

Airports Commission

Appraisal Framework Consultation

Consultation response from:
Northumberland Walk Residents' Association, [REDACTED]

Introduction

1. We welcome the Commission's assessments and the opportunity to provide comments on the appraisal Documents. We commend the commission on the extent of work undertaken and the overall quality of the assessments. However, there are some key shortcomings that must be addressed to ensure a comprehensive, fair and equal assessment of the options. Many of these relate to local environmental effects at Heathrow, but there are some general points we wish to make about the overall concept of airport expansion. A summary of the key points is provided as follows, with further detail provided in the subsequent sections.

- The surface access assessment has not considered the impact of local road traffic, whether this be freight, construction, direct or associated airport traffic. The effect of this traffic, especially heavy goods vehicles, in terms of noise or air pollution in Richings Park has been completely overlooked even though the area will be adversely affected.
- Neither the individual effect of ground noise nor the cumulative effect of aircraft and traffic noise on Richings Park has been considered; nor the effectiveness of any proposed mitigation measures even though ground noise is a significant problem today. There is no recognition of the fact that under the proposed operating modes Richings Park will not receive any respite from aircraft noise.
- The forecast of sustainable transport modes is unrealistic and should have included worse case scenarios to assess the effects.
- Associated airport development, such as hotels, has not been estimated and consequently the impacts on the local area have not been considered.
- The overall ability to meet carbon targets has not been considered; and the contribution of freight and staff transport has been excluded, even though they will make up a significant proportion of airport carbon emissions.
- As noted in the Commission's assessment, there are no waste management plans with either of the Heathrow schemes, particularly regarding the loss of the EfW facility at Lakeside.
- The major delivery risks have not been identified and require a probabilistic assessment to understand the potential range of cost outcomes, based on likely scenarios, to enable a comparison of the three schemes. Benchmarking to validate the cost estimates is also required
- A critical assessment has not been made of the scheme promoters' capability or the supply chain capability to deliver this major piece of infrastructure.

2. We urge the Commission to seek further assessment of these impacts so that a fair and thorough assessment of the options may be undertaken.

3. There has been much scaremongering by the pro-Heathrow lobby suggesting that Heathrow will close if it doesn't get a third runway; combined with stakeholder questionnaires that asked biased questions to elicit desired results, that has led to an apparent swing of support for Heathrow expansion. This is not representative of the true views of the local communities and we urge the Commission to look beyond this propaganda and recognise the true strength of feeling against further Heathrow expansion.

4. It is clear that the key impacts and costs of the Heathrow options far exceed those of Gatwick and we urge the Commission not to be persuaded by the Heathrow lobby, particularly on the hub issue which has not been demonstrated as needed. This is demonstrated by the key costs and facts as shown in the table below.

	HAL 3rd runway	HH extended runway	Gatwick 2nd runway
Cost	£18.6 billion	£13.5 billion	£9.3 billion
Transport links cost to taxpayer	£5.7 billion	£6.3 billion	£787 million
People affected by noise	550-680k	800-900k	22-35k
Homes demolished	783	242	168

Module 4 – Surface Access

5. We welcome the Commission's assessment of surface transport, but are disappointed that it has not considered the impact of traffic on Richings Park. In its Process Overview (page 2) the Commission recognises 'that surface access would impact upon many other modules within its appraisal framework, such as Place and Air Quality', but it has not assessed transport impact in either of these modules. We conclude that the entire transport impact on Richings Park (and other local areas) has been completely overlooked. We have laid out below our reasons for making this statement.

Freight traffic

6. We welcome the Commission's plan to conduct a 'freight impact assessment as part of a future phase of work', but are disappointed that freight transport needs, and their impacts have not been thoroughly assessed as part of its current surface access appraisal.

7. Whilst the 'impact of freight-related surface access movements may be relatively low compared with air passenger and employee movements' when considered in the context of arterial road traffic, HAL is forecasting a 55% growth in freight traffic to 2030 (HAL volume 1, section 3.2.1.6) and has cited Iver as a key growth area to support Heathrow logistics (HAL volume 1 Section 1 Figures 1.40 and 1.41). This will have a significant impact on local roads and local communities, and this needs to be considered so that potential mitigation measures and their effectiveness can be considered in the overall scheme appraisals and in making a comparative assessment of the options.

8. There is no recognition of this in the surface access assessment.

Local road network

9. In fact, Jacobs' overall assessment falls far short of a thorough impact analysis: it concentrates solely on rail and major road impacts, but does not consider any other surface access impacts, such as rat-running, motorway congestion and the general increase in airport traffic on the local roads in the surrounding area.

10. Richings Park and Iver already experiences a phenomenal increase in traffic when there is severe congestion on the M4/M25. This would only get worse under the proposals for Heathrow expansion and has not been considered in Jacobs' assessment. The HAL assessment itself has recognised this issue, stating: 'We would work with local authorities to identify where improvements might have wider benefits, such as to resolve existing bottlenecks and ease traffic flow, as well as improve journeys for local buses and cyclists' (HAL volume 1, Section 3.8.1.3) and yet there is no acknowledgement of this need in the Jacobs' report.
11. Construction on the arterial road network will increase rat-running in the local area and this has not been assessed even though Jacobs has recognised that 'During construction, significant delays are expected on routes with interventions that require lane closures' (module 4, section 5.8.2).
12. In addition to this, there has been no recognition of the increase in local road traffic as a result of the construction works. In fact, construction traffic has been completely overlooked in the surface access assessment.
13. Residents of the Heathrow villages (eg Sipson) already report the impacts of illegal parking in their villages from airport commuters/passengers who use the free bus service to escape airport parking charges. This will simply spread further afield to places like Richings Park, which has a mainline railway station (Iver) that will connect to Heathrow airport, and where there is no parking capacity even for local commuters.
14. The Jacobs' report says 'What is not clear however is the amount of usage there would be of the surface roads around the airport' (module 4, section 5.6.4) and yet no effort has been made to understand this even at the qualitative level, although Jacobs recognises that further assessment is required to understand 'the extent to which road users change their route to avoid congested sections of the road network, and the associated knock-on impacts; and the effect of forecast demand on junction performance and the resulting congestion impacts, both on strategic roads and the network in the vicinity of the airport (module 4, section 5.1.4).
15. The examples provided above, and other conceivable scenarios, should be tested and assessed to enable a thorough assessment of the impacts to be understood and ensure that the effectiveness of any potential mitigation measures are evaluated when making a comparative assessment of the options.
16. Furthermore, we note in the HH submission that 'The Mayor's Transport Strategy, shows London Underground forecast crowding in 2031. The Piccadilly Line from Heathrow into central London is shown to be in the second highest category of crowding, and the National Rail Forecast indicates high levels of crowding between Ealing Broadway and Paddington, however east of Paddington, Crossrail has capacity available' (HH section 3.3.4). Neither this, nor other challenging forecasts, have been taken into consideration in the Jacobs' assessment and as assessment made of their possible outcomes.

Associated airport traffic

17. The Jacobs's surface access assessment takes a very narrow view – HAL has recognised that 'a growing airport operation will require more office space for airlines, airport operations, and a host of support services...eg Heathrow West will need hotels to support an annual passenger throughput of 70 million' (HAL volume 1, Section 3.9.1.5) which would be located in the surrounding areas and would have their own surface access needs and associated impacts.

18. The basis of the Heathrow scheme is to promote hub capacity, and HAL has stated that ‘unlike many point-to-point airports, long-haul network airlines require significant commercial facilities at a hub’. Critical to this are large-scale air cargo operations. Increasingly around the world, hubs are seeing the development of ‘airport cities’ with hotels, convention centres, offices and other commercial developments near to the runways’ (HAL volume 1, section 3.1.1.2). If this is a key requirement of hub capacity, then the impact of all this additional development on surface transport needs to be considered to make a fair and comparative assessment with the Gatwick scheme.

19. None of this has been considered in the Jacobs’ assessment; instead it focusses solely on traffic immediately associated with the airport itself.

Sustainable transport modes

20. The assessment proposes forecasts of sustainable transport use, but has not examined a worst case scenario to understand the possible consequences if these forecasts were not achieved and the likely impact this would have on the local area. Instead, the forecasts of the number of people who will use sustainable transport modes, such as walking, cycling and public transport has been faithfully and blindly accepted. It is questionable whether these figures are realistically achievable recognising that the first 30% of a target population will be easy to win over to sustainable transport schemes through incentives (or penalties) whilst the residual 70% will adamantly refuse to give up using their cars. This is a pattern of behaviour we see every day in other scenarios, such as access to town centre shopping districts.

21. For example, HAL’s submission shows that staff currently accounts for a third of its transport movements and they expect to be able to manage this down to about 25% by 2030 – the Jacob’s report assumes that this will be ‘likely’ by encouraging car share and imposing stricter parking measures, but its likelihood has not even been qualitatively examined. Similar lame statements, such as ‘Providing support to passengers by advising on the most appropriate surface access mode should increase awareness and further support the shift to more sustainable modes of transport’ are also made in other parts of the document, which suggests that even Jacob’s are finding it hard to believe this is credible.

22. At the very least, we would expect to see scenario testing using high and low forecasts of staff/passenger use of sustainable transport modes, and the impacts of these assessed on the local and arterial road networks, and the rail network. For example, in module 4, section 5.5.2, the Jacob’s report concludes that ‘Whilst the airport does contribute some traffic, the impact of increasing from 2 to 3 runways is only a minor cause, and in many cases the actual flows are similar to those from the airport in 2012; for this reason there is not a compelling case for the airport to be responsible for improvements to the network in these areas’, but this might not be the case if the transport sustainability forecast were not achieved.

23. Without this worst case impact assessment, the Jacob’s analysis falls far short of a comprehensive impact assessment.

Module 5 – Noise: local assessment

24. We welcome the Government's study into noise in the vicinity of Heathrow airport, but are extremely disappointed that the study area (module 5, figures 4.1 and 5.1) did not include Richings Park and Iwer, which are areas where there are constant reports of significant noise from the airport – specifically ground noise. Whilst we recognise that there are published contours for airborne noise, there are none for ground noise and hence, there can be no certainty that the study area covers the entire population impacted by this airport noise. Figure 4.137 draws an approximate area around Heathrow to show the noise impact zone, but its derivation has not been demonstrated (we note also that there is no equivalent figure for the extended runway scheme). We would expect the Airports Commission to base its decision-making on more robust data.

25. By HAL's own admission, the position on ground noise is not well understood, particularly in Richings Park and the local community is currently assisting HAL to try and understand this position better by providing noise reports and also through an on-site noise monitor. It would be sensible to better understand the results from this survey and to undertake specific studies on this subject before drawing conclusions on the ground noise position in the local area, both with and without airport expansion.

26. Neither of the Heathrow proposals have taken into consideration any ground noise mitigation for Richings Park and the risk for local residents is that if the ground noise effects are understated, then this significant noise impact will never be mitigated.

27. In HAL's submission, they have proposed an extended noise wall but said that this will only have an effect on those communities immediately adjacent to the airport, eg Sipson and not Richings Park. Other schemes, such as fixed electrical power units will have minimal effect, because it is the noise of the aircraft engines preparing for take-off that causes the ground noise impact in Richings Park.

28. Also, whilst table 4.99 shows an overall reduction in the population exposed to ground noise, there will be an increase in exposure for populations to the north-west. As neither of the Heathrow schemes have proposed any ground noise mitigation for these areas, they have not demonstrated that they are able to mitigate the effects.

29. It is extremely disappointing that the Airports Commission talks only in terms of numbers of people affected and concludes that fewer people will be affected by ground noise with the proposed schemes, rather than seeking to understand the impact that this noise increase will have on Richings Park (and other local areas) and how this might be mitigated. There has been no consideration for mitigating noise impact in either of these schemes nor in the Airports Commission assessment.

30. Whilst we acknowledge the importance of reducing the number of people affected, there should be equal emphasis on mitigating the impacts on those communities who will suffer an increase in noise, and the cost of these measures taken into account. For ground noise there are options demonstrated at other airports, such as Schiphol, where they have developed noise attenuation bunds to mitigate the effects.

Noise figures

31. We welcome the figures which show what residents have always said that there will be an increase in noise impact on Richings Park, however, they all appear to be for airborne noise and none for ground noise. Why have the ground noise contours been excluded? Does this suggest that ground noise is not being seriously assessed by the Airports Commission?

Cumulative noise impacts

32. Whilst we recognise the complexity of undertaking an assessment on this scale, we are disappointed that the noise impacts have been assessed individually and not cumulatively. Residents in Richings Park are suffering the combined impacts from aircraft noise (ground and airborne) and freight traffic. Given that an expanded Heathrow will give rise to an increase in noise from all of these sources, then to ensure a thorough and robust assessment is undertaken, the cumulative noise impacts should be considered and contours developed for this.

Respite

33. Whilst we welcome the assessment of respite, the Government should also consider the fact that there will be no respite for residents living adjacent to the airport and not directly under the flight path, but who do experience the cumulative effects of ground and airborne noise. The respite schemes do not take this into consideration and hence, there are no proposals to alleviate the deleterious effects to Richings park in either of the Heathrow submissions. Both of these schemes will mean that there will always be aircraft departing on the northern runways, whereas with current operations there are periods of respite when aircraft departs from the southern runway – this make a significant difference in noise impact in the local area and hence, the quality of life for local residents. This point should be taken into consideration in the Airports Commission assessment.

Module 6 – Air Quality

34. We welcome the Commission's air quality assessment, but are disappointed that heavy duty vehicles have been excluded from the Jacobs' study (reference Air Quality: Baseline, table 2.5). We are also disappointed that construction related emissions have not been assessed, with Jacobs' stating that there is 'insufficient information exists to estimate emissions from construction vehicles' (Section 2.4). No attempt has been made to quantify the potential air quality emissions and their impacts from either of these sources on the local area. As referenced in other parts of this consultation response, Richings Park is already experiencing significant impacts from heavy goods vehicles. This is likely to worsen if Heathrow were expanded – both during construction and operations. No study work has been conducted to understand the effects of this traffic on Richings Park and this includes air quality assessment.

35. The Jacobs' report has noted that 'mitigation of road traffic emissions may be required along Bath Road, A4 and the M4, Hillingdon due to exceeding air quality limits forecast' (Executive Summary) but if the total impact of heavy goods vehicles were considered in Richings Park, as laid out in this document, then other local mitigation measures might also be needed which have not been addressed as part of the Commission's overall assessment.

36. It is noted that the monetisation values for NO_x and particulates at Gatwick (£76.8m and £92.4m) are significantly less than the Heathrow schemes (HAL 121.2m and £373.1m, HH 107.9m and £341.5m). Even if it were reasonable to monetise the value of human health, it is clearly evident that the impacts at Heathrow are unacceptable at an economic level.

Module 8 – Carbon

Carbon targets

37. We welcome the Commission's assessment of carbon and its approach to include emissions from both air and surface transport. However, we would expect to see the overall assessment in the Jacobs' report presented in the context of the ability to achieve carbon reduction targets. Whilst we recognise the merit of presenting carbon emissions in terms of monetary value, so that a comparison of the options can be made, this alone does not provide context. A far better approach would have been to present the results in terms of the targets that have to be met and what percentage this represents in terms of other airports and other sectors, along with a commentary on whether the targets are realistically achievable.

38. Similarly, whilst we recognise that departure and arrival route impacts are probably immaterial in making an assessment between the options, by not assessing the associated carbon emissions an overall picture of the carbon impact from airport expansion cannot be made.

39. It is not clear in the Jacobs' document why the impact assessment is only based on 'departing flights' (section 3.1, 4.1, 5.1) when the methodology (section 2.1) states that total aircraft emissions from all ATMs have been estimated (and appears to contradict tables 3.1, 4.1 and 5.1 which show total ATMs). As explained above, whilst this may be sufficient for comparing options, it does not allow for an estimate of total carbon emissions from airport expansion.

40. The ability to meet carbon targets whilst allowing airport expansion has not been evaluated and recognition not given to the need for other sectors to compensate for aviation growth, and whether this is achievable. Therefore, uncertainty remains over whether carbon targets can actually be met. This is a significant shortcoming in the appraisal report.

Freight and staff transport

41. We are also disappointed that carbon emissions from freight and staff transport have been excluded from the assessment (Carbon: Baseline section 2.3.4) especially given that HAL estimates staff travel alone to comprise one third of all traffic accessing Heathrow airport. As no assessment of freight transport has been provided in this module or the surface access module it is difficult to comment on this potential impact, but from purely qualitative terms it must represent a significant percentage of the overall carbon emissions. It is perplexing that no attempt has been made to quantify these emissions even in percentage terms, especially given the detailed analysis that has been conducted on other parts of the emissions estimate.

Module 10 – Place

Waste management

42. We welcome Jacobs' assessment of waste management, specifically construction waste that is so often overlooked but gives rise to a significant amount of waste. We commend the Commission for recognising the shortcomings in both the Heathrow submissions, neither of which have a realistic plan for waste management; in contrast, the Gatwick scheme has been well thought through with regard to managing both construction and operational waste. Clearly the Commission will not be able to make a fair and equal comparison of the options without such information, but it is unclear what the plan is for gathering and assessing this and hence a key uncertainty remains over the Heathrow proposals.

43. We welcome Jacobs' assessment of the loss of the EfW facility at Lakeside and the recognition that 'If Lakeside is unavailable, there could be significant strain on regional capacity and therefore resilience indicated is not guaranteed or substantiated' (Place Assessment Table 5.14). We also note the statement: 'Both SITA and Eunomia highlight the likelihood that by 2025 there will be a capacity deficit of residual waste treatment technologies, and this should be recognised when considering long-term airport capacity increase' (Waste Baseline, section 5.3). This is clearly a significant issue for waste management in the region that cannot be understated and Jacobs has noted that 're-provision of the EfW facility could potentially impact on local waste capacity, with a number of challenges in moving the location of such capacity to an alternative location'. It is not clear, however, from this assessment how the Commission can make a fair and comparable assessment of these options whilst uncertainty remains around this major impact. As well as the uncertainty around whether it would be possible to relocate such a facility, the costs have not been taken into consideration.

Construction

44. We note that in the Place Assessment, sections 3.3 and 3.4 Jacobs refers to 'temporary construction works within the boundary of the site' but neither of the Heathrow promoters has given details of where their temporary construction works would be located, how big they would be and indeed, whether there is a suitable location within the boundary of the site for the construction compound, materials storage, etc. Therefore, we cannot see how a realistic assessment of these impacts can have been made and this again remains as a major uncertainty over the Heathrow proposals. It could also add significantly to the cost.

Contaminated land

45. We welcome the Jacobs' assessment of contaminated land and the associated health impacts to workers (Place Assessment, Table 5.22) but are disappointed that there is no recognition of the fact that the landfill sites will cause construction difficulty. In HAL's submission they note that 'there is considerable variability in the shallower depth as extensive extraction of sand and gravels has taken place across areas of the site which have subsequently been backfilled with landfilled waste from household and commercial/industrial sources. These areas of landfill are significant for the engineering of aircraft pavements' (HAL volume 1, section 6.8.3.1). This being the case, then the contaminated soil will have to be removed and replaced with infill, which means that there will be an increased need for imported raw materials and a significant amount of contaminated waste to be disposed of, as well as a substantial increase in cost. There is no provision for this in the Heathrow submissions, and there is no assessment of the effects in the Jacobs' analysis.

46. In addition, the HAL submission states that where there is soft ground, this may need to be removed but cite this as a 'minor factor' (HAL volume 1, section 6.8.3.3). In engineering terms this may be a minor factor, but in terms of disposal a location will be required for this soft ground and this has not been identified nor have Jacobs been able to make an assessment of this. This would add significantly to the cost.

Module 12 – Community Impact

47. We welcome the community impact assessment, but are disappointed that in many cases the Commission has relied upon the assessments made by the scheme promoters rather than making an independent assessment themselves, based upon the information provided. In these areas we would have expected some commentary from the Commission to provide an independent and unbiased view. For example in section 3.13 “HHL considers that the noise implications at Pippins school are ‘not severe enough to prevent school from operating’, and that it is ‘reasonably likely’ that the school could continue”. This statement is given without any justification or independent assessment on whether it is correct.

48. Sections 3.3 and 4.2 of the Community Impact Assessment notes that: ‘This immediate community plus surrounding areas of West and South West London, Berkshire, Buckinghamshire, Surrey and Oxfordshire will also be impacted in terms of noise, air quality, jobs and quality of life. These impacts are picked up in other assessments’ but there has been little acknowledgement in any of the assessments of the impact on Richings Park.

49. Sections 3.23 4.25 the Commission acknowledges that there will be increased congestion on local roads, but again there is no assessment of the potential traffic congestion and its impact in the local areas, particularly in Richings Park, in the surface access assessment.

50. The maps in appendix 2 and 3 are completely unreadable at such a small scale and poor resolution and therefore, we are unable to pass comment on these.

Module 13 – Cost and commercial viability

51. We welcome the Commission’s assessment of cost and its inclusion of allowances for risk and optimism bias based on the Government’s Green Book. We also welcome the independent cost estimating exercise undertaken by Jacobs and outlined in Module 13 Cost and Commercial Viability: Cost and Revenue Identification and we endorse the Commission’s approach.

52. However, we would expect in this ‘concept select’ phase of the project lifecycle for the scheme promoters to have undertaken a quantitative risk analysis (QRA) to derive a probabilistic range of outcomes around the cost estimate and schedule based on an estimate of risk and uncertainty. We refer to the HM Treasury guidance: *Early financial cost estimates of infrastructure programmes and projects and the treatment of uncertainty and risk*¹, which ‘supports better appraisal of the costs of infrastructure projects and programmes and more realistic estimation of contingency budgets’ through the application of quantified risk assessments in the early stages of the project life cycle.

53. At the very least, we would expect the Commission to make this a recommendation for further development work on these proposals in the interests of better understanding the risks and uncertainties, and the potential range of cost and schedule outcomes.

54. Also, given that Jacobs has undertaken a thorough cost comparison against industry expectations (section 2.2) then we would expect the Commission to recommend that the scheme promoters re-baseline their cost estimates to align with those provide by Jacobs, or to justify any potential deviations, so that moving forward there is consistency between the unit rates for the purposes of making a fair and comparative assessment of the options.

¹ <https://www.gov.uk/government/publications/green-book-supplementary-guidance-valuing-infrastructure-spend/early-financial-cost-estimates-of-infrastructure-programmes-and-projects-and-the-treatment-of-uncertainty-and-risk#the-nature-and-structure-of-early-cost-estimates>

55. Whilst we recognise that Jacobs has based its cost estimate on comparisons of unit rates within the industry, we would have expected some benchmarking to be undertaken against other similar developments of a comparative nature around the world. Without this benchmarking, the cost estimate can only ever be assured on the basis of individual unit rates and not on overall outturn costs taking account of the realisation of risk and uncertainty. In this case, the Commission should recommend that benchmarking be undertaken for further development of the cost estimate (and schedule).

Module 16 – Delivery

56. We welcome the Commission's delivery risk assessment, but whilst noting that this is not a comprehensive risk register, there are a number of key delivery risks that have been overlooked and which are essential for making a fair and comparative assessment of the options:

- Construction strategy – accelerated delivery schedule and the use of innovative techniques, which will bring their own risks and hence, could cause schedule delays and additional costs (HAL, volume 1, section 6.10.3).
- Market outlook – there is no understanding of the readiness and availability of the supply chain to respond to this major infrastructure project in either of the Heathrow submissions.
- Despite its capability claims at delivering major infrastructure projects, HAL has not undertaken a major airport redesign project, which is in a completely different league to that of terminal construction, control towers and baggage handling and this in itself presents a major risk.

57. Although the delivery module suggests that an assessment has been made of delivery capability, it only covers risk assessment and does not consider the capability of the scheme promoters to deliver the project. No assessment has been made of the robustness of the overall project timeline or project execution strategy. To this extent, we question whether there is sufficient project management competence on the Airports Commission expert advisory panel, as there is a lack of recognition in the framework of the need to assess the developer's capability to meet the business case promises.

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