

CITY AIRPORT DEVELOPMENT PROGRAMME
(CADP1) S73 APPLICATION

ENVIRONMENTAL STATEMENT

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City Airport Development
Programme (CADP1) S73
Application

Volume 1: Environmental Statement
Chapter 7: Socio-Economics

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7 Socio Economics

7.1 Introduction

7.1.1 The socio-economic assessment has been undertaken by York Aviation LLP and Quod. It identifies and assesses the likely significant effects on socio-economic conditions associated with the proposed amendments.

7.1.2 In particular, this chapter presents the result of the assessment of the effects related to:

- Employment and Gross Value Added (GVA) impact during construction;
- Employment and GVA impacts (direct, indirect and induced) during operation;
- The impact on the local jobs market;
- Operational impact on the local community; and
- Wider socio-economic impacts (including catalytic impacts).

7.1.3 This chapter should be read in conjunction with the Need Case (Volume 3 of the ES). The Need Case helps to explain the derivation of the employment estimates and the wider economic benefits.

7.1.4 The chapter should also be read alongside the Benefits and Mitigation Statement which accompanies the planning application.

7.2 Policy and Legislative Context

National policy

National Planning Policy Framework (2021)

7.2.1 Central to the National Planning Policy Framework (NPPF)¹ is a positive approach to growth and the presumption in favour of sustainable development. The National Planning Policy Framework (NPPF – paragraph 8) sets out the overarching economic objective of a “*strong, responsive and competitive economy*”. The second objective is “*to support strong, vibrant and healthy communities.*”

7.2.2 Paragraphs 81 and 83 of the NPPF are also relevant. These require policies and decisions to create the conditions for businesses to invest and expand, support economic growth and allow areas to build on their strengths:

Paragraph 81: “Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential.”

Paragraph 81: “Planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations.”

Build Back Better: Our Plan for Growth (2021)

7.2.3 As part of the March 2021 Budget, the Government set out its plans² to support economic growth through significant investment in infrastructure, skills and innovation, and in particular to support the economic recovery from the Covid-19 pandemic.

¹ MHCLG. (2021) *National Planning Policy Framework*,

² HMT. (2021) *Build Back Better: Our Plan for Growth*

7.2.4 Page 31 states: *“High quality infrastructure is crucial for economic growth, boosting productivity and competitiveness. More than this, it is at the centre of our communities. Infrastructure helps connect people to each other, people to businesses, and businesses to markets, forming a foundation for economic activity and community prosperity. Well-developed transport networks allow businesses to grow and expand, enabling them to extend supply chains, deepen labour and product markets, collaborate, innovate and attract inward investment.”*

7.2.5 The Build Back Better plan for growth focuses on three pillars of investment to act as the foundation on which to build the economic recovery and levelling up: (1) radical uplift in infrastructure investment; (2) creating new skills training opportunities across the UK; and (3) fostering the conditions to unleash innovation.

Levelling Up White Paper (2022)

7.2.6 The Government published its Levelling Up White Paper in February 2022³. The Foreword states that, *“From day one, the defining mission of this government has been to level up this country.”*

7.2.7 The Levelling Up White Paper recognises that disparities in the performance of areas within cities can be just as great as disparities between regions and seeks to address economic underperformance wherever it arises:

“Even in high productivity cities, such as London, there are areas with low productivity”

7.2.8 The White Paper has four aims, two of which are directly relevant to this scheme:

1. *Boost productivity, pay, jobs and living standards, especially in those places where they are lagging.*
2. *Spread opportunities and improve public services, especially in those places where they are weakest.*

7.2.9 Beneath these aims are the Missions, which include:

“Living Standards: By 2030, pay, employment and productivity will have risen in every area of the UK, with each containing a globally competitive city, and the gap between the top performing and other areas closing.

Skills: By 2030, the number of people successfully completing high-quality skills training will have significantly increased in every area of the UK. In England, this will lead to 200,000 more people successfully completing high-quality skills training annually, driven by 80,000 more people completing courses in the lowest skilled areas.

Well-being: By 2030, well-being will have improved in every area of the UK, with the gap between top performing and other areas closing.”

7.2.10 The White Paper sets out the Government’s framework for broadening opportunities for people across the country and is underpinned by a range of metrics which will track the progress of the 12 Levelling Up “Missions”.

7.2.11 In May 2022 the Government published the Levelling Up and Regeneration Bill⁴ which will give effect to some of the principles set out in the White Paper. The Missions will have status in law, including a statutory obligation to report annually on progress towards meeting them by 2030.

7.2.12 The £4.8bn Levelling Up Fund is a key element of how the Government intends to deliver its agenda. As part of the allocation process, the Government has grouped local authority areas into three categories of prioritisation. LBN is a Priority 1 Area (the highest priority) because of its high levels of deprivation (see Section 7.5 below). Of the other local authorities in the Local Area, Hackney and Waltham Forest and Barking and Dagenham are also in Priority Category 1.

³ DLUHC. (2022) *Levelling Up the United Kingdom, White Paper*

⁴ UK Parliament. (2022)

Aviation Policy Framework (2013)

7.2.13 The Aviation Policy Framework⁵ starts with a summary of the importance of aviation to the UK economy including (at that time) £18bn of economic output and 220,000 jobs and acknowledges the capacity constraints at airports in the South East.

7.2.14 It states that (paragraph 9):

One of our main objectives is to ensure that the UK's air links continue to make it one of the best connected countries in the world. This includes increasing our links to emerging markets so that the UK can compete successfully for economic growth opportunities. To achieve this objective, we believe that it is essential both to maintain the UK's aviation hub capability and develop links from airports which provide point-to-point services.

7.2.15 It goes on to say that *"a key priority is to work with the aviation industry and other stakeholders to make better use of existing runway capacity at all UK airports."*

7.2.16 It states the UK's continued economic success depends on being able to connect with the countries and locations that are of most benefit to our economy. This is important in relation both to destinations that fall into that category today and those locations that will become crucial to our country's economic success in the future. It goes on to state that aviation enables productivity and growth through:

- Enhanced access to markets and new business opportunities through improved connectivity;
- Lower transport costs and quicker deliveries.
- Facilitating inward investment and the movement of goods, people and ideas both within the UK and to and from the rest of the world thus enhancing trade and the diffusion of knowledge and innovation.

7.2.17 It notes that the consistently high demand for aviation in the South East (and across the five main airports, including LCY) is driven by *"a densely populated region whose economy comprises multiple high-value sectors including finance, professional services, technology, media and fashion"* (paragraph 1.41).

Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England (2018)

7.2.18 The Airports National Policy Statement (ANPS)⁶ sets out the importance of aviation to the national economy, contributing around £20 billion per year and directly supporting approximately 230,000 jobs and extending beyond its direct contribution to the economy by also enabling activity in other important sectors like business services, financial services, and the creative industries.

7.2.19 It states (paragraphs 2.1 and 2.2):

"International connectivity, underpinned by strong airports and airlines, is important to the success of the UK economy. It is essential to allow domestic and foreign companies to access existing and new markets, and to help deliver trade and investment, linking us to valuable international markets and ensuring that the UK is open for business. It facilitates trade in goods and services, enables the movement of workers and tourists, and drives business innovation and investment, being particularly important for many of the fastest growing sectors of the economy.

International connectivity attracts businesses to cluster round airports, and helps to improve the productivity of the wider UK economy. Large and small UK businesses rely on air travel, while our airports are the primary gateway for vital time-sensitive freight services. Air travel also allows us ever greater freedom to travel and visit family and friends across the globe, and brings millions of people to the UK to do business or enjoy the best the country has to offer."

7.2.20 It goes on to state that new airport capacity is needed (paragraph 2.10):

"However, challenges exist in the UK's aviation sector, stemming in particular from capacity constraints. These constraints are affecting our ability to travel conveniently and to a broader range of destinations than in the past.

⁵ DfT. (2013) *Aviation Policy Framework*

⁶ DfT. (2018) *Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England*

They create negative impacts on the UK through increased risk of flight delays and unreliability, restricted scope for competition and lower fares, declining domestic connectivity, erosion of the UK's hub status relative to foreign competitors, and constraining the scope of the aviation sector to deliver wider economic benefits.”

Beyond the Horizon: The future of Aviation – Making Best Use of Existing Runways (2018)

7.2.21 This document states that the Government agreed with the Airports Commission that there is a need for new runway capacity in the South East and for other airports to make more intensive use of their existing infrastructure and make best use of their existing runways.

7.2.22 At paragraph 1.29 it concludes:

“Therefore the government is supportive of airports beyond Heathrow making best use of their existing runways. However, we recognise that the development of airports can have negative as well as positive local impacts, including on noise levels. We therefore consider that any proposals should be judged by the relevant planning authority, taking careful account of all relevant considerations, particularly economic and environmental impacts and proposed mitigations. This policy statement does not prejudge the decision of those authorities who will be required to give proper consideration to such applications. It instead leaves it up to local, rather than national government, to consider each case on its merits.”

Flightpath to the Future (2022)

7.2.23 The Flightpath to the Future⁷ document sets out the strategic framework for the sector for the next ten years. It again sets out the importance of airports and aviation to the UK economy and the Government's commitment to help the sector recover from the Covid-19 pandemic and make the most of the opportunities presented by the UK's exit from the European Union (EU).

7.2.24 It recognises the continued importance of jobs supported by the aviation industry:

“Aviation has an essential role to play in delivering a wide range of benefits for the UK and supporting the Government's levelling up agenda. Not only does it provide essential connectivity across the whole of the UK, it also presents huge economic, social and heritage opportunities for local areas and delivers a wide range of skilled jobs.”

7.2.25 It includes a ten-point plan which highlights key priority areas to help deliver the Government's commitment to growth. The first of these is to “Recover, learn lessons from the pandemic and sustainably grow the sector.”

7.2.26 Two points are grouped under the heading, “Realising benefits for the UK” are relevant to the proposal:

- Unlock local benefits and levelling up – including through trade, air freight, aerospace, investment and tourism as well as allowing people to benefit from improved connections across the union and regions.
- Unleash the potential for next generation professionals – enhance skills and diversity across the entirety of the sector. Ensuring the sector has the right skills, and is inclusive will also play a key role in supporting jobs creation.

7.2.27 The document emphasises the sector's opportunities for a more sustainable future. With these opportunities comes the need to support thousands of new jobs requiring a wide range of skills.

7.2.28 Throughout the document there is clear support for airport expansion and growth to help recovery and the “Build Back Better” policy agenda, boost the economy through global connectivity, support levelling up and delivering local benefits

⁷ DfT. (2022) *Flightpath to the Future*

Regional policy

The London Plan (2021)

7.2.29 Policy T8 (Aviation) of the London Plan 2021⁸ is supportive of the role aviation plays in the economy. T8.A states that: *“The Mayor supports the role of the airports serving London in enhancing the city’s spatial growth, particularly within Opportunity Areas well connected to the airports by public transport and which can accommodate significant numbers of new homes and jobs.”*

7.2.30 It also supports making better use of existing infrastructure. T8(F) states that: *“Development proposals should make better use of existing airport capacity, underpinned by upgraded passenger and freight facilities and improved surface access links, in particular rail.”*

Draft Royal Docks and Beckton Opportunity Area Planning Framework (2022)

7.2.31 In February 2022, the Mayor of London consulted on the Royal Docks and Beckton Opportunity Area Planning Framework⁹ and it is expected to be adopted by the end of 2022. This recognised LCY as one of the key *“anchor economic assets”*, which are of regional and international importance (section 1.1). The framework relies, to an extent, on leveraging the value of these assets, including the airport, to secure growth.

7.2.32 In terms of realising the economic potential of the Opportunity Area, the airport is clearly shown as positioned at the heart of a global enterprise and innovation district, *“building on its existing international connections”* to attract more creative and innovative businesses and foreign owned enterprises to the area. This will require enhancement of the international connectivity that the airport can offer.

Local policy

Newham Local Plan (2018)

7.2.33 The Newham Local Plan¹⁰ was adopted on the 10th December 2018.

7.2.34 **Policy J1 ‘Business and Jobs Growth’** recognises the need to support London’s international profile and emerging sectors strengths. Policy J1.A includes the following as a strategic principle:

Realise the benefits of the Borough’s connectivity, international profile and existing and emerging sectoral strengths to secure a supply of land, infrastructure, premises and successful places capable of attracting investment in growth sectors and supporting the existing business base, facilitating the continued diversification of the Borough’s economy and supporting Convergence aims;

7.2.35 Policy J1 allocates the airport as an ‘Employment Hub’ (ref. E11) with a strength / focus in *‘visitor economy, business and logistics.’* Supporting paragraph 1.23 states that the airport *‘is a major employer and catalyst for investment that supports London’s international role’*.

7.2.36 Part G of Policy S3 ‘Royal Docks’ states that:

“London City Airport will continue to perform an important role in the area’s international business and visitor connectivity and as the focus to an employment hub with measures implemented to support the optimisation of existing capacity and further mitigation of its environmental impacts, including improvements to public transport.”

7.2.37 Policy INF1 ‘Strategic Transport’ includes a list of interventions that benefit connectivity, accessibility, efficiency and/or journey time reliability, and help to achieve strategic principles. This includes measures to support the optimisation of airport capacity (Policy INF1(Air xviii)).

⁸ GLA., (2021) *The London Plan - The Spatial Strategy for Greater London*

⁹ GLA. (2022) *Royal Docks and Beckton Opportunity Area Planning Framework*

¹⁰ London Borough of Newham. (2018) *The Newham Local Plan*

7.2.38 Policy J3 ‘Skills and Access to Employment’ is clear about the need for ensuring benefits of the local and London-wide economy are felt by LBN’s residents, and the need to tackle barriers to work. In particular J3.1(a) states:

“Tackling barriers to work, enhancing the employability and long term employment prospects for all Newham residents, (regardless of health or disability status) including through improvements to aspirations, skills and educational attainment, childcare and training and access, and support for successful employability projects established by the Council and other partners.”

7.3 Assessment Methodology

Consultation

7.3.1 An EIA Scoping Report was prepared and submitted to LBN and a Scoping Opinion was received on 24th November 2022. Issues raised in the Scoping Opinion and how these are addressed in the ES are set out in Table 7.1 below. No further comments were received from statutory consultees that were relevant to the scope and methodology of this assessment.

Table 7.1. Issues Raised in LBN’s Scoping Opinion Relevant to this Chapter

Issues Raised	How/ Where Addressed
In the absence of formal guidance that influences socio-economic assessment methodology, the significance criteria for this topic should be clearly presented in the methodology section of this chapter topic in the ES.	The approach to defining significance criteria is set out in paragraphs Section 7.3 (Assessment Criteria - Significance Criteria)
Mitigation measures are not outlined in this section beyond the proposal to integrate existing community benefit programmes to the proposed development. These should be identified and outlined in the ES.	The mitigation measures are identified and outlined in Section 7.5 Embedded Mitigation and Existing Controls). The future mitigation sub-section sets out the mitigation that would be secured as part of this planning application.
The combined socio-economic benefits of the proposed development and cumulative schemes should also be considered in the assessment.	A cumulative assessment is set out in Section 7.9.

Scope of the Assessment

Technical Scope

7.3.2 The main socio-economic impacts of the proposed development that are assessed are summarised in Table 7.2. The assessment takes into account the phasing of the project and the likely socio-economic impact at each of the key assessment years.

Table 7.2: Socio-Economic and Community Effects

Impact	Scope of the Assessment
Employment and GVA impact during construction	A quantitative assessment of the direct employment and GVA effects of construction based on standard methodologies.
Employment and GVA impacts (direct, indirect and induced) during operation	A quantitative assessment of additional (direct, indirect and induced) employment and associated GVA at or related to LCY. The effect is assessed at the local and regional economy based on forecasts that take account of the pre-pandemic employment levels the anticipated productivity effect, and the build out of the CADP infrastructure.
The impact on the local jobs market	An analysis of the baseline local labour market and skills levels and qualitative assessment of the impact the proposed development would have.
Operational impact on the local community	An assessment of the likely employment impact on local residents in terms of: <ul style="list-style-type: none"> ➤ Impact on skills development; ➤ Impact on regeneration; ➤ Effects from LCY’s community investment programme; and

Impact	Scope of the Assessment
	<ul style="list-style-type: none"> ➤ Effects on diversity in the labour market (with regard to those with protected characteristics who are disadvantaged in the labour market).
Wider socio-economic impacts (including catalytic impact)	<p>An assessment of the wider socio-economic impact of the proposed development on the London economy in terms of:</p> <ul style="list-style-type: none"> ➤ The impact on inward investment and location decisions, which are reflected in business productivity effects; ➤ Trade effects, which are reflected in business productivity effects; ➤ Socio-economic welfare effects, including journey time savings; and ➤ Overseas tourism spend (business and leisure) in the local area. ➤ The assessment considers impacts on key sectors and key growth areas.

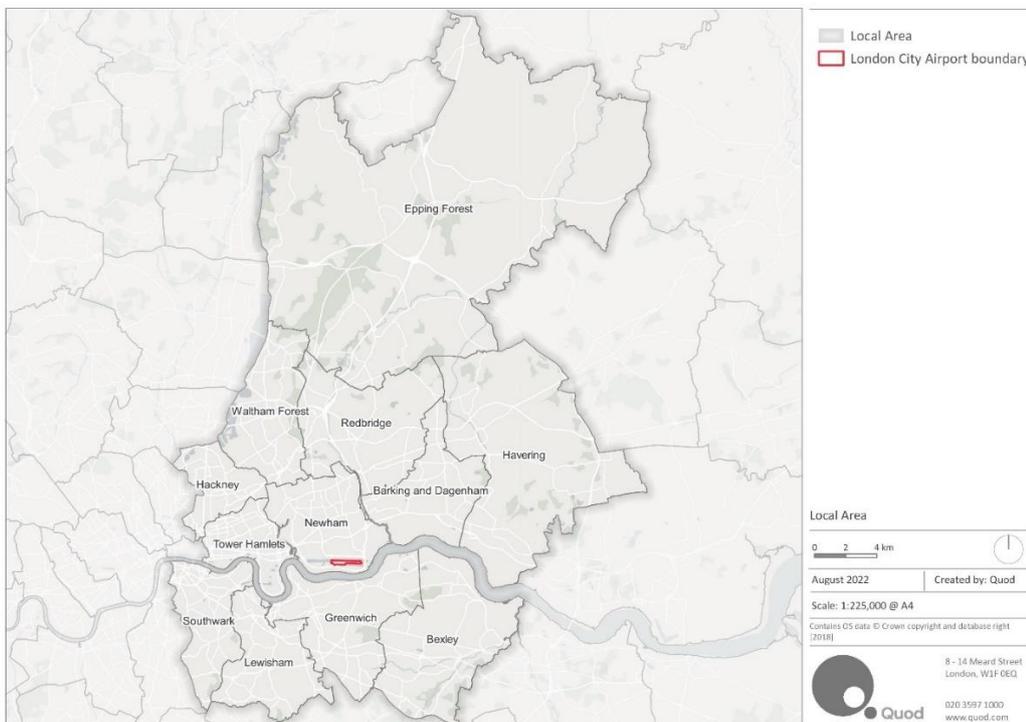
Spatial Scope

7.3.3 The baseline assessment considers the current social and economic conditions at different spatial levels as defined below:

- Site Level – the airport (where data is available and relevant at this spatial level);
- The Borough Level – the LBN;
- The Local Area¹¹ – The study area is the same as the ‘Local Area’ defined in the current S106 Agreement (for the existing CADP1 consent), namely LBN, the London Borough of Barking and Dagenham (LBBD), Bexley (LBB), Greenwich (RBG), Hackney, Havering, Lewisham (LBL), Redbridge (LBR), Southwark (LBS), Tower Hamlets (LBTH), and Waltham Forest (LBWF), as well as the District of Epping Forest (EFDC); and
- Regional Level – London.

7.3.4 The effects identified are also defined at the same geographical scales. For example, an effect that is considered to be significant at a Local level is significant for the boroughs that make up the Local Area.

Figure 7-1 Local Area map



¹¹ The Local Area is defined in the existing CAPD1 S106 Agreement with respect to the Airport’s employment targets

Assessment Scenarios

7.3.5 The socio economic assessment considers the following assessment years and scenarios:

- Baseline Year 2019;
- Do Minimum (DM) Scenario for 2025, 2027 and 2031; and
- Development Case (DC) Scenario for 2025, 2027 and 2031.

7.3.6 The assessment assesses and quantifies, where possible, the impact of the proposed amendments in the relevant assessment years through a comparison of the impacts under the DM and DC Scenarios.

7.3.7 For the assessment of construction impacts, the assessment considers employment and GVA impacts over the whole construction phase.

7.3.8 Consideration has also been given to the Faster and Slower Growth Cases as sensitivity tests (refer to Section 7.7).

Baseline Characterisation

7.3.9 The baseline year used in this assessment is 2019. This is due to the impact Covid-19 has had on employment levels in the years since. Data from more recent years is therefore considered unrepresentative for some elements of the assessment.

7.3.10 In projecting forwards under both the DM and DC Scenarios, account has been taken of the extent to which there have been structural changes in employment as a consequence of the pandemic. Where relevant, more up to date data is also presented in the baseline for context – and the difference / changes are commented on where relevant.

7.3.11 The baseline socio-economic conditions that are of relevance to the assessment have been established through analysis of the below nationally recognised research and survey information and datasets (the limitations set out in the Assumptions and Limitations section below should be acknowledged in the context of the age of some data sources):

- Census data (2011 and 2021 where appropriate and available);
- Office for National Statistics (ONS) Population Estimates (2019);
- Annual Population Survey (2019);
- ONS Business Register and Employment Survey (BRES) data 2019 (2020);
- Indices of Multiple Deprivation (IMD) (2019);
- Claimant Count data (2019/2020/2022); and
- LCY Annual Performance Report (APR) (2019).

Method of Assessment

Construction Impacts

7.3.12 The construction employment associated with the proposed development has been estimated using an industry standard approach and is based on the airport's estimated range of costs to complete the CADP1 Works. . This programme focuses purely on the remaining elements of CADP1 and does not include previous expenditure. These costs include high and low estimates. For the purposes of this assessment, the average of the two has been taken. The employment generated by this construction expenditure has then been calculated by converting the costs to GVA based on the ratio between turnover and GVA for the construction industry in London taken from the Annual Business Survey¹². The number of employment years associated with the construction programme is then calculated using the average GVA per job for construction in London. The GVA per job is assumed to increase by 1% per annum to reflect ongoing improved productivity.

¹² Office for National Statistics (2022). Non-financial business economy, UK regional results: Sections A to S, London, 2008 to 2020, Annual Business Survey.

7.3.13 Construction employment arising in the DC Scenario is then compared to that arising in the DM Scenario. It should be noted that construction employment would be generated under both scenarios, as the CADP1 development would be built in both the DM and DC Scenario, albeit at different rates and over a different time period, as set out in Chapter 6 of the ES. Accordingly, there would be limited difference in the total employment required, but the timings of the construction employment and GVA impact would differ.

Operational Impacts

Employment and GVA impacts (direct, indirect and induced)

7.3.14 The direct, indirect and induced impacts of the proposed amendments have been assessed in terms of the effect on employment and GVA. The methodology for this is set out in more detail in Section 6 of this ES Chapter and the Appendices of the Need Case (Volume 3 of the ES). In summary, a range of techniques were used:

- The direct employment supported by the airport in 2019 was established using data collected for the 2019 APR, supplemented by some further investigation of specific on-site businesses. The GVA associated with this direct employment was estimated using a mixture of annual financial reports for individual businesses (where available and appropriate) and published ONS data on productivity levels in specific relevant sectors where specific company information was not available.
- Future estimates of direct jobs and GVA were based on an assessment of the activity drivers of different functions on-site at the airport. This considered whether changes in individual functions at the airport would be related to passenger growth, movement growth or spatial footprint growth. Regression analysis of the growth in function employment over time, based on time-series APR data, compared to the historic growth drivers was conducted to produce a series of elasticities, alongside an underlying productivity time trend.
- Indirect and induced impacts were estimated using a series of multipliers. Different multipliers were calculated for the Local Area and for London, and for each study area, for the different functions on-site at the airport. The multipliers were calculated using the Flegg Location Quotient method¹³. This approach uses specialised location quotients, which assess the level of relative concentration of an economic sector, to adjust the matrix of coefficients in the UK input-output tables to reflect the different economic structure at a sub-regional level. The resulting adjusted input-output tables¹⁴ are then further adjusted to reflect the greater need for external trading relationships within areas at a sub-national level and in smaller economies. This approach is commonly used in undertaking economic impact assessments.

Local jobs market

7.3.15 The gross number of direct jobs calculated are split into the following three skill levels based on their job type:

- Management, professional and technical jobs;
- Administrative, trade and services jobs; and
- Sales, process and elementary.

7.3.16 This is estimated in both the DM and DC Scenarios based on the job type and the occupations that typically fill those roles. This is calculated based on the occupations of people who work in relevant sectors in LBN. This is derived from the Census 2011 data on industry by occupation of the workplace population.

7.3.17 The proportion of workers likely to live in the different geographical areas is derived from the Census 2011 travel to work data and the targets agreed as part of the CADP1 S106 agreement. This allows estimates to be made for where in London (or beyond) people taking up jobs at the airport are likely to commute from. Further detail on these assumptions is set out as part of the assessment.

¹³ Anthony T. Flegg & Timo Tohmo, Department of Accounting, Economics and Finance, Bristol Business School, University of the West of England, Bristol., (2013) *Estimating regional input coefficients and multipliers: The Use of the FLQ is not a Gamble.*

¹⁴ Office for National Statistics. ,(2022) *United Kingdom Input-Output Analytical Tables, 2018*

Local community

7.3.18 A qualitative assessment has been undertaken of the potential impacts on the local community associated with employment of residents within the Local Area in terms of:

- Impact on skills development;
- Impact on regeneration;
- Impact from LCY's community investment programme; and
- Impact on diversity in the labour market.

7.3.19 This considers the wider role that the airport has in regeneration of the Local Area and meeting Local, Regional and National policy objectives. This is a qualitative assessment which considers the effects of the proposed development in the light of policy objectives and meeting local need to allow regeneration, in particular:

- Improving access to skills, training and employment opportunities, through improving job matching;
- Levelling up more deprived areas of the country; and
- Providing infrastructure that supports employment in the areas where it is needed.

7.3.20 Given the overlap with other assessment areas, no scale of significance has been assigned to the effect on the local community. The effect on the local community and the approach to assessing significance is set out in more detail in Section 7.6.

Wider Socio-Economic Impacts

7.3.21 An assessment has been undertaken of the wider socio-economic impact of the proposed development on the Local Area and London economy, examining:

- Catalytic impacts including business productivity effects and Inbound tourism spend (business and leisure);and
- Socio-economic welfare effects, including journey time savings, air fare savings, producer benefits and carbon costs.

7.3.22 The methodology used is summarised below but further detail on is set out in the Need Case (Volume 3 of the ES) and the Appendices of the Need Case. The approach taken considers both the impact on employment and GVA (referred to as Catalytic Impacts) and socio-economic welfare effects.

Catalytic Impacts on the Economy

7.3.23 The effects on GVA and employment supported by inward investment, trade and competitiveness effects are considered holistically as an overall effect on productivity in the study area economies stemming from the connectivity provided to business travellers by the airport. The approach used examines the patterns of travel for business passengers from the CAA Passenger Survey 2019¹⁵ and OAG data¹⁶, identifying surface origins, potential alternative airport options, direct and indirect routings, and air fares. It ultimately assesses the generalised cost of travelling via the airport and the next best alternative to completing the same journey. A price elasticity based on the Department for Transport's (DfT) aviation forecasts research was then applied to the generalised cost differential to identify the number of passengers that would no longer fly if they were forced to use the alternate to the airport. The results of this analysis were then used to estimate the role that the airport plays in supporting productivity in the Local Area and London. These impacts were calculated using a statistical relationship originally developed by Oxford Economics¹⁷ as part of research undertaken for Transport for London around the Airports Commission process. This relationship correlates the level of business air travel and air freight from an area to total factor productivity in the economy. It identified an econometric relationship whereby a 10% increase in combined business air travel and air freight would result in a 0.5% increase in productivity in the economy. The employment associated with this increased GVA was assessed based on the

¹⁵ Civil Aviation Authority. , (2020) *CAA Passenger Survey 2019*

¹⁶ OAG Schedules Analyser Database.

¹⁷ Oxford Economics. , (2013) *Impacts on the UK Economy through the Provision of International Connectivity*

average GVA per job across the London economy, allowing for the fact that a large proportion of the GVA gain will not result in additional employment but be reflected in increased individual productivity.

7.3.24 The impact on inbound tourism to the Local Area and London has again been assessed in terms of the impact on GVA and employment. The impact on GVA has been assessed based on the expenditure injection from inbound tourists to the relevant study area. This has been based on VisitBritain data¹⁸ on overseas tourism expenditure patterns, the GB Tourism Survey¹⁹ for domestic tourism expenditure patterns and the CAA Passenger Survey 2019 data for volumes of visitors to the study areas. Employment effects were estimated based on the average GVA per job in tourism and associated sectors in London, based on ONS data.

Socio-Economic Welfare Effects

7.3.25 The purpose of the cost benefit analysis is to consider the broader effects on socio-economic welfare associated with the development and it places the emphasis on whether the expansion of the airport will result in a more efficient allocation of resources across the economy. It examines whether the key actors (passengers, producers, and the Government) in the market will be better or worse off as a result of LCY's growth in line with the DC Scenario as opposed to the DM Scenario. This approach is the same in concept as the economic elements of the DfT's WebTAG appraisal approach. It should, however, be emphasised that it is not a WebTAG appraisal and is not intended to be one. The purpose of this analysis is to provide a proportionate assessment of the impacts of the development from a socio-economic welfare perspective. Furthermore, it is worth noting that WebTAG is not intended for assessing the impact of private sector investments and is not commonly used standard in assessing airport socio-economic effects in relation to planning decisions.

7.3.26 The analysis considers a number of different impacts on socio-economic welfare:

- Passenger Surface Access Time Savings – The journey time savings associated with passengers being able to use the airport have been based on surface origins and modes of travel taken from the CAA Passenger Survey 2019. If passengers are not able to use the airport then they are forced to divert to the next most popular alternative to complete their journey. The surface access journey times associated with travel to and from the airport and the different alternatives have been identified using Google Maps. An additional allowance has then been made for processing time at each of the alternative airports, reflecting the airport's unique selling point as providing a streamlined and rapid passenger experience compared to its competitors. The time savings made by passengers using the airport were then monetised using the values of time for air travellers set out in the Airports Commission Final Report²⁰, updated to current prices and real values in line with WebTAG guidance²¹;
- Passenger Surface Access Cost Savings – similarly to journey time savings, the assessment has considered the change in access cost, either in terms of fuel costs for passenger using cars or public transport fares, for LCY passengers if they are forced to use the next most popular alternate for their journey. Passenger distribution has again been taken from the CAA Passenger Survey, while journey distances have been taken from Google Maps. Fuel costs have been assessed using the approach to estimating fuel costs set out in WebTAG. Public transport costs have been estimated using train company websites;
- Air Fare Savings – the air fares paid by passengers using the airport were compared to the air fares available from the next most popular alternate in each case. Where the fare at LCY is lower than the alternative, this represents a gain to passengers. Air fares for LCY and its competitors have been estimated based on data from the CAA Passenger Survey;
- Producer Surpluses – this examines the profits that will accrue across the London system airports from the additional passengers that can be accommodated as a result of the proposed development. The number of additional passengers has been estimated on the basis an analysis of the generalised costs of travel via LCY compared to the next best alternative drawing on data from the CAA Passenger Survey, OAG and

¹⁸ Visit Britain. (2022) *Inbound trends by UK nation, region & county*. Accessed at: <https://www.visitbritain.org/inbound-trends-uk-nation-region-county>.

¹⁹ Kantar.t. (2020) *The GB Tourist 2019 Annual Report*

²⁰ Airports Commission., (2015) *Economy: Transport Economic Efficiency Impacts*, Page 16

²¹ DfT. (2018) *TAG Data Book*

Google Maps. Profits have been based on the estimated relation between operating profit per passenger, taken from LCY's annual report and accounts, and airport scale;

- Air Passenger Duty – the estimated additional APD revenue accruing to the UK Government from passengers flying as a result of the proposed development has been based on the same generalised cost assessment described above and the existing rates of APD, allowing for the upcoming reduction in rates for domestic flights;
- Construction Costs – the construction costs of the proposed development represent a cost to society and hence are included within the socio-economic cost benefit analysis. The construction cost is based on the airport's estimated range of costs to complete the CADP1 Works. It has also been assumed for assessment purposes that construction takes place in the DM Scenario over 6 years to 2031, while in the DM Scenario, the costs are still incurred but construction start is assumed to be delayed until the early 2030s;
- Carbon Costs – the full range of carbon emissions associated with the proposed development, i.e. those relating to additional flights, increased airport operations, growing surface access journeys and the construction programme, have been monetised using the BEIS guidance on carbon valuation.

7.3.27 The Net Present Value (NPV) of the proposed development is calculated over a 60 year appraisal period. It is the discounted sum of the costs and benefits described above. A positive NPV suggests that socio-economic welfare benefits outweigh welfare costs.

7.3.28 The NPV is shown including and excluding carbon costs. This is for a number of reasons. The cost of carbon is already accounted for within the demand forecasts, as described above, and, consequently, these costs are already allowed for within the passenger demand forecasts and assumed to be internalised within the aviation industry with the costs passed onto passengers within the air fare so impacting the rate of growth within the forecast scenarios. Hence, to include them again within the socio-economic cost benefit analysis is to double count their effect. Inclusion within the socio-economic cost benefit is also problematic because it does not allow for the potential use of aircraft capacity elsewhere, either in the UK or overseas. It is, therefore, very difficult to know to what extent the carbon emissions are truly net additional and, hence, the extent of carbon costs associated with them. Furthermore, Government has made quite clear through the Jet Zero Strategy that the cost of carbon is a national and global issue that should be dealt with at that level. It is not a relevant consideration at a local level. These issues suggest that the relevant NPV is that which excludes carbon costs. However, the NPV including carbon costs is included to assess the proposed amendments in a worst case.

Comparison with 2015 UES

7.3.29 Appendix G of the Need Case (Volume 3 of the ES) compares the socio-economic impacts associated with the proposed development to those identified in the 2015 UES. The 2015 UES considered direct, indirect and induced impacts that are broadly comparable with those identified in this assessment. It did not, however, consider the wider impacts in the same way, and, hence, it is not possible to make the same comparison. The 2015 UES also focussed on impacts at the Local Area level and not considering the impacts across London. Not all effects identified in this assessment can therefore be compared to those of the 2015 UES.

Significance Criteria

7.3.30 There is no published or formalised technical guidance relating to the assessment of socio-economic effects. Professional judgement and experience have therefore been drawn upon to assess the significance of the potential socio-economic effects of the proposed development.

7.3.31 The scale of effects is broadly derived from the interaction between the sensitivity of the receptors and the magnitude of impacts, as described further in the subsequent sections.

Receptors and Receptor Sensitivity

7.3.32 Receptor sensitivity is largely driven by the baseline conditions and the extent to which socio-economic issues are present in the area. For example, an area with high unemployment will have higher sensitivity to socio-economic changes (impacts).

7.3.33 Receptor sensitivity is based on a scale of:

- **High** – where there are above average levels of socio-economic deprivation or a receptor has limited ability to respond or adapt to change;
- **Medium** – where there are average levels of socio-economic deprivation or a receptor has some ability to respond or adapt to change;
- **Low** – where there are below average levels of socio-economic deprivation or a receptor is particularly able to respond or adapt to change; and
- **Negligible** – where there a receptor is unlikely to be affected by change, regardless of the magnitude.

Magnitude of Impact

7.3.34 The assessment of the magnitude of the socio-economic impact is quantified where possible and an objective qualitative assessment is made in the cases where quantification is not possible. The magnitude of impact is based on a scale of:

- **High**: substantial change to one or more of the socio-economic receptors;
- **Medium**: noticeable change to one or more of the socio-economic receptors;
- **Low**: hardly perceptible change to one or more of the socio-economic receptors; and
- **Negligible**: no perceptible change to one or more of the socio-economic receptors.

Defining the Effect

Effect Nature

7.3.35 The nature of an effect has been determined by reference to the following criteria:

- **Adverse**: effects that have a negative influence on a socio-economic resource or receptor. And
- **Beneficial**: effects that have a positive influence on a socio-economic resource or receptor.

Scale of effect

7.3.36 The scale of the effect, based on a scale of:

- **Negligible**: effects generally beneath levels of perception;
- **Low**: slight or highly localised effects;
- **Medium**: limited effects; and
- **High**: considerable effect.

7.3.37 Table 7.3 sets out the approach to determining the scale of effect. Determining the scale of socio-economic effects requires professional judgement therefore the matrix below includes a degree of flexibility when considering the magnitude of an impact in the context of the sensitivity of the receptor. The reasoning behind the professional judgement is clearly explained in the assessment section below.

Table 7.3: Assessment Matrix

Receptor Sensitivity	Magnitude of Impact			
	Negligible	Low	Medium	High
Negligible	Negligible	Negligible or minor	Negligible or minor	Minor
Low	Negligible or minor	Negligible or minor	Minor	Minor or moderate
Medium	Negligible or minor	Minor	Moderate	Moderate or major
High	Minor	Minor or moderate	Moderate or major	Major

7.3.38 Effects classified as moderate or major in scale are considered 'Significant'. Effects classified as minor or negligible in scale are considered 'Not Significant'.

Effect Duration

7.3.39 Effects generated as a result of the construction works (i.e. those persisting for a limited period only) are generally classed as 'temporary'.

7.3.40 Effects that result from the completed and operational proposed development are classed as 'permanent' effects. These are effects that result from an irreversible change to the baseline environment (e.g. land-take) or which persist for the foreseeable future (e.g. from regular or continuous operations or activities).

Assumptions and Limitations

7.3.41 As set out above, 2019 has been selected as the baseline year due to the impact Covid-19 has had on employment levels in the years since. Data from more recent years is therefore considered unrepresentative for some elements of the assessment. This approach was agreed with LBN through the EIA scoping process. Where relevant more recent data is provided in the baseline assessment, and commentary is provided where material differences are identified.

7.3.42 As with any dataset, baseline data will change over time. 2019 data or the most recent published data sources have been used in this assessment; however, it should be noted that in some instances this data may not be up-to-date or may be less reliable. For example, the latest Census data where the whole suite of data is available is from 2011. Limited data has been released from the 2021 Census which is reported where relevant, and other data sets (such as the Annual Population Survey and the midyear population estimate) are used to update the Census 2011 data where possible. In this case, both 2011 Census (which is the most accurate) and 2019 APS data (which is more up-to-date) are reported. This is an unavoidable limitation that is not considered to adversely impact the validity of the assessment undertaken to identify the likely significant socio-economic effects.

7.4 Embedded Mitigation and Existing Controls

7.4.1 The assessment of effects assumes that the existing measures described in this section (existing initiatives at the airport and the existing S106 agreement) would continue to apply and would be carried forward to any future consent granted. In addition, there is further embedded mitigation that would occur in the DC – this is set out in the future mitigation section and would be secured by an S106 agreement were the application granted.

Existing Initiatives at the Airport

7.4.2 LCY is committed to being a good neighbour and is supporting the local community through a variety of different ways including community investment, educational programmes, volunteering, and sponsorships.

7.4.3 With regards to education and volunteering initiatives, these include:

- London City Helpers Programme launched in 2020: delivered in partnership with the East London Business Alliance (ELBA) and with support from other community partners, provides bespoke engagement activities in the community to tackle unemployment and address inequality, raise the aspiration of disadvantaged young people and support the mental health and wellbeing of residents in LBN and across East London;
- Youth Mentoring Programme launched in 2021: delivered in partnership with 15BillionEBP to raise young people's aspirations and support their mental health and wellbeing. Volunteers from the airport have been mentoring LBN school students at risk of becoming not in education, employment or training (NEET) due to the impact of the pandemic, via online/face to face workshops and other engagement activities aimed at fostering resilience and motivation and breaking the cycle of deprivation and low attainment;
- Air and Space Training Institute (IASTI) partnership;

- Science, technology, engineering and maths (STEM) in aviation launched in 2016 with the aim to inspire the next generation of innovators and entrepreneurs in the advancements that are shaping the aviation industry – from sustainable fuels to Artificial Intelligence (AI);
- Women in Aviation Programme: delivered by charity partner 15billionEBP, is part of the LCY's wider agenda to create a better gender balance across the business, and show how the sector offers an attractive career path for young women, including those from BAME communities. To-date this programme has enabled 600 young women to get an insight into the aviation industry and spark an interest in aviation roles;
- Volunteering through '12 days of Giving' and 'Volunteering fortnight'; and
- Updated Volunteering Policy to include 2 days of volunteering for all airport staff to be launched summer/autumn 2022.

7.4.4 LCY launched its Community Fund in May 2019 and has awarded Grants totalling more than £270k to 90+ local charities and not-for-profit organisations. This Fund builds on the success of the 30th anniversary £30K Community Fund, where 15 recipients received grants up to £3,000. In response to the COVID-19 pandemic, LCY also provided an additional £50,000 to help nine foodbanks across LBN, RBG, LBTH and LBBD, which play a critical role in getting essential supplies to vulnerable people and families.

7.4.5 The fund has a focus on:

- Building stronger, safer and healthier communities;
- Creating more sustainable and greener communities;
- Raising aspirations of East Londoners; and
- Creating pathways into employment.

7.4.6 LCY rolled out the London Living Wage in July 2019 to key direct suppliers, following accreditation to the scheme in March 2019. It is also an early adopter of the Mayor of London's Good Work Standard, becoming the first UK airport to achieve both milestones.

Existing S106 Agreement

7.4.7 As part of the current S106 agreement for the CADP1 planning permission, LCY committed to embedded posts financial contribution of £5.8m, with the combined effect of improving pathways to employment at LCY. The embedded posts include a Human Resources Officer, Community Engagement Officer and Procurement Officer. The financial contribution is made up of:

- £5m employment contribution to support people to gain entry in to work and ensure that local residents are given the opportunity to access jobs
- £770,000 education contribution to the Council to go towards programmes for local schools and/or colleges which assist pupils and students with employment and interviewing skills and/or general career advice and/or knowledge of the Airport and the Development and/or job opportunities in the aviation industry

7.4.8 LCY also committed to use reasonable endeavours to meet a number of targets and commitments around local employment opportunities; these include:

- Local recruitment targets of:
 1. at least 70% of new recruits for jobs advertised at the airport are residents of the Local Area;
 2. at least 40% of new recruits for jobs advertised at the airport are residents of LBN;
 3. at least 70% of new recruits for jobs at the airport advertised by the Operator are residents of the Local Area;
 4. at least 50% of new recruits for jobs at the airport advertised by the Operator are residents in the LBN;
 5. at least 40% of new recruits for jobs which relate to the construction of CADP1 and which are advertised by contractors or sub-contractors engaged by the airport Companies are residents in the LBN;
- Establishing a forum for airport employers to promote local recruitment;

- Adopting local recruitment policies and practices (and as far as practically possible) and encourage airport companies to do the same;
- To provide LBN with relevant updates on the above;
- To encourage staff (of the Operator and other business on the airport) to participate in community projects and initiatives in the Local Area; and
- To establish a Local Employment Partnerships Board to consider the initiatives that may be funded by the education contribution (and the success or otherwise of previous initiatives).

7.4.9 The S106 also includes a number of commitments to working with LBN to maximise supply chain impacts in LBN and the Local Area. This includes providing advance notice of supply chain opportunities and ‘meet the buyer’ events.

Future Mitigation

7.4.10 LCY is committed to continue to maximise the benefits of LCY to its local communities.

7.4.11 In the DC scenario, LCY will commit to:

- A significant enhancement to the airport’s Community Fund is proposed. This will see a total fund of £3.85 million administered over 10 years. The enhanced fund could be used to fund a variety of community interventions that improve amenity in areas local to the airport and along its flight paths, particularly given that proposed change to operating hours on a Saturday afternoon.
- An Employment and Education contribution of up to £1.9m to LBN; and
- Continue and expand on existing employment and training initiatives.

7.4.12 These will be confirmed and secured via the S106 agreement.

7.5 Baseline Conditions

Existing Baseline

Demographics

Population

7.5.1 At the time of the 2011 Census, the total resident population of the LBN was 307,984, and population of the Local Area was 2,944,093.

7.5.2 Mid-year ONS population estimates indicate that the population of the Local Area in 2019 was 3,306,252. This represents a growth of 12% since the 2011 Census, compared to the growth of London (10%) over the same time period.

7.5.3 The population of LBN had grown faster (15%) and had a population of 353,134 in 2019.

7.5.4 The first Census 2021 results were published in June 2022. This suggested slightly lower rates of growth since the 2011 Census: 14% in LBN, 11% in the Local Area and 8% in London.

7.5.5 However, the 2021 Census was undertaken during the Covid-19 pandemic when a proportion of residents may have been residing outside of LBN and London, which may have resulted in an underestimation of population numbers.

7.5.6 The 2019 mid-year population estimates are considered the most robust for the purpose of the baseline assessment.

Demographics

7.5.7 According to the 2019 mid-year population estimates, the Local Area has a high proportion of residents of working age, with 73.8% of the population aged 16 – 74 years. This is similar to the proportion for London (73.9%). Only 5.0% of the population in the Local Area is aged 75 or above, which is slightly lower than the

average for London (5.5%). The Local Area also has a slightly higher proportion of children under 16 years (21.3%) compared to London (20.6%).

7.5.8 LBN has a younger population than the Local Area: 22.1% of residents are 0-15 and 74.6% are 16 to 74 (compared to 21.3% and 73.8% respectively in the Local Area).

7.5.9 In the 2011 Census, the population of the Local Area is more ethnically diverse than London: 43% of residents identifying as an ethnicity other than white, compared to an average 40% across London as a whole. The largest non-white group in the Local Area was Asian / Asian British, which accounted for 20% of the total population, which is slightly higher than for London (19%).

7.5.10 The Annual Population Survey data on ethnic profile of residents aged 16-64 years indicates that 40.4% of Local Area's residents in this age group identify as ethnic minority, compared to 39.2% for London as a whole.

7.5.11 The population of LBN is more diverse than both the Local Area and London: in the 2011 Census, 71% of residents identifying as an ethnicity other than white (compared to 43% in the Local Area). Asian or Asian British residents account for 44% of LBN's population.

7.5.12 A summary of the demographic baseline is set out in Table 7.4.

Table 7.4: Summary of Demographic Baseline at Borough, Local and Regional Levels

Indicator	LBN	Local Area	London
Population			
Total, 2011	307,984	2,944,093	8,173,941
Total, 2019	353,134	3,306,252	8,961,989
Total 2021	351,100	3,269,100	8,799,800
Growth 2011 – 2019	15%	12%	10%
Growth 2011 – 2021	14%	11%	8%
Age Structure, 2019			
0-15 years	22.1%	21.3%	20.6%
16-74 years	74.6%	73.8%	73.9%
75 years or above	3.3%	5.0%	5.5%
Ethnic Profile, 2011			
White	29%	57%	60%
Mixed / multiple ethnic groups	5%	5%	5%
Asian / Asian British	44%	20%	19%
Black / African / Caribbean / Black British	20%	16%	13%
Other ethnic group	4%	3%	3%
Ethnic Profile, 2019			
White (16-64 years)	37.8%	59.5%	60.7%
Ethnic minority (16-64 years)	62.2%	40.4%	39.2%

Labour Market

Economic Activity

7.5.13 The 2011 Census data records that 71% of working age (16-74) residents in the Local Area are economically active. This is similar to London as a whole (72%).

7.5.14 The unemployment rate in the Local Area was 8.4% at the time of the 2011 Census, which was slightly higher than London average (7.3%).

7.5.15 LBN had lower levels of both economic activity (67%) and unemployment (6.9%) – this is explained by a larger number of students living in the Borough.

7.5.16 Claimant Count provides data on the proportion of residents claiming unemployment-related benefits in an area. It is calculated for residents aged 16-64 years. This is currently considered an experimental data set. The Claimant Count does not capture all unemployment in an area such as those unwilling or unable to claim Universal Credit or Jobseeker’s Allowance.

7.5.17 The Claimant Count data from July 2019 (baseline year) reveals a claimant rate of 3.0% for the Local Area residents, which is slightly higher than for London (2.8%).

7.5.18 The number of claimants in the Local Area in July 2019 was 66,350 and 167,570 in London. In July 2022 the numbers increased by 72% and 71% respectively, with 114,130 claimants in the Local Area and 287,100 claimants in London.

7.5.19 The number of claimants in LBN was in line with the London average in 2019 (2.8%) but has grown faster (by 122%) than the Local Area between July 2019 and July 2022.

Qualifications

7.5.20 The 2011 Census data indicates that both the LBN and the Local Area has a higher proportion of population holding no formal qualifications (21% for both) than London (18%). The proportion of highly educated people is lower than London average: 30% of residents of LBN and 32% of the Local Area population hold degree qualification or above, compared to 38% in London.

Occupations

7.5.21 The 2011 Census data indicates that a slightly lower proportion of Local Area residents (45% of the working population) are employed in high-skilled occupations (managerial, professional, and technical positions) compared to London (50%). People employed in low-skilled occupations (sales, process and elementary positions) made up 25% of the working population, which is higher than London average (22%).

7.5.22 LBN has a substantially lower proportion of residents (32%) employed in high-skilled occupations and a higher proportion working in low-skilled occupations.

7.5.23 The Annual Population Survey data on occupation for all residents in employment in 2019 (baseline year) shows a larger proportion of residents employed in high-skilled occupations, both for the Local Area (54%) and for London (59%). The proportion of residents employed in low-skilled occupations is 21% which is higher than for London as a whole (18%).

7.5.24 Again LBN had a lower proportion of residents in high-skilled occupations and higher proportion in low-skilled occupations than the Local Area or the London average.

7.5.25 The difference in the data sources (Annual Population Survey and the Census) is likely to be driven by data collection methods as well as by the difference in timeframes.

7.5.26 A summary of the labour market baseline is presented in Table 7.5.

Table 7.5: Summary of Labour Market Baseline at Borough, Local and Regional Levels

Indicator	LBN	Local Area	London
Economic activity (residents aged 16-74), 2011			
Economically active	67%	71%	72%
Unemployed	6.9%	8.4%	7.3%
Claimant count (residents aged 16 to 64 years)			
Claimant Rate (July 2019)	2.8%	3.0%	2.8%
Total Claimants (July 2019)	6,930	66,350	167,570

Total Claimants (July 2022)	15,400	114,130	287,100
Highest Level of Qualification (residents aged 16 years and above), 2011			
No formal qualifications	21%	21%	18%
GCSEs / A-Levels (or equivalent)	34%	37%	35%
Further and Higher Education	30%	32%	38%
Other qualifications	16%	9%	10%
Occupation (residents aged 16-74 years in employment), 2011 – Census			
Management / Professional / Technical	42,500 (32%)	617,000 (45%)	2,024,000 (50%)
Administrative / Trade / Service	39,600 (30%)	419,000 (30%)	1,120,000 (28%)
Sales / Process / Elementary	50,700 (38%)	349,000 (25%)	878,000 (22%)
TOTAL	132,800 (100%)	1,385,000 (100%)	4,022,000 (100%)
Occupation (all residents in employment), 2019 – Annual Population Survey			
Management / Professional / Technical	84,200 (47%)	928,000 (54%)	2,724,000 (59%)
Administrative / Trade / Service	44,900 (25%)	431,000 (25%)	1,065,000 (23%)
Sales / Process / Elementary	51,000 (28%)	356,000 (21%)	856,000 (18%)
TOTAL	180,100 (100%)	1,715,000 (100%)	4,645,000 (100%)

Deprivation

7.5.27 The Government's Index of Multiple Deprivation (IMD) (2019)²² measures deprivation by combining indicators including a range of social, economic, environmental, and housing factors to give a single deprivation score for small areas (lower-layer super output areas) in England. All areas are ranked relative to one another according to their level of deprivation.

7.5.28 The seven domains of deprivation that make up the index are as follows:

- Income;
- Employment;
- Education, skills and training;
- Health deprivation and disability;
- Crime;
- Barriers to housing and services; and
- Living environment deprivation.

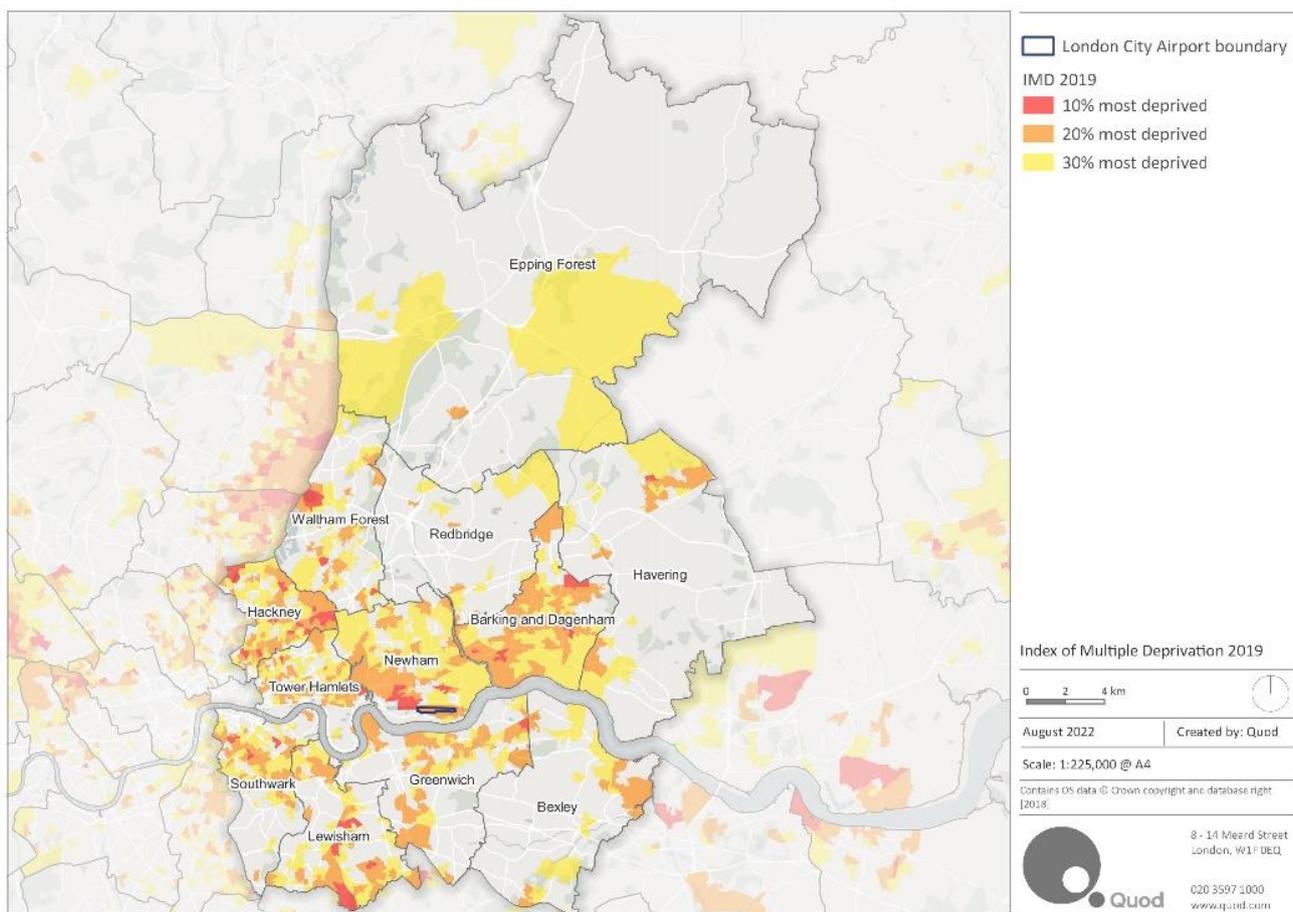
7.5.29 Figure 7.2 shows the relative levels of deprivation surrounding the airport – areas shown in red are within the 10% most deprived in England, those in orange are within the 20% most deprived and those in yellow within 30% most deprived.

7.5.30 The IMD data indicates that the majority of LBN is within the 30% most deprived areas in the country. The airport lies within 20% of most deprived areas and close by there are pockets of deprivation within the 10% most deprived.

7.5.31 In all local authorities within the Local Area there are significant levels of deprivation (Lower Super Output Areas (LSOAs) within the top 30% most deprived in the country). The most deprived are the London Borough of Hackney, LBTH, LBS, LBL, LBN, LBWF, LBBB and RBG where there are areas which lie within the top 30% most deprived in the country. In the Local Authorities further away from the airport (EFDC, Havering, LBR and LBB), there is less evidence of deprivation compared to the other local authorities of the Local Area.

²² DCLG. (2019) *Indices of Multiple Deprivation*

Figure 7.2: Levels of Deprivation in the Local Area



7.5.32 As set out above, the IMD data breaks down the overall deprivation into the individual seven domains of deprivation to provide further detail on types of deprivation.

7.5.33 The Income Deprivation Domain measures the proportion of the population in an area experiencing deprivation relating to low income. The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low earnings (and who satisfy the respective means tests)²³.

7.5.34 The Employment Deprivation Domain measures the proportion of the working age population in an area involuntarily excluded from the labour market. This includes people who would like to work but are unable to do so due to unemployment, sickness or disability, or caring responsibilities.

7.5.35 A large proportion of LBN falls within the top 30% most deprived areas in relation to income and employment, with some LSOAs in the top 10% of both deprivation domains.

Employment

7.5.36 According to BRES data, there were 1,397,000 jobs in the Local Area in 2019, of which 113,000 (8%) were in LBN.

7.5.37 The largest proportion of jobs in the Local Area (12% or 166,500) were in the professional, scientific and technical industry. This is similar to London average (13%). Other key industries include: health (12%), business administration and support services (11%), and education (9%).

7.5.38 LBN has particularly high employment in retail (14%) and transport and storage (7%) compared to the Local Area. LBN accounts for 11% of transport and storage in the Local Area with significant employment in this sector supported on or around the airport.

²³ Ibid

7.5.39 A summary of the employment baseline is set out in Table 7-6.

Table 7-6 Summary of Jobs by Employment Sector at Borough, Local and Regional Levels

Indicator	LBN		Local Area		London	
Total jobs (2019)	113,000	100%	1,397,000	100%	5,367,500	100%
Key Employment Sectors						
Professional, Scientific and technical	5,000	4%	166,500	12%	720,000	13%
Health	11,000	10%	162,000	12%	532,000	10%
Business administration and support services	15,500	14%	160,000	11%	577,000	11%
Education	13,000	12%	124,000	9%	376,500	7%
Retail	16,000	14%	106,750	8%	400,000	7%
Accommodation and food services	10,000	9%	95,250	7%	432,500	8%
Information and communication	3,250	3%	95,750	7%	444,500	8%
Construction	6,500	6%	66,750	5%	204,500	4%
Transport and Storage	8,000	7%	70,250	5%	264,500	5%
Other	24,765	22%	349,960	25%	1,415,875	26%

7.5.40 In 2019, there were 0.74 jobs per working age (16-64) residents in the LBN (and this fell slightly to 0.71 in 2020). The average in London in 2019 was 1.03 (0.99 in 2020).

7.5.41 Employment is very unevenly distributed across the Local Area. Only Southwark and LBN have more than one job per working age resident, whilst LBN (0.53), Barking & Dagenham (0.50), Redbridge (0.49), Waltham Forest (0.49) and Lewisham (0.40) all have significantly fewer.

7.5.42 With regards to employment at the airport, in 2019, there were 2,310 people employed on-site at the airport or 2,060 full-time equivalent (FTE) jobs. The estimated number of jobs of different occupation types is set out in Table 7.7 below.

Table 7.7: Employment at the Airport

	Jobs
Management / Professional / Technical	615
Administrative / Trade / Service	395
Sales / Process / Elementary	1,300
TOTAL	2,310

Source: York Aviation

7.5.43 In 2019, the operation of the airport also supported additional economic activity in the area through its supply chain and secondary rounds of spending, which is estimated to support a further 730 FTE jobs in the Local Area²⁴ and 1,190 FTE jobs across London.

7.5.44 Although there has been some reduction in employment during the Covid-19 pandemic, the number of people employed at the airport is expected to recover to pre-pandemic levels as demand recovers.

²⁴ The study area is the same as the 'Local Area' defined in the current S106 Agreement, namely the London Boroughs of Barking and Dagenham, Bexley, Greenwich, Hackney, Havering, Lewisham, Newham, Redbridge, Southwark, Tower Hamlets, and Waltham Forest, as well as the District of Epping Forest

GVA

7.5.45 The total GVA of the Local Area in 2019 was £114bn. This decreased slightly in 2020 (the latest available data) to £110bn. This compares to GVA of £483bn in London in 2019 (£470bn in 2020).

7.5.46 LBTH (33%) and LBS (19%) made up for over half of the GVA of the Local Area. Hackney and LBN are next with 8% and 6% respectively.

Table 7-8 Employment Summary (Gross Value Added)

	2019	2020
Local Area	£114,455m	£110,438m
Tower Hamlets	£37,271m	£37,366m
Southwark	£21,735m	£20,536m
Hackney	£9,050m	£8,647m
Newham	£6,817m	£6,721m
Bexley	£6,594m	£6,233m
Havering	£5,925m	£5,591m
Greenwich	£5,906m	£5,319m
Redbridge	£5,038m	£4,687m
Waltham Forest	£4,513m	£4,219m
Lewisham	£3,943m	£3,934m
Epping Forest	£4,075m	£3,790m
Barking and Dagenham	£3,588m	£3,395m
London	£482,863m	£470,286m

7.5.47 With regard to GVA generated by the airport, the direct on-site employment in 2019 contributed over £170 million in GVA to the LBN.

7.5.48 Indirect and induced jobs created by the airport in the Local Area and London in turn, contributed an additional £74 million and £130 million of GVA to the Local Area or London economy respectively.

London Economy

7.5.49 Research by the Globalisation and World Cities Network (GaWC) identifies London as one of the world's two top-tier global cities alongside New York²⁵. It is a centre for trade and foreign direct investment (FDI), and one of the world's key financial centres.

7.5.50 Table 7.9 shows the FDI international investment position of London and its sub-regions compared to the UK as a whole. London accounts for 42% of the UK's FDI investment position and this share has been growing over time. The majority of London's position is made up by Inner London – West, which is also the fastest growing area. Inner London – East is the second fastest growing area.

Table 7.9 FDI International Investment Position (£ Billions)

	2015	2016	2017	2018	2019	Growth since 2015
Inner London – West	238,180	247,641	359,763	442,246	417,772	75%
Inner London – East	118,117	127,039	147,369	139,687	168,930	43%
Outer London – East and North East	6,884	7,274	7,930	9,144	7,334	7%
Outer London – South	11,432	9,268	7,526	10,352	10,480	-8%
Outer London – West and North West	41,158	54,629	35,111	65,803	56,260	37%
London	415,770	445,851	557,698	667,233	660,777	59%
United Kingdom	£1,032,534	£1,187,303	£1,392,497	£1,572,820	£1,558,551	51%

²⁵ Globalisation and World Cities Network., (2020) *The World According to GaWC 2020*. Accessed at <https://www.lboro.ac.uk/microsites/geography/gawc/gawcworlds.html>.

Source: ONS: Foreign direct investment involving UK companies.

7.5.51 Table 7.10 shows London's position in terms of the trade in service exports in 2019 in the context of the UK as a whole. London accounted for around £138 billion in service exports in 2019 or around 43% of the UK total. Again, Inner London – West is the primary driver of this total, accounting for £82 billion in exports or 26% of the UK total. Inner London – East was the next largest component at around £30 billion or 9% of the UK total.

Table 7.10: Trade in Service Exports in 2019 (£ millions)

Area	Service Exports	% of UK
Inner London – West	£81,796	26%
Inner London – East	£30,021	9%
Outer London – East and North East	£3,988	1%
Outer London – South	£2,890	1%
Outer London – West and North West	£18,831	6%
London	£137,525	43%
United Kingdom	£316,320	100%

Source: ONS: Total value of trade in services (excluding travel) in the UK by ITL3 area and country breakdown, 2019.

7.5.52 Table 7.11 shows London's position in terms of the trade in goods exports in 2019 in the context of the UK as a whole. London accounted for £44 billion in goods exports in 2019 or around 13% of the UK total.

Table 7.11: Trade in Goods Exports in 2019 (£ millions)

	Exports	% of UK
London	£43,904	13%
United Kingdom	£346,499	100%

Source: HMRC: UK Regional Trade in Goods Statistics Quarter 4, 2019 Press Release.

7.5.53 London is one of the most visited cities in the world and the core driver of international inbound visits to the UK. Table 7.12 shows the volume of international visitors to London over time and the associated expenditure compared to the UK as a whole. London received 22 million international visitors in 2019. Over half of all visitors to the UK visited London. Those visitors spent £16 billion in the UK economy or 56% of total tourism expenditure in the UK. London has also grown more rapidly than the rest of the UK as a tourism market, with visits increasing by 44% since 2009 and spend increasing by 76%.

Table 7.12: Volume of International Visitors and Associated Expenditure

Measure	Area	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Change since 2009
Spend (£billion)	London	£9	£10	£10	£11	£12	£13	£13	£14	£16	£15	£16	76%
	UK	£18	£18	£19	£20	£22	£23	£24	£25	£28	£26	£28	62%
Visits (millions)	London	15	15	16	16	17	18	19	21	22	21	22	44%
	UK	31	30	32	32	34	35	37	39	41	40	41	31%

7.5.54 The airport itself supports considerable GVA and employment through wider economic impacts, through the connectivity it offers to business and leisure travellers, thereby increasing trade and inward investment, and through bringing visitors to the Local Area and London. The connectivity the airport provides to business passengers supports around £139 million in GVA and 540 FTE jobs in the Local Area and £299 million in GVA and 1,150 FTE jobs in London. Tourists coming through the airport support around £131 million in GVA and 1,020 FTE jobs in the Local Area and £332 million in GVA and 2,610 FTE jobs in London.

Sensitivity of receptors

7.5.55 Table 7.13 sets out the sensitivity of receptors and the associated rationale.

Table 7.13: Existing Receptors

Receptor	Sensitivity	Rationale
Construction industry and its employees (employment and GVA)	Local Area (Low)	The construction industry is assessed at a Local Area and a Regional level due to the mobility of the construction workforce. There are 66,750 construction jobs in the Local Area and 204,500 in London (refer to Table 7.6). Given the sustained demand for construction workers, the construction industry and its employees are assessed as being of low sensitivity at both geographies.
	Regional (Low)	
Local economy (employment and GVA)	Local Area (Low)	Due to the inter-dependent nature of the London economy, the employment and GVA generated is assessed at a Local Area and Regional level, and is low sensitivity at both geographies.
	Regional (Low)	
Local jobs market	LBN (High)	Given the high level of deprivation (including employment and income deprivation) and high unemployment, the local jobs market in LBN is assessed as being of high sensitivity. There is a need for entry level jobs to combat worklessness. The jobs market in the Local Area is medium sensitivity and the Regional jobs market is low sensitivity.
	Local Area (Medium)	
	Regional (Low)	

7.5.56 Given the overlap with other assessment areas, no scale of significance has been assigned to the effect on the local community and therefore the local community if not included as a receptor. Nonetheless, the effect on the local community and the approach to assessing significance is set out in more detail in Section 7.6.

DM Scenario

7.5.57 The DM Scenario assumes that there is no growth beyond the current limits (i.e the growth limited by CADP1).

Construction Phase

Employment and GVA

7.5.58 Under the DM Scenario, construction of the remaining elements of CADP1 would support 990 person years of employment and £134m of GVA over the assumed seven-year construction period (beginning in early 2030s).

Operational Phase

Employment and GVA impacts

7.5.59 The direct, indirect and induced impacts associated with the airport in respect of both employment and GVA in the DM Scenario are set out in Table 7.14.

7.5.60 There are expected to be 2,420 jobs onsite at the airport by 2031, which equates to 2,160 FTEs (increasing from 2,310 jobs and 2,060 FTEs in 2019).

7.5.61 Under both the DM and DC Scenarios, employment levels decrease marginally between 2019 and 2025. This due to the impact of the Covid-19 pandemic on employment at the airport and the concurrent increases in efficiency and productivity growth on-site at the airport

Table 7.14 Direct, Indirect and Induced Impacts in the DM Scenario

		Local Area				London			
		2019	2025	2027	2031	2019	2025	2027	2031
GVA (£m)	Direct	£172	£167	£179	£212	£172	£167	£179	£212
	Indirect & Induced	£74	£72	£78	£95	£130	£126	£136	£163
	Total	£246	£239	£257	£307	£302	£293	£315	£376
	Direct	2,310	2,180	2,240	2,420	2,310	2,180	2,240	2,420

Total Jobs	Indirect & Induced	850	790	830	970	1,370	1,260	1,330	1,530
	Total	3,160	2,960	3,070	3,390	3,680	3,430	3,570	3,950
FTE Jobs	Direct	2,060	1,940	2,000	2,160	2,060	1,940	2,000	2,160
	Indirect & Induced	730	680	720	830	1,190	1,090	1,160	1,330
	Total	2,800	2,620	2,720	2,990	3,260	3,030	3,160	3,490

Source: York Aviation

7.5.62 In the Local Area, direct GVA is forecast to be approximately £167 million in 2025 and £212 million in 2031. Indirect and Induced GVA is forecast to be £72 million in 2025 and to £95 million in 2031. Direct employment is forecast to be around 1,940 FTE jobs in 2025, growing to around 2,160 FTE jobs in 2031. Indirect and induced employment is forecast to be around 680 FTE jobs in 2025, growing to 830 FTE jobs in 2031. It should be noted that the level of employment supported in the DM Scenario by 2031 represents an increase of around 100 direct FTE jobs and 100 indirect and induced FTE jobs compared to 2019. This is a relatively small increase over 2019, reflecting ongoing productivity improvements over time.

7.5.63 In London, direct GVA is forecast to be around £167 million in 2025 and £212 million in 2031. Indirect and Induced GVA is forecast to be £126 million in 2025 and £163 million in 2031. Direct employment is forecast to be around 1,940 FTE jobs in 2025, growing to around 2,160 FTE jobs in 2031. Indirect and induced employment is forecast to be around 1,090 FTE jobs in 2025, growing to 1,330 FTE jobs in 2031. This compares to 2,060 direct FTE jobs and 1,190 indirect and induced FTE jobs in the 2019 baseline.

Local jobs market

7.5.64 Of the 2,420 jobs onsite at the airport by 2031, approximately 645 are likely to be management, professional and technical jobs, 415 are likely to be administrative, trade and services jobs, while 1,360 are expected to be sales, process and elementary.

7.5.65 Table 7.15 sets out the number of direct jobs by skill level in 2019, 2025, 2027 and 2031 in the DM Scenario.

Table 7.15 Direct Jobs by skill level

	Onsite Jobs			
	2019	2025	2027	2031
Management / Professional / Technical	615	580	595	645
Administrative / Trade / Service	395	370	380	415
Sales / Process / Elementary	1,300	1,230	1,260	1,360
Total Jobs	2,310	2,180	2,240	2,420
Total FTE Jobs	2,060	1,940	2,000	2,160

Source: Quod. NB: Rounded to the nearest 5 jobs

7.5.66 Based on the 2011 Census (which is the latest reliable dataset that is available on commuting patterns) commuting data of workers who work in the Middle Super Output Area (MSOA) in which the airport is located:

- 27% of jobs would be expected to be filled by residents of LBN;
- 67% of jobs would be expected to be filled by residents of the local area (including LBN); and
- 76% of jobs would be expected to be filled by residents of London (including LBN).

7.5.67 Table 7-16 sets out the skill level of the jobs by location of residence of workers in each assessment year for the DM Scenario. This assumes that between 27% and 40% are residents of LBN (the latter being in accordance with the S106 agreement as discussed under 'Embedded Mitigation'), 67% are from the Local Area and 76% are from London.

7.5.68 Given that the existing commitments of the existing S106 agreement target and encourage local recruitment (as set out in Section 7.4), it is anticipated that the proportion of jobs going to LBN residents would be at top end of this range in future years (i.e. 40%). However, the range is included to be conservative for the purposes of this ES assessment.

7.5.69 This would result in between 645 and 965 LBN residents being employed at the airport in 2031, of which 365 to 545 are expected to be sales, process and elementary. These jobs are likely to be entry level jobs which will help to combat deprivation and worklessness.

7.5.70 There would be 1,620 residents of the Local Area working at the airport, of which 915 are expected to be sales, process and elementary jobs.

7.5.71 At a London level, there would be 1,830 residents working at the airport, of which 1,030 are expected to be sales, process and elementary jobs.

Table 7-16 Jobs by skill level by residence of worker (direct jobs)

	LBN			Local Area			London		
	2025	2027	2031	2025	2027	2031	2025	2027	2031
Management / Professional / Technical	155-230	160-240	170-255	390	400	430	440	450	485
Administrative / Trade / Service	100-150	100-155	110-165	250	255	275	280	290	315
Sales / Process / Elementary	330 – 490	335 -505	365-545	820	845	915	930	955	1,030
Total Jobs	585-870	595-900	645-965	1,460	1,500	1,620	1,650	1,695	1,830

Source: Quod. NB: Rounded to the nearest 5 jobs; Note that this table only consider workers who commute from within London – it does not include all workers.

Impact on the local community

7.5.72 The section above ‘Embedded Mitigation and Existing Controls’ sets out the existing initiatives currently undertaken by LCY aimed at supporting and sharing the benefits of the airport with the local community. The measures would continue to apply in both the DM and DC Scenarios.

7.5.73 It is not possible to quantify the effects of these commitments and initiatives. However, it is recognised the local community would benefit in the DM Scenario, particularly with respect to:

- Enhancing skill set of local population (through employment opportunities);
- Effects from LCY’s community investment programme.

7.5.74 The consideration of the Proposed Amendments on the local community only considers effects over and above the effects that are already happening in the DM Scenario. As set out above the effect on the local community in the DC is considered but not assessed (to avoid double counting benefits).

Wider socio-economic impacts (including catalytic impacts)

7.5.75 In the DM Scenario, the catalytic impacts associated with the airport grow over time as it continues to grow, offering connectivity for business travellers and bringing more inbound tourist visitors. The impacts in the three assessment years are set out in Table 7.17.

7.5.76 In the Local Area, business productivity effects are forecast to be £144 million and 510 FTE jobs in 2025, growing to £195 million and 640 FTE jobs by 2031. Inbound tourism is expected to support £128 million and 950 FTE jobs in 2025, growing to £159 million and 1,110 FTE jobs in 2031.

7.5.77 In London, business productivity effects are forecast to be £313 million and 1,120 FTE jobs in 2025, growing to £430 million and 1,420 FTE jobs by 2031. Inbound tourism is expected to support £324 million and 2,390 FTE jobs in 2025, growing to £400 million and 2,790 FTE jobs in 2031.

Table 7.17 Catalytic Impacts in the DM Scenario

		Local Area				London			
		2019	2025	2027	2031	2019	2025	2027	2031
GVA (£m)	Business Productivity	£139	£144	£158	£195	£299	£313	£348	£430
	Inbound Tourism	£131	£128	£136	£159	£332	£324	£341	£400
	Total	£270	£272	£294	£354	£631	£637	£689	£830
Total Jobs	Business Productivity	630	600	640	760	1,350	1,310	1,420	1,670
	Inbound Tourism	1,280	1,190	1,230	1,390	3,260	2,990	3,090	3,480
	Total	1,910	1,790	1,870	2,150	4,610	4,300	4,510	5,150
FTE Jobs	Business Productivity	540	510	550	640	1,150	1,120	1,210	1,420
	Inbound Tourism	1,020	950	980	1,110	2,610	2,390	2,470	2,790
	Total	1,560	1,460	1,530	1,750	3,760	3,510	3,680	4,210

Source: York Aviation

7.6 Assessment of Effects

Construction Phase Effects

Employment and GVA

7.6.1 In the DC Scenario, the proposed development would support 1,060 person years of employment and £134m of GVA over the seven-year construction period (2025 to 2031).

7.6.2 As set out above, the construction employment and GVA associated with the proposed development will largely change in timing compared to the DM Scenario rather than the quantum of employment.

7.6.3 Therefore, the magnitude of the difference in employment and GVA between the DC and DM Scenarios would be negligible at both a Local Area and London Level. This results in a negligible effect at all levels as a result of the Proposed Amendments.

7.6.4 The 2015 UES concluded a moderate beneficial effect as a result of construction employment. This is not a like for like comparison (the baseline and context has changed), nonetheless the Proposed Amendments will not significantly change the significance of the effect previously stated.

Operational Phase Effects

Employment and GVA impacts

7.6.5 The direct, indirect and induced impacts associated with the airport in respect of both employment and GVA in the DC Scenario are set out in Table 7.18.

Table 7.18: Direct, Indirect and Induced Impacts in the DC Scenario

Impact		Local Area				London			
		2019	2025	2027	2031	2019	2025	2027	2031
GVA (£m)	Direct	£172	£179	£227	£316	£172	£179	£227	£316
	Indirect & Induced	£74	£78	£102	£135	£130	£136	£175	£235
	Total	£246	£257	£329	£451	£302	£315	£403	£551
Total Jobs	Direct	2,310	2,270	2,620	3,650	2,310	2,270	2,620	3,650
	Indirect & Induced	850	850	1,080	1,380	1,370	1,350	1,710	2,200
	Total	3,160	3,120	3,700	5,030	3,680	3,630	4,330	5,860
FTE Jobs	Direct	2,060	2,030	2,330	3,230	2,060	2,030	2,330	3,230
	Indirect & Induced	730	730	930	1,190	1,190	1,180	1,490	1,920
	Total	2,790	2,760	3,260	4,420	3,250	3,210	3,820	5,150

Source: York Aviation

7.6.6 Table 7.19 sets out the difference between the impacts in the DC Scenario and the DM Scenario.

Table 7.19: The Difference in Impacts Between the DC and DM Scenario

		Local Area			London		
		2025	2027	2031	2025	2027	2031
GVA (£m)	Direct	+£12	+£48	+£104	+£12	+£48	+£104
	Indirect & Induced	+£6	+£23	+£40	+£10	+£39	+£71
	Total	+£18	+£72	+£144	+£22	+£87	+£175
Total Jobs	Direct	+90	+380	+1,230	+90	+380	+1,230
	Indirect & Induced	+60	+250	+410	+90	+380	+670
	Total	+160	+630	+1,640	+200	+760	+1,910
FTE Jobs	Direct	+90	+330	+1,070	+90	+330	+1,070
	Indirect & Induced	+50	+210	+360	+90	+330	+590
	Total	+140	+540	+1,430	+180	+660	+1,660

Source: York Aviation

7.6.7 In the Local Area, direct GVA grows from £172 million in the baseline year of 2019 to around £179 million in 2025 and to £316 million in 2031. This represents an increase of £12 million and £104 million more in the DC Scenario than the DM Scenario for 2025 and 2031 respectively. Indirect and induced GVA grows from £74 million in 2019 to £78 million in 2025 and to £135 million in 2031. This represents an increase of £6 million and £40 million more in the DC Scenario than the DM Scenario for 2025 and 2031 respectively.

7.6.8 Direct employment is forecast to be around 2,030 FTE jobs in 2025, growing to around 3,230 FTE jobs in 2031. The latter is an increase of 1,170 FTE compared to 2019 levels and 1,070 FTE jobs more than would be seen under the DM Scenario in 2031. Under both the DM and DC Scenarios, employment levels decrease marginally between 2019 and 2025. This due to the impact of the Covid-19 pandemic on employment at the airport and the concurrent increases in efficiency and productivity growth on-site at the airport.

7.6.9 Indirect and induced employment in the Local Area is forecast to be the same in 2025 as the baseline year of 2019 (at around 730 FTE jobs) but would grow to 1,190 FTE jobs in 2031, 360 FTE jobs more than in the DM Scenario.

7.6.10 At the London Level, the direct impacts in relation to employment and GVA are the same as at the Local Level for both the DM and DC Scenarios.

7.6.11 As with direct employment, indirect and induced employment is initially forecast to fall from 1,190 in 2019 to around 1,180 FTE jobs in 2025, but then grow to 1,920 FTE jobs in 2031, giving rise to an additional 590 FTE jobs than in the DM Scenario. Indirect and induced GVA grows from £130 million in 2019 to £136 million in 2025 and to £235 million in 2031. This represents an increase of £10 million and £71 million more in the DC Scenario than the DM Scenario for 2025 and 2031 respectively.

7.6.12 The sensitivity of the receptors (the local economy) at both the Local Area and London level are assessed as being low, as set out in Table 7.13. At both the Local Area Level and London Level, the magnitude of the impact of the proposed development is considered to be low in 2025, rising to medium in 2027 and high by 2031. The significance of the effect is therefore minor beneficial (not significant) in 2025 and 2027, and moderate beneficial (significant) in 2031.

7.6.13 The significance of the effects assessed in the previous paragraph only assess the effect of the Proposed Amendments (i.e the effect that occur in the DC over and above those that occur in the DM Scenario).

7.6.14 The 2015 ES concluded that there would be a substantial beneficial effect as result of the effect on both employment and GVA in the operation stage. The context has changed since the CADP1 application, not least the effects of the Covid-19 pandemic, and so the DM Scenario is not exactly the same as the CADP1 forecasts. The differences – and the causes of these difference – are set out in Appendix G of the Need Case found at Volume 3 of the ES.

Local Jobs Market

7.6.15 The number of direct jobs onsite at the airport within the London Borough of Newham is expected to increase from 2,310 in 2019 to 3,650 jobs by 2031 (equivalent to the 3,230 FTEs) in the DC Scenario, 1,230 jobs more than in the DM Scenario (equivalent to 1,070 FTEs).

7.6.16 Table 7.20 sets out the breakdown by skills in each assessment year in the DC Scenario. As explained above, there is a small decline in direct jobs between 2019 and 2025.

7.6.17 Table 7.21 presents the additional jobs, by skill level, in the DC Scenario relative to the DM Scenario. By 2031, there are anticipated to be 1,230 additional jobs, of which 710 would be additional entry level jobs (sales, process and elementary jobs) as a result of the proposed amendments.

Table 7.20: Direct Jobs by Skill Level at the Site Level – DC Scenario

	Jobs on-site			
	2019	2025	2027	2031
Management / Professional / Technical	615	605	695	945
Administrative / Trade / Service	395	385	450	635
Sales / Process / Elementary	1,300	1,280	1,475	2,070
Total Jobs	2,310	2,270	2,620	3,650
Total FTE Jobs	2,060	2,030	2,330	3,230

Source: Quod. NB: Rounded to the nearest 5 jobs

Table 7.21: Direct Jobs by Skill Level at the Site Level – DC Scenario Compared to the DM Scenario

	Onsite		
	2025	2027	2031
Management / Professional / Technical	+25	+100	+300
Administrative / Trade / Service	+15	+70	+220
Sales / Process / Elementary	+50	+215	+710
Total Jobs	+90	+380	+1,230
Total FTE Jobs	+90	+330	+1,070

Source: Quod. NB: Rounded to the nearest 5 jobs

7.6.18 As set out previously, it is assumed that between 27% and 40% are LBN residents, 67% are from the Local Area and 76% are from London.

Given that the future mitigation, and in particular the Employment and Education contribution of up to £1.9m, (refer to Section 7.4), it is anticipated that the proportion of jobs going to LBN residents would be at top end of this range in future years (i.e. 40%). However, the range is included to be conservative for the purposes of this ES assessment.

7.6.19 Table 7.23 compares the DC Scenario and the DM Scenario to estimate the additional number of LBN residents employed at the airport by skill level.

7.6.20 Under the DC Scenario an additional 330-495 LBN residents would be employed at the airport in 2031, of which between 185 and 280 would be in entry level jobs (sales, process and elementary jobs), and hence combatting worklessness and deprivation identified in the baseline.

7.6.21 There would be 825 additional employees residing in the Local Area, of which 470 would be in entry level jobs. There would be 930 additional employees residing in London, of which 535 would be in entry level jobs.

Table 7.22: Jobs by skill level by residence of worker (direct jobs) - DC Scenario

	LBN			Local Area			London		
	2025	2027	2031	2025	2027	2031	2025	2027	2031
Management / Professional / Technical	160-240	185-280	255-380	405	465	635	455	525	715
Administrative / Trade / Service	105-155	120-180	170 -255	260	300	425	295	340	480
Sales / Process / Elementary	340-510	395-590	550-825	855	990	1,385	970	1,115	1,565
Total Jobs	605-905	700-1,050	975-1,460	1,520	1,755	2,445	1,720	1,980	2,760

Source: Quod. NB: Rounded to the nearest 5 jobs

Table 7.23: Jobs by skill level by residence of worker (direct jobs) – DC Scenario Compared to the DM Scenario

	LBN			Local Area			London		
	2025	2027	2031	2025	2027	2031	2025	2027	2031
Management / Professional / Technical	+5 to +10	+25 to +40	+85 to +125	+15	+65	+205	+15	+75	+230
Administrative / Trade / Service	+5	+20 to +25	+60 to +90	+10	+45	+150	+15	+50	+165
Sales / Process / Elementary	+10 to +20	+60 to +85	+185 to +280	+35	+145	+470	+40	+160	+535
Total Jobs	+20 to +35	+105 to +150	+330 to +495	+60	+255	+825	+70	+285	+930

Source: Quod. NB: Rounded to the nearest 5 jobs

7.6.22 The sensitivity of the local jobs market is assessed as being high at LBN level, medium at a Local Area level and low at a London level (as set out in Table 7.13).

7.6.23 At an LBN Level, the magnitude of the difference between the DM and DC Scenarios would be negligible in 2025, rising to low in 2027 and high by 2031. The significance of the effect is therefore minor beneficial in 2025 and 2027, rising to major beneficial by 2031.

7.6.24 At a Local Area Level, the magnitude of the effect would be low in 2025 and 2027 and high by 2031. The significance of the effect is therefore minor beneficial in 2025 and 2027 and moderate beneficial in 2031.

7.6.25 At a London Level, the magnitude of the effect would be low in 2025 and 2027 and high by 2031. The significance of the effect is therefore negligible to minor beneficial in 2025 and 2027, and moderate beneficial in 2031.

7.6.26 The 2015 UES did not assess the effects on the local jobs market in the same way and, hence, it is not possible to make the same comparison.

Impact on the local community

7.6.27 As identified under 'Embedded Mitigation and Existing Controls', there are a number of existing initiatives in place at the airport which would be implemented under both the DM and DC Scenarios and benefit the local community.

7.6.28 The Proposed Amendments will allow for further positive impacts (on top of the DM Scenario). Some of the impacts on the local community are not possible to quantify, and some are captured in previous assessment areas (such as the impact from direct employment). Nonetheless the effects on the local community are an important impact of the proposed amendments which should be considered.

7.6.29 The proposed development would give rise to additional benefits on the local community as follows:

- **Impact on regeneration:** LBN defines regeneration as investment in physical development, transport and digital infrastructure and skills. LCY has been central in supporting the growth and regeneration of LBN and East London. The proposed amendments will result in additional jobs, further opportunities for upskilling, and improved air connectivity (with more and more variety of routes) and provides the infrastructure to support the regeneration of East London. East London and LBN has some of the highest targets for housing completions and employment growth in London and the proposed amendments would help ensure that the growing population has transport infrastructure to serve the needs of the population.
- **Impact from community investment** – the proposed development would include a Community Investment Fund of £3.85m and an employment and education contribution of £1.9m to LBN to invest as appropriate. The Fund would be spent in ways that benefit the local community, including supporting local charities and organisations that represent inclusive and diverse communities across East London.
- **Impact on skill development** – more employment brings more opportunities for upskilling and for expanding existing employment and training initiatives at the airport. Under the DC Scenario, the airport would give rise to 3,650 total jobs on-site by 2031, 1,230 more jobs than in the DM Scenario. Further indirect employment opportunities would be generated as detailed in the preceding sections.
- **Impact on diversity in the labour market:** as set out in Section 7.4, LCY has a number of initiatives that breakdown barriers to employment and increase the diversity of the labour market, in an area that is more ethnically diverse than the regional average. This includes initiatives designed to target women, young people and those who are further from the labour market. The Proposed Amendments mean there are more jobs available for local people and those who are likely to benefit from these initiatives.

7.6.30 The combined effect of the investment in skills, training, employment and the community will result in regeneration and levelling up of a deprived area. This will result in clear benefits to the local community and is in line with Government Policy.

7.6.31 Given the overlap with other assessment areas, no scale of significance has been assigned to the effect on the local community. Nonetheless, the importance of LCY in meeting the local, regional and national policy objectives and providing opportunities to the local community should be acknowledged.

Catalytic impact on the economy

7.6.32 The faster rate growth of the airport in the DC Scenario will see it become a greater tool for businesses in the study areas, offering greater connectivity to support trade and investment. It will also enable the airport to bring in more tourists to the study areas.

7.6.33 Table 7.24 shows the catalytic impacts associated with the DC Scenario.

Table 7.24: Catalytic Impacts of the Proposed Development in the DC Scenario

		Local Area				London			
		2019	2025	2027	2031	2019	2025	2027	2031
GVA (£m)	Business Productivity	£139	£151	£191	£240	£299	£328	£420	£526
	Inbound Tourism	£131	£134	£173	£218	£332	£339	£443	£559
	Total	£270	£285	£364	£458	£631	£667	£863	£1,085
Total Jobs	Business Productivity	650	650	800	950	1,350	1,350	1,700	2,050
	Inbound Tourism	1,300	1,200	1,600	1,900	3,300	3,100	4,000	4,900
	Total	1,950	1,850	2,400	2,850	4,650	4,450	5,700	6,950
FTE Jobs	Business Productivity	540	540	660	790	1,150	1,170	1,460	1,740
	Inbound Tourism	1,020	980	1,260	1,520	2,610	2,500	3,210	3,890
	Total	1,560	1,520	1,920	2,310	3,760	3,670	4,670	5,620

Source: York Aviation

7.6.34 In the Local Area, Business Productivity GVA grows to around £151 million in 2025 and to £240 million in 2031. Inbound Tourism GVA grows to £134 million in 2025 and to £218 million in 2031. Business Productivity employment is forecast to be around 540 FTE jobs in 2025, growing to around 790 FTE jobs in 2031. Inbound Tourism employment is forecast to be around 980 FTE jobs in 2025, growing to 1,520 FTE jobs in 2031.

7.6.35 By 2031, impacts in the Local Study Area relating to increased business productivity stemming from improved connectivity result in a growth of £101 million in GVA and 250 jobs compared to 2019. Inbound tourism impacts are £87 million in GVA and 500 FTE jobs higher than 2019. In total, the DC is forecast to result in an increase of £188 million in GVA and 750 FTE jobs compared to 2019.

7.6.36 In London, Business Productivity GVA grows to around £328 million in 2025 to £526 million in 2031. Inbound Tourism GVA grows to £339 million in 2025 and to £559 million in 2031. Business Productivity employment is forecast to be around 1,170 FTE jobs in 2025, growing to around 1,740 FTE jobs in 2031. Inbound Tourism employment is forecast to be around 2,500 FTE jobs in 2025, growing to 3,890 FTE jobs in 2031.

7.6.37 By 2031, business productivity impacts in London are forecast to grow by £227 million in GVA and 590 jobs compared to 2019. Inbound tourism impacts are expected to grow by £227 million in GVA and 1,280 FTE jobs compared to 2019. In total, this is an increase of £453 million in GVA and 1,860 FTE jobs compared to 2019.

7.6.38 Table 7.25 sets out the impact of the DC Scenario compared to the DM Scenario. This represents the catalytic benefits associated with the proposed development.

Table 7.25: The Impact of the Catalytic Effects of the DC Scenario Compared to the DM Scenario

		Local Area			London		
		2025	2027	2031	2025	2027	2031
GVA (£m)	Business Productivity	+£7	+£34	+£45	+£15	+£72	+£96
	Inbound Tourism	+£6	+£37	+£59	+£15	+£102	+£159
	Total	+£13	+£71	+£103	+£30	+£174	+£255
Total Jobs	Business Productivity	+50	+160	+190	+40	+280	+380
	Inbound Tourism	+10	+370	+510	+110	+910	+1,420
	Total	+60	+530	+700	+150	+1,190	+1,800
FTE Jobs	Business Productivity	+30	+110	+160	+50	+250	+320
	Inbound Tourism	+30	+280	+410	+110	+740	+1,110
	Total	+60	+390	+570	+160	+990	+1,430

Source: York Aviation

7.6.39 In the Local Area, the DC Scenario provides an additional £7 million in Business Productivity GVA and 30 more associated FTE jobs than the DM Scenario in 2025. By 2031, the additional Business Productivity impacts associated with the DC Scenario grow to £45 million in GVA and 160 FTE jobs. In terms of Inbound Tourism effects, the DC Scenario provides an additional £6 million in GVA and 30 more FTE jobs than the DM Scenario in 2025. By 2031, the additional Inbound Tourism impacts associated with the DC Scenario grow to £59 million in GVA and 410 FTE jobs.

7.6.40 In London, the DC Scenario provides an additional £15 million in Business Productivity GVA and 50 more associated FTE jobs than the DM Scenario in 2025. By 2031, the additional Business Productivity impacts associated with the DC Scenario grow to £96 million in GVA and 320 FTE jobs. In terms of Inbound Tourism effects, the DC Scenario provides an additional £15 million in GVA and 110 more FTE jobs than the DM Scenario in 2025. By 2031, the additional Inbound Tourism impacts associated with the DC Scenario grow to £159 million in GVA and 1,110 FTE jobs.

7.6.41 The sensitivity of the receptor (Local economy – employment and GVA) at both the Local Area and the London level are low.

7.6.42 At a Local Area Level, the magnitude of the impact is assessed as being low in 2025, rising to medium in 2027 and 2031. Therefore the significance of the effect is therefore negligible in 2025, minor in 2027 and 2031.

7.6.43 At a London Level, the magnitude of the impact is assessed as being low in 2025, rising to high in 2027 and 2031. Therefore the significance of the effect is therefore negligible in 2025, moderate in 2027 and 2031.

7.6.44 The 2015 UES did not assess the wider economic effects in the same way and, hence, it is not possible to make the same comparison.

Socio-Economic Welfare Effects

7.6.45 Table 7.26 sets out the results of the socio-economic cost benefit analysis. Excluding carbon costs, the proposed amendments offer a broader socio-economic welfare net benefit with an NPV of £371 million. If carbon costs were to be included, this would be reduced to around £204 million.

7.6.46 These (beneficial) effects are not included in the assessment of significance above since they cannot be assigned to a geographical area.

Table 7.26: Results of the Socio-Economic Cost Benefit Analysis

	Present Values (£m)
Passenger Surface Access Time Savings	£1,767
Passenger Surface Access Cost Savings	£216
Passenger Air Fare Savings	-£1,674
Airport Company Benefits	£119
Air Passenger Duty	£12
Construction Costs	-£70
Carbon Costs	-£167
NPV excluding carbon costs	£371
NPV including carbon costs	£204

7.7 Sensitivity Tests

7.7.1 In addition to examining the main DC scenario, the assessment has also considered the impacts of the Faster and Slower Growth cases. This analysis demonstrated that the effect of different rates of growth to 9 mppa have a very limited effect on the operational socio-economic impacts of the proposed amendments and the benefits remain broadly of the same magnitude even if growth is faster or slower than our core assessment case. This analysis is set out in Appendix H of the Need Case (Volume 3 of the ES).

7.7.2 The assessment concludes the proposed amendments would result in negligible effects in terms of construction employment since the employment effects are largely a change in timing rather than quantum of construction employment or GVA – therefore, the conclusions are not anticipated to change significantly if the construction programme changes.

7.8 Further Mitigation and Monitoring

7.8.1 Existing monitoring will continue.

7.8.2 The Annual Performance Report allows for the ongoing monitoring of socio-economic effects, including:

- Onsite employment (including by sex and age)
- Supply chain opportunities
- Community Engagement and opportunities

7.8.3 Monitoring of the location of residence of workers will also continue, and LCY will work with the LBN to maximise opportunities for local residents to work at the airport.

7.8.4 There is no further mitigation or monitoring relevant to this assessment.

7.9 Residual Effects and Conclusions

7.9.1 The nature of socio-economic benefits, and the relationship between the benefits and the increase in flights / passengers, means that the benefits increase over time. Therefore, there are no significant effects in 2025.

7.9.2 In 2027, the catalytic effects will have a moderate beneficial significant effect at a regional level.

7.9.3 By 2031, there will be a moderate beneficial significant effect in:

- Employment and GVA impacts (direct, indirect and induced) during operation at a Local Area and regional level
- The impact on the local jobs market at a Local Area and regional level
- Catalytic impact on the wider London economy at a regional level

7.9.4 There will be a major significant beneficial effect on the local jobs market at a LBN level as a result of the direct job opportunities and the interventions and contributions made by LCY.

Table 7-27 Summary of Residual Environmental Effects

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant
Employment and GVA impact during construction	Local Area (Low)	A quantitative assessment of the direct employment and GVA effects of construction based on standard methodologies.	Short term	Negligible	Negligible	Not significant
	Regional (Low)		Short term	Negligible	Negligible	Not significant
Employment and GVA impacts (direct, indirect and induced) during operation	Local Area (Low)	A quantitative assessment of additional (direct, indirect and induced) employment and associated GVA at or related to LCY. The effect is assessed at the local and regional economy based on forecasts that take account of the pre-pandemic employment levels the anticipated productivity effect, and the build out of the CADP infrastructure.	Long term	2025: low 2027: medium 2031: high	2025: Minor 2027: Minor 2031: Moderate	2025: not significant 2027: not significant 2031: significant
	Regional (Low)		Long term	2025: low 2027: medium 2031: high	2025: Minor 2027: Minor 2031: Moderate	2025: not significant 2027: not significant 2031: significant
The impact on the local jobs market (assessed as a result of direct jobs)	LBN (High)	An analysis of the baseline local labour market and skills levels and qualitative assessment of the impact the proposed development would have.	Long term	2025: negligible 2027: low 2031: high	2025: minor 2027: minor 2031: major	2025: not significant 2027: not significant 2031: significant
	Local Area (Medium)		Long term	2025: low 2027: low 2031: high	2025: minor 2027: minor 2031: moderate	2025: not significant 2027: not significant 2031: significant
	Regional (Low)		Long term	2025: low 2027: low 2031: high	2025: negligible/ minor 2027: negligible/ minor 2031: moderate	2025: not significant 2027: not significant 2031: significant
Wider socio-economic impacts (including catalytic impacts)	Local Area (Low)	An assessment of the wider socio-economic impact of the proposed development on the London economy in terms of: <ul style="list-style-type: none"> ➤ The impact on inward investment and location decisions, which are reflected in business productivity effects; ➤ Trade effects, which are reflected in business productivity effects; 	Long term	2025: low 2027: medium 2031: medium	2025: negligible 2027: minor 2031: minor	2025: not significant 2027: not significant 2031: not significant
	Regional (Low)		Long term	2025: low 2027: high 2031: high	2025: negligible 2027: moderate 2031: moderate	2025: not significant 2027: significant 2031: significant

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant
		<ul style="list-style-type: none"> ➤ Socio-economic welfare effects, including journey time savings; and ➤ Overseas tourism spend (business and leisure) in the local area. ➤ The assessment considers impacts on key sectors and key growth areas 				

7.10 Assessment of Cumulative Effects

7.10.1 The cumulative effects assessment assesses the cumulative effect of the cumulative schemes (defined in Chapter 14 and the list of schemes scoped in is set out in Appendix 14.1).

Employment and GVA impact during construction

7.10.2 The proposed amendments, together with the cumulative schemes would be expected to generate employment opportunities during construction. It is not expected that the proposed amendments and other development projects would generate more employment opportunities than those projects considered separately.

7.10.3 We have not sought to quantify the employment in the different cumulative scheme. Variance in methodologies between projects for calculating construction jobs means that inaccuracies would arise from summing available figures. In addition, construction projects do not always occur concurrently due to variance in commencement date, programme length and potential stalling of projects. Fluctuation in the intensity of labour demand on construction sites can also enable contractors to move around between sites. Therefore, the employment generated through the construction of the cumulative schemes may not occur at the same time in a cumulative manner.

7.10.4 Given the size and mobility of the regional construction labour market, it is not expected that the cumulative schemes would generate any adverse effects with respect to socio-economics. All effects are likely to be Negligible or Beneficial (Not Significant) as a result of the additional construction employment opportunities.

Employment and GVA impacts (direct, indirect and induced) during operation

7.10.5 The cumulative effects on employment have been assessed by reviewing the planning applications relating to the relevant schemes (refer to Appendix 14.1 for the list of cumulative schemes). Standard job densities associated with the proposed employment uses have been applied where employment generation is not stated with the application documentation. Should the identified cumulative schemes come forward, they would generate up to approximately 38,600 jobs (high magnitude impact).

7.10.6 Considered alongside the proposed development, the cumulative effect of the cumulative schemes on employment (low sensitivity at the London and Local Area) is considered to be a direct, permanent, Moderate Beneficial (Significant) at the Local and London levels.

The impact on the local jobs market / Operational impact on the local community

7.10.7 A number of the cumulative schemes have initiatives to match employment opportunities with the local jobs market. This includes local labour commitments, working with Newham Improvers, and Workplace, education and business partnerships and supply chain opportunities. Given the range of initiatives it is not possible or appropriate to quantify the overall impact but the combined benefits, including the proposed amendments will be beneficial, long term effect.