Gatwick Airport Northern Runway Project

The Applicant's Response to Actions - ISHs 2-5

Book 10

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1 Introduction

1.1 Introduction

1.1.1 This document provides the Applicant's Deadline 2 response to the actions arising from Issue Specific Hearing (ISH) 2: Control Documents / DCO [EV7-005], ISH3: Socio-Economics (including Health and Wellbeing) [EV8-005], ISH4: Surface Transport [EV9-005] and ISH5: Aviation Noise [EV10-005].

2 Issue Specific Hearing 2: Control Documents / DCO

2.1.1 This section provides the Applicant's response to actions arising from ISH2: Control Documents / DCO [EV7-005].

2.1.2 The actions relevant to the Applicant are as follows:

Action No.	Action	Deadline
1	To clarify the extent to which Development Consent Order (DCO) controls would apply to non-commercial air traffic movements (ATM).	Response submitted at Deadline 1
2	To confirm the number of night flight dispensations for 2023 summer season, the procedure followed, the Department for Transport reporting requirements and the supporting details including the numbers allowed/ refused and the reasoning.	Response submitted at Deadline 1
3	To submit information on compliance of Work Nos. 2-7 with Civil Aviation Authority controls and whether these sufficiently control the phasing of the development.	Response submitted at Deadline 1
4	To consider whether the use of any of Work Nos. 8-34 should be related to the proposed increase in commercial ATMs or passenger numbers.	Response submitted at Deadline 1

5	To consider the need for a requirement to clarify dependency of hotel development on an increase in commercial ATMs or passenger numbers.	Response submitted at Deadline 1
6	To consider whether the level of design detail in Schedule 1 is sufficient, and consider whether more information can be included in the design principles.	Response submitted at Deadline 1
6.1	To consider whether a schedule of parameters should be included in the DCO to control maximum numbers of and dimensions of structures (applicable to Work Nos. 15, 16, 19, 20 and 26-29)	Response submitted at Deadline 1
7	To consider whether maximum number of car parking spaces for each car park should be specified	Response submitted at Deadline 1
8	To provide clarification regarding what is mitigation works to address adverse effects and what is associated development.	Response submitted at Deadline 1
9	To provide a reference to the submission that shows the extent of operational land or provide such clarification through an additional submission.	Response submitted at Deadline 1
10	To clarify which Work Nos. fall within the description of excepted development not requiring the making of the DCO to secure development consent.	Response submitted at Deadline 1
11	To submit a draft s106 agreement	Deadline 2
12	To consider the provision of a construction stakeholder engagement plan (or equivalent) as a DCO certified document.	Response submitted at Deadline 1

2.1.3 The Applicant's responses to actions submitted at Deadline 1 can be located at **The Applicant's Response to Actions from Issue Specific Hearing 2: Control Documents / DCO** [REP1-063].

2.1.4 The section below provides the Applicant's response to Action 11.

2.2 ISH2: Action Point 11

2.2.1 **The Examining Authority has asked the Applicant to submit a draft s106 Agreement. The following response is provided.**

2.2.2 The Applicant encloses a copy of the draft DCO **Section 106 Agreement** (Doc Ref. 10.11). A full draft of the Applicant's proposed DCO Section 106 Agreement was shared with Sharpe Pritchard LLP who represent eight local authorities on 1 February 2024. The Applicant received comments on the substantive commitments within this draft DCO s106 Agreement on 25 February to which the Applicant has now responded. The draft DCO Section 106 Agreement submitted at this Deadline 2 incorporates amendments made in response to the comments raised and also comments provided by other Interested Parties through the Written Representations, hearings and Statement of Common Ground discussions.

2.2.3 The Applicant has been informed by Sharpe Pritchard LLP that it has now also been instructed by Tandridge District Council. Therefore, the Applicant has agreed with Sharpe Pritchard LLP that the term "Joint Local Authorities" or "JLAs" now refers collectively to: Crawley Borough Council, West Sussex County Council, Mole Valley District Council, Reigate and Banstead Borough Council, Surrey County Council, Horsham District Council, Mid-Sussex District Council; East Sussex District Council and Tandridge District Council.

2.2.4 The JLAs have been provided with a copy of this revised draft DCO Section 106 Agreement in advance of this submission and have agreed to provide further comments in a mark-up of the agreement (or such other form as otherwise agreed) as a next step. Subsequently, the Applicant and JLAs intend to arrange topic specific meetings as necessary to progress the drafting of the Agreement.

2.2.5 As requested by the ExA in the Rule 8 letter, the Applicant will provide an update on progress or a progressed draft DCO Section 106 agreement at Deadlines 3 and 8 with an intention to submit a signed and dated version of the Agreement at Deadline 9. The Applicant is confident that agreement with the JLAs can be reached before Deadline 9.

2.2.6 Separately, in Issue Specific Hearing 2 the ExA raised questions about whether the Applicant considered that commitments in the draft DCO Section 106 Agreement were appropriately secured as obligations under that agreement or whether they should instead be secured as Requirements under the draft DCO. To confirm, the Applicant considers that the proposed approach, to secure the commitments as obligations under the draft DCO Section 106 Agreement, is the most appropriate approach in the context of the individual obligations.

2.2.7 By way of clarificatory context:

2.2.7.1. The draft DCO s106 Agreement follows the form and approach adopted in the existing section 106 Agreement between GAL, West Sussex County Council and Crawley Borough Council, but prepared in view of the specific circumstances of the Project. In this regard, a number of obligations within the draft DCO Section 106 Agreement have been included to minimise the divergence from the existing 2022 Agreement. The response to Action Point 1 in Issue Specific Hearing 3 below describes these updates.

2.2.7.2. Paragraph 54 of the National Planning Policy Framework provides that: "*Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition*". While it may be possible, in principle, for elements of the draft DCO Section 106 agreement to be pulled out into requirements, in many cases there are practical advantages to using a section 106 agreement to secure commitments. Notably a section 106 agreement can be modified through agreement by the local authorities who are party to the agreement and the Secretary of State under section 106A of the Town and Country Planning Act 1990. This provides for a greater level of flexibility than is provided for a DCO under the Planning Act 2008. This flexibility is particularly necessary in relation to the operation of governance groups that are established pursuant to the agreement, like the ESBS Steering Group and the Transport Mitigation Fund Decision Group. The number of parties involved in these groups mean that changes may be required to ensure that the groups continue to operate effectively in practice.

2.2.7.3. The relevant local authorities will enter into the draft DCO Section 106 Agreement with the Applicant thereby actively demonstrating their acceptance of the provisions therein. Section 106 is therefore a more effective tool for securing engagement mechanisms between the parties

(like the Annual Gatwick Air Quality Joint Authorities Meeting and the Gatwick Parking Meeting) because the parties are actively committing to the mechanisms.

2.2.7.4. In relation to the payment of monies, paragraph 005 (dated 23 July 2019) of the Government Guidance on the "*Use of Planning Permissions"* says that *"No payment of money or other consideration can be positively required when granting planning permission*". Although this guidance applies to planning permissions granted under the TCPA 1990, it is relevant to the drafting of DCO Requirements. For this reason, it is appropriate for positively worded obligations that require the payment of money to be included in the DCO section 106 Agreement rather than as DCO requirements.

2.2.7.5. The structure and language of a contractual agreement between the parties allows for complicated structures and mechanisms to be set out and secured in a way that all parties agree with. An example of this is the description of how the London Gatwick Community Fund will be established and distributed.

2.2.8 Notwithstanding the Applicant's in-principle position articulated above, the Applicant is mindful of the ExA's comments and will actively consider whether there are discrete commitments which could be secured under the DCO rather than the DCO Section 106 Agreement, without compromising their effect and subject to discussions with the JLAs on the same. This will continue to be a consideration as the drafting of the draft DCO Section 106 Agreement develops. Similarly, if the ExA (upon receipt of the draft Agreement at this deadline) considers that any of the obligations should instead be proposed as requirements to the draft DCO, the Applicant would be happy to consider such comments/direction and to respond at a future deadline as appropriate.

3 Issue Specific Hearing 3: Socio-Economics

3.1.1 This section provides the Applicant's response to actions arising from ISH3: Socio-Economics (including Health and Wellbeing) [EV8-005].

3.1.2 The actions relevant to the Applicant are as follows:

Action No.	Action	Deadline

1	Applicant to provide a summary of the controls within the existing s106 and how these would be taken forward in the Northern Runway Project s106 agreement.	Deadline 2
2	Draft Implementation Plan to be appended to the s106 and submitted into the Examination.	Deadline 3
3	Applicant to confirm where the code of conduct for construction workers can be found.	Response submitted at Deadline 1
4	Applicant to respond to Crawley Borough Council's position in relation to the declaration of a Housing Emergency.	Deadline 2
5	Applicant to review the implications of using the 2011 Census for the assessment of housing need during construction (possibly wider housing issues).	Deadline 2
6	Parties to respond to Agenda Item 6 - comments on Health Equality Impact Assessment.	Response submitted at Deadline 1
7	Applicant to provide signposting regarding the provision of data on health and well-being and cumulative impact.	Deadline 2

3.1.3 The Applicant's responses to actions submitted at Deadline 1 can be located at **The Applicant's Response to Actions from Issue Specific Hearing 3: Socio-Economics** [REP1-064].

3.1.4 The sections below provide the Applicant's response to Actions 1, 4, 5 and 7. For actions which require a more detailed response, a reference to the appropriate document is included. Action 3 will be responded to at Deadline 3 as stipulated within EV8-005.

3.2 ISH3: Action Point 1

3.2.1 **The Examining Authority has asked the Applicant to provide a summary of the controls within the existing s106 and how these would be taken forward**

in the Northern Runway Project s106 agreement. The following response is provided.

3.2.2 Since 2001 the Applicant has entered into a number of section 106 agreements with West Sussex County Council and Crawley Borough Council. The most recent of these is the section 106 agreement that was entered into on 24 May 2022 (The "2022 Agreement"). The 2022 Agreement was entered into voluntarily by the Applicant and is not linked to a specific planning permission.

3.2.3 **Appendix A** includes a table setting out the existing obligations in the 2022 Agreement and how these have been either taken forward, amended or removed in the draft DCO Section 106 Agreement.

3.3 ISH3: Action Point 4

3.3.1 **The Examining Authority has asked the Applicant to respond to Crawley Borough Council's position in relation to the declaration of a Housing Emergency. The following response is provided.**

3.3.2 The Housing Emergency declared by Crawley Borough Council ('CBC') relates primarily to the need for temporary accommodation. The motion to declare a Housing Emergency was put to the Full Council meeting of CBC on 21st February 2024, within which the Council resolved to declare a Housing Emergency, request the Leader of the Council and the Cabinet Member for Housing write to the Secretary of State for Levelling Up, Housing and Communities to request additional resources, and work with the housing sector and Government to develop long term solutions to the national housing crisis.

3.3.3 Based on this resolution, these actions do not constitute a change in CBC policy and the Housing Emergency is not reflected within any planning policy document or other planning-related document relevant to this DCO Application. As such, at this stage the Applicant does not consider that the resolution has a direct bearing on the nature of the assessment of population and housing effects that has informed the assessment of potential socio-economic effects within the Application.

3.3.4 Further, several of the issues that have contributed to CBC's decision to declare a Housing Emergency are not considered to be relevant to this DCO Application. The factors cited by CBC within the Notice of Motion to declare a Housing Emergency include water neutrality planning restrictions slowing down or limiting new development, and the likelihood of closure of four Asylum Contingency hotels in the Borough.

3.3.5 CBC also identifies *"the unaffordability of home ownership"* as a contributing factor to the Housing Emergency; in the short- to medium-term the temporary Non-Home Based ('NHB') construction workers would not be expected to purchase property in the area. As such, the key factors that have led to the declaration of a Housing Emergency are unrelated to the Gatwick NRP. The concerns raised by CBC pertaining to the availability of private rented properties in the area within its declaration of a Housing Emergency are addressed below.

3.3.6 Within Section 6 of **ES Appendix 17.9.3: Assessment of Population and Housing Effects** [APP-201], Table 6.1.1 presents the distribution of the NHB construction workers within the key authorities. It shows an absolute maximum of 115 NHB workers based in Crawley at the anticipated construction peak in February 2027. This is based on analysis, included within **ES Appendix 17.9.1: Gatwick Construction Workforce Distribution Technical Note** [APP-199], using a very conservative assumption that 20% of construction workers would be NHB, compared to a UK average of 5% and a South East regional average of 7%. Therefore, the 115 NHB workers figure would represent a 'worst-case' scenario for Crawley in terms of demand for housing from temporary construction workers.

3.3.7 Further, **ES Appendix 17.9.3** states that the temporary construction workers would primarily rely on accommodation in the private rented sector, within which there is likely to be sufficient capacity to absorb demand; therefore, it is not considered that the construction workforce would place additional demand on affordable rented housing. Data from the 2011 and 2021 Census (discussed further in **ISH3: Action Point 5** below) shows a 34.2% increase in the number of households living in the private rented sector. The number of vacant private rental properties in Crawley is estimated to have increased by 110 units over the same period, equivalent to an increase of 340 bedspaces. This is indicative of an increased supply of dwellings of this tenure.

3.3.8 It was previously estimated, based on data from the 2011 Census (the latest available at the time of writing) that if the peak number of NHB workers in Crawley were to be accommodated in vacant private rented properties they would represent 42.42% of vacant bedspaces. However, as highlighted in **ISH3: Action Point 5** below, using data from the 2021 Census this figure is significantly reduced to 18.89%. In addition, as it is not anticipated that all NHB workers would opt for this form of tenure – with others choosing to lodge with existing owner-occupier households, subletting from existing private rented tenants, residing in Houses under Multiple Occupation ('HMO') or living in shorter term forms of accommodation such as hotels and B&Bs – this is a maximum figure

and the proportion of existing vacant bedspaces occupied by NHB construction workers at their peak would be likely to be much lower. Furthermore, this does not account for any future growth in the number of available private rented properties between 2021 and the assessed peak year for the construction workforce in 2027.

3.3.9 Overall, the Applicant does not consider that the relatively limited number of NHB construction workers likely to reside in the Borough would materially impact CBC's position in relation to the declaration of a Housing Emergency, assuming that CBC still maintains its Housing Emergency up until commencement of construction of the Project. Any increase in housing demand in the area attributable to temporary construction workers would be negligible and transitory in nature and would not impact the demand for temporary accommodation ('temporary' here meaning emergency housing that is supported by CBC, as opposed to 'temporary' meaning housing that is simply occupied for a short period of time and which might be in the private rented sector or hotels, B&Bs, etc.) or social housing, as it is not considered that the construction workforce would be accommodated in such tenures.

3.3.10 The Applicant also notes that CBC has stated that it does not consider the DCO proposals as justifying an increase in housing need in the Draft Crawley Borough Local Plan 2024-2040 as per the Stage 1 Written Statements to Inspectors' Matters pertaining to Matter 3: Housing Needs within document CBC.MIQ.003a *'Written Statement Matter 3 Housing Needs Issue 1'*[1] dated November 2023. They state:

"While CBC does not endorse the analysis set out in the Appendix in full, it does not disagree with its conclusions regarding the implications of the project for the overall level of housing need during the period up to 2040. Accordingly the Northern West Sussex Housing Needs Statement of Common Ground, July 2023 (Submission Document Reference: SoCG/02), page 9, sets out that the Housing Market Area Authorities do not consider the DCO proposals as justifying an increase in housing need." (Paragraph 3.2.3)

3.3.11 This would appear inconsistent with the position it has advanced on housing during the DCO process.

3.3.12 The Applicant intends to respond to other issues raised within the Local Impact Reports (which were submitted at Deadline 1) relevant to socio-economics at

[1] Crawley Borough Council (2023). Crawley Borough Local Plan Examination – Matter 3: Housing Needs.

Deadline 3. Accordingly, the Applicant reserves the right to make further comments on this issue.

3.4 ISH3: Action Point 5

3.4.1 **The Examining Authority has asked the Applicant to review the implications of using the 2011 Census for the assessment of housing need during construction. The following response is provided.**

3.4.2 Section 6 of **ES Appendix 17.9.3: Assessment of Population and Housing Effects** [APP-201] assessed potential housing need during construction. This response details the impact of updating data originally sourced from the 2011 Census (the latest available at the time of preparing the ES) with equivalent data from the 2021 Census on the assessment of housing need during construction. The calculation methodologies remain unchanged.

Context

3.4.3 There are no changes to the context of the assessment of housing need during construction.

Assessment of private rented sector

3.4.4 Data from the 2011 Census showed that across the key non-home based ('NHB') authorities[2] (each with more than one NHB worker) there were 70,687 households living in the private rented sector, including 22,102 in the North West Sussex Housing Market Area ('NWS HMA'). Using data from the 2021 Census, this figure increases to 86,578 households living in private rented accommodation across the key authorities, with 27,780 households within the NWS HMA.

Table 3.3.1: Total number of households living in the private rented sector in key NHB authorities

	Households living in the private rented sector			
	2011	2021	Change 2011-2021	% change 2011-2021
Crawley	6,717	9,015	2,298	34.2%
Reigate and Banstead	7,659	9,387	1,728	22.6%
Mole Valley	4,762	5,238	476	10.0%
Mid Sussex	8,098	9,710	1,612	19.9%

[2] These authorities are Crawley, Reigate and Banstead, Mole Valley, Mid Sussex, Tandridge, Horsham and Croydon. Crawley, Mid Sussex and Horsham form the North West Sussex Housing Market Area ('NWS HMA').

Tandridge	4,117	4,730	613	14.9%
Horsham	7,287	9,055	1,768	24.3%
Croydon	32,038	39,441	7,403	23.1%
Total	**70,678**	**86,576**	**15,898**	**22.5%**
NWS HMA	*22,102*	*27,780*	*5,678*	*25.7%*

Source: Census 2011 LC4405EW, Census 2021 TS054. Note: Tenure refers to households not dwellings, therefore figures above do not include vacant dwellings.

3.4.5 There were estimated to be 1,970 vacant properties in the private rented sector across the key NHB authorities based on the 2011 Census data. Within the 2021 Census data, there is estimated to be a greater number of vacant private rented properties, at 4,288 across the key NHB authorities and 969 in the NWS HMA (up from 533 in 2011). This reflects the greater number of private rental properties in 2021 compared to 2011 and a rising number of vacant dwellings across the housing stock in all key NHB authority areas.

Table 3.3.2: Estimation of number of vacant private rental properties in key NHB authorities

	2011		2021	
	Proportion of households with no usual residents	Estimated number of vacant private rental properties	Proportion of households with no usual residents	Estimated number of vacant private rental properties
Crawley	1.74%	119	2.47%	229
Reigate and Banstead	3.02%	239	4.10%	401
Mole Valley	3.14%	154	4.28%	234
Mid Sussex	2.30%	191	4.00%	404
Tandridge	4.03%	173	4.53%	225
Horsham	2.88%	216	3.58%	336
Croydon	2.56%	842	5.87%	2,459
Total	**2.71%**	**1,970**	**4.50%**	**4,288**
NWS HMA	*2.35%*	*533*	*3.44%*	*969*

Source: Census 2011 KS401EW, Census 2021 RM204 and Vacant Dwellings. Note: Estimated number of vacant private rental properties based on total number of households in private rented tenure divided by the overall proportion of household spaces (i.e. dwellings) occupied.

3.4.6 From these vacant properties, it was previously estimated that there were in the region of 4,128 vacant bedspaces. Using 2021 Census data, this estimate increases to 11,453, again reflecting higher vacancy rates and a greater stock of private rented properties.

Table 3.3.3: Estimate of total bedspaces available in vacant properties in the private rented sector in key NHB authorities

	2011	2021					
	Estimated total bedspaces	Estimated vacant private rental properties by number of bedrooms					Estimated total bedspaces
		Total	1-bed	2-bed	3-bed	4+bed	
Crawley	269	229	31	53	105	39	609
Reigate and Banstead	515	401	43	103	138	117	1,131
Mole Valley	336	234	30	53	74	76	665
Mid Sussex	423	404	42	95	145	123	1,157
Tandridge	398	225	22	57	75	72	646
Horsham	486	336	34	82	120	99	957
Croydon	1,701	2,459	426	715	841	478	6,289
Total	**4,128**	**4,288**	**629**	**1,157**	**1,498**	**1,004**	**11,453**
NWS HMA	*1,178*	*969*	*107*	*230*	*370*	*261*	*2,723*

Source: Census 2011 LC4405EW and KS401EW, Census 2021 TS050. Note: For the purposes of this analysis it is assumed that homes with 4+ bedrooms have 4 bedrooms, therefore the total bedspaces presented here are minimums given that some homes with 4 or more bedrooms will have 5 or more bedrooms.

3.4.7 The NHB workers in each authority area as a proportion of total bedspaces is reduced when using the 2021 Census data, from 5.96% to 2.18% across the key NHB authorities.

Table 3.3.4: Estimate of total bedspaces available in vacant properties in the private rented sector by key NHB authorities

	NHB workers as a proportion of vacant total bedspaces	
	2011	2021
Crawley	42.42%	18.89%
Reigate and Banstead	21.45%	9.73%
Mole Valley	2.96%	1.50%
Mid Sussex	1.41%	0.52%
Tandridge	1.01%	0.62%
Horsham	0.62%	0.31%
Croydon	0.12%	0.03%
Total	**5.96%**	**2.18%**
NWS HMA	*10.36%*	*4.55%*

Source: Analysis of Census 2011 and Census 2021

3.4.8 Previously, the conclusion that NHB workers would be the equivalent of no more than 6.0% of the total vacant bedspaces within the private rented sector was considered a maximum. This is confirmed by using the 2021 Census data, which suggests a significantly lower figure of 2.2%; this implies an even more negligible impact as a result of the Project than reported in the ES.

Alternative forms of accommodation

3.4.9 The previous analysis within the DCO Application of alternative forms of accommodation for NHB workers considered 2011 Census data and corresponding designation of 'other' households, excluding single-family households, households formed solely of full-time students, and households where all members were over 65. The 2021 Census only provides data on household composition by tenure at a more aggregated level than the 2011 Census and does not allow for 'other' households formed of all full-time students or all aged over 65 to be excluded from results. Further, shared ownership is included within the owner-occupier category in the 2021 Census, while it was excluded from the previous analysis. Therefore, the figures presented below based on the 2021 census data are similar but not directly comparable to the original analysis within the DCO Application based on 2011 census data.

Table 3.4.1: 'Other' households as a proportion of all owner-occupier households in key NHB authorities

	2011			2021		
	Owner-occupier households	Of which 'Other'	As a proportion	Owner-occupier households	Of which 'Other'	As a proportion
Crawley	25,228	2,025	8.03%	25,923	2,093	8.07%
Reigate and Banstead	40,486	1,961	4.84%	43,538	2,156	4.95%
Mole Valley	26,362	1,054	4.00%	27,567	1,148	4.16%
Mid Sussex	42,658	1,860	4.36%	46,825	1,979	4.23%
Tandridge	25,302	1,269	5.02%	26,941	1,391	5.16%
Horsham	40,926	1,695	4.14%	46,137	1,869	4.05%
Croydon	85,230	8,123	9.53%	85,849	7,620	8.88%
Total	**286,192**	**18,014**	**6.29%**	**302,780**	**18,256**	**6.03%**
NWS HMA	*108,812*	*5,607*	*5.15%*	*118,885*	*5,941*	*5.00%*

Source: Census 2011 DC4101EW and Census 2021 RM135

3.4.10 The 2021 census figures for owner-occupier households with spare bedrooms include those who own their property through shared ownership are comparable with the 2011 data. NHB workers as a proportion of owner-occupier households with spare bedrooms is comparable between the 2011 and 2021 Census.

Table 3.4.2: Owner-occupier households with spare bedrooms and NHB as a proportion in key NHB authorities

	2011			2021		
	Owner-occupier households with spare bedrooms		NHB workers as a proportion	Owner-occupier households with spare bedrooms		NHB workers as a proportion
	1 spare	2+ spare		1 spare	2+ spare	
Crawley	8,848	11,271	0.57%	6,621	14,385	0.55%
Reigate and Banstead	14,316	20,096	0.32%	10,676	27,043	0.29%
Mole Valley	8,722	14,094	0.04%	6,047	18,170	0.04%
Mid Sussex	14,928	22,005	0.02%	11,498	29,517	0.01%
Tandridge	8,554	12,989	0.02%	6,134	17,370	0.02%
Horsham	13,783	21,860	0.01%	11,214	29,528	0.01%
Croydon	30,221	33,653	0.00%	20,340	48,297	0.00%
Total	**99,372**	**135,968**	**0.11%**	**72,530**	**184,310**	**0.10%**
NWS HMA	*37,559*	*55,136*	*0.13%*	*29,333*	*73,430*	*0.12%*

Source: Census 2011 LC4108EW, Census 2021 RM101

3.4.11 Finally, the number of privately renting households with spare bedrooms increased between the 2011 and 2021 Census in the key NHB authorities, with a particularly marked increase in the number of households with two or more spare bedrooms.

Table 3.4.3 Privately renting households and NHB as a proportion in key NHB authorities, and number with spare bedrooms

	2011			2021		
	Private rent households	NHB workers as %	Private rent households with spare bedrooms	Private rent households	NHB workers as %	Private rent households with spare bedrooms

			1 spare	2+ spare			1 spare	2+ spare
Crawley	6,717	1.71%	2,014	805	9,015	1.28%	2,253	1,594
Reigate and Banstead	7,659	1.44%	2,609	999	9,387	1.17%	2,553	1,734
Mole Valley	4,762	0.21%	1,656	776	5,238	0.19%	1,440	1,343
Mid Sussex	8,098	0.07%	2,954	1,305	9,710	0.06%	3,080	2,195
Tandridge	4,117	0.10%	1,414	732	4,730	0.08%	1,395	1,195
Horsham	7,287	0.04%	2,639	1,343	9,055	0.03%	2,934	2,188
Croydon	32,038	0.01%	6,986	2,435	39,441	0.01%	8,290	5,685
Total	**70,678**	**0.35%**	**20,272**	**8,395**	**86,576**	**0.29%**	**21,945**	**15,934**
NWS HMA	*22,102*	*0.56%*	*7,607*	*3,453*	*27,780*	*0.45%*	*8,267*	*5,977*

Source: Census 2011 LC4405EW and DC4105EW, Census 2021 TS054 and RM101

Summary

3.4.12 Overall, the impacts of and conclusions within the DCO Application assessment are unchanged, if not strengthened when 2021 Census data is considered in place of the previous 2011 data.

3.4.13 In particular, the 2021 Census data confirms the demand for temporary accommodation during the construction phase of the Project from NHB workers is not considered to be likely to give rise to significant housing effects as the number of NHB workers (even at its peak) represents a very small proportion of the potential sources of supply available to meet this demand.

3.5 ISH3: Action Point 7

3.5.1 **The Examining Authority has asked the Applicant to provide signposting regarding the provision of data on health and well-being and cumulative impact. The following response is provided.**

Agenda item 7.1 (Vulnerable Group Feedback)

Context

3.5.2 This action relates to the issue specific hearing (ISH) 3 agenda item 7.1, where the Examining Authority stated that "*The Applicant will be asked to respond to the Relevant Representations made by West Sussex Council (WSCC) and Crawley Borough Council (CBC) regarding the provision of specific feedback from individual vulnerable groups*". [EV2-001].

3.5.3 This note provides the Applicant's summary response to this matter, in particular:

- The Project's consultations inherently included responses from vulnerable groups.
- The health assessment has specifically considered the needs of vulnerable groups, including in relation to walking and cycling route diversions and changes to open spaces.
- The health assessment has followed guidance and good practice in triangulating evidence, including from the consultation, to assess the potential for likely significant adverse effects to health inequalities.
- The health assessment concludes that there would not be a significant public health adverse effect, including for vulnerable groups. A conclusion with which the national public health stakeholders agree.

3.5.4 The specific issues relating to the consideration of vulnerable groups referred to by the ExA at ISH3 are captured at Rows 2.12.2.1 and 2.12.2.2 of the **Statement of Common Ground between Gatwick Airport Limited and West Sussex County Council** [REP1-033], and Rows 2.12.2.1 to 2.12.2.3 of the **Statement of Common Ground between Gatwick Airport Limited and Crawley Borough Council** [REP1-032].

3.5.5 In response, the Applicant has provided signposting to the relevant sections of the DCO Application to demonstrate how vulnerable groups have been considered.

3.5.6 Vulnerable groups have primarily been taken into account as part of the **Consultation Report** [APP-218] and in **ES Chapter 18: Health and Wellbeing** [APP-043].

Consultation Report

3.5.7 The following paragraphs signpost how hard-to-reach groups were taken into account when designing the consultation, to increase its accessibility to vulnerable groups, and how the responses from vulnerable groups where considered.

Hard-to-reach groups involvement in designing the consultation

3.5.8 The approach to consultation was informed by engagement with hard-to-reach group organisations. **Consultation Report** [APP-218] paragraph 5.6.8 explains how in the lead-up to the Autumn 2021 consultation 110 hard to reach group organisations were identified, contacted and sent consultation packs. Nineteen groups participated in the interviews and their feedback helped shape the consultations.

3.5.9 **Consultation Report** [APP-218] paragraph 6.6.8 explains that for the Summer 2022 Consultation, seven hard-to-reach organisations were identified within the targeted consultation zone, **Consultation Report** [APP-218] Figure 6.1. Each group was emailed to advise them of the Consultation, and subsequently sent a poster providing details of the consultation.

3.5.10 **The Consultation Report Appendices – Part B – Volume 19** [APP-242] Appendix B.23 provides the list of hard-to-reach organisations;

3.5.11 **The Consultation Report Appendices – Part B – Volume 19** [APP-242] Appendix B.24 is the hard-to-reach consultation pack; and

3.5.12 **Consultation Report Appendices – Part C – Volume 1** [APP-243] Appendix C.7 sets out the hard-to-reach poster.

Vulerable groups responses to the consultation

3.5.13 The consultation response set out in **Consultation Report - Annex A** [APP-219] and **Consultation Report - Annex C** [APP-221] inherently include the views expressed by vulnerable groups.

3.5.14 It is the case that all people have some characteristics that may mean they are more sensitive, including related to protected characteristics such as age, gender and ethnicity. Other sensitivities only apply to a proportion of the population, such as being in poor health or having low income. Vulnerable groups in both cases are broad and are inherently included within the respondents to the consultations.

ES Chapter 18: Health and Wellbeing

3.5.15 The principle of taking into account the views of vulnerable groups is agreed and is set out within the **ES Chapter 18: Health and Wellbeing** [APP-043] Table 18.4.6 methodology.

3.5.16 **ES Appendix 18.4.1: Methods Statement for Health and Wellbeing** [APP-205] paragraph 2.1.10 lists the vulnerable population groups relevant to the **ES Chapter 18: Health and Wellbeing** [APP-043] assessment.

3.5.17 **ES Chapter 18: Health and Wellbeing** [APP-043], for example paragraph 18.8.313 in relation to public areas of open space and active travel walking and cycling routes, confirms that the significance of the population health effects has had regard to the **Consultation Report** [APP-218] as an evidence source.

3.5.18 The high sensitivity of vulnerable groups in the context of the such areas, routes and diversions is specifically considered **ES Chapter 18: Health and Wellbeing** [APP-043], section 18.8, paragraphs 18.8.310 to 18.8.360.

Conclusion

3.5.19 The Project's consultations inherently included consultation with and responses from vulnerable groups. Signposting has been provided above.

3.5.20 The health assessment has specifically considered consultation responses received and needs of vulnerable groups, including in relation to walking and cycling route diversions and changes to open spaces.

3.5.21 The health assessment has followed guidance and good practice in triangulating evidence, including from the consultation, to assess the potential for likely significant adverse effects to health inequalities.

3.5.22 The health assessment concludes that there would not be a significant public health adverse effect, including for vulnerable groups.

3.5.23 The UK Health Security Agency (UKHSA) and the Department of Health and Social Care Office for Health Improvement and Disparities (OHID) are the national statutory stakeholders for public health, and were previously collectively Public Health England. UKHSA and OHID in their combined relevant representation [RR-4687] of October 2023 confirm that:

3.5.24 "*Following our review of the submitted documentation we are satisfied that the proposed development should not result in any significant adverse impact on public health*".

3.5.25 These Government organisations have a particular role and technical expertise in relation to health inequalities and they are satisfied with the current assessment.

Agenda item 7.2 (Cumulative Assessment for Vulnerable Groups)

Context

3.5.26 This action relates to the issue specific hearing (ISH) 3 agenda item 7.2: "*The Applicant will be asked to respond to the Relevant Representation made by Surrey County Council (SCC) in respect of its concerns as to whether the full cumulative effects of the construction and operation phases on the physical and mental wellbeing of vulnerable group populations have been fully considered*". [EV2-001].

3.5.27 The specific issues relating to the consideration of cumulative effects referred to by the ExA at ISH3 are captured at Row 2.12.3.1 of the **Statement of Common Ground between Gatwick Airport Limited and Surrey County Council** [REP1-045].

3.5.28 In response, the Applicant has provided signposting to the relevant sections of the DCO Application to demonstrate how cumulative effects to vulnerable groups have been considered.

3.5.29 Cumulative and in-combination effects, including on vulnerable groups, are assessed in **ES Chapter 18: Health and Wellbeing** [APP-043] and in **ES Chapter 20: Cumulative Effects and Inter-Relationships** [APP-045].

Cumulative and In-Combination Effects

3.5.30 A full cumulative assessment has been undertaken.

3.5.31 **ES Chapter 18: Health and Wellbeing** [APP-043] section 18.10 sets out the assessment of cumulative effects with other projects.

3.5.32 **ES Chapter 18: Health and Wellbeing** [APP-043] section 18.11 sets out the assessment of inter-related effects, covering interactions and combined effects of the Project on populations. This is by geographic population and by vulnerable group populations:

- Geographic populations: paragraphs 18.11.3 to 18.11.8 (pdf page 177/214) explain the combined effects to the population close to the airport (the site-specific effects). Horley Central & South (E05012876) and Charlwood (E05007317) are two of the 9 wards in the site-specific health study area. Section 18.4, paragraph 18.4.13 (pdf page 27/214). The cumulative assessment has particular regard to these areas, including due to their greater sensitivity associated with deprivation and proximity to the Project activities.
- Vulnerable groups: paragraphs 18.11.14 to 18.11.20 (pdf page 179/214) explain the combined effects to vulnerable population groups.

3.5.33 **ES Chapter 18: Health and Wellbeing** [APP-043] Table 18.4.4 explains that deprivation is a factor in assigning sensitivity. **ES Appendix 18.4.1: Methods Statement for Health and Wellbeing** [APP-205] paragraph 2.1.5 explains that sensitivity has been driven by pockets of poorer health outcomes within the study area. The assessment has assigned high sensitivity within its assessments to the affected populations, including due to their being areas of high deprivation, for

example as discussed in **ES Chapter 18: Health and Wellbeing** paragraph 18.5.4 [APP-043].

3.5.34 **ES Chapter 18: Health and Wellbeing** [APP-043] section 18.11 concludes that there would not be new or materially different significant population health effects due to inter-related effects. Paragraph 18.11.22 [APP-043] sets out further mitigation to mitigate against exceptional circumstances relating to combined effects and vulnerable individuals. This is a best practice approach.

3.5.35 **ES Chapter 20: Cumulative Effects and Inter-Relationships** [APP-045] sets out further analysis:

- Project Lifetime Effects are set out in Table 20.8.3 [APP-045]. This specifically considers the combined effects of different assessment years.
- Receptor-led Inter-related effects are set out in paragraph 20.8.19 [APP-045], which links to the **ES Chapter 18: Health and Wellbeing** [APP-043] section 18.11.

Conclusion

3.5.36 A full cumulative assessment has been undertaken in **ES Chapter 18: Health and Wellbeing** [APP-043] and in **ES Chapter 20: Cumulative Effects and Inter-Relationships** [APP-045].

3.5.37 Deprived areas, including Horley Central & South (E05012876) and Charlwood (E05007317) are specifically considered as part of the 'nine ward area' on which the health assessment focuses.

4 Issue Specific Hearing 4: Surface Transport

4.1.1 This section provides the Applicant's response to actions arising from ISH4: Surface Transport [EV9-005].

4.1.2 The actions relevant to the Applicant are as follows:

Action No.	Action	Deadline
1	Provide a scenario test to supplement the assessment in Chapter 12, Transport of the Environmental Statement (ES). This scenario should examine the use of a future baseline	Response submitted at Deadline 1

	following the definition in paragraph 12.6.3 of the Transport Assessment (TA) [AS-079] that "The model provides information on the performance of the highway network in each of the future baseline years, allowing for background traffic growth, committed developments, and committed network changes but does not include the Project." This requested revised future baseline scenario should not include any traffic changes associated with the airport growth and infrastructure improvements included in the Project case. Paragraph 1.25 of the IEMA 2023 Guidance says, in relation the Rochdale envelope, that the approach should ensure "that the project being assessed represents the realistic worst case in terms of traffic and movement demand." The requested supplemental scenario should provide this realistic worst case.	
2	Provide 2023 staff travel survey details and commentary in writing.	Deadline 2
3	Provide commentary on the conflicting considerations for use of June traffic levels over the traffic levels in August.	Deadline 2
4	Provide, as requested by National Highways, further detail about the underlying assumptions in respect of post-COVID modelling.	Deadline 2
5	Respond to several issues raised by Interested Parties raised in Agenda Item 4.2	Deadline 2
6	Submit car parking note to include details of car park occupancy to justify the need for additional car parking. This should include consideration of on-site and off-site parking. The Examining	Response submitted at Deadline 1

	Authority would like to have a comprehensive view of parking demand and supply including the following locations: • On-site parking. • Authorised off-site parking. • Off-site parking in other locations managed by online parking companies. • On-street parking (fly parking).	
7	Clarify that the provision of the 2500 robotic parking spaces is a net increase of airport parking numbers. In addition, explain why if the Development Consent Order were granted such an increase should not be considered in the Project case.	Deadline 2
8	Applicant has confirmed that Table 45 of Annex B of the TA [APP-260] is included in error and will be corrected and re-submitted.	Response submitted at Deadline 1
9	Provide an annotated commentary on the Surface Access Commitments document [APP-090], to highlight its concerns.	Deadline 2
10	Applicant to submit a clearer movement framework to indicate pedestrian, cycle and shared routes indicating locations like cycle parking and entrances. This should also include an indication of widths of the various pedestrian, cycle and shared routes.	Response submitted at Deadline 1
11	National Highways requested that the Applicant provides details of the designs on the strategic highway network to enable assessments to be undertaken with respect to the DMRB standards	Response submitted at Deadline 1

4.1.3 The Applicant's responses to actions submitted at Deadline 1 can be located at **The Applicant's Response to Actions from Issue Specific Hearing 4: Surface Transport** [REP1-065].

4.1.4 The following sections provide the Applicant's response to Actions 2, 3, 4, 5 and 7. For actions which require a more detailed response, a reference to the appropriate document is included.

4.2 ISH4: Action Point 2

4.2.1 **The Examining Authority has asked the Applicant to provide 2023 staff travel survey details and commentary in writing. The following response is provided.**

4.2.2 The Applicant has included a summary slide-deck of the **2023 Gatwick Airport Staff Travel to Work Survey** as **Appendix D** to this response to Deadline 2. This has been shared with the Transport Forum Steering Group, which includes representatives from local authorities and National Highways. GAL regularly carries out surveys of staff travel patterns and noting the change in personnel following the Covid-19 pandemic a baseline was required to allow the impacts and recovery to be measured. The 2023 Staff Travel Survey was the first since the pandemic.

4.2.3 The strategic modelling work was based on an extensive travel survey undertaken in 2016 (a more targeted survey was undertaken in 2019 and is referred to in the 2023 survey results but this had a significantly lower number of respondents and a narrower range of questions). The main differences between 2016 and 2023 staff mode share are an increase in car drivers (+15%), and a reduction in bus (-6%) and company transport (-6%). Rail increases by +1%. There are a number of reasons which can explain these results, including that buses have not returned to the same level of service as pre-pandemic levels and company transport provided by airlines is not currently running. The effects of the current reduction in rail services compared to pre-pandemic levels and the impact of ongoing industrial action can be seen when comparing the 2019 rail mode share with the 2023 rail mode share.

4.2.4 The staff survey suggests that the airport is in recovery and there are measures set out in the current Gatwick Airport Surface Access Strategy (ASAS) (2022-2030) action plan to improve sustainable mode shares. The latest ASAS sets a target of 48% of staff journeys to work by public transport, shared travel and active travel by 2030, which is an increase from the previous ASAS published in 2019. The ASAS includes actions to complete a strategy for staff travel by public

transport in consultation with operators (to cover discounts, ticketing, information provision, marketing and offers), and trial new and enhanced bus and coach services funded through the Sustainable Transport Fund.

4.2.5 These measures will support shifts back onto public transport services as the airport and wider transport networks recover, to achieve the levels set out in our ASAS.

4.3 ISH4: Action Point 3

4.3.1 **The Examining Authority has asked the Applicant to provide commentary on the conflicting considerations for use of June traffic levels over the traffic levels in August. The following response is provided.**

4.3.2 The Applicant has prepared a short technical note, attached as **Appendix B: Considerations on the use of June in transport modelling** (Doc Ref. 10.9.7) to this response, which explains the approach taken when determining whether the modelling of traffic should be based on conditions in June or conditions in August.

4.3.3 The technical note explains why, having considered seasonal variation in both non-airport and airport demand, June was considered to provide a reasonable and robust basis for the assessment.

4.4 ISH4: Action Point 4

4.4.1 **The Examining Authority has asked the Applicant to provide, as requested by National Highways, further detail about the underlying assumptions in respect of post-COVID modelling. The following response is provided.**

4.4.2 For context, the key documents in relation to post-COVID modelling are **Accounting for Covid-19 in Transport Modelling** [AS-121] and related appendices [AS-122]. These provide a comprehensive outline of the assumptions supporting post-COVID modelling relative to the Application submission. These should be read in conjunction with **Transport Assessment Annex B: Strategic Transport Modelling Report** [APP-260].

4.4.3 During ISH4, the specific discussions requiring clarification were:

- Request to see the underlying assumptions that have been fed into the modelling.
- Request to see confirmation from Network Rail that the rail assumptions used in post-COVID modelling were acceptable.

Clarification of rail assumptions used in the post-COVID modelling

4.4.4 **Accounting for Covid-19 in Transport Modelling** [AS-121] provides a detailed account of the transport modelling undertaken to consider the impacts of the COVID pandemic on the modelling undertaken for the Project. It sets out the background to approach in Section 2, the source data and identified trends in Section 3, the forecasting approach used in Section 4, the 2023 forecast model results used to gauge the scale of adjustments for COVID in Section 5, and Section 6 details the final results of the sensitivity tests.

4.4.5 In relation to rail related assumptions, the specific sections of **Accounting for Covid-19 in Transport Modelling** [AS-121] to note are:

- Section 3.2 relating to the use of the DfT Rail COVID Forecasting Tool v19.4.
- Paragraphs 4.2.8 to 4.2.11 which outline the rail timetable assumptions used in the modelling, and state that for the sensitivity testing the rail network timetable is based on the 2019 timetable. Specific frequency assumptions are outlined in Table 7.

4.4.6 If National Highways requires any more specific detail relating to the rail assumptions, the Applicant is happy to provide further information as part of ongoing engagement.

Network Rail position on rail assumptions

4.4.7 As outlined during ISH4, and as stated in its Written Representations made at Deadline 1 (paragraph 2.8 of [REP1-090]), Network Rail has confirmed that a return to pre-COVID service levels, as assumed in the post-COVID modelling described in A**ccounting for Covid-19 in Transport Modelling** [AS-121] is theoretically possible.

4.4.8 The Applicant is in ongoing dialogue with Network Rail to review and confirm assumptions, as acknowledged in paragraph 2.7 of Network Rail's Written Representation [REP1-090].

4.4.9 As part of ongoing discussions with National Highways, GAL is committed to sharing the latest developments on any discussions with other parties including Network Rail and will provide any further updates relevant to the rail and traffic forecasting assumptions as they materialise.

4.5 ISH4: Action Point 5

4.5.1 **The Examining Authority has asked the Applicant to respond to several issues raised by Interested Parties raised in Agenda Item 4.2. The following response is provided.**

4.5.2 In response to this action point, the Applicant has prepared a technical note attached to this response as **Appendix C: Rail Passenger Modelling Clarification Note** (Doc Ref. 10.9.7) which addresses the points raised by Interested Parties.

4.6 ISH4: Action Point 7

4.6.1 **The Examining Authority has asked the Applicant to clarify that the provision of the 2500 robotic parking spaces is a net increase of airport parking numbers. In addition, explain why if the Development Consent Order were granted such an increase should not be considered in the Project case. The following response is provided.**

4.6.2 GAL confirms that the provision of the 2,500 robotic parking spaces is a net increase to the current on-airport parking spaces provision in the parking area known as “Long Stay South” or “South Terminal Long Stay”. GAL operates on-airport parking with flexibility towards the proportion of spaces operated as self-park (the passenger parks the car themselves in individual car parking spaces and retains the keys) and block-park (the car is parked by a valet operator in a more space-efficient manner and returned to a collection point when the passenger returns), in response to variability in passenger demand. In block-park operation the cars are parked close together with the valet driver only needing room to exit the vehicle on the driver’s side and are parked sequentially in the order in which they will be returned to the customer, so removing the need for circulation routes associated with self-park. The difference in the parking density between self-park and block-park is approximately 35-40% depending on the area in question, so each 100 self park spaces with associated aisles for access would convert to 135-140 spaces operated as block parking.

4.6.3 The term “robotic parking” simply describes an automated version of block-parking which uses autonomous robots to tow vehicles to their parking spaces and parks them closer together than for self-park operation with a similar density to block-parking. The difference between block-parking and "robotic parking" is only in the customer experience and automation of the process (i.e. using automated payment terminals and allowing drivers to retain their keys). The net increase of 2,500 spaces arises as a result of the conversion of existing self-park

spaces to robotic (or block) parking spaces which maximises the available space and has been included in the Future Baseline assumptions as the growth which would occur at the Airport in the absence of the Project (as explained in section 4.4.6 of **ES Chapter 4: Existing Site and Operations** [APP-029]). The Applicant's approach to the future baseline is explained in further detail in **The Applicant's Response to Actions – ISH 4: Surface Transport** [REP1-065] in response to Action Point 1. The intensification of the parking use as a result of the conversion of existing self-park spaces to robotic parking spaces will come forward in advance of the NRP as permitted development (pursuant to Schedule 2, Part 8, Class F of the Town and Country Planning (General Permitted Development) (England) Order 2015 ("GPDO"), subject to the prior consultation requirements with the local planning authority as set out in the GPDO.

4.6.4 The other car parks proposed to come forward in the absence of the Project as part of the Future baseline were Multi-story car park 7 (North Terminal) (MSCP7) and new multi storey car parking at the South Terminal Hilton Hotel, the latter of which was being taken forward by the hotel operator (paragraph 4.4.6 of **ES Chapter 4: Existing Site and Operation** [APP-029]).

4.6.5 MSCP7 is still due for completion this year; however, GAL understands that the Hilton permission has now lapsed after further delays to its construction post-Covid. As such, as matters stand, that permission/parking provision of 820 additional spaces no longer forms part of the Future Baseline, nor (by consequence) the parking provision on airport as part of the Project scenario. However, the Hilton car park area is co-located (in terms of access points) with other car parks so the loss of spaces is not considered to lead to any potential traffic redistribution effects and the loss of 820 spaces is not significant within the wider parking capacity on offer for passengers and does not materially impact on traffic volumes or mode shares.

5 Issue Specific Hearing 5: Aviation Noise

5.1.1 This section provides the Applicant's response to actions arising from ISH 5: Aviation Noise [EV10-005]. The actions relevant to the Applicant are as follows:

Action No.	Action	Deadline

1	Outline differences, if any, between where an aircraft is under the scope of the Air Navigation Order and where it is not.	Deadline 2
2	To submit the 2018 ambient noise study undertaken by the Applicant in support of its position on impact thresholds.	Response submitted at Deadline 1
3	To consider nighttime sound levels at specific school raised by Cllr Lockwood, Lingfield Parish.	Deadline 2
4	Joint Local Authorities To set out concerns regarding modelling at Deadline 1 separately or within Local Impact Report.	Deadline 1
5	CAGNE to set out the detail of what it feels is missing from the noise assessment, as stated.	Deadline 2
6	Applicant to respond to the points of detail raised at the hearing by Interested Parties in its written submissions.	Deadline 2
7	Applicant to provide an updated annex of how the noise insulation scheme will be implemented.	Deadline 2

5.1.2 The Applicant's responses to actions submitted at Deadline 1 can be located at **The Applicant's Response to Actions from Issue Specific Hearing 5: Aviation Noise** [REP1-066].

5.1.3 The following sections provide the Applicant's response to Actions 1, 3, 6 and 7. For actions which require a more detailed response, a reference to the appropriate document is included.

5.2 ISH5: Action Point 1

5.2.1 **The Examining Authority has asked the Applicant to outline differences, if any, between where an aircraft is under the scope of the Air Navigation Order and where it is not. The following response is provided.**

5.2.2 This question was asked in the context of ground noise and the legal protections that apply, and specifically with regard to section 77 of the Civil Aviation Act 1982 which provides at subsection (1) that "*An Air Navigation Order may provide for regulating the conditions under which noise and vibration may be caused by aircraft on aerodromes and may provide that subsection (2) below shall apply to any aerodrome as respects which provision as to noise and vibration caused by aircraft is so made",* and at subsection (2) that "*No action shall lie in respect of nuisance by reason only of the noise and vibration caused by aircraft on an aerodrome to which this subsection applies by virtue of an Air Navigation Order, as long as the provisions of any such Order are duly complied with."*

5.2.3 Section 218 of the Air Navigation Order 2016 provides at subsection (1) that "*The Secretary of State may prescribe the conditions under which noise and vibration may be caused by aircraft (including military aircraft) on Government aerodromes, national licensed aerodromes, . . . certified aerodromes or on aerodromes at which the manufacture, repair or maintenance of aircraft is carried out by persons carrying on business as manufacturers or repairers of aircraft."* Subsection (2) provides that "*Section 77(2) of the Civil Aviation Act 1982 applies to any aerodrome in relation to which the Secretary of State has prescribed conditions in accordance with paragraph (1)"*.

5.2.4 Within the Air Navigation (General) Regulations 2006 the Secretary of State prescribes the conditions under which noise and vibration may be caused by aircraft on licensed aerodromes, such as Gatwick Airport, and which includes the engines being operated in the aircraft for various purposes, which includes for the purpose of ensuring their satisfactory performance, at Regulation 11. Accordingly, the operation of engines for valid purposes will benefit from the protection from nuisance claims afforded by Section 77 of the Civil Aviation Act 1982.

5.2.5 Were that not the case, so for example if engines were being operated for purposes which are beyond the scope Regulation 11 of the Air Navigation (General) Regulations 2006, they would not benefit from the protection from nuisance actions. However, the Applicant cannot identify any behaviour which would lead to engines being tested at the airport outside the scope of Regulation 11, given the only circumstances in which engines would be operated at the airport are in connection with take-off and landing, moving on the ground, ensuring satisfactory performance, bringing them to temperature in preparation for flight, or ensuring that the instruments, accessories or other components of the aircraft are in a satisfactory condition.

5.3 ISH5: Action Point 3

5.3.1 **The Examining Authority has asked the Applicant to consider night-time sound levels at a specific school raised by Cllr Lockwood, Lingfield Parish. The following response is provided.**

5.3.2 Cllr Lockwood referred to Young Epilepsy (St Pier's Lane, Dormansland, Lingfield, RH7 6PW) which is under the runway 26 approach approximately 12km from the airport. The centre includes St Piers School, St Piers College and a range of residential accommodation for boarding students, a visitors' centre and related facilities.

5.3.3 The **ES Appendix 14.9.2: Air Noise Modelling** [APP-172], Table 4.3.2 gives predicted noise levels of Leq 16 hr 55.6 dB in both the 2019 baseline and the 2032 baselines, increasing by 0.8dB to 56.4 dB with the NRP. Two school receptors are assessed with the same noise levels:

- *22: St Piers School (Young Epilepsy) and*
- *23: Young Epilepsy (The National Centre for Young People with Epilepsy).*

5.3.4 The noise change is not judged significant in the ES and so significant noise effects from the Project are not predicted here. However, these noise levels are above the qualifying level of Leq 16 hr 51 dB for the Schools NIS and Leq 16 hr 54dB for the Outer Zone residential Noise Insulation Scheme.

5.3.5 The Applicant can confirm the school and college teaching buildings would therefore qualify for the Schools Insulation Scheme and the residential accommodation would qualify for the residential Noise Insulation Scheme, as described in **ES Appendix 14.9.10** [APP-180].

5.4 ISH5: Action Point 6

5.4.1 **The Examining Authority has asked the Applicant to respond to the points of detail raised at the hearing by Interested Parties in its written submissions. The responses are provided in the Table below.**

Table 5.1 Applicant's response to matters raised at ISH5

Ref	Summary of the IPs issue	Applicant's Response
Civil Aviation Noise Law and Policy		
1	Lisa Scott, Charlwood Parish Council	

Ref	Summary of the IPs issue	Applicant's Response
a	Residents feel voices are depressed when they have difficulty in submitting complaints about noise	The Applicant takes all complaints it receives very seriously, and it considers those and responds to them as is appropriate to the complaint received. It strives to ensure responses are satisfactory, whilst recognising that impacts will arise from an operational airport which cannot be avoided. There are four ways to submit complaints to GAL: • an automated voicemail phone line • by letter • via an online webform • through our WebTrak system Full details are here lhttps://www.gatwickairport.com/company/noise-airspace/noise-enquiries.html GAL updates the Complaints Handling Policy on an annual basis, as required in the Noise Action Plan, unless there is anything that requires an update throughout the year (e.g. feedback through the Noise and Track Keeping Monitoring Advisory Group (NaTMAG). GAL aims to make the complaint submission process as easy as possible through all of the available channels. This includes a login service on the WebTrak form and webform where a complainants details can be saved for the next time they wish to submit a complaint.
Lowest Observable Adverse Effect Levels (LOAEL)		
2	Charles Lloyd, Gatwick Obviously Not	
a	Considers that the SoNA from 2014 is dated, and subject to doubt and challenge. Two suggestions:	This was discussed during the hearing. In summary the Applicant noted it had followed DfT policy and CAA guidance in carrying out the noise assessment including the use of LOAEL and a range of supplementary noise metrics.

Ref	Summary of the IPs issue	Applicant's Response
	(1) The applicant should be asked to report noise using the limits reported by the World Health Organisation in 2018: 45 dB across the day and 40dB at night (despite not being the targets adopted by the UK, consider these figures represent a much more accurate picture of noise impacts.) (2) Panel should talk to the CAA about the ongoing aircraft noise attitude survey and consider whether the survey data as it currently exists suggests any change in attitudes to aircraft noise.	The Applicant noted that all social surveys of this type are subject to critique. The Peer Review carried out in 2021 by Placewise Ltd and STA Acoustics [CAP 1506c] concluded: *It is, therefore, the view of the peer reviewers that the results and conclusions from SoNA2014 as set out in this second edition can be used as a basis for the further development of Government policy in this area.*
b	Not confident that Gatwick air traffic movements and passenger volumes baselines the traffic it said it could achieve without the project is achievable. And if those baseline conditions are not achieved, then the	The baseline air traffic forecasts have been discussed within the **Technical Note on the Future Baseline** [REP1-047]. With regards noise, the Noise Insulation Scheme is based on absolute levels of noise so that it offers noise mitigation regardless of whether the Project has increased noise or not. In this way the Noise Insulation Scheme is independent of any future baseline forecasts.

Ref	Summary of the IPs issue	Applicant's Response
	environmental and noise effects of the project will have been understated consistently throughout the environmental statement. So we think that there needs to be an exercise through which the airport demonstrates that those baseline volumes can reasonably be achieved.	
3	Lisa Scott, Charlwood Parish Council	
a	Upgraded runway will be 12m closer to Hookwood, and would like to see noise monitoring in the Hookwood area. Have previously been told that Hookwood does not suffer from noise, but own monitoring indicates 90dB as peak recordings. Requesting that noise envelopes and positioning of the noise recorders are reconsidered, and that a more extensive	The ES includes baseline noise surveys at Oakfield Cottages in Hookwood, see **ES Appendix 14.9.6: Ground Noise Baseline Report** [APP-176] and an assessment of noise impacts here, see **ES Chapter 14: Noise and Vibration** [APP-039]. **ES Appendix 14.9.10: Noise Insulation Scheme** [APP-180] commits to noise monitoring in this area (para 4.1.11) if necessary to judge the need for noise insulation during operation.

Ref	Summary of the IPs issue	Applicant's Response
	noise survey is performed to get proper data on a wider number of recipients of that noise.	
b	Seeking more imaginative offers on the insulation scheme, for example, a heat pump which provides air conditioning in the nighttime and will also purify air and help to address air quality issues.	**ES Appendix 14.9.10** [APP-180] provides details of the Noise Insulation Scheme, along with the **Noise Insulation Scheme Update Note** submitted at Deadline 2 (Doc Ref. 5.3). The offer includes acoustic ventilators to allow fresh air flow, but not air conditioning or refrigeration cooling. This is in line with practice at other UK airports.
4	Steve Harrison	
a	Resident at the end of the runway, recording 85dB, 82dB from A320s, seeking that the nose envelope and monitoring data is reassessed as the modelling is not consistent with what he is observing in his back garden.	These noise levels quoted are probably Lmax, i.e. peak noise levels, and are consistent with those measured at Noise and Track Keeping (NTK) monitors. NTK data is used to validate the ANCON model used by the CAA Environmental Research and Consultancy Department to model noise levels from the Project, see **ES Appendix 14.9.2: Air Noise Modelling** [APP-173]
b	Queried the extent to which assumptions regarding the mix of aircraft future	The mix of aircraft and the transition of the fleet has been looked at in detail in the ES. See **ES Appendix 14.9.2: Air Noise Modelling** [APP-172] and **ES Appendix 14.9.5: Air Noise**

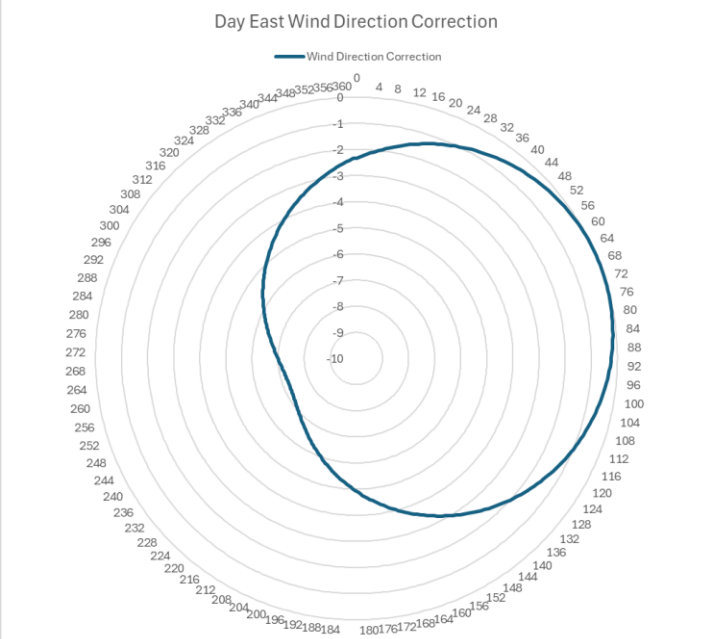
Ref	Summary of the IPs issue	Applicant's Response
	upgrades of airline fleets been factored into the reasonable worst case assessment?	**Envelope Background** [APP-175]. The worst case is assessed using a slower transition fleet that allows for possible delays in fleet transition that could occur. The fleet will transition as aircraft reach the end of their serviceable life, so it is not realistic to assume no transition over the time scales considered for this project i.e. opening in 2029 with growth to 2038 and beyond.
5	Sally Pavey Warnham Parish Council	
a	Warnham Parish suffers three departure routes and all of the arrivals to the west of the airport. Considers the averaging out of noise to be unacceptable. Endorses noise events being a consideration. Warnham Parish area is outside of any insulation or compensation scheme currently, and is concerned it will also be excluded under the new scheme.	The Noise Insulation Scheme Outer Zone boundary is set at Leq 16 hr 54dB consistent with government policy and best practise in the UK. The applicant acknowledges this boundary is at a higher noise level than the LOAEL above which the second aim of the NSPE applies, i.e. to mitigate and minimise adverse impacts on health and quality of life. It requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life, while also taking into account the guiding principles of sustainable development (paragraph 1.8). This makes clear that it does not mean that such adverse effects cannot occur. A small area of the northern end of the parish is currently predicted to fall within the Outer Zone of the new Noise Insulation Scheme Boundary for the project defined by the 54dB Leq contour, although most of the parish sits outside the boundary. Noise mitigation measures adopted by the airport to minimise noise impacts summarised in Section 3 of **ES Appendix 14.9.2: Air Noise Modelling** [APP-172] will continue to be developed in the future with the Project as outlined in the Noise Action Plan, so as to

Ref	Summary of the IPs issue	Applicant's Response
		minimise adverse effects in accordance with policy requirements.
6	Joint Local Authorities	
a	Noted the aviation policy framework where it says the average metrics are not always indicative of the real effects, and other metrics should be used. Also highlighted the issue of additional awakenings, and queried whether that might be used in connection with determining a nighttime SOAEL (by comparison to Heathrow, proposing to use a threshold of one additional awakening over the 92 day summer period to define that as a SOAEL for intervention).	As discussed in the hearing, Leq is weighted and not an average in the commonly accepted meaning of the word, and the ES uses a variety of secondary noise metrics to describe the effects of the Project in line with DfT and CAA guidance. The Heathow expansion PEIR may have commented on the significance of awakenings but the project was not taken forward. The Physiological Sleep Disturbance Assessment reported in **ES Appendix 14.9.2: Air Noise Modelling** [APP-172] concludes that even in the worst affected area the greatest extent of additional awakenings would be 0.8 per night. When discussing awakenings is it important to keep in mind an average healthy person awakens about 20 times a night for various reasons not connected with noise.
7	CAGNE	
a	For schools, noise levels averaged over shorter periods should be considered	This was discussed during the hearing. Noise insulation for schools will be consider where aircraft noise levels are above Leq 16 hour 51dB. See **ES Appendix 14.9.10: Noise Insulation**

Ref	Summary of the IPs issue	Applicant's Response
	not only averaged over 16 hours.	**Scheme** [APP-180] provided details of the Noise Insulation Scheme, which includes the following: *Where schools are concerned that aircraft noise could be affecting teaching, each classroom area will be surveyed to assess the effects of all types of noise including local road traffic. Noise insulation measures could include improved glazing and acoustic fresh air ventilation and GAL will work with the schools to deliver a suitable noise insulation package if found to be required… Any eligible school that applies will be surveyed by a suitably qualified surveyor and their requirements will be discussed in detail to arrive at the appropriate package of measures.* The assessment for qualifying schools would use appropriate noise metrics and standards to test if aircraft noise is affecting teaching including metrics covering shorter time periods.
b	Comparison of noise contours and levels between air and ground noise. Air noise uses the average mode split over both runway directions for the 92 summer day period, as has been done at many other airport applications. Ground noise assessment uses 100% modes, where it looks at aircraft all taking off in one direction and	The use of ground noise contours has been discussed with the topic working group, where the Applicant has explained that ground noise contours do not necessarily depict areas of significant effect because the ground noise assessment also considers ambient noise and change above it. However, the Applicant is producing a report on ground noise effects with the slower transition fleet and in this will provide ground noise contours. These will depict noise on easterly and westerly operating days together for ease of comparison.

Ref	Summary of the IPs issue	Applicant's Response
	then aircraft all taking off in the other direction as two separate scenarios. This means that you can't directly compare any receptors that are affected by both air and ground noise. There's also no contours for ground noise, so it's even harder to visualize. One has to go through and pick specific locations and then see if there are any marrying up between all of the assessments.	
c	Wind noise corrections within the Applicant's ground noise model suggests that the Applicant only looked at the corrections on the basis of easterly and westerly winds. There are no times when northerly or southerly winds are taken into account, as would be expected using the worst case	Section 4.8 of **ES Appendix 14.9.3: Ground Noise Modelling** [APP-173] sets out the methodology employed for the wind direction correction in the ground noise modelling. Paragraphs 2.2.3 to 2.2.6 of **ES Appendix 14.9.3** discuss the justification for employing the methodology. This explains that the ISO 9613 worst case assumptions are used for the Lmax levels reported. This is because the highest instantaneous Lmax may occur for any wind directions at any point in time. However, for modelling Leq, 16 hr or Leq 8 hr night over an average summer day (ie the average over 92 days) this approach was

Ref	Summary of the IPs issue	Applicant's Response
	assumptions under ISO 9613. It is therefore potentially not a worst case assumption for ground noise, and there is potential that those effects are being minimised.	considered too conservative because any given receptors would not be 100% downwind across the whole averaging period. This is particularly the case for an airport because the runway shifts direction to avoid aircraft operating in tail winds. For example, this means that a receptor due west of the airport and due west of a ground noise source can never be downwind during westerly operations when the wind is necessarily from the west. The wind directions and speeds used to model the average Leq condition in the 4 easterly/westerly, day/night scenarios are the average condition taken in each case from an analysis of 2018 summer season wind conditions, given in Table 4.8.1, noting the resultant hourly or daily Leq noise levels would vary around this. Using the formula at paragraph 4.8.1 and the average wind conditions from Table 4.8.1 of the Appendix, corrections have been applied based on the relative vectors between each source and each receiver location. The figure below is an example of the corrections made for the daytime easterly operating scenario, for which the average wind is from a bearing 070 degrees, based on a fixed distance of 500 m between a source and a receiver. Using this methodology a reasonable worst case has been modelled and assessed.

Ref	Summary of the IPs issue	Applicant's Response
		
d	The existing noise insulation scheme, which is a baseline compared to the future one, some residents will have a worsening effect, where there due to lack of options or a lowering of money available. It would be highly useful if there were higher resolution OS mapping underneath the figures available for assessing the baselines, to actually compare these.	Noted; the Applicant is in the process of reviewing the offer proposed in the NIS to take account of feedback received. Any changes will be detailed in the updated version of **ES Appendix 14.9.10: Noise Insulation Scheme** [APP-180] to be submitted at Deadline 3. Paragraph 14.9.80 of **ES Chapter 14: Noise and Vibration** [APP-039] provides a link to the northern runway project air noise viewer which is an online mapping tool illustrating the boundaries of the Noise Insulation Scheme. The viewer also shows the various noise contours provided in the ES figures. This online resource was provided with the ES to allow interested parties to look in detail at noise levels in their location including eligibility for the noise insulation scheme. It includes a post code look up tool to facilitate this.

Ref	Summary of the IPs issue	Applicant's Response
8	Stephen Rolphe, Salfords and Sidlow Parish Council	
a	Residents of Parish are beneath both a Heathrow and Gatwick flight path, so is concerned about the combined effects of these two sources of aviation noise.	Salfords and Sidlow lie within various N60 and N65 noise contours, see for example **ES Noise and Vibration Figures – Part 2** [APP-064] 14.9.17 and 14.9.22 which illustrate the change in the number of aircraft with Lmax about 65 dB and 60 dB at night in these areas as a result of the Project in the noisiest year, 2032. The ES provides mapping of 2019 baseline aircraft overflights, i.e. below 7000 feet, for Gatwick Airport, see ES Figure 14.6.7 and for other airports, see ES Figure 14.6.8. In this area this mapping indicates 50 to 200 Gatwick overflights and less than 10 Heathrow overflights on an average summer day. Aircraft above 7000 feet are not included in this analysis which is undertaken in accordance with the CAA definition of overflight, see CAP 1498. Whilst overflight is not a noise metric this suggests noise contributions from Heathrow airport are likely to be very small making combined effects unlikely.

5.5 ISH5: Action Point 7

5.5.1 **The Examining Authority has asked the Applicant to provide an updated annex of how the noise insulation scheme will be implemented. The following response is provided.**

5.5.2 A **Noise Insulation Scheme Update Note** (Doc Ref. 5.3) is submitted accompanying this response that provides further details on the implementation of the scheme. An updated version of **ES Appendix 14.9.10: Noise Insulation Scheme** will be submitted at Deadline 3.

Appendix A - Comparison of the Obligations within the Existing s106 Agreement and the draft DCO s106 Agreement

Table of Contents

1 Introduction

1.1.1 This document provides the Applicant's Deadline 2 response to Action 1 arising from ISH3: Socio-Economics (including Health and Wellbeing) [EV8-005]:

> *"The Applicant to provide a summary of the controls within the existing s106 and how these would be taken forward in the Northern Runway Project s106 agreement."*

1.1.2 The "existing s106" refers to the agreement entered into on 24 May 2022 by the Applicant, Crawley Borough Council ("CBC") and West Sussex County Council ("WSCC") under section 106 of the Town and Country Planning Act 1990, Section 111 of the Local Government Act and Section 1 of the Localism Act (the "2022 Agreement"). The obligations within the 2022 Agreement have been copied into the table below.

1.1.3 The "Northern Runway Project s106 agreement" refers to the agreement that the Applicant intends to enter into with the relevant parties in relation to the Northern Runway Project ("DCO s106 Agreement"). This agreement will also be entered into under section 106 of the Town and Country Planning Act 1990, Section 111 of the Local Government Act and Section 1 of the Localism Act. The intention is for the DCO s106 Agreement to be entered into before the end of the Examination and a signed and dated version submitted to the Examining Authority at Deadline 9. The draft DCO s106 Agreement (Doc Ref. 10.11) has been submitted at this Deadline 2.

1.1.4 The Table in this note sets out each obligation in the 2022 Agreement and whether that obligation has been "Replicated", "Not Replicated" or "Replicated in Part" in the DCO s106 Agreement and an explanation of that position. There are a number of additional obligations that have been included in the DCO s106 Agreement which do not correspond to an obligation in the 2022 Agreement and have therefore not been included in this table.

2 Context of the 2022 Agreement

2.1.1 The 2022 Agreement is not linked to any specific planning permission and was entered into voluntarily by the Applicant. It is not the first agreement of its kind that the Applicant has entered into with CBC and WSCC and is in fact, the sixth agreement of this nature. The context to the 2022 Agreement is important to understand the status of the obligations and drafting in the 2022 Agreement and

how they have evolved over time with periodic reviews but not a substantial overhaul.

2.1.2 The first voluntary agreement of this nature that the Applicant entered into with CBC and WSCC was in 2001. In 2000 Gatwick Airport served 32 million passengers and the Applicant's intention was to grow the capacity of the airport to 40 mppa by 2008. On 27 July 2000, the Applicant published a Sustainable Development Strategy (SDS) which provided stakeholders with assurance that the Applicant's management of the airport's operation and its planning and development of new facilities would pursue the objectives of sustainable development in delivering the social and economic benefits associated with air travel and airport employment whilst using all reasonably practicable means of minimising the associated impacts on the environment, on the number of road journeys and on resource use.

2.1.3 Following the publication of the SDS and in the national context of broader growth across the aviation sector, the Applicant felt it was appropriate, as a responsible operator, to voluntarily enter into an agreement with CBC and WSCC under s106 of the TCPA 1990 and other powers to commit to a number of obligations to minimise as far as possible the short- and long-term impacts of the airport. This agreement was entered into on 5 February 2001 (the "2001 Agreement").

2.1.4 The 2001 Agreement included an automatic expiration date of 31 March 2009 and a commitment by all parties to enter into good faith negotiations by 31 March 2006 with the aim of extending the agreement beyond the expiration date. Since the 2001 Agreements, the Applicant has entered into subsequent agreements with CBC and WSCC in 2008, 2015 and 2019 prior to the 2022 Agreement. Each agreement has contained a provision that the agreement expires on a specific date and that any predecessor agreement shall be deemed to have expired. The only operative agreement is the 2022 Agreement.

2.1.5 The 2022 Agreement expires on 31 December 2024 and has a commitment to enter into good faith negotiations with an aim to extending the agreement beyond 31 December 2024 by 31 December 2023. This negotiation has started between GAL and CBC and WSCC with the intention of extending the 2022 existing agreement.

2.1.6 The obligations in these agreements varied over time to reflect the activities at the airport at the relevant time but the structure and form of the agreement has been replicated. The areas that have been controlled have also been replicated in each agreement: climate change, air quality, noise, surface access and the

ways of working between the parties i.e. specific meetings and sharing of information.

3 Comparing the Approach to the Draft DCO S106 Agreement Versus the 2022 Agreement

3.1.1 The priority of the DCO s106 Agreement is to secure the mitigation which is required to mitigate impacts arising from the construction and operation of the authorised development (which includes dual runway operations). In addition to mitigation required for the authorised development, GAL has taken this opportunity to reflect on the 2022 Agreement which has been essentially rolled-over since 2001 and proposes within the draft DCO s106 Agreement provisions to reflect the ways of working of the airport and JLAs now and going forward and appropriate controls on the wider operations of the airport.

3.1.2 As the obligations within the 2022 Agreement and its predecessors were entered into voluntarily by the Applicant and are not linked to a planning permission there is no legal or planning requirement for any of these obligations to be retained or replicated by virtue of being in the 2022 Agreement. Nonetheless the spirit of the Applicant's intention to develop and operate the airport to minimise environmental impacts and maximise benefits where possible remains and the Applicant has therefore sought to replicate their terms where considered appropriate under the draft DCO s106 Agreement.

3.1.3 In drafting the DCO s106 Agreement the Applicant has considered whether it is appropriate for each of the obligations in the 2022 Agreement to be replicated, not-replicated or replicated but amended. The following themes characterise how the Applicant has carried out this exercise:

3.1.3.1. **Updates to reflect modern drafting conventions:** a number of the obligations in this 2022 Agreement have been copied from the 2001 and 2006 Agreements and are not clear and enforceable. A different approach has been taken to the DCO s106 Agreement regarding the structure, format and language of the agreement to ensure that obligations are clear and enforceable.

3.1.3.2. **Removal of obligations that would be superseded by provisions in the DCO:** the 2022 Agreement was entered into without a corresponding planning permission. The DCO s106 Agreement will be entered into directly in relation to the NRP DCO. A number of provisions in the 2022 Agreement have been superseded by proposed obligations under the

draft DCO (Doc Ref. 2.1) e.g. climate change obligations have been superseded in purpose by the Carbon Action Plan [APP-091] which is secured by Requirement 21 of the draft DCO.

3.1.3.3. **Removal of obligations that duplicate requirements under existing legislation:** this duplication reflects the approach of copying the provisions from the previous agreement for many years. The legislation that binds the operation of the airport has developed and continues to do so. Recording provisions in this agreement reflecting the law at the time the agreement is entered into could cause risks of conflict and is in any event unnecessary given the underlying operative effect of the relevant legislation. An example of this is a number of the noise related provisions which are appropriately controlled by the Environmental Noise (England) Regulations 2006.

3.1.3.4. **Removal of obligations that are not relevant:** obligations which related to completed works are no longer required e.g. obligations relating to the railway works are no longer necessary as these works have been completed.

3.1.3.5. **Addition of obligations required to mitigate impacts of NRP:** the Environmental Statement has identified measures that are required to mitigate the impacts of the construction and operation of the NRP. The DCO s106 Agreement will legally secure a number of these measures. The Applicant's approach to whether obligations should be secured through a DCO Requirement or section 106 agreement is set out in the Applicant's Response to Actions ISH2-5 (Deadline 2) (Doc Ref. 10.9.7).

3.1.4 The Applicant has agreed with the JLAs that the parties to the DCO s106 Agreement should be those parties who are subject to direct obligations within the agreement. Following this principle the parties to the DCO s106 Agreement will be the Applicant, CBC, WSCC and Reigate and Banstead Borough Council.

4 Table of Comparison of Controls in the Section 106 Agreements

Ref in 2022 Agreement	Text of 2022 Agreement	Status under draft DCO s106 Agreement
Schedule 2, Climate Change, Part 2, The Company's Obligations, Obligation 2	The Company will, by 30 June 2024, unless otherwise agreed in writing between the parties, update and publish its report on the Airport and climate change; and thereafter continue an ongoing dialogue on climate change initiatives with local authorities and other key stakeholders.	Removed. This Schedule is replaced by the Carbon Action Plan (CAP) [APP-091] secured by Requirement 21 of the DCO. The CAP focusses on three key airport emission sources: airport buildings and ground operations, aviation and construction. Under each heading the CAP sets clear outcomes that GAL is committing to deliver. The CAP further includes a commitment to publish annual monitoring reports under section 4.4. The Monitoring Reports will: • explain the methodology and data used to monitor and assess performance against the commitments; • summarise the measures which we are implementing to ensure compliance with the commitments; • report on progress against/compliance with the commitments (depending on the stage of the Project's development); and • identify any new measures which we are intending to implement over the course of the following year to ensure continued progress against/compliance with the commitments. GAL will publish the Monitoring Report no later than the 1st of May each year on its website and will submit a copy of the Monitoring Report to the Government for information, to

		inform government in implementing its Net Zero commitments in aviation. The Monitoring Report will be independently verified.
Schedule 3, Air Quality, Part 2, Company's Obligation, Obligation 3.1	3.1.1 The Company will provide a Fixed Electrical Ground Power supply to any new Aircraft Stand. 3.1.2 The Company will not allow the use of Ground Power Units at any Aircraft Stand unless: 3.1.2.1 there is no Fixed Electrical Ground Power installed at the Aircraft Stand; or 3.1.2.2 the Fixed Electrical Ground Power which has been installed at the Aircraft Stand is temporarily out of service; or 3.1.2.3 the relevant aircraft is incapable of utilising Fixed Electrical Ground Power by reason of its design or a technical malfunction or the power so supplied is insufficient for the aircraft.	Replicated. This obligation has been replicated in the DCO s106 Agreement so that it applies to both NRP and development and operation at the airport beyond NRP.
Schedule 3, Air Quality, Part 2, Company's Obligation, Obligation 3.2	The Company will participate actively with the County Council, Borough Council and Adjoining Authorities: 3.2.1 to avoid breaching the EU Limit value for NO2. 3.2.2 to ensure that all other relevant air quality standards continue to be met.	Not-Replicated The devolved power is given to the local authorities who are legally required to achieve the objectives under the Environment Act 2021. Government considered it is appropriate for the local authorities, rather than private companies to bear this legal responsibility. Further, local authorities have been granted the powers to control air quality impacts across their administrative area. The EIA concludes that there are no likely significant adverse impacts on air quality as a result of the project, therefore no mitigation measures are required.

		However, to support the understanding of air pollution effects in the local area GAL is proposing to commit to monitoring regimes and contributions toward further monitoring in the area and participation in various air quality studies. These commitments are not required to make the project acceptable in planning and legal terms.
	3.2.3 to develop and implement any local Air Quality Management Area (AQMA) action plan that may be required to address air quality in the vicinity of the Airport where evidence demonstrates that air quality is materially affected by airport-derived emissions including those from airport operations fixed plant and surface access.	Replicated as amended Were an AQMA to be declared in the area due to exceedances of the National Air Quality Objectives, the Applicant would support the relevant local authority in their development of an Air Quality Action Plan through the engagement mechanisms set out through the draft DCO s106 Agreement e.g. the Annual Gatwick Air Quality Joint Authorities Meeting. As demonstrated in the ES, there are no current exceedances of the UK air quality Objectives near the airport and no exceedances are predicted in future. The draft DCO s106 agreement, however, requires the Applicant's AQAP to set out how the Applicant has considered any AQMA within 2km of the Airport in place at the relevant time in identifying the measures that have been carried out to improve air quality over the previous five year period.
	3.2.4 provided the necessary standards have been promulgated, to participate in a project to quantify residential exposure within the Horley AQMA to aviation derived ultrafine particles and to provide 50% of the cost of such project to Reigate and Banstead.	Replicated as amended The draft DCO s106 Agreement includes a specific contribution for cost certainty.

	3.2.5 to attend the Annual Gatwick Air Quality Joint Authorities Meeting.	Replicated
Obligation 3.3	The Company will, during the period of this Agreement, provide Reigate and Banstead Borough Council (RBBC) with the following financial support for their activities relating to air quality in the vicinity of the Airport: 3.3.1 a payment of sixty-eight thousand pounds (£68,000) on or before 31 May in each calendar year 2022 to 2024 inclusive for revenue costs, including staff time, data management, servicing, and consumables as outlined in a schedule with associated indicative costs provided on or before 31 March each year.	Replicated as amended An increased payment is proposed to be made directly to RBBC as party to the draft DCO s106 agreement. Further detail of the scope of activities the contribution is intended to cover and the process for publishing the Draft Joint Air Quality Monitoring Report has been included.
	3.3.2 purchasing in accordance with a specification and programme set by RBBC and thereafter leasing to RBBC at nominal cost (say £1 per site per annum), such equipment (not covered under paragraph 3.3.1 and as agreed between the parties - such agreement not to be unreasonably withheld) as is needed to be replaced in order to maintain the current programme of air quality monitoring on three permanent sites.	Replicated as amended. The mechanism payment for replacement equipment has been revised to a simple direct payment.
	3.3.3 the Company will arrange twice-yearly meetings with RBBC to discuss progress with air quality monitoring, the results thereof and any further initiatives that may be deemed appropriate, as well as the Company's progress with implementing its Air Quality Action Plan.	Replicated as amended. This meeting will happen at the request of RBBC.
Obligation 3.4	The Company will undertake a programme of studies of NOx/NO2, PM10 and PM2.5 attributable to activity at the Airport as detailed in the Air Quality Action Plan.	Replicated as amended.

		Significantly more control on the monitoring which are part of these studies that the Applicant will be carried out has been added.
Schedule 4, Noise, Part 2, Company's Obligation, Obligation 4.1	With the aim of providing a continuing incentive to airline operators to reduce the noise impact of departing aircraft at the Fixed Noise Monitoring Locations and subject to any requirements imposed by the Company's appropriate regulator, the Company will give due consideration when preparing and reviewing the Noise Action Plan to the retention and possible increase of the Noise Supplements payable by such operators on account of infringement by their aircraft of noise thresholds on departure.	Replicated.
Obligation 4.2	The Company will maintain differentials in the charges on aircraft movements at the Airport, subject to any requirements of the Company's appropriate regulator so as to encourage airlines to use quieter and cleaner aircraft types.	Replicated.
Obligation 4.3	With the aim of managing the impact of air noise and restricting (so far as is reasonably practicable) the extent of the air noise contours associated with full use of the Airport's runway, the Company will engage with airlines, ANS, NATS, and other relevant parties through the Flight Operations Performance and Safety Committee and, or by other appropriate means, use all reasonable endeavours to secure the benefits to be derived from existing or future regulations procedures and codes of practice applicable to aircraft in flight.	Not Replicated. As a designated airport there is an existing regime of control and a complementary process for engagement. This is appropriately secured through legislative means and there is no intention to re-state those legislative requirements within the DCO or the draft DCO s106 Agreement. Where improvements are secured to operations these will be captured as appropriate through noise envelope reviews, the output from which is revised air noise contours for future periods. The noise envelope is secured by DCO Requirement 15.

		The Applicant also notes that the regulatory and policy landscape may change in the future, but that is not a matter for the Applicant to control, and it is not something for the S.106 Agreement to restrict in terms to its application to the airport in the future. Future decisions of that nature will be taken on their own merits, and with necessary engagement and consultation undertaken in advance.
Obligation 4.4	With the aim of mitigating the possible impact of future growth in aircraft engine testing at the Airport: 4.4.1 If the annual number of ground run engine tests occurring within any rolling six month period reaches 250 and remains at, or in excess of, that number for six successive months or if such a situation is forecast in consequence of confirmed airline plans to undertake additional aircraft maintenance at the Airport, the Company shall, within the following nine months, undertake and conclude a process of discussion and consultation with the Councils with the objective of: 4.4.1.1 assessing the impact of such testing on local communities; 4.4.1.2 evaluating the feasibility and benefits of alternative means of managing or mitigating any material impact including: • increased restrictions on the times of day when tests would be permitted; • changes to the locations favoured for engine tests; • the construction and operation of a ground run pen; and	Replicated.

	4.4.1.3 identifying the preferred means of managing or mitigating any material impact. 4.4.2 The Company will subsequently, and if reasonably practicable within six months in accordance with a programme to be agreed with the Councils, introduce such measures as may be agreed with the Councils as appropriate to manage or mitigate the impact of ground noise arising from engine testing saving that: 4.4.3 In the event of the construction of a ground run pen being the agreed means of mitigation, the Company will, within six months of agreeing the mitigation programme with the Councils, seek and following permission implement the planning permission for a ground run pen as soon as is reasonably practicable and thereafter maintain it in use.	
Obligation 4.5	4.5.1 The Company will undertake an annual programme of engagement to explain and educate local authority members, members of GATCOM, and other invited guests about noise issues and airspace change at the Airport. 4.5.2 To fund and support the continued existence of the Noise Management Executive Board, including holding an annual meeting, unless the Chair of the Noise Management Executive Board decides to recommend to the Airport to disband the Board, for whatever reason	Replicated as amended. Revised drafting combines the obligations to clarify that GAL will undertake and fund the programme of engagement including holding an annual meeting to explain and educate local authority members.
Schedule 5, Surface Access to the Airport, Part 2, Company's Obligations, Obligation 5.1	The Company will hold an annual meeting of the Gatwick Area Transport Forum and meetings of the Transport Forum Steering Group at quarterly intervals unless agreed otherwise by the Steering Group.	Replicated as amended.

Obligation 5.2	The Company will maintain an Airport Surface Access Strategy and will review the Strategy alongside the publication of a new Master Plan.	Not Replicated. The ASAS is produced and maintained in response to a government process outside of the planning approval for the NRP. Government has established a review period/refresh and governance process that it considers appropriate under the Transport Act 2000 and Government Guidance.
Obligation 5.3	5.3.1 The Company will bring forward initiatives (to be the subject of consultation with the Transport Forum Steering Group and with the Councils) that promote, in accordance with the Airport Surface Access Strategy, the use by passengers and staff travelling overland to and from the Airport by modes of transport other than the private car and, with regard to staff travel, the encouragement and promotion of car sharing.	Not Replicated. This obligation has been replaced by commitments in the Surface Access Commitments [APP-090] which are secured by the DCO Requirement 20.
	5.3.2 The Company will set aside funds (to be known as the 'Sustainable Transport Fund' - STF) to be used for the initiatives referred to in paragraph 5.3.1 above in each calendar year from 2022 to 2024. Such funds will be based on the sum of: 5.3.2.1 £10 per annum for each pass validated for entry to a staff car park operated by or on behalf of the Company; 5.3.2.2 a levy on the total supply of spaces in public car parks operated or available for operation by or on behalf of the Company on 30 September in the preceding year at the rate per space of: • £33.25 in 2022 • £34.00 in 2023; and • £34.75 in 2024	Replicated as amended. The levy on car parking spaces has been index-linked rather than values being prescribed.

	5.3.2.3 1.8% of the total fees collected each calendar year from the drivers of vehicles using the terminal forecourt passenger drop off zones; 5.2.3.4 100% of the funds generated through fines for red route contraventions; and 5.3.2.5 any sums brought forward from previous years.	
	5.3.3 Unless otherwise agreed with the Councils, the Company will: 5.3.3.1 each year, invest in the chosen initiatives referred to in Paragraph 5.3.1 a substantial proportion being no less than 50% of the STF in that year or such lesser sum if the expenditure of further sums is not justified by the outcomes achieved; and 5.3.3.2 by the end of the period of this Agreement, have used a substantial proportion being no less than 50% of total Residual Funds to support the introduction or operation or use of bus services that promise to facilitate a material increase in the proportion of airport staff or air passengers choosing to use public transport for their surface journeys between the Airport and neighbouring communities or such lesser percentage if the expenditure of further sums is not justified by the outcomes achieved; and	Replicated as amended. Paragraph 5.3.1 and the measures in 5.3.3.2 relate to encouraging sustainable transport mode. These obligations will be replaced by the commitments in the Surface Access Commitments therefore this obligation has been revised to require at least 50% of the STF being spent on delivering commitments in the SAC.
	5.3.3.3 by the 30 June in each year, submit to the County Council and the Borough	Replicated as amended

	Council a statement of the funds contributed to the STF in the previous calendar year, the details of all expenditure of the STF, and the balance remaining.	The date to provide the report has changed to reflect the financial year.
	In clause 5.3.3, 'Residual Funds' shall mean the funds to be provided by the Company as calculated in accordance with clause 5.3.2 less the sums paid or allocated (whether or not retrospectively) by the Company in the relevant year towards the funding of works at Gatwick Airport Railway Station, which shall be no more than 75% of the STF in that year. 'Works at Gatwick Airport Railway Station' includes those provided for in the agreement of 19 July 2011 and those provided for in planning application CR/2018/0273/FUL, which was permitted by Crawley Borough Council on 19 March 2019.	Not Replicated. No longer required as the railway station works have been completed.
Obligation 5.4	The Company will work with Network Rail and other stakeholders including the Councils to assist the planning and implementation of a project to redevelop the railway station serving the Airport including potential use of funds from the STF in a manner which, in conjunction with the Company's proposals for South Terminal and its landside infrastructure including that serving Fastway and other local bus services, provides the Airport with an efficient transport interchange suiting the needs of all users.	Not Replicated. No longer required as the railway station works have been completed and the Applicant continues to engage regularly with Network Rail.
Obligation 5.5	The Company will restrict the use of the Airport entrance/exit at Povey Cross to buses, emergency service vehicles, Airport operational users and a maximum of 350 staff car park pass holders, subject to these users satisfying the criteria specified in Appendix A to this Agreement and to report annually on the number of passes issued to staff and readily available data on vehicular use of the entrance/exit.	Replicated as amended. The details from the appendix have been brought into the body of the agreement.

Obligation 5.6	Having regard to the Company's Car Parking Strategy, the Company will: 5.6.1 Provide sufficient but no more on-Airport public car parking spaces than necessary to achieve a combined on and off airport supply that is proportionate to 48% of non-transfer passengers choosing to use public transport for their journeys to and from the airport by end of 2024. 5.6.2 Provide sufficient but no more Company-managed on-airport staff car parking spaces than is consistent with achieving 42% of staff journeys to work by sustainable modes by end of 2024, and subject to working with stakeholders to revise the local bus target in line with agreed service enhancements.	Not Replicated. Sustainable travel commitments are secured through the Surface Access Commitments (secured by DCO Requirement 20) and how on-airport parking is used to encourage certain behaviours is a part of that. This is explained through the Car Parking Strategy [REP1-051]. An off-airport parking support contribution has been included within the draft DCO s106 Agreement for use in enforcing parking measures outside the airport.
Obligation 5.7	5.7.1 The Company will actively engage with the Local Highway Authorities with the objective of: 5.7.1.1 reaching agreement on the location and characteristics of such improvements to the highway access to the Airport as may be justified by growth in the volume of Airport related traffic and on the anticipated timeframe for their implementation; and 5.7.1.2 subject to there being reliable estimates of the costs of the said improvements, agreeing the financial contributions that the Company is to make towards the cost of the agreed works. 5.7.2 Prior to the commencement of the calendar year in which the works are to be carried out, the Company will use reasonable endeavours to enter into appropriate agreements with the	Not Replicated. Engagement with the relevant local highway authority is controlled by provisions in the draft DCO that require the Applicant to enter into highways agreements with the relevant highway authorities prior to carrying out highway works (Article 20). Further, the Applicant is required to engage with the relevant local highway authority with regards to any works on their highways where a section 278 Agreement would be required and any changes to roads owned by the Applicant that would require a change to the Traffic Regulation Orders would require consultation under Road Traffic Regulation Act 1984.

	relevant Local Highway Authority for the works concerned	
Schedule 6, Development	Obligation 6: In devising and bringing forward proposals for Airport development, the Company will: 6.1 have due regard to relevant national and local planning policies and guidance. 6.2 attend to the visual impact of the development in terms of its urban design, landscaping, and relationship with its surroundings. 6.3 support its proposals with information about the management of any particularly significant ongoing impacts that would be attributable to the development in question, e.g. ground noise, light pollution, flood risk, and energy consumption. 6.4 replace or otherwise compensate for any loss of trees as a consequence of the development. 6.5 have regard to the impact of flooding, and design such development and, where necessary, include mitigation measures to avoid any harmful impact on surrounding communities.	Not Replicated. The DCO provides controls over the development at the airport and specifically in relation to environmental mitigation that is required.
Schedule 7, Community and the Economy, Part 2, Company's Obligations, Obligation 7.1	7.1.1 The Company will nominate (in accordance with the terms of the Gatwick Community Trust deed) two persons to be considered for appointment as trustees by the board of the Community Trust. 7.1.2 The Company will pay to the Community Trust all revenue received by the Company as a result of infringements by aircraft of departure noise thresholds imposed by the Government. 7.1.3 The Company will pay to the Community Trust no later than 31 May in the calendar years 2022 to	Not Replicated. This will be replaced in its entirety by the London Gatwick Community Fund, secured under Schedule 4 to the draft DCO s106 Agreement.

	2024 inclusive, £50,000 for every 10 million of departing or arriving passengers per annum ("ppa") based on published CAA passenger data for the preceding year: • £50,000 for up to 10mppa • £100,000 for between 10,000,001 and 20,000,000 ppa • £150,000 for between 20,000,001 and 30,000,000 ppa • £200,000 for between 30,000,001 and 40,000,000 ppa • £250,000 for between 40,000,001 and 50,000,000 ppa, and • £300,000 for above 50,000,001 ppa.	
Obligation 7.2	In each calendar year up to and including 2024, the Company will support the Gatwick Greenspace Partnership either financially or in value terms to a figure that is the lesser of: 7.2.1 20% of the total sums paid by local authorities to the said Partnership for the purposes of its activities in the twelve months ending 31 March in the year in question; and 7.2.2 twelve thousand five hundred pounds (£12,500). SAVE that this Obligation shall determine absolutely if annual local authority support should reduce to a sum less than twenty five thousand pounds (£25,000)	Replicated as amended. To codify the obligation appropriately the Applicant proposes to enter into an agreement with Sussex Wildlife Trust to secure the annual contribution of £12,500 to the Gatwick Greenspace Partnership. The Applicant has not replicated the provision that the Applicant is entitled to end providing its contribution if WSCC and CBC do not contribute at least £25,000 a year. Instead the Applicant proposes to match any contribution made by WSCC and CBC to the GGP in addition to it's own flat-rate contribution.
Schedule 8, Action Planning	**Obligation 8**	The AQAP has been replicated in the Air Quality Schedule and is proposed to operate alongside the Carbon Action Plan.

	8.1 The Company will continue to keep under review and update, as necessary, the following Action Plans: • Air quality. • Noise (for the purpose of this Agreement, the Company's Environmental Noise Directive Noise Action Plan as approved from time to time). • Surface Access Action Plan (being the actions described in the Airport Surface Access Strategy). • Water management. • Waste management. • Energy management. 8.2 As part of preparing the Monitoring Report referred to in Obligation 9.2, the Company will identify the latest version of each Action Plan and any significant updates that have taken place in the preceding year.	The Noise Action Plan has not been replicated as the Secretary of State has prescribed the regime of control on the production and content of Noise Action Plans through the Environmental Noise (England Regulations) 2006 and the Airports Policy Framework. As a designated airport there is an existing regime of control and a complementary process prescribed for preparing and reviewing Noise Action Plans. There is no need for this regime to be amended and/or supplemented to remain effective. The Surface Access Action Plan has not been replicated as it duplicates information provided in the ASAS and the reporting required under the Surface Access Commitments. Water, Waste and Energy Action Plans are no longer required because specific measures have been secured through the DCO and control documents.
Schedule 9, Monitoring and Reporting	**Obligation 9** 9.1 To monitor compliance with the Obligations of the Company contained in this Agreement and to report the results to the County Council and the Borough Council in accordance with the following provisions. 9.2 The report ("the Monitoring Report") shall list: 9.2.1 each Obligation. 9.2.2 the Company's assessment of whether the Obligation has been met or the progress made towards the Obligation including any remedial action proposed in the Monitoring Report for the preceding year.	Not Replicated. Where monitoring is considered appropriate it has been secured through the draft DCO s106 agreement or the draft DCO itself. As the number of obligations on the Applicant increases drastically through the DCO and the DCO s106 Agreement this monitoring report would not serve a purpose of ensuring accountability and transparency. Instead, the approach has been taken to identify the specific information that is to be provided to the JLAs and the appropriate time to do that in the context of each environmental topic and their corresponding control document where relevant.

	9.2.3 as a minimum, the following environmental indicators: • the results of both its continuous and random monitoring of the air quality impact of the operation of the Airport with regard to the levels of carbon monoxide PM10, oxides of nitrogen/nitrogen dioxide, and periodic monitoring of benzene, 1,3-butadiene and other hydro-carbons; • the availability and serviceability of Fixed Electrical Ground Power; • engine testing (including time place duration and need); • complaints related to the impact of ground noise; • waste collected by the Company's contractor and the proportions recovered and disposed to landfill; • the number of reports made by the Environment Agency on non-compliance by the Company with discharge consents; • the average biological oxygen demand discharged at the Outfall; and • the energy consumption of infrastructure within the Company's control. 9.2.4 any proposed remedial action where the Obligation has not been met together with an	

	appropriate timescale or, where no remedial action is proposed, the reasons why the Company considers remedial action is not appropriate. 9.3 The Monitoring Report shall be prepared by the Company for each calendar year 2021 to 2023 and shall be issued to the County Council, the Borough Council and, as necessary, the Environmental Consultant by 31 March in the year next following. 9.4 The County Council and the Borough Council shall each produce in a format similar to that of the Company, a Monitoring Report relating to their Obligations. 9.5 The Monitoring Reports for 2022 and 2023 shall be reviewed by the Environmental Consultant who, subject to the provisions of paragraph 9.6, will select a sample of ten of the Company's Obligations. 9.6 In selecting those of the Company's Obligations for review, the Environmental Consultant shall each year include no fewer than two relating to each of: • surface access; • aircraft noise; and • air quality. 9.7 In reviewing and reporting on the selected Obligations, the Environmental Consultant shall: 9.7.1 seek to verify the accuracy of the information included in the Monitoring Report; and 9.7.2 comment on the adequacy of the work undertaken pursuant to the Obligation and, in	

	the case of remedial actions, the adequacy of the work that they propose. 9.8 The Company will compile into the Monitoring Report for 2022 and 2023, the Environmental Consultant's recommendations and conclusions and its own response to such recommendations and issue the combined document to the County Council and the Borough Council by 31 August in the year following the year being reported. 9.9 The cost of the Environmental Consultant shall be paid in the following proportions: • 50% by the Company • 25% by the County Council • 25% by the Borough Council	
Schedule 10 and 11, The Borough Council and the County Council	Obligation 10.1 To meet with the Company, the County Council and the Adjoining Authorities on at least two occasions a year, unless agreed otherwise by the Company and the Councils, in order to discuss issues relating to long-term Airport parking both on and off-Airport in order to minimise the level of unauthorised parking.	Replicated as amended. Obligation is now provided in the Surface Access Schedule.
Obligation 10.2 and 11.1	To meet with the Company (Chief Planning Officer and / or Planning Manager) on at least two occasions a year, unless agreed otherwise, in order to provide feedback on issues being raised through the Gatwick Joint Local Authorities meetings and Gatwick Officers Group and to consider: • any emerging planning, transport or environmental policies or issues of relevance to the operation and development of the Airport;	Replicated as amended

	• employment trends and other matters bearing on the economy of the sub-region; and • progress on the implementation of Obligations and Commitments.	
Obligation 10.3	To run a Gatwick Officers Group comprising officers from the Borough Council, the County Council and the Adjoining Authorities, charged with discussing and considering amongst other things: • Implementation of the Master Plan, S106 Agreement, and Action Plans referred to in this Agreement; • Current and emerging issues related to the operation, growth and development of the Airport including future forecasts and topics; • To invite the Company, as appropriate, to discuss the above; • Preparing reports and issues to be discussed by Councillors at the Gatwick Joint Local Authorities meeting.	Replicated as amended
Obligation 10.4	To maintain appropriate mechanisms to consult with the County Council and Adjoining Authorities on any proposals for development at the Airport.	Not Replicated. Where CBC is required to consult another body that has been prescribed in the relevant requirement.
Obligation 10.5 and 11.2	To consult the Company on any future Council proposals for road user charges that would apply to staff or passengers travelling to or from the Airport and to give fair consideration to the Company's response on the appropriateness and use of such charges.	Not Replicated. No longer required by the Applicant.
Obligation 10.6	To hold an annual meeting with other relevant local authorities and the Company on issues relating to air	Replicated as amended This obligation is now in the Air Quality Schedule.

	quality impact of operations at the Airport and to exchange all relevant data/information at the time.	
Obligation 10.7 and 11.4	To use reasonable endeavours to work with Network Rail and/or the Company regarding the redevelopment of the railway station serving the Airport in order to provide the Airport with an efficient railway interchange that suits the needs of all users and, where opportunities arise, to improve the multi-modal interchangeability of the Airport.	Not Replicated The upgrade works to the railway station have been completed.
Obligation 10.8 and 11.5	To work with the Company on the implementation of its investment plans, in particular those directed at the enhancement of the Airport's Terminals forecourt areas.	Not Replicated. The development of the forecourts is included within the draft DCO
Obligation 10.9 and 11.6	To monitor compliance with the obligations of the Borough Council/County Council and to provide the results of that monitoring to the Company for inclusion in the Monitoring Report to be prepared by the Company in accordance with the timetable and requirements set out in Schedule 9.	Not Replicated The central Monitoring Report is no longer required.
Obligation 10.10 and 11.7	To pay an equal contribution with the County Council towards the 50% cost of the Environmental Consultant to be appointed pursuant to Schedule 9.	Not Replicated The central Monitoring Report is no longer required.
Obligation 11.3	To use all monies received by the County Council from the Company pursuant to Obligation 5.7.2 strictly towards the cost of the transport or highway scheme in respect of which the payment or payments were made, provided that the payment to a relevant Highway Authority for such purpose will release the County Council from any further obligation in respect thereof.	Not Replicated. Highways agreements and the associated payments are secured through the DCO.

Appendix B - Technical Note: Considerations on the use of June for transport modelling

Table of Contents

1 Introduction

1.1 Purpose of this document

1.1.1 This document has been prepared in response to Item 3 in the actions from **Issue Specific Hearing 4 (ISH4)** [EV9-005] requesting a document to "provide commentary on the conflicting considerations for use of June traffic levels over the traffic levels in August".

1.1.2 The Strategic Transport Modelling (detailed in **Transport Assessment Annex B: Strategic Transport Modelling Report** [APP-260]), and subsequent analysis feeding into the Environment Statement (**ES Chapter 12: Traffic and Transport** [AS-076]) and **Transport Assessment** [AS-079], draw on the strategic transport model forecasts. These represent a June weekday condition for background travel on the network and a corresponding peak weekday in relation to June airport operations. This is consistent for both the future baseline and with Project scenarios. This combination of non-airport and airport demand is considered a reasonable worst case for the purpose of the assessments presented in the Application. This note provides further rationale for this, building on material provided in the Application documents.

1.1.3 It should be noted that whilst National Highways raised a question in its Relevant Representation [RR-3222] regarding the use of June or August as a reasonable worst case, it has subsequently confirmed in its Summary of Representations made at ISH4 (paragraph 3.12 of [REP1-086]) that it agrees with the Applicant's use of June traffic levels to inform the assessment and considers the matter agreed (as noted in the **Statement of Common Ground between Gatwick Airport Limited and National Highways** [REP1-036] at reference 2.20.1.3, page 62).

1.2 Key application documents

1.2.1 The **Transport Assessment** [AS-079] section 8.1 summarises the interaction of airport and non-airport demand as being complex in terms of the seasonal variation in travel demand. The airport peak season occurs during the August period, which corresponds to lower levels of commuting demand particularly on rail and local road networks. Further details are provided in section 7.3 of the **Transport Assessment (TA) Annex B: Strategic Transport Modelling Report** [APP-260].

1.3 Context

1.3.1 As discussed further in this note, the strategic transport model is made up of two types of demand:

- **Non-airport demand** – Background traffic, calculated based on existing non-airport demand with housing/employment growth applied within the modelled area to control to TEMPRO assumptions, to create the non-airport related future baseline.
- **Airport demand** – Airport traffic, calculated using the ICF forecasts for passengers, direct employees and cargo.

1.3.2 The modelling work has been undertaken in line with the Department for Transport's (DfT) Transport Analysis Guidance (TAG) and has adopted a neutral period of a June weekday as the basis for assessment. TAG Unit M1.2 *Data Sources and Surveys*[1] paragraph 3.3.7 defines a neutral period as being from "*March through to November (excluding August)*". In paragraph 3.3.6 it also makes reference to avoiding abnormal traffic periods and to avoiding local holiday periods. It also notes that in some instances a particular period may be of interest, citing as an example periods of high levels of seasonal tourism. There is no specific mention of the treatment of locations adjacent to airports in TAG.

1.3.3 In determining the appropriate month to adopt for the assessment, extensive discussions with the Local Highway Authorities and National Highways were undertaken. The key areas of concern related to the combined effect of peak airport operations with peak non-airport demand. Through the discussions and analysis of data it was identified that there was a need to ensure that both local traffic peak conditions and strategic network traffic conditions could be assessed. Traffic data was assembled to support this analysis, considering airport and non-airport traffic and daily and hourly variations in traffic levels. This note presents the various components analysed in determining that a June condition provides a reasonable worst-case scenario in the context of the assessment.

1.4 Structure

1.4.1 The document sets out the reasons for using June as the assessment period, including:

- Section 2 details the passenger demand element.

[1] TAG Unit M1.2 - Data Sources and Surveys (publishing.service.gov.uk)

- Section 3 details analysis of vehicles flows on the strategic road network (SRN).
- Section 4 details analysis of vehicle flows on the local road network.
- Section 5 details what other airports applications have used.
- Section 6 provides a summary and conclusion from the analysis.

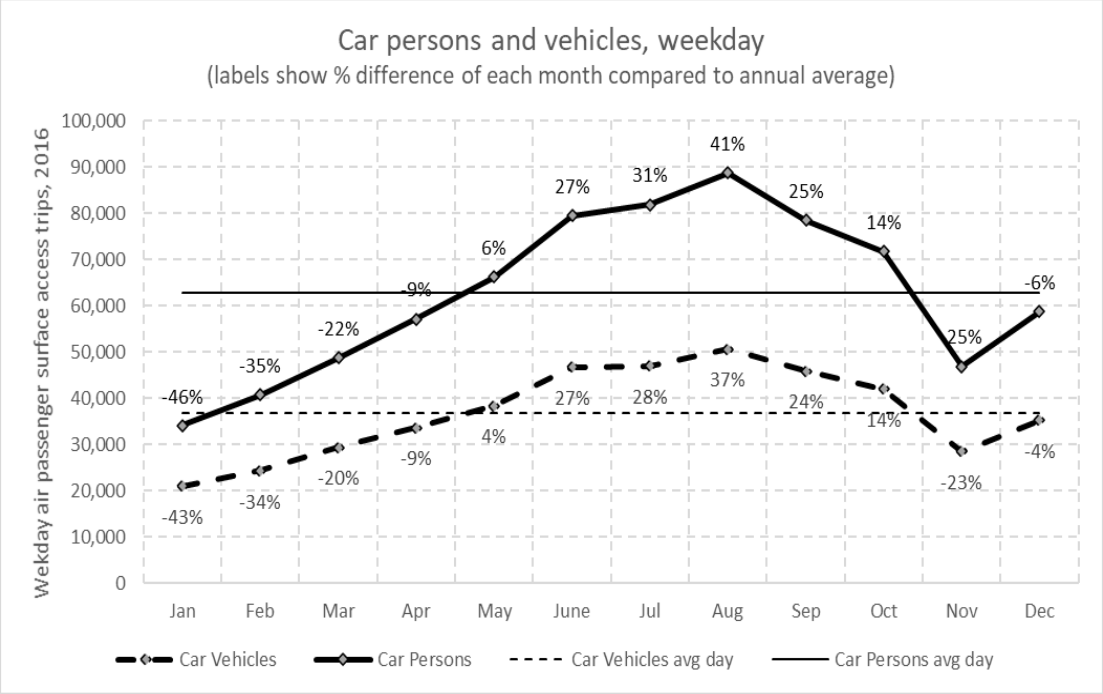
2 Gatwick passenger demand

2.1.1 Section 7.3 of the **Transport Assessment (TA) Annex B: Strategic Transport Modelling Report** [APP-260] outlines a range of seasonality considerations considered in the development of the strategic transport model. Figure 33 of the report is reproduced below (Figure 1) relating to Gatwick passenger demand seasonal profiles.

2.1.2 The figure shows a broad range of variability with the winter months typically showing the lowest demand, and the summer months showing the highest demands. April, May, October and December represent the periods during the year where traffic flows are closest to annual average conditions. The spread of demand shows between a -46% to +41% variation from annual average conditions for person trips by car or -43% to +37% in terms of car vehicles.

2.1.3 The seasonality of car person trip demand on a weekday is shown as 41% above annual average conditions in August 2016, 31% in July and 27% in June 2016. Car vehicle demand is 27% above the annual average in June 2016 and 37% above in August 2016. August therefore represents an 8% uplift on the June car vehicles value for the Airport based on 2016 weekday data. The flatter profile for car vehicles reflects the larger average group size through the summer months and the prevalence of leisure trips.

Figure 1: Car person and vehicle trips



2.1.4 **ES Appendix 4.3.1: Forecast Data Book** [APP-075] and the **Technical Note on Future Baseline** [REP1-047] describes how the associated growth at the airport (in the future baseline scenario) will be achieved. The latter note explains in section 1.5 how de-peaking is a well-established trend for Gatwick Airport and is driven by a combination of constraints on growing the peak season as well as the evolving mix of Gatwick Airport's airlines and markets.

2.1.5 The schedule will therefore flatten out through the year and over time, demand on a June day will become more like that on an August day over the preceding years, detailed in section 7.4.2 and shown in Table 40 (replicated below as Table 1) of **Transport Assessment Annex B: Strategic Transport Modelling Report** [APP-260]. Therefore, while there is a difference in passenger demand between August and June this flattening of the seasonal profile means the reduction of this difference to only 3% by 2047.

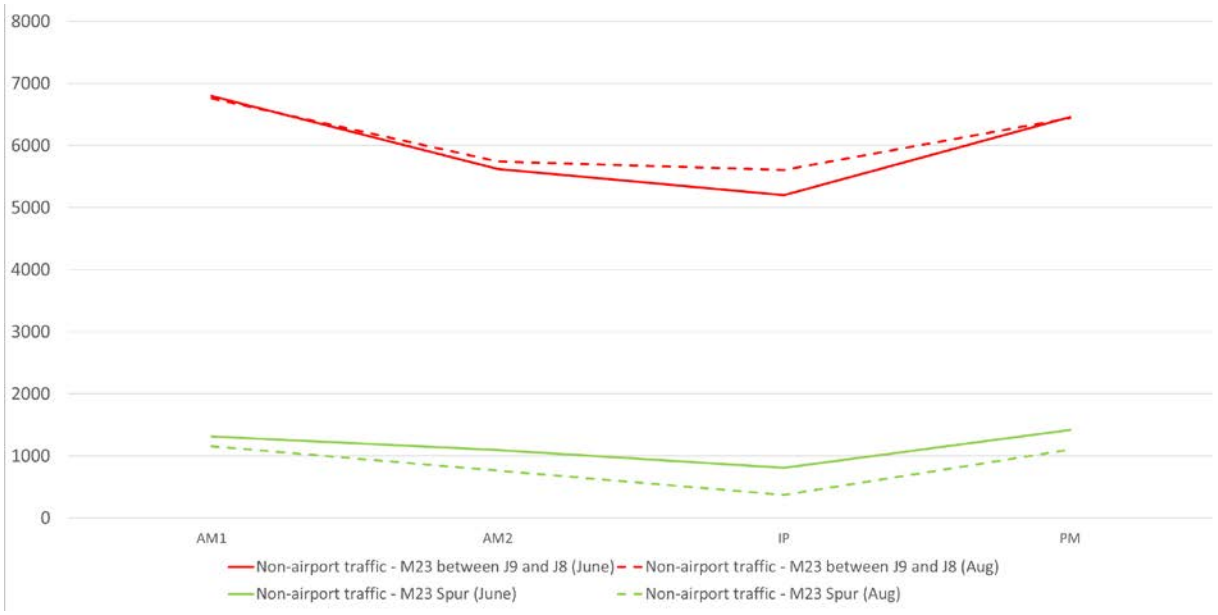
Table 1: Daily Surface Access Forecasts (Table 40 of Transport Assessment Annex B - Strategic Transport Modelling Report [APP-260])

Scenario	High Aug arrivals and departures (thousands)	Factor (High August to High June)	High Jun arrivals and departures (thousands)
Future Baseline 2029 With Project 2029	178.3 189.6	0.95	169.3 180.0
Future Baseline 2032 With Project 2032	182.1 217.3	0.96	174.8 208.6
Future Baseline 2038 With Project 2038	187.1 226.9	0.97	181.4 220.1
Future Baseline 2047 With Project 2047	193.9 236.1	0.97	188.0 229.0

3 Seasonality of vehicle flows on the Strategic Road Network (SRN)

3.1.1 Detailed analysis has been undertaken to understand the breakdown of traffic on the M23 in terms of airport and non-airport demand. In order to undertake this analysis, modelled airport demand has been deducted from the observed WebTRIS data. This is summarised in Figure 2.

Figure 2: M23 non-airport vehicle flows for June and August (2016)



3.1.2 The airport demand has been derived from datasets for calculating the GAL demand. It is acknowledged that this is a modelled dataset and is an approximate representation of the airport movements in 2016.

3.1.3 This shows that June has higher non-airport traffic levels than August in all time periods on the M23 Spur.

3.1.4 The M23 mainline shows that in the AM1 and PM time periods, where total flows on this part of the M23 are greatest, the amount of non-airport traffic is marginally higher in June than in August. In the AM2 and interpeak periods, the level of non-airport traffic is greater in August than in June, but at these times the total volume of traffic on the M23 between Junctions 8 and 9 is lower than in the AM1 and PM time periods.

3.1.5 This therefore indicates that the use of June as the basis for assessment is robust, because background (non-airport) demand is greatest in June in the time periods which carry the greatest total volume of traffic on the M23 between Junctions 8 and 9, and in all time periods on the M23 Spur.

4 Seasonality of vehicle flows on the local roads

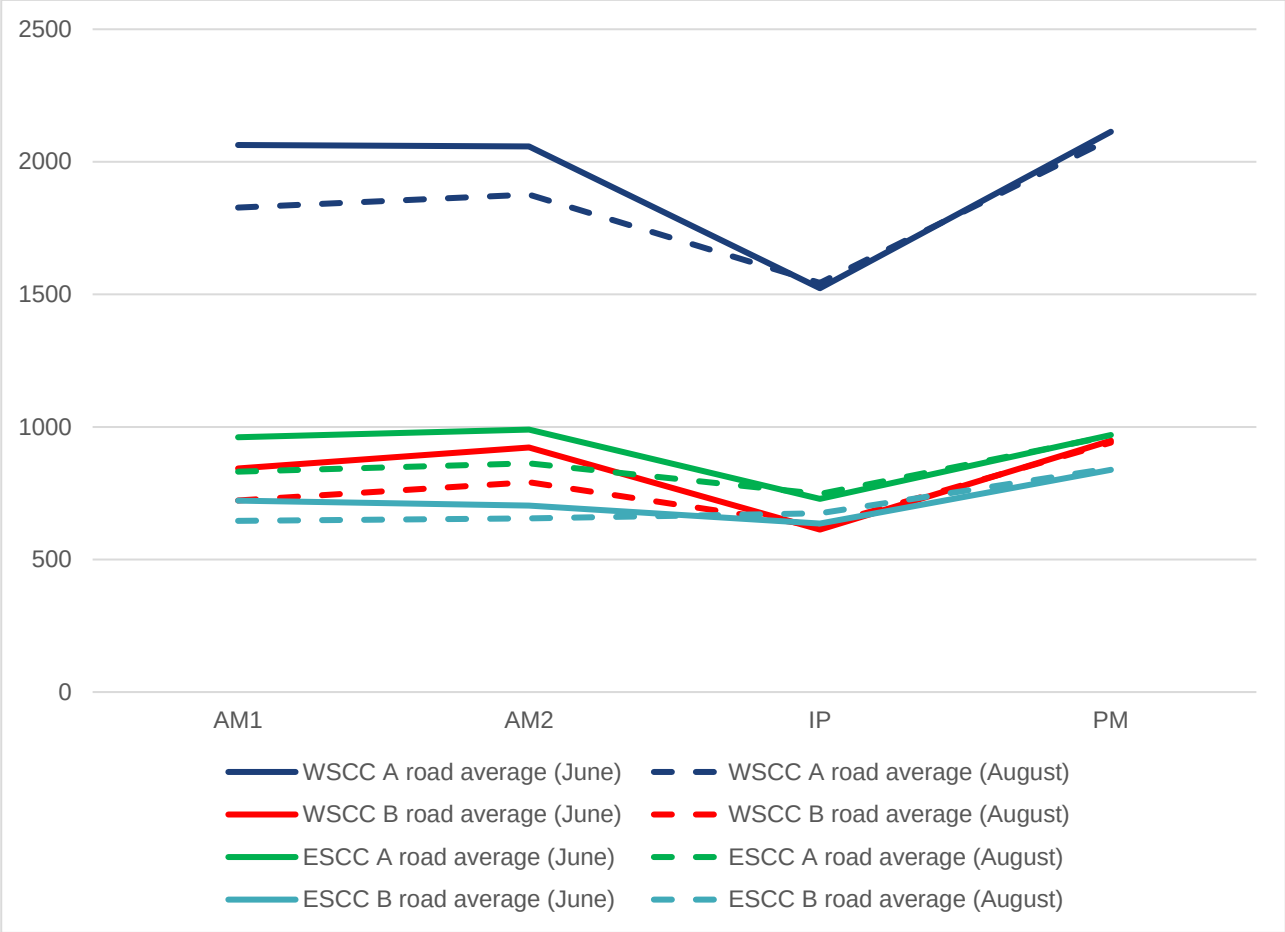
4.1.1 Detailed analysis has been undertaken to understand the difference between the vehicle flows on the local road network in June and August. This has been undertaken for counts in West Sussex and East Sussex which have annual data available for a sample of A and B roads across the regions. This is summarised in Figure 3.

4.1.2 In the morning and evening peaks, when the vehicle flows are at their highest the vehicle flows in 2016 were higher in June than in August. This difference is more prominent in the morning peaks.

4.1.3 It should be noted that August vehicle flows can be higher in the inter-peak period on the local road network, but this is generally when total vehicle flows themselves are lower than at peak times of day and typical of school holiday periods.

4.1.4 Therefore, in terms of non-airport demand on local roads, vehicle flows are at their highest in the morning and evening peaks and at those times of day, flows in June are higher than in August, albeit noting that in the evening peak June and August are similar. The use of June therefore represents a robust approach.

Figure 3: Local roads average traffic volume for June and August (2016)



5 Wider knowledge & assessments

5.1.1 It should be noted that in the documentation for Luton Airport DCO application their strategic model represents a June 2016 base year, as stated in Volume 7 of **Other Documents 7.02 Transport Assessment Appendices - Part 1 of 3 (Appendices A-E), Appendix E1 [Doc Ref: TR020001/APP/7.02**], Para 2.2.8. Without significant new demand data collection it was recommended that the base year of the strategic model be maintained at June 2016.

5.1.2 The Transport Assessment states that a busy October day was used for passenger demand forecasts. This was provided by York Aviation in the **Need Case [TR020001/App/7.04]**, which states in paragraph 6.6.26 that they developed "*timetables for an indicative October day… in each assessment year for the purposes of surface access assessments and transport modelling. This is to reflect that the Busy Day in each year is likely to occur in the peak of summer when background traffic is lower due to school holidays. The October day*

represents a typical busier day for the month (excluding the half term peak) to test against normal level of background traffic demand is considered more appropriate for surface access modelling." These October busy day demands appear to have been overlaid on the future year non-airport growth forecasts which were based on the June 2016 base year.

5.1.3 In a similar way to the assumptions made for the modelling for Gatwick, the Luton forecasts assume a flattening of the seasonal variation (paragraph 6.6.28 in the **Need Case [TR020001/App/7.04].**

5.1.4 Stansted Airport undertook transport modelling to support its application and the **Stansted Airport 35+ Project | Surface Access Transport Assessment [Application Number: UTT/18/0460/FUL]**, paragraph 4.23 states that *"the current air passenger flight arrival and departure profile was examined based on take-off and landing times information provided by STAL for an average weekday in October 2016 (consistent with assessing impact on the highway network during a neutral month)."*

5.1.5 Paragraph 6.9 of the same document stated that "*daily passenger profiles were produced for an 'average' day at the airport for each assessment year*".

5.1.6 The Transport Assessment for the Luton and Stansted schemes therefore assessed a more 'average' day in terms of airport demand than the assessment that has been undertaken for Gatwick, which uses a June peak day airport demand assumption, overlaid onto June background demand in terms of traffic and so is considered to present a more conservative, worst-case assumption. As noted in paragraph 1.1.3, National Highways has indicated agreement to the approach used for Gatwick.

6 Summary and conclusions

6.1.1 The basis for using June as the month for the transport modelling for the Project has been developed by considering a number of factors in terms of the seasonal profile of background demand (non-airport), the profile of demand for the Airport itself, and a combination of the two.

6.1.2 From analysis of traffic count data, the commuting periods during June show higher traffic flows than in August. In combination with June airport demand, which will become increasingly similar to that in the August period in future years, the use of June in the transport modelling therefore provides a reasonable worst-case scenario for assessment.

6.1.3 For the assessment in ES Chapter 12: Traffic and Transport [APP-076] the analysis uses directly modelled outputs which represent a June assessment.

6.1.4 In terms of assessment for other environmental topics, all data provided from the transport modelling to inform assessment by other environmental disciplines has derived annual average traffic flows from the strategic transport model, which are used for the other topic assessments.

6.1.5 Additionally, the work undertaken to produce sensitivity tests for post-Covid conditions, reported in **Accounting for Covid-19 in Transport Modelling** [AS-121], does not lead to any suggestion that June is not an appropriate month on which to base the assessment.

Appendix C - Technical Note: Rail passenger modelling clarification note

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1 Introduction

1.1 Purpose of this document

1.1.1 During the Issue Specific Hearing (ISH) 4 on Surface Transport held on 5 March 2024, a range of discussions and views were expressed in relation to item 4.2 [EV2-001] of the agenda – Rail Passenger Modelling. In the resulting action points released by the ExA [EV9-005], Item 5 requests that the Applicant should "*Respond to several issues raised by Interested Parties raised in Agenda Item 4.2*". This note provides a relevant response to the items identified.

1.2 Key application documents

1.2.1 For context, the Application documents provide a range of analysis and information relating to rail passenger modelling. This specifically refers to the assessment of the likely operating performance of the rail network in both the future baseline and with Project scenarios.

1.2.2 The future demand used in the assessment is derived from the Strategic Transport Model forecasts which are detailed in **Transport Assessment Annex B: Strategic Transport Modelling Report** [APP-260]. Section 3 of that document outlines the overall model structure and Section 5.2 more specifically explains the development of the rail model used. Sections 11.10 and 12.9 detail the performance of the future baseline and with Project scenarios respectively.

1.2.3 The **Transport Assessment** [AS-079] in Section 9 and **ES Chapter 12: Traffic and Transport** [AS-076] set out the overall assessment of the with Project impacts on the future rail network. In the context of crowding analysis, two measures are presented. The first is the Seated Load Factor, which is the proportion of seats occupied. The second is the Standing Capacity Occupied, which is an assessment of the extent to which standing space is occupied when seats are fully occupied.

1.3 Items identified at ISH4 raised by Interested Parties

1.3.1 We have grouped the topics discussed during ISH4, into a number of themes. We have included some relevant context for these points in Section 2, drawing on information in the Application documents. The following points are specifically addressed in the subsequent sections.

- What criteria are used for assessing passenger standing? (Section 3)
- How is luggage considered within the assessment? (Section 4)

- What is the seasonal variation in rail flows and does the rail assessment represent a reasonable worst case? (Section 5)
- Relationship of rail passenger modelling and station capacity modelling (Section 6)
- Use of rail to support construction activities (Section 7)
- How is GAL providing funding for rail mitigation? (Section 8)

2 Rail passenger modelling - context

2.1.1 Gatwick Airport station is the busiest station in the South East (excluding London stations). Over the decade from 2009 to 2019, which included a considerable increase in capacity on GTR services through the introduction of new rolling stock and completion of the Thameslink Programme, rail mode share at Gatwick increased from 31% to 41% and total passenger entries and exits increased from 12.8m passengers to 21.1m passengers[1].

2.1.2 Gatwick Airport station is connected by direct rail services to over 120 other stations, with over 1,000 stations accessible by train with just a single interchange. There are services between Gatwick Airport and central London every three to four minutes at peak times and much of the demand related to the Airport occurs in the counter-peak direction (ie in the opposite direction to the tidal commuter demand into and out of central London).

2.1.3 Govia Thameslink Railway (GTR) and Great Western Railway (GWR) operate rail services calling at Gatwick Airport station. GAL and Govia Thameslink Railway (GTR) have a Partnership Agreement (established in 2015) to work together to promote rail access to and from Gatwick, improve passenger experience and increase rail mode share. This has resulted in considerable joint working on marketing strategies, events and engagement with other stakeholders, for example airlines, supporting the case for rail access.

2.1.4 Rail passenger modelling has been undertaken as part of the strategic modelling work, feeding into the assessment of mode choice and also to present data on train loading and crowding with and without the Project for the Application. Data underpinning the modelling was provided by DfT, Network Rail, GTR and Great Western Railway (GWR). The strategic modelling used this data and included a 2019 calibration/validation process to ensure that the rail demand at the Airport

[1] ORR Rail Station Usage Statistics – Table 1415 - https://dataportal.orr.gov.uk/media/1908/table-1415-time-series-of-passenger-entries-and-exits-and-interchanges-by-station.ods

aligned with observed demand once conditions and reliability stabilised along the corridor.

2.1.5 Prior to the Application, GAL updated the Uncertainty Log[2] in consultation with NR to reflect changes in the status of proposed schemes, for example the continued delay in a confirmed funding commitment to the Croydon Area Remodelling Scheme (CARS) and Brighton Main Line (BML) Upgrade Programme. This resulted in relevant changes to the modelled assumptions being included in the **Transport Assessment** [AS-079].

2.1.6 In response to the ExA's Procedural Decision [PD-006], the Applicant has submitted **Accounting for Covid-19 in Transport Modelling** [APP-121]. This report responds to updated guidance issued by the DfT in its Transport Appraisal Guidance Unit M4 (May 2023) describing how scheme promoters should account for Covid-19 impacts. As part of this sensitivity test, GAL has used updated parameters and data from DfT in accordance with their Rail 'Covid Forecasting Tool v19.4' used in conjunction with their guidance in TAG Unit M4.

2.1.7 **ES Chapter 12: Traffic and Transport** [AS-076] section 12.9 presents the expected change in rail demand by service group in the application modelling for the with Project scenario in 2047. This indicates an uplift in demand in the network peak hour on the northbound fast services to London Bridge and London Victoria of 2%, which represents 140 and 128 additional passengers in the hour on each route respectively with the Project. Additionally, there would be an additional 63 passengers in the hour on the northbound stopping services, which represents a 5.3% increase. The impacts and effects of the Project in the 'post-Covid' sensitivity tests are generally reduced from, or similar to, those presented in the Application. On the rail network specifically, crowding levels in the 'post-Covid' sensitivity test future baseline and with Project scenarios are lower than those assessed in the Application.

2.1.8 GAL is continuing to engage with Network Rail and GTR and is working collaboratively on a Statement of Common Ground and anticipates making considerable progress on the matters contained therein.

[2] The Uncertainty Log contains information on planned developments and transport schemes in the area being modelled, including the degree of certainty that they will come forward within the modelled timescales. The approach accords with the DfT's Transport Appraisal Guidance. The Uncertainty Log is discussed further in Section 9 of **Transport Assessment Annex B: Strategic Transport Modelling Report** [APP-260.]

3 Assessment criteria for passengers standing

3.1.1 As outlined in the **Transport Assessment** [AS-079] (paragraph 9.3.3), crowding is an important measure of the effects of the Project on rail passengers and assessment was undertaken to cover:

- The line loading (number of passengers on trains) on departure from each station, which indicates total demand on these services;
- The Seated Load Factor, which shows how many seats on trains are occupied; and
- The percentage of standing capacity occupied, which illustrates crowding when standing passengers are expected.

3.1.2 The assessment process is illustrated in Figure 1.

Figure 1: Rail crowding assessment criteria (Diagram 9.3.1 from Transport Assessment)

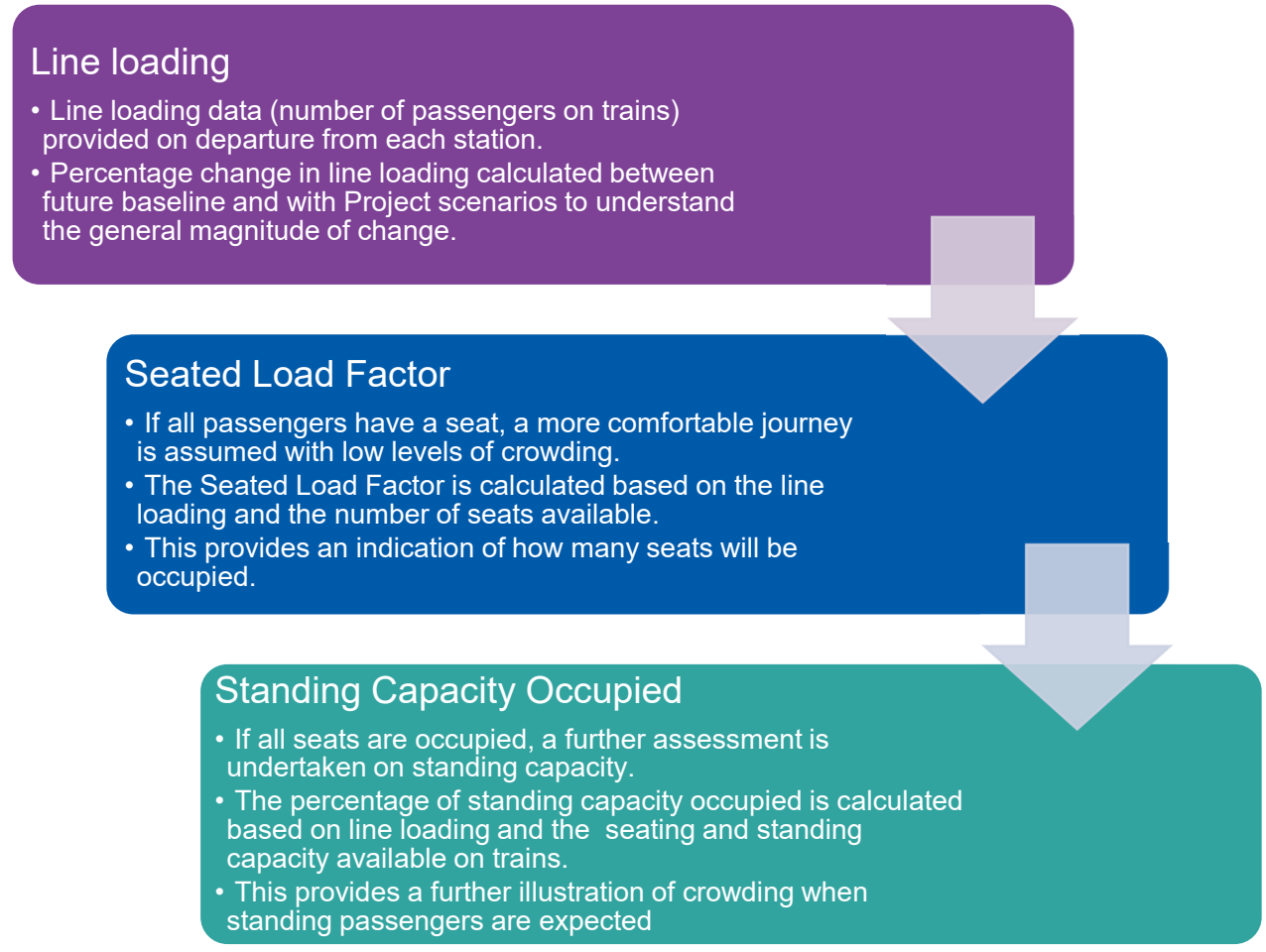
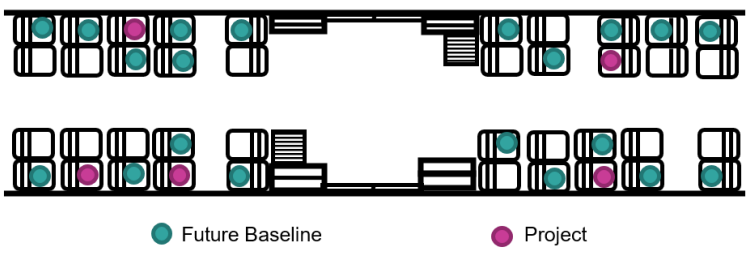


Illustration of Seated Load Factor



3.1.3 More detail on the specific calculations undertaken to calculate the seated load factor and standing capacity occupied can be found in the **Transport Assessment** [AS-079] at paragraphs 9.3.3 through to 9.3.14.

3.1.4 Crowding impacts were assessed based on line loadings for both the Network peak hour (the hour with the highest aggregate line loading) and Project peak hour (the hour with the highest increase in rail passengers as a result of the Project).

3.1.5 In relation to passenger standing, once all seats are shown to be occupied the calculation considers what proportion of the standing capacity (drawn from the DfT Green Book), is occupied. This is expressed as a percentage. Tabulations of Standing Capacity Occupied are provided in the Application as part of **ES Appendix 12.9.2: Rail Passenger Flows** [APP-154].

3.1.6 In relation to the assessment criteria of standing capacity occupied, reference is provided in the Application at paragraph 9.3.14 of the **Transport Assessment** [AS-079], which notes: *"Where the demand generated on the rail network by the Project can be accommodated within the available number of seats, or creates only small change in the amount of standing capacity occupied, the impacts of the Project are considered acceptable. Where the number of standing passengers would increase, the assessment also considers the length of time that passengers would be standing for. DfT guidance previously used in considering train service franchising typically suggested that in peak periods, passengers should not have to stand for more than 20 minutes."*

3.1.7 The **Transport Assessment** [AS-079] Section 9 provides a detailed description of the assessment of the effects of the Project on passengers using the rail system, and more detailed commentary of the extent of Standing Capacity Occupied can be found at paragraphs 9.6.37 to 9.6.49 for the Network peak hour, and paragraph 9.7.18 for the Project peak hour.

4 Treatment of luggage

4.1.1 The seated and standing train capacities used in the assessments of rail passenger modelling are taken from DfT's Green Book (2019). It is not clear from this source what specific assumptions are made in the calculation of standing capacity.

4.1.2 The working assumption relating to luggage in the assessment of rail crowding is that it is placed in overhead racks, under seats, in luggage compartments or placed on the floor.

4.1.3 To provide context for considering luggage in further detail, it is useful to recap on the findings of the assessment presented in the Application. Tables 9.6.5 through to 9.6.10 in the **Transport Assessment** [AS-079] reference the crowding effects using seated capacity. Generally, the fast trains are busy in the morning peak (AM) into London, and in the afternoon (PM) out of London. The majority of the Project demand is typically added in the counter-peak direction and the peaks of Project demand during the day do not necessarily coincide with commuter peaks.

4.1.4 The Project would increase loadings on trains, but the assessment shows that typically seated load factors (or standing capacity occupied, where relevant) would only change by a few percentage points as a result of the Project. By 2047 the greatest level of standing capacity occupied on services between London and Gatwick Airport would be around 50%, and this would occur in the sector between central London and Clapham Junction / East Croydon. The Project would typically add no more than three to five passengers per train carriage.

4.1.5 In order to understand the impacts of luggage more specifically when instances of standing are expected to occur, further analysis has been undertaken of the 2047 with Project scenario presented in the Application. The Network peak assessment identified that for the section between Gatwick Airport and East Croydon, some additional standing was anticipated on fast services that could extend through to central London termini. No instances of standing were identified for stopping services either in the Future Baseline or With Project scenarios.

4.1.6 During the morning commuter peak (08:00 to 09:00) around 21% of the train load departing northbound towards London in 2047 would board at Gatwick. This is made up of around 17% of air passengers and 4% of other users (airport staff or local users). In the evening commuter peak (17:00-18:00) around 39% of the southbound train load arriving at Gatwick alight at the station. This is made up of around 32% air passengers and 7% of other users.

4.1.7 The **Transport Assessment** [AS-079] Diagram 9.6.6 indicates that between Gatwick and East Croydon for fast services in the AM Network peak northbound, Seated Load Factors would be between 1.1 and 1.3. Considering the extent of air passenger load on these trains, around half the passengers boarding at Gatwick Airport could access seats, with the remainder standing. Given the Standing Capacity Occupied would be around 20% (see Diagram 9.6.12 of the **Transport Assessment** [AS-079]), there would be significant space available on the services to support luggage in the event it were not possible to use overhead

racks, space under seats or luggage compartments. Standing between Gatwick and East Croydon is only anticipated between 08:00 and 10:00 in 2047, assuming that there were no further increase in capacity by that time, and is identified in both the future baseline and with Project scenarios.

4.1.8 In relation to southbound services in the PM network peak, Seated Load Factors arriving at Gatwick Airport would also be between 1.1 and 1.3 in 2047. Again, considering the anticipated air passenger loads, it is likely that at least half of all air passengers would be able to access seating between East Croydon and Gatwick Airport. Similar to the AM period, given the Standing Capacity Occupied would be around 20% (see Diagram 9.6.12 of the **Transport Assessment** [AS-079]), there would be significant space available on the services to support luggage if it were not possible to use overhead racks, space under seats or luggage compartments. Standing between East Croydon and Gatwick Airport is only anticipated between 17:00 and 19:00 in 2047 and is identified in both the future baseline and with Project scenarios.

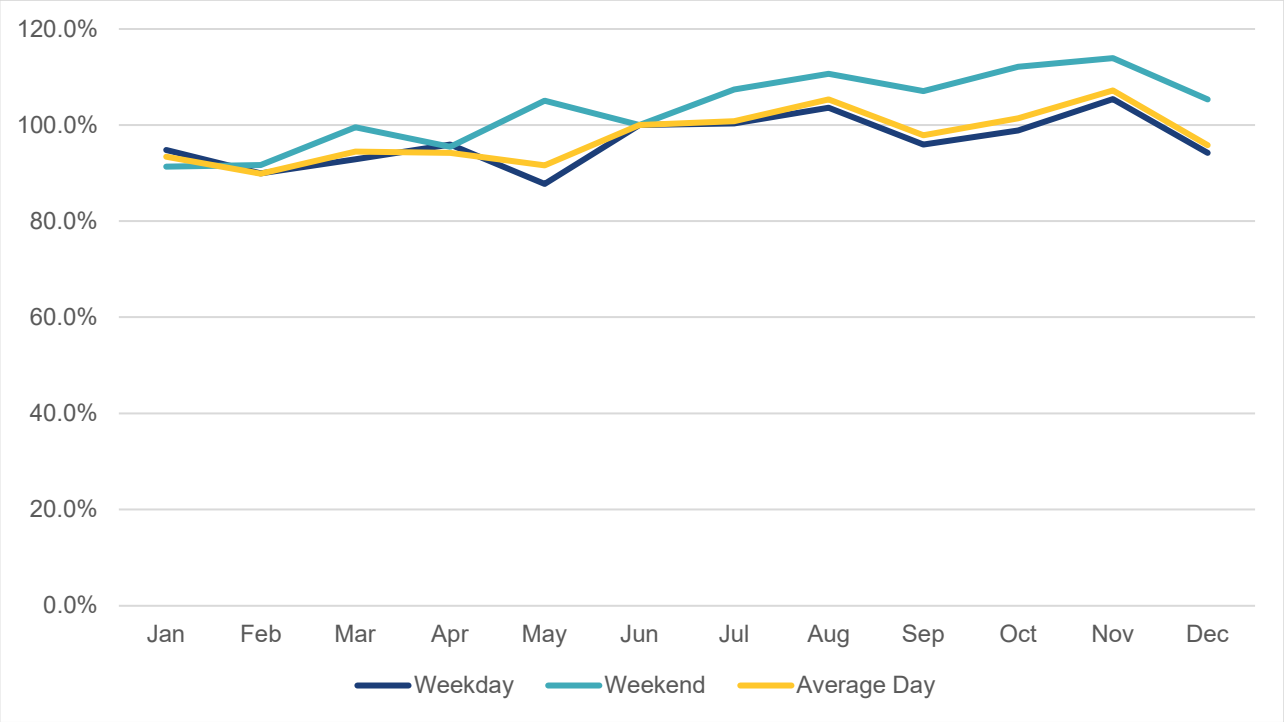
5 Seasonal variation of rail demand

5.1.1 The Application modelling relating to the assessment of rail crowding draws on data from the strategic transport model which represents a weekday in June. In order to consider the potential for wider seasonal effects on the rail network, further analysis is described below which reviews the seasonal profile of both Gatwick air passenger mode share and also background rail demand.

5.1.2 Daily rail demand through Victoria station was obtained in order to assess the general seasonal rail trends across the network serving Gatwick Airport. Only data for 2023 was available for this analysis. The analysis is summarised in Figure 2. The data was processed to calculate average daily, average weekday and average weekend day demand and indexed across the year. The analysis shows that June had the second-highest level of weekday rail demand in the year.

5.1.3 The data shown includes potential Gatwick Airport demand at these stations in addition to background demand. During November, the extent of airport demand will be considerably less than June. Based on 2016 CAA data, November observes a higher public transport mode share of some 48% compared with 40% in June. Airport demand in November 2016 accounted for around 20% fewer surface access trips than the annual average. This indicates that the use of a June weekday condition in the assessment is robust from a rail perspective.

Figure 2: Seasonal profile of daily rail demand as a function of June demand (based on flows at London Victoria in 2023)



6 Relationship between passenger and station capacity modelling

6.1.1 The strategic transport model forms the basis for all demand forecasts used in the assessment included in the Application. This includes the forecasts for station usage at Gatwick Airport station. Data was extracted from the strategic model in terms of the anticipated station entries and exits by model time period which have been used in more detailed analysis of the Gatwick Airport station. This is detailed in **Transport Assessment Annex D: Station and Shuttle Legion Modelling Report** [APP-262].

6.1.2 GAL has undertaken detailed passenger modelling of Gatwick Airport station using the Network Rail GRIP5[3] Legion model for 2036, developed for testing the Gatwick Station Project. The model provides an assessment of both walkways (areas where a pedestrian would expect free movement) and queues/waiting areas (where pedestrians experience higher densities and still consider their environment comfortable). GAL held meetings with NR's Station Planning team

[3] Governance for Railway Investment Projects (GRIP) Stage 5 refers to the detailed design stage for a preferred option in preparation for construction. The model has been validated by Network Rail and corresponds to the "as built" station project.

prior to submitting the Application to verify the modelling approach and assessment.

6.1.3 The assessment in the Application (**Transport Assessment Annex D: Station and Shuttle Legion Modelling Report** [APP-262]) shows that the station would continue to operate satisfactorily overall in 2047 with the demand from the Project. GAL is continuing to discuss the station and rail crowding analysis presented in the Application with NR.

7 Use of rail to support construction activities

7.1.1 In relation to proposed construction activities, as set out in **ES Appendix 5.3.2: Code of Construction Practice Annex 3: Outline Construction Traffic Management Plan** [APP-085], although some generalised discussions have been held with Network Rail, it is too early to be able to agree specific proposals or railhead locations or to confirm that suitable train paths will be available. GAL has therefore not relied on rail transport for its construction assessments. Nevertheless, GAL recognises the sustainability benefits of reducing the volume of road traffic associated with construction and with its contractors will therefore continue to explore the feasibility of having some materials delivered by rail if consent is granted for the Project.

8 Funding for rail mitigation

8.1.1 GAL has made a significant financial contribution to rail access in the last decade, to improve passenger experience and increase capacity for rail travel to and from the Airport. As part of the Gatwick Station Project to improve capacity, wayfinding and operations at the station, which was part funded by GAL, improvements to the track and signalling layout close to Gatwick Airport station were also completed. These were works scheduled as part of the proposed BML Upgrade Programme and have journey time benefits to all rail users on services passing through the station.

8.1.2 GAL has a current commitment, via a Section 106 obligation, to levy a Sustainable Transport Fund (STF) from on-airport parking and forecourt charges. The STF can be used to fund improvements to public transport services and networks, active travel provision and measures to incentivise staff access via sustainable modes (for example discounted fares on bus, coach and rail). An example is the recent contribution made by GAL to GWR to enable the early introduction of a second direct train from Reading to Gatwick Airport via the North

Downs Line. This had been a GWR franchise commitment that had been delayed due to the Covid-19 pandemic and recovery of rail passenger demand. The service change came into operation in December 2023.

8.1.3 GAL will continue to fund the STF (draft DCO s106 Agreement (Doc Ref. 10.11) and is committing to achieve specific public transport mode shares within three years of dual runway operations commencing (as part of the **Surface Access Commitments (SACs)** [APP-090] secured through Requirement 20 of the draft DCO [REP1-004]. In pursuit of achieving those commitments, GAL will continue to consider providing funding for enhancements to the rail network where they increase the use of rail.

8.1.4 As part of the SACs and secured in the draft DCO s106 Agreement, GAL will also set aside a Transport Mitigation Fund (TMF) to support further interventions, particularly should the need arise for additional measures in the area surrounding the Airport as a direct result of airport-related growth. This fund is to provide mitigation of an unforeseen or unintended transport impact from the Project. Decisions on allocation from the TMF would be made by a Transport Mitigation Fund Decision Group (TMFDG), details of which will be contained in the draft DCO s106 agreement.

8.1.5 Whilst GAL has provided a commitment to achieve a 55% sustainable mode share for both passengers and staff in the SACs, it has aspirations to achieve higher targets in the long term, including through further engagement with the rail industry to optimise rail mode share.

Appendix D – 2023 Travel to Work Survey

2023 Travel to Work Survey

Gatwick Airport Northern Runway Project (Ref. TR020005)

Applicant's Response to Actions from ISHs 2-5

Initial Report

LONDON GATWICK

POWERED BY VINCI AIRPORTS | GLOBAL INFRASTRUCTURE PARTNERS

Contents

Methodology

- Online survey
- Distributed to all GAL staff by direct email and promoted via Airspace, Yammer and Weekly Flyer newsletter
- Emails sent to key business partner organisations (largest employers) requesting they distribute to their staff
- Flyers with QR codes were posted around staff areas across the airport campus
- 5 £100 amazon vouchers were used as an incentive to encourage staff to complete

2,814 surveys completed

1,976 external and 838 internal

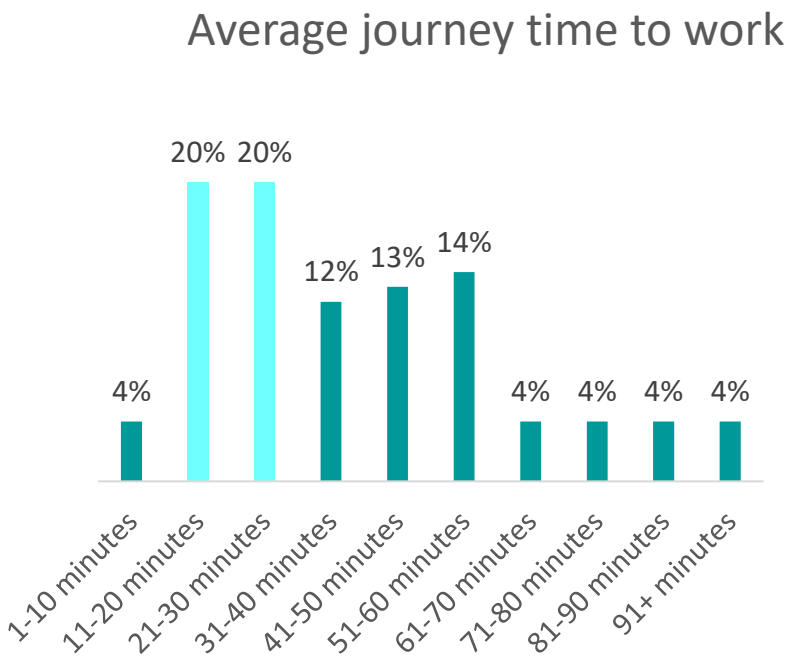
Context - Key Challenges

- New staff cohort
- Impact of COVID-19 on travel behaviours is ongoing
- Public transport networks continuing to rebuild and recover
- Smaller proportion living in Crawley
- More hybrid working – fares system has not caught up to new realities
- Still largely operational workforce with early/late start and finish times
- Awareness and uptake of staff discount schemes is lower

Working Patterns

- 44% of staff travel to work at Gatwick 5 days a week, while 79% work on site 4-5 days .
- 50% of non-shift workers work elsewhere 1 or 2 days a week, with a third reporting they tend to work from home 2 days a week.
- 86% of shift workers always work on site.
- When considering their earliest shift start time, 84% of airline workers start work between 03:00 and 05:00.
- Finish times are more variable for airline workers, but the largest concentrations finish between 07:00-07:59 or between 23:00-23:59.
- 68% of non-shift workers start work between 08:00 and 08:59.

Journey to Work



- The average journey time across all modes of transport is 45 minutes.
- Those using rail have an average journey time of 61 minutes, suggesting rail users travel from further afield.
- People who cycle and walk to work have the shortest journey times (26 and 29 minutes).

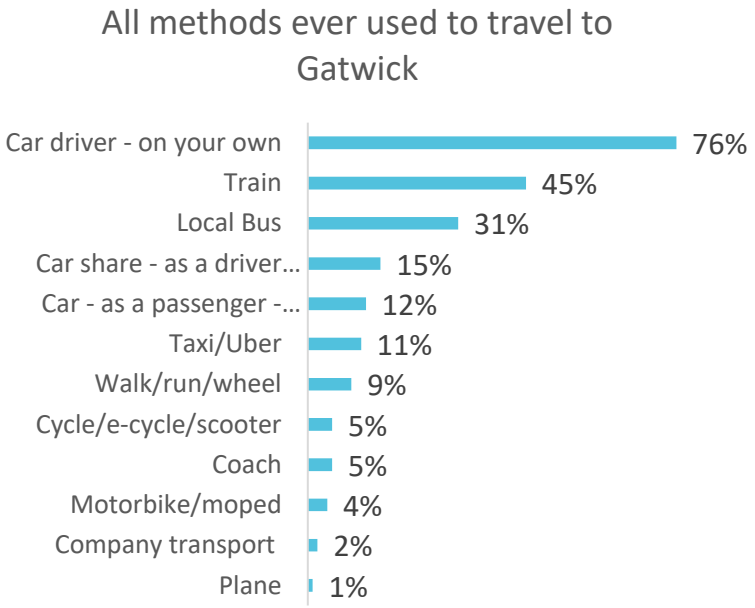
Employees travelling by local bus to Gatwick increased by 5% in 2023; the majority continue to travel by car (72%)

Mode of Transport to/from Work	2016 (n=5323)	2019 (n=1504)	2023 (n=2814)	% Change 2023 vs. 2019
Car driver – on your own	52%	67%	67%	0%
Car share – as a driver or passenger with others that work at Gatwick	6%	7%	4%	-3%
Car – as a passenger – dropped off by someone not working at Gatwick	2%	1%	1%	0%
CAR: All those traveling by car	**61%**	**75%**	**72%**	**-3%**
Local Bus	-	5%	10%	+5%
Coach	-	1%	0%	-1%
Public Bus/ Coach	**16%**	**6%**	**10%**	**+4%**
Train	12%	15%	13%	-2%
Company Transport	6%	0%	0%	0%
Cycle/ e-cycle/ scooter	2%	2%	1%	-1%
Walk/ run/ wheel	1%	1%	1%	0%
Motorbike/ moped	1%	1%	1%	0%
Plane	1%	0%	0%	0%
Taxi/ Uber	1%	0%	0%	0%
Other	-	-	0%	-

Q16. What method of transport do you USUALLY use to travel to work at Gatwick?

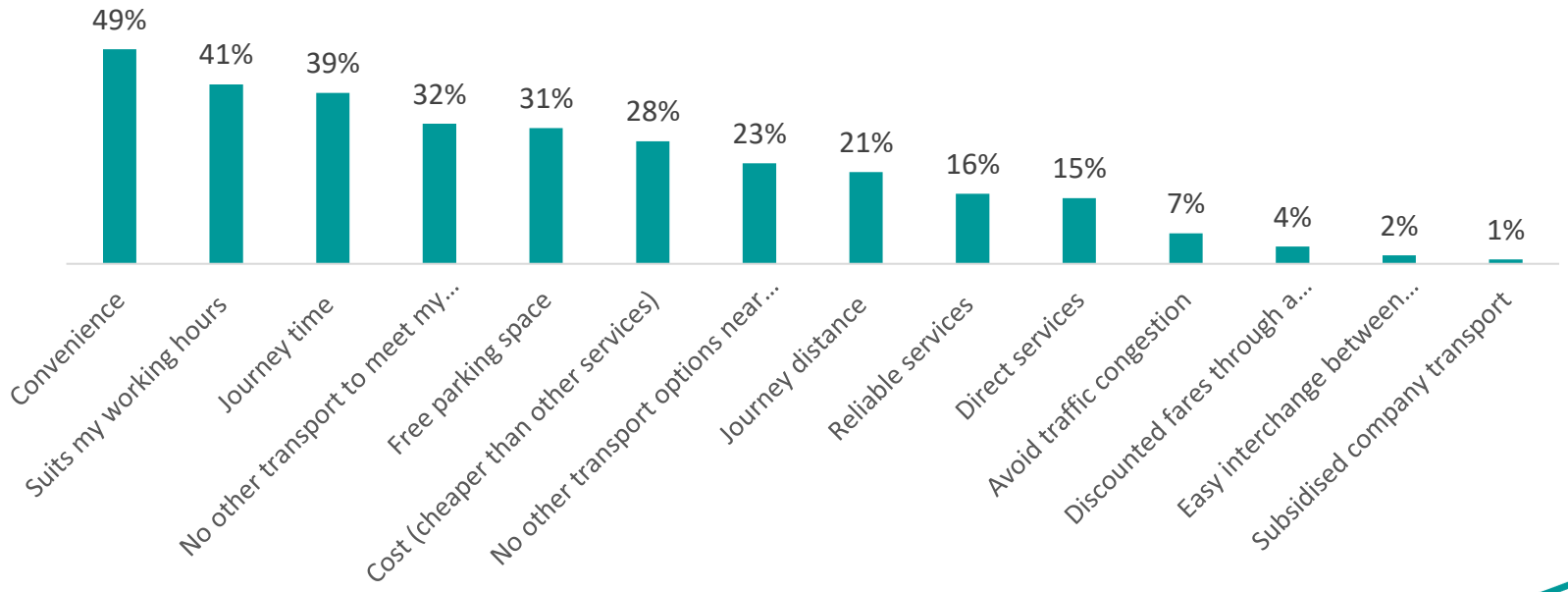
Base: All respondents (n=2814)

Mode of Transport – Ever Used



- 86% of staff report ever having travelled to Gatwick via car (76% of these on their own).
- Results suggest there is therefore a substantial proportion of staff who could use public transport more regularly.

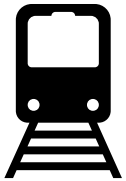
Reasons for Travel – usual mode of transport (all modes)



*This question allowed multiple responses, so answers add up to more than 100%

Reasons For Mode Choice

- Convenience
- Suits my working hours
- Journey time
- Free parking space (40%)
- No other transport options

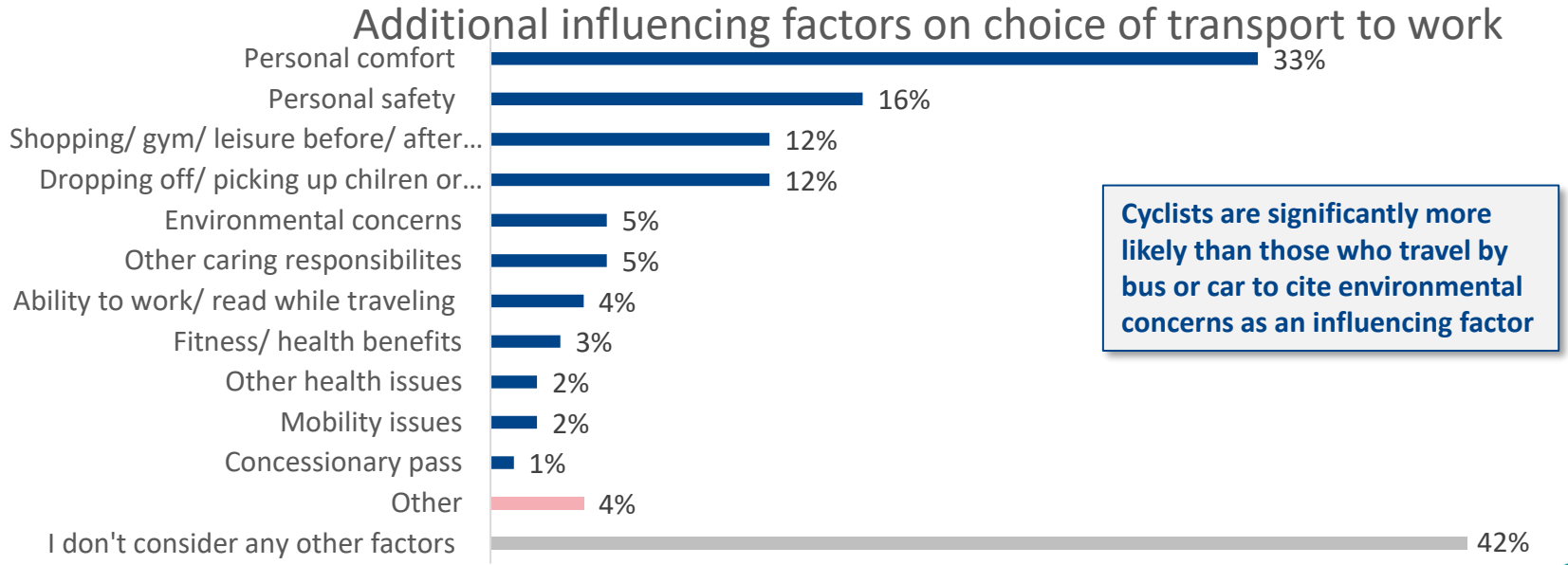


- Journey time (37%)
- Convenience (33%)
- No other transport options (32%)
- Direct services (29%)
- Avoid traffic congestion (25%)

- Convenience
- Cost (cheaper than other services)
- Direct services
- No other options
- Suits my hours

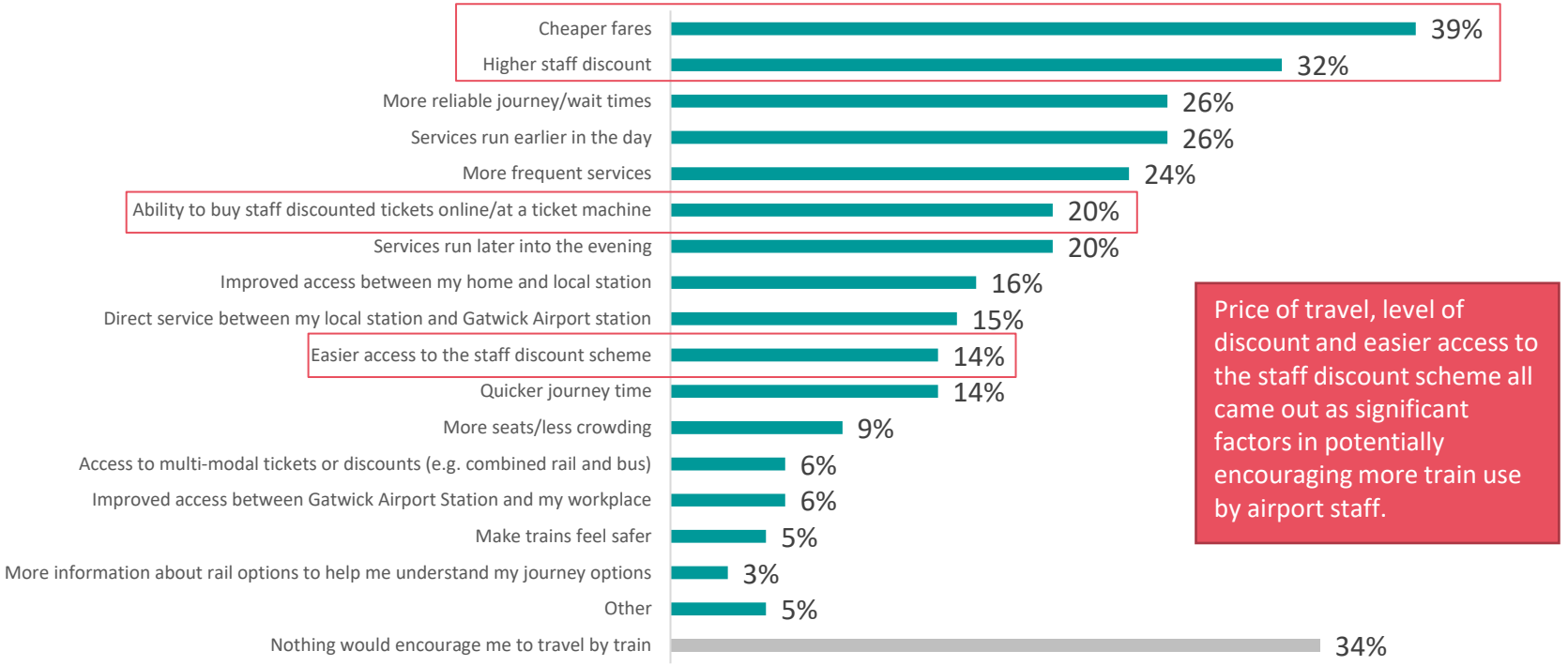
Just 19% of people travel by train due to cost – the lowest of all modes

Additional Factors



Cyclists are significantly more likely than those who travel by bus or car to cite environmental concerns as an influencing factor

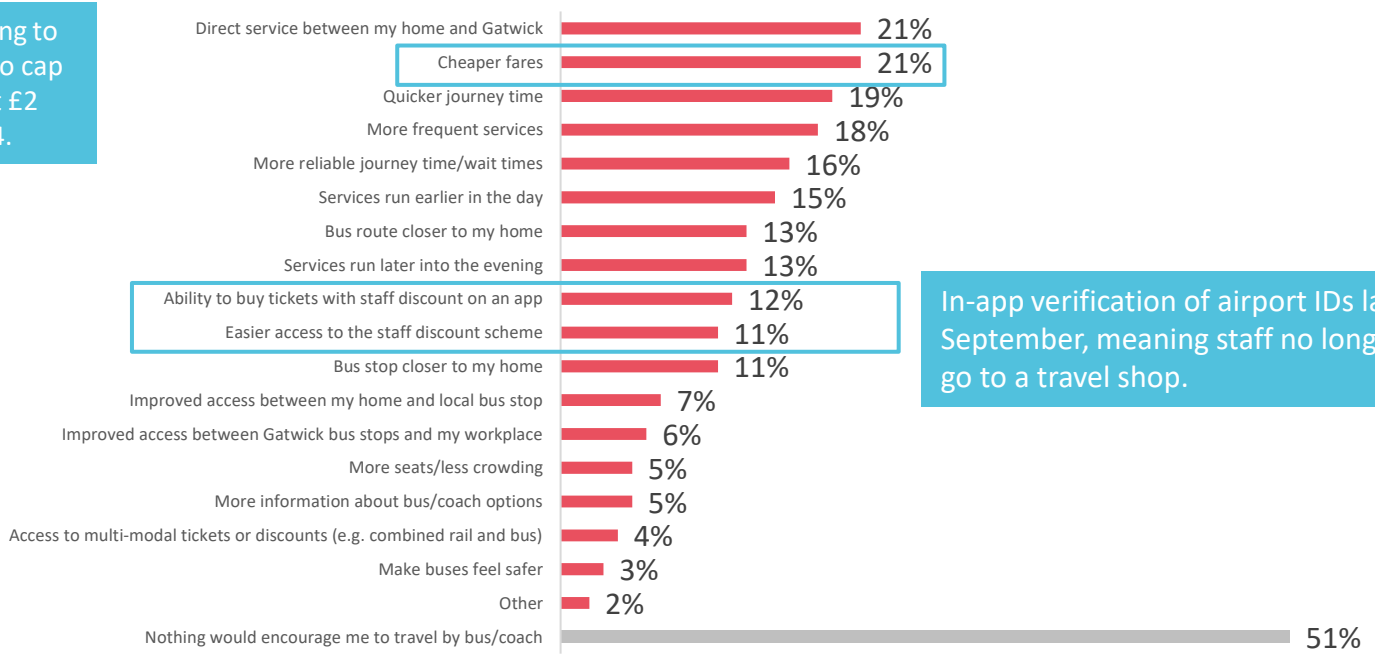
Price would be the primary factor to encourage more staff to travel by train



Price of travel, level of discount and easier access to the staff discount scheme all came out as significant factors in potentially encouraging more train use by airport staff.

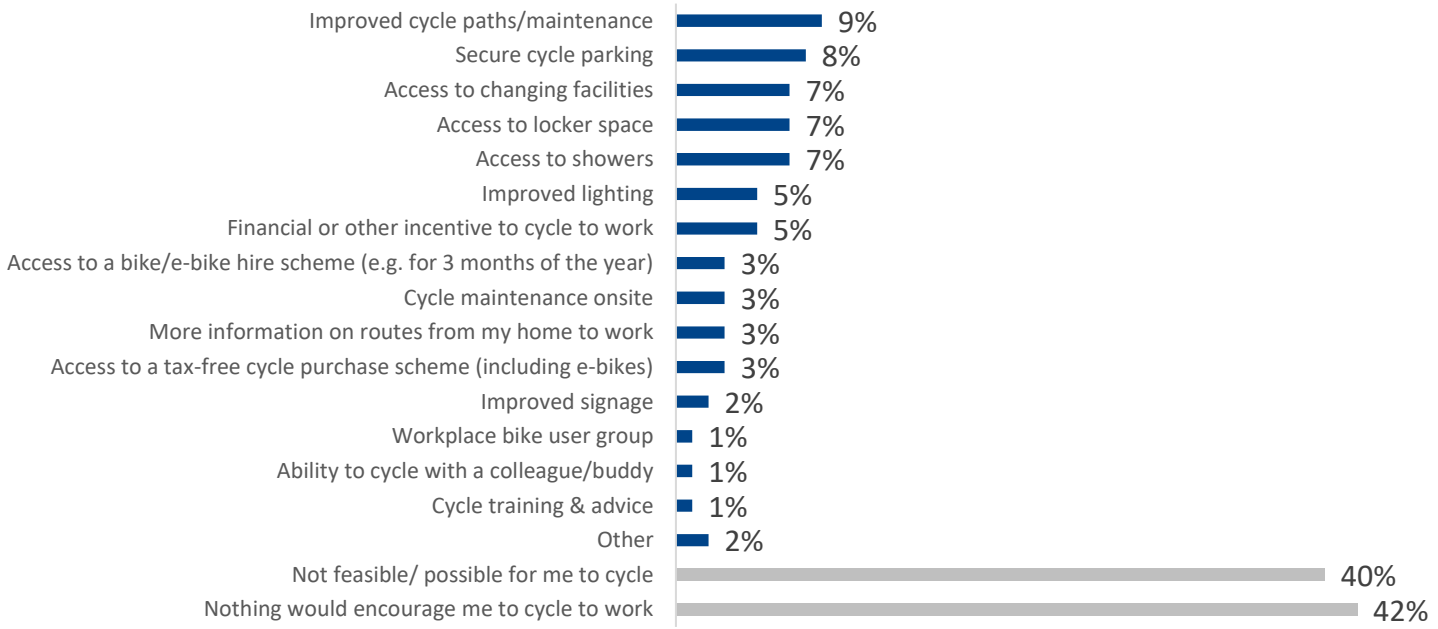
Direct services between home and work and cheaper fares would be the most likely factors to encourage more bus use

Government is continuing to support bus operators to cap prices for single fares at £2 until 31 December 2024.



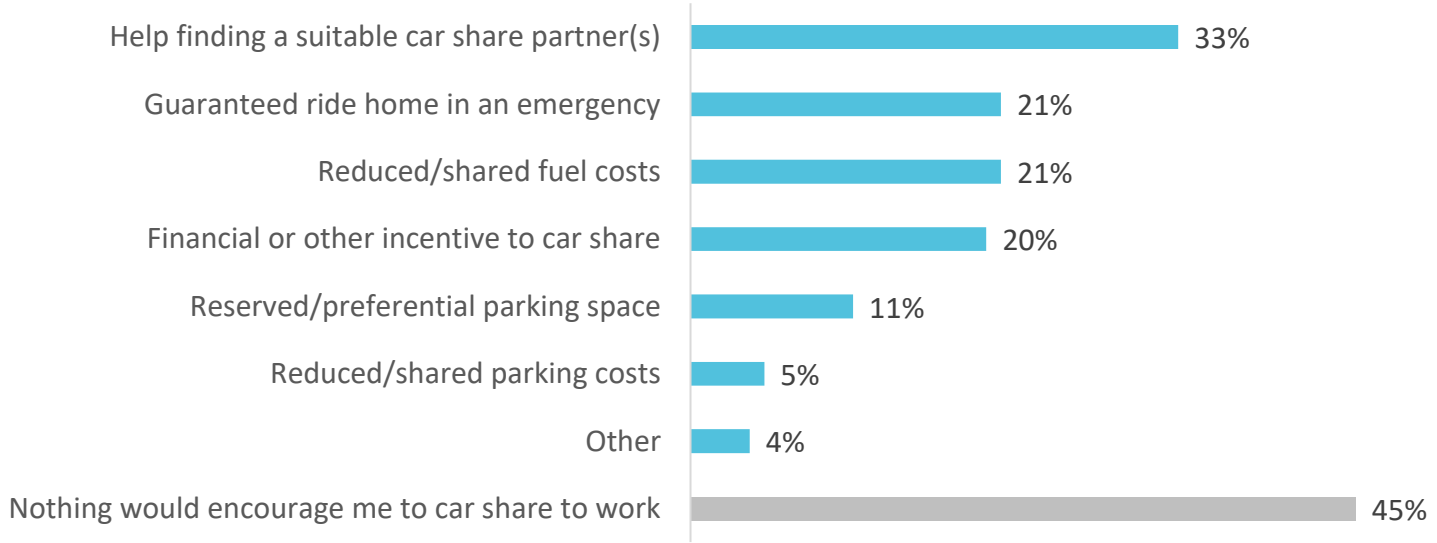
In-app verification of airport IDs launched in September, meaning staff no longer have to go to a travel shop.

Improved on-airport facilities could encourage more cycling

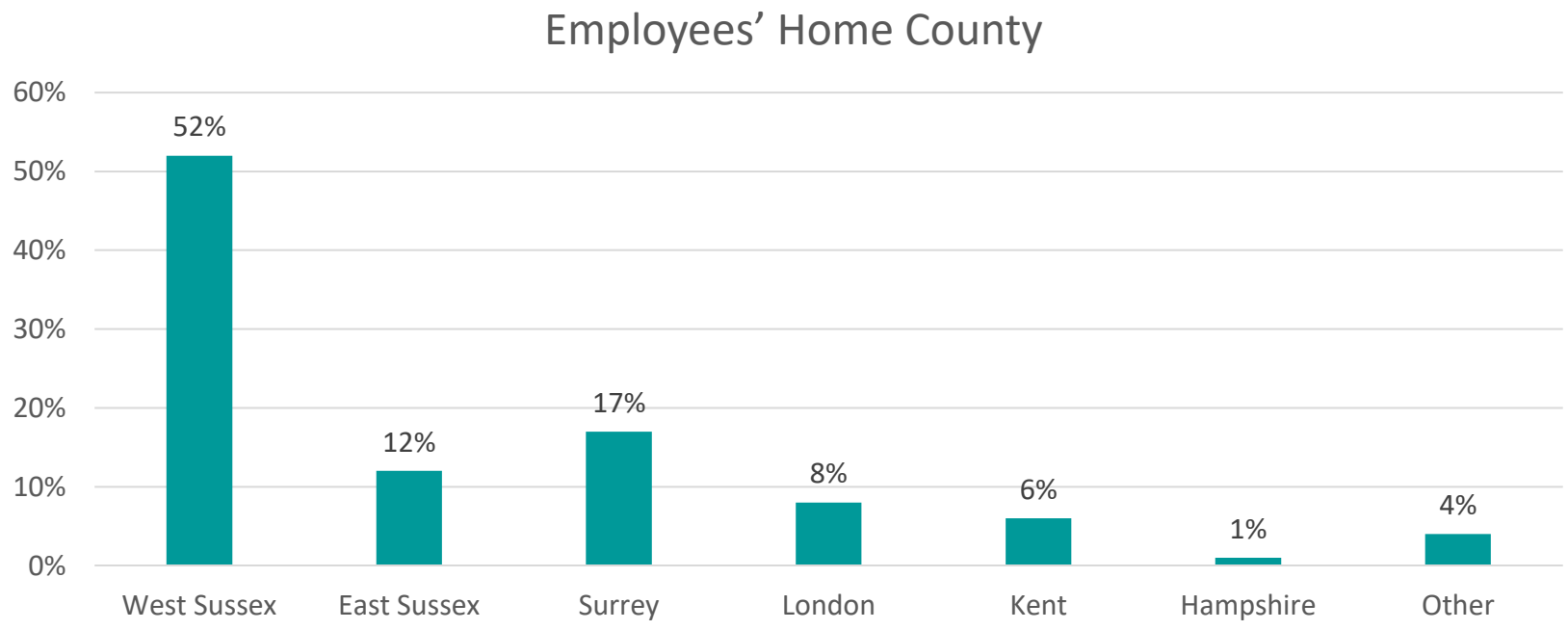


82% could not be encouraged to cycle to work or say it is unfeasible

Over half of airport staff might be encouraged to car share

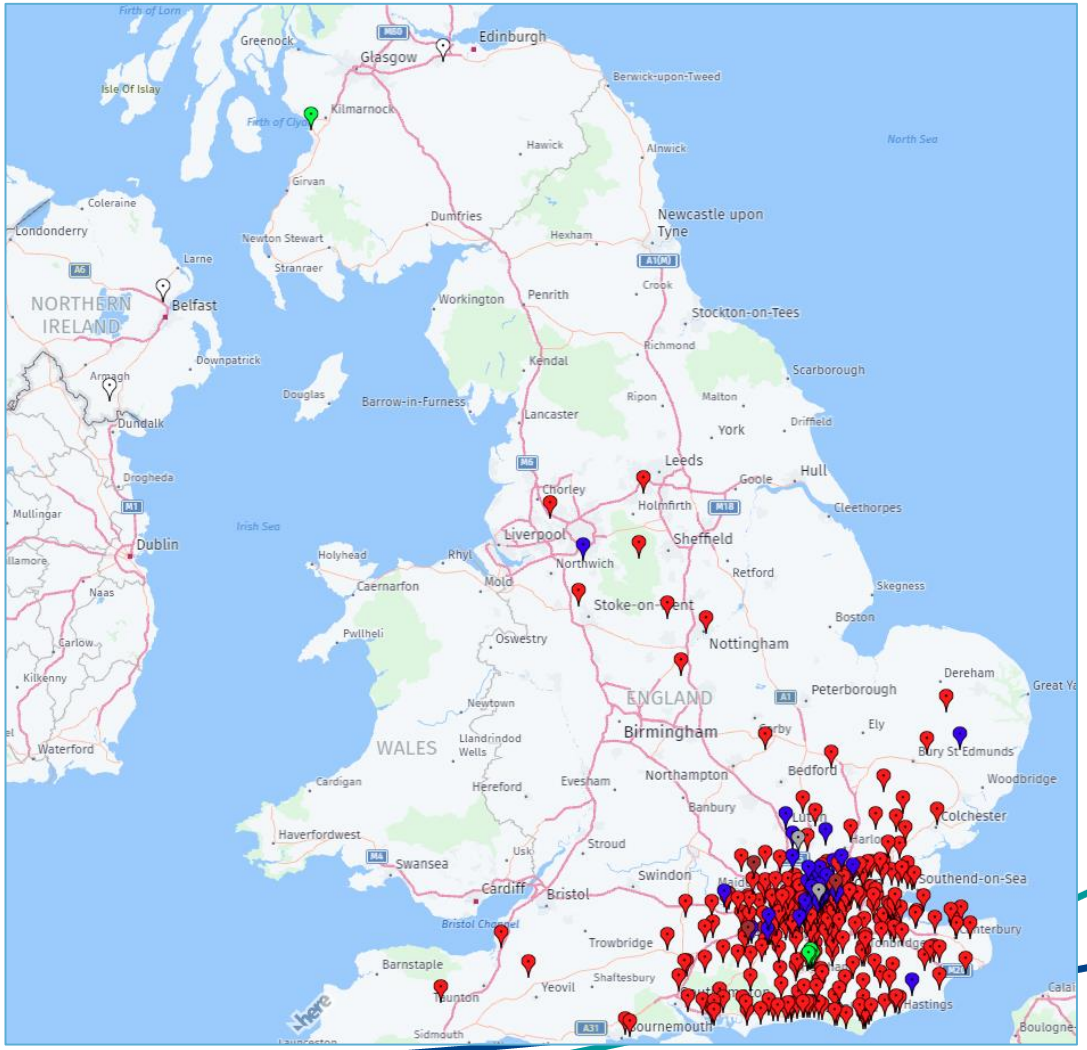


Workforce Catchment Area



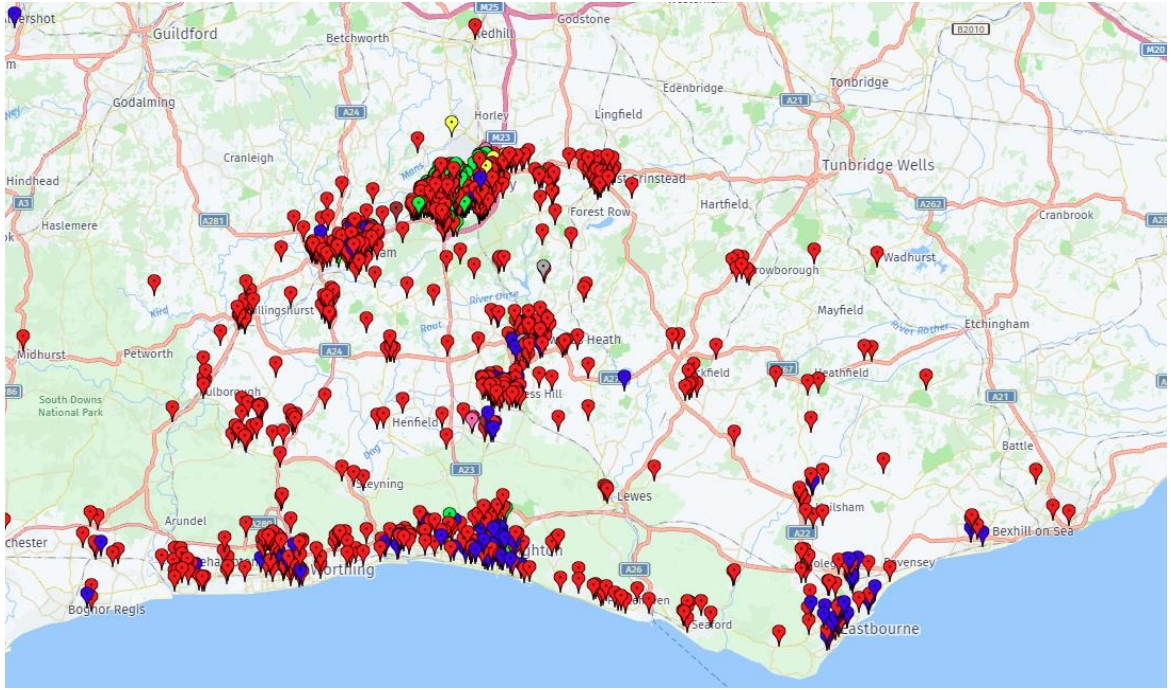
Travel Map

	Car
	Train
	Bus/ Coach
	Company Transport
	Taxi/ Uber
	Walk/ Wheel/ Run
	Cycle/ E-cycle/ Scooter
	Motorbike/ Moped
	Plane
	Other



LONDON GATWICK

Sussex Postcodes



	Car
	Train
	Bus/ Coach
	Company Transport
	Taxi/ Uber
	Walk/ Wheel/ Run
	Cycle/ E-cycle/ Scooter
	Motorbike/ Moped
	Plane
	Other

Awareness of Staff Discounts

79% of staff are aware of at least one of the staff travel schemes (bus, train, Ride to Work, coach).

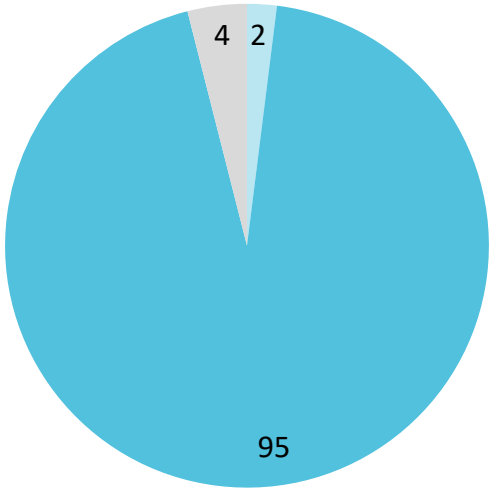
- 51% were **unaware** of the rail staff discount or discounts on Metrobus services
- 37% were aware but had never used it
- 11% have used it (7% in the past, 5% currently using it)

Awareness of the Ride to Work scheme was highest, while awareness of discounts on National Express were lowest (64% unaware).

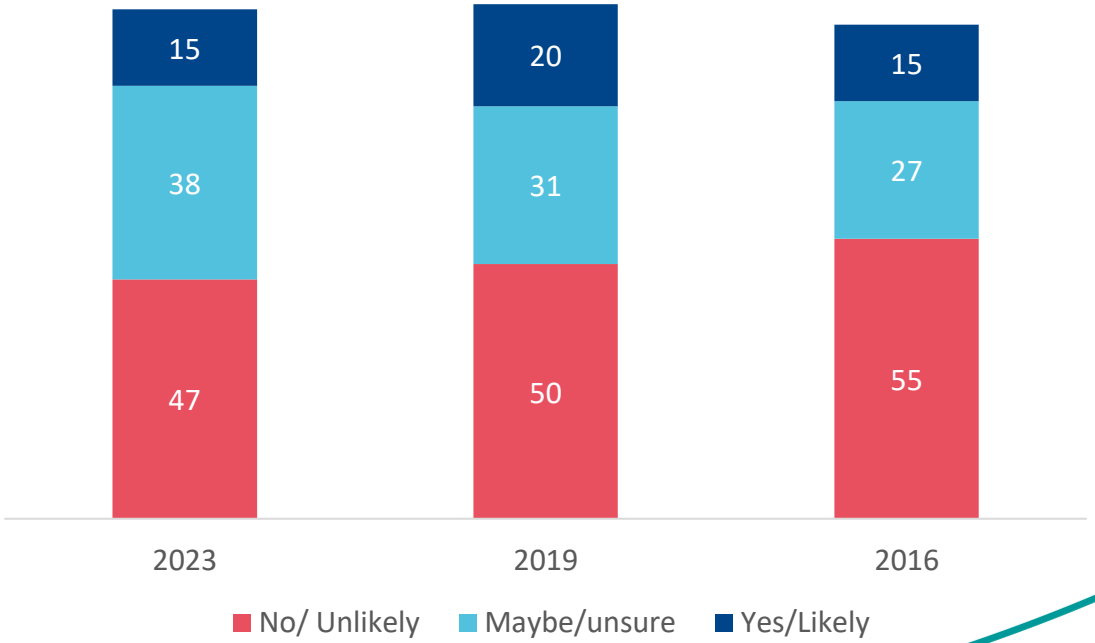
This suggests there are opportunities to raise awareness of all discount schemes and increase uptake.

Parking & EVs

Payment for parking (%)



Likelihood of changing vehicle to an EV in the future* (%)



Next Steps

- Undertake further analysis, particularly using staff postcode data
- Determine an Active Travel Target for airport staff journeys
- Once ready, share data with transport operators and other stakeholders to support service improvements
- Develop and communicate a new Staff Travel Plan and Active Travel Strategy, including new initiatives
- Reintroduce a staff car sharing scheme

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