



Quality of Life: Equalities Impacts Report

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1. Introduction

- 1.1** This report has been prepared to draw together the available evidence relevant to equalities issues in one document and to highlight, so far as possible, the potential equalities impacts of each of the three short-listed schemes. The importance of undertaking this exercise was highlighted in the national consultation as several consultees called for a separate Equalities Impact Assessment to be undertaken.
- 1.2** This work builds on the *Community: Impact Assessment* published at consultation which included a high level equalities screening for each of the three short-listed scheme based on the information available at that stage.
- 1.3** This report is intended to identify, assess and undertake a comparison of the equalities impacts of the short-listed schemes as far as possible bearing in mind i) the Commission's task at this stage i.e. to select one of three short-listed schemes for recommendation to Government, and ii) the limited level of detail in terms of equalities impacts and mitigations to which the schemes have currently been developed for this purpose. So it is not yet possible to identify with certainty specific impacts on protected groups at this stage.
- 1.4** The Commission has nonetheless sought to undertake an assessment of equalities impacts by reference to the level of information reasonably available at this stage. If any of the shortlisted schemes are taken forward for further development and planning permissions are sought, more detailed identification and consideration of equalities impacts will need to be undertaken.

2. Equalities Guidance and Legislation

- 2.1** The Equality Act 2010 created (under section 149) a public sector equality duty replacing separate race, gender and disability duties. In summary, those subject to the equality duty must, in the exercise of their functions, have due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act.
- Advance equality of opportunity between people who share a protected characteristic and those who do not.
- Foster good relations between people who share a protected characteristic and those who do not.

2.2 The Equalities and Human Rights Commission (EHRC) characterises the broad purpose of the equality duty as to integrate consideration of equality and good relations into the day-to-day business of public authorities.

2.3 This requires an evidence-based understanding of the equalities impacts which the decisions in question are likely to have. The public sector equality duty does not require the completion of an Equalities Impact Assessment (EQIA) although it recognises that an EQIA is an established and credible tool for demonstrating due regard for the duty. The EHRC's guidance makes it clear that it is important to have adequate and accurate evidence upon which to base an assessment, but the level of detail and the format in which the evidence is presented will depend on the nature of the decision being taken. Protected Characteristics as defined in the Act are:

- **Age**, which refers to a person of a particular age group;
- **Disability**, including persons with a physical or mental impairment and the impairment has a substantial long-term adverse effect on that person's ability to carry out day-to-day activities;
- **Gender**;
- **Gender reassignment**, which refers to a person proposing to or has undergone a process in relation to physiological or other attributes of sex;
- **Pregnancy and maternity**;
- **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**.

2.4 In addition to those groups protected by law, an assessment may also consider impacts on social inclusion issues; such as, effects on single parents and people living in areas affected by multiple facets of socio-economic deprivation.

3. Applicability of the Airports Commission's work so far to the public sector equality duty

3.1 Several of the Commission's Appraisal Modules have identified possible equalities impacts.

Air Quality

3.2 Air quality changes 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. These sensitive populations would include those under 16, over 65 and those of any age with pre-existing conditions and/or disabilities. Those with pre-existing conditions would not be able to be identified at a strategic scale. The particular impact on these groups would be strongly affected by any scheme specific mitigation available, or any actions by government with respect to possible national or regional air quality mitigations.

3.3 All of the schemes will affect air quality around the airports concerned, with the primary impact being in relation to NO₂. None of the schemes show any exceedance of local NO₂ limits (40µg/m³) around any receptor close to human habitation (such as at residential buildings or schools). The main air quality impacts on the local population in 2030 are set out in the table below:

Table 3.1: Air Quality Scheme Impacts

	LGW 2R	LHR ENR	LHR NWR
Heath-based receptors in exceedance	0	0	0
Highest annual mean NO ₂ level at any health-based receptor	38.6µg/m ³	37.2µg/m ³	34.7µg/m ³
Highest change in annual mean NO ₂ at any health-based receptor	13.1µg/m ³ (rising to 30.7µg/m ³)	14.0µg/m ³ (rising to 30.7µg/m ³)	10.8µg/m ³ (rising to 32.9µg/m ³)
Population experiencing a rise in annual mean NO ₂ levels	51,328	100,389 ⁸⁹	121,340
Population entering the 'at risk' category for NO ₂ (annual mean >32µg/m ³)	151	294	37
Average change in annual mean NO ₂ at affected properties	+2.1µg/m ³	+0.7µg/m ³	+0.9µg/m ³

Source: Airports Commission analysis

- 3.4** Twice as many people will experience a rise in annual mean NO₂ levels for either of the Heathrow schemes as compared to Gatwick, and this is higher still for the Heathrow Airport Northwest Runway scheme (although this scheme also sees the lowest number of people enter the 'at risk' category as a result of expansion).
- 3.5** It should be noted that these impacts were calculated on the basis of the Commission's high-end *low-cost is king* and *global growth* scenarios, in order to understand the potential upper limit of air quality impacts in 2030. The *assessment of need* scenario, which incorporates central estimates for macroeconomic factors such as GDP (as opposed to the higher estimates in the high-end scenarios used) would see slower growth in passenger and ATM numbers and hence the air quality impacts would be expected to be lower. Nonetheless, air quality is an important health issue, and work will still be required to mitigate the effects of increased road and aircraft emissions as a result of expansion.
- 3.6** The evidence currently available to the Commission does not enable it to analyse the likely specific impacts on older, younger or disabled people around the specific health based receptors. As above, the levels at some health based receptors increase, but none above the limit.
- 3.7** In addition to these impacts on the local population, the Commission's analysis has indicated that achieving compliance with EU limit values (40µg/m³) is likely to require

¹ The Extended Northern Runway scheme at Heathrow also sees a significant population (c. 17,000 people) which experiences a decrease in NO₂ levels.

particular thought and mitigation around Heathrow. The key receptor in this instance is located to the north of the airport boundary on the Bath Road, an area of predominantly business and industrial development; the area does contain hotels and therefore a transient population although hotel staff and other permanent users of facilities in the area will be affected by emissions over a much longer period of time. Addressing this issue will require coordinated action by the government in respect of road traffic and the airport itself in relation to airport-related emissions. The challenge of achieving this is predicted to be greater for the Heathrow Airport Extended Northern Runway scheme (LHR ENR) than for the Heathrow Airport Northwest Runway scheme (LHR NWR). The effects of expansion at the Gatwick Airport Second Runway scheme (LGW 2R) are not predicted to be as pronounced as at Heathrow in relation to the EU limit values.

Noise

- 3.8** Noise has been shown to have a particular impact on children at school, with several studies² noting a negative impact on children’s concentration and learning outcomes (although these impacts do not appear to be prolonged with effective insulation in place). Older people and those with certain types of disability can also be more susceptible to noise impacts.
- 3.9** The ability to identify particular amenity buildings impacted by noise (such as schools, community buildings or places of worship) was limited by the detail of mapping of building classifications that could be compared to noise maps. However a more specific analysis is not necessary or appropriate at this stage. Any attempt to do so would provide results with a level of accuracy and precision which would be of limited utility given the early stage of flightpath design. The need for more specific evidence may well arise later at the stage when any detailed flightpath designs are being worked up and therefore the location of noise impacts will be clearer, at which time there will be a continuing obligation to take account of equality implications.

2 For example, the RANCH study (Stansfield et al 2005) or the longitudinal Munich Airport Study (Hygge et. al 2002)

- 3.10** Both of the Heathrow options are predicted to increase the level of noise in the surrounding area compared to future noise impacts without any expansion (although noise impacts would still be lower than today due to improvements in aviation technology and operations for some noise metrics). The different designs of the two Heathrow schemes mean that the Heathrow Airport Extended Northern Runway scheme concentrates the increased traffic approaching the airport on the centrelines of the approaches to the current runways, and hence with just two centrelines has more limited ability to provide respite via runway alternation, meaning it must rely more on flightpaths and deep landings to reduce noise impacts. This limits the respite available at peak times compared to the Heathrow Airport Northwest Runway scheme and increases the number of people affected in the majority of the higher noise contours. However, the lower levels of overall traffic mean that in the quietest and furthest contours from the airport the Extended Northern Runway performs slightly better than the Northwest Runway.
- 3.11** In comparison across the metrics the second runway at Gatwick shows a higher *relative* impact. Broadly the population exposed to noise across all metrics is expected to double as there is limited scope for technology and improved operations to mitigate the increased volume of traffic. However, due to its relatively rural location and the relatively sparsely populated wider local area, expansion at Gatwick affects considerably fewer people than either of the two Heathrow schemes. In the *assessment of need* carbon-capped scenario, both Heathrow schemes on the LDEN >55 metric affect just over 550,000 people in 2030, whereas at Gatwick the number of people in this metric is slightly over 22,000.
- 3.12** A range of the Commission's assessments of noise impacts on the local population in 2030 (based on the *Assessment of Need* Carbon-Capped forecast) are set out in the table below:

Table 3.2: A range of noise impact metrics, do-minimum compared to 2030, AoN carbon-capped

		LGW 2R	LHR-ENR	LHR-NWR
57dB_{LAeq}	Total population affected	4,900	257,900	237,100
	Change from 'do minimum'	+2,700	+37,700	+15,900
	Change from current	+1,350	-8,200	-29,000
	Change in sensitive buildings⁹¹	-2	+42	+23
55dB_{Lden}	Total population affected	22,100	558,600	556,200
	Change from 'do minimum'	+12,700	-21,900	-24,300
	Change from current	+10,800	-207,500	-209,900
	Change in sensitive buildings	+12	-32	-60
48dB_{Lnight}	Total population affected	22,300	263,800	266,800
	Change from 'do minimum'	+10,600	-7,400	-4,400
	Change from current	+11,100	-157,500	-154,500
	Change in sensitive buildings	+10	-7	-26

Source: Airports Commission analysis

3.13 The noise impacts change further over the period to 2050, generally increasing across most metrics at Gatwick, but with some metrics declining due to technological and operational improvements for the two Heathrow schemes. The overall pattern is not however significantly altered, with far more people affected in total under the two Heathrow schemes than with a second runway at Gatwick.

Employment

3.14 At a general level, all of the schemes are in proximity to some areas that have relatively high levels of underemployment and/or socio-economic deprivation (for example parts of Crawley near Gatwick or of Slough near Heathrow.) The level of unemployment is generally higher in the vicinity of Heathrow. The estimated number of new direct jobs is higher for the two Heathrow schemes than at Gatwick. This is shown in the tables below. There will also be more indirect, induced and catalytic jobs created by the two Heathrow schemes, which could also provide opportunities for the local population.

3 Defined as schools, hospitals and places of worship affected.

Table 3.3: Local Employment levels and On-Airport employees

GATWICK			
Local Authority Area	Number of On-Airport Employees⁴	Share of Local Authority Area Employment (%)	Local Authority Area Unemployment Rate (2013)⁵
Crawley	1,405	2.6	9.8
Epsom and Ewell	n/a	n/a	5.7
Horsham	312	0.5	2.6
Mid Sussex	363	0.5	2.8
Mole Valley	62	0.1	7.0
Reigate and Banstead	417	0.6	3.7
Tandridge	107	0.3	5.6
Central Estimate of Employment Growth from Expansion (000s)	2030 4,100 – 6,500		2050 12,700 – 32,100
HEATHROW			
Local Authority Area	Number of On-Airport Employees	Share of Local Authority Area Employment (%)	Local Authority Area Unemployment Rate (2013)
Hounslow	10,760	8.3	7.3
Ealing	5,760	3.7	9.9
Slough	4,090	6.1	8.2
Hillingdon	8,960	6.7	7.7
Spelthorne	3,920	7.8	4.9
Central Estimate of Employment Growth from Expansion (000s)	2030 NWR: 59,300 – 76,700 ENR: 61,800 – 76,700		2050 NWR: 74,700 – 78,400 ENR: 63,800 – 65,600

Source: Airports Commission analysis

4 The number of On Airport Employees was provided by GAL and HAL, respectively.

5 Annual Population Survey

3.15 There could be a positive social inclusion impact of expansion making, available new jobs for local people, particularly if each of the scheme promoter's commitments and/or plans in respect of local employment and training could be developed, such as:

- Heathrow Airport Ltd (HAL) has stated that it would: "Protect more than 100,000 existing local jobs and create 100,000 new jobs nationwide by developing our local employment, apprenticeships and skills programmes and supporting a supply chain throughout the UK including during construction."
- Gatwick Airport Ltd (GAL) has stated that it would introduce: "A £3.75m fund to help create 2,500 new apprentices for local people."
- Heathrow Hub Ltd (HHL) submission states that it has: "drawn up an outline skills and training strategy to ensure that the right skills are available and that the local workforce benefits from the opportunities. This builds upon the wide range of initiatives in place and proposed by Heathrow Airport Limited (HAL)."

3.16 Based upon the evidence available to the Commission, at this early stage in development, the projections made by HAL appear to be credible, as do the proposals set out by the other scheme promoters. As set out in the *Final Report*, the Commission considers it integral to its recommendations that local people should benefit from the jobs and training which become available with expansion.

Place & Community

3.17 The Place assessment highlights the community buildings and services (such as houses, charities, places of worship and schools/nurseries) that would need to be demolished and re-provided in other locations. These are shown in the tables below, together with the Commission's current assessment of the potential for mitigation.

Table 3.4: Gatwick Airport Second Runway scheme Community Infrastructure Impacts

Community Facility/Service	Proposed mitigation	Likely extent of mitigation
168 residential properties likely to be demolished for airport expansion	financial compensation	partial, unless planning permits relocation of displaced communities en masse
potential secondary impacts of relocated households on existing communities	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	financial compensation and relocation	full, assuming alternative facilities large enough
two places of worship – a church used by 7th Day Adventists, and a Hindu temple	financial compensation and relocation	full – alternative facilities available nearby
one charity facility – Outreach 3 Way, which helps people with learning difficulties	financial compensation and relocation	full, since charity has alternative facilities nearby
four pre-schools/nurseries	financial compensation and relocation	partial, unless replacement facilities are similarly close to families new dwellings. Two alternative facilities nearby could be affected by noise
Crawley Rugby club, with its sporting and social facilities	financial compensation and relocation	full, but dependent on successful planning process which could throw up secondary issues
The northern part of Rowley Wood	financial compensation or provision of alternative community facilities	full
public rights of way	provision of new links to maintain connectivity	full once operational, partial during construction
cycle routes	provision of new cycle routes once airport operational	full once operational, partial during construction

Community Facility/Service	Proposed mitigation	Likely extent of mitigation
Impacts on local journey times, either from severance or increased traffic	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

Source: Airports Commission analysis

Table 3.5: Heathrow Airport Northwest Runway scheme Community Infrastructure Impacts

Community Facility	Proposed mitigation	Likely extent of mitigation
783 residential properties likely to be demolished for airport expansion	financial compensation and relocation assistance	partial, unless planning permits relocation of displaced communities en masse
potential secondary impacts of relocated households on existing communities	provision of community services to meet additional demand	full if effects are subsumed within wider effects associated with airport-related development
Harmondsworth Primary school	relocation	partial, dependent on location and accessibility for relocated families
Harmondsworth Community hall (including the Wonderland day nursery)	relocation	partial, dependent on location and accessibility for relocated families
Sipson community centre	relocation	partial, dependent on location and accessibility for relocated users
Heathrow special needs centre in Longford	relocation	partial, dependent on location and accessibility for relocated users
Nursery schools in Longford and Sipson	relocation	partial, dependent on location and accessibility for relocated families
White Horse pub at Longford	financial compensation and relocation assistance	full

Community Facility	Proposed mitigation	Likely extent of mitigation
Sipson recreation ground and facilities	relocation	partial, dependent on location and accessibility for relocated families
other formal and informal recreation sites	relocation/ re-provision	full
part of the Colne Valley regional park	relocation	full
impacts on local journey times and severance from A4/M25/Southern Rail Access works	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

Source: Airports Commission analysis

Table 3.6: Heathrow Airport Extended Northern Runway scheme Community Infrastructure Impacts

Community Facility	Proposed mitigation	Likely extent of mitigation
242 residential properties likely to demolished for airport expansion	financial compensation and relocation assistance	partial, unless planning permits relocation of displaced communities en masse
potential secondary impacts of relocated households on existing communities	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	financial compensation and relocation assistance	partial, unless planning permits relocation of businesses to suitable sites close to airport, transport network and other businesses
loss of Punch Bowl pub during construction	financial compensation and provision of alternative community facility during construction	full, assuming suitable location available
noise implications for Pippins Primary school	provision of suitable noise insulation	partial, unless outdoor provision of similar facilities. Children still exposed to noise to and from school
severance of section of the Colne Valley Way running from Colnbrook to Horton	diversion	full
severance of Poyle Road, which currently links Poyle and Colnbrook with Wraysbury and Horton	traffic diverted via Horton Road instead	partial – longer local journey times
severance of route to Poyle from the west along Bath Road	provision of alternative route	partial, dependent on new journey patterns

Source: Airports Commission analysis

3.18 The largest loss of homes would be as a result of the Heathrow Northwest Runway scheme, which would require the loss of 783 properties as a result of the land take needed for the new runway (additional properties could also be lost due to surface access interventions). The Gatwick Second Runway scheme would require the loss

of 168 residential properties, mainly on the northern edge of Crawley. The Heathrow Extended Northern Runway scheme would require the loss of 242 properties, mainly in the village of Poyle.

3.19 The Community Assessment sets out the likely consequential community impacts:

- at Heathrow Airport Northwest Runway scheme, it would be difficult to see any existing community cohesion being maintained unless entire communities from the affected villages and their facilities could be moved en masse at the same time, the mitigations suggested focussing on developing new communities;
- at Heathrow Airport Extended Northern Runway scheme, this would cause significant uncertainty for the residents of Poyle, particularly those who could lose both their home and place of work, and relocating this whole community en masse would present challenges;
- at Gatwick, the loss of housing would be the largest impact on the community in Crawley, albeit on a smaller scale than either Heathrow scheme. A potential impact would be increased travel times to any re-provided Hindu temple and Seventh Day Adventists church.

3.20 However, the full impacts on people with protected characteristics within these communities are not yet known, as this would depend on what approach is taken to re-housing those who had lost their homes and where, what compensation is made available, and in what manner any affected community facilities are re-provided. Equally, impacts on facilities not demolished but whose users could face longer travel times or other severance issues, have not yet been identified. To do so at this stage, in advance of detailed local roads design or information on where housing for the community would be re-provided, could under or overestimate the impacts. The *Community: Impacts Assessment* sets out some equalities data for those communities who may be most impacted by the scheme. This is drawn together in respect of each protected characteristic in table 4.1.

4. Summary of Equalities Information gathered so far

- 4.1** The below table sets out the impact pathways which can be identified as having possible impacts on groups with protected characteristics.
- 4.2** The Commission has considered both the possible differential impacts of the schemes – those that affect a group of people with a protected characteristic specifically *because of that characteristic* – and the disproportionate impacts – impacts that have a proportionately greater effect on groups with a particular protected characteristic than the population in general. (For example if a Christian Church is demolished that would have a differential impact on the Christians who use it, but if the houses that are demolished happen to house a greater number of Christians than the population at large, that would be a disproportionate impact).
- 4.3** The differential impacts are simpler to identify at this stage than the disproportionate impacts, which require detailed equality mapping data to predict any such detailed impacts with any level of certainty. The Commission has reviewed available data at ward level, but does not have equalities data at lower, more detailed levels than this. However, so far as is feasible, possible disproportionate impacts have been identified. Table 4.1 also sets out a comparison of the equalities impacts as between the three short-listed schemes, so far as possible, although this is necessarily in high level terms at this stage.
- 4.4** This does not suggest that anything not highlighted in the table below will necessarily have no equalities impact – only that an impact pathway has not been identified at this stage of design and with the available data reviewed. Detailed review of population data, possible mitigations and re-provisions, detailed severance impacts and review of noise contours at a later stage of design could all uncover impacts not highlighted below, or could demonstrate that a potential impact will not materialise at all or as significantly. The issues identified below would likely need to be considered for their relevance at any further stage of planning and development.

Table 4.1: Impact pathways already identified as having possible impacts on groups with protected characteristics

Impact Pathway	LGW 2	LHR NWR	LHR ENR	Comparison
Age				
<p>Air Quality: Air quality impacts could more strongly affect children (aged under 16), older people (aged 65+).</p>	<p>The Gatwick scheme is projected to have a lesser effect on air quality than either Heathrow scheme. Nonetheless, the issue would need to be considered carefully at the detailed planning stage to ensure that no vulnerable groups are seriously affected.</p>	<p>The air quality impacts of expansion at Heathrow are expected to be negative, particularly in respect of achieving EU limit values. The number of people predicted to move into the 'at risk' category is, however, small. Nonetheless, firm action to improve air quality and effective mitigation for local communities would be necessary.</p> <p>Residents of the Heathrow villages are younger than the national average, with a median age of 33. Air quality impacts could more strongly affect children aged under 16.</p>	<p>The overall air quality impacts are similar to those from LHR-NWR. Fewer people are forecast to see a worsening of air quality, but the challenges in relation to achieving EU limit values are more severe. Nonetheless, firm action to improve air quality and effective mitigation for local communities would be necessary.</p> <p>Residents of Poyle and the Heathrow villages are younger than the national average, Poyle's under 15s make up 20% of the population and air quality impacts could more strongly affect children aged under 16.</p>	<p>There are more extensive AQ disbenefits in the Heathrow schemes than at Gatwick although none shows exceedance at a health based receptor.</p> <p>In principle, there could therefore be a risk that more children/older people could be exposed to higher pollutant levels at Heathrow than at Gatwick but the currently available data does not enable meaningful analysis of the population around the affected health based receptors and therefore the specific extent of any disproportionate impacts cannot be accurately determined at this stage.</p>
<p>Noise Young children and older people could be particularly impacted by noise from construction and operation.</p>	<p>The Gatwick scheme is projected to have a lesser effect on noise than either Heathrow scheme. Nonetheless, the issue will need to be considered carefully at the detailed planning stage to ensure that no vulnerable groups are seriously affected.</p>	<p>The noise effects of expansion at Heathrow are also likely to be significant and will require mitigation measures. HAL have offered a package of measures to help local schools and provide insulation for communities. Satisfactory provision of mitigation measures would be a necessary pre-condition for development.</p>	<p>Overall similar to LHR-NWR, but with more limited scope to provide respite through runway alternation. Particular noise impacts possible for Pippins Primary school. Satisfactory provision of mitigation measures would be a necessary pre-condition for development.</p>	<p>A larger number of people will be affected by noise for both the Heathrow schemes than at Gatwick. In principle, there could therefore be a risk that more children/older people could be exposed to higher noise levels at Heathrow than at Gatwick. However, no age information by noise contour is available (and the level of noise experienced will be dependent on the development of flight paths, as referred to earlier) and it is not possible to assess the extent of any potential disproportionate impacts at this stage. Mitigations and flight-path design could reduce the final impact on particular schools.</p>

Impact Pathway	LGW 2	LHR NWR	LHR ENR	Comparison
<p>Place/Community Young children and older people could be particularly impacted by the loss of community facilities such as schools and care homes developed to meet their needs. The impact of housing loss and severance on these groups would need to be considered as part of the impacts of these issues on the wider community.</p>	<p>The relocation of housing and of some community facilities could lead to disruption and additional journey times for elderly people and their families to health and care facilities e.g. Trent House Care Home. Further work will need to be done at the detailed design stage to ensure that mitigations/re-provisions meet the needs of the users. The impacts of severance for particular communities would also need to be considered.</p>	<p>The relocation of the Harmondsworth Primary School could lead to disruption and additional journey times on younger people and their families. Further work will need to be done at the detailed design stage to ensure that mitigations/re-provisions meet the needs of school children. The impacts of severance for particular communities would also need to be considered.</p> <p>The residents of the Heathrow villages are younger than the national average, with a median age of 33. 70% of residents are less than 44 years old. This might mean that there could be disproportionate impacts on younger people in the area due to housing and community facility loss and severance.</p>	<p>There are no age-specific community facilities lost as a result of the ENR scheme. However in common with the other two schemes there could well be severance impacts, for instance travel time to Doctors surgeries for Poyle residents, and the impact on these for elderly people or other groups would need to be taken into account. The residents of the Heathrow villages are younger than the national average, with a median age of 33. 70% of residents are less than 44 years old. This might mean that there could be disproportionate impacts on younger people in the area due to housing and community facility loss and severance.</p>	<p>Only the LHR ENR scheme has no specific community facilities for old or young people that would need to be re-provided, and as such could be said to have, without mitigation, a more limited differential impact on older or younger people with respect to Place. However, the impacts at LHR NWR and LGW 2R will vary significantly dependant the suitability of re-provision of services, and could be successfully limited.</p> <p>A larger number of houses will be lost in the LHR NWR scheme than at LHR ENR or Gatwick. In principle, there could therefore be a risk that more children/older people could be impacted by housing loss and severance impacts at the LHR NWR scheme. However, these impacts in particular will vary significantly dependant on detailed design of local roads etc., and also the suitability of re-provision of services. It is not possible to assess the extent of any potential disproportionate impacts at this stage.</p>

Impact Pathway	LGW 2	LHR NWR	LHR ENR	Comparison
Disability				
<p>Air Quality Air quality impacts could more strongly affect those with pre-existing conditions.</p> <p>Place/Community People with disabilities could be particularly impacted by the loss of community facilities such as schools and care homes developed to meet their needs. The impact of housing loss and severance on these groups would need to be considered as part of the impacts of these issues on the wider community.</p>	<p>See discussion in age above.</p> <p>Housing relocation as under Age above, and in particular the relocation of the Outreach 3 Way facility for people with learning difficulties. Further work will need to be done at the detailed design stage to ensure that mitigations/re-provisions meet the needs of the users. The impacts of severance for particular communities would also need to be considered.</p>	<p>See discussion in age above.</p> <p>Significant housing relocation and relocation of community facilities, as under Age above, especially the Heathrow Special Needs Centre in Longford. Further work will need to be done at the detailed design stage to ensure that mitigations/re-provisions meet the needs of the users. The impacts of severance for particular communities would also need to be considered.</p>	<p>See discussion in age above.</p> <p>There are no community facilities specifically for disabled people that are lost as a result of the LHR ENR scheme. However in common with the other two schemes there could well be severance impacts and the impact on these for disabled people or other groups would need to be taken into account.</p>	<p>As per age above there are more extensive air quality disbenefits in the Heathrow schemes than at Gatwick although none shows exceedance at a health based receptor.</p> <p>In principle, there could therefore be a risk that more people with pre-existing conditions could be exposed to higher pollutant levels at Heathrow than at Gatwick but the currently available data does not enable meaningful analysis of the population around the affected health based receptors and therefore the specific extent of any disproportionate impacts cannot be accurately determined at this stage.</p> <p>Only the LHR ENR scheme has no specific community facilities for disabled people that would need to be re-provided, and as such could be said to have, without mitigation, a more limited differential impact on disabled people with respect to Place. However, the impacts at LHR NWR and LGW 2R will vary significantly dependant the suitability of re-provision of services, and could be successfully limited.</p> <p>A larger number of houses will be lost in the LHR NWR scheme than at LHR ENR or Gatwick. In principle, there could therefore be a risk that more disabled people could be impacted by housing loss and severance impacts at the LHR NWR scheme. However, these impacts in particular will vary significantly dependant on detailed design of local roads etc, and also the suitability of re-provision of services. It is not possible to assess the extent of any potential disproportionate impacts at this stage.</p>

Impact Pathway	LGW 2	LHR NWR	LHR ENR	Comparison
Gender				
See Pregnancy/maternity below Otherwise, not identified as a differential impact pathway with respect to the shortlisted schemes. Later analysis at detailed design stage may uncover other differential or disproportionate impacts.				
Gender reassignment				
Not identified as a differential impact pathway with respect to the shortlisted schemes. Later analysis at detailed design stage may uncover other differential or disproportionate impacts.				
Pregnancy and maternity				
Place/Community The loss of housing and community facilities identified above, 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.	The relocation of housing and of some community facilities, including four pre-schools and nurseries, is likely to lead to disruption and difficulties finding appropriate child-care potentially impacting on the mother's employment, and/or additional journey times to relocated/new nurseries.	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 mother's employment, and/or additional journey times to relocated/new nurseries.	There are no community facilities specifically for young children or their mothers that are lost as a result of the LHR ENR scheme. However in common with the other two schemes there could well be severance impacts and the impact of these for pregnant women, mothers or other groups would need to be taken into account.	Only the LHR ENR scheme has no specific community facilities for pregnant women or new mothers that would need to be re-provided, and as such could be said to have, without mitigation, a more limited differential impact on disabled people with respect to Place. However, the impacts at LHR NWR and LGW 2R will vary significantly dependant the suitability of re-provision of services, and could be successfully limited. A larger number of houses will be lost in the LHR NWR scheme than at LHR ENR or Gatwick. In principle, there could therefore be a risk that more pregnant women or mothers could be impacted by housing loss and severance impacts at the LHR NWR scheme. However, these impacts in particular will vary significantly dependant on detailed design of local roads etc., and also the suitability of re-provision of services. It is not possible to assess the extent of any potential disproportionate impacts at this stage.

Impact Pathway	LGW 2	LHR NWR	LHR ENR	Comparison
Race				
<p>No differential impact was identified with respect to the shortlisted schemes, but the high level equalities data available to the Commission does suggest that there could be a disproportionate impact, given the higher proportion of Black, Asian and Minority Ethnic (BAME) people in the local populations around the airports compared to the national average (14.5%).</p>	<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 affected by the Gatwick development.</p> <p>Both airport's 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.</p>	<p>Around either Heathrow scheme the racial split is closer to 50:50 between white and BAME people at locations such as the Heathrow villages, Hounslow and Slough; Hillingdon is 61% White, 39% BAME people. This is significantly higher than the 14.5% national average. There is a relatively large BAME population in the Heathrow Villages ward, which is heavily affected by the NWR through land take and severance impacts. In relation to the ENR scheme there is a large proportion of Asian households in the village of Poyle which could be affected by this scheme.</p> <p>Both airport's on-site workforces have a higher than average proportion of BAME staff: Heathrow's is 24% Asian/Asian British and 5% Black/African/Caribbean/Black British.</p>		<p>The BAME populations around the shortlisted airports are particularly likely to experience the negative effects of expansion such as air pollution, aviation noise and relocation of communities through land take, but also to benefit from the positive impacts, such as increased employment. The level of housing loss is higher at the Heathrow schemes, and LHR NWR in particular than it is around Gatwick. As such in principle, there could therefore be a risk that more BAME people could be impacted by housing loss and severance impacts at the LHR NWR scheme. However, the impacts at LHR NWR will vary significantly dependant on detailed design and mitigation, and could be successfully limited.</p> <p>The currently available data is not detailed enough to adequately consider these differing positive and negative impacts therefore the specific extent of any possible disproportionate impacts cannot be accurately determined at this stage.</p>

Impact Pathway	LGW 2	LHR NWR	LHR ENR	Comparison
Region or Belief				
<p>Place/Community</p> <p>Religious people would be particularly impacted by the loss of places of worship, or severance impacts making their journeys to these places more difficult. The impact of housing loss and severance on these groups would need to be considered as part of the impacts of these issues on the wider community.</p>	<p>Two places of worship would be lost: a Hindu temple and a church used by 7th Day Adventists with differential impacts on these two religious groups, although there are alternative facilities nearby which should mitigate some of the impacts.</p>	<p>No specific loss of religious buildings.</p> <p>The impact of housing loss and severance on these groups would need to be considered as part of the impacts of these issues on the wider community.</p>		<p>Only the LGW 2R scheme has specific places of worship that would be lost, and as such could be said to have, without mitigation, a stronger differential impact on religious people with respect to Place, although there are alternative facilities nearby which should mitigate some of the impacts.</p> <p>The level of housing is higher at the Heathrow schemes, and LHR NWR in particular than it is around Gatwick. As such in principle, there could therefore be a risk that there could be a disproportionate impact of housing loss and severance impacts at the LHR NWR scheme on religious people. However, the impacts at LHR NWR will vary significantly dependant on detailed design and mitigation, and could be successfully limited.</p>

Impact Pathway	LGW 2	LHR NWR	LHR ENR	Comparison
Airport expansion could also 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 populations around Heathrow have a disproportionately high number of Hindus, Muslims and Sikhs, for example, a 10.3% Hindu population in Hounslow (compared to 1.5% nationally) and a 23.3% Muslim population in Slough, compared to 5% nationally and a 9% Sikh population there compared to 0.9% nationally. The Heathrow Villages Ward in Hillingdon, which would be particularly affected by the LHR NWR scheme, contains a variety of religious groups with 45.8% Christians, 8% Hindus, 14.2% Muslims, 9.8% Sikhs and 13.7% of no religion. There are therefore a disproportionately high number of Hindus, Muslims and Sikhs in the Heathrow Villages who will be affected by airport expansion. For ENR, the Sikh community represents an 11% share of the population of Colnbrook and Poyle, over ten times as high as the national average Sikh population.		The religious populations around the shortlisted airports are particularly likely to experience the negative effects of expansion such as air pollution, aviation noise and relocation of communities through land take, but also to benefit from the positive impacts, such as increased employment. The currently available data is not detailed enough to adequately consider these differing positive and negative impacts therefore the specific extent of any possible disproportionate impacts cannot be accurately determined at this stage.
Sexual orientation				
Not identified as a differential impact pathway with respect to the shortlisted schemes. Later analysis at detailed design stage may uncover other differential or disproportionate impacts.				
Marriage/ civil partnership				
Not identified as a differential impact pathway with respect to the shortlisted schemes. Later analysis at detailed design stage may uncover other differential or disproportionate impacts.				
Impacts on social inclusion issues				
Local Economy: At a general level, all of the schemes are in proximity to some areas that have relatively high levels of underemployment and/or socio-economic deprivation, economic development could support increased employment in local areas (for example parts of Crawley near Gatwick or of Slough near Heathrow.)	The level unemployment is generally lower in the vicinity of Gatwick. This is shown in the tables above. There will also be fewer indirect, induced and catalytic jobs created by the Gatwick scheme than the two Heathrow schemes, although the growth would still also provide opportunities for the local population.	The level of unemployment is generally higher in the vicinity of Heathrow. This is shown in the tables above. There will also be more indirect, induced and catalytic jobs created by the two Heathrow schemes, which could also provide opportunities for the local population.		Because of the currently higher levels of unemployment that could be reduced by extra jobs derived from a Heathrow scheme, the Heathrow schemes could have a stronger beneficial effect on social inclusion.

Source: Airports Commission analysis

5. Conclusion

- 5.1** The above tables summarise our current understanding of the equalities impacts of the various schemes, given the current stage of design. If any of the schemes were to be taken forward more detailed work would need to be undertaken as designs, mitigations and operational plans develop, and it is likely to be necessary to undertake a more detailed EQIA at that stage.
- 5.2** Based on the information currently available, air quality and noise, particularly in relation to the two Heathrow options, could affect older and younger people and those with pre-existing conditions more strongly. This will require careful mitigation measures. Older and younger people could also be impacted by the loss of particular community facilities (A care home at the Gatwick Airport Second Runway scheme and a school at the Heathrow Airport Northwest Runway scheme). The impacts on children through the need to re-provide nursery facilities would also impact on recent mothers.
- 5.3** There is a spread of religious groups within the relevant areas of all three schemes which might suffer impacts as a result of any of the developments being implemented but higher proportions of Hindu, Muslim and Sikh populations than nationally around both airports. Under a Heathrow Airport Northwest Runway scheme the ward most significantly affected by land take, the Heathrow Villages ward, has a higher Hindu, Muslim and Sikh population overall than nationally. There is a large Sikh community in Poyle, which could be strongly affected under a Heathrow Airport Extended Northern Runway scheme. These impacts would need careful and appropriate mitigation at the detailed design phase. At Gatwick certain faith communities are predicted to lose their places of worship and the community cohesion which they offer.
- 5.4** There are higher than average BAME communities around each airport, with a particularly high proportion of BAME people in the local authority areas surrounding Heathrow. 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 both airports' workforces have BAME employment above the national average, with Heathrow's particularly higher.
- 5.5** There could be clear benefits 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.

5.6 Overall, it seems likely that the negative equalities impacts could be well mitigated through good design, operations and mitigation plans- and several possible mitigation measures for the impact pathways themselves (e.g. reducing air quality impacts, which would have a knock on effect for any sensitive populations) are already highlighted across the Commission's assessments. There are also opportunities, which scheme promoters have already highlighted, to target employment opportunities at local people, which could further develop the benefits of employment for social inclusion around the airport. As part of future planning processes the promoter will need to develop these interventions in detail and implement and monitor them as part of the ongoing delivery of the airport.

