces, 2016

17.10 Funding for the arts has also undergone significant cuts over the past 5 years, particularly at the Local Authority level. On average, councils' spend on cultural services in London fell in real terms by 24 per cent between 2010/11 and 2013/14, while their investment in London-based NPOs fell by 23 per cent from 2010/11 to 2012/13. Arts Council England has already shifted funding outside the capital from 40 per cent to 20 per cent with a further 5 per cent expected by 2018.⁹⁰

Culture in LB Newham

Newham is one of the youngest and most diverse boroughs in the UK and is committed to becoming a beacon for inclusive and transformative cultural activity. Its cultural sector includes nationally significant organisations such as Theatre Royal Stratford East and East London Dance, and dynamic organisations such as Rosetta Arts and Iroko. In 2022, East Bank, at Queen Elizabeth Olympic Park will start to open with major cultural and academic organisations including Sadler's Wells, the BBC, the Victoria and Albert Museum, UAL's London College of Fashion and University College London. Rooted in the people and place of the Royal Docks, our programme provides a complementary offer, and the Royal Docks is already working in partnership with many of these organisations, benefiting from synergies and sharing opportunities.

Whilst Newham's cultural scene is fast developing its population is measured by Arts Council England's Engagement in Arts and Culture survey (2015-2017) as having significantly lower engagement in arts and culture than the national average. The Royal Docks is a partner in the Creative Newham initiative, led by Rosetta Arts, which is developing creative partnerships to better deliver arts across the borough. We are also working with London Borough of Newham to support projects such as Newham History Month.

⁸⁹ [London local government's support for arts and culture, London Councils 2015](#)

⁹⁰ Arts Council England

Culture in Royal Docks and Beckton Riverside

Enterprise Zone investment will support culture and cultural placemaking alongside sport and leisure. This will be demonstrated in the forthcoming Royal Docks Cultural Placemaking Strategy. (Source: Vision and Principles).

The GLA Royal Docks team published a Royal Docks Cultural and Placemaking Strategy in March 2021. This was founded on extensive public engagement, and sets out a vision for the future cultural offering in the Royal Docks:

The Royal Docks will be the cultural engine of London: From its transformational role in the industrial revolution and international trading, to its present-day position in one of the youngest and most multicultural boroughs in the UK, the Royal Docks represents a meeting point for global travellers and local residents, the place of the first steps and the triumphant returns for a million adventures.

A river runs by it, an airport flies through it, a community once built and cared for it: this strategy lays out the ways in which we will work with Royal Docks' communities to make that happen again. As we head towards the bicentenary of one of the most extraordinary inner-city sites in the world, the Royal Docks cultural strategy aims to unite a complex past with a thrilling future, returning to its source in order to explore the graft and the genius, the work and the play, the people and the place that can redefine five square miles of quintessential London. Inspired by its heritage and people, the Royal Docks needs to position itself in the minds of the world as the cultural engine powering London's creative economy. It must clearly establish itself as an ideas factory and physical creation centre, the "workshop of the world", where local and global creative innovation and production are supported and so flourish.

The Royal Docks will become one of the world's great creation centres: home to creative people engaged in the process of making extraordinary cultural work. We will develop spaces of all size and shape to be used as workshops, rehearsal spaces, artist accommodation, temporary and permanent venues and social spaces. We will unearth, invite, commission and support creatives in the making and presenting of their work in the Royal Docks: inspired and facilitated by the nature of the space. We must take this once in

a century opportunity to transform a vast and important part of London into one of the world's most vibrant crucibles for creativity.

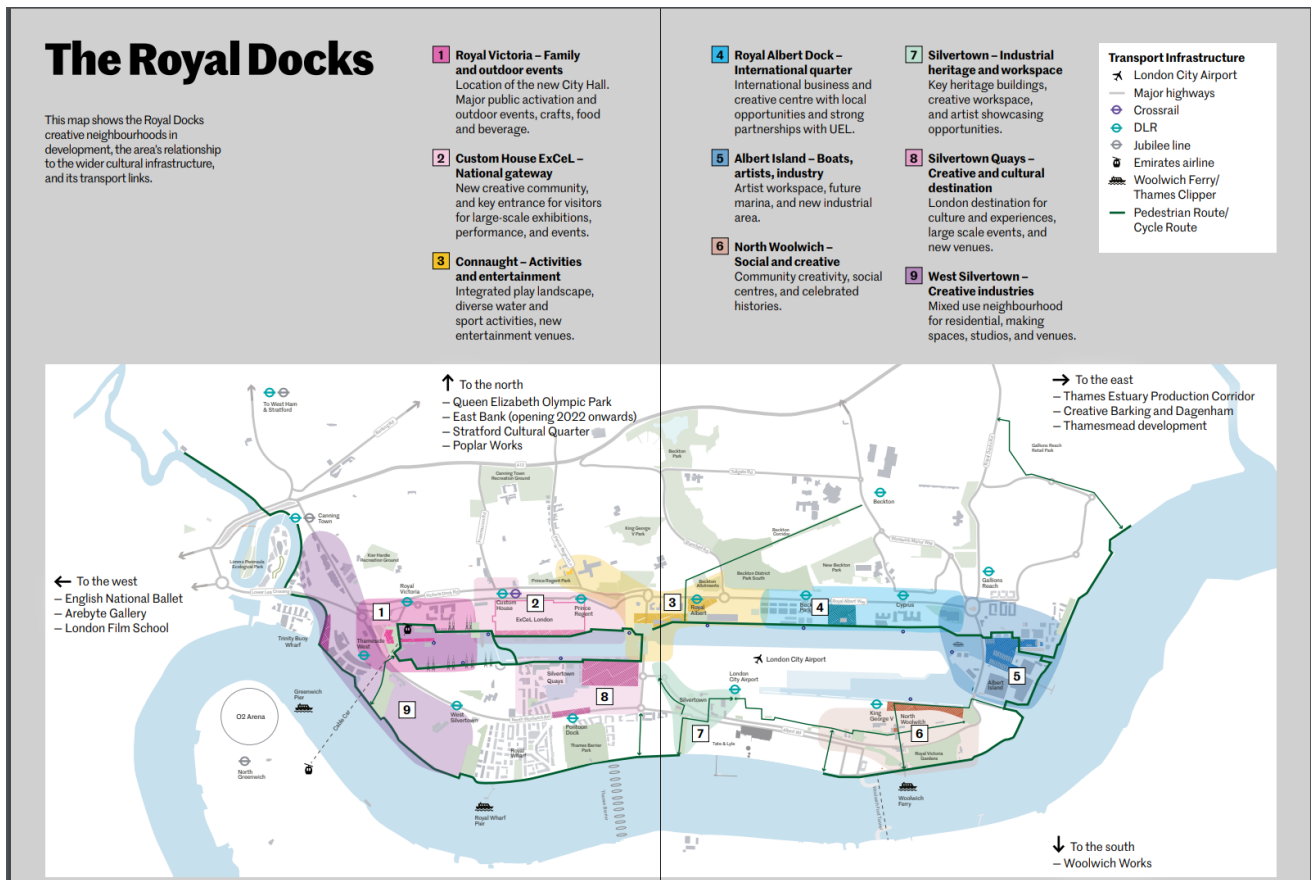
This new cultural engine will be driven by its inclusive communities and fuelled by creativity, resulting in a new quarter that – like London itself – is a world leader in inclusion and diversity, open to everyone.

This vision will be implemented through three pillars:

- **PEOPLE DRIVEN BY CREATIVITY:** Newham and London will love and embrace its Royal Docks, and creative people will see this as their home, where they are nourished, inspired and productive.
- **PROGRAMME FUELLING INSPIRATION:** Events and activities will be commissioned and curated to attract, excite, and inspire all who engage with the Royal Docks.
- **PLACE THE ENGINE FOR CULTURE:** The Royal Docks will be planned, developed, and run as a space for creation, and its operating systems regularly updated to be fit for its changing use.

17.11 Structures to help deliver the Royal Docks Cultural and Placemaking Strategy include:

- The Royal Docks Networking Forum: The Royal Docks Networking Forum is a key mechanism for the Royal Dock’s Team to formally engage partners and to update key stakeholders on activities being undertaken
- Cultural network An active localised network is planned to support the cultural ecosystem through capacity building, networking, partnership and collaboration.
- Cultural Connectors and Programme Panel Cultural Connectors will be a local group open to all interested in culture and the arts to support and get involved in the cultural programme. The Programme Panel made up of Cultural Connectors and artists will participate in programming decisions and exploring new creative ideas.



<p>Key issues</p>	<ol style="list-style-type: none"> 1. Loss of pubs, cinemas, creative workspace, live music and other cultural facilities and risk of harm to heritage assets. 2. Increased appropriate production space needed for the creative industries to thrive and develop 3. Inequality in access to cultural venues 4. Low levels of participation 5. Regulation/bureaucracy stifles creativity / talent development 6. Lack of community led engagement in planning and development schemes for local area 7. Despite the wide ranging economic and social benefits it brings, culture is a low priority on national and local development agendas.
<p>Opportunities</p>	<ul style="list-style-type: none"> • Development of a cultural infrastructure plan • Inclusion of agent of change principle to support cultural events • Support the Thames Estuary Production Corridor vision • Promote and protect London’s libraries, community centres and art venues • Support London’s theatres, galleries, museums to open up access for all Londoners and to spread their activity and presence across the city • Support the aims of other relevant Mayoral strategies and programmes such as: <ul style="list-style-type: none"> - Cultural Strategy - Skills or Londoners Strategy - Creative Industries investment programme for fashion, film games and design • Support the Royal Docks Team Cultural Placemaking Strategy

Implications of the plans and programme review	The economic and social benefits of a strong culture
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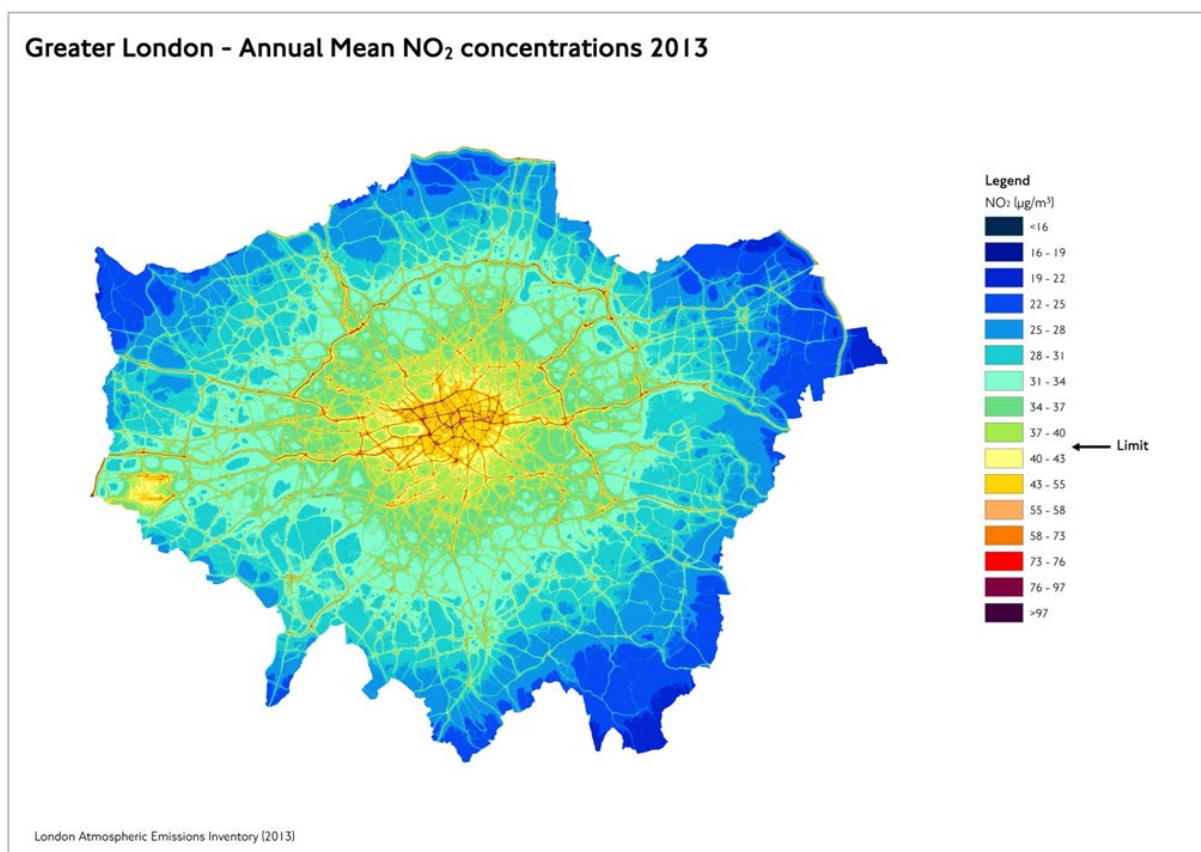
Suggested IIA Objectives	<p>To safeguard and enhance the Capital's rich cultural offer, infrastructure, heritage, natural environment and talent to benefit all Londoners while delivering new activities that strengthen London's global position</p> <p>In Royal Docks and Beckton Riverside specifically, Celebrate and protect existing cultural and heritage destinations while encouraging new offers.</p>
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18. Environment Air Quality

The condition of the air with respect to the presence (or absence) of pollutants in the air e.g. NO_x, NO₂, PM and the resulting impact this has on London's compliance with legal standards, public health and inequality.

- 18.1** Since the passage of the Clean Air Act in 1956 there has been significant progress made in improving air quality in the capital. Reductions in the levels of benzene, lead and sulphur dioxide pollution have greatly improved health and quality of life. London now meets eight of the nine legal limits set by the National Air Quality Regulations, underlining the ability of effective and coordinated action to improve the air quality. However, despite this there are 33 Air Quality Management Areas (AQMA) across London, most designated for road transport pollutant emissions with 4 AQMAs designated for other transport and industrial emissions.
- 18.2** Scientific research has shown air pollution has a great impact on health. Lifelong exposure to current concentration of particulates in the air in London has been calculated to reduce average life expectancy by about 9 months (based on a child born in 2008). The London Health Commission states that 7per cent of all adult deaths in London are attributable to air pollution. Mortality is not the only air pollution related health effects, in 2010 - London air pollution was associated with over 3,000 hospital admissions as well as increased sensitivity to allergens, pre-natal exposure linked to low birth weight and increased risks of chronic disease later in life. The latest health evidence suggests that the smaller particles and gases which are invisible to the human eye may be even more deadly with a wider range of health effects. Two pollutants remain a specific concern; particulate matter (PM10 and PM 2.5) and nitrogen dioxide (NO₂).

- 18.3** Exposure to particles even in the short term (days to months) causes increases in hospital admissions and premature deaths and increases in the number of GP visits⁹¹. It is estimated that in 2008 there were over 4,000 deaths brought forward attributable to long-term exposure to small particles. This amounts to between 6 and 9 per cent of all deaths⁹². Whilst London is meeting legal limits for particulate matter, as this pollutant is damaging to health at any level it is important to remain focused on reducing it.
- 18.4** In addition to the UK Air Quality Strategy Objectives and EU limit values, the World Health Organisation (WHO) has set a guideline value for PM_{2.5} of 10µgm⁻³ - although WHO does not set timeframes for when guidelines should be met. The 2014 Local Air Quality Network Summary Report reports that no sites achieved this WHO guidance value.



⁹¹ TfL, 2014 – Transport Action Plan

⁹² TfL, 2014 – Transport Action Plan

- 18.5** **Figure 18.1** shows NO₂ levels concentrations across London. London, along with a large number of other UK and European cities, is exceeding the requirements of the Ambient Air Quality Directive 2008 for nitrogen dioxide (NO₂). Any area in yellow, red or purple exceeds the legal standards - including in central and Inner London, on the major road network and at Heathrow Airport. In 2014, 39 out of 67 sites measured in London did not achieve the annual mean objective for NO₂ and 8 sites recorded an annual mean of twice the legal limit or above. 14 sites exceeded the hourly mean objective for NO₂⁹³.
- 18.6** The number of Londoners exposed has been declining, however it is estimated that in 2020 500,000 people will still be exposed to levels of NO₂ above the EU limit value. A more accurate estimate of the number of people projected to be exposed to level of NO₂ above the EU limit value in 2020 and beyond will be able to be determined after the London Atmospheric Emissions Inventory (LAEI) 2013 concentration data has been published. It is anticipated that these data will be available later in the year (2016/17).
- 18.7** Analysis undertaken GLA Economics shows populations living in the most deprived areas are on average currently more exposed to poor air quality than those in less deprived areas. 51 per cent of the Local Super Output Areas within the most deprived 10 per cent of London have concentrations above the NO₂ EU limit value. This is in contrast to the 10 per cent least deprived areas, which are on average 1 per cent above the NO₂ limit value⁹⁴. According to the GLA London Atmospheric Emissions Inventory exposure analysis 2013 there were 1,400,000 vulnerable people exposed to the health risks associated with exceeding the EU limits for NO₂.
- 18.8** Those in deprived areas are also much more likely to have pre-existing cardio-respiratory disease. Thus, they are both more exposed and also more susceptible to poor air quality effects. Therefore, reducing air pollution could help to reduce overall health inequalities.

⁹³ Environmental Research Group and King's College London, 2016 – London Air Quality Network Summary Report

⁹⁴ GLA Economic Evidence Base 2016, Chapter 7

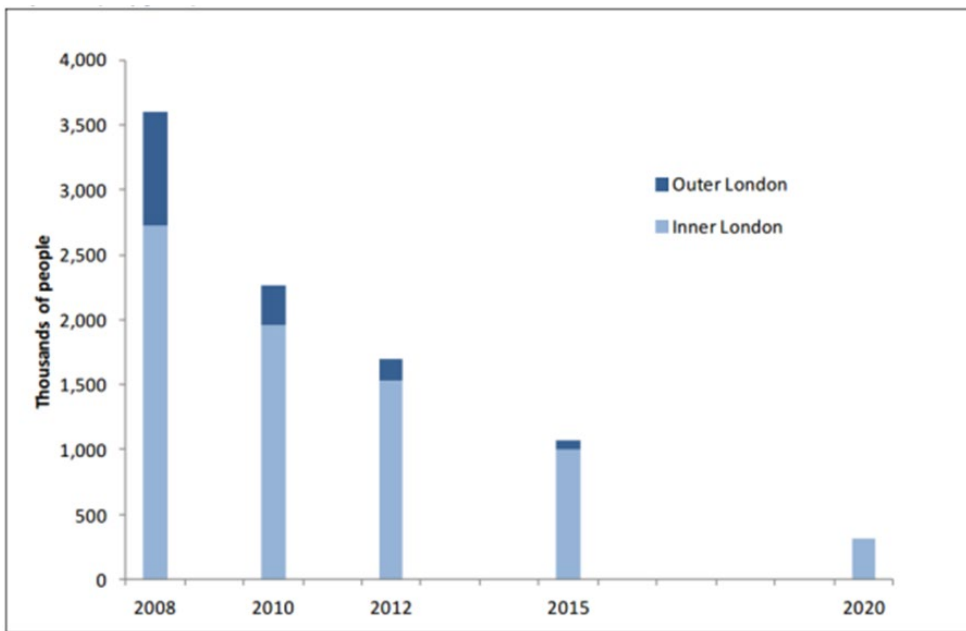


Figure 18.2 Estimate of population exposed to NO₂ concentrations in exceedance of the EU Air Quality Objective, 2008-2020

- 18.9** Newham, Brent, Redbridge, Hackney and Tower Hamlets are the boroughs that have the highest proportion of most deprived populations (30 per cent most deprived) in London's areas of worst air quality. Tower Hamlets, Camden, Southwark, Islington and City of Westminster are the boroughs that have the highest number of people living in London's worst air quality areas. These boroughs in particular need targeted action to reduce inequalities in access to clean air. The implementation of ULEZ, retro-fitting of buses and licensing new taxis to be ZEC from 2018 will also help to improve air quality by 2025, however Defra's projections show that London will still exceed limit values in 2020 ⁹⁵.
- 18.10** Evidence shows overall, there has been a gradual reduction in all of the major air quality metrics, such as NO₂, PM₁₀, PM_{2.5} and NO_x concentrations at background sites in Inner and Outer London and Outer London roadside sites. Inner London NO₂ roadside sites have a more variable trend but have seen a steeper decline from 2012. This decline is also reflected in the Inner London PM₁₀ roadside sites.
- 18.11** This analysis is supported by analysis at most individual monitoring sites, although the dynamic nature of air pollution and the way it is affected by multiple factors (temporary issues like construction activity, weather, local road layouts etc.), mean concentrations at some sites can go up while the overall trend across the city is improving.

⁹⁵ Defra, 2015 – Air Quality Plan

Air Quality Focus Areas

18.12 There are two air quality focus areas to the west and north west of the opportunity area as shown in **Figure 18.3** below. These are locations that not only exceed the EU annual mean limit for nitrogen dioxide but are also locations with high human exposure.

18.13 Newham has designated its entire borough as Air Quality Management Area (AQMA) for PM10 and NO2 and has produced an Air Quality Action Plan, 2019-2024⁹⁶.

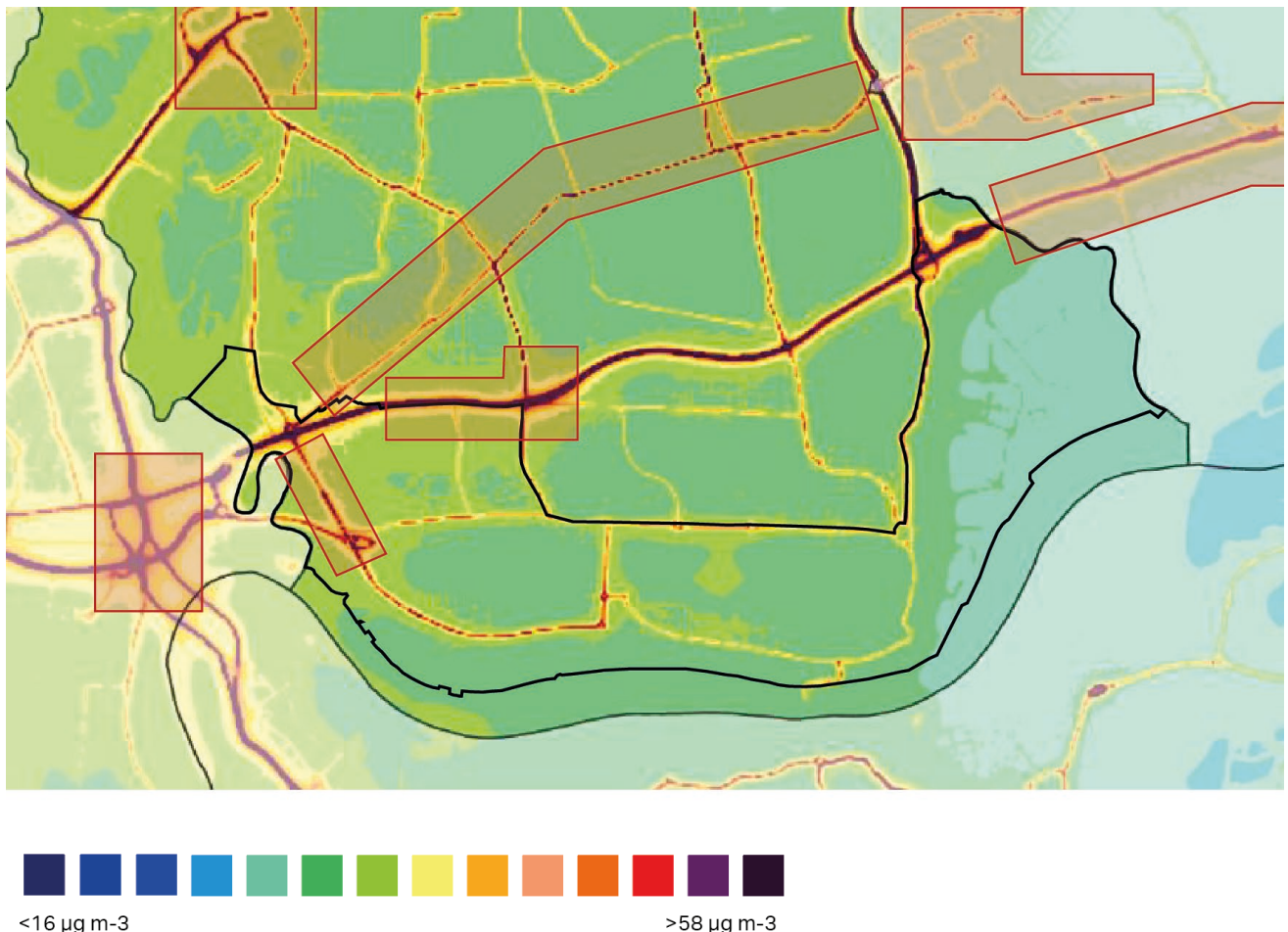


Figure 18.3 Air Quality Focus Areas in proximity to the OAPF area

(Source: <https://www.newham.gov.uk/downloads/file/166/air-quality-action-plan>)

⁹⁶ Newham's Air Quality Action Plan <https://www.newham.gov.uk/downloads/file/166/air-quality-action-plan>

18.13.1 Policy SI1 of the London Plan states that development proposals in Air Quality Focus Areas should:

- incorporate design measures to mitigate and minimise exposure especially for the vulnerable, like children and older people
- be accompanied by a full air quality assessment
- reference air quality strategies produced for Opportunity Areas

18.14 NOx Emissions

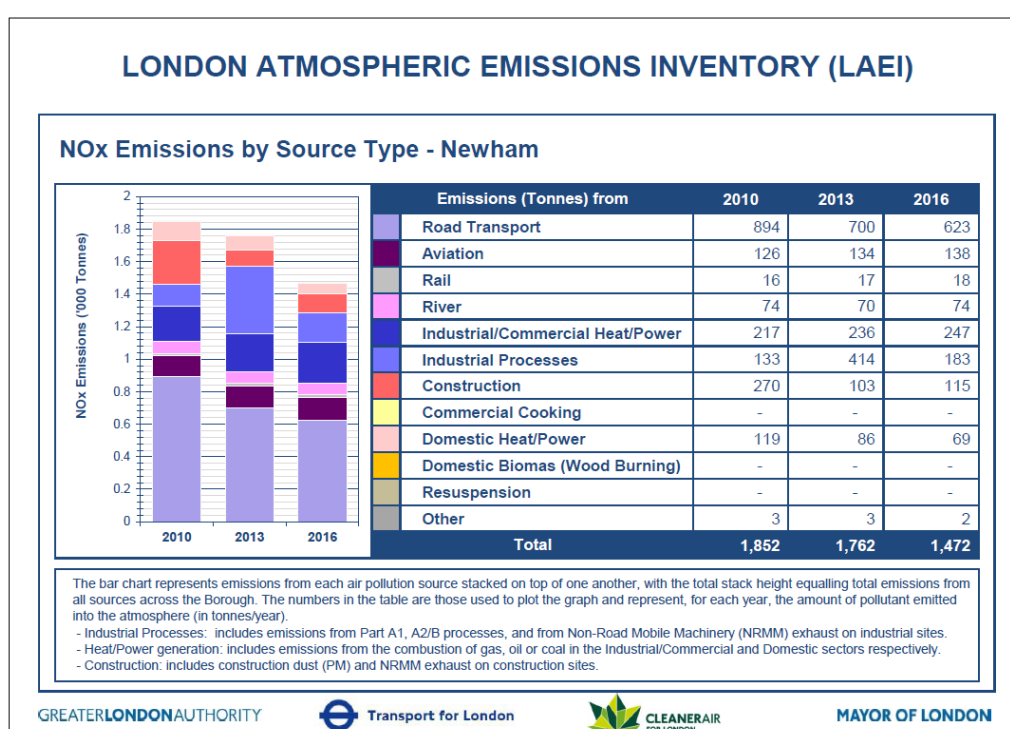


Figure 18.4 NOx emissions Newham

(Source: London Data Store: <https://data.london.gov.uk/dataset/laei-2016---borough-air-quality-data-for-llaqm>)

18.14.1 According to the London Atmospheric Emissions Inventory (LAEI) the greatest sources of NOx emissions in Newham were from road transport in 2016. However, this figure has consistently fallen since 2010. NOx from construction has declined from 270 tonnes in 2010 to 115 tonnes in 2016. NOx emissions from industrial processes, heat power generations, aviation and rail have increased since 2010.

Overall NOx emissions have shown a significant decrease since 2010 and has reduced by 380 tonnes which equates to reduction of 20.5%.

18.15 PM₁₀s

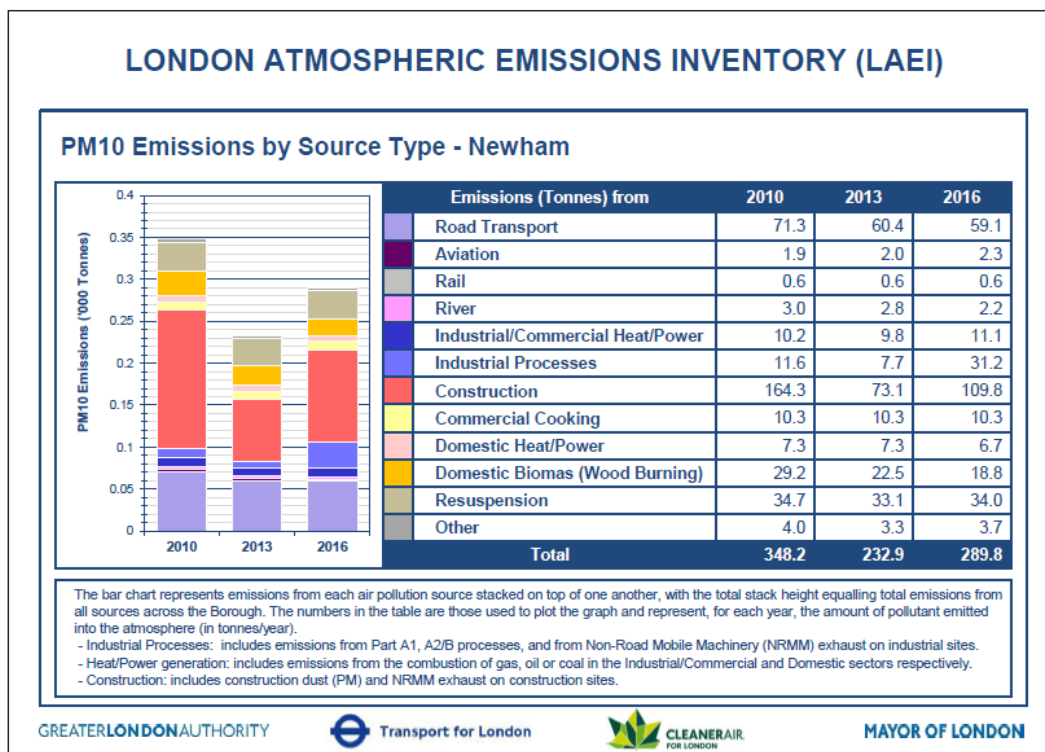


Figure 18.5 PM10 emissions Newham

(Source: London Data Store: <https://data.london.gov.uk/dataset/laei-2016---borough-air-quality-data-for-llaqm>)

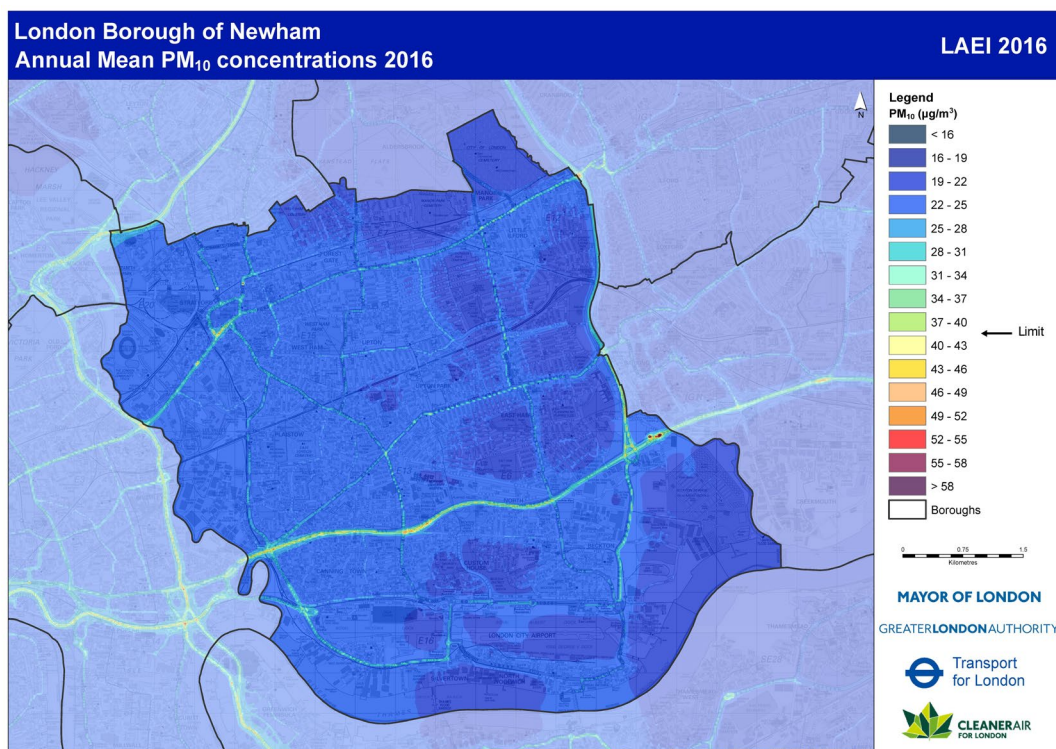


Figure 18.6 Annual mean PM₁₀ concentrations in Newham

(Source: London Data Store: <https://data.london.gov.uk/dataset/laei-2016---borough-air-quality-data-for-llaqm>)

18.15.1 PM₁₀ emissions within the opportunity area planning framework were considerably lower than the EU limit illustrated in **Figure 18.5** above for 2016.

<p>Key issues</p>	<ol style="list-style-type: none"> 1. High levels of NO_x, PM₁₀ and PM_{2.5} emissions from road transport 2. Little to no predicted reduction in PM₁₀ and PM_{2.5} emissions from road transport between 2013 and 2030 3. London is not compliant with legal limit values for NO₂ 4. Large numbers of the population are exposed to levels of NO₂ above the EU limit value 5. Exposure to poor air quality is unequal across London and some areas are more exposed to poor air quality than others
<p>Opportunities</p>	<ul style="list-style-type: none"> • Opportunities to extend policies such as ULEZ. • Technological developments such as the availability of cheaper electric vehicles. • Integration of green infrastructure enhancements in new development • Shift to decentralised energy • Enhance London's position as a world leader in ultra-low emission technology
<p>Implications of plans and programme review</p>	<p>The urgent need to meet mandatory standards for air quality and cut the annual number of premature deaths from air pollution-related diseases by almost 40 per cent by 2020.</p> <p>London's entire transport system to be zero emission by 2050</p>

<p>Suggested IIA Objectives</p>	<p>To reduce emissions and concentrations of harmful atmospheric pollutants, particularly in areas of poorest air quality, and reduce exposure</p>
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19. Climate Change

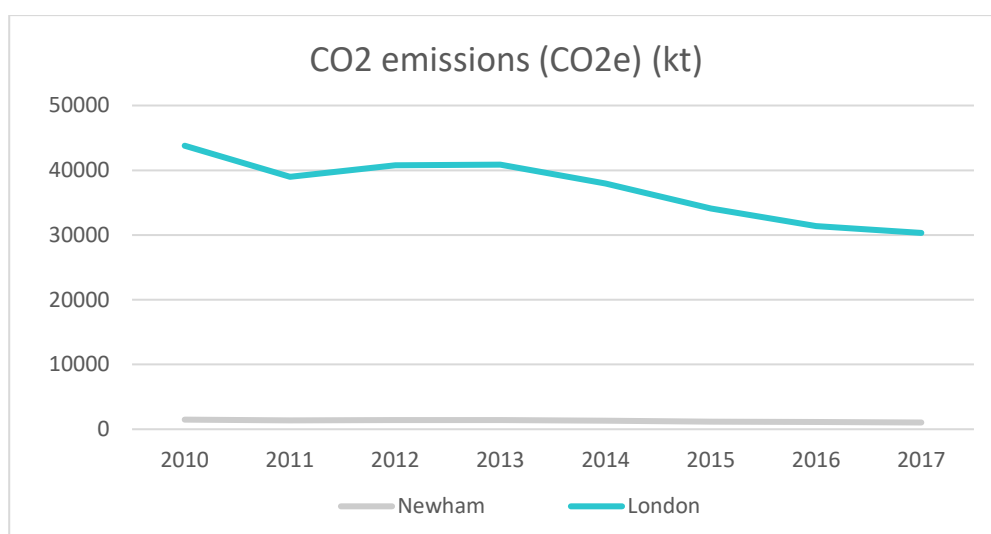
Climate Change Mitigation refers to efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behaviour.

Mitigation

19.1 Climate change mitigation refers to efforts to reduce or prevent emission of greenhouse gases (GHG). These emissions are altering the composition of the atmosphere and contributing to climate change. Mitigation includes using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices and consumer behaviour. Carbon dioxide (CO₂) is the most abundant GHG globally, and concentrations in the atmosphere have risen from around 280 ppm in 1900 to over 400ppm in 2016. The United Nation's Intergovernmental Panel on Climate Change (IPCC) estimate that CO₂ concentrations must be stabilised at 450ppm to have a fair chance of avoiding global warming above two degrees Celsius, which could carry catastrophic consequences. To help meet this global challenge, the UK is committed through the Climate Change Act (2008) to reduce CO₂ emissions by at least 80 per cent on 1990 levels. In 2015, the UK also pledged a 40% reduction in emissions below 1990 levels by 2030 under the Paris Agreement. London may have to go beyond an 80 per cent reduction to meet the Mayor's ambition for a zero carbon London by 2050 and to help keep global temperature increase to less than 1.5 degrees as globally agreed through the UNFCCC negotiations in Paris which come into force in 2020. For London, alongside wider national initiatives, the Mayor has also committed to making London a zero-carbon city by 2050.

- 19.2** Newham declared a climate emergency in 2019 which means and has set a raft of environmental measures to tackle global warming, poor air quality and waste. The measures are aimed to make Newham carbon neutral by 2030, and to achieve net zero greenhouse gas emissions by 2050. In July 2020, the council agreed a Climate Emergency Action Plan⁹⁷, which sets out some of the boroughs key steps to be taken in the next year or so.
- 19.3** The GLA maintains the London Energy and Greenhouse Gas Inventory (LEGGI) to record the city’s progress against the GHG reduction target. It uses data on energy use from the Business, Energy and Industrial Strategy and Transport for London (TfL). The latest data available is for 2016, where it is estimated to be 30.87 Mt CO₂e.
- 19.4** Since 1990, London’s CO₂e emissions have fallen by 17 per cent (**Figure 19.1**). This reduction in GHG emissions is largely due to, reduced gas use, a lower carbon national electricity supply and a shift towards the service industry, which is less energy intensive than industrial or manufacturing processes. This 17 per cent reduction has been against a 27 per cent increase in London’s population since 1990 to over 8.6 million in 2015. Indeed, per capita emissions have reduced by 35% since 1990 and at 3.6 tonnes per person per year, London’s CO₂ emissions are the lowest in the country (on a regional basis).

Figure 19.1 CO₂ emissions – Newham, London 2010-2017



Source: London Energy and Greenhouse Gas Inventory

19.5 In 2016, across London, 37 percent of emissions were generated from dwellings, 37 per cent from businesses, and 26 per cent from London’s transport. The vast majority of GHG emissions are from heating and powering buildings. Not only do new buildings need to be low carbon and energy efficient, but it is important that the existing building stock is also as energy efficiency as possible. Since 2008, the most significant reductions have been in domestic and industrial carbon dioxide emissions.

19.6 Of the London emissions, Newham accounted for 3.4% of the total emissions. The breakdown of emissions by industry is as follows:

Figure 19.2 Breakdown of CO2 emissions

	Domestic	Industrial and commercial	Transport	Total emissions (CO2e) (kt)
Newham	30%	46%	24%	1,039
London	37%	37%	26%	30,320

Source: LEGGI 2017

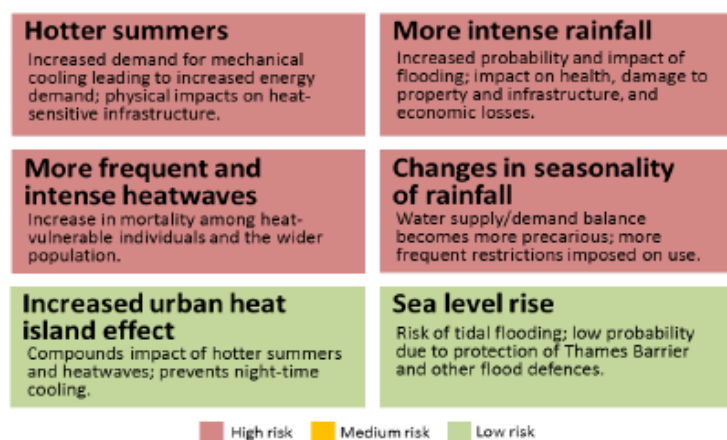
19.7 The Royal Docks and Beckton Riverside OA has industrial businesses, a sewerage treatment plant and waste processing facilities, which provide an opportunity to take advantage of waste heat.

<p>Key issues</p>	<ol style="list-style-type: none"> 1. London is not currently meeting the Mayor’s CO2 emission target of 60per cent reduction of 1990 levels by 2025 2. Transport will continue to contribute significantly to CO2 emissions 3. Inefficient existing building stock 4. CO2 emissions from buildings will reduce by floorspace but continue to rise as more housing and employment space is provided
<p>Opportunities</p>	<ul style="list-style-type: none"> • Transition to a low carbon economy, enhancing London’s position as a world leader in low carbon good and services. • Taking advantage of waste heat from industrial and waste treatment processes. • Building zero carbon developments and promoting retrofit solutions • Opportunity to help London shift to a circular economy • Potential for positive health benefits by helping reduce air pollution through the generation and supply of clean (low or zero emission) energy for buildings and transport. • Reducing carbon emissions by shifting to more sustainable modes of transport
<p>Implications of the plans and programmes Review</p>	<ul style="list-style-type: none"> • Need to design buildings and spaces to adapt and mitigate the effects of climate change, including overheating, flooding, droughts and more extreme weather events. The Mayor has a commitment to be a zero carbon City by 2030. • Newham has declared a climate emergency

Suggested IIA Objective	To help tackle climate change through reducing greenhouse gas emissions and moving towards a zero carbon London by 2050
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Climate Change Adaptation

- 19.8** Climate change is one of the key challenges facing London, the UK and the world today. It poses many environmental risks; including extended period of dryness and heat in the summer which could lead to drought; heightened flood risk due to more intensive and prolonged rainfall, particularly in winter months; and sea level rise and changes in wave patterns and strength which may result in increased erosion of coastal areas. Such environmental effects may also have significant socio-economic and health implications, particularly for nations and regions less able to mitigate or adapt to changes.
- 19.9** The changing climate and associated extreme weather events such as higher summer temperatures; warmer winters; more seasonable rainfall; wetter winters; and rising sea levels are applying pressure to London’s infrastructure including transport, homes, public buildings and businesses. The OA will be especially vulnerable to flooding from the Thames.
- 19.10** Analysis from the Carbon Disclosure Project outlined six current and anticipated effects of climate change for London, which are shown in the following diagram.



Source: Carbon Disclosure Project, data provided for the CDP Cities 2013 report, GLA

19.11 The impacts of climate change are set to increase with London facing the following risks:

- **Flood risk** - London is relatively well protected against tidal flooding (subject to continued delivery of actions as part of the TE2100 Plan), but parts of London are vulnerable to river, surface water, groundwater and sewer flooding.
- **Drought** - if there are two consecutive dry winters, London is at risk of drought conditions and water supply restrictions.
- **Heat risk** - London is getting hotter: extreme hot weather events occurring more frequently, changing demographics, increased urban development and densification are all contributory factors.

Heat Risk

19.12 Higher average temperature is likely to intensify the Urban Heat Island (UHI) effect which can result in the centre of London being up to 10°C warmer than its surroundings. Summer heatwaves may make the built environment uncomfortable, and can affect the health of Londoners, particularly vulnerable people. The Urban Heat Island effect is most intense at night and is mainly experienced within the Central Activities Zone. According to the Heatwave Plan for England by 2080, the temperature in towns and cities could rise by 10°C, peaking at up to 40°C (104F) in London.⁹⁸

19.13 Heat islands can develop in fairly large areas within a city, or in smaller 'pockets' around individual buildings or along streets. London has a fairly pronounced UHI due to its size and density as shown below. The variation of temperature can depend upon the nature of the land cover with parks and lakes cooler than adjacent areas covered by buildings which absorb and trap heat.

⁹⁸ Heatwave Plan for England, 2004

19.14 The OAPF area has the benefit of being located on the edge of London and on the river and has large areas of green space which protect against the UHI. There are opportunities within the area to improve green and blue infrastructure to mitigate London's wider UHI.

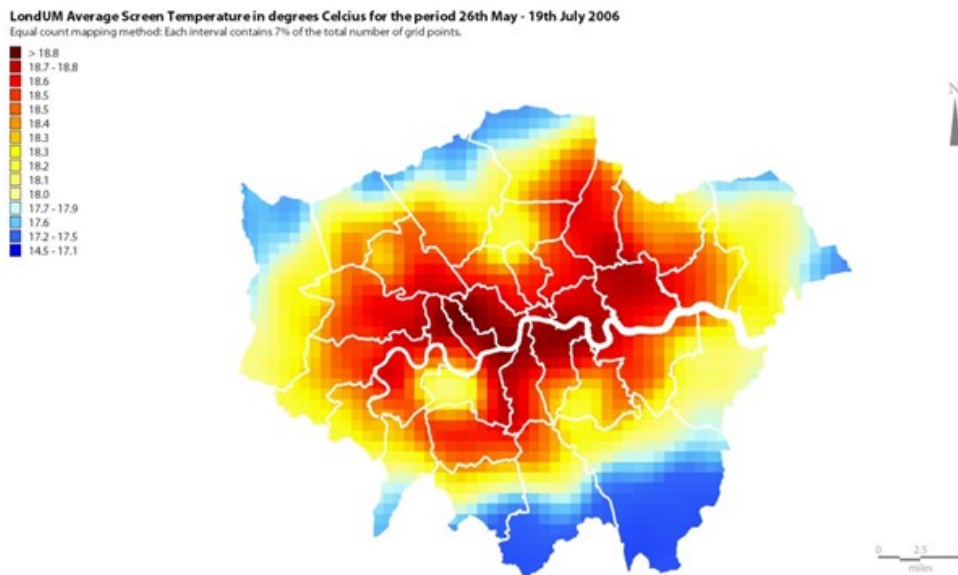


Table 19.1 Summer Urban Heat Island 2006 - average surface temperatures over the summer period of 2006

Source: Development of a Local Urban Climate Model and its Application to the Intelligent Development of Cities (LUCID), (University College London)

- 19.15** The UK Climate Change Projections 2009 (UKCP09) show what the major changes to the UK's climate would most likely be in the absence of action to cut global emissions. In summary, the UK will experience warmer, wetter winters, hotter and drier summers, sea level rises, and more severe weather. Based on a 'medium emissions' pathway, which according to the Climate Committee is the one that the world is currently most closely following, the South East could see average summer temperature increases of 3.9°C by the 2080s. At the same time there could be a 22 per cent decrease in average summer rainfall in the South East. Very cold winters will still occur but will occur less frequently. The UKCPO9 projections also suggest that by 2050, one third of London's summers may exceed the Met Office current heat wave temperature threshold (day time temperature of 32°C and night time temperature of 18°C).
- 19.16** The main causes of illness and death during periods of high temperatures are related to respiratory and cardiovascular conditions. Elderly people over 65 years old in urban areas (especially those over 75 or living alone as well as low levels of social connection), people with compromised health, pregnant women and children up to the age of four are also particularly at risk. In the absence of any approaches to address urban heat risk, heat-related deaths would be expected to rise by around 257per cent, more than double, by the 2050s from a current annual baseline of around 2,000 deaths⁹⁹.
- 19.17** The University College London's LUCID project shows that many of London's dwellings are vulnerable to heat. The monitoring of 36 London's dwellings during a hot spell demonstrated that night time bedroom temperatures were above the upper comfort threshold recommended by Chartered Institute of Building Services Engineers (CIBSE). It concluded that the thermal performance of buildings is a bigger influence on the internal temperatures of buildings than the location in the urban heat island.

⁹⁹ Hajat, S; Vardoulakis, S; Heaviside, C; Eggen, B (2014) Climate change effects on human health: projections of temperature-related mortality for the UK during the 2020s, 2050s and 2080s. *Journal of epidemiology and community health*. 0, p1-8

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Increase in extreme weather events such as flood risk, drought and heat risk and associated impacts 2. Changing demographics such as an ageing population and more under five year olds increasing the number of potentially vulnerable people. 3. Design of building causes a larger variation in temperature exposure than the Urban Heat Island (UHI) effect
<p>Opportunities</p>	<ul style="list-style-type: none"> • Promotion of sustainable building design to reduce the urban heat island effect • Maximise amount of green coverage to help reduce effects • Use of other Mayoral Strategies to raise awareness and promote behaviour change • Making use of existing green and blue infrastructure and incorporating additional green and blue infrastructure, including SuDS, in new development
<p>Implications of the plans and programmes review</p>	<ul style="list-style-type: none"> • Need to design buildings and spaces to adapt and mitigate the effects of climate change, including overheating, flooding, droughts and more extreme weather events.

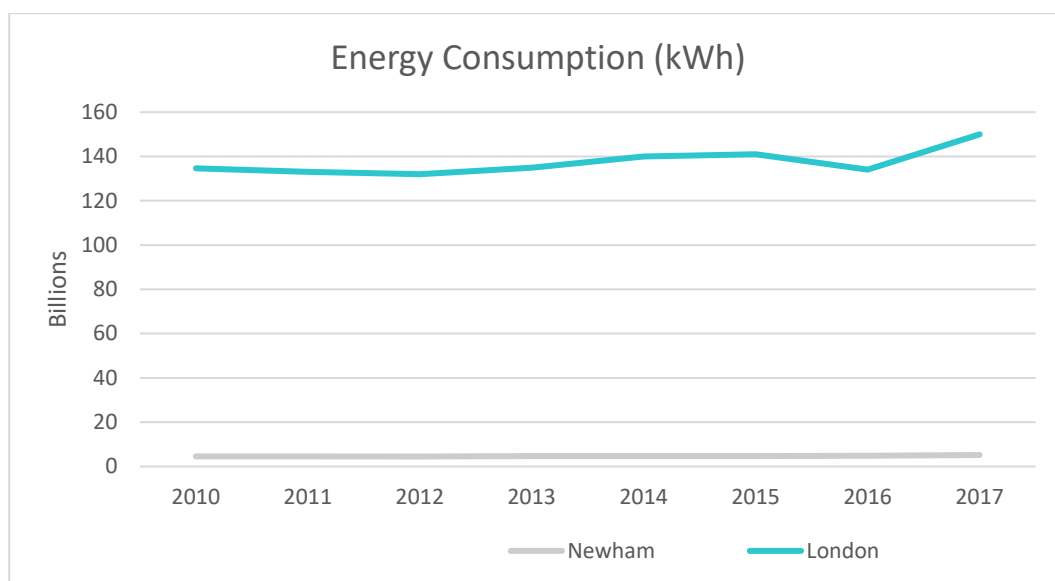
<p>Suggested IIA Objectives</p>	<p>To ensure London adapts and becomes more resilient to the impacts of climate change and extreme weather events such as, flood drought and heat risks</p> <p>To help tackle climate change through reducing greenhouse gas emissions and moving towards a zero carbon London by 2050</p>
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20. Energy Use and Supply

The supply of and demand for energy by industry, transport and households

- 20.1** Reducing overall energy consumption and being more energy efficient is vital to reducing greenhouse gas emissions and contributing to a secure energy future. Reducing energy consumption through more efficient buildings and appliances can also help to tackle issues of energy affordability and fuel poverty¹⁰⁰.
- 20.2** The demand for energy and the type of energy changes by season. In the winter months, consumption of gas is higher due to use of central heating for buildings. In the summer months, there is a general shift towards higher electricity use from air conditioning to cool buildings. Consumption can also vary from year to year depending on the weather.

Figure 20.1 Energy consumption – Newham, London 2010-2017



Source: London Energy and Greenhouse Gas Inventory

¹⁰⁰ UK Government (2016) Fuel poverty statistics [online]. Available from: www.gov.uk/government/collections/fuel-poverty-statistics.

20.3 London consumed an estimated 134653 GWh of energy in 2017¹⁰¹. This is an 18 per cent reduction on 1990 levels, despite a population increase of 27 per cent. In 2017, 41 per cent of energy was for domestic use, 35 per cent for workplaces (the industrial and commercial sector) and 24 per cent for the transport sector. The table below shows that Newham had larger industry and commercial markets, given the nature of the development in the borough.

Figure 20.2 Breakdown of energy use by industry

	Domestic	Industry and commercial	Transport	Total emissions GWh
Newham	33%	45%	22%	4,591
London	41%	35%	24%	134,653

Source: LEGGI 2017

20.4 Of the total amount of energy consumed in London in 2017, 76 per cent was gas with 24 per cent electricity. have a higher gas use than the London average, again, perhaps reflecting their predominant residential character.

Need to check this information - probably my wrong analysis (LEGGI 2017 03a)

Figure 20.3 Breakdown of energy consumption energy type

	Gas	Electricity	Total (kWh)
Newham	75%	25%	5,567,402,169
London	76%	24%	161,572,488,471

Source: LEGGI 2017

¹⁰¹ London Energy and Greenhouse Gas Inventory 2017

- 20.5** Despite the greater use of gas across London, because of its higher carbon intensity than gas, electricity contributes a proportionally larger amount to London's overall CO₂ emissions. Coal, one of the most carbon intensive fossil fuels, only makes up <1per cent of the total energy used. Almost all of this is from the industrial and commercial sector. Over one fifth (21per cent) of energy consumed is from petroleum, primarily used in the transport sector – including rail transport. ¹⁰²
- 20.6** Gas usage has decreased since 1990, and this trend is expected to continue despite projected population growth. Electricity usage has stabilised despite the increase in population, largely due to increased efficiency of appliances. It is expected that demand for electricity will rise as population continues to grow and heating and transportation are increasingly electrified, due to a decarbonised electricity grid.
- 20.7** London, as most cities, has limited renewable energy potential. Such energy sources currently contribute only a small fraction of London's energy, accounting for 2 per cent of consumption. Despite an increase in photovoltaics delivered on new developments, London has one of the lowest solar installation rates in the UK.
- 20.8** Capacity of the energy supply is also a concern. Significant new investment is already urgently needed in electricity substations capacity and distribution to keep up with demand and to accommodate the step change in the rate of house delivery that is required¹⁰³. One in five substations has less than 7 per cent spare capacity.

¹⁰² London Energy and Greenhouse Gas Inventory 2013

¹⁰³ London Infrastructure Plan 2050

- 20.9** Fuel poverty continues to be an issue in London, with 11.8 per cent, or 397,924 households¹⁰⁴ meeting the Government's 'low income high cost' definition of fuel poverty (compared to 11.1 per cent across England). However, as the definition favours larger homes, there may be many households in smaller properties who also struggle to pay their fuel bills despite not meeting the definition. Of these households 25% are unemployed and 10.3% are retired. Whilst unemployed households represent a slight (1.7%) decline in households in fuel poverty, there has been a marked increase in retired and part time working household in fuel poverty, 32.3% and 31.8% respectively. Of the households in fuel poverty 18.3% are Asian and 15.3% are Black, 17.5% are lone parent households with dependent children and 10% have a long term illness or disability¹⁰⁵. Fuel poverty is estimated to contribute to 340 excess winter death in 2016/17¹⁰⁶.
- 20.10** Across London, fuel poverty varies with the City of London having the lowest rate of fuel poverty at 4.2% followed by Bromley, Southwark and Sutton with 9.1% each¹⁰⁷. Newham has the highest rate of fuel poverty with 19.1% followed by Brent at 14.9%.

¹⁰⁴ BEIS Fuel poverty sub-regional table 2019

¹⁰⁵ Fuel Poverty Action Plan for London 2018 GLA

¹⁰⁶ Fuel Poverty Action Plan for London 2018 GLA

¹⁰⁷ BEIS Fuel poverty sub-regional table 2019.

- 20.11** One way of helping to tackle energy affordability (including fuel poverty) is to improve the efficiency of London's buildings and transport. Retrofitting is a huge challenge in London. Over 80 per cent of the buildings standing today will still be occupied in 2050. There are around 3.4 million homes in London, the vast majority of which will need to be retrofitted with building fabric measures (such as cavity wall insulation) and potentially on-site renewable energy generation to reduce the energy demand, if GHG reduction targets are to be met. In 2013 around 25 per cent of homes in London were in Energy Performance Certificate Bands E to G (representing poor energy efficiency). This proportion varied widely by tenure, from 13 per cent of housing association homes to 39 per cent of owner-occupied homes¹⁰⁸. A large proportion of London's homes and workplaces are difficult to treat and offer numerous barriers to retrofit that must be overcome. The concentration of development in the Royal Docks and Beckton Riverside OA will lend itself to being zero carbon.
- 20.12** In addition, existing energy resources are not being utilised as effectively as they could be by, for example existing energy sources such as waste heat from industrial processes could be used to heat buildings. As of 2014 it is estimated that only 5 per cent of London's energy demand was met from decentralised energy¹⁰⁹. Given the industrial processes near the OA, there is potential to harness waste heat from waste, sewerage and industrial processes.
- 20.13** Managing demand is essential in reducing energy use. The London Plan sets a zero-carbon target for new development which should be applied in the OA.

¹⁰⁸ DCLG (2013) English Housing Survey: Energy efficiency of English housing [online]. Available from:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/445440/EHS_Energy_efficiency_of_English_housing_2013.pdf.

¹⁰⁹ DECC (2015) Combined Heat and Power in Scotland, Wales, Northern Ireland and the regions of England in 2014 [online]. Available from:
www.gov.uk/government/uploads/system/uploads/attachment_data/file/462358/Regional_CHP_2014.pdf.

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Relatively high and ineffective use of fossil fuels contributing towards the OA's and London's overall GHG emissions and air pollution. 2. Insufficient low carbon energy supply 3. High number of residents of Newham in fuel poverty. 4. Energy-inefficient building stock & transport. 5. Unutilised local energy resources including sources of waste heat 6. Increasing electricity demand and need to manage peak electricity demand
<p>Opportunities</p>	<ul style="list-style-type: none"> • Transition to a low carbon energy supply to help meet GHG reduction targets. • Take advantage of waste heat sources. • Require new buildings to be zero carbon. • Utilising the OA's and nearby secondary heat resource. • Potential for positive health benefits by helping reduce air pollution through the generation and supply of clean (low or zero emission) energy for buildings and transport.
<p>Implications of the plans and programmes review</p>	<p>Widening supply and demand gap. Greater efficiencies, use of renewable energy sources, and importance of low carbon economy.</p>

<p>Suggested IIA Objectives</p>	<p>To manage and reduce demand for energy, achieve greater energy efficiency, utilise new and existing energy sources effectively, and ensure a resilient smart and affordable energy system</p>
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21. Water Resources and Quality

The supply of water and the quality of water within all water bodies

21.1 The River Thames and London's canals, tributary rivers, lakes, reservoirs and docks alongside smaller waterbodies form a strategic network of water spaces. The Royal Docks and Beckton Riverside OA is bound to the south by the Thames River. The Beckton Sewerage treatment facility sits within the OA boundary to the east on the River Thames.



Source Environment and Scientific Services, British Waterways
© Crown copyright. All rights reserved. Greater London Authority 100032216 (2011)

Figure 21.1 Blue Ribbon Network

- 21.2** The Environment Agency is responsible for water quality and resources. Drinking water and sewerage services are supplied to customers in Newham by Thames Water, the largest water company servicing London. The majority (around 80 per cent) of London's water is drawn from rivers, principally the Thames to the west of London and the River Lee in North London. Most of the rest of London's supplies comes from abstracting groundwater.
- 21.3** Water resources are already under pressure in London and the south east with a risk of a drought if there are two consecutive dry winters. Such a situation occurred during the winters of 2010-11 and 2011-12 in the run up to the 2012 Olympic & Paralympic Games London was in a drought situation. This was only eased by having a significantly wet spring and could easily have become a more severe situation. Severe droughts may have significant economic, social and potentially health implications.
- 21.4** The relatively dry nature of the South East, combined with the high population density, especially within London, means that water resources are under significant pressure. This pressure is exacerbated by London not only having one of the highest rates of water use in the country but also having some of the highest rates of leakage from the water supply distribution network.
- 21.5** Measures to reduce demand, such as increased water efficiency (as set out in the London Plan for new development), reduced leakage and increasing use of water meters are needed throughout London. This will help to manage the supply-demand balance over the short term. However, with a rapidly growing population and some restrictions on water abstraction for environmental reasons, there is a need for new additional water resources in order to maintain a secure water supply-demand balance. Thames Water has identified that a significant new water resource will be required by the mid-2020s.
- 21.6** Water quality in rivers, lakes, groundwater and streams and what needs to be done to improve them is set out in the River Basin Management Plan¹¹⁰ which is produced by the Environment Agency. Within London, there are 65 separate waterbodies, including tidal water bodies ('transitional waters').

- 21.7** There are 20 management catchments in [London Management Catchment](#) explorer, as part of the Thames River and Basin Management Plan. LB Newham is featured under two management catchments in the river basin: 1) London and 2) Thames TraC. In terms of operational catchment. It should also be noted that part of the Borough is located within the Lee Lower River and Lakes catchment area. Royal Docks and Beckton Riverside is sitting under 2 operational catchments: 1) Medway Swale Estuary and 2) Tidal Thames. According to the Newham Flood Risk Management Plan, by 2027, London Borough of Newham will join the London Lee Catchment Partnership in the Lee Valley to contribute to improving water quality and biodiversity in the London and Thames Estuary, Thames Flood Risk Area.
- 21.8** The Thames River basin management plan states that the priority river basin management issues to tackle in Tidal Thames catchment are:
- the Water (including habitat enhancement, water quality, and flood risk)
 - the human element (education, access, and public awareness)
 - planning and economic development (including river traffic, commerce, fishing, and riverside redevelopment)

¹¹⁰ Defra (2015) Water for life and livelihoods – Part 1: Thames river basin district. River basin management plan [online]. Available from: www.gov.uk/government/uploads/system/uploads/attachment_data/file/500548/Thames_RBD_Part_1_river_basin_management_plan.pdf

Key issues	<ol style="list-style-type: none"> 1. Need to reduce per capita water consumption 2. Need to improve the physical form of the OA's waterbodies 3. Need to protect sewer and wastewater infrastructure capacity 4. Need to ensure resilience of water supply during drought/severe drought conditions.
Opportunities	<ul style="list-style-type: none"> • Improved river corridors and water quality can improve the public realm and ecological value of London's Environment • Reduced water consumption can reduce the need/scale of new water resources • Increased use of SUDs can reduce the load on sewer and wastewater infrastructure
Implications of plans and programmes review	<p>Identified need to focus on the protection, improvements and sustainable use of the water environment.</p>

Suggested IIA Objectives	<p>To protect and enhance London's water environment by ensuring that London has a sustainable water supply, drainage and sewerage system</p>
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22. Flood Risk

The probability of and potential consequences of flooding from all sources which includes flooding from rivers and the sea, directly from rainfall on the ground surface and rising groundwater, overwhelmed sewers and drainage systems and

- 22.1** London always has had and will continue to have a degree of flood risk. It is a major issue for London and especially the Royal Docks and Beckton Riverside OA. The probability of flooding is increasing with climate change.
- 22.2** The London Plan and its IIA note that in order to accommodate London's growth, more housing and other forms of development are required, of which some will need to be built in areas with a degree of flood risk. It is important to minimise the number of buildings and people who are located in areas at high risk of flooding.
- 22.3** There are many sources of flooding, including tidal, fluvial, surface water, ground water, sewer and reservoir. Currently 14 per cent of London is at risk of tidal and fluvial flooding (the extent of Flood Zones 2 and 3) and three per cent of London is at risk of surface water flooding.

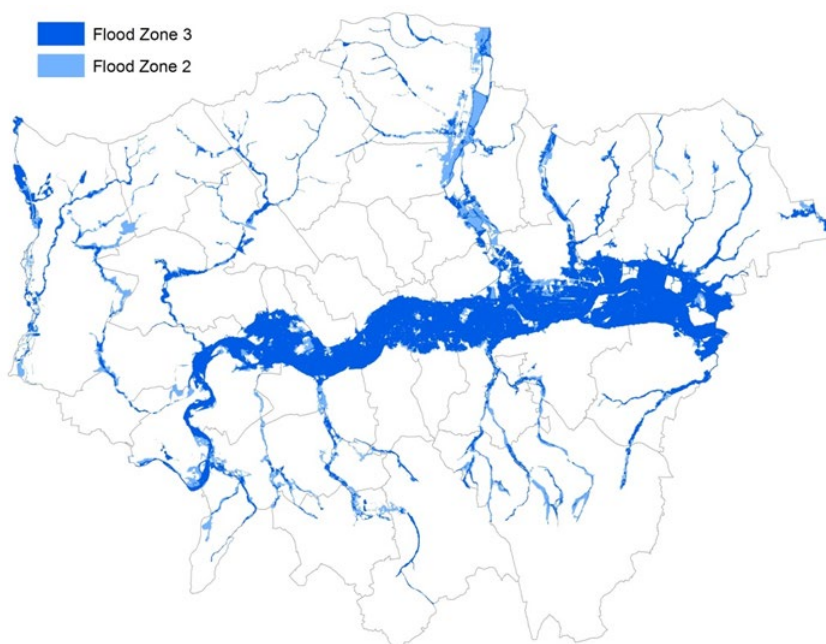
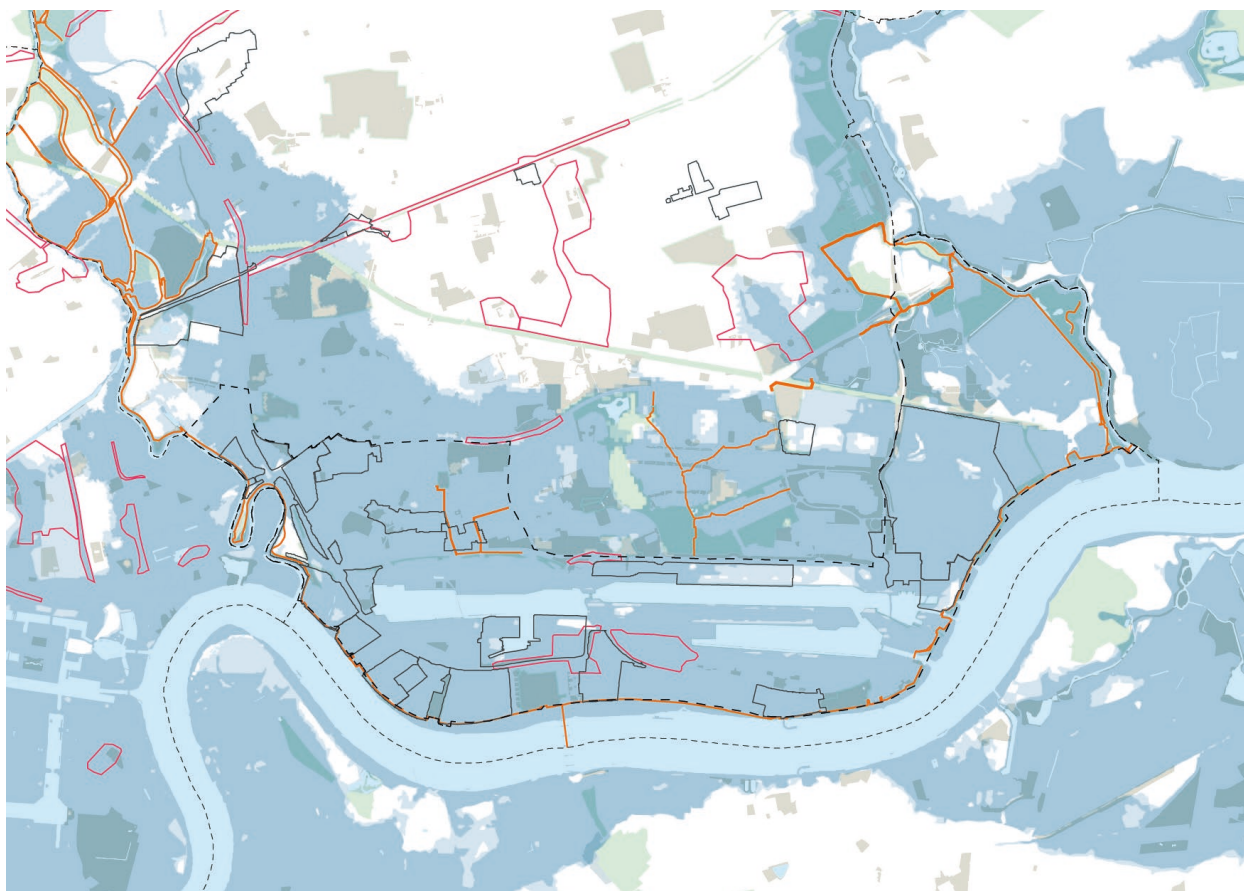


Figure 22.1 Flood Zone 2 and 3 in London
GLA, 2014 – Regional Flood Risk Appraisal



- Development sites in OA (allocated in LBN local plan)
- Flood zone 2
- Flood zone 3
- Indicative flood defence
- Critical drainage area

Figure 22.2 Regional Flood Zones

Source: GLA, 2020

- 22.4** Many parts of London, notably extensive areas on both north and south banks of the Thames, including the Royal Docks and Beckton Riverside OA are within Flood Zones 2 and 3. Most of the OA is within flood zone 3. The OA is protected by some of the 400 smaller barriers and movable flood gates downstream of the Thames Barrier and the extensive river walls and embankments stretching into Tilbury. Overall London is protected by flood defences that currently provide protection against tidal flooding commonly referred to as in excess of 1 in 1000 year. There is an agreed strategy, Thames Estuary 2100, to maintain and enhance that protection through the current century and beyond, planning for anticipated ongoing climate change and sea level rise and delivering the necessary flood risk management solutions as the impacts arise.
- 22.5** Surface water flooding can be caused or exacerbated by blockages to the drainage network. New surface water drainage networks are normally designed to cope with storms of a 1 in 30-year intensity, however many existing systems may be constructed to different standards. Surface water often flows towards low lying land and valleys. Buildings in these areas may lie within risk areas. Buildings with large roof areas, such as mainline rail termini, hospitals, schools, retail warehouses are particularly prone to surface water risks under heavy rainfall situations.
- 22.6** Areas at the bottom of a hill, along roads and drainage channels in the Royal Docks and Beckton Riverside OA are susceptible to surface water flooding.
- 22.7** Reducing the number of properties and people at high risk from flooding and improving the resilience of infrastructure and utilities to flooding is a key challenge for the OA.
- 22.8** The IIA for the London Plan notes that ‘Many of London’s remaining large brownfield areas are either substantially or partially within Flood Zones 2 and 3 (37 per cent of the area within Opportunity Areas). However, alternative sites for large scale development within London do not exist without encroaching into Green Belt, Metropolitan Open Land or other protected spaces¹¹¹’. The OA and individual development schemes will have to address the exceptions test as set out in the NPPF.

- 22.9** Any development that occurs within the area would need to show that it would not lead to an increase in Flood Risk, both on and off site. Any development would need to be supported by a Flood Risk Assessment that provides an adequate assessment of Flood Risk.
- 22.10** Redevelopment, especially at a large scale, often offers opportunities to reduce flood risk, including de-culverting and the re-naturalising of tributary rivers, increasing flood storage capacity, designing the least vulnerable uses to be in the higher flood risk areas and installing sustainable drainage systems. Examples of such flood risk reductions have been demonstrated through major developments like Ram Brewery, Wandsworth, the Queen Elizabeth Olympic Park and many other river restoration schemes throughout London.
- 22.11** Sustainable drainage is now a normal element of most large-scale planning application. Many of the strategic planning applications that are referred to the Mayor aim for Greenfield run-off rates, or close to that, and almost all are designed to achieve at least a 50 per cent reduction on the existing rainwater discharge rates. The Mayor is also focused on retrofitting sustainable drainage measures to existing buildings and published the London Sustainable Drainage Action Plan in December 2016¹¹².

¹¹¹ GLA, 2014 – Regional Flood Risk Appraisal

¹¹² <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/london-sustainable-drainage-action-plan>

<p>Key issues</p>	<ul style="list-style-type: none"> • Risk of flooding to property and people from river, surface water, tidal, sewer, ground water and reservoir • Increase in run-off and potential contamination and disruption of flows • Necessary infrastructure needs to be planned for, funded and implemented to support growth and development
<p>Opportunities</p>	<ol style="list-style-type: none"> 1. New development has the potential to manage and reduce flood risk to the development and to the wider local area. 2. Increased resilience through retrofitting could have long term financial and social benefits 3. Increased sustainable drainage can reduce flood risk, water quality and the urban realm more generally 4. Opportunity to implement a Riverside Strategy approach, as promoted by the Thames Estuary 2100 Plan and the London Plan, to prepare for future flood risk scenarios while improving the public realm and amenity value of the riverside.
<p>Implications of plans and programmes review</p>	<p>A need to ensure that development is designed not to increase flood risk, to encourage the use of Sustainable Urban Drainage Systems (SUDS) and that all elements of policy require review to ensure that flood risk is reduced and integrated with the management of the rest of London's Environment.</p>

<p>Suggested IIA Objectives</p>	<p>To manage the risk of flooding from all sources and improve the resilience of people and property to flooding</p>
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23. Natural Environment and Natural Capital

The diversity of habitats and species, and the services provided by London's green infrastructure.

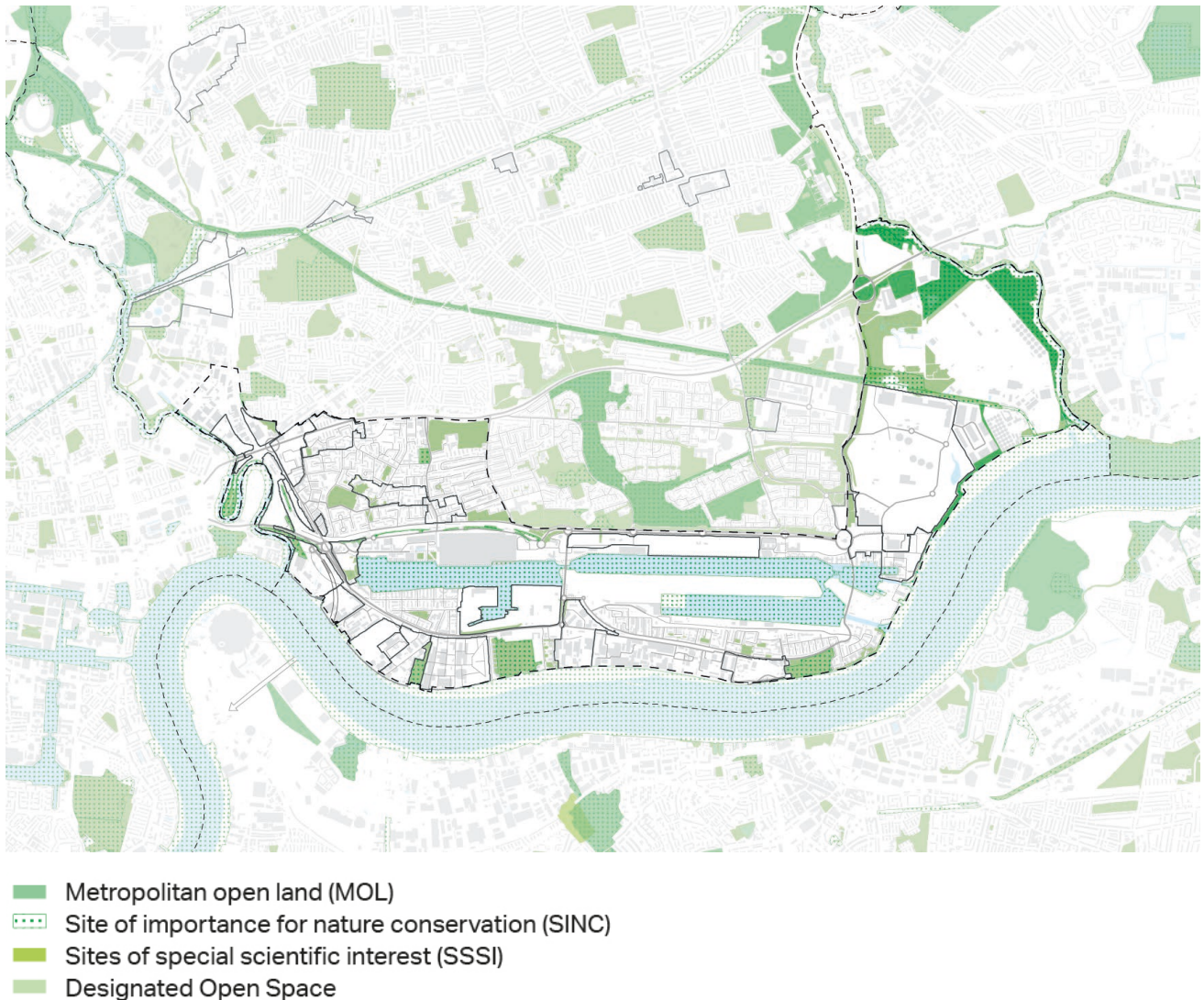


Figure 23.1 Open and Green space in and around the OAPF area

Source: GLA, 2020

- 23.1** According to the Local Plan Refresh (2021), green space covers 13.1% of Newham, compared with 39% for London as a whole. Newham has 25 parks and numerous green spaces totalling approximately 396 ha of publically accessible green space. Many of LB Newham's parks are listed on Historic England's Register of Parks and Gardens of Special Historic Interest. The borough also contains several nationally and regionally designated open spaces, including areas of metropolitan open land. In particular,
- Approximately 678 ha (17.6%) of Newham comprises Green Space Protected Land
 - 0.5 % of total area of Newham designated as MOL (Metropolitan Open Land)
 - 2.1% of total area of Newham designated as Green Belt
 - 7.5% of total area of Newham designated as MOL or green belt
- 23.2** Even though Newham is an urban borough, it has several significant green spaces and four strategic green corridors (GI1, GI14, GI13, GI14, as per [LB Newham Local Plan 2018](#)), which provide important wildlife habitats and rich biodiversity, such as West Ham Park, City of London Cemetery and Beckton District Park. The latter is near the OA boundary to the North. The borough also contains 41 Sites of Importance for Nature Conservation (SINCs), with some located within the Opportunity Area (e.g. River Thames and tidal tributaries, and Royal Docks – Borough Grade 1). Newham's SINCs cover a range of habitats such as meadow grassland, reedbed and woodland. There are also several waterbodies which are designated as SINCs and represent valuable wildlife habitats. It should be underlined that Newham has seen no reduction in Sites of Importance for Nature Conservation (SINCs) since 2006/07, when 0.37 ha were lost.
- 23.3** Two European sites lie within 15km of the Borough boundary: Epping Forest Special Area of Conservation, the Lea Valley Special Protection Area (SPA)/Ramsar. While the River Thames is a proposed Marine Conservation Zone (MCZ) it is not a designated SAC or SPA and thus not referenced here.

23.4 The sites of metropolitan importance for nature conservation represent the best examples of London's habitats and include the Rivers Thames. Sites of borough importance for nature conservation are those that are important from a borough-wide perspective. They include places such as Royal Dock, Beckton Alps and Beckton District Park and Thames Barrier Park etc. Furthermore, the network of Green Corridors found in Newham allows some species with specialised habitat requirements to extend their distribution into parts of London where they would otherwise not be seen (i.e. The Greenway and Old Ford Nature Reserve). The rivers, canals and railside land are important components of these corridors and are a great benefit London's biodiversity. The green corridors are as important as the spaces themselves, as they provide crucial links and connectivity for people and nature to move between places. The RDT Public Realm Framework provides extensive suggestions related to extending and connecting those corridors to the docks, and linking the Royal Docks and Beckton Riverside OA to existing neighbouring assets, such as the River Lea.

Biodiversity and Species

23.5 LB Newham is home to a significant number of different plants and animals. Some of these are rare or declining, whilst there are also populations of regional or national significant species. Examples of the latter include the black redstart who lives in the Borough. This bird lives on wasteland sites such as those along the Thames' former dockyards. In addition, the only known British population of the streaked bombardier beetle lives on a site to the north of the Thames barrier in Newham. However, a species does not have to be rare or threatened to be interesting and important. They may have strong cultural significance, or simply look or sound beautiful.

23.6 According to the Newham Biodiversity Action Plan important populations of woodland birds, butterflies, dragonflies, lizards, frogs, toads, newts and small mammals such as hedgehog all find their homes in the Borough. The Newham Biodiversity Action Plan sets out those habitats and species and some key actions (See below paragraph 23.6). More recently, as part of the Newham Local Plan refresh, the borough has highlighted re-naturing (or Re-wilding) of existing open spaces as one of their priorities in terms of green and blue open space. That could allow more species to colonise the borough (e.g., the water vole has been seen in neighbouring boroughs, and could be encouraged), and has been endorsed as a key strategy in the RDT Landscape guides.

23.7 According to the The Newham Biodiversity Action Plan there is one UK BAP Priority Habitat in Newham. The Action Plan highlights that there are four broad Habitat Action Plans (HAP) that were selected for Newham:

- Public open space and green corridors.
- Rivers and wetlands.
- The Built environment.
- Private gardens, grounds and allotments.

The Action Plan sites the following habitat of interest, some of which can also be found within Royal Docks and Beckton Riverside:

- Calcareous grassland
- Lowland meadow
- Lowland meadow and woodland
- Woodland (native/non-native)

In relation to key species for the borough the Action Plan refers to 57 protected and notable species in Newham:

- **Birds** - 13 species including:
 - Woodland birds (e.g. greatspotted woodpecker *Dendrocopus major*, nuthatch *Sitta europaea*, treecreeper *Certia familiaris*, song thrush *Turdus philomelos* and willow warbler *Phylloscopus trochilus*).
 - Kestrel *Falco tinnunculus*

- Starling *Sturnus vulgaris*
- **Invertebrates** - 30 species including:
 - Bees (all types including honey bee and bumble bees).
 - Greater stag beetle *Lucanus cervus*
 - Butterflies
- **Mammals** - 6 species including:
 - Hedgehog *Erinaceus europaeus*
 - Bats
- **Plants** – 5 species including:
 - Native meadow flowers
 - Lichens found in Newham's cemeteries
- **Reptiles and amphibians**
 - Amphibians (frogs, newts and toads)
 - Reptiles

- 23.8** The richness of London's natural environment includes private gardens, parks and open spaces and green corridors along canals and railways as well as on the River Thames and its tributaries. There is evidence of psychological, physical and social benefits of proximity to, and engagement with, the natural environment. Vegetation, particularly trees, can contribute to air quality improvements and help to reduce the effects of the urban heat island. Increased vegetation also helps to reduce surface run-off. There is strong evidence that people with better access to the natural environment tend to be happier and less prone to mental illness: nature has positive effects on mood, concentration, self-discipline, and physiological stress. Whilst difficult to study, there is also a possible link between access to green space and increases in physical activity as well as the contribution of the natural environment to social cohesion, particularly for well design and maintained green spaces.
- 23.9** The Mayor's Biodiversity Strategy (2002) noted that two-thirds of London's land area is occupied by green spaces and water. Of this, about a third is private gardens, a third parks or in sports use and a further third is semi-natural habitat, such as grasslands, woodlands and rivers.
- 23.10** Since the publication of the Biodiversity Strategy, more detailed land-cover assessments and analyses have been undertaken by Greenspace Information for Greater London using more sophisticated GIS based data. Consequently, it is not feasible to undertake a direct, like-for-like comparison between the land-cover figures published in the Biodiversity Strategy and current land-cover figures because current data would need to be derived from multiple (not fully compatible) datasets. Nevertheless, **Figure 23.1** compares data on land cover and habitats where there is comparable data.

Table 23.1 Land cover and habitats

Biodiversity Strategy estimate versus recent recorded coverage		
Habitat or land-use	Biodiversity Strategy (2002)	Most recent data ¹¹³
Total green space (including gardens)	c. 65 per cent of London's land area	57 per cent of London's land area
Total green space (excluding gardens)	32 per cent	33 per cent
Private gardens	c. 33 per cent	22 per cent of which 14 per cent is vegetated space
Total tree canopy cover	c.20 per cent	19.5 per cent ¹¹⁴
SINC	29855 ha	30679 ha (2013 data)
Woodland	c. 7000 ha	7569 ha (2009-10 data)
Chalk Grassland	c. 300 ha	301ha (2009-10 data)
Reedbed	c. 125 ha	142 ha (2009-10 data)
Acid Grassland	c. 1300 ha	1491ha (2009-10 data)
Heathland	c. 80 ha	55 ha (2009-10 data)

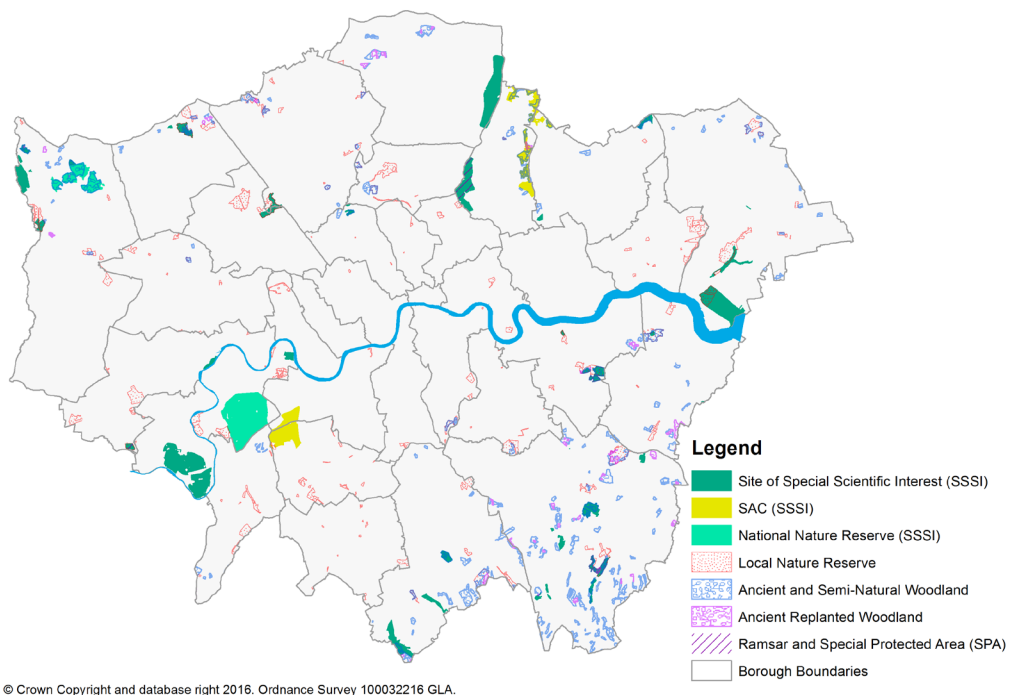
¹¹³ Greenspace Information for Greater London datasets, 2013

¹¹⁴ GLA (2015) Measuring Tree Canopy Cover in London [online]. Available from: www.london.gov.uk/sites/default/files/measuring_tree_canopy_cover_2015.pdf.

- 23.11** The data in Table 23.1 suggest that the biggest reduction in green space in London is vegetated garden space¹¹⁵. However, these figures probably do not consider the loss of ephemeral habitats associated with some brownfield sites awaiting redevelopment as these sites are less easy to classify and are not always identified during land-cover or habitat surveys.
- 23.12** Garden green space and vegetated brownfields are particularly important in an urban context because:
- a) gardens comprise a significant proportion of London's green space resource and are places where people can interact with nature most often, and,
 - b) ephemeral habitats associated with some brownfield sites can provide conditions that mimic sparsely vegetated habitats such as beaches, dunes, and heathlands, that support a wide range of rare or unusual wildlife, particularly invertebrates.
- 23.13** There are numerous statutorily designated nature conservation sites and priority habitats within the GLA administrative boundary. These are shown on **Figure 23.2** and comprise:
- Three SACs – Richmond Park in Richmond Upon Thames, Wimbledon Common in Merton and Epping Forest in Waltham Forest;
 - Two SPAs – including the Lee Valley in Waltham Forest and South West London Waterbodies in Hounslow;
 - Two Ramsar Sites – including the Lee Valley in Waltham Forest and South West London Waterbodies in Hounslow;
 - 38 SSSIs – six in Hillingdon; five in Bromley and three each in Havering, Croydon, Bexley and Waltham Forest. The area of land within SSSIs in London considered to be in favourable or recovering condition has increased from 73 per cent in 2000 to 93 per cent in 2012
 - Three NNRs – Ashted Common in Kingston-upon-Thames, Ruislip Woods in Hillingdon and Richmond Park in Richmond-upon-Thames;
 - 144 LNRs – present in all boroughs except for the City of London, Newham and Kensington and Chelsea;

¹¹⁵ GiGL (N/D) London: Garden City? [online]. Available from: www.gigl.org.uk/partnershipcasestudy/garden-research/

- Areas of Ancient and Semi-natural Woodland can be found in 17 boroughs;
- Areas of Ancient Replanted Woodland can be found in 10 boroughs.



23.17 The HRA is required to consider whether there is likely to be any significant likely effects of the London Plan on all European level sites including SAC/SPA and Ramsar sites. Appendix B details the baseline situation for each of these sites. The HRA will be published for consultation alongside the IIA and London Plan .

London's Sites of Importance for Nature Conservation

23.14 Other important wildlife sites in Greater London are identified as Sites of Importance for Nature Conservation (SINCs).

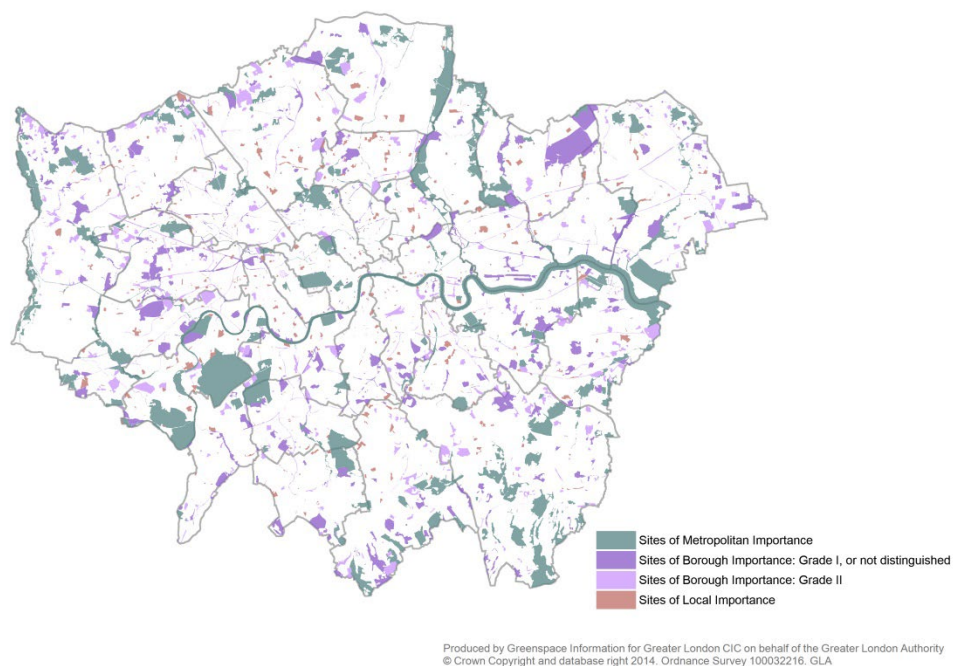


Figure 23.3 Distribution of Sites of Importance for Nature Conservation in London

23.15 SINCs are recognised by the GLA and London borough councils as London’s important wildlife sites. In total, over 1,400 SINCs have been identified, covering nearly 20per cent of the capital.

Table 23.2 Sites of Importance for Nature Conservation in London

Sites of Importance for Nature Conservation in London		
Grade	Area (ha)	per cent of Greater London
Metropolitan	16249	10.19
Borough	12652	7.93
Local	1778	1.12
Total	30679	19.24

Figures calculated from GiGL SINC dataset (December 2013)

23.16 These are variously graded as Metropolitan, Borough and Local depending upon the relative importance and value of the SINC

- Sites of Metropolitan Importance – About 140 Metropolitan sites have been identified. They include nationally important wildlife sites such as Richmond Park, Epping Forest and Rainham Marshes, and places such as Sydenham Hill Woods, Eastbrookend Country Park and Hounslow Heath;
- Sites of Borough Importance – there are almost 800 borough sites identified to date. They include woodlands, rivers, grasslands and parks where nature conservation is a primary objective of land management;
- Sites of Local Importance – provide Londoners with access to nature in their local area. Includes parks and green spaces where there is some intrinsic nature conservation value. About 460 Local sites have been identified

23.17 Whilst SINC coverage has increased since 2002; there has been losses across London at specific sites. SINC are semi-natural so require constant management to maintain their wildlife value. The percentage of SINC reported to be under positive conservation management has increased from 42 per cent in 2009 to 50 per cent in 2010 and 59 per cent in 2011.

23.18 London's SINC network also includes Sites of Special Scientific Interest (SSSI) – those sites which have a statutory nature conservation designation. The condition of these sites is monitored at a national level. The area of land within SSSIs in London considered to be in favourable or recovering condition has increased from 73 per cent in 2000 to 93 per cent in 2012.

London's urban forest

23.19 London's urban forest comprises areas of extensive woodland, wooded landscapes in parks and open spaces, trees in residential gardens and street trees. The total area of London's urban forest appears to have remained relatively static over the past 10 years, with estimated coverage of c20 per cent¹¹⁶. *Valuing London's Urban Forest* - the report of the London i-Tree Eco Project – indicates that London's trees provide at least £133M of benefits every year in terms of air pollution removal, carbon sequestration and reducing the surface run off.¹¹⁷

London's gardens

23.20 Private gardens provide many people with daily contact with nature and form a pleasant component of residential areas. A single garden may provide habitat for a range of plants and wildlife and collectively they are an important resource for conserving species such as hedgehogs, amphibians and pollinating insects.

23.21 A report¹¹⁸ on changes in London's domestic gardens shows that between 1998-99 and 2006-08:

- The area of vegetated garden land declined by 12 per cent, a loss of 3,000 ha.
- The amount of hard surfacing in London's gardens increased by 26per cent or 2,600 ha.
- The area of garden buildings (sheds etc.) increased by 55 per cent or 1,000 ha.
- The amount of garden lawn decreased by 16 per cent or 2,200 ha.

¹¹⁶ GLA (2015) Measuring Tree Canopy Cover in London [online]. Available from:
www.london.gov.uk/sites/default/files/measuring_tree_canopy_cover_2015.pdf

¹¹⁷ Treeconomics London, (2015), "Valuing London's Urban Forest: Results of the London i-Tree Eco Project"
[http://www.forestry.gov.uk/pdf/2890-Forest_Report_Pages.pdf/\\$FILE/2890-Forest_Report_Pages.pdf](http://www.forestry.gov.uk/pdf/2890-Forest_Report_Pages.pdf/$FILE/2890-Forest_Report_Pages.pdf). Monetised annual benefits outlined on page 10; benefits of tree planting provided on pages 16 and 17.

¹¹⁸ London Wildlife Trust and Greenspace Information for Greater London, *London: Garden City?*,

23.22 The changes in garden cover are primarily due to many small changes to individual gardens as part of their management and use by homeowners, rather than large scale changes or housing development on garden land (although this can result in significant loss of garden land at a local level). A more proactive policy approach to the intensification of suburbs to increase housing delivery may further reduce the garden coverage over London.

Areas of Deficiency in access to open space

23.23 London’s publicly accessible green spaces make up about 16 per cent of the capital. The Table 23.3 below shows the amount London that is deficient in terms of access to different types of open space based on the London Plan benchmarks.

Table 23.3 Access Open Space

London Plan Bench Marks	per cent of area deficient in access to publically open space
>8.0km away from Regional Parks	65per cent of Greater London
>3.2km away from Metropolitan Parks	26per cent of Greater London
>1.2km away from) District Parks	45per cent of Greater London
>400m away from) Local, Small and Pocket Parks	50per cent of Greater London

23.28 Merging all these different layers of deficiency results in 86 per cent of London being deficient in access to at least one type of public open space. However, despite these apparent deficiencies, it should be recognised that some parts of suburban London contain homes with large gardens and therefore lack of access to small local parks may not be a significant issue for some residents. Similarly, Londoners living on the periphery of London may be less concerned about lack of access to Metropolitan or Regional parks in London because of the proximity of similar facilities in the Green Belt around London.

Areas of Deficiency in access to nature

- 23.24** Areas of Deficiency in Access to Nature are those areas in London where people have to walk more than 1 km to reach a SINC of at least borough importance. Since 2006, the area of London defined as being deficient in access to nature has fallen from 22 per cent to 16 per cent. Almost 25,000ha of London was classified as being deficient in access to nature in 2010, which is over 9,000 ha less than in 2006. Much of this decrease is likely to have been achieved either by creating better access to sites where there has previously been none or creating new access points to sites already accessible to the public. The creation or restoration of habitats that has resulted in the increase in the area of SINC's will also have made an important contribution as some Sites of Local Importance will have been upgraded to Sites of Borough Importance.
- 23.25** The measuring of access to open space within the Newham Local Plan is based on 'as the crow flies' distances, meaning the reality is worse. The lack of direct routes to medium size parks means that most of the southern part of the study area will still have poor access to medium-sized open spaces.¹¹⁹
- 23.26** There are two areas within the docks that are subject to an acute lack of access to both small and medium open spaces, which are:
- Royal Victoria Dock West and the site of the Thameside West development; and,
 - The eastern end of the docks around Albert Island and Beckton Riverside.¹²⁰

¹¹⁹ [Royal Docks Public Realm Framework](#)

¹²⁰ [Royal Docks Public Realm Framework](#)

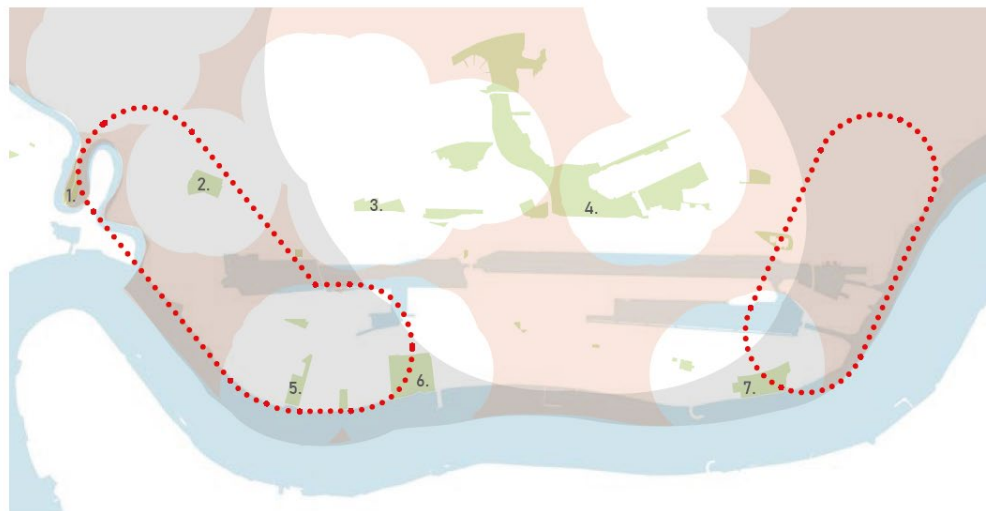
23.27 Despite the presence of large areas of green and open space within the area, the Royal Docks and Beckton Riverside does suffer from open space deficiency.

Current access to Open Spaces - Information extracted from Newham Local Plan

- Poor Access to small open spaces
- Poor Access to medium open spaces
- Poor current provision of/access to small and medium open spaces

Key

1. Limmo Peninsula Ecological Park
2. Kier Hardie Recreation Ground
3. Cundy Park
4. Beckton District Park
5. Lyle Park
6. Thames Barrier Park
7. Royal Victoria Gardens



Royal Docks Public Realm Framework

London's bird populations

23.28 Between 1994 and 2011, 21 of the 33 bird species monitored by the British Trust for Ornithology increased significantly in London, whilst 7 species declined significantly during this same period. These trends largely mirror national trends. This suggests that there are no particular nature conservation or land management issues which need to be addressed specifically in London, especially as the actual causes for declines are undetermined. However, loss of nest sites in buildings (resulting from the trend to seal buildings for energy efficiency reasons) and the loss of vegetated areas in gardens (see above) may well be a reason for the decline in species such as house sparrow, starling, blackbird and swift.

23.29 Where tailored conservation efforts have been undertaken for particular species, which have an urban or London affiliation, there have been some notable successes, particularly with the creation of biodiverse green roofs, the provision of nest-boxes and protection of nest-sites.

Natural Capital

- 23.30** Comprehensively valuing the services and benefits provided by the natural environments is becoming more important so that these are properly accounted for when deciding, for example, how to enhance resilience or improve public health when compared to other alternatives. A study undertaken by Natural England estimated that the savings to the NHS through having increased access to green space for every household in England equated to £2.1 billion per annum¹²¹.
- 23.31** Analysis by GLA Economics modelling suggests that house prices within 600 metres of a regional or metropolitan park were between 1.9 per cent and 2.9 per cent higher as a result of that proximity.

¹²¹ Natural England, (2009), "Our Natural Health Service: The role of the natural environment in maintaining healthy lives".

23.32 Programmes of planting trees in urban areas provide a range of both environmental and wellbeing benefits. These include aesthetic improvements to areas becoming a focal point for residents; but they can also act as a means of carbon storage, improve biodiversity, help to reduce localised flooding, and potentially enable reductions in energy usage through helping to cool areas in the summer and provide insulation in the winter. The London i-Tree Eco assessment has looked to provide monetised costs for the environmental benefits and replacement costs of trees currently in the capital; estimating that London's existing urban forest provides total benefits of £132.7 million per annum¹²².



Figure 23.5 Tree Canopy Cover in Royal Docks and Beckton Riverside

Source: GLA, 2020

¹²² Treeconomics London, (2015), "Valuing London's Urban Forest: Results of the London i-Tree Eco Project"
[http://www.forestry.gov.uk/pdf/2890-Forest_Report_Pages.pdf/\\$FILE/2890-Forest_Report_Pages.pdf](http://www.forestry.gov.uk/pdf/2890-Forest_Report_Pages.pdf/$FILE/2890-Forest_Report_Pages.pdf). Monetised annual benefits outlined on page 10; benefits of tree planting provided on pages 16 and 17.

Natural Capital in LB Newham

23.33 As mentioned earlier, green space covers 13.1% of Newham, compared with 39% for London as a whole. Newham has 25 parks and numerous green spaces totalling approximately 396 ha of publicly accessible green space. The borough has 16% tree cover which is the second lowest in London. People enjoy and use parks and open spaces in Newham, with 43% of residents visiting at least once a week. However, a low use of outdoor space for health and exercise reasons (10.1% compared to the London average of 12.3% and the national average of 17.9%) is shown in figures from Natural England's 'Engagement with the Natural Environment' survey, as reported in the [Public Health Outcomes Framework](#). The Natural Capital Account for London's Public Parks, includes an assessment for Newham. The total combined economic value of public parks in Newham is estimated to be £1.5 billion for health, amenity, recreation, property, carbon storage, and temperature regulation benefits.¹²³

23.34 LB Newham's Strategic Leisure Facility Needs Assessment (2017) covers swimming pool, indoor sports hall, and health and fitness provision. Currently, there are number of existing outdoor sports facilities within the OA. These include:

- Royal Docks Learning & Activity Centre
- London
- Regatta Centre
- Britannia Village Hall
- Sportsdock

¹²³ <https://apps.london.gov.uk/naturalcapitalreport/index.html>

Development and the River Thames

23.35 The Port of London guidance 'Estuary Edges' considers the impact of development on the River Thames as a nature asset. A number of principles for future development are identified:

- Integrate the creation of inter-tidal habitat, terraces or wall features into the green space associated with development. This is so that the multiple benefits of more wildlife, river access and engagement with estuaries, creeks and riverside areas can add value to the development by providing the public with tangible improvements in the amenity value of the site.
- Integrate surface water drainage from sites through the intertidal feature by creating a creek feature devoid of plants. Design vegetated areas to form either side of this creek;
- Reduce flood risk by:
 - Newly realigned flood walls/embankments having the same level of flood protection or better.
 - Making space for more tidal water by creating naturalised set back or intertidal vegetated terraces.;
 - Including surface water attenuation e.g. swales on the landward side of the floodwall to prevent tide locking/need for pumping and therefore save energy.
 - Refer to any local flood risk strategies/plans e.g. the London one is called the Thames Estuary 2100 plan and can be obtained through the Environment Agency.
 - Position buildings in your development so that they do not overshadow your estuary edge feature. Ideally set all buildings back from the edge and design open, green space which blends with the intertidal.

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Loss of biodiversity and reduced ecological resilience as a result of increased pressure for development and intensification of existing development 2. Decrease in Areas of Deficiency in Access to Nature, however increased recreational pressure on existing habitats and green spaces 3. Impact of climate change
<p>Opportunities</p>	<ul style="list-style-type: none"> • Improve protection for existing sites identified as being of value for nature conservation and ecosystem services. • Opportunities for increasing integration green infrastructure into the built environment e.g. green roofs and walls, nature-based sustainable drainage. • Improvements to the design and management of parks and open spaces, and the connections between them, to ensure all of the existing network has a richer ecology and is more accessible and permeable. • Protecting and enhancing biodiversity and strategic green corridors • New typologies of green spaces, and the choice of habitats and species in landscape design, to optimise climate change adaptation benefits and to ensure resilience of existing landscapes • Promotion of the concepts of natural capital, natural capital accounting and ecosystem services in order to build a more robust business-case for the investment in green infrastructure by highlighting the wider economic and social benefits.

	<ul style="list-style-type: none"> • New developments should improve existing natural assets and contribute to the green infrastructure network. Refer to Policy G5 of the London Plan and London Environment Strategy. This includes consideration to: <ul style="list-style-type: none"> ○ Reduce motor traffic from local streets and increase planting to create boulevards and pocket parks ○ Use of green roofs and living façades ○ Create new areas of flood storage ○ Introduce reed beds and wild flowers to conserve and enhance wildlife and natural habitats ○ Support and secure management of new and existing open spaces • Existing recreational facilities that support the existing community should be retained within the development and improved where possible, in accordance with the relevant policies in the NPPF, the London Plan and Local Plan policies that seek to protect sports facilities (including playing fields) from loss to other types of development. LB Newham have existing evidence bases for sport and it is important that the outcomes from these are also captured in future planning documents, alongside any additional provision.
<p>Implications of plans and programmes review</p>	<p>Opportunities to integrate biodiversity and the network of green spaces to provide a range of sustainability benefits, i.e. healthy living, improving air and water quality, cooling the urban environment, enhancing biodiversity and ecological resilience. This could include both enhancing existing habitats and providing new areas for biodiversity as opportunities arise.</p>

	Environmental Net gain is a goal for the Opportunity Area to achieve, aligning with the London Plan and 25 Year Environment Plan
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Suggested IIA Objectives	To protect, connect and enhance London's natural capital (including important habitats, species and landscapes) and the services and benefits it provides, delivering a net positive outcome for biodiversity
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24. Townscape, Landscape and Public Realm

Landscape and townscape is the visual aesthetic of the natural or built environment. The public realm refers to the quality (including the perception) of publically accessed spaces and places between buildings (streets, footpaths, cycle paths, roads, parks, open spaces etc.)

- 24.1** The social, cultural, environmental and economic relationships between people and their communities are reinforced by the physical character of a place.
- 24.2** The landscape takes its character from a combination of elements, including topography, watercourses, land use and pattern, vegetation, open space and cultural heritage features. Landscapes vary considerably in character and quality and are often considered a key component of the distinctiveness of any local area or region.
- 24.3** London possesses a wide range of parks and open space, which provide some of the capital's key public assets. Around two-thirds of London's 1,600 square kilometres is occupied by green spaces or water. Approximately a third of this is private gardens, another third is parks or sports facilities and the remaining third is semi-natural habitat, such as grasslands, woodlands and rivers¹²⁴.
- 24.4** In addition to the Green Belt, which forms 22 per cent of London's land area, 10 per cent of London is designated Metropolitan Open Land (MOL) within the built environment (this includes spaces such as Richmond Park and Hampstead Heath)

¹²⁴ Mayor's Biodiversity Strategy 2002

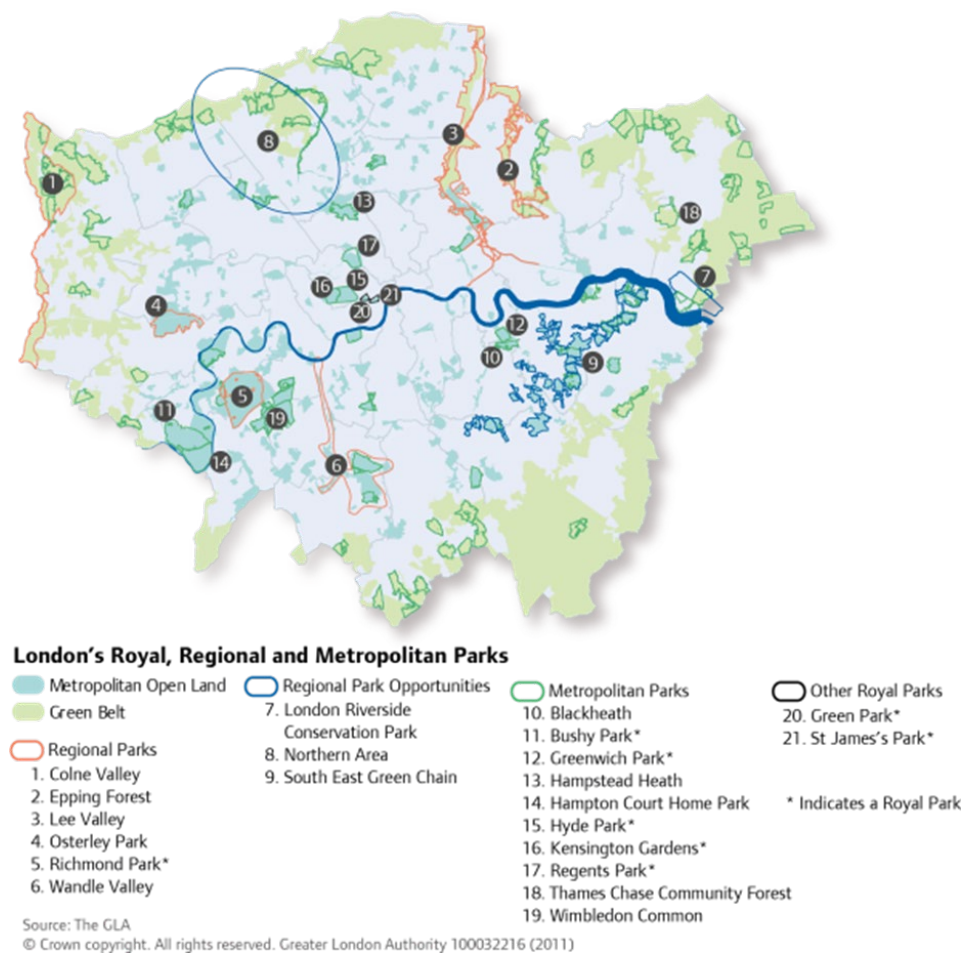


Figure 24.1 London's Open Space Network

Source GLA 2017

24.5 London also includes 22 Natural Landscape Areas (NLAs). A Natural Landscape Area is an area which is an original watercourse, contains vegetation typical of the soils and geology of its area and/or allows an appreciation of the wider geomorphology and natural topography of London.

24.6 The network of rivers, canals, lakes and docks in London is what the London Plan calls the Blue Ribbon. The network brings together a huge range of different places, used for many different purposes, but which share the unique attribute of water. These water spaces are relatively scarce and past policies have sought to protect and enhance them.

- 24.7** London's publicly accessible green spaces make up about 16 per cent of the capital. However, large areas of London are classified as deficient access to parks.
- 26 per cent of Greater London is deficient in access (i.e. >3.2km away from) to a Metropolitan Park
 - 45 per cent of Greater London is deficient in access (i.e. >1.2km away from) to a District Park
 - 50 per cent of Greater London is deficient in access (i.e. >400m away from) to a Local Park
- 24.8** Private gardens provide many people with daily contact with nature. However, the area of vegetated garden land has declined by 12per cent (3,000ha) between 1998 and 2008 with the amount of garden lawn decreased by 16 per cent (2,200 ha). Again, more detail can be found in the Natural Environment section.
- 24.9** Townscape includes the buildings and the activities and spaces between them. London's historic character is also synonymous with townscape and landscape features, the importance of which is discussed in section 19.
- 24.10** The scale, form and layout of buildings shape the public realm and create the character and density of an area. Generally, density is related to the scale and height of buildings, although tall buildings do not necessarily have a high density. Density is mainly referred to for housing developments.
- 24.11** A number of character typologies, and associated character areas are identified in Newham, which help to generate appropriate design cues for different places in pursuit of good design when assessed against design principles. Character typologies derived are broadly:
- Victorian and Edwardian
 - Garden City, Art Deco, Inter-War and Early Post-War
 - Post War 1960s and 1970s
 - 1980s to mid 1990s
 - Late 1990s-2010
 - Post 2010

In general, older development and greater concentrations of heritage assets are found in the north of the borough, and broad character areas derived are:

- Character Area 1: Northern part of Newham: Manor Park, East Ham, Forest Gate, Green Street, parts of Stratford and West Ham, and Plaistow;
- Character Area 2: South western part of the borough – including much of Canning Town and Custom House, parts of Plaistow and West Ham;
- Character Area 3: Lower Lea Valley, north of the District Line including parts of Stratford and West Ham (currently within LLDC);
- Character Area 4: Lower Lea Valley: South of the District Line towards the Thames including parts of Canning Town;
- Character Area 5: Southern part of the borough, around the Royal Docks (Silvertown, North Woolwich, Royal Victoria, Royal Albert, and south part of Gallions Reach);
- Character Area 6: Beckton housing estate (between Prince Regent Lane, Newham Way, Royal Albert Way and Royal Docks Road);
- Character Area 7: Beckton, east of Royal Docks Road, including Beckton Sewerage Treatment Plant, former Gasworks, industry and Gallions Reach out of centre retail park.

The Olympic Park and legacy development area is identified as a distinct character area in evolution, with its own place-making priorities – Character Area 3. The legacy development area constitutes a separate local planning authority. (Source: Newham's Character Study, 2017).

24.12 Housing density in London increased from the late 1990s to the early 2000s but has been relatively constant over recent years for development in London as a whole. However, over 50 per cent of development is currently being permitted at densities above the London Plan policy maximums for its location. The policy maximum for housing density is set out in the London Plan Sustainable Residential Quality (SRQ) density matrix. **Figure 24.2** below compares the residential density achieved for each scheme against the optimal density range set out in SRQ density matrix in the London Plan, taking into account both the site’s Public Transport Accessibility Level (PTAL) and its setting as defined in the London Plan.

Figure 24.2 Residential approvals compared to the density matrix

RESIDENTIAL APPROVALS COMPARED TO THE DENSITY MATRIX – ALL SCHEMES			
FINANCIAL YEAR	per cent OF UNITS APPROVALS		
	WITHIN RANGE	ABOVE RANGE	BELOW RANGE
2006/07	36 per cent	60 per cent	4 per cent
2007/08	40 per cent	55 per cent	5 per cent
2008/09	41 per cent	53 per cent	7 per cent
2009/10	39 per cent	56 per cent	6 per cent
2010/11	37 per cent	58 per cent	5 per cent
2011/12	40 per cent	55 per cent	5 per cent
2012/13	58 per cent	37 per cent	5 per cent
2013/14	43 per cent	50 per cent	7 per cent
2014/15	41 per cent	51 per cent	8 per cent

Source: London Plan Annual Monitoring Report 12 (2014/15)

- 24.13** The average housing density in Newham is higher than the London average and has increased since 2001. In 2011 the average density in Newham was 26.8 dwellings per hectare (dw/ha) and in 2019 it increased to 30.3 dw/ha. This compared with the London's average of 21.1 dw/ha in 2011 and 22.5 dw/ha in 2019.¹²⁵
- 24.14** Tall buildings can have a significant impact on the surrounding environment, particularly in terms of their impact on the townscape and local microclimate. Protected strategic and local views are an important consideration when considering the location and height of tall buildings. There are no protected views within the Royal Docks and Beckton Riverside OA.
- 24.15** The public realm is an important feature of the townscape and refers to streets, footpaths, cycle paths, roads, street furniture, public spaces and landscaping etc. Perceptions of the public realm are most commonly related to the maintenance of pavements and roads, the cleanliness of open spaces and the quality of local parks. Other elements which influence perceptions include traffic congestion, road markings, the provision of seating, suitably designed dropped kerbs, signage directions and the extent to which streets are cluttered with signs and street furniture. The quality and inclusiveness of the public realm has a significant influence on quality of life because it affects people's sense of place, security and belonging, as well as having an influence on a range of health and social factors.
- 24.16** There has been a slight increase in the proportion of Londoners who think that the quality of their local area has got 'a lot' better over the past year, from 7 per cent in 2011 to 11per cent in 2012The main aspects that Londoners are either most satisfied or most dissatisfied with are the quality and cleanliness of open spaces and pavements, and whether parks are well maintained and free of litter. . Inner Londoners are significantly more likely to say this than those living in outer London boroughs.

¹²⁵ [Number and Density of Dwellings by Borough - London Datastore](#)

- 24.17** The design of streets is also an important element in the improving people perception of the public realm. It can encourage active travel including walking and cycling which in turn can improve people's physical activity and helps tackle health issues such as obesity. Attractive streets can also encourage people to socialise and play, building stronger social networks and reducing social isolation, both of which are important for physical and mental health. The provision of shade through trees can help to protect people from sun damage and enables people to cool and regulate their body temperature; and the provision of resting places can help people who have mobility impairments and need places to stop and rest to break up a longer walking and/ or cycle distance.
- 24.18** The intensification of London could impact the physical character of London's landscape and townscape and can result in loss of sense of place if poorly designed.
- 24.19** Royal Docks and Beckton Riverside has been historically developed around industry and shipping, with the open spaces and the road layout catering for those activities. Over the last years, the place has been changing to welcome more people to live, play and work. The change in personality and character will also need to be reflected in the quality and accessibility of public realm, as mentioned above in paragraph 24.15. Recognising this need, the Royal Docks team developed in 2020 a Public Realm Framework which sets the main principles and interventions towards the delivery of a coherent design character for the area and its connections to wider Newham and London and overcoming physical and perceived barriers. The framework focuses on unlocking key connections through excellent walking and cycling routes that connect the water spaces of the docks to the growing communities to the north and along the river.

24.20 The Public Realm Framework is one of a suite of guidance documents around good quality public realm and landscape. The others include the Royal Docks design guides on Wayfinding, Lighting and Landscaping, and the Royal Docks Cycling and Walking Action Plan. Royal Docks Design Guides, especially for wayfinding, landscaping and lighting in the public realm principles. The Landscape guide details out both hard and soft landscaping principles and key moves to achieve greener and bluer Royal Docks, as well as inclusive and safe links and places. Apart from walking and cycling improvements, there is special mention in the opportunities for urban wilding, and the application of sensory elements to enhance people’s connection to public realm with significant benefits for Newham.

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Poor quality public realm in some parts of London which can discourage active travel 2. Deficiencies in open spaces in some parts of the city 3. Risk of poor design, harm to the distinctive character of places, lack of legible neighbourhoods and sense of place
<p>Opportunities</p>	<ul style="list-style-type: none"> • To promote high quality design to create and maintain a safe and attractive public realm which encourages people to walk and cycling, promoting a sense of place and reducing the need to travel. • Good design that supports delivery of new high-density development, whilst reflecting London’s special character • To promote the provision and use of green linkages and connections
<p>Implications of the plans and programmes review</p>	<p>Importance of creating and maintain a safe and attractive public realm which encourages people to walk and cycling, promoting a sense of place and reducing the need to travel.</p>

Suggested IIA Objectives	To contribute to safety and security and the perceptions of safety To create attractive, mixed use neighbourhoods ensuring new buildings and spaces are appropriately designed that promote and enhance existing sense of place and distinctiveness, reducing the need to travel by motorized transport
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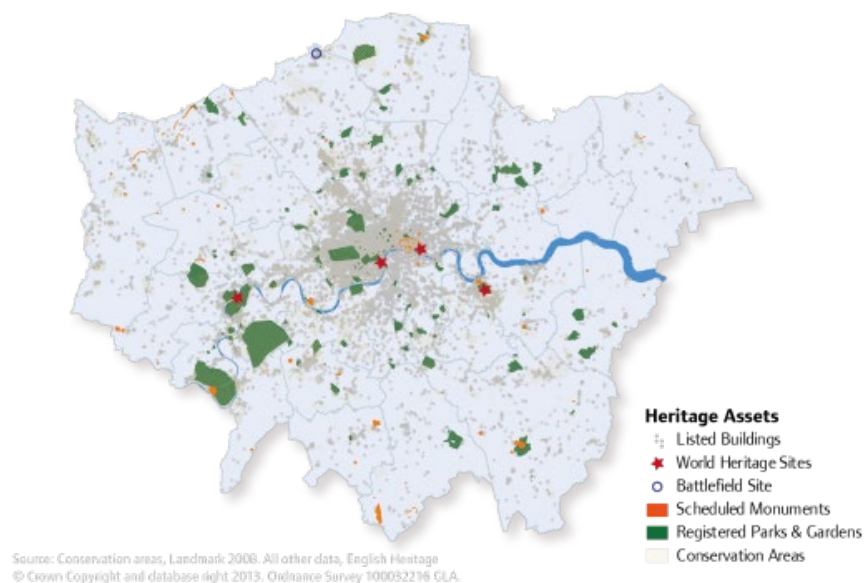
25. Historic Environment

London's heritage including designated heritage assets such as listed buildings, registered historic parks and gardens and other natural landscapes, conservation areas, World Heritage Sites, registered battlefields, scheduled monuments, archaeological remains and memorials and historic views and settings.

Heritage Assets

- 25.1** London's built and landscape heritage provides a depth of character that has immeasurable benefit to the city's economy, culture and quality of life. One of the things that makes London distinctive is the way it combines the old and the new. London's heritage assets and historic environment make a significant contribution to the city's culture by providing easy access to the history of the city and its places. Recognition and enhancement of the multicultural nature of much of London's heritage can help to promote community cohesion. In addition to buildings, street patterns, industrial development, open spaces and landscapes, people can perceive the story of the city through plaques, monuments, museums, artefacts, photography and literature.
- 25.2** London's designated and non-designated heritage assets range from the Georgian squares of Bloomsbury to Kew Gardens (Victorian) and the Royal Parks, and include ancient places of work like the Inns of Court (medieval in origin), distinctive residential areas like Hampstead Garden Suburb (early twentieth century) and vibrant town centres and shopping areas like Brixton and the West End. This sheer variety is an important element of London's vibrant economic success, world class status and unique character.

Figure 25.1 Spatial distribution of designated assets in London, 2013



25.3 As well as a number of Archaeological Priority Areas (APAs) and locally designated assets such as locally listed buildings and areas of special character, the Greater London Historic Environment Record (GLHER) provides a resource to understand the historic environment in London. Further information on Newham’s APAs can be found under the [Archaeological Priority Areas Appraisal 2014](#).

25.4 The borough has over 100 listed buildings with national historical or architectural interest. There are four Grade 1 and six Grade2* Listed Buildings in the Borough; eleven Listed Buildings (incorporating all grades) on Historic England’s Heritage at Risk Register; and an additional 192 entries on the Local List. The nature of the built environment including architectural styles; heritage assets; and strengths, weaknesses, opportunities, and threats in each part of the Borough are explored further in the Character Study¹²⁶ (first published 2011 and updated 2017). (Source: [Newham Local Plan Integrated Impact Assessment Feb 2018](#))

25.5 There are nine conservation areas in Newham (which do not fall within the OAPF boundary):

- Durham Road conservation area, Manor Park, E12

¹²⁶ Newham’s Character Study, 2017 <https://www.newham.gov.uk/downloads/file/899/newhamcharacterstudy2018>

- East Ham conservation area, E6
- Forest Gate Town Centre conservation area, E7
- Romford Road conservation area, Forest Gate, E7
- Stratford St John's conservation area, E15
- Sugar House Lane conservation area, Stratford, E15
- Three Mills conservation area, E3
- University conservation area, Stratford, E15
- Woodgrange Estate conservation area, Forest Gate, E7

Figure 25.2 Newham's Heritage Assets

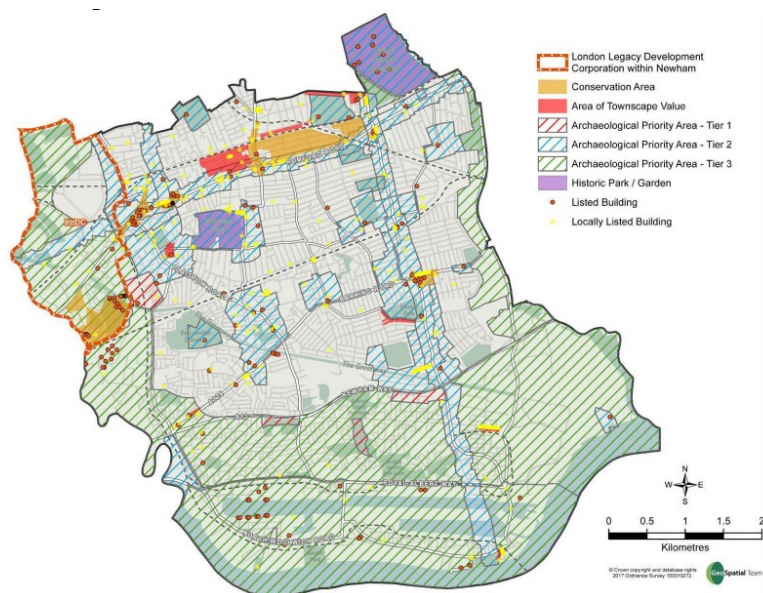
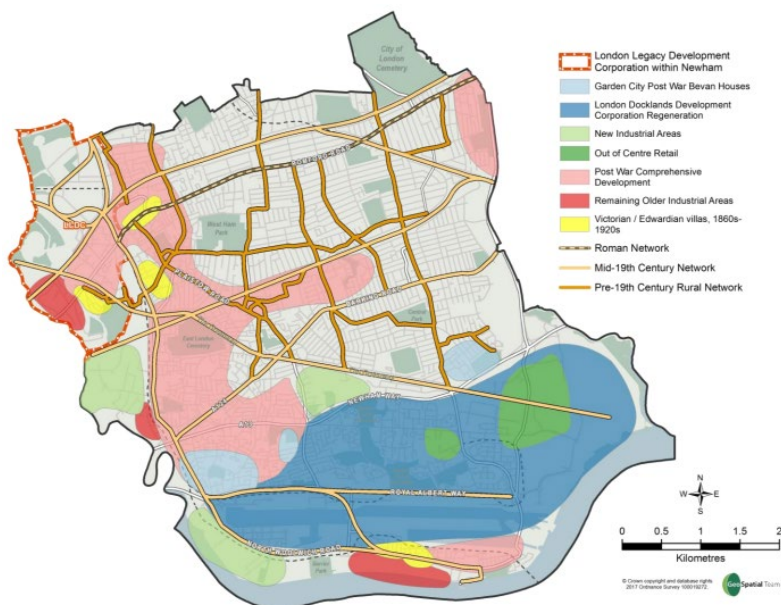


Figure 25.3 Newham’s Broad ‘Zones’ of Historical Development



Source: [Newham’s Character Study 2017](#)

25.6 Protected Heritage Assets in the OAPF area¹²⁷

Structure	Designation
Royal Oak public house	GII Listed
Chapel of St George and St Helena at former Dockland Settlement	GII Listed
Church of St Luke	GII Listed
Workshop, Crossness Pumping Station	GII Listed
Stothert and Pitt cranes on north and south sides of the Royal Victoria Dock	GII Listed
Warehouse W	GII Listed

¹²⁷ Historic England map of Listed buildings <https://historicengland.org.uk/listing/the-list/map-search?clearresults=True>

Warehouse K	GII Listed
Silo D	GII Listed at Heritage Risk
War memorial at former St Mark's Church (Brick Lane Music Hall)	GII Listed
Former St Mark's Church (Brick Lane Music Hall)	GII* Listed
The Connaught tavern	GII Listed
Dock Manager's offices	GII Listed at Heritage Risk
Central Buffet at Custom house	GII Listed at Heritage Risk
Entrance to Woolwich Pedestrian Tunnel	GII Listed
North Woolwich Station including turntable and platform lamp standards	GII Listed at Heritage Risk
Gallions Hotel	GII* Listed
Chimney to Beckton Sewerage Works	GII Listed at Heritage Risk

Heritage at Risk

25.7 There are many reasons why heritage assets may be considered at risk; these include development pressure, lack of investment, uncertainty over ownership and responsibility and a lack of understanding of the potential of such assets in delivering economic, social and environmental benefits. The amount of heritage at risk provides one indication as to how the historic environment is being managed. As shown in the **Figure 25.4** from the London Plan Annual Monitoring Report for 2014-15, designated assets at risk from neglect or decay in London in 2015 included 62 conservation areas, 492 listed buildings, 31 scheduled monuments and 9 registered parks and gardens. This makes up 12.2 per cent of the total 5,478 national designated assets at risk. The number of assets at risk in London has reduced since 2014 with 4 fewer designated assets at risk in 2015 than in 2014.

Figure 25.4 Heritage at Risk

TABLE 2.30 NUMBER AND CONDITION OF DESIGNATED HERITAGE ASSETS										
	2011		2012		2013		2014		2015	
	NO.	% AT RISK	NO.	% AT RISK	NO.	% AT RISK	NO.	% AT RISK	NO.	% AT RISK
World Heritage Sites*	4	0	4	0	4	0	4	0	4	0
Listed Buildings#	18,745	2.53	18,854	2.8	18,872	2.7	18,896	3	18,936	2.59
Conservation Areas	1,000	6.4	949	6.8	1,009	6.3	1,017	6.3**	1,021	6%**
Schedule Monuments	154	22.7	154	22.7	155	20.6	156	19.9	158	19.6
Registered Parks and Gardens	149	5.40	150	8	150	7.3	150	7.3	150	6
Registered Battlefield	1	0	1	0	1	0	1	0	1	0

Source: English Heritage

*designated by UNESCO. # does not include places of worship.

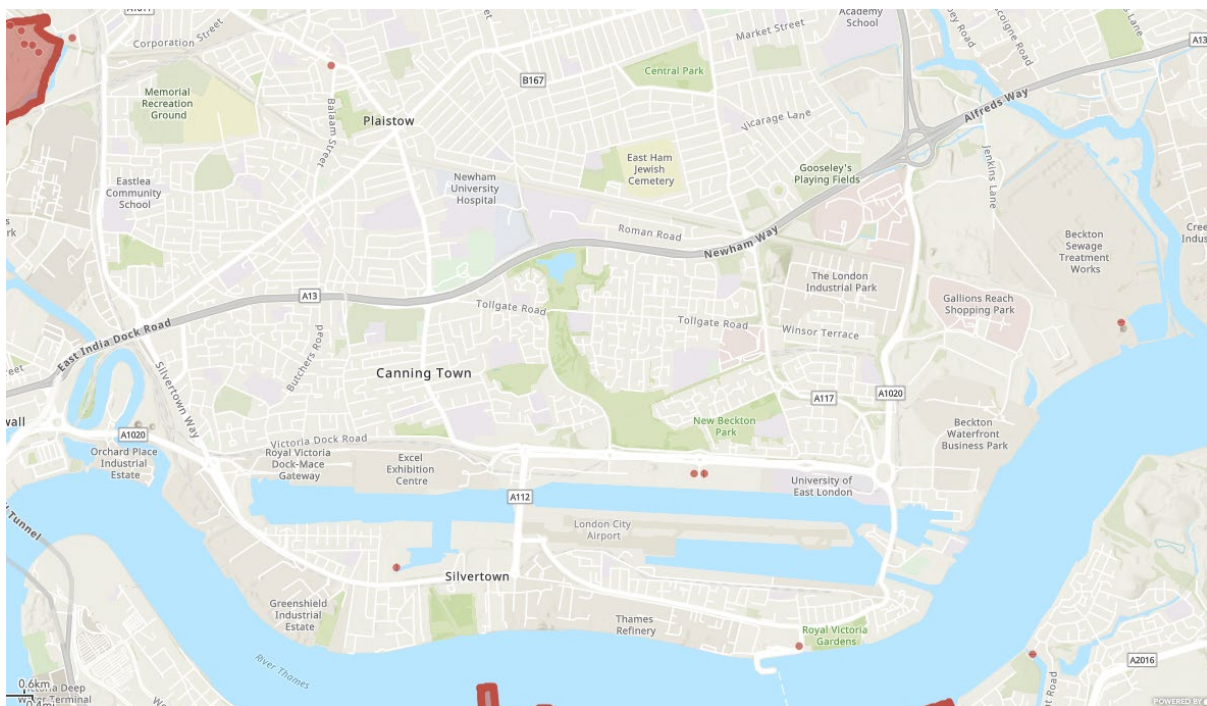
** 954 of the 1021 Conservation Areas in London have been surveyed through the Conservation Areas at Risk survey and 62, or 6%, are considered at risk.

25.8 In terms of decay, acidified air pollutants can accelerate the degradation of valuable buildings, especially cultural monuments such as older sandstone and limestone buildings. Other cultural monuments, such as rune stones and rock carvings, also display evidence of serious damage as a result of acidifying air pollutants.

25.9 Within the OAPF boundary there are 5 Listed Buildings which are on Historic England’s Heritage at Risk Register:

- Silo D, North Woolwich Road, Canning Town
- Central offices at Custom House, Royal Albert Dock
- Central buffet at Custom House, Royal Albert Dock
- North Woolwich Station including turntable and platform lamp standards, Pier Road, North Woolwich
- Chimney to Beckton Sewerage Works, Jenkins Lane, Beckton

Figure 25.5 Royal Docks and Beckton Riverside OAPF Heritage at Risk



Source: [Heritage at Risk 2020](#)

25.10 Historic Maps

Figure 25.6 Historic map 1870

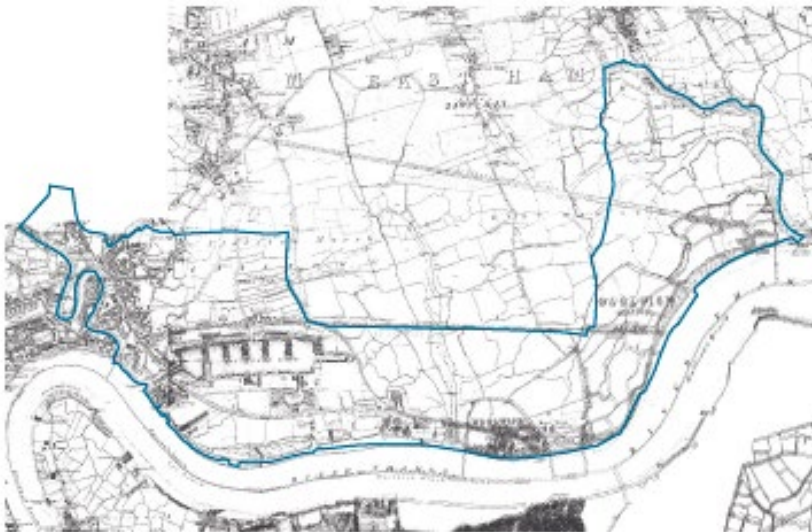


Figure 25.7 Historic map 1890

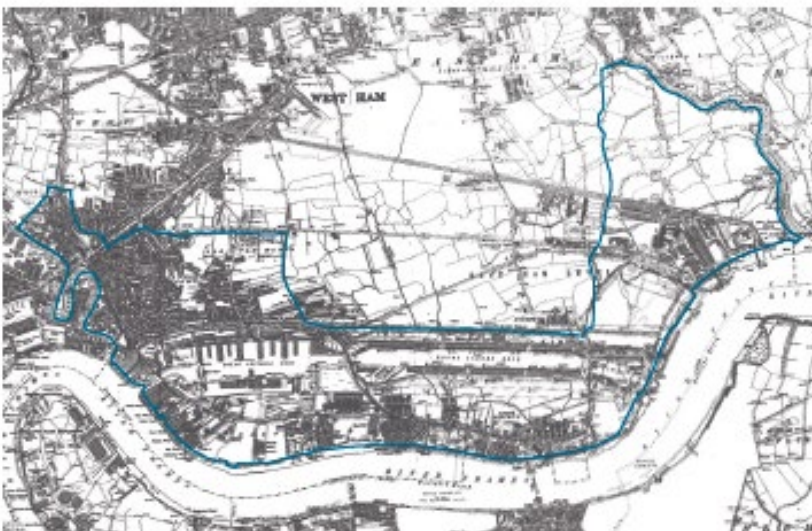


Figure 25.8 Historic map 1930

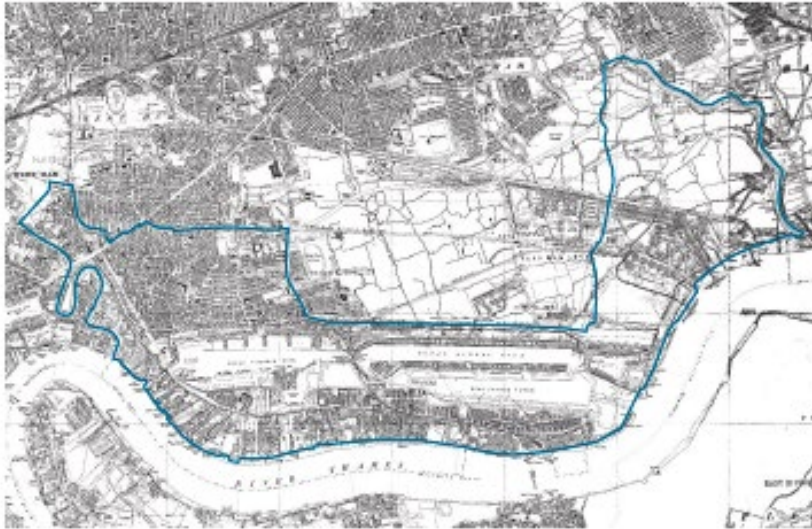


Figure 25.9 Historic map 1960

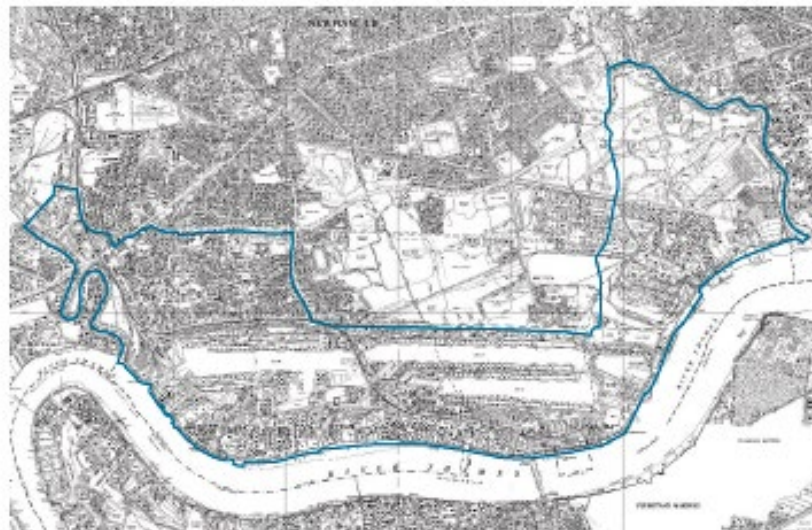
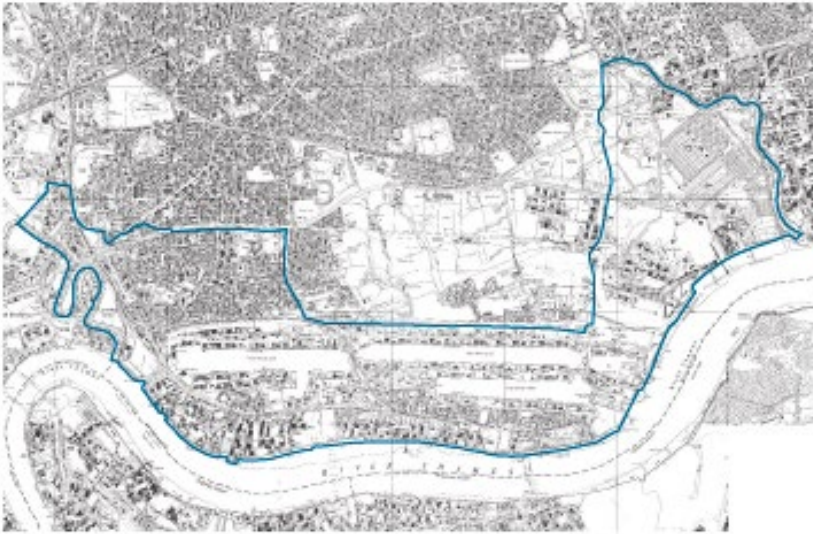


Figure 25.10 Historic map 1980



<p>Key issues</p>	<ol style="list-style-type: none"> 1. Heritage assets at risk from neglect, decay, inappropriate development and air pollution 2. Views and vistas to heritage assets are at risk from increased development pressures, including consideration of any cross-boundary effects 3. Potential harm to the significance of heritage assets and wider historic environment through inappropriate development
<p>Opportunities</p>	<ul style="list-style-type: none"> • London’s heritage assets create the city’s sense of place and provide richness in the urban fabric, as well as being an economic asset for the city, attracting tourists, businesses and their employees
<p>Implications of the plans and programmes review</p>	<p>Conserve and enhance designated and non-designated heritage assets and their settings.</p>
<p>Suggested IIA Objectives</p>	<p>To conserve and enhance the historic environment, including sites, features, landscapes and areas of historical, architectural, archaeological and cultural value in relation to their significance and their settings.</p>

26. Geology and Soils

The natural and man-made geological footprint of land

The variety of rocks, minerals, landforms, and natural processes, such as weathering, erosion and sedimentation that underlie and determine the character of the landscape and issues such as flood management and food-growing.

Geology and geodiversity

- 26.1** LB of Newham does not contain any Regionally Important Geological and Geomorphological Site (RIGS). The borough includes two Sites of Geological Interest agreed by LGP in January 2018: 1) Bow Creek Meanders, and 2) City of London Cemetery, Wanstead¹²⁸.

¹²⁸ London Geodiversity Action Plan 2019-2024, <http://londongeopartnership.org.uk/wp/wp-content/uploads/2019/04/LondonGAP-2019-2024.pdf>

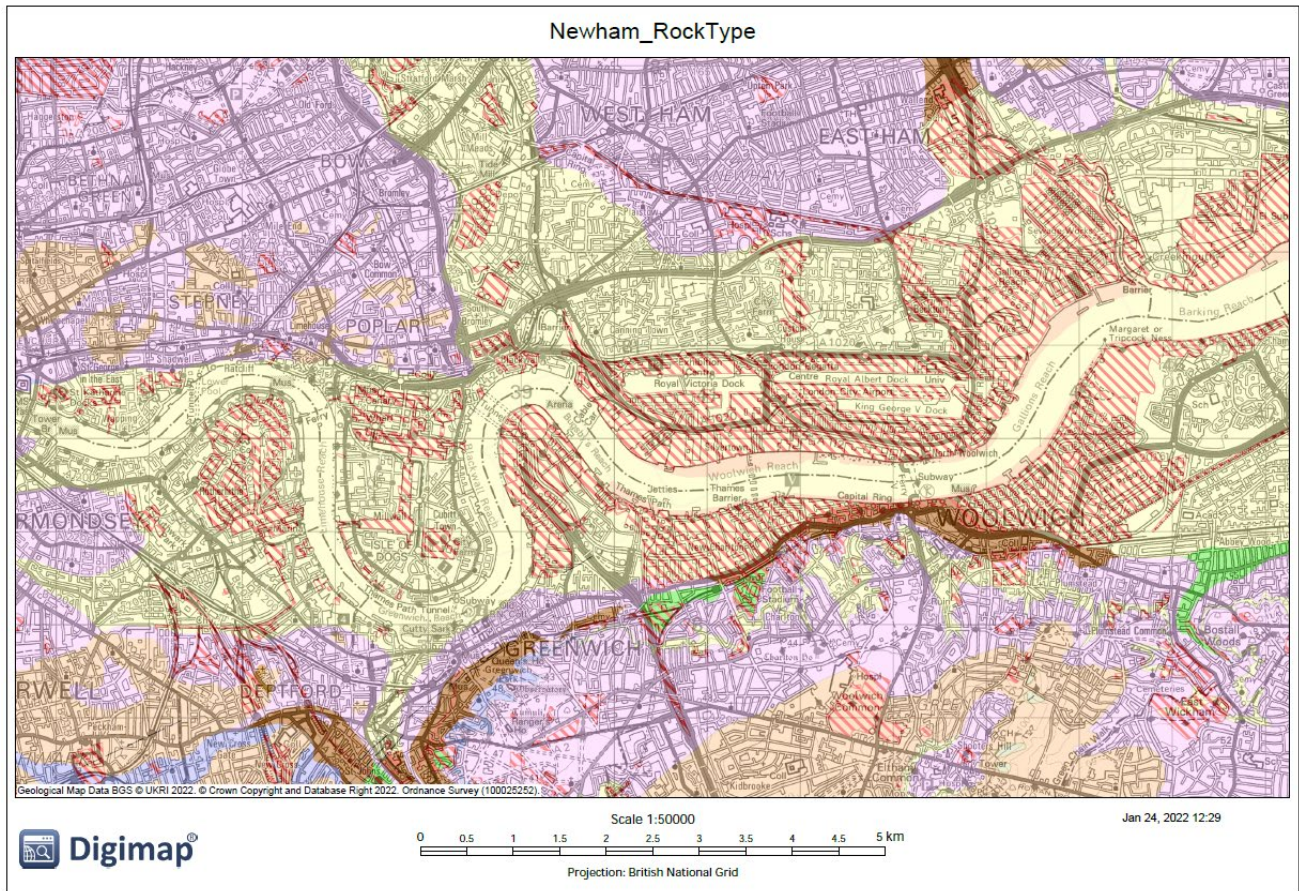


Figure 26.1 Geology of Royal Docks and Beckton Riverside

Source: Ordnance Survey, 2022

Soils

- 26.2** Soil is a fundamental natural resource and plays an important role in urban areas in supporting food growing, improving drainage and can help shape the quality of London's green spaces. Soil degradation over time from erosion, organic matter decline, pollution, compaction and direct loss caused by surface sealing by development can result in such important functions being lost. Pressure on soils is likely to increase in the future with expected population growth and needs to be managed carefully during construction and development to avoid further soil degradation.
- 26.3** Some soils in London have high levels of contamination from substances that are a legacy of former industry and the incorporation of rubble and waste into soils as a consequence of cyclical regeneration and renewal of London's built environment. This includes industrial land such as old gas works, chemical plants, oil refineries, petrol stations, metal works and munitions factories as well as former landfills, waste handling and disposal facilities. Contamination can also occur through the use of toxic materials by the transport industry, including fuel and oil spills from motor vehicles, and chemicals used for the preservation of wooden railroad ties.
- 26.4** Risk of increased soil degradation is often highest during construction of new developments or infrastructure, for example, through compaction from machinery use and risk of erosion when left exposed to wind and rain.

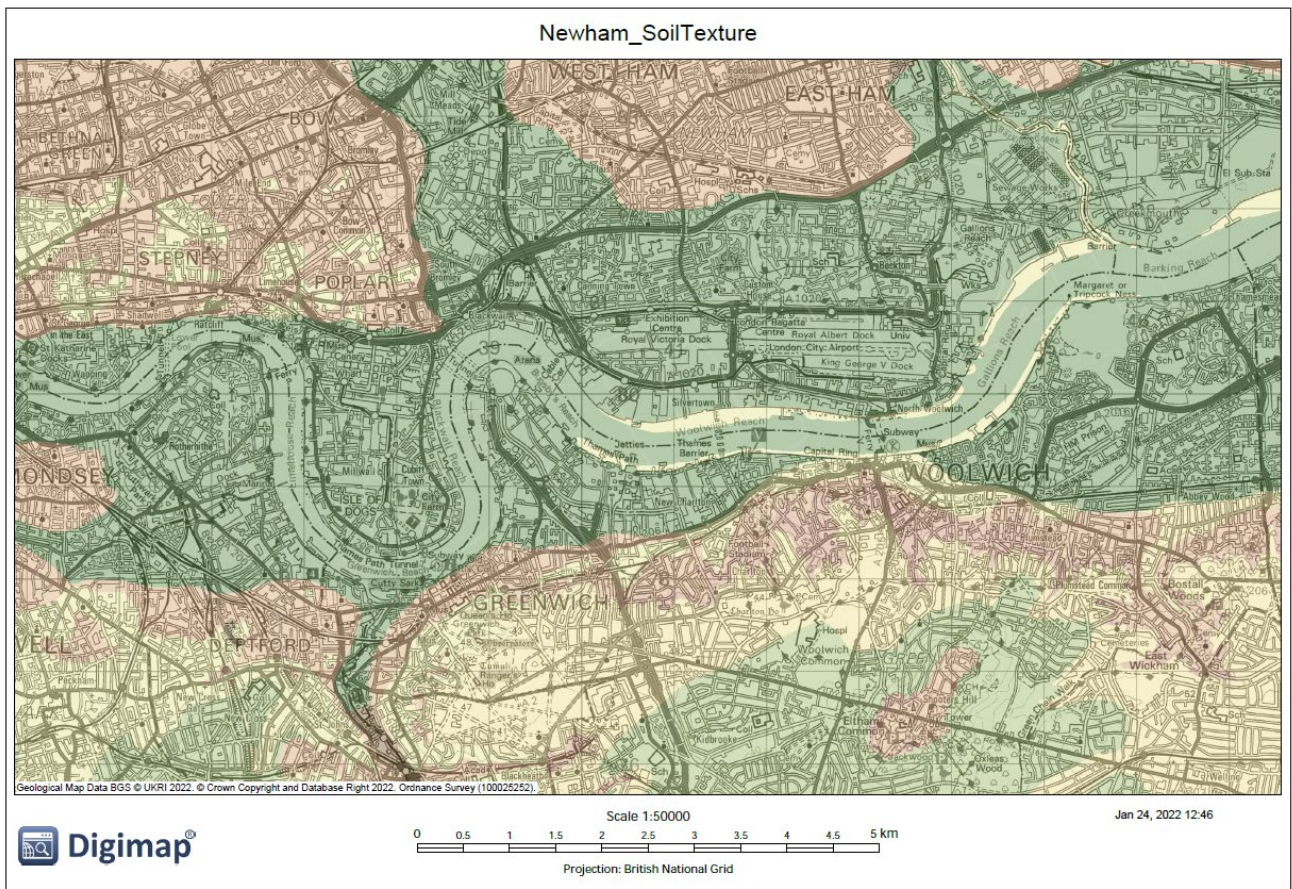


Figure 26.2 Geology of Royal Docks and Beckton Riverside

Source: Ordnance Survey, 2022

- 26.5** Some of London's larger brownfield sites may be contaminated by past land use practices. They can also often contain archaeological potential that could be addressed in tandem with understanding and responding to contamination issues. Contamination can pose a significant risk to human health and the environment; however not all land that is contaminated presents an environmental or human health risk. The real or perceived costs of remedial treatment of land can act as a significant barrier to successful regeneration, particularly if contamination issues and their solutions are not identified early and integrated into the redevelopment of a site. Risks and uncertainty regarding land contamination may inhibit the redevelopment of brownfield land and in some cases this may contribute to long term dereliction. In addition, the costs for remediation can reduce the contribution available for social infrastructure and other obligations such as affordable housing or even require a public subsidy before development can be contemplated. An assessment of the risks associated with developing contaminated or potentially contaminated land is therefore essential to inform decisions about the appropriate level of treatment, clean up or remediation that may be required.
- 26.6** The scale of redevelopment proposed for the area presents an opportunity to remediate land and improve water quality. Given the strategic scale of the planned redevelopment there is an opportunity for a strategic approach to land remediation. A joined-up approach to land remediation, and where appropriate the re-use of materials, would have many benefits from an environmental sustainability perspective and would help to speed up delivery of development.

Key issues	<ol style="list-style-type: none"> 1. Threat to London’s geodiversity as a result of increased demand for development 2. Modifications to the landscape and subsequently geomorphological processes 3. Remediation of contaminated land
Opportunities	<ul style="list-style-type: none"> • Focus on prevention and remediation of soil contamination • Co-ordinated approach to bring derelict land back into use with high abnormal costs
Implications of the Policy Review	<p>Identified need to focus on prevention and remediation of environmental damage, including land contamination. Need to increase efforts to reduce soil degradation and remediate contaminated sites.</p>

Suggested IIA Objectives	<p>To conserve London’s geodiversity and protect soils from development and over intensive use</p>
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27. Materials and Waste

Materials - new and used, suitable for the design, build, and operation of products, assets and infrastructure. These include primary raw materials such as aggregates and minerals as well as manufactured, reused, recycled and re-manufactured products

Waste – discarded materials substances or objects which have no further use in their present form that are prepared for reuse or recycling ahead of disposal.

Disposal is the only option for some hazardous or contaminated wastes materials.

27.1 In 2015, London produced just under 18 million tonnes (mt) of waste, comprising:

- 3.1mt household waste –17 per cent
- 5.0mt commercial/industrial waste –28 per cent
- 9.7mt construction, demolition and excavation waste –54 per cent

27.2 Undertaking waste research for the GLA in 2014, SLR Consulting¹²⁹ found that in 2012 London was:

- dealing with almost half of its own waste within its boundaries
- exporting 7.97mt of waste, of which 3.95mt (49per cent) went to landfill – 2.05 to landfill sites in the South East and 1.84mt to East of England

Wasteful economy increasing cost and environmental impact

27.3 Landfilling waste is expensive (£100 per tonne, £84 of which is the landfill tax rising to £86 from April 2017), unpopular with those receiving it (particularly in the South and South East) and increasingly a short-medium term solution. Landfills receiving London's waste are expected to close by 2025 and they are not being replaced.

¹²⁹ SLR, Global Environmental Solutions – Waste Arising Study Review for the Revised London Plan, 2014

27.4 The cost of managing London's waste is estimated to be more than £2b per year, including around £720m on managing waste in the control of local authorities.¹³⁰ Waste costs are expected to increase without a step change in waste reduction and performance improvement in recycling. London's waste presents significant economic and social opportunities. Managing more waste locally by optimising existing waste facilities and building new reuse and recovery facilities, can deliver benefits to local communities in the form of new products, employment and low carbon energy. Research¹³¹ undertaken for the GLA and the London Waste and Recycling Board (LWARB) estimate London transitioning to the circular economy through waste reduction and significant improvement in reuse and recycling performance could bring £7b of benefits to London and generate 12,000 new jobs by 2036.

Increasing demand for land putting waste sites at risk

27.5 Waste sites are safeguarded under London Plan policy, however many are at risk due to increasing demand for other land uses in particular for new housing, particularly in north and east London. Between 2010 and 2015, a total of 525ha of industrial land was transferred to other uses or 105ha per annum compared with the London Plan/SPG recommended rate of release of 36.6 ha per annum¹³². Loss of industrial land in excess of London Plan release benchmarks could have impact on long term strategic site availability for managing waste.

27.6 This is best understood by viewing the London waste map by overlaying the planned Housing zones and Opportunity Area at <https://maps.london.gov.uk/webmaps/waste/>.

¹³⁰ GLA Waste modelling 2016/17. Data available on request.

¹³¹ *Towards a circular economy*, LWARB 2015 and *Employment and the circular economy – job creation through resource efficiency in London*, LWARB 2015. Accessed at <http://www.lwarb.gov.uk/what-we-do/accelerate-the-move-to-a-circular-economy-in-london/>

¹³² AECOM "Industrial Land Supply and Economy Study 2015", published GLA March 2016

- 27.7** Across London some sites have already been lost to housing development with replacement capacity elsewhere yet to be found. Identifying and safeguarding sites for waste allows for local waste management solutions to be found, including opportunities for reorientation and intensification to maximise these assets and free up underutilised sites for other uses. Boroughs cannot be forced to use these, particularly if more affordable solutions exist elsewhere.
- 27.8** The Joint Waste DPD (Development Plan Document) has been developed by the four East London Waste Authority (ELWA) boroughs of LB Barking & Dagenham, Havering, Newham and Redbridge.¹³³ The plan proposes to safeguard a 7ha site at Beckton Riverside for a 'medium sized waste management site' to manage the additional level of waste apportioned to Newham in the London Plan. However, this plan is due to expire in 2021.

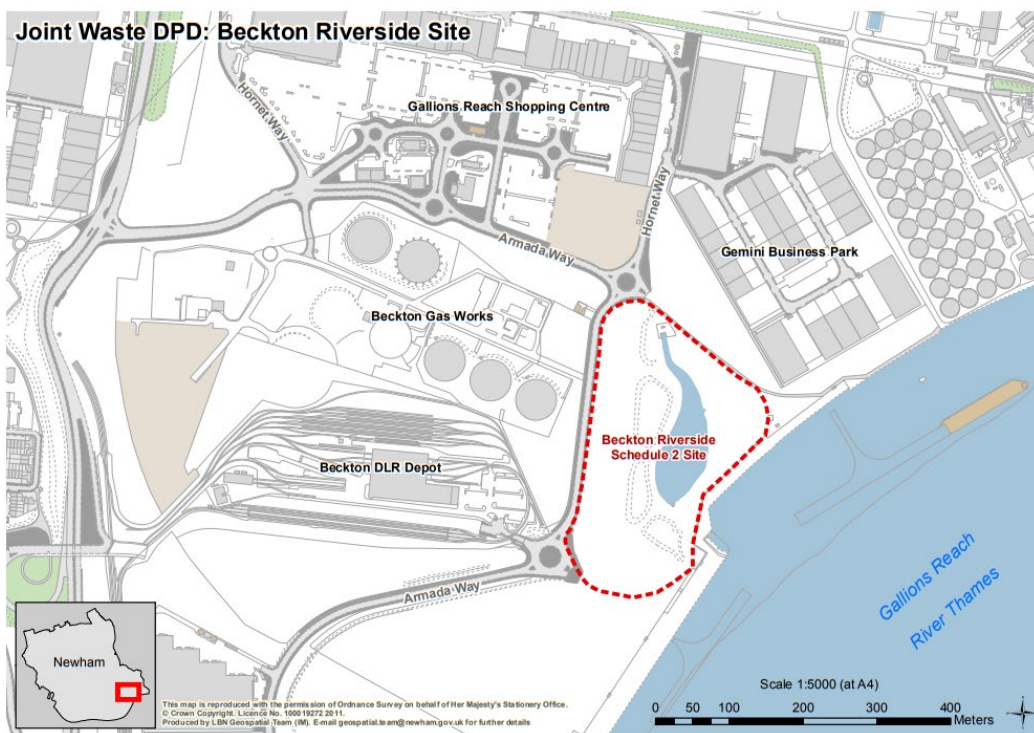


Figure 27.1 Joint waste development plan, Beckton Riverside site

¹³³ [Adopted Joint Waste DPD \(newham.gov.uk\)](http://www.newham.gov.uk)

27.9 In the OA there are a number of existing waste management and recycling facilities.¹³⁴

- Jenkins Lane Waste Management Facility - licensed for 362,000 tones
- Jenkins Lane Reuse and Recycling Centre - licensed for 110,000 tones
- Corbyn Recycling - licensed for 74,999 tones
- London City Metals limited - licensed for 74,999 tones
- Jighand Limited - licensed for 30,000 tones
- Waste Transfer Station, Silvertown - licensed for 25,000 tones
- Metro (London GB) Limited - licensed for 74,999 tones
- Recycled Material Supplies - licensed for 230,000 tones
- Mohawk Wharf Recycling Facility - licensed for 150,000 tones
- Thames Wharf - licensed for 75,000 tones
- Docklands Waste Recycling, Dock Road - licensed for 93,600 tones
- Dock Road Recycling Facility - licensed for 209,000 tones
- Brewsters, Dock Road - licensed for 275,000 tones
- G&B Compressor Hire, Dock Road - licensed for 75,000 tones

¹³⁴ <https://maps.london.gov.uk/waste/>

Low recycling performance against stretching recycling targets.

- 27.10** London's recycling rate for local authority collected waste has increased steadily from 2002 to 2012, reaching 30 per cent in 2012 and remaining therefor the past four years against a 2015 target of 45 per cent. This is the lowest in England (average 44per cent)¹³⁵. Recycling performance in flats is particularly low, estimated to be around 10 per cent.
- 27.11** London did not meet the Mayor's 45per cent municipal waste recycling performance by 2014/15 and will need significant improvement to meet targets to recycling 65 per cent by 2030.
- 27.12** London Plan Policy SI7 sets boroughs a target to meet or exceed the municipal waste recycling target of 65 per cent by 2030. The London Environment Strategy sets out a pathway to achieving municipal recycling target of 65 per cent by 2030 and outlines the Mayor's approach to municipal waste management in detail.
- 27.13** In London, the percentage of household waste recycled in each of the boroughs varies from 15% in Newham to 52% in Bexley. (Source: Quality of Life report, 2017)
- 27.14** Newham's household recycling rate dropped from 23% to 14% between 2011 and 2018, But in 2018/19 increased to 16.9% (this compares with London's rate of 33%).¹³⁶ Newham had the lowest 'household waste' recycling rate in England in 2016/17 at 14%. Only 17% of Newham's total recycled waste from households is green/organic waste.¹³⁷

¹³⁵ Local authority waste statistics: <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables>

¹³⁶ London data store (Household Waste Recycling Rates, Borough level)

¹³⁷ DEFRA Statistics on waste managed by local authorities in England in 2016/17

Waste Apportionment

- 27.15** Waste apportionment is a long-standing waste planning methodology which recognises that for any given area, waste arisings (the amounts of waste produced) do not always match the land available for waste management (processing, transferring, landfilling). This mismatch is particularly acute in London. Waste apportionment in the London Plan redistributes waste to be managed around the capital, in effect shifting the balance of waste management activity from central/inner to outer London.
- 27.16** The Government's policy approach to waste apportionment has changed recently. In October 2014, PPS10 (previous national guidance on waste) was rescinded and replaced by the National Planning Policy Framework (NPPF) and its attendant National Planning Practice Guidance (NPPG). For London, the NPPG's approach to waste is more subtle than that of the PPS, with apportionment no longer set as an absolute requirement. Boroughs still have to plan for the management of their waste but are instead advised to 'have regard' to London Plan apportionments. Boroughs' local waste plans will still need to be in general conformity with the London Plan. In addition, Government guidance now expects waste planning authorities to allocate sufficient land to deal with a much wider set of waste streams, seven in total (up from two) – LACW, C&I, CD&E, Hazardous, Waste Water, Low level Radioactive and Agricultural.

27.17 The London Plan sets out the apportionment for Newham in table 9.2. It also promotes the principle of a circular economy. A circular economy is one where materials are retained in use at their highest value for as long as possible and are then re-used or recycled, leaving a minimum of residual waste. London should move to a more circular economy as this will save resources, increase the resource efficiency of London's businesses, and help to reduce carbon emissions. The successful implementation of circular economy principles will help to reduce the volume of waste that London produces and has to manage. A key way of achieving this will be through incorporating circular economy principles into the design of developments as well as through Circular Economy Statements for referable applications.

Wharves

27.18 In the OA there are a number of released and safeguarded wharves.

- Mayer Parry Wharf - Safeguarded
- Thames Wharf - Released
- Peruvian Wharf - Safeguarded
- Royal Primrose Wharf - Expected Safeguard
- Manhattan Wharf - Expected Release
- Sunshine Wharf - Expected Release

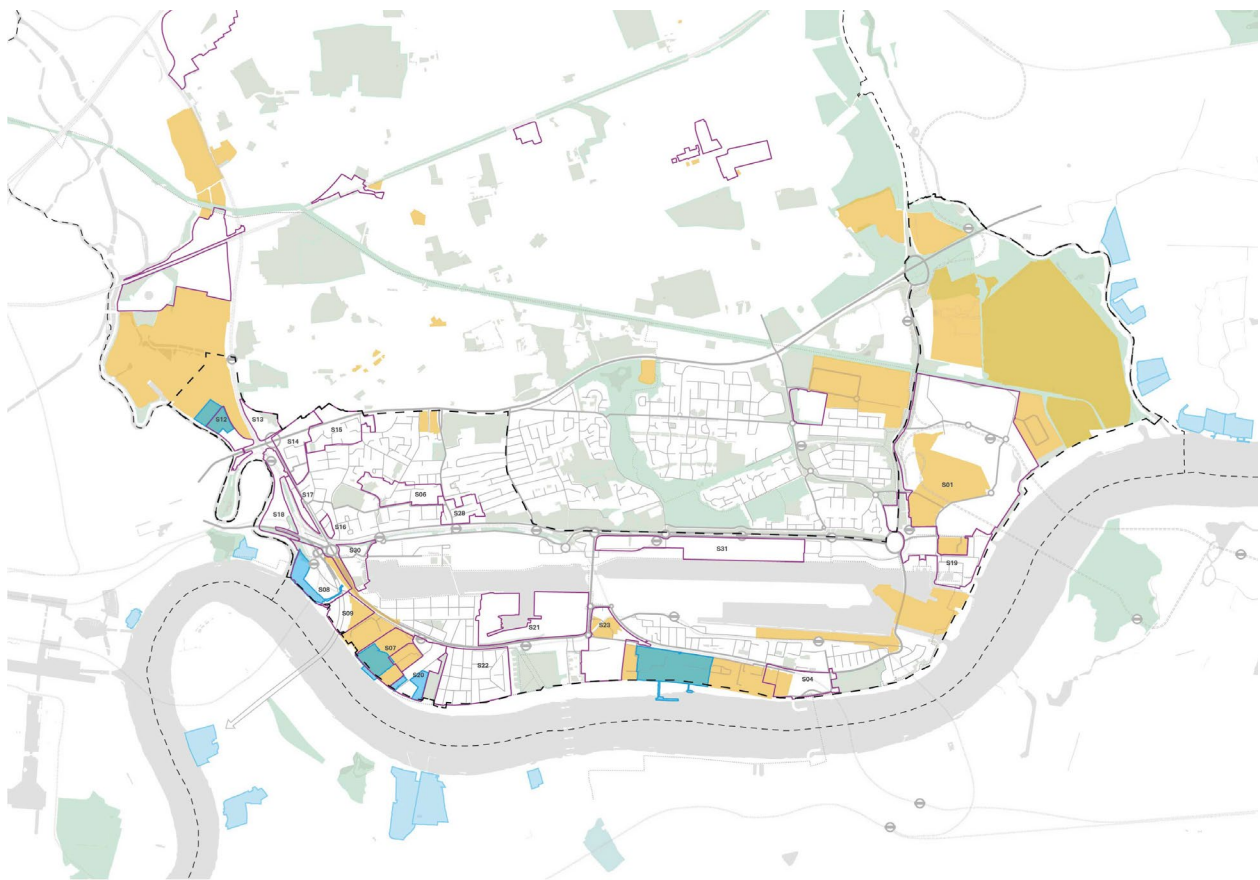


Figure 27.2 Wharves in the Royal Docks and Beckton Riverside OA

Source: GLA, 2019

Non-efficient movement of freight

27.19 Almost 90 per cent of all freight lifted in London is moved by road, with river (5.3 per cent), rail (4.3 per cent) and air (1.1 per cent) transport accounting for the remainder. However, rail and water transport are being increasingly used for the excavation of material from major transport infrastructure projects in London. Crossrail aims to ensure that 85 per cent of the excavated material is transported by rail or water. The Lee Tunnel sewerage project is also making use of river transport for excavated material as well as the Thames Tideway sewerage project¹³⁸.

¹³⁸ University of Westminster (2014) London Freight Data Report: 2014 Update. Prepared by Julian Allen, Michael Browne and Allan Woodburn for Transport for London. 1 December

27.20 Freight activity across London has been increasing. By 2014, LGV vehicle kilometres and HGV vehicle kilometres were 20 per cent and 4 per cent higher respectively than they were in 1994-1999. This growth is expected to continue¹³⁹.

27.21 Key factors leading to increased freight vehicle kilometre include:

- Increased business-to-customer (e.g. e-commerce and click and collect etc.) deliveries;
- Increased business-to-business (e.g. just-in-time) deliveries which has reduced stock-holding capacity;
- Reduced number of distribution centres due to release of industrial land to other uses;
- Relocation of freight / logistic hubs to areas with good highway accessibility e.g. motorway hubs / M25;
- Growth in sub-contracting / self-employment due to industry fragmentation of supply chain to create more flexible and agile supply chains;
- Lengthening of supply chains as a result of broadened customer demand for choice.

27.22 These trends are expected to continue, and unless other measures are undertaken to reduce freight vehicle kilometres (e.g. consolidation of practices, substitution of postal deliveries, new methods of delivery), London will see an increase freight traffic and a higher proportion of van traffic resulting in less efficient utilisation of road capacity, greater road congestion (and costs) and further worsening of air quality issues.

¹³⁹ University of Westminster (2014) London Freight Data Report: 2014 Update. Prepared by Julian Allen, Michael Browne and Allan Woodburn for Transport for London. 1 December

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Increasing pressure on waste sites and infrastructure including wharves in London to meet demand 2. Wasteful economy increasing disposal costs and climate change impact 3. Low municipal waste recycling rate and inconsistent recycling service provision falling short of stretching recycling targets 4. Likely increase in waste arisings in particularly construction materials to meet the needs of London’s growing population 5. Waste management during the construction phase of developments including demolition, so the number of waste sites is larger than discussed in the document. 6. Exempted facilities, which may be temporary sites including CDE waste transfer stations potentially
<p>Opportunities</p>	<ul style="list-style-type: none"> • Reducing waste and increasing recycling performance will lower London’s waste management bill and environmental impact • Managing waste more locally by optimising existing facilities and building new reuse and recovery facilities, will deliver benefits to local communities in the form of new products, employment and low carbon energy. • New waste facilities should be in a fully enclosed building/structure with a roof covering the waste

	management activities, and storage where practicable as per the London Plan recommendations and policy SI8D4.
Implications of the Policy Review	A need to apply principles of circular economy when aiming for waste reduction, reuse, re-manufacturing and recycling in all construction and operational practices.
Suggested IIA Objectives	To keep materials at their highest value and use for as long as possible. To significantly reduce waste generated and achieve high reuse and recycling rates

28. Noise and Vibration

Unwanted sound and vibration that causes disturbance

- 28.1** There is no single definition of noise. Noise can be defined as unwanted sound. Ironically, it is often referred to as the silent polluter in that its effects can be hard to establish. This is because the problem is psychological: differences in perception such as the type or loudness of music.
- 28.2** Noise disturbance can be associated with health impacts such as sleep disturbance, stress, anxiety, high blood pressure, poor mental health in adults and school performance and cognitive impairment in children. The adverse impacts of that stress are clearly documented, resulting in higher rates of cardio-vascular disease and deteriorating mental health.
- 28.3** A level of 57dB represents the 'onset of significant community annoyance' and in London alone two million people (42 per cent of the population) are exposed to more than 55dBLden¹⁴⁰. Different groups of people are affected differently, for example younger people are differentially affected by noise, particularly at night, as they spend more time in bed than older people.
- 28.4** Three types of noise are defined in the Noise Policy Statement for England (NPSE) (March 2010). These are:
- environmental noise - which includes noise from transportation sources;
 - neighbour noise - which includes noise from inside and outside people's homes; and
 - neighbourhood noise - which includes noise arising from within the community such as industrial and entertainment premises, trade and business premises, construction sites and noise in the street.

¹⁴⁰ GLA Economic Evidence Base, 2016

28.5 London is becoming an increasingly noisy city. The main source of ambient noise in London is road traffic, followed by rail. In urban areas, most vehicle noise comes from engines because, at low speed, engine noise dominates over the noise generated by tyres and road surfaces. However other activities such as construction, busy high streets, or a greater vibrant night time economy will also impact noise levels. Table 28.1 identifies the number of people exposed to roadside and railway noise above the threshold in London in 2011.

Figure 28.1 Number of people exposed to roadside and railway noise above threshold in London, 2011

Type	>55dB	>65dB	>75dB
Roadside	2,378,200	1,027,200	99,200
Roadside – night	1,665,400	649,400	900
Railway	252,200	158,100	15,200
Railway – night	388,700	95,100	6,400

Source: Defra

28.6 Respondents to the TfL Perceptions of the Travel Environment Survey (2012) were asked to consider noise generated from different transport modes in their area, the extent to which they are disturbed by transport-related noise and the impact this has on their quality of life. In general, satisfaction with the level of transport related noise has shown a steady increase over recent years; achieving a mean satisfaction rating of 76 out of 100 in 2012. There has also been a significant increase in the proportion of Londoners giving a very high satisfaction rating; this is up from 31 per cent in 2011 to 35 per cent in 2012. However, the most common cause of noise disturbance remains road traffic, with 41 per cent of Londoners disturbed by this in 2012.

- 28.7** The Environmental Noise (England) Regulations 2006 require Defra to produce noise action plans for large urban areas. Defra established a procedure by which boroughs could approach them to designate quiet areas in their boroughs. Consultation with the Mayor is not required so the Mayor would be unaware if any boroughs approach Defra to define quiet areas. Providing residents with quiet areas will reduce stress levels and improve mental health and it will be a function of the planning system to ensure that any designated or candidate quiet areas retain this characteristic as new development comes forward.
- 28.8** Changes of land uses will result in different patterns of noise. Between 2001 and 2015 1,306ha of industrial land was lost (16 per cent of the total) to other uses (residential, offices, retail, leisure etc)¹⁴¹. These newer uses are often less ‘noisy’ than what was there previously. However, complaints about noise tend to rise due to the proximity of competing uses. Considering the environment into which new development will be located is an important function of the planning system and noise will obviously be a key determinant. Solutions such as triple glazing and sealed windows may ‘solve’ the problem but could offer poor residential amenity to new residents. The NPPF (March 2012, para 123) is clear that existing businesses should not “have unreasonable restrictions put on them because of changes in nearby land uses since they were established.”
- 28.9** London City Airport sits within the Royal Docks and Beckton Riverside OA. The London plan makes it clear that support for additional capacity is also dependent on the aviation industry meeting its environmental costs in respect of noise, air quality and climate change, while also contributing to a significant increase in the numbers of new jobs and homes.

¹⁴¹ AECOM Industrial Land Supply and Economy Study 2015, published GLA March 2016

<p>Key issues</p>	<ol style="list-style-type: none"> 1. Noise from London City Airport 2. Parts of the population are exposed to roadside and railway noise that exceeds the threshold 3. Increasing noise levels from night time economy, freight movement and deliveries associated with mixed use development 4. Lack of quiet and tranquil places for relaxation and enjoyment
<p>Opportunities</p>	<ul style="list-style-type: none"> • Reduce number of people exposed to high levels of noise from roads, railways and aircrafts • Use of insulation to reduce noise disturbance • Minimise locating noisy activities adjacent to noise sensitive receptors
<p>Implications of the plans and programmes review</p>	<p>A need to minimise noise and vibration levels and the number of people exposed to high levels of noise from development, activities and use.</p>

<p>Suggested IIA Objectives</p>	<p>To minimise noise and vibration levels and disruption to people and communities across London and reduce inequalities in exposure</p>
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29. Key issues

This chapter provides a summary of the key issues identified across sustainability topics and their likely evolution in the absence of the new London Plan.

29.1.1 Key issues for the Royal Docks and Beckton Riverside OAPF are summarised in **Figure 29.1**.

Figure 29.1 Key issues

Topic	Key issues	Evolution in the absence of the London Plan
Demographic Change	<ul style="list-style-type: none"> • Significant anticipated increase in local population of 120% • The changing spatial distribution of the population and growth with Beckton and Royal Docks being home to the greatest level of population by 2041 • Ageing and more diverse population especially the increases in the over 40 and over 65 populations. • Uncertainty of the composition of the population, including migration patterns which is expected to fluctuate over the plan period. 	Increase in population and its composition will lead to increased pressure and competition for land for different types of development.
Social Integration and Inclusion	<ul style="list-style-type: none"> • Increasingly diverse population by ethnicity • Multiple Deprivation overall is high compared to London and England • High rates of child poverty especially in Canning Town 	Benefits / dis-benefits of growth will affect groups of people differently.

Topic	Key issues	Evolution in the absence of the London Plan
	<ul style="list-style-type: none"> • High proportion of single parent families • Population churn is erratic and could impact community cohesion and social capital 	
Health and Health Inequalities	<ul style="list-style-type: none"> • Increasing health inequalities across the population • Lower than London average life expectancy • High mortality rate from circulatory diseases and diabetes, poor cancer survival rates and high incidence of respiratory illnesses and mental health problems • Childhood obesity is an issue within the OAPF area • Exposure of the population to harmful levels of air pollution across the OAPF boundary • High rates of physical inactivity • Open space deficiency • High rates of COVID-19 	<p>Obesity is a growing problem and is likely to continue.</p> <p>Increased pressure on the health sector to deal with complex health needs.</p>
Crime, Safety and Security	<ul style="list-style-type: none"> • Increased threat of major incidents and unplanned events • Perceptions of lack of safety • Fear of crime creating barrier to activities leading to increased social isolation 	<p>Social isolation of some groups are likely to increase as their perception or fear of crime or anti-social behavior will make them reluctant to go out and use facilities,</p>

Topic	Key issues	Evolution in the absence of the London Plan
	<ul style="list-style-type: none"> • Vulnerability of different groups of people at greater risk of crime • More vibrant night-time economy leading to increased risk of crime 	<p>services, including shops, green spaces, libraries, etc or the public transport, particularly at certain times of day.</p>
Housing	<ul style="list-style-type: none"> • Local housing data is not up to date • Housing targets and need have increased significantly, and delivery will have to be escalated in order to meet requirements • Great disparity between household income and property prices illustrating need for genuinely affordable housing • Increasing costs of housing relative to wages • London Plan SHMA establishes greatest need for low cost rent and much lower need for intermediate affordable housing. • Overcrowding an issue in Newham 	<p>The challenges to meet housing demand (including total requirements, size, type, tenure) are likely to increase.</p>
Sustainable Land Use	<ul style="list-style-type: none"> • Inability for London to accommodate required growth within its boundaries • Unsustainable patterns of development within and across London's boundaries • Higher densities development 	<p>Pressure for development and competition between different uses will increase, potentially leading to unsustainable patterns of use.</p>

Topic	Key issues	Evolution in the absence of the London Plan
	<ul style="list-style-type: none"> • Competing pressures for land impacts on ability to provide social, physical and environmental infrastructure • Non-efficient use of land • Integration of land use and transport • Spatial impact and consequential development pressures resulting from decision on London’s future airport capacity 	
Connectivity	<ul style="list-style-type: none"> • Poor orbital connectivity by all modes of public transport in outer London • Poor connectivity across the River Thames in east London • Reduced transport connectivity across London as a result of congestion and overcrowding on services and roads • Reduced connectivity across London by walking as a result of congestion and overcrowding on pavements and footpaths • Increasing airport capacity will impact on the spatial and economic fabric of the city • Deficiencies in access to open space • Poor connectivity to green infrastructure for all 	<p>The issues of poor connectivity are likely to deteriorate further as a result of increased development or pressure on the transport system or public realm.</p>

Topic	Key issues	Evolution in the absence of the London Plan
Accessibility	<ul style="list-style-type: none"> • Poor design of the built environment • Barriers to using public transport 	Accessibility of the built environment and public transport may not improve or could deteriorate.
Economic Competitiveness	<ul style="list-style-type: none"> • Between 1971 and 2015 manufacturing has increased significantly in the area. • There are high levels of industrial activity especially within the logistics, construction and manufacturing sectors. • Tourism is a key economic component in Greenwich especially centred around Maritime Greenwich. • Business start-ups are very high generally especially within Greenwich. • Business survival rates are very good especially in Bexley which outstrips the rate for London up to and beyond five years. • Co-location development on industrial land could jeopardise the integrity and operation of 24-hour industrial activity. • Co-location and other development could negatively impact industrial land values making industrial 	Without investment in London's infrastructure and land use policies to ensure the sufficient provision of employment and business space in terms of type, location and cost, there is a threat to London's position as a leading global city as well as the ability of local economies to serve local populations.

Topic	Key issues	Evolution in the absence of the London Plan
	<p>intensification development less viable.</p> <ul style="list-style-type: none"> • Low industrial rental values limits viability for industrial intensification development generally 	
Employment	<ul style="list-style-type: none"> • Average salaries for Newham working age population is considerably lower than the London average • Unemployment rates in Newham are relatively high compared with the London average, yet unemployment rates have fallen faster than the London average • Income inequality in Newham is worse than the London average 	<p>Disparities between wages and cost of living and lack of diversity in jobs could be a further threat to the resilience of the local economy and objectives to provide opportunities for all.</p> <p>There may also be impacts on the local area's competitiveness in terms of its ability to attract a flexible labour force.</p>
Education and Skills	<ul style="list-style-type: none"> • Insufficient school places to meet growing needs • Large variations in educational performance across London • Lack of support for transitions from education to work, especially for young women • Maintaining London's status as an international city of learning, research and development 	<p>Inability of Londoners to access jobs may compromise London's economic competitiveness</p> <p>Lead to increased levels of social deprivation and poverty</p>

Topic	Key issues	Evolution in the absence of the London Plan
Culture	<ul style="list-style-type: none"> • Loss of pubs, cinemas, live music and other cultural venues • Inequality in access to cultural venues • Low levels of participation • Regulation/bureaucracy stifles creativity / talent development • Lack of community led engagement in planning and development schemes for local area • Despite the wide ranging economic and social benefits it brings, culture is a low priority on national and local development agendas. • Lack of funding opportunities / budget reductions 	<p>Continued loss of culture infrastructure leading to a lack of provision and participation.</p>
Air Quality	<ul style="list-style-type: none"> • High levels of NOx, PM10 and PM2.5 emissions from road transport • Little to no predicted reduction in PM10 and PM2.5 emissions from road transport between 2013 and 2030 • London is not compliant with legal limit values for NO2 • Large numbers of the population are exposed to levels of NO2 above the EU limit value • Exposure to poor air quality is unequal across London and some 	<p>Without additional measures to tackle the issue of air quality, London will continue to be non-compliant with legal limits with higher levels of exposure to pollutants.</p> <p>Increasing economic growth and development will lead to increased emissions from construction, buildings, car</p>

Topic	Key issues	Evolution in the absence of the London Plan
	<p>areas are more exposed to poor air quality than others</p> <ul style="list-style-type: none"> • The health impacts of air pollution include: an increased risk of early death as well as whole-life impacts on lung function, lung health and increased susceptibility to cardiovascular diseases, respiratory cancer, stroke, asthma and COPD. 	<p>use and congestion leading to localized air quality issues.</p>
Climate Change	<ul style="list-style-type: none"> • London is not currently meeting the Mayor's CO2 emission target of 60per cent reduction of 1990 levels by 2025 • Transport will continue to contribute significantly to CO2 emissions • Inefficient existing building stock • CO2 emissions from buildings will reduce by floorspace but continue to rise as more housing and employment space is provided 	<p>The Mayor's CO2 emissions targets are likely not be met if additional reduction measures are not put in place by the London Plan and other Mayoral strategies.</p> <p>Climate change effects will continue including increased temperatures, potential droughts, severe storms and flooding.</p> <p>The effects of climate change will not be experienced equally among London's population and are likely to increase existing inequalities.</p>

Topic	Key issues	Evolution in the absence of the London Plan
Energy Use and Supply	<ul style="list-style-type: none"> • Relatively high and ineffective use of fossil fuels contributing towards the OA's and London's overall GHG emissions and air pollution. • Insufficient low carbon energy supply • High number of residents of Newham in fuel poverty. • Energy-inefficient building stock & transport. • Unutilised local energy resources including sources of waste heat • Increasing electricity demand and need to manage peak electricity demand 	<p>Without additional measures energy use is likely to increase – reducing London's sustainability</p>
Water Resources and Quality	<ul style="list-style-type: none"> • Need to reduce per capita water consumption • Need to plan for and deliver additional new water resources • Need to improve the quality of water in London's waterbodies • Need to improve the physical form of London's waterbodies 	<p>Increase in demand for water and deterioration of water quality.</p>
Flood Risk	<ul style="list-style-type: none"> • Risk of flooding to property and people from river, surface water, tidal, sewer, ground water and reservoir • Increase in run-off and potential contamination and disruption of flows 	<p>Without the London Plan , the strict criteria it sets out, and the weight it attaches to London's flood management plans delivery and investment, that the number of people /</p>

Topic	Key issues	Evolution in the absence of the London Plan
	<ul style="list-style-type: none"> • Necessary infrastructure needs to be planned for, funded and implemented to support growth and development • New development should avoid areas of flood risk, following the sequential approach. Opportunities to reduce flood risk through new development should be sought and implemented. 	<p>properties at risk will increase.</p>
<p>Natural Environment and Natural Capital</p>	<ul style="list-style-type: none"> • Loss of biodiversity and reduced ecological resilience as a result of increased pressure for development and intensification of existing development • Decrease in Areas of Deficiency in Access to Nature and increased recreational pressure on existing habitats and green spaces • Impact of climate change and threat of new pests and diseases • Consider what social infrastructure is required to ensure that there is a sufficient supply of good quality sports and recreation facilities in the OAPF to meet the needs of existing and future residents. Both formal and informal facilities should be provided, to encourage physical activity and deliver a range of social, 	<p>Increased development pressure will reduce the amount of green space available and reduce the quality of existing - with no funding / investment).</p> <p>There will be an increase in air pollution hence causing indirect negative effects on air and water quality leading to deterioration of natural and built environment.</p>

Topic	Key issues	Evolution in the absence of the London Plan
	<p>health and wellbeing benefits to communities.</p>	
<p>Townscape and Landscape</p>	<ul style="list-style-type: none"> • Poor quality public realm in some parts of London which can discourage active travel • Deficiencies in open spaces in some parts of the city • Risk of poor design, lack of legible neighbourhoods and sense of place 	<p>Design challenges of the built / natural environment / public realm may not be consistently addressed.</p>
<p>Historic Environment</p>	<ul style="list-style-type: none"> • Heritage assets at risk from neglect, decay, inappropriate development and air pollution • Views and vistas to heritage assets are at risk from increased development pressures • Potential harm to the significance of heritage assets and wider historic environment through inappropriate development • 	<p>Heritage assets are likely to continue to be preserved through legislation. However it is their settings which will continue to be most at risk from increased pressure for development.</p>
<p>Geology and Soils</p>	<ul style="list-style-type: none"> • Threat to London's geodiversity as a result of increased demand for development • Modifications to the landscape and subsequently geomorphological processes • Remediation of contaminated land 	<p>Greater impacts on geology and soils from development</p> <p>More innovative solutions to the reduce the impact of the costs of remediation are also needed</p>

Topic	Key issues	Evolution in the absence of the London Plan
Materials and Waste	<ul style="list-style-type: none"> • Increasing pressure on waste sites and infrastructure including wharves in London to meet demand • Wasteful economy increasing disposal costs and climate change impact • Low municipal waste recycling rate and inconsistent recycling service provision falling short of stretching recycling targets • Fragmented waste governance resulting in inconsistent recycling service provision and performance across London • Likely increase in waste arisings in particularly construction materials to meet the needs of London’s growing population 	<p>The amount of materials and waste produced is likely to increase with increased population / growth and no additional measures to help reduce it.</p>
Noise and Vibration	<ul style="list-style-type: none"> • Parts of the population are exposed to roadside and railway noise that exceeds the threshold • Increasing noise levels from night time economy, freight movement and deliveries associated with mixed use development • Lack of quiet and tranquil places for relaxation and enjoyment 	<p>There is likely to be an increase in the population exposed to noise or noise related activity.</p>

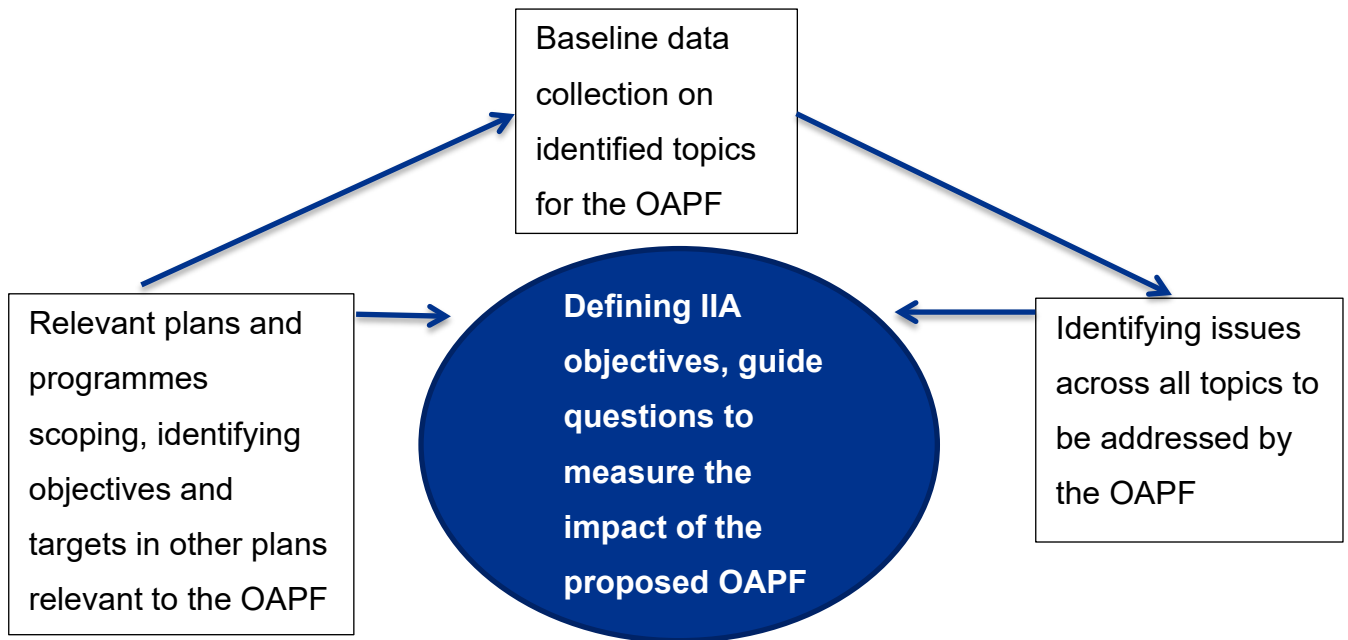
30. Integrated Impact Assessment Framework (Task A4)

This chapter introduces the IIA assessment framework, against which the sustainability of the proposed policies within the new London Plan will be tested. It is structured around sustainability themes and complemented with the assessment guide questions which have been colour coded to represent different elements of the IIA assessment.

30.1 Objectives and questions

- 30.1.1 An important element of the IIA process is the determination of IIA objectives. An objective is a statement of what is intended, specifying a desired direction of change. The achievement of objectives is normally measured by using indicators and need to be specific and measurable. IIA objectives are used to show whether the objectives of the Royal Docks and Beckton Riverside OAPF are beneficial for the achievement of sustainable development, to compare the sustainability effects of alternatives, or to suggest improvements.
- 30.1.2 An objectives-led approach is considered to be most appropriate to assessing the London Plan as it enables assessment of the extent to which each aspect of the London Plan contributes towards delivery of each objective as opposed to just meeting prescribed targets. Thus a more qualitative approach is adopted that allows for a better identification and description of effects rather than attempting to assign a quantitative value, which is more limited and restrictive at this strategic level.
- 30.1.3 IIA objectives align with wider international, national and local environmental, health, social and economic policy objectives and form the basis of what the London Plan and other Mayoral strategies will be appraised against. A diagram showing the process of the determination of IIA objectives is presented in **Figure 30.1**.

Figure 30.1 The process of the determination of IIA objectives.



30.1.4 It is intended that the IIAs for all Mayoral strategies will be assessed against the same IIA objectives, with guide questions being different and relevant to the strategy being assessed. During the preparation of each of the individual strategies, it may be determined that particular objectives are scoped out as they are deemed as not being applicable to the scope and intent of the strategy. In addition, the order of the IIA objectives may vary between the IIAs of the strategies to reflect the structure of the baseline for that particular strategy.

30.1.5 Alongside each draft IIA objective is a set of guide questions that will be used to assess whether the London Plan will help to achieve or conflict with the objective. These may be revised slightly as the strategy evolves, but will be based on the draft questions presented below in **Figure 30.3**.

30.1.6 Guide questions are coloured to indicate which of the elements of the IIA the question addresses:

- **Green = SEA**
- **Purple = EQIA**
- **Orange = HIA**
- **Red = HRA**
- **Blue = SA (Economic)**
- **Yellow = CSIA**

30.1.7 A total of 24 IIA objectives have been derived for the assessment of the London Plan . **Figure 30.2** below shows the link between SEA Directive issues and IIA objectives (detailed list of the IIA objectives is presented in **Figure 30.3**).

Figure 30.2 Link between SEA Directive Issues and IIA objectives

SEA Directive Issue	IIA Objectives
Material Assets	5, 6, 23
Climatic Factors	14, 15, 16, 17, 19
Biodiversity	20
Fauna	20
Flora	20

Water	18
Soil	22
Air	14
Cultural heritage, architectural and archaeological heritage	13, 21
Landscape	7, 21
Population	2, 3, 9, 10, 12
Human health	3, 4, 8, 24

30.1.8 **Figure 30.3** also shows the link between the 24 IIA objectives and the relevant SDGs.

Figure 30.3 Integrated Impact Assessment framework

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
Equality and Inclusion	1.To make London a fair and inclusive city where every person is able to participate, reducing inequality and disadvantage and addressing the diverse needs of the population	<ul style="list-style-type: none"> • Reduce poverty and social exclusion? • Promote a culture of equality, fairness and respect for people and the environment? 	<p>SDG 1- Poverty End poverty in all its forms everywhere</p> <p>SDG 2- Hunger End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p>
Social Integration	2.To ensure the OAPF area has socially integrated communities which are strong, resilient and free of prejudice	<ul style="list-style-type: none"> • Promote an inclusive design approach ensuring a barrier free environment for all, especially disabled people? • Provide opportunities for people to choose an active, fulfilling life? • Provide opportunities for Londoners to actively participate in the city’s life, decision making and communities? 	<p>SDG 5- Gender Achieve gender equality and empower all women and girls</p> <p>SDG 10 - Inequalities</p>

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Provide opportunities for Londoners of every background to connect? 	Reduce inequality within and among countries
Health and health Inequalities	3.To improve the mental and physical health and wellbeing of local residents and to reduce health inequalities across the area and between communities	<ul style="list-style-type: none"> • Improve access and equity of access to health and social care services and facilities? • Reduce differentials in life expectancy and healthy life expectancy across London? • Promote increases in physical activity, particularly in areas of health and social deprivation? • Reduce inequalities in levels of physical activity? • Improve the physical and mental health and wellbeing of communities? 	SDG 3 - Health Ensure healthy lives and promote well-being for all at all ages

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Reduce inequalities in physical and mental health and wellbeing? • Support the provision of quality, affordable and healthy food? 	
Crime, safety and security	4. To contribute to safety and security and the perceptions of safety	<ul style="list-style-type: none"> • Reduce levels of crime? • Reduce the opportunity for crime and anti-social behaviour? • Create a travel environment that feels safe to all users during the day time and night time? • Increase security and resilience to major incidents? • Improve perceptions of safety and fear of crime to help remove barriers to activities leading to reduced social isolation? 	<p>SDG 16 – Peace, justice and strong institutions</p> <p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p>

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
Housing Supply, Quality, Choice and Affordability	5. To provide a quantum, type, quality and tenure of housing (including specialist and affordable provision) to better meet demographic change and household demand and the needs of the community	<ul style="list-style-type: none"> • Help to facilitate the delivery of house building that meets the needs of Londoners? • Reduce homelessness and overcrowding? Increase the range and affordability of housing? • Promote accessible and adaptable homes, improving choice for people who require them? • Improve insulation and energy efficiency in housing to reduce fuel poverty and ill-health? • Provide housing that encourages a sense of community and enhances the amenity value of the community? 	SDG 11 – Cities and communities Make cities and human settlements inclusive, safe, resilient and sustainable

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
Sustainable Land Use	6. Make the best and most efficient use of land so as to support sustainable patterns and forms of development?	<ul style="list-style-type: none"> • Make the best use of land through appropriate development on brownfield sites and use of existing transport network? • Ensure that higher densities development does not adversely impact on different groups of people? • Integrate land use and transport? • Promote regeneration and provide benefits for existing communities? 	SDG 15 – Life on land Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Design	7. To create attractive, mixed use neighbourhoods, ensuring new buildings and spaces are appropriately designed that promote and enhance existing. Nurturing a sense of place and distinctiveness, reducing the need to travel by motorized transport	<ul style="list-style-type: none"> • Conserve and enhance the townscape/cityscape character? • Create and maintain a safe and attractive public realm which encourages people to walk and cycle? 	SDG 11 – Cities and communities Make cities and human settlements inclusive, safe, resilient and sustainable

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Help to make people feel positive about the area they live in and promote social integration? • Encourage an inclusive design approach taking into account the needs of a variety of users • Help to improve the wider built environment and create a sense of place and ‘vibrancy’? • Promote high quality design and sustainable design and construction methods? • Improve legibility and ease of use of the built environment for people with sensory or cognitive impairments? • Retain the spatial diversity of communities? 	

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
Accessibility	8.To maximise accessibility for all in and around London	<ul style="list-style-type: none"> • Improve accessibility to all public transport modes? • Increase equality of access to services and facilities? • Improve links between areas, neighbourhoods and communities? 	SDG 11 – Cities and communities Make cities and human settlements inclusive, safe, resilient and sustainable
Connectivity	9.To enhance and improve connectivity for all to, from, within and around the area and increase the proportion of journeys made by sustainable and active transport modes	<ul style="list-style-type: none"> • Improve connectivity by public transport in outer London? • Improve connectivity across the River Thames by all modes of transport, particularly in east London? • Reduce traffic volumes and congestion on roads across all parts of London? 	SDG 11 – Cities and communities Make cities and human settlements inclusive, safe, resilient and sustainable

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Reduce congestion on public pavements and footpaths, especially in central London? • Reduce severance and consequent inequalities for those groups who are more greatly affected by severance (e.g. people on low incomes, disabled people, children and young people, older people and people dependent on walking and using public transport for travel)? • Encourage a modal shift to more sustainable forms of travel as well as encourage greater efficiency (e.g. through car-sharing)? • Reduce the overall need for people to travel by improving their access to 	

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		the services, jobs, leisure and amenities in the place in which they live? • Encourage active travel by creating safe, attractive routes?	
<u>Economic</u>			
Economic competitiveness and employment	10. To maintain, strengthen and support the local economy, recognising the existing and historical economic base and building upon this as a priority.	<ul style="list-style-type: none"> • Help maintain London as an internationally competitive city? • Increase London's productivity? • Facilitate the provision of the right type of employment land and floorspace in the right place to ensure that London remains economically competitive? 	SDG 8 – Work and economic growth Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Help generate satisfying, secure and rewarding new jobs? • Create healthy, productive workplaces? • Help to provide employment opportunities in the most deprived areas, particularly to disadvantaged groups, and stimulate regeneration? • Minimise barriers to employment (e.g. transport, financial, childcare)? • Help reduce overall unemployment, particularly long-term and youth unemployment? • Improve the resilience of business and the economy? • Help to diversify the economy? 	<p>SDG 9 – Industry innovation and infrastructure</p> <p>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p>

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Encourage business start-ups and support the growth of businesses, particularly SMEs? • Enable people with physical and mental health conditions and disabilities to stay in employment? • Support social enterprise, voluntary and community sectors? • Support small, local retail offers? • Support working families? 	
Infrastructure	11. To ensure that provision of environmental, social and physical infrastructure is managed and delivered to meet population and demographic change in line with sustainable development and to support economic competitiveness	<ul style="list-style-type: none"> • Ensure that provision of environmental, social and physical infrastructure support economic competitiveness and housing delivery? 	SDG 8 – Work and economic growth Promote sustained, inclusive and sustainable economic growth, full and

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Unlock land that has capacity for housing development? • Provide accessible infrastructure to connect new housing developments to key services? • Ensure equity of access to environmental, social and physical infrastructure? 	productive employment and decent work for all
Education and Skills	12. To ensure the education and skills provision meets the needs of area's existing and future labour market and improves life chances for all	<ul style="list-style-type: none"> • Help to improve learning and the attainment of skills to the right employment opportunities? • Ensure provision of sufficient school places to meet growing needs across London? • Support transitions from education to work? 	SDG 4 - Education Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all SDG 8 – Work and economic growth

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Support London’s status as an international city of learning, research and development? • Support adult education to improve social mobility and life chances for all ages? • Support early years education and support, particularly in areas of deprivation? • Encourage education and training that meets the needs of business, including vocational training? 	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Culture	13. To safeguard and enhance the area’s cultural offer, infrastructure, heritage, natural environment and talent to benefit all Londoners while delivering new activities that strengthen and build strong and inclusive communities.	<ul style="list-style-type: none"> • Improve accessibility for all to cultural venues? • Improve participation by all in cultural activities and support cultural 	SDG 12 – Consumption and production

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<p>activities that promote social integration?</p> <ul style="list-style-type: none"> • Help to maintain and increase appropriate cultural facilities, both for consumption and production to sustain and strengthen a growing sector Enable Londoners to develop skill and take up careers in the creative industries • Provide access to affordable cultural activities in areas of deprivation? 	Ensure sustainable consumption and production patterns
<u>Environment</u>			
Air quality	14. To reduce emissions and concentrations of harmful atmospheric pollutants, particularly in	<ul style="list-style-type: none"> • Reduce NO_x, PM₁₀ and PM_{2.5} emissions? 	SDG 11 – Cities and communities

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
	areas of poorest air quality, and reduce exposure	<ul style="list-style-type: none"> • Reduce inequalities in terms of access to clean air across London, particularly for those: <ul style="list-style-type: none"> • who live in deprived areas? • who live, learn or work near busy roads or construction sites? • who are more vulnerable because of their age or existing medical condition? • Reduce the number of people exposed to particulates and NO₂ concentrations, particularly vulnerable people? • Improve air quality around areas which may have high concentrations of vulnerable people such as 	Make cities and human settlements inclusive, safe, resilient and sustainable

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<p>schools, outdoor play areas, care homes and hospitals?</p> <ul style="list-style-type: none"> • Help to achieve national and international standards for air quality? • Reduce costs to the economy resulting from premature deaths due to poor air quality? 	
<p>Climate change adaptation and mitigation</p>	<p>15. To ensure that the area adapts and becomes more resilient to the impacts of climate change and extreme weather events such as flood, drought and heat risks through regeneration and development opportunities</p>	<ul style="list-style-type: none"> • Protect London from climate change impacts? • Improve the microclimate and ameliorate the impact of the heat island effect on Londoners? • Help London to function during a flood event, heavy rainfall or tidal surge? 	<p>SDG 13 - Climate Take urgent action to combat climate change and its impacts</p>

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
	<p>16. To help tackle climate change through reducing greenhouse gas emissions and moving towards a zero carbon London by 2050</p>	<ul style="list-style-type: none"> • Help London to function during periods of drought? • Reduce impacts on groups more vulnerable to the effects of climate change e.g. older people are more vulnerable to excess heat? • Help to reduce London's CO₂ emission targets by 60% by 2025? • Reduce transport's contribution to CO₂ emissions? • Reduce the built environment's contribution to CO₂ emissions? • Facilitate investment in green technologies, equipment and infrastructure that reduce GHG emissions? 	

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> Promote the transition to a low carbon economy? Reduce carbon emissions by shifting to more sustainable modes of transport? 	
Energy use and supply	17. To manage and reduce demand for energy, achieve greater energy efficiency, utilise new and existing energy sources effectively, and ensure a resilient smart and affordable energy system	<ul style="list-style-type: none"> Increase the proportion of energy both purchased and generated from renewable and sustainable resources? Contribute to the provision of smart and affordable energy system for all? Reduce the demand and need for energy? Promote generation of energy locally? 	SDG 7 - Energy Ensure access to affordable, reliable, sustainable and modern energy for all

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Ensure that any supply shortages are addressed? • Promote and improve energy efficiency? • Reduce impacts of fuel poverty, particularly for vulnerable groups? • Promote the transition to a low carbon economy? 	
Water resources and quality	18. To protect and enhance the area’s water resources by ensuring the highest levels of water efficiency and reuse, drainage and the sewerage system	<ul style="list-style-type: none"> • Improve the quality of the water environment, helping to meet the objectives of the Water Framework Directive? • Reduce discharges to surface and ground waters? 	<p>SDG 6 – Water and sanitation</p> <p>Ensure availability and sustainable management of water and sanitation for all</p> <p>SDG 14 – Oceans</p>

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> Support necessary improvements to the water systems infrastructure (water supply/sewerage)? Reduce abstraction from surface and ground water sources? Reduce water consumption through the promotion of demand management? Protect and enhance the character and use of London’s riverscapes and waterways? 	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Flood risk	19. To manage the risk of flooding from all sources and improve the resilience of property and infrastructure to flooding and reduce its effects and impacts on the community.	<ul style="list-style-type: none"> Minimise the risk of flooding from all sources of flooding to people, property, infrastructure ? Manage residual flood risks appropriately and avoid new flood risks? 	SDG 6 – Water and sanitation Ensure availability and sustainable management of water and sanitation for all

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Seek to minimise new development in areas prone to flood risk or mitigate the potential for such risk? • Promote the integration of sustainable urban drainage systems? 	
Natural Capital and Natural Environment	20. To protect, connect and enhance the area's natural capital (including important habitats, species and landscapes) and the services and benefits it provides linking it directly with the wider London green and blue network.	<ul style="list-style-type: none"> • Protect and enhance the character of local greenspaces? • Bring nature closer to people, particularly in most urbanised parts of the city and improve access to areas of biodiversity interest? • Help to acknowledge monetary value to natural capital of London? • Conserve, enhance or create natural and semi-natural habitats of recognised ecological value and/or 	SDG 11 – Cities and communities Make cities and human settlements inclusive, safe, resilient and sustainable SDG 15 – Life on land Protect, restore and promote sustainable use of terrestrial ecosystems,

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<p>the green corridors that link them enhancing the ecological function and carrying capacity of the greenspace network?</p> <ul style="list-style-type: none"> • Avoid damage to sites, protected species and habitats, especially where there is a designation of international, national, regional or local importance? • Promote, educate and raise awareness of the enjoyment and benefits of the natural environment to all? • Promote and support the function of the Blue Ribbon Network? • Specifically address deficiencies in access to open space? 	<p>sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Create green spaces that are safe and accessible to all? • Promote sensory environments and play spaces? 	
Historic Environment	21. To conserve and enhance the existing historic environment, including sites, features, landscapes and areas of historical, architectural, archaeological and cultural value in relation to their significance and their settings.	<ul style="list-style-type: none"> • Conserve and/or enhance heritage assets, their setting and the wider historic environment? • Contribute to the better management of heritage assets and tackle heritage at risk? • Improve the quality and condition of the historic environment? • Respect, maintain and strengthen local character and distinctiveness? 	SDG 11 – Cities and communities Make cities and human settlements inclusive, safe, resilient and sustainable

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Increase the social benefit (e.g. education, participation, citizenship, health and well-being) derived from the historic environment? • Engage communities in identifying culturally important features and areas? • Provide for increased access to and enjoyment of the historic environment? • Provide an area wide Framework to assess, evaluate the significance of the buried archaeological resource to inform mitigation. 	

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> Provide for increased understanding and interpretation of the historic environment? 	
Geology and soils	22. To conserve and recognise the area's geodiversity and protect soils from development and over intensive use	<ul style="list-style-type: none"> Promote the use of brownfield land? Prevent further soil degradation or erosion? Restore degraded soil? Minimise the risk of health impacts through contamination? Maximise the potential benefit of access to new employment and housing as a result of remediation? 	SDG 15 – Life on land Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Materials and waste	23. To keep materials at their highest value and use for as long as possible. To significantly	<ul style="list-style-type: none"> Promote the principles of circular economy when aiming for waste 	SDG 11 – Cities and communities




Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
	reduce waste generated and achieve high reuse and recycling rates	<p>reduction, reuse, re-manufacturing and recycling?</p> <ul style="list-style-type: none"> Maximise use of innovative waste management techniques including smart technology? Help develop more efficient and sustainable freight transportation? Minimise negative impacts of waste processing and disposal on vulnerable groups? 	<p>Make cities and human settlements inclusive, safe, resilient and sustainable</p> <p>SDG 12 – Consumption and production</p> <p>Ensure sustainable consumption and production patterns</p>
Noise and vibration	24. To minimise noise and vibration levels and disruption to people and communities across the opportunity area and reduce inequalities in exposure	<ul style="list-style-type: none"> Reduce the number of people exposed to high levels of noise with the potential to cause annoyance, sleep disturbance or physiological effects? Help reduce actual noise levels and disturbances from noise? 	

Topic	IIA objective	Assessment guide questions <i>Will the strategy...? SEA, EQIA, HIA, HRA, SA, CSIA</i>	SDGs
		<ul style="list-style-type: none"> • Minimise and reduce road, rail and aviation noise and vibration levels and disruption? • Improve people's access to quiet/ tranquil spaces? • Reduce night time noise in residential areas? 	

30.2 Compatibility testing

- 30.2.1 A compatibility test of the IIA objectives has been carried out using a framework presented in **Appendix C**. As there can be tensions between objectives that cannot be resolved, the compatibility assessment has clarified these so that subsequent decisions will be informed, and mitigation or alternatives can be considered.
- 30.2.2 Testing of the compatibility of the IIA objectives highlighted some potential tensions between objectives. Some natural potential incompatibility emerged between IIA objectives that require development (such as improving transport connectivity and provision of housing) and environmental objectives. Therefore, finding the right balance between these objectives is important for achieving sustainable development. For example, the protection of heritage assets could constrain some opportunities for additional development but on the other hand an attractive environment including heritage assets could be a factor that helps to attract and retain businesses. Economic growth could result in greater waste generation however application of circular economy principles could assist in addressing this.

Key

	Compatible
	Neutral
	Incompatible

30.3 Assessment methodology of likely significant effects

- 30.3.1 The IIA will identify, describe and evaluate the likely significant effects of implementing OAPF against the IIA objectives using the assessment guide questions. It will do this for the area within the OAPF boundary plus certain places beyond which could still be affected by the proposals in the framework. This may include growth corridors, water bodies and some European designated sites and forms the spatial scope of the assessment.
- 30.3.2 Any likely effects identified as a result of implementing the OAPF will be described according to criteria presented within the SEA Regulations including a description of

the probability, duration, frequency and reversibility of impacts. As the OAPF covers a period up to 2041, the temporal scope of the IIA is proposed as follows:

- Short term effects – those effects that occur within the first five years of implementation of the OAPF;
- Medium term effects – those effects that occur between six and fifteen years following the adoption of the OAPF;
- Long term effects – those effects that will occur beyond fifteen years.

30.4 Predicting the effects of the London Plan against the IIA Objectives

Testing the proposed policies in the OAPF against the IIA objectives will use symbol based scoring system and provide a brief commentary explaining and expanding on the scoring. Impacts identified will be considered relative to their significance as per **Figure 30.4**. Significance takes into account the magnitude, duration and permanency of the impact, along with consideration of potential secondary and cumulative impacts. For the purposes of this assessment major effects (positive or negative) will be considered significant.

Figure 30.4 Significance ratings and definition

Scale of effect		Definition
++	Major positive effect	New OAPF policies/strategic approach contributes greatly towards achieving the IIA objective
+	Minor positive effect	New OAPF policies/strategic approach contributes to achieving the IIA objective
0	Neutral or no effect	New OAPF policies/strategic approach does not impact upon the achievement of the IIA objective
-	Minor negative effect	New OAPF policies/strategic approach conflicts with the IIA objective
--	Major negative effect	New OAPF policies/strategic approach greatly hinders or prevents the achievement of the IIA objective

Scale of effect		Definition
?	Uncertain	New OAPF policies/strategic approach can have positive or negative effects but the level of information available at a time of assessment does not allow to make a clear judgement

30.4.1 The assessment will identify cumulative and secondary effects of the strategy. Secondary impacts are impacts that are not direct results of the London Plan but occur away from the original impact or as a result of a complex pathway e.g. development that changes the water table and impacts the ecology of a nearby wetland.

30.4.2 The assessment will consider two types of cumulative effects:

- Intra-strategy: those which arise from two or more impacts occurring simultaneously, whereby an impact that may not have a significant effect on its own may, combined with others, produce a cumulative effect.
- Inter-strategy - significant effects of the London Plan acting in combination with the impacts of other Mayoral Strategies.

30.5 **Monitoring and difficulties encountered**

30.5.1 The role of the IIA monitoring involves measuring the IIA indicators which may establish a causal link between implementation of the London Plan and the likely significant effect being monitored. It is a requirement of the SEA Directive to establish how the significant effects of implementing the London Plan will be monitored. However, as ODPM Guidance (ODPM, 2005) notes, 'it is not necessary to monitor everything, or monitor an effect indefinitely. Instead, monitoring needs to be focused on significant sustainability effects'. Monitoring should therefore be focussed upon significant effects that may give rise to irreversible damage, with a view to identifying trends before such damage is caused (or uncertain effects where monitoring would enable preventative or mitigation measures to be undertaken).

30.5.2 Monitoring is also used, where appropriate, during implementation of the plan to make good deficiencies in baseline information in the IIA. It enables unforeseen adverse effects to be identified at an early stage and is a way of demonstrating

success in delivering the London Plan targets and reducing its environmental, social and economic effects.

- 30.5.3 The London Plan recognises ‘that in a city as dynamic as London it is impossible to anticipate all the ways in which change will happen... and that it is vital that that we can adjust, especially to changes that could give rise to re-consideration of the Plan’s direction or policies...’. In this way the London Plan recognises (and emphasises) the importance of the Plan - Monitor - Manage process.
- 30.5.4 Existing monitoring measures include the London Development Database, which monitors planning applications, permissions and completions across London for development trends. The database also supports the production of the London Plan Annual Monitoring Report (AMR). The AMR is a key element in the Plan – Monitor- Manage cycle. The current London Plan uses a set of 24 key performance indicators (KPIs). Monitoring is also undertaken by other parts of the GLA such as the Housing in London, the General Assessment of the Environment and the London Sustainable Development Commission (LSDC).
- 30.5.5 A review is needed on the monitoring framework of the London Plan, specifically the KPIs, to assess their continued appropriateness of assessing the implementation of the London Plan and its potential impact on sustainability objectives.
- 30.5.6 A full IIA monitoring framework will be developed at the next stage of the IIA process where measures proposed for monitoring will be clear, practicable and linked to the indicators and objectives used in the IIA.

31. Next steps

This chapter outlines remaining stages of the IIA process, describes the OAPF assessment template and summarises engagement which has taken place to date.

31.1 Remaining Stages of the IIA

31.1.1 Identifying options, choosing preferred options and proposing measures to mitigate (Stage B)

Proposed policies within the London Plan will be informed by the issues that London faces which have been identified in this IIA Scoping Report. The IIA of the London Plan will appraise London Plan objectives, Spatial Development Options and London Plan policies against IIA objectives outlined in the IIA Framework in order to assess their compatibility and effects across all sustainability topics.

An example of how the table for the IIA of the London Plan will look is shown in **Figure 31.1** below. Impacts will be commented on, and mitigation measures for such impacts proposed, whether that is through rewording of the policy or mitigation by using other policies or proposals in the London Plan.

Figure 31.0.1 London Plan Assessment Template

Objective	Assessment criteria Will the strategy	Assessment								Direct (D)	Temporary (T) or Permanent	Spatial consideration: Local, London,	Receptors and/or affected groups	Summary against overall objectives	Potential cumulative effects	Mitigation / policy input
		SEA	SEA	Eq IA	HA	CS IA	ST (0-4 years)	MT (5-9 years)	LT (10+ years)							
<i>To</i>							O	?	-	D	P	GL	This will set out	This describes	This will set	This will identify

<p><i>reduce emissions and concentrations of harmful atmospheric pollutants, particularly in areas of poorest air quality and reduce</i></p>	<p><i>Reduce No_x, PM₁₀ and PM_{2.5} emissions</i> Other guide questions to be included</p>	<p>This highlights which of the assessments must consider this objective. The colour coding helps users navigate through the report</p>	<p>Noting the uncertainty around when policy will be implemented effects are categorised as being likely to occur in the: short term (0-4 years), medium term (5-9 years), or long term (10+ years).</p>		<p>The assessment will seek to categorise if the effects are direct, indirect, temporary and/or permanent. The likely spatial extent is also set out to consider if the effect will be a local, London or a wider concern.</p>	<p>who it will affect. Key groups or communities to be considered include: - Older and young people - Socio economi</p>	<p>es how the policy addresses the IIA objective. It may include confirmation that the policy aligns with the objective, or</p>	<p>out whether proposed policy could have cumulative effects with other policies or where there are</p>	<p>where further work may be required to better align policies, make recommendations for additional provisions to be included or recommendation rejection of a policy.</p>
			++	Very positive effect					
			+	Positive effect					
			?	Uncertain					
			-	Negative effect					
			--	Very negative effect					
O	Neutral / no effect								

References

Appendix A: Relevant plans and programmes

Newham's Local Plan IIA Scoping Report – key sources of baseline information:

- Understanding Newham 2015 – Ipsos MORI findings from Wave 8 of the Newham Household Panel Surveys (NHPS, July 2016)
- Gypsy & Traveller Accommodation Assessment (March 2016)
- Core Strategy and supporting documents including Statement of Consultation (2012)
- Authority Monitoring Reports (updated via annual bulletins)
- Newham's Biodiversity Resource
- Newham Biodiversity Action Plan
- Employment Land Review
- Strategic Flood Risk Assessment
- Food Outlet Mapping in the London Borough of Newham
- Newham Strategic Housing Market Assessment
- Newham Affordable Housing Economic Viability Assessment
- Community Infrastructure Study
- Town Centre and Retail Study
- Newham Character study
- Air Quality Action Plan
- Economic Development Strategy
- Housing Newham Strategy
- Joint Strategic Needs Assessment (NHS Newham and Newham Council)
- Local Implementation Plan
- Sustainable Community Strategy
- Greater London Archaeological Advisory Service (GLAAS) *London Borough of Newham - Archaeological Priority Areas Appraisal* (July 2014)

Topic	Document Title – Strategic Level	Borough/local level
Relevant to all Topics areas. Implications have been considered for separate topics	<ul style="list-style-type: none"> • National Planning Policy Framework (2019) • The London Plan 2015 • East London Sub-Regional Framework • National Planning Practice Guidance • Greater London Authority Act (1999) • Greater London Authority Act (2007) 	<ul style="list-style-type: none"> • Newham Local Plan 2018 • Newham Community Wealth Building • Newham Corporate Plan 2020-23 • Newham Authority Monitoring Reports • Newham Sustainable Community Strategy 2012-30
Social Integration and Inclusion	Equality Act 2010	Newham Equality and Cohesion Plan
	Equality and Human Rights Commission (November 2009) Equality impact assessment guidance A step-by-step guide to integrating equality impact assessment into policymaking and review.	Newham EQIA
	GLA’s Equal life chances for all (revised 2014)	Newham Democracy Commission
	Greater London Authority Integrated Impact Assessment Supplementary Equality Impact Assessment Information (2019)	Newham Slavery and Human Trafficking statement 2018
Health and Health Inequalities	National Planning Policy Framework (March 2012)	Newham COVID-19 Recovery Strategy
	Child Obesity Plan (2016)	Newham Health and Well-being Strategy
	London Health and Care Collaboration Agreement and	Newham Joint Mental Health Strategy 2015-20

Topic	Document Title – Strategic Level	Borough/local level
	London Devolution Deal (2015)	
	Better Health for London: next steps 2014	Newham Joint Dementia Strategy 2015-18
	HUDU Planning for Health (June 2015) Rapid Health Impact Assessment Tool	Newham Joint Carers' Strategy 2015-18
	Mayors Health Inequality Strategy Delivery Plan 2015-2015 Indicator Report	Newham Autism Strategy for Adults 2013-16
	London Health Inequalities Strategy (2018)	
	Health and Well Being Strategy	
	The London Health Inequalities Strategy (2010)	
Crime, Safety and Security	Crime and Disorder Act 1998	
	Police and Justice Act 2006 (as amended)	
	National Planning Policy Framework (March 2012)	
	Mayor's Office for Policing and Crime's (MOPAC) Police and Crime Plan 2013-16 (March 2013)	
	Mayor's Safer Streets for London Plan (2013)	
	London Assembly Police and Crime Committee report, Policing the Night-Time Economy (March 2016)	
Housing	Housing and Planning Bill (DCLG 2015/16)	South East London Strategic Housing Market Assessment (SHMA) 2014

Topic	Document Title – Strategic Level	Borough/local level
	National Planning Policy Framework	
	London Housing Strategy (2018)	
	Outer London Commission Sixth Report: Barrier to Housing Delivery (March 2016)	
	Outer London Commission Seventh Report: Accommodating Report (March 2016)	
	GLA Equal life chances for all (revised 2014)	
	GLA Housing Strategy 2014	
Sustainable Land Use	National Planning Policy Framework (March 2012)	
	Airport Commission’s Final Report July 2015	
	EU Sustainable Development Strategy	
	UK Sustainable Development Strategy	
	BREEAM	
	Thames Gateway Development and Investment Framework	

Topic	Document Title – Strategic Level	Borough/local level
	Outer London Commission’s 7th Report: Accommodating London’s Growth	
Accessibility	National Planning Policy Framework (March 2012)	
	GLA Equal life chances for all (revised 2014)	
	The London Health Inequalities Strategy (2010)	
	Your accessible transport network (May 2015 update)	
Connectivity	National Planning Policy Framework (March 2012)	Royal Docks Public Realm Framework, 2019
	Airport Commission’s Final Report July 2015	
	Mayor of London Transport Strategy	
	South East London Sub-Regional Transport Plan	
	Freight: 2010-2015 Government Policy (DfT)	
	Rail Network 2010-2015: Government Policy (DfT)	
	London Infrastructure Plan – update 2015	
	Port of London Authority Plan	
	Local Transport 2010 to 2015 Government Policy (DfT, 2015)	
	Connecting the Capital (TfL, 2015)	
	More residents more jobs? 2015 update Oct 2015	

Topic	Document Title – Strategic Level	Borough/local level
Economic Competitiveness	Fixing the foundations: creating a more prosperous nation (July 2015)	Newham Inclusive Economy Strategy
	National Planning Policy Framework (March 2012)	Royal Docks Enterprise Zone Delivery Plan, 2018
	Jobs and Growth Plan for London. GLA (2013)	The Royal Docks Economic Purpose report, 2019
	Outer London Commission 7 th Report: Accommodating London's Growth March 2016	
	London Infrastructure Plan update 2015	
	London in comparison with other global cities August 2016	
	The changing spatial nature of business and employment in London Feb 2016	
	London's Digital Economy Jan 2012	
	Growing Together II: London and the UK economy Sept 2014	
Employment	London's changing economy since 2008 (Oct 2015)	Newham Employment Strategy 2014-17
	Part-time employment in London (Jan 2015)	
	Patterns of low pay (July 2012)	

Topic	Document Title – Strategic Level	Borough/local level
Education and Skills	GLA Equal life chances for all (revised 2014)	Newham Places for All, A School Place Planning Strategy 2020-25
	Mayor’s Academic Forum Recommendations 2015	Newham Children and Young People’s Plan 2015-2018
	Skills for Londoners Strategy	
Culture	World Cities Culture Report 2015 – measures and cultural assets	Royal Docks Cultural Placemaking Strategy
	Culture White Paper (March 2016)	
	London Culture Strategy, 2018	
	Open Studios Network and Artist Studios Report 2014	
	Arts Council England Strategy	
	The Mayor’s A-Z of Planning and Culture (October 2015)	
	Mayor’s Culture Strategy, Cultural Metropolis (November 2010)	
	Mayor’s Cultural Strategy – achievements and next steps	
	Mayor’s cultural tourism vision for London 2015 – 2017, Take a Closer Look	
	GLA Night Time Economy Commission, Strategic Case and Investment Proposal (2016)	
London’s Grassroots Music Venues Rescue Plan (October 2015)		

Topic	Document Title – Strategic Level	Borough/local level
Air quality	EU Ambient Air Quality Directive (2008/50/EC)	Newham Air Quality Action Plan 2019-2014
	EU Thematic Strategy on Air Pollution (2005)	
	Air Quality Standards Regulations 2010	
	Environment Act 1995 (as amended)	
	Air Quality Strategy for England, Scotland, Wales and Northern Ireland	
	National Planning Policy Framework (2012)	
	UK's Air Quality Action Plan (Defra, revised January 2016)	
	London Air Quality Network Summary Report 2014 (March 2016)	
	Transport Emissions Roadmap (TERM), Cleaner transport for a cleaner London (TfL, September 2014)	
	Transport Action Plan, Improving the health of Londoners (TfL, February 2014)	
	Mayor's Air Quality Strategy	
Cleaning the Air, the Mayor's Air Quality Strategy (GLA,		

Topic	Document Title – Strategic Level	Borough/local level
	December 2010)	
	Cleaner Air for London, the Progress Report on the delivery of the Mayor’s Air Quality Strategy (GLA, July 2015)	
	UK Air Quality Strategy 2007	
	Air Quality Action Plan 2002	
	WHO Air Quality Guidelines	
	Clean Air Act (1993)	
	Mayor’s Transport Strategy (2010)	
Climate Change	United Nations Framework Convention on Climate Change	Newham Climate Emergency Action Plan 2020
	Adapting to climate change: a checklist for development guidance on designing development in a changing climate	
	Joseph Rowntree Foundation’s vulnerability to heatwaves and drought- adaptation to climate change, 2011	

Topic	Document Title – Strategic Level	Borough/local level
	Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment (4th April 2013 European Commission)	
	Kyoto Climate Change Protocol & UK Climate Change Programme	
	The Paris Agreement	
	Climate Change Act 2008	
	UK Low Carbon Transition Plan (2009)	
	London Climate Change Mitigation and Energy Strategy (2011)	
	Mayor’s climate change adaptation strategy, <i>Managing risks and increasing resilience</i> (2011)	
	Transport Emissions Roadmap (TERM), Cleaner transport for a cleaner London (TfL, September 2014)	
	EC White Paper: Adapting to Climate Change	
	Climate Change Risk Assessment	
	UK Climate Change Programme	
	National Adaptation Programme (NAP)	

Topic	Document Title – Strategic Level	Borough/local level
	The Carbon Plan	
	Promotion of the Use of Energy from Renewable Sources Directive (2009/28/EC)	
	Arup’s Reducing Urban Heat Risk July 2014	
	The London Climate Change Partnership (LCCP) Overheating Thresholds Report June 2012	
	Scenarios to 2050: London Energy Plan	
Energy use and Supply	UK Renewable Energy Strategy 2015	
	Energy White Paper: Meeting the Energy Challenge 2007	
	Mayor’s Climate Change Mitigation and Energy Annual Report: 2013-2014 (June 2015)	
	London’s Zero Carbon Energy Resource (2013)	
	London Infrastructure Plan 2050	
	London Energy Plan forthcoming)- Scenarios to 2050: London Energy Plan	
	Mayor of London Energy Strategy 2001	
	Water Framework Directive – 2000/60/EC	
	Water Act 2003	

Topic	Document Title – Strategic Level	Borough/local level
Water resources and quality	River Basin Management Plan (RBMP) for the Thames River Basin District (2009)	
	Estuary Edges Guidance	
	Urban Wastewater Treatment Directive (91/271/EEC)	
	Thames Estuary 2100 Plan	
	Thames River Basin Management Plan	
	Mayor’s Water Strategy (2011)	
	Directive 2000/60/EC Water	
	Draft Thames Waterway Management Plan	
	European Water Framework Directive (2000/60/EC)	
	Thames River Basin Management Plan (2009)	
	Thames Corridor Catchment Abstraction Management Strategy	
	London Abstraction Licensing Strategy (2013)	
	Water Framework Directive (WFD) 2000/60/EC (2000)	
Flood risk	Flood & Water Management Act 2010	Newham Strategic Flood Risk Assessment (SFRA)

Topic	Document Title – Strategic Level	Borough/local level
	UK Water Strategy (2008)	
	National Planning Policy Framework (March 2012)	
	London’s Regional Flood Risk Appraisal (2014)	
	Thames Catchment Flood Management Plan (2009)	
	Securing London’s water future, the Mayor’s Water Strategy (2011)	
	Thames Estuary 2100 Plan (TE2100 Plan) (November 2014)	
	London Resilience Partnership Strategic Flood Response Framework (2015)	
	Final Water Resources Management Plan 14 (WRMP14), 2015-2040 (Thames Water, July 2014) and Annual review June 2016 Affinity Water 2014 Water Resources Management Plan Essex & Suffolk Water 2015 Water Resource Management Plan	

Topic	Document Title – Strategic Level	Borough/local level
	Sutton and East Surrey 2014 Final Water Resources Management Plan	
	London Sustainable Drainage Action Plan (2016)	
	Estuary Edges Guidance	
	Directive on the Conservation of Wild Birds 79/409/EEC	
	Thames River Basin District Flood Risk Management Plan (2016)	
Natural Environment and Natural Capital	EC Directive on the Conservation of Habitats and Wild Fauna and Flora 92/43/EEC	Newham Sustainable Community Strategy for 2010–2030
	Conservation of Habitats and Species Regulations 2010	
	Wildlife & Countryside Act 1981 (as amended)	
	Thames Estuary 2100 Plan	
	Environmental Assessment of plans and programmes Regulations 2004 (SI 2004 No 1633)	
	Natural Environment and Rural Communities Act 2006	
	England biodiversity strategy: Climate change adaptation principles	

Topic	Document Title – Strategic Level	Borough/local level
	The Guidance for Local Authorities on Implementing the Biodiversity Duty (2007)	
	UK post-2010 Biodiversity Framework	
	Biodiversity 2020	
	EU 7th Environmental Action Plan	
	A Practical Guide to the Strategic Environmental Assessment Directive (ODPM, 2005);	
	Estuary Edges Guidance	
	EU Biodiversity Action Plan, 2006	
	EU Habitats Directive (92/43/EEC)	
	EU Birds Directive (2009/147/EEC)	
	National Biodiversity Strategy	
	London Environment Strategy, 2018	
	The Natural Choice – securing the value of nature (2011)	
	National Planning Policy Framework (2012)	

Topic	Document Title – Strategic Level	Borough/local level
	Mayor’s Biodiversity Strategy, Connecting with London's Nature (GLA, July 2002)	
	Mayor's Biodiversity Strategy Update, A review of progress and priorities for action (GLA, 2015)	
	London Underground Biodiversity Action Plan 2010, Connecting Nature (2010)	
	Green Capital. Green Infrastructure for a future city (2016)	
	Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive)	
	National Planning Policy Framework (March 2012)	
	"Our Waste, Our Resources: A Strategy For England" (HM Government)	
	Waste Management Plan for England (2013)	Joint Waste Plan (2012)
	London Environment Strategy (GLA)	

Topic	Document Title – Strategic Level	Borough/local level
	25 Year Plan "A Green Future: Our 25 Year Plan to Improve the Environment" (HM Government)	
Townscape and Landscape	European Landscape Convention (2000)	
	<i>Countryside and Rights of Way Act 2000</i>	
	Streetscape Guidance (TfL, Third Edition, 2016 Revision 1)	
	Publicly Accessible Space – London Assembly Report June 2011	
	Planning (Listed Buildings and Conservation Areas) Act 1990	
Historic Environment	Ancient Monuments and Archaeological Areas Act 1979	
	World Heritage Convention (1972)	
	National Planning Policy Framework (March 2012)	
	UNESCO guidelines on World Heritage Sites	
	Palace of Westminster and Westminster Abbey, including St Margaret's Church World Heritage Sites Management Plan 2007	

Topic	Document Title – Strategic Level	Borough/local level
	Tower of London - World Heritage Site Draft Management Plan 2016	
	Maritime Greenwich World Heritage Site Management Plan 2014	
	Royal Botanic Gardens, Kew - World Heritage Site Management Plan 2011	
	Historic Environment Good Practice Advice in Planning: 1 The Historic Environment in Local Plans (March 2015)	
	Historic Environment Good Practice Advice in Planning: 2 Managing Significance in Decision-Taking in the Historic Environment. (March 2015)	
	Historic Environment Good Practice Advice in Planning: 3 The Significance of Heritage Assets	
	Conservation Area Designation, Appraisal and Management	

Topic	Document Title – Strategic Level	Borough/local level
	Historic England Advice Note 1	
	Historic England Guidance (2016)	
	Historic England Advice Note 8	
	Managing change to Heritage Assets - Historic England Advice Note 2	
	Tall Buildings - Historic England Advice Note 4	
	Sustainability Appraisal and Strategic Environmental Assessment Historic England Advice Note 8	
	Mayor’s Culture Strategy, Cultural Metropolis (November 2010)	
	Mayor’s cultural tourism vision for London 2015 – 2017, Take a Closer Look	
	Mayor’s cultural tourism vision for London 2015 – 2017, Take a Closer Look	
	World Cities Culture Report 2015 – measures and cultural assets	
	EU Soil Strategy (2006)	

Topic	Document Title – Strategic Level	Borough/local level
	UNESCO World Heritage Convention	
	Convention for the Protection of the Architectural Heritage of Europe	
	European Convention on the Protection of Archaeological Heritage	
	Planning (Listed Buildings and Conservation Areas) Act 1990	
	Crossness Conservation Area Appraisal and Management Plan	
Geology and soils	Seventh Environment Action Programme (2014)	
	EU Environmental Liability Directive (99/31/EC)	
	Safeguarding our Soils – A Strategy for England (2009)	
	EU Waste Framework Directive (2008/98/EC)	
Materials and waste	Waste (England and Wales) (Amendment) Regulations 2014	Joint Waste Plan (2012)
	National Planning Policy for Waste (October 2014)	
	UK Waste Strategy for England (2007)	

Topic	Document Title – Strategic Level	Borough/local level
	EU Directive on Waste (2008/98/EC)	
	Hazardous Waste Directive (91/689/EEC)	
	Urban Wastewater Treatment Directive (91/271/EEC)	
	Mayor of London Waste Strategy	
	Directive 2006/12/EC Waste	
	Mayor’s Municipal Waste Strategy, London’s Wasted Resource (November 2011)	
	Seveso III Directive	
	National Waste Strategy	
	Mayor’s Business Waste Management Strategy (2011)	
	EC Noise Directive (2000/14/EC)	
Noise and vibration	Noise Policy Statement For England (NPSE), March 2010	London City Airport Annual Performance Report 2019
	National Planning Policy Framework (March 2012)	
	Mayor’s Ambient Noise Strategy (2004)	
	EU Noise Directive (2002/49/EC)	

Appendix B: Natura 2000 Sites

Natura 2000 Site	Location	Qualifying features	Conservation objectives
Richmond Park SAC (846.68ha) Site code: UK0030246	Within the GLA area The following boroughs are within or adjacent to the site: <ul style="list-style-type: none"> • Richmond upon Thames • Kingston upon Thames • Wandsworth • Merton 	<ul style="list-style-type: none"> • Stag beetle (<i>Lucanus cervus</i>) 	To maintain or restore: <ul style="list-style-type: none"> • The extent and distribution of the habitat of stag beetle • The structure and function of the habitats of stag beetle • The supporting processes on which the habitats of stag beetle rely • The population of stag beetle, and • The distribution of stag beetle within the site.
Wimbledon Common SAC (348.31ha) Site code: UK0030301	Within the GLA area The following boroughs are within or adjacent to the European sites: <ul style="list-style-type: none"> • Merton • Wandsworth 	<ul style="list-style-type: none"> • Stag beetle (<i>Lucanus cervus</i>) • Northern Atlantic wet heaths with <i>Erica tetralix</i> • European dry heaths 	To maintain or restore: <ul style="list-style-type: none"> • The extent and distribution of qualifying habitats and habitats of stag beetle • The structure and function (including typical species) of qualifying habitats

Natura 2000 Site	Location	Qualifying features	Conservation objectives
	<ul style="list-style-type: none"> • Richmond upon Thames • Kingston upon Thames 		<ul style="list-style-type: none"> • The structure and function of the habitats of stag beetle • The supporting processes on which qualifying habitats and the habitats of stag beetle rely • The populations of stag beetle, and, • The distribution stag beetle within the site.
<p>Epping Forest SAC (1604.95ha)</p> <p>Site code: UK12720</p>	<p>Partially within the GLA area</p> <p>The following boroughs are within or adjacent to the European sites:</p> <ul style="list-style-type: none"> • Waltham Forest • Redbridge • Enfield 	<ul style="list-style-type: none"> • Atlantic acidophilus beech forests with <i>Ilex</i> and sometimes <i>Taxus</i> in shrub layer • Northern Atlantic wet heaths with <i>Erica teralix</i> • European dry heaths • Stag beetle (<i>Lucanus cervus</i>) 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying habitats and habitats of stag beetle • The structure and function (including typical species) of qualifying habitats • The structure and function of the habitats of stag beetle • The supporting processes on which qualifying habitats and the habitats of stag beetle rely • The populations of stag beetle, and,

Natura 2000 Site	Location	Qualifying features	Conservation objectives
			<ul style="list-style-type: none"> The distribution stag beetle within the site.
<p>Lee Valley SPA and Ramsar (447.87ha)</p> <p>SPA site code: 9012111</p> <p>Ramsar site code: UK11034</p>	<p>Partially within the GLA area</p> <p>The following boroughs are within or adjacent to the European sites:</p> <ul style="list-style-type: none"> Enfield Waltham Forest Haringey Hackney 	<p>SPA:</p> <ul style="list-style-type: none"> Great bittern (<i>Botaurus stellaris</i>) (Non-breeding) Gadwall (<i>Anas strepera</i>) (Non-breeding) Northern shoveler (<i>Anas clypeata</i>) (Non-breeding) <p>Ramsar:</p> <ul style="list-style-type: none"> Ramsar Criterion 2: The site supports the nationally scarce plant species whorled water-milfoil <i>Myriophyllum verticillatum</i> and the rare or vulnerable invertebrate <i>Micronecta minutissima</i> (a water-boatman). Ramsar criterion 6: species/populations occurring at levels of international importance (northern shoveler, gadwall). 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> The extent and distribution of the habitats of the qualifying features The structure and function of the habitats of the qualifying features The supporting processes on which the habitats of the qualifying features rely The population of each of the qualifying features, and, The distribution of the qualifying features within the site.

Natura 2000 Site	Location	Qualifying features	Conservation objectives
<p>South West London Waterbodies SPA and Ramsar (828.1ha)</p> <p>SPA site code: UK9012171</p> <p>Ramsar site code: UK11065</p>	<p>Partially within the GLA area</p> <p>The following boroughs are within or adjacent to the European sites:</p> <ul style="list-style-type: none"> • Hillingdon • Hounslow • Richmond upon Thames 	<p>SPA:</p> <ul style="list-style-type: none"> • Gadwall (<i>Anas strepera</i>) (Non-breeding) • Northern shoveler (<i>Anas clypeata</i>) (Non-breeding) • Ramsar: • Ramsar criterion 6: species/populations occurring at levels of international importance (northern shoveler, gadwall). 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site.
<p>Wormley – Hoddesdonpark Woods SAC (335.53ha)</p> <p>SAC site code: UK0013696</p>	<p>Outside GLA area – approx. 4km north</p>	<ul style="list-style-type: none"> • Sub-Atlantic and medio-European oak or oak hornbeam forests of the <i>Carpinion betuli</i> 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying habitats • The structure and function (including typical species) of qualifying habitats, and • The supporting processes on which qualifying habitats rely

Natura 2000 Site	Location	Qualifying features	Conservation objectives
<p>Windsor Forest and Great Park SAC (1687.26)</p> <p>SAC site code: UK0012586</p>	<p>Outside GLA area – approx. 6km to west</p>	<ul style="list-style-type: none"> • Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains: Dry oak-dominated woodland • Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robur-petraeae</i> or <i>Ilici-Fagenion</i>): Beech forests on acid soils • Violet click beetle (<i>Limoniscus violaceus</i>) 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying habitats and habitats of the violet click beetle • The structure and function (including typical species) of qualifying habitats • The structure and function of the habitats of violet click beetle • The supporting processes on which qualifying habitats and the habitats of violet click beetle rely • The populations of violet click beetle, and, • The distribution of violet click beetle within the site.
<p>Mole Gap to Reigate Escarpment SAC (887.68ha)</p> <p>SAC site code: UK0012804</p>	<p>Outside GLA area – approx. 6km to south</p>	<ul style="list-style-type: none"> • <i>Taxus baccata</i> woods of the British Isles (Yew-dominated woodland) • <i>Asperulo-Fagetum</i> beech forests (Beech forests on neutral to rich soils) 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying habitats and habitats of qualifying species

Natura 2000 Site	Location	Qualifying features	Conservation objectives
		<ul style="list-style-type: none"> • European dry heaths • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) (Dry grasslands and scrublands on chalk or limestone). • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) (Dry grasslands and scrublands on chalk or limestone, including important orchid sites) • Stable xerothermophilous formations with <i>Buxus sempervirens</i> on rock slopes (Berberidion p.p.) (Natural box scrub) • Bechstein’s bat (<i>Myotis bechsteinii</i>) • Great crested newt (<i>Triturus cristatus</i>) 	<ul style="list-style-type: none"> • The structure and function (including typical species) of qualifying habitats • The structure and function of the habitats of qualifying species • The supporting processes on which qualifying habitats and the habitats of qualifying species rely • The populations of qualifying species, and, • The distribution of qualifying species within the site.

Natura 2000 Site	Location	Qualifying features	Conservation objectives
<p>Thames Basin Heaths SPA (8274.72ha)</p> <p>SAC site code: 9012414</p> <p>Overlaps with Thursley, Ash, Pirbright & Chobham SAC (UK0012793)</p>	<p>Outside GLA area – approx. 8km to south-west</p>	<ul style="list-style-type: none"> • Dartford Warbler (<i>Sylvia undata</i>) (breeding) • Nightjar (<i>Caprimulgus europaeus</i>) (breeding) • Woodlark (<i>Lullula arborea</i>) (breeding) 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site.
<p>Thursley, Ash, Pirbright & Chobham SAC (5138ha)</p> <p>SAC site code: UK0012793</p> <p>Overlaps with Thames Basin</p>	<p>Outside GLA area – approx. 8km to south-west</p>	<ul style="list-style-type: none"> • Depressions on peat substrates of the <i>Rhynchosporion</i> • European dry heaths • Northern Atlantic wet heaths with <i>Erica tetralix</i> (Wet heathland with cross-leaved heath) 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying habitats • The structure and function (including typical species) of qualifying habitats, and • The supporting processes on which qualifying habitats rely

Natura 2000 Site	Location	Qualifying features	Conservation objectives
Heaths SPA (9012414)			
Burnham Beeches SAC (382.76ha) SAC site code: UK0030034	Outside GLA area – approx. 9km to west	<ul style="list-style-type: none"> Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robur-petraeae</i> or <i>Ilici-Fagenion</i>) (Beech forests on acid soils) 	To maintain or restore: <ul style="list-style-type: none"> The extent and distribution of qualifying habitats The structure and function (including typical species) of qualifying habitats, and The supporting processes on which qualifying habitats rely

<p>Thames Estuary and Marshes SPA (4838.94ha) and Ramsar (5589ha)</p> <p>SPA site code: UK9012021</p> <p>Ramsar site Code: UK11069</p>	<p>Outside GLA area – approx. 14km east</p>	<p>SPA:</p> <ul style="list-style-type: none"> • Hen harrier (<i>Circus cyaneus</i>) (Non-breeding) • Pied avocet (<i>Recurvirostra avosetta</i>) (Non-breeding) • Ringed plover (<i>Charadrius hiaticula</i>) (Non-breeding) • Grey plover (<i>Pluvialis squatarola</i>) (Non-breeding) • Red knot (<i>Calidris canutus</i>) (Non-breeding) • Dunlin (<i>Calidris alpina alpina</i>) (Non-breeding) • Black-tailed godwit (<i>Limosa limosa islandica</i>) (Non-breeding) • Common redshank (<i>Tringa tetanus</i>) (Non-breeding) • Waterbird assemblage 	<p>To maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site.
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		<p>Ramsar criterion:</p> <ul style="list-style-type: none">• Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.• Ramsar criterion 5 Assemblages of international importance: Species with peak counts in winter: 45118 waterfowl (5 year peak mean 1998/99-2002/2003)• Ramsar criterion 6 – Species/populations occurring at levels of international importance. Species with peak counts in spring/autumn: Ringed plover , (<i>Charadrius hiaticula</i>)	
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Natura 2000 Site	Location	Qualifying features	Conservation objectives
		<p>Black-tailed godwit (<i>Limosa limosa islandica</i>)</p> <p>Species with peak counts in winter:</p> <p>Grey plover (<i>Pluvialis squatarola</i>)</p> <p>Red knot (<i>Calidris canutus</i>)</p> <p>Dunlin (<i>Calidris alpina alpina</i>)</p> <p>Common redshank (<i>Tringa totanus tetanus</i>)</p>	

Appendix C: Testing compatibility of the IIA objectives

IIA objective	IIA 1 Equalities	IIA 2 Social Integration	IIA 3 Health	IIA 4 Crime	IIA 5 Housing	IIA 6 Land use	IIA 7 Design	IIA 8 Access	IIA 9 Connectivity	IIA 10 Economic Competition	IIA 11 Infrastructure	IIA 12 Education and Skills	IIA 13 Culture	IIA 14 Air quality	IIA 15 CC adaptation	IIA 16 CC mitigation	IIA 17 Energy	IIA 18 Water	IIA 19 Flood	IIA 20 Natural Environment	IIA 21 Historic	IIA 22 Soil	IIA 23 Materials and Waste	IIA 24 Noise
IIA 1 Equalities																								
IIA 2 Social Integration	✓																							
IIA 3 Health	✓	✓																						
IIA 4 Crime	✗	✓	✓																					
IIA 5 Housing	✓	✓	✓	✓																				

Royal Docks and Beckton Riverside Opportunity Area Planning Framework

Integrated Impact Assessment: Scoping Report

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IIA 6 Land use	x	✓	✓	✓	✓																			
IIA 7 Design	✓	✓	✓	✓	✓	✓																		
IIA 8 Access	✓	✓	✓	✓	✓	✓	✓																	
IIA 9 Connectivity	✓	✓		✓	x	x	✓																	
IIA 10 Economic Comp	x	✓	✓	✓	✓	✓	✓	✓	x															

Royal Docks and Beckton Riverside Opportunity Area Planning Framework

Integrated Impact Assessment: Scoping Report

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IIA 11 Infrastructure					x	x				x														
IIA 12 Education and Skills	✓	✓	✓	✓						✓														
IIA 13 Culture	✓	✓	✓	✓	✓	✓	✓	✓	x	x	x													
IIA 14 Air Quality	✓									✓	✓													

Royal Docks and Beckton Riverside Opportunity Area Planning Framework

Integrated Impact Assessment: Scoping Report

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IIA 15 CC Adaptation	✓			✓				✓		✓		✓	✓	✓										
IIA 16 Cc Mitigation										✗				✓	✓									
IIA 17 Energy	✓										✓			✓	✓	✓								
IIA 18 Water	✓	✓			✗	✗	✓			✗	✓		✗	✓		✓	✓							
IIA 19					✓	✓				✓	✓				✓			✓						

Royal Docks and Beckton Riverside Opportunity Area Planning Framework

Integrated Impact Assessment: Scoping Report

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Flood																								
IIA 20 Natural Environment	✓	✓	✓		✗	✗	✓	✓		✗			✓					✓						
IIA 21 Historic	✓	✓	✓		✗	✗	✓			✗			✓					✓	✓	✓				
IIA 22 Geology soil					✗					✗	✓		✓		✓	✓	✓	✓	✓					
IIA 23	✓	✓	✓		✗	✗	✓			✗										✓	✓			

Royal Docks and Beckton Riverside Opportunity Area Planning Framework

Integrated Impact Assessment: Scoping Report

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Waste	Compatible	Compatible	Compatible	Neutral	Incompatible	Incompatible	Compatible	Neutral	Neutral	Incompatible	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Compatible	Compatible	Neutral	Incompatible	Incompatible
IIA 24 Noise	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Compatible	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Compatible	Neutral	Neutral	Neutral	Neutral	Neutral	Incompatible

Key

√	Compatible
	Neutral
x	Incompatible

