

AIRPORTS NATIONAL POLICY STATEMENT

EQUALITY ASSESSMENT

JUNE 2018

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EQUALITY ASSESSMENT

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TABLE OF CONTENTS

1	INTRODUCTION	5
1.1	BACKGROUND	5
1.2	EQUALITIES LEGISLATION.....	6
1.3	THE PURPOSE OF THIS EQUALITY ASSESSMENT.....	6
1.4	GUIDANCE	8
2	AIRPORT EXPANSION SCHEMES	9
2.1	INTRODUCTION	9
2.2	SCOPE AND OBJECTIVES	10
2.3	METHODOLOGY	10
2.4	BASELINE DATA COLLECTION	11
2.5	SCREENING	12
2.6	ASSESSMENT OF POTENTIAL IMPACTS.....	12
2.7	CONSIDERATION OF ALTERNATIVES	13
2.8	PUBLIC CONSULTATION	13
3	BASELINE INFORMATION	15
3.1	STUDY AREA	15
3.2	LGW-2R.....	16
3.3	LHR-ENR	18
3.4	LHR-NWR	19
3.5	SUMMARY OF BASELINE AND POTENTIAL IMPACTS REQUIRING CONSIDERATION.....	22
4	IDENTIFICATION OF TARGET PRIORITY GROUPS.....	27
5	EQUALITY ASSESSMENT	28
5.1	LGW-2R.....	28
5.2	LHR-ENR	32

5.3	LHR-NWR	36
6	MITIGATION OPTIONS	40
6.1	EXISTING MITIGATION OPTIONS	40
6.2	ADDITIONAL MITIGATION.....	47
7	CONCLUSIONS	48
7.1	CONCLUSIONS FOR THE SHORTLISTED SCHEMES	48
7.2	CONCLUSION FOR LHR-NWR.....	50

1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 The Department for Transport (DfT) is responsible for setting national aviation policy, working with airlines, airports, the Civil Aviation Authority (CAA) and NATS (the UK's National Air Traffic Service). Supporting the development of aviation and improving passenger experience is one of the DfT's priorities.
- 1.1.2 The Airports Commission (AC), chaired by Sir Howard Davies, was set up in November 2012 to undertake an independent examination of the scale and timing of any necessary steps to maintain the UK's status as Europe's most important aviation hub. It published its final report on 1 July 2015.
- 1.1.3 During this process, three potential schemes were shortlisted:
- **London Gatwick Second Runway (LGW-2R)** scheme for a new full length runway to the south of and parallel to the existing runway at Gatwick Airport;
 - **London Heathrow Northwest Runway (LHR-NWR)** scheme for a new full length runway to the northwest of the current northern runway at Heathrow Airport; and
 - **London Heathrow Extended Northern Runway (LHR-ENR)** scheme for an extension of the existing northern runway at Heathrow Airport to the west (together the **shortlisted schemes**).
- 1.1.4 Each of the three schemes shortlisted were considered credible schemes for expansion, capable of delivering valuable enhancements to the UK's aviation capacity and connectivity.
- 1.1.5 In December 2015 the Government accepted the AC's case for airport expansion in the South East and the shortlist of schemes for expansion. It has continued to work on environmental impacts and develop the best possible package of measures to mitigate the impacts on local people and the environment.
- 1.1.6 On 25 October 2016, the Government confirmed that it had completed its further work. It also announced that a new Northwest Runway at Heathrow Airport was its preferred scheme to deliver additional airport capacity in the South East of England.
- 1.1.7 The Government's policy is set out in the Airports National Policy Statement (NPS). The NPS sets out the basis for determining planning consent for nationally significant infrastructure projects. It is a statutory requirement in the Planning Act 2008 to consult on a draft NPS.
- 1.1.8 The draft Airports NPS and supporting AoS were published previously on 2 February 2017 following which a 16 week public consultation was undertaken. A further consultation lasting 8 weeks on a revised draft Airports NPS and supporting AoS was launched on 24 October 2017. Feedback from both consultations has informed the Equality Assessment.
- 1.1.9 On publishing the draft Airports NPS, the Government made a commitment to continue updating its evidence base on airport capacity, including revised passenger demand forecasts and the impact of publication of the final Air Quality Plan (the UK plan for tackling roadside nitrogen dioxide concentrations). In order to provide clarity, the Government updated the draft Airports NPS and some of the other documents which were published alongside it, on the basis of these changes to the evidence base and as a result of initial consideration of the responses to the February consultation and other broader Government policy changes which arose during that period.

1.2 EQUALITIES LEGISLATION

- 1.2.1 A range of legislation imposes equalities duties on public bodies. The statutory duties are now defined in the Equality Act 2010.
- 1.2.2 The Equality Act 2010 places a duty on public authorities when carrying out their functions to consider the need to:
- Eliminate unlawful racial discrimination;
 - Promote equality of opportunity; and
 - Promote good relations between people of different racial groups.
- 1.2.3 The Equality Act 2010 legally protects people from discrimination in the workplace, for example banning discrimination by employers against disabled job-seekers and employees. It also legally protects people from discrimination in wider society, for example banning discrimination in the provision of goods and services against disabled service-users.
- 1.2.4 Finally, the Equality Act 2010 provides protections to people with certain “protected characteristics” and includes a public sector equality duty which requires public authorities in the exercise of their functions to have due regard to the need to eliminate unlawful discrimination, harassment, and victimisation; to advance equality of opportunity; and to foster good relationships between people who share a protected characteristic (see Section 1.3 below) and those who do not. Furthermore, DfT, which is responsible for setting national aviation policy, aims to be an exemplary organisation in relation to social equalities¹. It is therefore necessary to assess the equality impacts on communities impacted by airport capacity policy.

1.3 THE PURPOSE OF THIS EQUALITY ASSESSMENT

- 1.3.1 This Equality Assessment has been carried out as part of the overall Appraisal of Sustainability (AoS) that informs and shapes the drafting of the NPS referred to at 1.1.7 above. It assesses whether the shortlisted schemes are sustainable in Equalities terms (against the statutory framework) and supports the drafting of the NPS in relation to the measures or boundaries any promoter must consider when applying for development consent in line with that NPS.
- 1.3.2 Equality Assessments are used to support delivery of the legal equality duties of public bodies in terms of race, sex and disability. In particular, they provide a mechanism for assessing the impact of public policies on equality for different groups.
- 1.3.3 Equality Assessments add value to the sustainability of major development projects by facilitating a better understanding of the existing situation of specific groups and, through a systematic process, identifying measures that can maximise the equitable sharing of benefits and ensure that mitigation measures are developed to avoid or minimise any adverse impacts.
- 1.3.4 The incorporation of this feedback means that the assessment is no longer considered ‘Interim’ and can be considered the final assessment to be published alongside the Airports NPS.

¹ DfT, 2015. *2010 to 2015 Government policy: accessible transport*. <https://www.gov.uk/government/publications/2010-to-2015-government-policy-accessible-transport>.

- 1.3.5 The Equality Assessment process focuses on the evaluation and recording of the likely equalities effects associated with introduction of each scheme. This Equality Assessment uses AC baseline data, supplemented with Census 2011 statistics to present a current baseline of local communities likely to experience potential equalities impacts. Potential equalities impacts from airport expansion are then identified, together with consideration of appropriate mitigation measures. The assessment seeks to ensure the schemes do not discriminate or disadvantage certain people and also enables consideration of how equality measures can be improved or promoted within them.
- 1.3.6 The Equality Assessment aims to assess the effects of the shortlisted schemes from the viewpoint of a number of social groups who share certain ‘protected characteristics’, as defined by the Equality Act 2010. Protected characteristics as defined in the Act are:
- **Age**, which refers to a person of a particular age group; age groups considered in this assessment include children (0-16), young people (17-25), working age people (15 – 64) and elderly people (65+)².
 - **Disability**, including persons with a physical or mental impairment where the impairment has a substantial long-term adverse effect on that person’s ability to carry out day-to-day activities;
 - **Sex**;
 - **Gender reassignment**, which refers to a person proposing to or having undergone a process in relation to physiological or other attributes of sex;
 - **Pregnancy and maternity**, where pregnancy refers to the condition of being pregnant or expecting a baby and maternity refers to the period after the birth (26 weeks);
 - **Race**, including ethnic or national origins, colour or nationality;
 - **Religion or belief**, including lack of belief;
 - **Sexual orientation**, including a person’s sexual orientation toward persons of the same sex, opposite sex or of either sex; and
 - **Marriage and civil partnership**
- 1.3.7 Within this report persons, or groups of persons, that share a protected characteristic are referred to by the concise term “priority groups”. The priority groups considered to be of relevance are set out in Table 4.1.
- 1.3.8 The extent of impacts felt by the identified priority groups will be measured by the degree of how they will be affected differentially or disproportionately compared to non-priority groups. This is explained further in Section 2.6.
- 1.3.9 In line with best practice (Institute for Democracy and Electoral Assistance, 2011) this Equality Assessment recognises these priority groups.
- 1.3.10 The Public Sector Equality Duty has informed the carrying out of an Interim Equality Assessment for the shortlisted schemes and express consideration to the duty is provided in relation to the preferred scheme at the end of this document. Implementation of the duty has continued through consultations on the draft NPS (2 February – 25 May 2017) and revised draft NPS (24 October – 19 December) and mitigation in the NPS.

² Common age groups used for statistical surveys, including by the Office of National Statistics.

1.3.11 A Health Impact Analysis³ has also been undertaken for the NPS. This has considered the potential for the following additional types of impacts to various groups, including the same priority groups shown in Table 4.1:

- Level of Income
- Access to leisure, recreation services, facilities and utilities
- Participation in the Community
- Community Severance
- Housing Conditions
- Housing Tenure
- Air Quality
- Exercise and physical activity.

1.4 GUIDANCE

1.4.1 The following guidance has been used to inform the Equality Assessment process:

- *'Cabinet Office Equality Impact Assessments: Guidance to the Process'* (Cabinet Office, undated), which details what an EqIA is and how to undertake one within the Cabinet Office;
- *'Equality impact assessment quick-start guide'* (Equality and Human Rights Commission, undated), which provides guidance on integrating equality impact assessment into policymaking and review;
- *'Equality Impact Assessment Guidance and Forms 2007-13'* (Revised 2012) (European Regional Development Fund, 2007). This document provides guidance on conducting EqIA for project leads to carry out effective EqIAs;
- Transport for London, *'Equality Impact Assessments: How to do them'* (2004);
- DfT, *'Equality Guide for Policy Makers: Complying with the Equality Duty in Policy Making'*;
- Institute for Democracy and Electoral Assistance, *Designing for Equality Best-fit, medium-fit and non-favourable combinations of electoral systems and gender quota*, (2007); and
- The principles set out in *R (Brown) v Secretary of State for Work and Pensions* [2009] PTSR 1506.
- Mayor of London, *Planning for Equality and Diversity in London: Supplementary planning guidance*.

³ WSP|Parsons Brinckerhoff, 2017. *Health Impact Analysis*, published as part of the draft Airports NPS Consultation documentation.

2 AIRPORT EXPANSION SCHEMES

2.1 INTRODUCTION

2.1.1 This section sets out the approach taken for the assessment of the three shortlisted schemes:

- LGW-2R scheme for a new full length runway to the south of and parallel to the existing runway at Gatwick Airport;
- LHR-ENR scheme for an extension of the existing northern runway at Heathrow Airport to the west; and
- LHR-NWR scheme for a new full length runway to the northwest of the current northern runway at Heathrow Airport.

2.1.2 The information below, relating to the shortlisted schemes considered within this assessment, has been taken from the scheme promoters' descriptions and AC business case and sustainability documents.

Table 2.1: Airport Expansion schemes⁴

GATWICK LGW-2R	HEATHROW LHR-ENR	HEATHROW LHR-NWR
<p>New full length runway to the south and running parallel to the existing runway.</p> <p>The space between the runways would be set at 1,045 m, which would provide room for the required supporting airport infrastructure, which includes a new terminal building, main pier and satellite. The capacity of the new terminal building would be approximately 50 million passengers per annum (mppa), slightly higher than the combined capacity of the two existing terminal buildings (which is around 45 mppa).</p> <p>The airport's footprint would extend to the south to encompass the space for the new runway; and to the east, broadly to the M23, to provide space for ancillary airport services and parking. A variety of road network improvements will be required to support airport expansion, including widening of slip roads on the M23, and</p>	<p>Extension of the existing northern runway to the west. This would effectively create two separate runways, each 3,000 m in length, with a 650 m safety area in between, enabling them to be operated independently. The scheme would provide an operating capacity of 700,000 air transport movements ATM per year.</p> <p>Similar to the LHR-NWR scheme, the runway extension would be accompanied by a new terminal building to the west of the existing central terminal area, with capacity to accommodate 35 mppa. There would also be space for hotels and parking and for development of ancillary services to the south of the airport. A variety of road network improvements will be required to support airport expansion, including widening of the M4 and improvements to the M25.</p> <p>The airport's footprint would expand to the north, south and west with a total direct land take of 336 ha.</p>	<p>New full length runway (3,500 m) to the Northwest of the existing runways at Heathrow Airport, with a forecast operating capacity of 740,000 air transport movements (ATM) per year. The horizontal separation between the new runway and the current northern runway would be 1,045 m, allowing it to operate independently of the existing runways.</p> <p>A new terminal building would be built to the west of the current central terminal area, with the majority of the airport's terminal space and satellites and the transport spine of the airport continuing to run between the two existing runways. When complete it would have a capacity of 35 mppa.</p> <p>The airport footprint would expand north-westwards to accommodate the new runway and also to the south, west and east to make space for ancillary services and commercial development. A variety of road network improvements will be required to support airport expansion,</p>

⁴ Airports Commission, 2015. *Final Report*. [\[online\]](#) Accessed 06/01/2017.

GATWICK LGW-2R	HEATHROW LHR-ENR	HEATHROW LHR-NWR
<p>realignment of the A23.</p> <p>In total, 624 ha is estimated to be required for airport development, subject to more detailed design work, and up to an additional 78 ha for surface access improvements. These land take requirements could change following detailed construction and surface access route design, and any potential mitigation. No additional land take for flood storage schemes is identified in the proposal.</p>	<p>Additional land take for surface access improvements and flood storage of up to 330 ha and 57 ha respectively may also be required. Approximately 278 ha of the proposed land take would lie within Green Belt. These land take requirements however, could change following detailed construction and surface access route design, and any potential mitigation.</p>	<p>including widening of the M4 and improvements to the M25.</p> <p>In total, 569 ha of land would be directly required for the airport development, with up to an additional 43 ha for flood storage and 294 ha for related surface access improvements. Approximately 431 ha of this is within designated Green Belt. These land take requirements however, could change following detailed construction and surface access route design, and any potential mitigation.</p>

2.2 SCOPE AND OBJECTIVES

2.2.1 The main objective of this assessment is to:

- Assess the potential impacts upon priority groups as a result of the schemes, and identify and recommend measures to reduce or avoid direct, differential or disproportionate impacts.

2.2.2 This assessment focuses on the potential positive and negative equality impacts likely to be experienced by those communities (wards and districts) closest to each airport, (ie into which, and close to which, the expanded airports would physically impact). Specific technical assessments, for example noise or air quality, have their own study areas, and are assessed in their respective chapters. The study area for this assessment is outlined in **Section 3**.

2.3 METHODOLOGY

2.3.1 The following methodology has been used to conduct the Equality Assessment:

- An initial review of existing baseline information to gather data and understand the communities which may be affected by each of the shortlisted developments. This includes review of previously published documents, Census 2011 data and information held by each local authority;
- A review of the Equality Screening Assessment previously undertaken for the AC Final Report which identifies protected priority groups which may be affected by the development of each of the proposed expansion schemes, together with the likely impacts as a result of the shortlisted schemes;
- Identification of the priority groups to be considered within this assessment, which have the potential to experience impacts as a result of development of the shortlisted schemes;
- Feedback from the February and October consultations on the draft Airports NPS and revised draft Airports NPS;
- Assessment of the potential positive and negative impacts on each priority group for each of the schemes; and
- Identification of mitigation measures proposed by the scheme promoter to achieve equality objectives and reduce and avoid the identified potential equality impacts. The action plan also comprises measures to support the delivery of equality benefits. Such measures will be

considered in the identification of the preferred scheme for the NPS. The next steps are also indicated.

2.4 BASELINE DATA COLLECTION

2.4.1 Research has been undertaken to develop the baseline information for each community affected by the schemes. Firstly, a number of previously published AC documents were reviewed to gather relevant baseline information. The documents reviewed are outlined below:

- Airports Commission, 2015. *Final Report*;
- Airports Commission, 2015. *Heathrow Airport North West Runway: Business Case and Sustainability Assessment*;
- Airports Commission, 2014. *Heathrow Airport Extended Northern Runway: Business Case and Sustainability Assessment*;
- Airports Commission, 2014. *Gatwick Airport Second Runway: Business Case and Sustainability Assessment*;
- Airports Commission, 2014. *Consultation Document: Gatwick Airport Second Runway, Heathrow Airport Extended Northern Runway, Heathrow Airport North West Runway*;
- Jacobs, 2015. *Health and Equalities Assessment Review*;
- Airports Commission, 2015. *Quality of Life: Equalities*;
- Airports Commission, 2014. *Quality of Life: Assessment*;
- Airports Commission, 2015. *Quality of Life: Leisure Impacts*;
- Airports Commission, 2014. *Quality of Life: Assessment*;
- AC Local Economy: Literature Review (PWC, 2014);
- Airports Commission, 2014. *Local Economy: Impacts Assessment*;
- Airports Commission, 2015. *Local Economy: Impact Assessment Post Consultation Updates*;
- Jacobs, 2014. *Place: Baseline*;
- Jacobs, 2014. *Place: Assessment*;
- Jacobs, 2014. *Noise: Local Assessment*;
- Jacobs, 2015. *Noise: Local Assessment*; and
- Airports Commission, 2014. *Community: Impact Assessment*.

2.4.2 To supplement the information available in the outlined documents, borough and ward level Census data (ONS, 2011) has been used to provide socio-economic and demographic data within each community area affected by each scheme (particularly Indices of Multiple Deprivation (IMD) data, data on job seeker's allowance claimants with disabilities, and race and religion statistics). This enabled identification of areas with higher than average proportions of priority groups when compared to the England average. However, Census data could not be used to identify any disproportionate impacts for sex or disability, as women comprise around half the population and there is limited definition of the term 'disabled' within the dataset.

2.5 SCREENING

2.5.1 The purpose of equalities screening is to identify any differential or disproportionate effects on protected characteristics related to age, sex, religion or belief, disability, race, sexual orientation, gender reassignment, and pregnancy and maternity. Should the screening exercise determine potential significant effects are likely, a full equalities assessment would need to be undertaken later in the process.

2.5.2 Initial high-level screening exercises were undertaken for each of the schemes as part of the initial AC works such as in the Health and Equalities Assessment Review⁵. The screening results identified those priority groups that required further consideration in the Equality Assessment and those groups for which it was felt no further consideration was needed. This decision was based upon whether priority groups may experience potential differential effects based on a particular sensitivity to noise, air quality or socio-economic effects, or their disproportionate representation in areas affected by such impacts, including indirect and cumulative effects. The relative sensitivity of priority groups to these impacts was determined from a review of previously published work undertaken by the AC, and evidence obtained during the baseline data collection.

2.6 ASSESSMENT OF POTENTIAL IMPACTS

2.6.1 The assessment of potential impacts is based on an evaluation of whether an impact is likely to have a differential effect (positive or negative) on any priority group. This evaluation is based on the following key concepts:

- **Differential effects:** Those impacts that potentially affect a priority group differently from the rest of the general population because of specific needs or a recognised sensitivity or vulnerability associated with their protected characteristics.
- **Disproportionate representation:** Those impacts that have a greater effect on members of a priority group than on other members of the general population due to a higher proportional representation of a priority group at a particular location. For example, for Black and Minority Ethnic (BAME) and Religious groups, disproportionate effects are considered where their proportional representation in a study area is at least 10% higher than the regional average.
- **Direct impact:** Direct impacts are those which could potentially result in a direct causal effect on a priority group.
- **Indirect impact:** Indirect impacts are those that would result as a consequence of direct impacts.
- **Cumulative Impacts:** Where a priority group may be affected by more than one positive or adverse impact. Cumulative impacts are identified in the following ways:
 - where a person may experience multiple sensitivities (i.e. children are sensitive to environmental changes such as air quality and noise) ;
 - where more than one impact is found to have an effect on the same priority groups;
 - where one or more impact is experienced in the same geographical area and within this area where a priority group is over-represented

⁵ Jacobs, 2015. *Module 11. Health and Equalities Assessment Review*. [\[online\]](#) Accessed 06/01/2017.

2.7 CONSIDERATION OF ALTERNATIVES

- 2.7.1 This report only considers alternatives with regard to the three airport expansion schemes. Where appropriate, a comparison of impacts against a 'do-nothing' base case scenario has been undertaken to determine the potential impacts.

2.8 PUBLIC CONSULTATION

- 2.8.1 The AC undertook consultation in November 2014⁶, and sought views on how the shortlisted schemes could be improved, including through mitigation and compensation measures. The AC engaged widely throughout this process, inviting elected and unelected community representatives to speak at its public evidence and discussion sessions and visiting communities around Heathrow and Gatwick. The AC held meetings with a range of stakeholders including representative of local communities (community groups and elected representatives) as well as the aviation industry, customer representatives and other organisations. The AC also published a discussion paper (*Discussion Paper 07: Delivery of new runway capacity*⁷) in July 2014 to which a wide range of responses were received from the public.
- 2.8.2 A list of organisations that responded to the consultation process can be seen within the Analysis of the AC's Consultation Responses: associated appendices document⁸.
- 2.8.3 The Government has consulted on a draft Airports National Policy Statement, including the Interim Equality Assessment.
- 2.8.4 The methods (online, exhibitions, and publicity via various media channels) used were inclusive of priority groups.
- 2.8.5 The consultation document asked questions about the impacts of the policy and the principles that will be used to assess an application for a Northwest Runway (including equalities):

Question 1 asked:

The Government believes there is the need for additional airport capacity in the South East of England by 2030. Please tell us your views.

Question 3 asked:

The Secretary of State will use a range of assessment principles when considering any application for a Northwest Runway at Heathrow Airport. Please tell us your views.

Question 9 asked:

The Government has a public sector equality duty to ensure protected groups have the opportunity to respond to consultations. Please tell us your views on how the consultation has achieved this.

⁶ Airports Commission, 2014. *Consultation Document – Gatwick Airport Second Runway, Heathrow Airport Extended Northern Runway, Heathrow Airport North West Runway*. [\[online\]](#) Accessed 06/01/2017.

⁷ Airports Commission, 2014. *Discussion Paper 07: Delivery of New Runway Capacity*. [\[online\]](#) Accessed 06/01/2017.

⁸ Airports Commission, 2015. *Consultation outcome – Increasing the UK's long term aviation capacity*. [\[online\]](#) Accessed 06/01/2017.

- 2.8.6 The Consultation Report⁹ notes that responses received included views on:
- The accessibility of the consultation to priority groups;
 - The impacts of the proposed scheme on priority groups; and
 - The requirement on the applicant regarding Equality Assessment in the NPS.
- 2.8.7 Respondents noted that the consultation could be more accessible to children, elderly, disabled and those that do not speak English as a first language.
- 2.8.8 Comments raised on the impact of the Draft NPS on priority groups include:
- Loss of housing can have particular effects on the elderly and disabled;
 - Air quality and noise can have particular negative impacts on children; and
 - Loss of access to places of worship can particularly affect religious groups

⁹ OPM Group, 2017 Consultation on Draft Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England: Summary report of consultation responses.

3 BASELINE INFORMATION

3.1 STUDY AREA

3.1.1 Information has been gathered to present the current baseline of local communities which may be affected by each of the schemes. Data has been taken from the documents outlined in **Section 2, 4**, and supplemented with additional and relevant information as outlined within the methodology section.

3.1.2 For each scheme, the following study areas have been considered in comparison to both regional and national figures, to determine the baseline situation. The threshold above which consideration will be given to the potential for disproportionate effects was agreed with the DfT steering group and is 10% above the regional figure. These study areas have been previously identified in the Community Impact Assessment¹⁰. These study areas have been used as they contain the communities which are closest to each airport (i.e. into which, and close to which, the extended airports will physically impact). **Table 3.1** outlines the study areas that have been considered within the assessment.

Table 3.1: Study Area for the Assessment¹¹

SCHEME	STUDY AREA
LGW-2R	<ul style="list-style-type: none"> → Crawley Borough → Langley Green Ward → Northgate Ward → Pound Hill North Ward → Rusper and Colgate Ward → Horley Central Ward
LHR-ENR	<ul style="list-style-type: none"> → Slough Borough → Colnbrook with Poyle Ward → The London Borough of Hillingdon → The London Borough of Hounslow
LHR-NWR	<ul style="list-style-type: none"> → Slough Borough → Heathrow Villages Ward (namely Harmondsworth Village, Sipson Village, Longford Village and Harlington Village as well as an area of West Drayton and the Bath Road) → The London Borough of Hillingdon → The London Borough of Hounslow

¹⁰ Airports Commission, 2014. *Community: Impact Assessment*. [\[online\]](#) Accessed 06/01/2017.

¹¹ Airports Commission, 2015. *Final Report*. [\[online\]](#) Accessed 06/01/2017.

3.2 LGW-2R

STUDY AREA

- 3.2.1 Gatwick Airport is situated in a largely rural area, with the urban centre of Crawley to the south. The airport site sits in the Langley Green and Pound Hill North wards of Crawley. The expanded airport would require land take in these two wards as well as Crawley's Northgate ward, plus the Rusper and Colgate ward within the district of Horsham. There is no direct land take in Horley to the north, but the Horley Central ward (within Reigate and Banstead district) is included in the profile.
- 3.2.2 This section concentrates on the immediate local community in terms of those living closest to the airport, due to the likely impacts in terms of noise, air quality, jobs and quality of life. Consideration is also given to surrounding areas in Sussex and Surrey since communities further away could potentially be affected by the knock-on effects of proposed mitigation measures.
- 3.2.3 This immediate community has been considered.

AGE, ETHNICITY AND RELIGION

- 3.2.4 Despite some variation across the wards affected, the population of the study area tends to be younger than regional and national averages with 19.6% to 22% of its residents being less than 16 years old compared to 19% in the South-East and 18.9% in England. More significantly, only 12.6% to 15.5% of residents by wards affected are aged 65 and over, which is lower than regional (17.1%) and national (16.4%) averages¹².
- 3.2.5 The percentage of females in the English population is 49%. Rusper and Colgate, Horley Central and Crawley all have female populations higher than 50%. Of Crawley females aged 16-74, almost 60% work either full time or part time, compared to just over 52% nationally.
- 3.2.6 Langley Green, Northgate, Pound Hill North and Crawley have a proportionally higher percentage of BAME population than regional and national averages. In Rusper and Colgate and Horley Central, more than 90% state their ethnicity as white, which is similar to the regional average but higher than the national average. There is therefore a strong variation in the proportion of residents from ethnic minorities within the study area, with percentages ranging from 40% in Langley Green to 3% in Rusper and Colgate.
- 3.2.7 There is also a strong variation within the study area in terms of religion. There is a significantly higher proportion of Hindus in Langley Green, Northgate, Pound Hill North and Crawley when compared to regional and national averages. Other religions seem to follow regional and national percentages with exception for Rusper and Colgate which has a higher percentage of Christian (68.8%) and Langley Green which has a significantly higher percentage of Muslim (19.2%).

¹² Office for National Statistics, 2016. *2011 Census*. [\[online\]](#) Accessed 06/01/2017.

Table 3.2: Ethnicity and Religion Profile for LGW-2R

	LANGLEY GREEN	NORTHGATE	POUND HILL NORTH	CRAWLEY DISTRICT	RUSPER AND COLGATE	HORLEY CENTRAL	SOUTH EAST REGION	ENGLAND
Population	8,255	5,298	6,733	106,597	2,722	8,297	8,635,000	53,012,456
White %	60	74	84	79.9	96.7	90.0	91	85.5
BAME % (including mixed)	40	26	16	20.1	3.3	10.0	9	14.5
Christian %	43.9	51.4	56.7	54.2	68.8	59.8	59.8	59.4
Hindu %	10.3	7.9	3.8	4.6	0.2	1.3	1.1	1.5
Muslim %	19.2	9.3	5	7.2	0.5	2.2	2.3	5
Sikh %	0.9	1	1.6	0.7	0	0.2	0.6	0.8
None %	17.9	23.7	25.3	26	23.4	28.3	27.7	24.7

Source: Census, 2011

LIFE EXPECTANCY, ECONOMIC ACTIVITY AND QUALIFICATIONS

- 3.2.8** According to 2011 Census Data, life expectancy at birth in Crawley is 79.4 years old for males and 83.6 years old for females, compared to 79.2 and 83.0 in England. In Horsham the figures are 81.5 and 84.4, and in Reigate and Banstead 80.8 and 84.0.
- 3.2.9** According to the AC Final Report¹³, Crawley has a higher proportion of people employed in elementary occupations than at the England level, and within Crawley the shares in two of the three affected wards are higher (Langley Green and Pound Hill North). The England unemployment rate is 4.4% of total population. Langley Green, Northgate and Crawley all have higher unemployment rates than the England average¹⁴.
- 3.2.10** 22% of Crawley residents have Level 4 or above qualifications, which is lower than the national average of 27%. The share with no qualifications is also lower than nationally, but there is a much higher share of residents with other qualifications, such as vocational/work related or foreign qualifications.
- 3.2.11** In the local authorities of the study area, deprivation is lower than the national average. According to the English IMD 2015¹⁵, where an 'average rank' score of 1 is the most deprived, and the rank of 326 is given to the least deprived, Crawley has an average score of 151; Reigate and Banstead has an average rank of 292; and Horsham has an average rank of 295. None of these districts are within the 10% most deprived nationally.

DISABILITY PROFILE

- 3.2.12** Percentages of the population classified as claimants of disability benefits suggest that disability in the study area is in line with the regional average. This is reinforced by an assessment of the proportion of households with at least one person with long-term health problems or disability, which shows that 18.3% to 26.5% of households in the study area have at least one person with a long-term health problem or disability, which is similar to regional (23.6%) and national (25.6%) statistics.

¹³ Airports Commission, 2015. *Final Report*. [\[online\]](#) Accessed 06/01/2017.

¹⁴ Office for National Statistics, 2016. *2011 Census*. [\[online\]](#) Accessed 06/01/2017.

¹⁵ Department of Communities and Local Government, 2015. *English Indices of Deprivation 2015*. [\[online\]](#) Accessed 06/01/2017.

3.3 LHR-ENR

STUDY AREA

- 3.3.1 Heathrow Airport lies within an urban area on the edge of West London. It is situated within the Heathrow Villages ward of the London Borough of Hillingdon. The main impact from the extension of the existing northern runway would be in the village of Poyle, situated to the west within the borough of Slough. This profile considers some baseline indicators at both LPA district and ward level.
- 3.3.2 This section concentrates on the immediate local community in terms of those living closest to the airport, although those living slightly further away could potentially be affected by the knock-on effects of proposed mitigation measures, such as the relocation of community facilities. This immediate community plus surrounding areas of West and South West London, Berkshire, Buckinghamshire, Surrey and Oxfordshire will also be impacted in terms of noise, air quality, jobs and quality of life.

AGE, ETHNICITY AND RELIGION

- 3.3.3 Despite some variation across the wards affected, the population of the study area tends to be slightly younger than regional and national averages with 18.4% to 20.8% of its residents being less than 16 years old compared to 19% in the South-East and 18.9% in England. Similarly, only 9.4% to 16.3% of residents are aged 65 and over, which is lower than regional (17.1%) and national (16.4%) averages¹⁶.
- 3.3.4 The percentage of females in the English population is 49%. Colnbrook and Poyle, Hillingdon, Hounslow and Slough all have female populations higher than 50%¹⁷. Of females aged 16 to74, almost 60% work either full time or part time, compared to 53% in Slough and 52% nationally.
- 3.3.5 In Colnbrook and Poyle, Slough, Hillingdon and Hounslow, the percentage of white population is significantly lower than the England average. Christianity is the main religion in each study area, but is less than the England average. There is a higher share of Hindus, Muslims and Sikhs than nationally, and a lower share of people with no religion. A further breakdown of figures can be seen in **Table 3.3**.

Table 3.3: Ethnicity and Religious Profile for LHR-ENR

	COLNBROOK AND POYLE	SLOUGH	HILLINGDON	HOUNSLOW	LONDON REGION	ENGLAND
Population	6,157	140,205	273,936	253,957	8,173,941	53,012,456
White %	58.9	45.7	61	51	59.8	85.5
BAME % (including mixed)	41.1	54.3	39	49	40.1	14.5
Christian %	49	41.2	49.2	42	48.4	59
Hindu %	5.6	6.2	8	10.3	5.0	1.5
Muslim %	11.6	23.3	10.6	14	12.4	5
Sikh %	11	10.6	6.7	9	1.5	0.8
None %	15.9	12.1	17	15.9	20.7	24.7

¹⁶ Office for National Statistics, 2016. *2011 Census*. [\[online\]](#) Accessed 06/01/2017.

¹⁷ Office for National Statistics, 2016. *2011 Census*. [\[online\]](#) Accessed 06/01/2017.

Source: Census, 2011

LIFE EXPECTANCY, ECONOMIC ACTIVITY AND QUALIFICATIONS

- 3.3.6** In Slough life expectancy at birth is marginally lower for males (78.5 versus 79.2) and slightly higher for females (83.3 versus 83.0) than nationally. The corresponding figures for Hillingdon are 79.9 versus 83.5, and for Hounslow 79.5 versus 83.3.
- 3.3.7** Colnbrook with Poyle has a higher proportion of people employed in elementary occupations than at the national level, which is in line with the rest of Slough. Colnbrook and Poyle, Slough and Hounslow all have higher unemployment rates than the England average of 4.4%¹⁸.
- 3.3.8** 25% of residents of Colnbrook with Poyle (and 20% of those in wider Slough) have Level 4 or above qualifications, lower than the national average of 27%. However, the share with no qualifications is lower than nationally, and there is a much higher share of residents with other qualifications, such as vocational/work related or foreign qualifications.
- 3.3.9** According to the English IMD 2015¹⁹, where an 'average rank' score of 1 is the most deprived, and the rank of 326 is given to the least deprived, Slough has an average score of 79, Hillingdon has an average rank of 153, and Hounslow has an average rank of 86. Both Slough and Hounslow are within the 30% most deprived districts within the UK.
- 3.3.10** In the local authorities within the study area, although deprivation is lower than average, approximately 19.5% (6,600) children still live in poverty in Slough²⁰, 20.1% (11,800) in Hillingdon²¹, and 21.5% (11,300) in Hounslow²².

DISABILITY PROFILE

- 3.3.11** Percentages of the population classified as claimants of disability benefits suggest that disability in the study area is in line with the regional average. This is reinforced by an assessment of the proportion of households with at least one person with long-term health problems or disability, which shows that 17.1% to 27% of households in the study area have at least one person with a long-term health problem or disability, which is similar to regional (22.4%) and national (25.6%) statistics.

3.4 LHR-NWR

STUDY AREA

- 3.4.1** Heathrow Airport lies in an urban area on the edge of West London. The current airport site is situated within the Heathrow Villages ward of the London Borough of Hillingdon. Of these villages, Harmondsworth, Longford and Sipson would be directly affected by land take, as might Harlington due to road diversion. The village of Stanwell on the southern boundary could lose land to facilitate rail access. The Colnbrook with Poyle ward of Slough, situated to the west, would be affected by land take through the provision of a new access road from the diverted A4. Beyond the immediate community, some parts of the surrounding areas of West and South West London, Berkshire, Buckinghamshire, Surrey and Oxfordshire may also be impacted in terms of noise, air

¹⁸ Office for National Statistics, 2016. *2011 Census*. [\[online\]](#) Accessed 06/01/2017.

¹⁹ Department of Communities and Local Government, 2015. *English Indices of Deprivation 2015*. [\[online\]](#) Accessed 06/01/2017.

²⁰ Public Health England, 2016. *Health Profile 2015, Slough District*. [\[online\]](#) Accessed 06/01/2017.

²¹ Public Health England, 2016. *Health Profile 2015, Hillingdon District*. [\[online\]](#) Accessed 06/01/2017.

²² Public Health England 2016. *Health Profile 2015, Hounslow District*. [\[online\]](#) Accessed 06/01/2017.

quality, jobs and quality of life.

AGE, ETHNICITY AND RELIGION

- 3.4.2 Despite some variation across the wards affected, the population of young people in the study area is similar to regional and national averages with 18.4% to 20.8% of its residents being less than 16 years old compared to 19% in the South-East and 18.9% in England. There are fewer (9.4% to 16.3%) residents aged 65 and over than regional (17.1%) and national (16.4%) averages²³.
- 3.4.3 The percentage of females in the English population is 49%. Heathrow Villages, Hillingdon, Hounslow and Slough all have female populations higher than 50%²⁴.
- 3.4.4 In Heathrow Villages, Slough, Hillingdon and Hounslow, the percentage of white population is significantly lower than the England average (85.5%). Christianity is the main religion in each study area, but again, less than the England average (59%). There is a higher share of Hindus, Muslims and Sikhs than nationally, and a lower share of people with no religion. A further breakdown of figures can be seen in **Table 3.4**.

Table 3.4: Ethnicity and Religion Profile for LHR-NWR

	HEATHROW VILLAGES	SLOUGH	HILLINGDON	HOUNSLOW	LONDON REGION	ENGLAND
Population	12,199	140,205	273,936	253,957	8,173,941	53,012,456
White %	50	45.7	61	51	59.8	85.5
BAME % (including mixed)	50	54.3	39	49	40.1	14.5
Christian %	45.8	41.2	49.2	42	48.4	59
Hindu %	8	6.2	8	10.3	5.0	1.5
Muslim %	14.2	23.3	10.6	14	12.4	5
Sikh %	9.8	10.6	6.7	9	1.5	0.8
None %	13.7	12.1	17	15.9	20.7	24.7

Source: Census, 2011

LIFE EXPECTANCY, ECONOMIC ACTIVITY AND QUALIFICATIONS

- 3.4.5 Life expectancy at birth is slightly higher in Hillingdon than nationally for both males (79.9 versus 79.2) and females (83.5 versus 83). Nearby corresponding figures are 79.5 and 83.3 in Hounslow, and 78.5 and 79.2 in Slough.
- 3.4.6 Heathrow Villages has a higher proportion of people employed in elementary occupations than at the national level, and higher than the rest of Hillingdon. The England unemployment rate is 4.4% of total population. Heathrow Villages, Hounslow and Slough all have higher unemployment rates than the England average (4.4%).
- 3.4.7 19% of Heathrow Villages ward residents have Level 4 or above qualifications²⁵, lower than the national average of 27%. However, the share with no qualifications is lower than nationally, and

²³ Office for National Statistics, 2016. *2011 Census*. [\[online\]](#) Accessed 06/01/2017.

²⁴ Office for National Statistics, 2016. *2011 Census*. [\[online\]](#) Accessed 06/01/2017.

²⁵ Level 4 or above qualifications include Degree (BA, BSc), Higher Degree (MA, PhD, PGCE), NVQ Level 4-5, HNC, HND, RSA Higher Diploma, BTEC Higher level, Professional Qualifications (Teaching, Nursing, Accountancy).

there is a much higher share of residents with other qualifications, such as vocational/work related or foreign qualifications. However, the study area has high employment rates and high median wages level when compared to the national average. Slough in particular has a strong employment centre in part due to its location near the M4 corridor.

- 3.4.8 According to the English IMD 2015²⁶, where an 'average rank' score of 1 is the most deprived, and the rank of 326 is given to the least deprived, Slough has an average score of 79, Hillingdon has an average rank of 153, and Hounslow has an average rank of 86. Both Slough and Hounslow are within the 30% most deprived districts within England.

DISABILITY PROFILE

- 3.4.9 Percentages of the population classified as claimants of disability benefits suggest that disability in the study area is in line with the regional average. This is reinforced by an assessment of the proportion of households with at least one person with long-term health problems or disability, which shows that 20.6% to 27% of households in the study area have at least one person with a long-term health problem or disability, which is similar to regional (22.4%) and national (25.6%) statistics.

²⁶ Department of Communities and Local Government, 2015. *English Indices of Deprivation 2015*. [\[online\]](#)
Accessed 06/01/2017.

3.5 SUMMARY OF BASELINE AND POTENTIAL IMPACTS REQUIRING CONSIDERATION

PRIORITY GROUP	LGW-2R	LHR-ENR	LHR-NWR	POTENTIAL IMPACTS REQUIRING CONSIDERATION
Gender, pregnancy and maternity	Rusper and Colgate, Horley Central and Crawley all have female populations higher than 50%. Of Crawley females aged 16 to 74, almost 60% work either full time or part time, compared to just over 52% nationally.	Colnbrook and Poyle, Hillingdon, Hounslow and Slough all have female populations higher than 50%. Of females aged 16 to 74, almost 60% work either full time or part time, compared to 53% in Slough and 52% nationally.	Heathrow Villages, Hillingdon, Hounslow and Slough all have female populations higher than 50%. Of females aged 16 to 74, almost 57% work either full time or part time, compared to 52% in Hillingdon and 52% nationally.	As community services are lost, such as schools or nurseries, community severance may occur and travel times to such places may be affected. Loss of housing can cause stress on local residents and community severance may occur.
Religion or Belief	Northgate, Poundhill, Crawley, Rusper and Colgate and Horley Central have over 10% more Christians than the South-East average. Langley Green and Northgate have over 10% more Hindus than the South-East region. Langley Green has over 10% more Muslims than the South-East region.	Concentration of Christians in Colnbrook and Poyle and Hillingdon are similar to the London region, while Slough and Hounslow Christian populations are much lower. Hindu and Sikh populations are more than 10% higher than the London region throughout the study area. Muslim populations are more than 10% higher than the London region in Slough and Hounslow.	The London region has a higher percentage of Christians than the study area. Heathrow Villages, Slough, Hillingdon and Hounslow have over 10% more Hindus than the London region. Heathrow Villages, Slough and Hounslow have over 10% more Muslims than the London Region. The study area has a much higher proportion of Sikhs than the regional and national averages.	Loss of housing can cause stress on local residents and community severance may occur. As places of worship are lost and / or relocated, community severance may occur and travel times to such places may be affected. A loss, or relocation, of places of worship may also impact the ability of local residents to participate in their community.

PRIORITY GROUP	LGW-2R	LHR-ENR	LHR-NWR	POTENTIAL IMPACTS REQUIRING CONSIDERATION
Ethnicity and Race	<p>Almost 80% of Crawley residents are white; this is higher than the regional average, but lower than the national average.</p> <p>There is variation in the proportion of residents from ethnic minorities across local wards: 40% in Langley Green against 3% in Rusper and Colgate.</p> <p>BAME populations are 10% higher than the regional average in Langley Green, Northgate and Crawley.</p>	<p>Slough and Hounslow have more than 10% higher BAME populations than the London region.</p> <p>In Colnbrook and Poyle and Hillingdon, white populations are similar to the London region.</p>	<p>In Heathrow Villages and Hounslow, approximately 50% of the population is white.</p> <p>BAME populations are more than 10% higher in Heathrow Villages, Slough and Hounslow than the London region.</p>	<p>Loss of housing can cause stress on local residents and community severance may occur.</p> <p>Positive impacts on training and employment if opportunities are created.</p>
Age	<p>The population of the study area tends to be younger than regional and national averages with 19.6% to 22% of its residents being less than 16 years old.</p> <p>Similarly, only 12.6% to 15.5% of residents are aged 65 and over, which is lower than regional and national averages.</p>	<p>The population of the study area tends to be slightly younger than regional and national averages with 18.4% to 20.8% of its residents being less than 16 years old.</p> <p>Similarly, only 9.4% to 16.3% of residents are aged 65 and over, which is lower than regional and national averages.</p>	<p>The population of the study area tends to be slightly younger than regional and national averages with 18.4% to 20.8% of its residents being less than 16 years old.</p> <p>Similarly, only 9.4% to 16.3% of residents are aged 65 and over, which is lower than regional and national averages.</p>	<p>Loss of housing can cause stress on local residents and community severance may occur.</p> <p>Air quality changes from increased traffic and emissions have the potential to impact on the health of all people across the local area, but there are also populations particularly sensitive to these impacts namely those under 16, over 65 and those of any age with pre-existing conditions and/or disabilities.²⁷</p> <p>Raised bronchitis symptoms in children have been associated with long term NO₂ exposure²⁸.</p>

²⁷ Airports Commission, 2015. *Quality of Life: Equalities Impact Report*. [online] Accessed 06/01/2017.

²⁸ World Health Organization, 2016. *Ambient (outdoor) air quality and health: Fact sheet*. [online] Accessed 06/01/2017.

PRIORITY GROUP	LGW-2R	LHR-ENR	LHR-NWR	POTENTIAL IMPACTS REQUIRING CONSIDERATION
				<p>Aircraft noise impacts may impact upon children's learning and development.²⁹</p> <p>Loss of housing and community services can cause stress and lead to community severance and a reduction in the participation in the community, particularly for the elderly. Reduced access to leisure, recreation services and facilities will have a negative impact on children and young people in the area.</p> <p>Cumulative impacts may be felt by some members of this group because they experience multiple sensitivities.</p>
Disability	18.3% to 26.5% households in the study area have at least one person with a long-term health problem or disability, which is similar to regional (23.6%) and national (25.6%) averages.	17.1% to 27% households in the study area have at least one person with a long-term health problem or disability, which is slightly lower than regional (22.4%) and national (25.6%) averages.	20.6% to 27% households in the study area have at least one person with a long-term health problem or disability, which is similar to regional (22.4%) and national (25.6%) averages.	<p>Loss of housing can cause stress on local residents and community severance may occur.</p> <p>NOx/particulate emissions can be harmful to human health. Small particulate pollution at low concentrations has health impacts and no threshold has been identified below which no damage to health is observed. Reduced lung function has been associated with long term exposure to NO₂.³⁰</p>

²⁹ Airports Commission, 2014. *11 Quality of Life: Assessment*. [\[online\]](#) Accessed 06/01/2017.

³⁰ World Health Organization, 2016. *Ambient (outdoor) air quality and health: Fact sheet*. [\[online\]](#) Accessed 06/01/2017.

PRIORITY GROUP	LGW-2R	LHR-ENR	LHR-NWR	POTENTIAL IMPACTS REQUIRING CONSIDERATION
				<p>Daytime aircraft noise is associated with lower life satisfaction, lower sense of worthwhile, lower happiness, increased anxiety and lower positive affect balance³¹.</p> <p>Those with existing mental illnesses may be more susceptible to aircraft noise impacts³².</p> <p>As community services are lost, community severance may occur and travel times to such places may be affected, with the ability to participate in the community reduced.</p> <p>Positive impacts on training and employment if opportunities are created.</p> <p>Cumulative impacts may be felt by some members of this group because they experience multiple sensitivities.</p>
Low Income Groups	Deprivation is lower than the national average. In this study area, unemployment	Deprivation is lower than the national average. In this study area,	Deprivation is lower than the national average. In this study area,	Potential positive impacts on training and employment if opportunities are created, and in turn positive health impacts from

³¹ pwc, 2014. *11 Quality of Life: Assessment*. [\[online\]](#) Accessed 06/01/2017.

³² University of the West of England/European Commission Directorate-General Environment, 2015. *Noise Impacts on Health: Science for Environment Policy, Issue 47*. [\[online\]](#) Accessed 06/01/2017.

PRIORITY GROUP	LGW-2R	LHR-ENR	LHR-NWR	POTENTIAL IMPACTS REQUIRING CONSIDERATION
	rate is noticeably above the national rate, although the rate for Crawley is approximately the same.	unemployment rate is noticeably above the national rate.	unemployment rate is noticeably above the national rate.	increased family incomes.

4 IDENTIFICATION OF TARGET PRIORITY GROUPS

4.1.1 The priority groups that have the potential to experience impacts as a result of development of the shortlisted schemes have been taken from the People Assessment in the AC: Final Report³³. These groups have been determined through the AC screening process, where potential impacts were also identified. Following the screening process by the AC, it was determined that the gender reassignment, sexual orientation and marriage and civil partnership priority groups would be screened out of the assessment, this is considered justified as there are no indications that they are likely to experience any significant disproportionate or differential effects as a result of the schemes³⁴. For example, these priority groups do not appear to frequently use the community facilities to be lost/ relocated as part of each development schemes. However, if further surveys identify use of these facilities by these groups, their inclusion should be considered within the assessment.

Table 4.1: Identified Priority Groups

EQUALITY STRAND	PRIORITY GROUP
Gender, pregnancy and maternity	Women
Religion or Belief	People belonging to faith and belief groups
Ethnicity and Race	Black, Asian and Minority Ethnic people (BAME)
Age	Children (0-16) Young People (17-25) Working age people (15 – 64) Elderly people (65+)
Disability	Disabled people with a physical or mental impairment which has a long term effect on their ability to undertake day to day activities
Low Income Groups	People within most deprived local authorities using national Indices of Deprivation

4.1.2 Feedback from consultations on the Airports NPS from February to May 2017 and the revised draft Airports NPS from October to December 2017 supported this screening identifying potential for impacts on ethnic groups, elderly, children, religious groups, gender and people with low incomes.

³³ Airports Commission, 2015. *Final Report*. [\[online\]](#) Accessed 06/01/2017.

³⁴ Jacobs, 2015. *Module 11. Health and Equalities Assessment Review*. [\[online\]](#) Accessed 06/01/2017.

5 EQUALITY ASSESSMENT

5.1 LGW-2R

- 5.1.1 Gatwick Airport is situated in a largely rural area, on the edge of the urban centre of Crawley. The land-take of the scheme is focussed in general to the south of the airport where the new runway would be located, although some development to the east to make space for ancillary services and surface access space would also be required. The expanded airport would require land take in the Langley Green, Pound Hill North and Northgate wards of Crawley, plus the Rusper and Colgate ward within the district of Horsham.
- 5.1.2 One hundred and sixty-eight (168) residential properties lie within the predicted LGW-2R footprint and could need to be compulsory purchased. An additional 37 residential properties are within the 100 m buffer around proposed transport infrastructure and could potentially be lost to the surface access improvements depending on detailed route and construction design. According to the Place Assessment³⁵, the Crawley District expects to see the greatest loss of existing residential development in terms of land take, with up to 45.9 ha lost due to airport expansion and surface access improvements. The Horsham District is likely to experience 10.9 ha loss, Mole Valley District would experience 0.4 ha, Reigate & Banstead District could lose up to 4.6 ha residential land and Tandridge District may experience up to 2.8 ha loss.
- 5.1.3 A total of 7 educational facilities, 5 of which are children's nurseries or crèches, two places of worship, two community services (Trent House Care Home and Outreach 3 Way), and one park also lie within the predicted LGW-2R expansion land take and could need to be compulsory purchased. In total, in terms of recreation and leisure land, including open space, up to 31.8 ha is expected to be lost to land take as a result of airport expansion and 0.3 ha as a result of improved surface access, with approximately 28.0 ha being taken within the Crawley District, and 3.8 ha in the Horsham District. With regard to community services, 0.9ha is expected to be lost in total as a result of the airport expansion, all within the Crawley District. In terms of industry and business land take, the Crawley District is to expect a loss of up to 51.4 ha.
- 5.1.4 There is limited data available on the secondary impacts of each development, for example where displaced households will be relocated to and their effect on existing communities and journey times to new facilities. However, potential impacts are acknowledged at this stage.

³⁵ Jacobs, 2014. *10. Place: Assessment*. [\[online\]](#) Accessed 06/01/2017.

Table 5.1: Potential Impacts at LGW-2R

PRIORITY GROUP	POTENTIAL IMPACTS
Gender, pregnancy and maternity	With the loss of housing and relocation of some community facilities such as day-care and nurseries, potential additional journey times may differentially affect mothers travelling to nurseries with their children and may impact on primary carers of young children who are predominantly women ³⁶ . For the Gatwick scheme, five pre-schools and nurseries are likely to be lost, which may lead to disruption and difficulties finding appropriate child-care potentially impacting on the mothers' employment, and/or additional journey times to relocated/new nurseries.
Religion or Belief	<p>Airport expansion could have disproportionate impacts on the religious groups in the area selected for expansion. In Crawley, there is a higher share of Christians in Rusper and Colgate (68.8% compared to the 59.4% national average) and a significantly higher proportion of Hindus and Muslims than nationally. There are particularly large Hindu and Muslim populations in Langley Green, Northgate, Pound Hill North and Crawley (District) areas (the former benefitting from a Hindu temple) and also a slightly larger than average Sikh population in these wards. For example; at Langley Green, the population is 10.3% Hindu compared with 1.5% nationally and 19.2% there are Muslims compared with 5% nationally. 1.6% of the population at Pound Hill North are Sikhs compared with 0.8% nationally. The religious populations in the wards surrounding the LGW-2R scheme are likely to experience indirect negative effects of expansion such as noise, air quality and relocation of communities through land take. However, the scheme is also expected to create both skilled and unskilled jobs, creating employment opportunities for religious observers.</p> <p>With the loss and relocation of housing and of some community facilities. Additional journey times may disproportionately affect members of certain faith groups travelling to places of worship. Religious people would be impacted differentially by the loss of places of worship, or severance impacts making their journeys to these places more difficult. For the LGW-2R scheme, two places of worship would be lost: a Hindu temple and a church used by Seventh Day Adventists with differential impacts on these two religious groups as they lose their places of worship and the community cohesion and participation which they offer. However, there are alternative facilities nearby.</p> <p>Overall, religious populations in the wards surrounding LGW-2R could experience cumulative effects as a result of the proposed scheme, as they may be affected by more than one impact.</p>
Ethnicity and Race	<p>The population around Crawley is predominantly white but there is also a significant BAME community across local wards, particularly at Langley Green where 40% fall into this group, significantly higher than the national average, and may be disproportionately affected by the Gatwick development, particularly from housing loss. Both Gatwick and Heathrow airports on-site workforces have a higher than average proportion of BAME staff: Gatwick's is 8% Asian and 6% Black. This compares to a UK average of 4.4% Asian (defined as Indian, Pakistani and Bangladeshi) and 2.5% Black. Therefore, the BAME community surrounding the LGW-2R scheme may experience disproportionately some negative effects of the development, such as noise and air quality impacts. However, the scheme is also expected to create both skilled and unskilled jobs, creating employment opportunities for the BAME community of the study area.</p> <p>Overall, BAME communities in the wards surrounding LGW-2R could experience cumulative effects as a result of the proposed scheme, as they may be affected by more than one impact.</p>

³⁶ Department for Transport, 2011. *National Travel Survey: 2010*. [online] Accessed 06/01/2017; Scottish Executive, 2002. *Women and transport guidance and checklist*. [online] Accessed 06/01/2017.

PRIORITY GROUP	POTENTIAL IMPACTS
Age	<p>Air quality impacts from increased air and road traffic emissions of NOx and particulates could have a differential effect on children (aged under 16) and older people (aged 65+), due to their particular sensitivity. Higher annual mean NO₂ concentrations are predicted to affect 51,328 people³⁷.</p> <p>The loss of housing and community facilities could disproportionately impact children and the elderly, depending on the extent to which alternative accessible facilities can be provided. With regard to place and community, children and the elderly could be particularly impacted by the loss of community facilities such as schools and care homes leading to community severance and a reduction in the ability to participate in their communities. The direct loss and relocation of housing and of some community facilities could lead to disruption and additional journey times, particularly affecting elderly people and families with children, in relation to health and care facilities eg Trent House Care Home. Children and Young People may be disproportionately impacted by reduced access to leisure and recreation facilities, and possible health impacts such as reduction in exercise and physical activity as a result.</p> <p>Differential effects could possibly be felt by groups such as the elderly and children who may be more sensitive to noise created through construction and operation. Living within a daytime aircraft noise contour (over 55dB Lden) is negatively associated with subjective wellbeing measures, and the presence of daytime aircraft noise is associated with lower life satisfaction, lower sense of worthwhile, lower happiness, increased anxiety and lower positive affect balance³⁸. Furthermore, there may be adverse noise impacts on children's learning and educational achievement, particularly with recognition memory and motivation, and reading comprehension as a result of noise disturbance to their learning environment..</p> <p>There is a predicted increase of 16,200 people exposed to aircraft noise exceeding 54dB L_{Aeq 16hr} by 2030,.</p> <p>Overall, it is likely that both the children and elderly priority groups could experience cumulative effects as a result of the proposed development, as both of these groups have multiple sensitivities and are likely to be affected by more than one impact. However, potential positive impacts may arise for working age people if training and employment opportunities are created as a result of the proposed scheme.</p>
Disability	<p>Effects may be felt more strongly by those with pre-existing conditions with regards to air quality impacts. This could include those who suffer from respiratory difficulties related to their disability. Furthermore, differential effects could possibly be felt by groups such as those with disabilities who may be more sensitive to noise created through construction and operation. Living within a daytime aircraft noise contour (over 55dB Lden) is negatively associated with subjective wellbeing measures, and the presence of daytime aircraft noise is associated with lower life satisfaction, lower sense of worthwhile, lower happiness, increased anxiety and lower positive affect balance³⁹.</p> <p>With regard to place and communities, people with disabilities could be particularly impacted by the loss of community facilities such as schools and care homes developed to meet their needs, leading to a reduced ability to participate in their community. Significant housing relocation and relocation of community facilities, especially the Outreach 3 Way facility for people with learning difficulties, could lead to disruption and additional journey times for those with disabilities. Furthermore, there could be severance impacts for disabled people which should be taken into account.</p> <p>Those who suffer with certain types of disability who are more sensitive to environmental changes as a result of the proposed scheme,</p>

³⁷ See: WSP, 2017. *AoS Appendix A-8, Air Quality*, Section 8.9.9, published as part of the draft Airports NPS Consultation documentation.

³⁸ pwc, 2014. *11 Quality of Life: Assessment, Airports Comment*. [\[online\]](#) Accessed 06/01/2017.

³⁹ pwc, 2014. *11 Quality of Life: Assessment, Airports Comment*. [\[online\]](#) Accessed 06/01/2017.

PRIORITY GROUP	POTENTIAL IMPACTS
	may experience cumulative effects as these groups can have multiple sensitivities and are likely to be affected by more than one impact. However, potential positive impacts may arise for those with disabilities if training and employment opportunities are created as a result of the proposed scheme.
Low Income Groups	<p>Around Gatwick, none of the wards are featured in the 10% most deprived areas. However, Crawley stands out as being more relatively deprived⁴⁰. Crawley is currently a strong focus of direct, indirect and induced jobs associated with Gatwick Airport. Crawley accounts for approximately one third of current airport staff and a high proportion of staff in the area are employed in airport related businesses. The population in Crawley is relatively low skilled, with less than 1. 1% of workers holding an NVQ level 4 or above, and with relatively high unemployment at 9. 8% in 2013. On average under 40% of workers in the air transport industry have level 4 qualifications and GAL's current workforce is relatively consistent with this trend. As such there is a relatively strong match between the new direct jobs and some of the lower skill indirect/induced jobs created and the current skills of the population in Crawley. This suggests that additional jobs created by a LGW -2R could help to reduce the overall deprivation levels of the area although this would depend on the skill levels of the unemployed and hence their ability to take up new employment opportunities.</p> <p>A report carried out for the Airports Council International (ACI) Europe regarding the social and economic impacts of airports⁴¹ suggested an average of 950 on-site jobs are supported by every million passengers at airports in Europe. However, as noted by the Gatwick Airport Ltd employment survey, staff salaries are varied with 46 per cent of staff earning between £9,000 and £24,000 in 2012, and 6 per cent earning the top pay salaries of £50,000+.</p> <p>The only statistically significant interaction between the presence of aircraft noise and socio-demographic factors is found for social housing. According to the Quality of Life Assessment⁴² the negative effect of aircraft noise on life satisfaction is greater for people living in social housing. However, it should be noted that the results are not driven by more social housing located in noisy areas because the model compares social and non-social housing in equally noisy areas⁴³.</p> <p>Overall, low income groups in the wards surrounding LGW-2R could experience cumulative effects as a result of the proposed scheme, as they may be affected by more than one impact.</p>

⁴⁰ Airports Commission, 2014. *Local Economy Impacts: Assessment*. [\[online\]](#) Accessed 06/01/2017.

⁴¹ InterVISTAS, 2015. *Economic Impact of European Airports: A Critical Catalyst to Economic Growth*. [\[online\]](#) Accessed 06/01/2017.

⁴² pwc, 2014. *11 Quality of Life: Assessment*. [\[online\]](#) Accessed 06/01/2017.

⁴³ pwc, 2014. *11 Quality of Life: Assessment*. [\[online\]](#) Accessed 06/01/2017.

5.2 LHR-ENR

- 5.2.1 The LHR-ENR extends the airport to the west impacting the Colnbrook and Poyle wards within the borough of Slough. Some areas within the boroughs of Spelthorne and Windsor and Maidenhead would also be directly affected. The landscape around Heathrow is mixed, with developed urban areas existing alongside areas of high sensitivity, such as the Colne Valley Regional Park, that are of high value to the local community. The land take of the airport itself is mainly focused on the Poyle Industrial Estate and some agricultural land to the west of the airport, comprising approximately 335 ha. This land is a mixture of commercial and industrial, and there are various sites in the local area where this activity can be moved to. The surface area access for the proposed LHR-ENR is approximately 329.8 ha and an additional area of 57.3 ha of land is located within flood storage areas.
- 5.2.2 A total of 242 residential properties lie within the proposed land take. An additional 165 residential properties could potentially be lost to the surface access improvements depending on detailed route and construction design. According to the Place Assessment⁴⁴, the majority of this housing loss would be seen in Hillingdon with up to 5.9 ha lost, Slough with up to 11.8 ha lost, and Spelthorne with up to 8.3 ha lost. South Bucks and Windsor and Maidenhead may also experience some loss of residential land.
- 5.2.3 In addition to residential loss, three public open spaces/nature reserves would be lost, including two playgrounds, and one community service. Up to 13.6 ha of main industrial sites would also be lost in Slough through surface access improvements and 38.6 ha from land take.
- 5.2.4 There is limited data available on the secondary impacts of each development, for example where displaced households will be relocated to and their effect on existing communities and journey times to new facilities. However potential impacts are acknowledged at this stage.

⁴⁴ Jacobs, 2014. *10. Place: Assessment*. [\[online\]](#) Accessed 06/01/2017.

Table 5.2: Potential Impacts at LHR-ENR

PRIORITY GROUP	POTENTIAL IMPACTS
Gender, pregnancy and maternity	The loss of housing and two playgrounds is likely to have a significant impact on primary carers of young children who are predominantly women ⁴⁵ .
Religion or Belief	This scheme requires no specific loss of religious buildings. However, the relocation of housing may differentially and disproportionately affect members of certain faith groups travelling to places of worship which may impact on their ability to participate in their community.
Ethnicity and Race	There are higher than average BAME communities near the airport including particularly high Asian populations in Colnbrook and Poyle. These communities could experience disproportionately some negative effects of the development, such as noise and air quality impacts, as well as the loss of housing. However, the scheme is also expected to create both skilled and unskilled jobs, creating employment opportunities for the BAME community of the study area. Overall, BAME communities in the wards surrounding LHR-ENR could experience cumulative effects as a result of the proposed scheme, as they may be affected by more than one impact.
Age	<p>Air quality impacts from increased air and road traffic and emissions could more strongly affect children (aged under 16) and older people (aged 65+). It is estimated that 100,392 people will be affected by a rise in annual mean NO₂ levels in the case of LHR-ENR.⁴⁶ A total of 294 people are predicted to move into the 'at risk' category.⁴⁷</p> <p>It is expected that residents of Heathrow Villages and Poyle may experience differential and disproportionate effects related to air quality due to a higher percentage of children residing in these locations. For example, in Poyle, the under 16 years old group makes up 21% of the overall population, and air quality impacts could more strongly affect children aged under 16. Due to the high proportion of younger residents in the wards surrounding Heathrow Airport, this might mean that there could be a differential or disproportionate effect on younger people in the area.</p> <p>The loss of housing could disproportionately impact children and the elderly, depending on the extent to which alternative accessible facilities can be provided. With regard to place and community, children could be particularly impacted by the loss of playgrounds and public open space leading to a reduction in their ability to participate in their community. The Punch Bowl Pub, which is informally used as a community meeting facility by some elderly residents, would be lost which may cause disproportionate effects upon this priority group as they may have to travel further to find similar facilities.</p> <p>Children and Young People may be disproportionately impacted by reduced access to leisure and recreation facilities, and possible health impacts such as reduction in exercise and physical activity as a result.</p> <p>Furthermore, differential effects could possibly be felt by groups such as the elderly and children who may be more sensitive to noise created through construction and operation or severance effects. Living within a daytime aircraft noise contour (over 55dB) is negatively associated with subjective wellbeing measures, and the presence of daytime aircraft noise is associated with lower life satisfaction, lower sense of worth, lower happiness, increased anxiety and lower positive affect balance⁴⁸. Furthermore, there may be adverse noise impacts on children's learning and educational achievement, particularly with recognition memory and motivation, and reading</p>

⁴⁵ Department for Transport, 2011. *National Travel Survey: 2010* [online] Accessed 06/01/2017; Scottish Executive, 2002. *Women and transport guidance and checklist*. [online] Accessed 06/01/2017.

⁴⁶ See: WSP, 2017. *AoS Appendix A-8, Air Quality*, Section 8.9.9, published as part of the draft Airports NPS Consultation documentation.

⁴⁷ Airports Commission, 2015. *Quality of Life: Equalities Impact Report*. [online] Accessed 06/01/2017.

⁴⁸ pwc, 2014. *11 Quality of Life: Assessment, Airports Comment*. [online] Accessed 06/01/2017.

PRIORITY GROUP	POTENTIAL IMPACTS
	<p>comprehension as a result of noise disturbance to their learning environment.</p> <p>The changes in airspace noise exposure result in a predicted increase of 27,200 people exposed to airspace noise exceeding 54dB L_{Aeq} 16hr by 2030.⁴⁹</p> <p>The demographics of the Heathrow area authorities demonstrate a higher percentage of younger people than the national average, along with lower than average older population. This suggests a local workforce more capable than average to take up jobs following any airport expansion. Overall, children and elderly priority groups may experience cumulative effects as a result of the proposed development, as both of these groups have multiple sensitivities and are likely to be affected by more than one impact.</p>
Disability	<p>Effects may be felt more strongly on those with pre-existing conditions with regards to air quality impacts. This could include those who suffer from respiratory difficulties related to their disability. Furthermore, differential effects could possibly be felt by groups such as those with disabilities who may be more sensitive to noise created through construction and operation. Living within a daytime aircraft noise contour (over 55dB) is negatively associated with subjective wellbeing measures, and the presence of daytime aircraft noise is associated with lower life satisfaction, lower sense of worth, lower happiness, increased anxiety and lower positive affect balance⁵⁰. With regard to place and communities, people with disabilities could be particularly impacted by the loss of community facilities such as schools and care homes developed to meet their needs.</p> <p>There are no community facilities specifically for disabled people that would be lost as a result of the LHR-ENR scheme. However, the Punch Bowl Pub, which is informally used as a community meeting facility by groups including disability support groups, would be lost during construction of the Scheme. This may differentially affect members of this priority group as they may have to travel further to reach other similar facilities resulting in a reduced ability to participate in the community. Furthermore, in common with the other two schemes, there could be severance impacts for disabled people due to relocation of housing. Those who suffer with certain types of disability, who are more sensitive to environmental changes from different impacts as a result of the proposed scheme, may experience cumulative effects. However, potential positive impacts may arise for those with disabilities if training and employment opportunities are created as a result of the proposed scheme.</p>
Low Income Groups	<p>As outlined in the baseline discussion, Heathrow Villages have a higher unemployment rate than the national rate. 19% of Heathrow Villages ward residents have Level 4 or above qualifications, lower than the national average of 27%, and the authorities surrounding Heathrow have a high proportion of non-skilled workers compared to the national average of 9.3%. Slough is the most deprived of the study area. However, in the event of an expansion at Heathrow Airport, areas of relatively high unemployment and deprivation could benefit from the additional resulting jobs. The job mix at Heathrow Airport is predominantly low skilled and accessible without having studied for higher level qualifications such as university degrees.</p> <p>The relatively high unemployment rate in areas such as Hillingdon (7.7%), along with the possibility of the relatively strong match between the new jobs which could be created and the current skills of the population, and current trends for on airport direct employment, suggest that there is capacity for some of these new jobs to be filled by unemployed people from these areas. There could also be clear indirect effects in terms of jobs for communities around the airport, which could be useful to support the reduction of social exclusion in some of the local communities with relatively high unemployment rates. The number of jobs created, and the current rates of unemployment, are higher around Heathrow than Gatwick.</p>

⁴⁹ Predicted changes in population exposures in the do something, relative to the do minimum for carbon traded (assessment of need) scenario assumptions

⁵⁰ pwc, 2014. *11 Quality of Life: Assessment, Airports Comment*. [\[online\]](#) Accessed 06/01/2017.

PRIORITY GROUP	POTENTIAL IMPACTS
	<p>The only statistically significant interaction between the presence of aircraft noise and socio-demographic factors is found for social housing. The negative effect of airport noise on life satisfaction is greater for people living in social housing. It should be noted that the results are not being driven by the possibility that more social housing is located in noisy areas because the model compares social and non-social housing in equally noisy areas⁵¹.</p> <p>Overall, low income groups in the wards surrounding LHR-ENR could experience cumulative effects as a result of the proposed scheme, as they may be affected by more than one impact.</p>

⁵¹ pwc, 2014. *11 Quality of Life: Assessment, Airports Comment*. [\[online\]](#) Accessed 06/01/2017.

5.3 LHR-NWR

- 5.3.1 The land take of the LHR-NWR extends in all directions, but has a particular impact to the north of the airport where houses and amenities could be lost in Sipson, Harmondsworth, and Longford and generally along the Bath Road. The land take associated with the proposed LHR-NWR and surface access areas is approximately 568.8 ha and 294.2 ha respectively. An additional 42.9 ha of land is identified for flood storage. According to the Place Assessment⁵², the number of existing residential properties within the airport land take area is estimated to be 783. The majority of this housing loss would be seen in Hillingdon with up to 45.7 ha lost. Hounslow, Slough, South Bucks and Spelthorne are also likely to experience loss of residential land due to access requirements.
- 5.3.2 In addition to residential loss, one educational facility could be lost, five playgrounds and four public open spaces/nature reserves over 48 ha, and three community services including an immigration centre (AIT Harmondsworth). Furthermore, up to 74 ha of main industrial sites would be lost in Slough through surface access improvements and 6.5 ha from land take. 18.5 ha of land allocated as 'significant employment locations' may also be lost in Hillingdon as a result of land take.
- 5.3.3 There is limited information available on the secondary impacts of each development, for example where displaced households will be relocated to and their effect on existing communities and journey times to new facilities. However, potential impacts are acknowledged at this stage.

⁵² Jacobs, 2014. *10. Place: Assessment*. [\[online\]](#) Accessed 06/01/2017.

Table 5.3: Potential Impacts at LHR-NWR

PRIORITY GROUP	POTENTIAL IMPACTS
Gender, pregnancy and maternity	The loss of housing and community facilities, such as nurseries, other child-care facilities and community playground facilities is likely to have a significant impact on primary carers of young children who are predominantly women ⁵³ . The significant relocation of housing, a primary school, three nursery schools (in Harmondsworth, Longford and Sipson) and other community facilities is likely lead to significant disruption, difficulties finding appropriate child-care, potentially impacting on the mothers' employment, and/or additional journey times to relocated/new nurseries.
Religion or Belief	This scheme requires no loss of religious buildings. However, this scheme requires the greatest relocation of housing which may differentially and disproportionately affect members of certain faith groups travelling to places of worship, and impact on the ability to participate in the community
Ethnicity and Race	There are higher than average BAME communities around the airport. These communities would experience the negative impacts of expansion, but would also be well-placed to benefit from its positive effects. It is noticeable that Heathrow airport's workforce has BAME employment above the national average. Therefore, due to the disproportionate representation of BAME residents surrounding Heathrow airport, this priority group is likely to experience greater effects of the development. The loss of community facilities and housing could differentially and disproportionately impact some priority groups, depending on the extent to which alternative and convenient facilities can be provided. Overall, BAME communities in the wards surrounding LHR-NWR could experience cumulative effects as a result of the proposed development, as they may be affected by more than one impact.
Age	Air quality impacts from increased air and road traffic and emissions could more strongly affect children (aged under 16) and older people (aged 65+), and disproportionate effects may be experienced by residents in Heathrow Villages due to the population being younger than the national average. It is estimated that 121,377 people will experience a rise in annual mean NO ₂ levels in the case of LHR-NWR ⁵⁴ . Only 37 people are predicted to move into the 'at risk' category ⁵⁵ . The loss of housing and community facilities could disproportionately impact children and the elderly, depending on the extent to which alternative accessible facilities can be provided. With regard to place and community, children could be particularly impacted by the loss of playgrounds and public open spaces leading to a reduction in their ability to participate in their community. The relocation of the Harmondsworth Primary School could lead to disruption and additional journey times on younger people and their families. The impacts of severance for particular communities would also need to be considered, and the ability for such groups to participate in their community. The residents of the Heathrow villages are younger than the national average. This might mean that there could be disproportionate impacts on younger people in the area due to housing and community facility loss and severance. Furthermore, differential effects could possibly be felt by groups such as the elderly and children who may be more sensitive to noise created through construction and operation. Living within a daytime aircraft noise contour (over 55dB) is negatively associated with subjective

⁵³ Department for Transport, 2011. *National Travel Survey: 2010*. [online] Accessed 06/01/2017; Scottish Executive, 2002. *Women and transport guidance and checklist*. [online] Accessed 06/01/2017.

⁵⁴ See: WSP|Parsons Brinckerhoff, 2017. *AoS Appendix A-8, Air Quality*, Section 8.9.9, published as part of the draft Airports NPS Consultation documentation.

⁵⁵ Airports Commission, 2015. *Quality of Life: Equalities Impact Report*. [online] Accessed 06/01/2017.

PRIORITY GROUP	POTENTIAL IMPACTS
	<p>wellbeing measures, and the presence of daytime aircraft noise is associated with lower life satisfaction, lower sense of worthwhile, lower happiness, increased anxiety and lower positive affect balance⁵⁶. Furthermore, there may be adverse noise impacts on children's learning and educational achievement, particularly with recognition memory and motivation, and reading comprehension as a result of noise disturbance to their learning environment.</p> <p>The changes in airspace noise exposure result in a predicted increase of 92,700 people exposed to airspace noise exceeding 54dB LAeq 16 hr by 2030.⁵⁷</p> <p>The demographics of the Heathrow area authorities demonstrate a higher percentage of younger people than the national average, along with lower than average older population. This suggests a local workforce more capable than average to take up jobs following any airport expansion.</p> <p>Overall, children and elderly priority groups may experience cumulative effects as a result of the proposed scheme, as both of these groups have multiple sensitivities and are likely to be affected by more than one impact.</p>
Disability	<p>Effects may be felt more strongly on those with pre-existing conditions with regards to air quality impacts. This could include those who suffer from respiratory difficulties related to their disability. Furthermore, differential effects could possibly be felt by groups such as those with disabilities who may be more sensitive to noise created through construction and operation. Living within a daytime aircraft noise contour (over 55dB) is negatively associated with subjective wellbeing measures, and the presence of daytime aircraft noise is associated with lower life satisfaction, lower sense of worth, lower happiness, increased anxiety and lower positive affect balance⁵⁸.</p> <p>With regard to place and communities, people with disabilities could be particularly impacted by the loss of community facilities such as schools and care homes developed to meet their needs and enable them to participate in their community. Significant housing relocation and relocation of community facilities, especially the Heathrow Special Needs Centre in Longford, could lead to disruption and additional journey times for those with disabilities. Furthermore, there could be severance impacts for disabled people due to access difficulties, which should be taken into account. A larger number of houses would be lost for the LHR-NWR scheme than the other two schemes, and in principle, there could therefore be a risk that more disabled people could be impacted by housing loss and severance impacts. However, these impacts in particular could vary significantly dependent on detailed design of local roads and also the suitability of re-provision of services.</p> <p>Those who suffer with certain types of disability who are more sensitive to environmental changes as a result of the proposed scheme, may experience cumulative effects as these groups can have multiple sensitivities are likely to be affected by more than one impact.</p> <p>However, potential positive impacts may arise for those with disabilities if training and employment opportunities are created as a result of the proposed scheme.</p>
Low Income Groups	<p>As outlined in the baseline discussion, Heathrow Villages have a higher unemployment rate than the national rate. 19% of Heathrow Villages residents have Level 4 or above qualifications, lower than the national average of 27%, and the authorities surrounding Heathrow have a high proportion of non-skilled workers compared to the national average of 9.3 per cent. Slough is the most deprived of the study area. However, in the event of an expansion at Heathrow Airport, areas of relatively high unemployment and deprivation could benefit from the additional resulting jobs.</p>

⁵⁶ pwc, 2014. *11 Quality of Life: Assessment, Airports Comment*. [\[online\]](#) Accessed 06/01/2017.

⁵⁷ Predicted changes in population exposures in the do something, relative to the do minimum for carbon traded (assessment of need) scenario assumptions.

⁵⁸ pwc, 2014. *11 Quality of Life: Assessment, Airports Comment*. [\[online\]](#) Accessed 06/01/2017.

PRIORITY GROUP	POTENTIAL IMPACTS
	<p>The job mix at Heathrow Airport is predominantly low skilled and accessible without having studied for higher level qualifications such as university degrees. The relatively high unemployment rate in areas such as Hillingdon (7.7%) and Ealing (9.9%), along with the possibility of the relatively strong match between the new jobs which could be created and the current skills of the population, and current trends for on airport direct employment, suggest that there is capacity for some of these new jobs to be filled by unemployed people from these areas. There could also be clear indirect effects in terms of jobs for communities around the airport, which could be useful to support the reduction of social exclusion in some of the local communities with relatively high unemployment rates. The number of jobs likely to be created and the current rates of unemployment are higher around Heathrow than Gatwick.</p> <p>The only statistically significant interaction between the presence of aircraft noise and socio-demographic factors is found for social housing. The negative effect of airport noise on life satisfaction is greater for people living in social housing. It should be noted that the results are not being driven by the possibility that more social housing is located in noisy areas because the model compares social and non-social housing in equally noisy areas⁵⁹.</p> <p>Overall, low income groups in the wards surrounding LHR-NWR could experience cumulative effects as a result of the proposed development, as they may be affected by more than one impact.</p>

⁵⁹ pwc, 2014. *11 Quality of Life: Assessment*. [\[online\]](#) Accessed 06/01/2017.

6 MITIGATION OPTIONS

6.1 EXISTING MITIGATION OPTIONS

- 6.1.1 **Tables 6.1, 6.2 and 6.3** summarise the causes of potential equality impacts identified in the work already undertaken to date and in Chapter 5, together with the potential options for mitigation and opportunities as proposed by the AC and scheme promoters.

Table 6.1: Mitigation Options at LGW-2R

POTENTIAL EQUALITY IMPACT	POTENTIALLY AFFECTED PRIORITY GROUPS	PROPOSED MITIGATION	LIKELY EXTENT OF MITIGATION
168 residential properties likely to be demolished for airport expansion	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Financial compensation at 125% of unblighted market value of the property.	Partial if relocation does not occur in a single move or to a single location, and with management measures in place to mitigate for differential effects
Up to 37 residential properties could be demolished for surface access, since they fall within the buffer zone for construction works	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Financial compensation at 125% of unblighted market value of the property.	Partial if relocation does not occur in a single move or to a single location, and with management measures in place to mitigate for differential effects
Potential secondary impacts of relocated households on existing communities	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of community services to meet additional demand	Full if effects are subsumed within wider effects associated with airport-related development
Trent House care home	Age	Financial compensation and relocation	Partial if relocation does not occur to a single suitable location, and with management measures in place to mitigate for differential effects
Loss of industrial/employment land	Ethnicity and Race Age Disability Low Income Groups	Financial compensation and relocation	Partial, if planning does not permit relocation of businesses to suitable sites close to airport, transport network and other businesses
Two places of worship – a church used by Seventh Day Adventists, and a Hindu temple	Religion or Belief	Financial compensation and relocation	Full – assuming alternative facilities available nearby ⁶⁰
One charity facility -Outreach 3 Way, which helps people with learning difficulties	Disability	Financial compensation and relocation	Full, assuming charity has alternative facilities nearby ⁶¹

⁶⁰ It is stated in 'Jacobs, 2015. *Module 11. Health and Equalities Assessment Review*. [\[online\]](#) Accessed 06/01/2017' that alternative facilities are available.

⁶¹ It is stated in 'Jacobs, 2015. *Module 11. Health and Equalities Assessment Review*. [\[online\]](#) Accessed 06/01/17' that the charity has alternative facilities nearby.

POTENTIAL EQUALITY IMPACT	POTENTIALLY AFFECTED PRIORITY GROUPS	PROPOSED MITIGATION	LIKELY EXTENT OF MITIGATION
Fivepre-schools/nurseries	Pregnancy and Maternity Age	Financial compensation and relocation	Partial, if replacement facilities are not similarly close to families' new dwellings. Two alternative facilities nearby could be affected by noise.
Crawley Rugby Club, with its sporting and social facilities	Age	Financial compensation and relocation	Full, if planning process successful planning process
The northern part of Rowley Wood	Age	Financial compensation or provision of alternative community facilities	Full
Public rights of way	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of new links to maintain connectivity	Full once operational, partial during construction
Cycle routes	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of new cycle routes once airport operational	Full once operational, partial during construction
Impacts on local journey times, either from severance or increased traffic	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Re-alignment of roads and traffic management measures, and improved public transport access	Partial, due to uncertainty of journey times for those displaced and/or using re-provided facilities

Table 6.2: Mitigation Options at LHR-ENR

POTENTIAL EQUALITY IMPACT	POTENTIALLY AFFECTED PRIORITY GROUPS	PROPOSED MITIGATION	LIKELY EXTENT OF MITIGATION
242 residential properties likely to demolished for airport expansion	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Financial compensation at 125% of unblighted market value of the property and relocation	Partial if relocation does not occur in a single move or to a single location, and with management measures in place to mitigate for differential effects
Up to 165 residential properties could be demolished for surface access, since they fall within the potential buffer zone For construction works	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Financial compensation at 125% of unblighted market value of the property and relocation	Partial if relocation does not occur in a single move or to a single location, and with management measures in place to mitigate for differential effects
Potential secondary impacts of relocated households on existing communities	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of community services to meet additional demand	Full if effects are subsumed within wider effects associated with airport-related development
Loss of industrial/employment land	Ethnicity and Race Age Disability Low Income Groups	Financial compensation and relocation	Partial, if planning does not permit relocation of businesses to suitable sites close to airport, transport network and other businesses
Loss of Punch Bowl pub during construction	Pregnancy and Maternity Age Disability	Financial compensation and provision of alternative community facility during construction	Full, assuming suitable location available and planning obtained
Noise implications for Pippins primary school	Pregnancy and Maternity Age	Provision of suitable noise insulation	Partial, if no outdoor provision of similar facilities. Children still exposed to noise to and from school
Loss of public open space and playgrounds	Age	Relocation/re-provision	Full
Public rights of way	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of new links to maintain connectivity	Full once operational, partial during construction

POTENTIAL EQUALITY IMPACT	POTENTIALLY AFFECTED PRIORITY GROUPS	PROPOSED MITIGATION	LIKELY EXTENT OF MITIGATION
Cycle routes	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of new cycle routes once airport operational	Full once operational, partial during construction
Severance of section of the Colne Valley Way running from Colnbrook to Horton	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Diversion	Full
Severance of Poyle Road, which currently links Poyle and Colnbrook with Wraysbury and Horton	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Traffic diverted via Horton Road instead	Partial if longer local journey times
Severance of route to Poyle from the west along Bath Road	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of alternative route	Partial, if longer journey times/altered journey patterns

Table 6.3: Mitigation Options at LHR-NWR

POTENTIAL EQUALITY IMPACT	POTENTIALLY AFFECT PRIORITY GROUPS	PROPOSED MITIGATION	LIKELY EXTENT OF MITIGATION
783 residential properties likely to be demolished for airport expansion	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Financial compensation at 125% of unblighted market value of the property	Partial if relocation does not occur in a single move or to a single location, and with management measures in place to mitigate for differential effects
Up to 289 residential properties could be demolished for surface access, since they fall within the potential buffer zone for construction works	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Financial compensation at 125% of unblighted market value of the property.	Partial if relocation does not occur in a single move or to a single location, and with management measures in place to mitigate for differential effects
Potential secondary impacts of relocated households on existing communities	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of community services to meet additional demand	Full if effects are subsumed within wider effects associated with airport-related development
Loss of industrial/employment land	Ethnicity and Race Age Disability Low Income Groups	Financial compensation and relocation	Partial, if planning does not permit relocation of businesses to suitable sites close to airport, transport network and other businesses
Harmondsworth primary school	Pregnancy and Maternity Age	Relocation	Full - assuming replacement facilities are similarly close to families' new dwellings.
Harmondsworth community hall (including the Wonderland day nursery)	Pregnancy and Maternity Age Disability	Relocation	Full - assuming replacement facilities are similarly close to families' new dwellings.
Sipson community centre	Pregnancy and Maternity Age Disability	Relocation	Partial, if location not similarly accessible
Heathrow special needs centre in Longford	Disability	Relocation	Partial, if location not similarly accessible
Nursery schools in Longford, Harmondsworth and Sipson	Pregnancy and Maternity Age	Relocation	Partial, if location not similarly accessible

POTENTIAL EQUALITY IMPACT	POTENTIALLY AFFECT PRIORITY GROUPS	PROPOSED MITIGATION	LIKELY EXTENT OF MITIGATION
White Horse, and Kings Arms pubs at Longford	Age	Financial compensation and relocation assistance	Full, assuming suitable location available and planning obtained
Sipson recreation ground and facilities	Age	Relocation	Partial, if location not similarly accessible
Other formal and informal recreation sites	Age	Relocation/re-provision	Full
Public rights of way	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of new links to maintain connectivity	Full once operational, partial during construction
Cycle routes	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Provision of new cycle routes once airport operational	Full once operational, partial during construction
Severance of section of the Colne Valley Way	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Diversion	Full
Part of the Colne Valley Regional Park	Pregnancy and Maternity Age Disability	Relocation	Full
Impacts on local journey times and severance from A4/M25/ southern rail access works	Pregnancy and Maternity Religion or Belief Ethnicity and Race Age Disability Low Income Groups	Traffic management measures during construction re-alignment of roads to segregate local from airport and other through traffic, and improved public transport access	Partial, due to uncertainty of journey times for those displaced and/or using re-provided facilities

6.2 ADDITIONAL MITIGATION

6.2.1 Additional mitigation, in addition to those measures proposed with the AC and promoter reports, to reduce the effects of equality impacts on priority groups and to ensure best practice measures are followed, could include the following measures:

- Ensure priority groups are identified at the planning stage in a number of environmental assessments to ensure they are considered throughout the design process. For example, needs of priority groups could be specifically assessed in Health, Economic and Transport Assessments, to ensure their specific needs are considered so as to reduce the likelihood of disproportionate effects being experienced;
- Improved and continuous consultation and engagement with support groups for members of the community within priority groups, for example BAME and disability groups, to ensure views of those unable to access existing consultation measures are captured;
- Funding research could be sought to more accurately identify threshold levels at which priority groups may be impacted;
- Working with local communities to better understand the impacts of noise and ensure that the benefits of technological improvements to reduce noise are shared between the developer and the local communities. This should include consideration of respite regimes and noise reduction schemes and recognise the specific needs of priority groups;
- Working with partners to ensure delivery of planned measures, such as those contained in the Government's 2017 Air Quality Plan, to improve air quality in the area of the airport.

It will be important to monitor the equality impacts of each proposal in as much detail as possible. Should one specific development proceed, monitoring arrangements will need to be developed to evaluate the effectiveness of mitigation on the affected priority groups and agreed with the relevant authorities.

Reducing significant effects may, at area level, be relevant to fostering good relations and equality of opportunity. As part of mitigation and monitoring, the views and attitudes of priority groups on community relations and access to opportunities created should be obtained.

7 CONCLUSIONS

7.1 CONCLUSIONS FOR THE SHORTLISTED SCHEMES

- 7.1.1 This report identified a higher proportional representation of some priority groups in each of the study areas compared with regional averages. Therefore, each of the schemes may have differential and disproportionate effects on priority groups within the study area, as the impacts of each development would lead to specific areas experiencing housing and community facilities loss as well as changes in noise, air quality and/or economic position.
- 7.1.2 The mitigation considered in relation to the shortlisted schemes is the measures proposed with the AC and promoter reports. The final impacts on affected priority groups will be dependent on careful detailed design and engagement with the local community by the scheme promoter to ensure their needs are met. It also seems that many negative equalities impacts could be fully or partially mitigated through good design, operations and mitigation plans.
- 7.1.3 **Pregnancy and maternity** – Each scheme will result in the loss of community facilities specific to young children, such as nurseries, schools and community playground facilities, which may have a differential effect on primary carers of young children, who are predominantly women⁶². LGW-2R will require the relocation of five nurseries or crèches and LHR-NWR will require the relocation of one primary school. LHR-ENR will not require any relocation of educational facilities and fewer community facilities directly affected, comprising two playgrounds. Each scheme will also result in the relocation of housing, which could also have a differential effect on mothers through additional journey times to relocated or new nurseries. LGW-2R is expected to require the relocation of 168 residential properties, LHR-ENR the relocation of 242 residential properties and LHR-NWR the relocation of 783 residential properties.
- 7.1.4 **BAME communities** - In parts of each study area, BAME communities are 10% or more above regional average. Each scheme will result in the relocation of housing, which could have disproportionate and differential effects on BAME communities since they are more likely than others to experience barriers to affordable housing, as well as problems of poor quality housing and overcrowding⁶³. LGW-2R is expected to require the relocation of 168 residential properties, LHR-ENR the relocation of 242 residential properties and LHR-NWR the relocation of 783 residential properties. Similarly, each scheme will result in the loss of community facilities, which may have a disproportionate effect on BAME residents. Each scheme could also have a positive disproportionate effect on BAME communities within the study area, through the creation of employment opportunities matching the current skills of the population. The number of jobs expected to be created, and the current rates of unemployment are generally higher around Heathrow than Gatwick.

⁶² Department for Transport, 2011. *National Travel Survey: 2010*. [\[online\]](#) Accessed 06/01/2017; Scottish Executive, 2002. *Women and transport guidance and checklist*. [\[online\]](#) Accessed 06/01/2017.

⁶³ London Health Commission, 2011. *Fair London Healthy Londoners*.

- 7.1.5 Religious groups** – The representation of some religious groups within the area selected for expansion of LGW-2R is 10% higher or more than the regional average. With the relocation of housing and of some community facilities, the additional journey times may disproportionately affect members of certain faith groups travelling to places of worship. Moreover, LGW-2R will result in the loss of two places of worship, which could have a disproportionate and differential effect on religious groups from the loss of their places of worship and the community cohesion and participation that they offer. The LHR-ENR and LHR-NWR will not require any relocation of religious buildings. However, the relocation of housing may differentially and disproportionately affect members of certain faith groups travelling to places of worship.
- 7.1.6 Age** – In the study areas of each of the shortlisted schemes, the population tends to be younger than regional and national averages. There may, therefore, be differential and disproportionate effects on younger people in the area due to loss and severance impacts in relation to housing and community facilities. Each of the schemes may have a differential effect on children and older people, as the impacts of each development would lead to specific areas experiencing changes in noise and air quality. Twice as many people will experience a rise in annual mean NO₂ levels for either of the Heathrow schemes as compared to LGW-2R, the highest being for LHR-NWR (although this scheme also sees the lowest number of people enter the ‘at risk’ category as a result of expansion). The local population exposed to the noise >54 dB L_{Aeq,16hr} contour near to LGW-2R is expected to be a small fraction of those exposed near to LHR-ENR or LHR-NWR, however, the LHR-NWR scheme is expected to result in a smaller proportion of the local population exposed to noises above 57dB compared with LHR-ENR, but will lead to more people exposed at 54dB..
- 7.1.7 Disability** – Each scheme will result in the loss of community facilities such as schools and care homes developed to meet the needs of people with disabilities, which could have a differential effect on this priority group, potentially affecting community participation. The LGW-2R will require the relocation of the Outreach 3 Way facility for people with learning difficulties and the LHR-NWR will require the relocation of Heathrow Special Needs Centre in Longford. No community facilities specifically for people with disabilities would be lost as a result of LHR-ENR although the Punch Bowl Pub, which is informally used as a community meeting facility by groups including disability support groups, would be lost during construction. Similarly, each scheme will result in the relocation of housing, which could also have a differential effect on people with disabilities as it could lead to disruption and additional journey times.
- 7.1.8 Deprivation** - In the study areas of each of the shortlisted schemes, deprivation levels tend to be lower than the national average but unemployment rates are higher. It is expected that areas of relatively high unemployment could benefit from the resulting job creation from the expansion, resulting in a positive disproportionate effect on low-income groups. The jobs mix both at Gatwick and Heathrow is predominantly low skilled and accessible to those without higher-level qualifications. There is, therefore, the possibility for the new jobs created to match the current skills of the population. Current trends on airport direct employment also suggest that there is capacity for some of these new jobs to be filled by unemployed people from the study areas. The number of jobs expected to be created and the current rates of unemployment are generally higher around Heathrow than Gatwick.
- 7.1.9** Cumulative impacts may be felt by some members of priority groups, either because they experience multiple sensitivities or because more than one impact is found to have an effect on them. In particular, children, the elderly and some people with disabilities are known to be particularly sensitive to environmental changes such as changes in air quality and noise. Religious groups, BAME communities and low incomes groups could also experience more than one impact.
- 7.1.10** Similarly, it should be noted that the nature and scale of differential and disproportionate impacts on priority groups also depends on further detailed design work. At this next stage, more detailed mitigation packages can be developed in consultation with those affected.

7.2 CONCLUSION FOR LHR-NWR

- 7.2.1 On 25 October 2016, the Government announced that its preferred scheme to meet the need for new airport capacity in the South East of England was a Northwest Runway at Heathrow Airport. The Government believes that the LHR-NWR scheme, of all the three shortlisted schemes, is the most effective and most appropriate way of meeting the requirement for additional capacity. A range of factors have been taken into account. These are set out in Section 3 of the NPS.
- 7.2.2 The following provides a conclusion on LHR-NWR prior to consultation, and takes account of both, the mitigation proposed with the AC and promoter reports, and the additional mitigation shown in the NPS as follows:
- A surface access strategy to achieve public transport, cycling and walking to achieve a public transport mode share of at least 50% by 2030, and at least 55% by 2040 for passengers, with annual reporting against these targets;
 - The promoter to secure upgrading or enhancing of road, rail or other transport networks or services which are physically needed to be completed to enable the additional runway to operate, including works to the M25, local road diversions and improvements including the diversion of the A4 and A3044 and on-airport station works and safeguarding;
 - A package of air quality mitigation measures to be identified by the promoter in consultation with communities and implemented, and which may involve improvements to pollution hotspots beyond the immediate locality; and
 - A noise envelope and a runway alternation scheme, and a package of other noise measures, to be identified and implemented.
- 7.2.3 **Pregnancy and maternity** - LHR-NWR will result in the loss of community facilities specific to young children, such as nurseries, schools and community playground facilities, which may have a differential effect on primary carers of young children, who are predominantly women⁶⁴. The preferred scheme will require the relocation of one primary school and will also result in the relocation of housing, which could also have a differential effect on mothers through additional journey-times to relocated-new nurseries. The preferred scheme is expected to require the relocation of 783 residential properties.
- 7.2.4 **BAME communities** - In parts of the Heathrow study area, BAME communities are 10% or more above regional average and the preferred scheme will result in the relocation of 783 residential properties, which could have disproportionate and differential effects on BAME communities since they are more likely than others to experience barriers to affordable housing, as well as problems of poor quality housing and overcrowding⁶⁵. The preferred scheme will result in the loss of community facilities, which may have a disproportionate effect on BAME residents. However, the preferred scheme could also have a positive disproportionate effect on BAME communities within the study area, through the creation of employment opportunities matching the current skills of the population. The number of jobs expected to be created, and the current rates of unemployment are generally higher around Heathrow than Gatwick.
- 7.2.5 **Religious groups** – LHR-NWR will not require any relocation of religious buildings. However, the relocation of housing may differentially and disproportionately affect members of certain faith groups travelling to places of worship.

⁶⁴ Department for Transport, 2011. *National Travel Survey: 2010* [online] Accessed 06/01/2017; Scottish Executive, 2002. *Women and transport guidance and checklist*. [online] Accessed 06/01/2017.

⁶⁵ London Health Commission, 2011. *Fair London Healthy Londoners*.

- 7.2.6 Age** – In the Heathrow study area the population tends to be younger than regional and national averages. There may, therefore, be differential and disproportionate effects on younger people in the area due to loss and severance impacts in relation to housing and community facilities. The preferred scheme may have a differential effect on children and older people, as the impacts of each development would lead to specific areas experiencing changes in noise and air quality.. The changes in airspace noise exposure result in a predicted increase of 92,700 people affected by noise exceeding 54dB_{L_{Aeq} 16hr} by 2030⁶⁶. It is estimated that 121,340 people will experience a rise in annual mean NO₂ levels in the case of LHR-NWR without exceedances of EU Directive limit value. However, only 37 people are predicted to move into the ‘at risk’ category.
- 7.2.7 Disability** – LHR-NWR will result in the loss of community facilities such as schools and care homes developed to meet the needs of people with disabilities, which could have a differential effect on this priority group. It will require the relocation of Heathrow Special Needs Centre in Longford. The preferred scheme will also result in the relocation of housing, which could also have a differential effect on people with disabilities as it could lead to disruption and additional journey times.
- 7.2.8 Deprivation** - In the Heathrow study area deprivation levels tend to be lower than the national average but unemployment rates are higher. It is expected that areas of relatively high unemployment could benefit from the resulting job creation from the expansion, resulting in a positive disproportionate effect on low-income groups. The jobs mix is predominantly low skilled and accessible to those without higher-level qualifications. There is, therefore, the possibility for the new jobs created to match the current skills of the population. Current trends on airport direct employment also suggest that there is capacity for some of these new jobs to be filled by unemployed people from the study areas.
- 7.2.9** Cumulative impacts may be felt by some members of priority groups, either because they experience multiple sensitivities or because more than one impact is found to have an effect on them. In particular, children, the elderly and some people with disabilities are known to be particularly sensitive to environmental changes such as changes in air quality and noise. Religious groups, BAME communities and low income groups could also experience more than one impact.
- 7.2.10** Similarly, it should be noted that the nature and scale of differential and disproportionate impacts on priority groups also depend on further detailed design work. At this next stage, more detailed mitigation packages can be developed in consultation with those affected.
- 7.2.11 Public Sector Equality Duty** - this Equality Assessment is for a public authority in the exercise of publishing a National Policy Statement and therefore the Public Sector Equality Duty may be engaged. Due regard has been had to each of the provisions of section 149 of the Equality Act 2010 as follows:
- *(a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act.*
- It is not considered that LHR-NWR will give rise to these and other prohibited conducts.

⁶⁶ Predicted changes in population exposures in the do something, relative to the do minimum for carbon traded (assessment of need) scenario assumptions.

- *(b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.*

LHR-NWR would not prevent the advancing of equality of opportunity. The identification of mitigation, and further mitigation to be identified, assists in reducing or preventing impacts on persons or groups sharing a protected characteristic. This mitigation will advance equality of opportunity amongst these persons, likely at an area level. The creation of jobs that correspond to the skills and locations of some BAME communities is expected to provide opportunities for employment for these groups. Further mitigation identified in 6.2 includes seeking views and attitudes of priority groups on community relations and access to opportunities created. Mitigation in the NPS includes air quality measures to be developed in consultation with communities and a surface transport strategy with targets for increased public transport and sustainable travel modes with annual public reporting against the targets.

- *(c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.*

LHR-NWR would not prevent the fostering of good relations. The identification of mitigation, and further mitigation to be identified, assists in reducing or preventing impacts on persons or groups sharing a protected characteristic. This mitigation will assist in fostering good relationships between priority groups and non-priority groups, likely at an area level. Further mitigation identified in 6.2 includes seeking views and attitudes of priority groups on community relations and access to opportunities created. Mitigation in the NPS includes air quality measures to be developed in consultation with communities and a surface transport strategy with targets for increased public transport with annual public reporting against the targets.

