Hammersmith & Fi	ulham Commission on Airport Expansion
	ommission Consultation on its Short-listed Options fo in the South-East of England
report by the Hammersmith	h & Fulham Commission on Airport Expansion
lear-final Draft, 31 December	r 2014

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1 Executive Summary

Introduction

The Airports Commission (AC) was set up in November 2012 to recommend necessary steps to maintain the UK's status as Europe's most important aviation hub. It has concluded that there will need to be at least one additional runway capacity in the South East of England by 2030 and has shortlisted three options:

- One new runway to the north west (NWR) of Heathrow's existing runways: the official proposal by Heathrow Airport Ltd (HAL)
- Extending Heathrow's northern runway to the west (ENR): a proposal by an independent group, Heathrow Hub (HH)
- One new runway at Gatwick

The AC has performed an initial assessment of these proposals and has invited responses to a series of questions by 3 February 2015. This is the last public consultation before the AC makes a recommendation to the government of the day in the summer of 2015.

Sir Howard Davies, the AC Chair, says in his introduction to the consultation document:

"It is particularly important for local residents and their representatives to understand more clearly what the proposals entail, and what their consequences might be for the local environment."

A group of Hammersmith & Fulham residents formed a local commission, the Hammersmith & Fulham Commission on Airport Expansion (HFCAE), to do just that. The Council provided support, under the aegis of the Community Safety, Environment and Residents' Services Policy and Accountability Committee (CSER PAC), with terms of reference and a secretariat comprised of two Council officers. Due to limitations of time and resource, our findings relate almost wholly to the two Heathrow proposals.

Our detailed report is structured round the AC's questions and arranged as follows:

- Executive Summary
- Detailed report
- Annex 1: Residents' Views
- Annex 2: HFCAE process

The HFCAE process

As a Commission we:

- Identified the main issues for residents should Heathrow expand
- Studied the AC documentation on these issues and met regularly to analyse the evidence as a group.
- Wrote, on 21 November 2014, to HAL and HH, HACAN, West London Friends of the Earth, West London Business, Transport for London, the Civil Aviation Authority and the London Chamber of Commerce & Industry, seeking specific information about local impacts. All of these organisations submitted written responses, half of them

attempting to address borough-specific impacts and half of them repeating more general material.

- Invited the organisations above to an oral hearing at the Town Hall on 10 December 2014. HAL and HH, HACAN, West London Friends of the Earth, West London Business and Transport for London accepted our invitation to answer questions from HFCAE at an open meeting.
- Invited further comments from residents directly, and also via some 250 residents' associations, civic societies and community groups.
- Attended a public consultation meeting held by the AC on 3 December.
- Reviewed the resultant evidence with HFCAE members writing detailed sections of the report.

We are satisfied that, in the short time available to consider a huge quantity of complex material, we have examined the issues as thoroughly as any group of citizens could. We wrote to the AC about the inadequate time allowed for consultation on 27 November 2014 – the response to question 8 on page 11 of this summary refers.

More details are at Annex 2.

Evidence

Resident responses

A large volume of feedback was received following the Council website article announcing the setting up of the HFCAE in early November 2014. Following a call for written evidence, submissions were made directly by residents and through residents' associations and amenity groups. Collectively, this gave us an indication of the salient issues for residents, which were: noise; safety; traffic and public transport congestion (referred to herein as "surface access"); air quality; carbon emissions; economic impacts; and overall quality of life. Further, a majority of respondents are against expansion at Heathrow.

Further details are at Annex 1.

Expert witnesses

Representatives of HAL and HH, HACAN, West London Friends of the Earth, West London Business, London Chamber of Commerce & industry and Transport for London sent in written submissions as requested. HAL, HACAN and TfL gave borough-specific answers to a greater or lesser degree while the others sent in more general material. With the exception of London Chamber of Commerce & Industry, these organisations also attended the hearing on 10 December and answered a range of detailed questions put to them by HFCAE commissioners on the two Heathrow expansion options.

AC Question 1: Conclusions drawn on the proposals

Noise

The AC acknowledges that noise is overwhelmingly important to people in determining their views on airport expansion. It is, indeed, the most important issue to Hammersmith & Fulham residents based on the feedback received from the call for written evidence. The AC's own assessment of the noise impacts of both proposals would be "significantly adverse". In their – we consider optimistic – view, this could be mitigated to "adverse" through various measures proposed by HAL and HH.

The chief determinant of noise experienced by people is the location of flight paths. However, as the AC and both the proposers admit, this information is not known. Nor will it be known when the AC makes its recommendation in summer 2015. Thereafter, extensive further consultation and deliberation across a myriad of interested bodies would need to be undertaken, including a complete recasting of flight paths across London in conjunction with the Civil Aviation Authority. For the moment, a range of assumptions has been made about where flight paths might be located, in order to allow noise assessments to be included as part of the AC's work.

We think that the consultation should not have been carried out until this level of detail was available, in order for a full assessment of the impact of the proposals to be carried out and published for comment. We note that the report by the All-Party Parliamentary Group on Heathrow and the Wider Economy, published on 18 December 2014, also expresses concerns about the "lack of transparency in Heathrow's proposals", describing the absence of flight path information as "undemocratic".

In the absence of well-substantiated evidence and firm proposals, we have to draw our own conclusions from what we do know. An additional or extended runway at Heathrow would lead to 700,000-740,000 annual arrivals/departures by 2050 compared to current capacity of 480,000. This would certainly mean additional flight paths over west London, potentially subjecting new communities to serious noise disturbance. It is likely at least one new flight path would be over Hammersmith and/or Shepherds Bush, which will contain more people than now owing to anticipated population growth. At the oral evidence hearing on 10 December, Heathrow Hub referred to "a constant flow of arrivals".

Examining the information published by the AC, we also find that:

- The noise assessments are for large geographic areas making assessing borough and community level impacts impossible.
- The level of uncertainty on aspects of the proposals such as fleet mix, runway use and operational modes mean that the forecast noise impacts could be very different from actual impacts.
- Expansion will either increase impacts for those already affected by Heathrow or create impacts for communities not currently affected.
- Issues of noise concentration or dispersal have not been aired but it is clear that, for H&F, this would mean trading the interests of one set of residents off against the interests of another. As a body of residents representative of all areas of the borough, we are not prepared to participate in this.
- Population increases could mean that more people in the borough may be affected by noise
- Health impacts of additional noise are significant since monetisation of extra heart attacks, hypertension and other issues such as annoyance, are calculated to cost a total of £25bn to mitigate.

In a bid to reduce proposed noise levels and/or numbers of people affected by noise, the proposers have suggested various measures, such as quieter aircraft and curved approaches to descent. If these are possible, then we would like to know why they are not being done now. Moreover, if expansion takes place, then it follows that the future benefit of a significantly quieter environment is snatched away even as it is presented to us. In the event that expansion at Heathrow is not recommended, we need to engage with HAL

to secure those benefits and guard against deterioration in other ways, such the possibility of mixed mode, abandonment of runway alternation and more night flights.

Overall, the AC considers that both expansion options for Heathrow will have 'significantly adverse' impacts in terms of noise issues, although with mitigation, there is the potential to reduce impacts closer to 'adverse'. The HFCAE does not consider that causing adverse impacts, which have health implications on large communities of local residents, is acceptable.

Safety

This is an important concern for residents, who are well aware that the London airports system is the busiest hub in the world, with around 1 million flights serving 135 million passengers a year. They are uneasy about proposals which will entail further congestion in the air above them; and are unlikely to have been reassured by the Secretary of State for Transport's recent comment that NATS did very well coping with the computer problem on 12 December 2014 considering London is "the busiest airspace in Europe". If either of the Heathrow expansion options proceed, this will add around another quarter of a million flights a year. In our view, making the airspace busier where it is most heavily concentrated and where aircraft are required to fly over such densely populated areas seems a surprising conclusion.

However the AC gave this issue little prominence. This appears to be because it is an aspect which will be worked through after a recommendation is made, as part of the processes referred to earlier. We understand that, if there are trade-offs to be made, safety will (understandably) trump other issues. However, this adds to the already large uncertainty about how much weight will be given to other issues and how they would be traded off against safety concerns. In particular, safety is critical in determining flight paths.

Surface access

On the evidence provided by the AC, the effects of expansion on Hammersmith & Fulham for road and public transport would be overwhelmingly negative.

Despite a wider offer of public transport to and from Heathrow by 2030, the Piccadilly Line will suffer severe overcrowding as it will continue to be heavily used by Heathrow passengers to and from Central London. The AC blames "background growth" (ie the forecast increase in London residents and commuters) for pressure on the Piccadilly Line and Crossrail: in fact, this growth is planned for by TfL, and HAL and HH effectively appropriate the planned upgrades to the rail and tube network to accommodate Heathrow expansion. To add to over-capacity, no allowance is made for luggage occupancy, already an acute problem which further reduces standing room on Heathrow-bound trains.

On the roads, the AC gives no assessment of the impact on inner west London, other than a general forecast of 1500 extra cars in the morning peak hour going into Heathrow along the M4 from central London. The promoters asserted at the H&F oral hearing that there would be "no" or "negligible" extra traffic along the A4 corridor through Hammersmith. Neither the promoters' nor the AC's claims have apparently been subject to in-depth modelling, and with the forecast increase in passenger numbers to 132-149 million by 2050 from today's 72.3 million, common sense indicates car traffic will increase. An increase in "kiss and fly" car journeys from central London is acknowledged. The likely outcome is acute worsening congestion on the A4 through Hammersmith and severe pressure on local junctions including the Hammersmith gyratory, impacting on local

residents, commuters and business traffic, and on air quality. There is a heavy reliance by the promoters on a dramatic shift from road to public transport, reducing from 59% in 2013 to 45% in 2030 – but no assurance that this will be achieved.

For both Underground transport and road traffic, the AC fails to conduct modelling up to the period of full expansion in 2050, instead stopping at 2030. There is therefore no "worst case scenario", which is a major omission in assessing effects on H&F residents and workers.

There is an overall assumption on the part of the promoters that other authorities (Department for Transport, local councils, Transport for London) will pick up the surface transport issues and that, consequently, they are not a high priority for the promoters.

Air quality

Detailed air quality modelling has not been carried out by the proposers or the Commission. The AC acknowledges that it would have been preferable to carry out air quality dispersion modelling to assess the risks of exceedances of national air quality standards prior to consultation. H&F is outside the AC's high level study area for air quality and detailed monitoring has not been carried out anywhere.

This is another issue which is important for residents but on which we have almost no information. Given the traffic congestion in the borough, we certainly have our share of the 4,247 deaths attributable to small particles from vehicle exhausts across Greater London. The whole of H&F is an Air Quality Management Area and already exceeds national air quality standards in many areas.

It is hard to avoid the conclusion that air pollution would increase with Heathrow expansion. On examining such information as is available in the AC documentation, we note that there is a low to likely risk of exceeding annual NO₂ European Union Limit Values on the A4 Bath Road and M4 in Hillingdon. These roads lead directly into and out of the A4 Great West Road running through the borough, adjoining which there are six schools and their playgrounds. We noted that on 8 December 2014 the Commons Environmental Audit select committee recommended that schools, hospitals and care homes should not be built near main roads to reduce the tens of thousands of deaths being caused by the "invisible killer" of air pollution.

Road traffic to and from Heathrow produce the main air quality issues for the borough, although Transport for London challenge the proposers' claims that pollution from aircraft is not an issue. We agree with this but have not been able to take this further in the time available.

The proposers do in fact acknowledge that air quality is a problem but rest their claims that expansion will not make it any worse on the assumptions about the modal shift to public transport and its capacity to cope, which were discussed in the Surface Access section above. We do not find these claims credible. Without mitigation measures, the AC considers that both Heathrow expansion proposals would have 'significantly adverse' impacts on air quality. Although mitigation measures could be introduced to reduce impacts, the AC notes that substantial and forceful measures may be required to reduce impacts, and even then, they would still be classified as 'adverse'.

Carbon emissions

On carbon emissions, the AC's assessment is that the UK could build one more runway

without breaching its legal commitments on condition that no other airport could expand significantly. If it is decided to build an extra runway at Gatwick, this might in theory produce the certainty which Heathrow has kept promising residents about no future expansion and which H&F residents have never been able to rely on. However, the AC has also said that it could not rule out a fourth runway when matters are assessed further into the century.

And it would be difficult to rely on any future commitment in this area: at the ticketed AC event on 3 December, to which no representative of the borough was invited, the CEO of Heathrow retracted HAL's promise not to push for a third runway, saying that it "should never have been made".

The AC considers that the carbon impact of Heathrow expansion is 'adverse'. However, it is noted that the only reason that it is not classified as 'highly adverse' is because expanding Heathrow as opposed to other airports shows a comparative saving in terms of carbon emissions. This is because Heathrow has a higher public transport modal share than many other airports. If it expands, some passengers are assumed to use Heathrow rather than other airports where their carbon emissions from surface transport would be higher. We contend that, if public transport access to other airports actually improved and if travellers to Heathrow made more journeys to/from the airport by car than expected, then the carbon impacts could well be higher than stated.

Quality of life

The AC commissioned a study of quality of life for those living near airports, which said:

- "We can be confident that aircraft noise is bad for subjective well-being."
- "Those living in noise contours but not close enough to airports to benefit from the
 potential advantages, for example in terms of access to employment opportunities, will
 be likely to suffer negative effects on their subjective well-being due to noise."

The AC mentioned the benefits of connectivity for individuals taking more flights for leisure purposes. Hammersmith & Fulham is ninth in Heathrow's frequent fliers list. However many residents use other London airports, sometimes for cost reasons, which is unsurprising since average incomes of people who make international flights are £77,249 for businesses travellers and £53,566 for leisure travellers (CAA Passenger Survey Report 2013). In this regard, we were interested to note the proposers' comments that air fares might need to increase.

The study recommended putting monetary values on various aspects to build into the sustainability assessments of the options. However, instead, the AC rowed back from doing this and sought views in its consultation.

The AC's assessment of quality of life impact puts people into three categories, which they assess accordingly:

- Local within 5km where the AC nets off the positive (mostly jobs) and negative effects to get an overall neutral rating
- Local outside 5km within flight path which the AC fails to assess apart from saying that noise will be negative
- National where any economic benefits represent pure gain since there are no local negative impacts

At 16km from Heathrow, our borough clearly falls into the middle category and, again, there is relatively little about the impacts on us. There are several other boroughs in a broadly analogous position to H&F, i.e. outside the 5km radius but affected negatively by noise, traffic and air pollution and benefiting minimally from new inward investment and jobs.

Whilst we are encouraged to see a Quality of Life Assessment included in the AC's assessment – as this sort of analysis has never been done previously – we are concerned about the way positive and negative impacts are measured against each other, and in some cases judged to balance each other out. Further work is required to develop suitable assessments that can be used as part of the decision-making process that will inform the AC's final recommendations.

Economy

It is most likely that there would be economic benefits to the borough from Heathrow expansion (although one of the AC scenarios demonstrates negative business benefits with certain carbon emissions limitation policies). HAL and West London Business estimate the additional benefits to west London of Heathrow expansion to be in the order of £30 billion in the period to 2085, although this benefit straddles several boroughs and it is questionable how much of this would accrue to H&F. Both proposals are likely to deliver increased direct airport employment and the potential for consequential benefits. These include increased tourism, both in numbers and higher tourist spending, together with additional potential, if H&F can harness it, for high tech and service business stimulation in the borough. To secure this, H&F Council would need a firm plan to pull benefit into the borough.

The proposers would create new apprenticeships although they would not commit to targets for each borough, so direct benefits to H&F are unclear. However as a rough guide, we could base this on the Ipsos MORI employment survey of Heathrow in 2013/14 which found 839 employees out of 75,780 airport staff are resident in Hammersmith & Fulham. This is 1.11% of the Heathrow workforce, giving something of the order of 111 apprenticeships.

There would also be new low-skilled jobs, which airports typically create. The proposers have said that such jobs would be paid at least at the London Living Wage, although we would be more confident if HAL were signed up as a Living Wage Foundation employer.

However, it can be argued that H&F has sufficient significant inward investment not to be dependent on the economic benefits of Heathrow expansion. Examples include the White City Opportunity Area, which includes an international creative hub for Imperial College, the continued success of Westfield coupled with large developments by St James and Stanhope/BBC, the proposed Old Oak and Park Royal developments and the Earls Court redevelopment.

The above developments and population increases require some 13,000 additional homes by 2032 (H&F Development Management Local Plan). We understand from Transport for London that the housing requirement for additional jobs created in boroughs closer to Heathrow might be difficult for them to meet, thus putting further pressure on our housing needs.

The AC concludes on balance that an expanded Heathrow would be "highly supportive" in

promoting employment and economic growth. The AC admits that this is dependent on future economic conditions. Or, as Heathrow Hub stated at the oral evidence hearing, "noone really knows".

AC Question 2: Mitigations

None of the suggestions below should be taken to mean that we support Heathrow expansion.

General

We were struck with the complexity of the likely delivery process and suggest that a delivery authority somewhat on the lines of the Olympic Delivery Authority would need to be set up to manage the large number of different bodies and issues involved.

Noise

More work could be done on:

- Reducing noise impacts from arrivals (including possible use of increased angle of approach and inset landings)
- Protection of periods of respite for residents
- Assessing alternatives to westerly preference
- Phasing out night flights
- Maximising the use of the least noisy aircraft

Economy

More attention should be given to management of journeys by air across all of London Airports. For example, only 14% of flights to and from Heathrow are for business purposes. Some of the business benefits could be secured by Heathrow handling fewer leisure flights, enabling airports with spare capacity to handle those.

AC Question 3: How the AC carried out its appraisal

We welcome the AC's transparency on technical detail and also recognise that they have acknowledged the limits to the evidence they have presented. However, the more judgement is applied the more opaque the AC's process becomes. Assessment within the business cases and sustainability assessments is set out clearly enough but the AC's judgements are against specific module criteria in a static and watertight manner. This tends to minimise the complexity of the judgement required and gives rise to a sense of spurious precision.

There is insufficient attempt to understand how variation in one module may have knockon effects to others. This is critical since:

- Many modules show a wide range of possible results depending on assumptions made.
- A few modules need to be judged absolutely, e.g. safety and air quality, which both have a statutory basis. If there is little room to maneouvre on these issues, there will be more compromise on other aspects, critically flight paths and noise.
- While costs have been adjusted for optimism bias, other aspects do not appear to have been adjusted in the same way, for example, noise mitigation or the projected shift from cars to public transport.

As the AC says: "The Commission recognises, however, that there will need to be trade-offs between these objectives. No scheme should be expected to meet fully all the objectives set (Para 2.16 of the Consultation Document). We do not know the weighting of the respective objectives and how trade-offs will be made in coming to the final recommendation. When asked at the AC's "Heathrow Area public drop-in" evening event on 3 December 2014, one official said that members of the AC would exercise their professional judgement.

AC Question 4: Factors not addressed by AC

We have already mentioned in the relevant sections above the greater attention safety should have had in the published documents.

AC Question 5: How the AC's appraisal carried out on specific topics

We have already mentioned above that more specific local information is needed on all topics in the AC's appraisal framework for us to assess local impact.

In some areas basic work needs to have been done before consultation. The key areas here are the locations of flight paths, flight numbers, transport modelling and air quality modelling.

Noise

All findings from the Attitudes to Noise from Aviation Sources in England Report need to be taken into account. Reference should be made to the World Health Organisation's guidelines for community noise impacts.

The assessment needs to cover all impacts that need mitigating and how the costs are going to be met.

From 2050 for the remainder of the assessment period (calculated to be 35 years), health impacts are presumed to hold, but impacts (and associated costs) could increase.

Much more attention needs to be paid to presenting data on noise in a way which is more accessible to the public and also in consistent ways so that comparisons can be made between different scenarios and options.

Surface Access and Air Quality

Reference has been made in the conclusions sections above on these two topics for the need for detailed local modelling.

Quality of life

We have already mentioned above that we welcome this. Without following through and assigning monetary values we do not understand how quality of life assessment will be brought into the AC's final judgement.

It is not clear what assessment is being given to a range of factors for communities living outside the 5km radius but within the flight path area (category 2 in the table at paragraph 15 above) as there is currently a blank in this box. The numbers of people in this category should be quantified. We consider Hammersmith & Fulham falls within this category as

well as several other inner London boroughs.

The cut-off point of the 55dB in the technical paper probably only reflects the accepted use of this contour and is presumably shorthand for 55dB Leq. However many argue that it should be lower and also argue for measurement in dB Lden. Without this starting point we would presumably expected a graduated finding (cf the marginal negative effect for additional dB's above 55) with annoyance starting at lower levels and having at least some effect on quality of life.

The physical health effects of noise are only represented in a very limited fashion in the datasets used. The association between noise and health conditions cannot be scored anywhere else in the Appraisal Framework. More weight should be given to the negative health effects, such as strokes, heart disease and hypertension, on which there is supporting academic evidence.

AC Question 6: The AC's Sustainability assessments

In the Sustainability Assessment, the Commission notes that "It is well understood that people who live beyond an airport's noise contours can often be irritated and upset by the overflight of planes. And an expanded Heathrow would lead to more planes overflying the capital". Despite this recognition, the issue of the impacts on communities such as H&F which are often on the outer edge or beyond the noise contours presented in noise assessments is not well covered or accounted for in the AC's assessments.

AC Question 7: The AC's business cases

The comments made in answer to Question 3 apply here.

AC Question 8: Other comments on the AC's process

We wrote to the AC on the 27th November 2014 about the shortcomings of the current consultation process:

- It is very difficult for the public to engage in the huge volume of information presented in highly technical ways over the minimum consultation period, particularly when it straddles Christmas. Most of the documentation is only available online, rendering it inaccessible to certain groups and more difficult for many to consider properly.
- The AC has not created significant public awareness and had a tiny handful of people at the "Heathrow Area public drop-in" evening event on 3 December 2014, details of which were only circulated 48 hours before the event.
- Many people's awareness is limited to the case made for Heathrow expansion through the "Back Heathrow" campaign. "Back Heathrow" has undertaken a comprehensive publicity campaign, including direct mail to households in H&F. We have written to Back Heathrow to ascertain the extent of coverage and await a reply. At the oral evidence hearing, HAL refused to divulge the amount of funding it gives to "Back Heathrow" beyond the statement that it was "greater than £100,000".
- There has been poor engagement with local authorities including H&F, who were not invited to the "Heathrow Public Discussion" event earlier on 3 December.
- Repeated expansion proposals over the last decade have seen people respond again and again, resulting in consultation fatigue as apparently final decisions are re-opened.

All this means that it has been very challenging to fulfil Sir Howard Davies's aim, quoted at the beginning of this report, of understanding the impact of the different proposals on local communities. Without flight path details and traffic and air quality modelling evidence, we have been left to interpret models which are sensitive to underlying assumptions, and volatile to interactions between different aspects. Trade-offs will be made and netted off, rendering opaque the final thought processes. Accordingly we do not understand how the AC has the evidential basis to make a final recommendation.

Conclusion

On the best information we have, the impact on Hammersmith & Fulham of expansion at Heathrow would be as follows:

- Hammersmith & Fulham would enjoy limited economic benefits by way of inward investment and new jobs and apprenticeships. Given other developments in the borough, these benefits are not essential to our prosperity.
- Safety considerations cast uncertainty on all other assumptions.
- There would be would be additional flights, additional flight paths and additional noise.
- Congestion would increase and access to public transport, already problematic, would deteriorate further.
- Air quality, already exceeding EU limits, would deteriorate further.
- Residents' health and quality of life would be adversely affected.

Despite extensive publicity from "Back Heathrow", a majority of H&F residents responding to calls for feedback and evidence continue to oppose expansion at Heathrow.

2 Detailed Consultation Response

This section answers in detail, and is structured according to, the questions posed by the Airports Commission (AC) in its consultation on the final shortlisted options for extra runway capacity in the South-East of England.

A. What conclusions do you draw about the shortlisted options?

Local Economy Impacts

1. Promoting employment and economic growth in the local area and surrounding region

Option (a) One new runway to the northwest (Heathrow's official proposal) & Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

Neither option has independently differing impacts on Hammersmith & Fulham (H&F). Both options deliver to London higher airport capacity, increased direct airport employment and the potential for knock on benefits including increased tourism, both in numbers and higher tourist spending (especially from long haul destinations), together with additional potential, if H&F can harness it, for high tech and service business stimulation in the borough. However H&F does need to have a firm plan to pull benefits into the borough.

Heathrow Airport Limited (HAL) and West London Business estimate the additional benefits to West London of Heathrow expansion would be £30 billion in the period to 2085, although this benefit straddles several boroughs and it is questionable how much of this would accrue to H&F. However, it can be argued that H&F has sufficient significant inward investment not to be dependent on the economic benefits of Heathrow expansion. Examples include the White City Opportunity Area, which includes an international creative hub for Imperial College, the continued success of Westfield coupled with large developments by St James and Stanhope/BBC, the proposed Old Oak and Park Royal developments and the Earls Court redevelopment.

It is estimated that Hammersmith & Fulham needs 13,000 additional homes and 25,000 new jobs by 2032 (H&F Development Management Local Plan). There could be some marginal benefits from Heathrow expansion in achieving these targets but Friends of the Earth put forward the view that if carbon policies are included in the economic appraisal the benefits are likely to be negative.

HAL has successfully set up an apprentice scheme particularly focussing on the five Boroughs that are closest to the airport and would welcome Hammersmith & Fulham involvement. However of the 10,000 new apprenticeships they plan to create, they could not commit to targets for each Borough. According to the Ipsos MORI employment survey of Heathrow in 2013/14, this found 839 employees out of 75,780 airport staff are resident in Hammersmith & Fulham, which is 1.11% of the workforce. This means that an expanded Heathrow could benefit Hammersmith & Fulham by creating 111 apprenticeships for local people. This would be welcome, but hardly significant in light of the other benefits which are coming from developments within the Borough.

A survey of Heathrow staff in 2008/09 showed that 45.5% of Heathrow staff – 33,483 people live in the five Boroughs (Hounslow, Hillingdon, Ealing, Slough and Spelthorne).

This is the priority area with Hammersmith & Fulham having only 457 employees (0.6%) (Source - Heathrow On-Airport Employment Survey 2008/09).

HACAN made an important point that more passengers terminate in London than any other world city. The increase in capacity is not about bringing more people to London but maintaining Heathrow Airport's position as the leading airport interchange in northern Europe.

It is our contention that business in H&F is generated by local activity, not by expanding Heathrow, which itself will generate more business in the immediate vicinity of the airport but will have no significant impact for Hammersmith & Fulham.

While it is difficult to ascertain the overall level of economic benefit for Hammersmith & Fulham, it is our view that the potential economic benefits do not outweigh the adverse environment impact on the Borough resulting from more flights and potentially more flight paths across H&F.

Air Quality in the business and economic context:

According to West London Business (WLB), there are 3 main factors for businesses relocating to West London:

- Access to international markets
- Access to skills base
- Quality of Life

With the above in mind air quality is essential to quality of life and therefore, if congestion on the roads and overcrowding on public transport deteriorates, then so does local air quality and with it quality of life. Many of the people employed by businesses located in West London are also residents and therefore pollution levels and associated air quality will be of concern to them.

WLB has confirmed that it is in favour of expansion at Heathrow, as long as this is within acceptable environmental limits and is sustainable. It is our conclusion that the data and evidence to substantiate claims by the proposers' that air quality would be improved and limits would not be exceeded is lacking, and that more detailed data, modelling and evidence is required by the AC to confirm that this is achievable – in particular air pollution dispersion models and hard evidence to support passenger modal shift from road to rail.

Carbon emissions in the business and economic context:

Nic Ferriday of Friends of the Earth (FoE) suggested at the oral evidence hearing on 10th December that the potential costs of carbon could be significant to the point of affecting the total economic viability of expansion at Heathrow. To take account of the costs of climate change, the AC has used 2 sets of scenarios – 'carbon capped' and 'carbon-traded'. The way they have assessed the carbon-capped scenario is by assuming the cost of carbon, included in ticket prices, is raised to a sufficiently high level to constrain demand such that the CO2 emissions at 2050 do not exceed 2005 levels.

The Committee on Climate Change has said (para 2.41 of the main AC consultation document): "It has not been possible to assess the transport economic efficiency, delays or wider economic impacts under a carbon-capped forecast. This is because carbon prices

are much higher in each scheme option than the 'do minimum baseline, meaning the carbon policy component of the appraisal dominates capacity appraisal. This is particularly problematic as appropriate carbon policies have not been investigated in detail."

According to FoE, what they are hinting at but not saying explicitly is that, if the AC includes the cost of carbon in the economic appraisal, the net economic benefits may become negative. It would then be very difficult to justify a new runway at either Heathrow or Gatwick.

The AC intends to carry out further work to complete a fuller economic assessment of the case where UK emissions are constrained, i.e. 'capped'. This work will be available for the final report in summer 2015. It is our opinion that the full assessment should have been carried out and made available as part of the current consultation.

Local Economy Impacts

2. Producing positive outcomes for local communities and the local economy from any surface access that may be required to support the proposal

Option (a) One new runway to the northwest (Heathrow's official proposal) & Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

Airports create low-skilled, low-paid jobs (74% of all direct airport employees). Even though new jobs will be created by either of the expansion options, it appears very unlikely that much, if any, of this new employment would go to borough residents unless H&F makes strong links with the airport and invests in building appropriate L1 L2 skills in unemployed borough residents. But do we really want a plan to build a low-skilled low-paid workforce in the borough? New rail links (Crossrail, new western and southern access) will make it easier for people to commute to the airport to work from further away. The option of faster access away from Heathrow through these new rail routes may diminish traffic travelling to and through the borough by Underground.

Both Heathrow Hub (HH) and HAL at the 10th December Oral Evidence Hearing confirmed that the new jobs would be paid at least the London Living wage, which is currently £9.15 per hour. We would be more confident of this if HAL signed up as a Living Wage Foundation employer.

The increase in air travel is unlikely to benefit residents on low incomes in H&F, as the average wage for business travellers taking international flights is £77,249 and that for leisure travellers is £53,656 (Source - CAA Passenger Survey Report 2013). Air fares could also rise in the future to help pay for the construction of an expanded Heathrow and operating costs of the airlines, so air travel is unlikely to become more accessible to low income earners in the borough.

The predicted increase in London's population to 10 million by 2036, and 850,000 new jobs mostly in the east of London, further suggests that H&F needs to nurture business to locate in the borough by offering best-in-class office space, communications and facilities.

Surface Access

3. Accommodating the needs of other users of transport networks, such as commuters, intercity travellers and freight

Option (a) One new runway to the northwest (Heathrow's official proposal) & Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

On the evidence provided by the AC, the surface access effects on Hammersmith & Fulham will be damaging. The case from HAL, that their scheme can be achieved while "accommodating the needs of other users of transport network such as commuters, intercity travellers and freight", as it would affect residents of Hammersmith & Fulham, is not credible. On the contrary, the scheme looks likely to produce serious deterioration in road traffic and conditions on the Piccadilly Line in and through H&F.

Despite being a key area in the A4 corridor road traffic gateway into London, and despite the Piccadilly Line being one of the area's main commuter link with central London as well as the key Underground link to/from Heathrow, the AC and its consultant's reports on surface access either do not assess impacts on Hammersmith & Fulham, or draw conclusions which are not apparently based on in-depth local research or modelling.

We have drawn out the following information from the AC and from our Oral Evidence Hearing on the Commission's report, which shows the damaging impacts on H&F:

Road traffic:

- Despite the AC forecast of 1,500 extra cars at peak hour into London, HAL stated at the H&F hearing that there will be "no additional traffic" and HH stated there will be "negligible" extra traffic. No modelling has apparently been carried out to support this.
- Both HH and HAL have no analysis or modelling of road traffic into central London on the A4 corridor through Hammersmith, while acknowledging that this is the main road gateway into central London.
- Both promoters offered the prospect of congestion charging if the modal shift to public transport failed to materialise which undermines their prediction of no traffic increase.
- The forecast reduction in % of passengers going to/from Heathrow by car will still mean an increase in absolute numbers on the A4 corridor, given the more-than-double predicted passenger numbers at Heathrow to a potential 149 million in 2050.
- Both promoters are relying on planned improvements to existing rail systems (Piccadilly line, Crossrail) and new rail projects (i.e. the Southern Rail Access & Western Rail Access Route to Heathrow) to provide an improved public transport offer which will lead passengers to switch to public transport.
- They predict a modal shift broadly resulting in 50% of passengers and Heathrow workers using public transport. They could not point to studies or research supporting how such a large-scale forecast modal shift could be achieved. Although Transport for London (TfL) agrees that passengers do respond to an improved public transport offer, it states much transport behaviour is entrenched and achieving significant changes takes time.
- Nether promoter has modelled passenger numbers or road use into the 2040s when any expansion would be fully operational. HAL said it is "difficult to model into the longer term". This is a serious flaw in planning for such large scale expansion proposals.
- The provision of a 10,000 space car park at HH Station, and the fact that both promoters allow for the possibility of introducing congestion charging, shows a lack of

confidence in the "no extra traffic growth" claim. In the absence of any modelling to support them these claims cannot be considered reliable and we have to assume, with TfL, that with an increase of airport passengers of over 100% by 2050, there will be very considerable extra loading on the A4 through Hammersmith. This will produce greatly increased congestion and pollution in Hammersmith along the A4 corridor and neighbouring roads.

 There is no forecast of increased Heathrow-related HGV traffic on the A4 corridor through Hammersmith, despite references to increased freight traffic at an expanded Heathrow.

The AC and the promoters simply do not look at the implications for inner west London or indeed the whole South East of England beyond 2030, yet are proposing a scheme where the full impact will not be felt till 2050. Their appraisal of road surface access implications for other users is therefore incomplete and essentially defective.

Underground Traffic

- The Piccadilly Line is Hammersmith's key link with Central London and outer west London. Its planned upgrade and Crossrail are designed to deal with "background growth" (i.e. forecast population growth of London residents and commuters) – but the promoters and the AC are appropriating these upgrades to meet Heathrow's expansion.
- The AC acknowledges expansion and investment over and above the planned upgrades will be required to meet background growth AND Heathrow expansion. The promoters' and Commission's assumption that the infrastructure can meet demand is therefore unfounded.
- The AC reports flag up serious overcrowding on sections of the Piccadilly. We believe the tables showing capacity and crowding in the HH and AC assessments average out tube passenger numbers across trains to all Piccadilly Line destinations, not just to Heathrow. If the calculations were done for Heathrow trains only there would be even greater increased figures for overcrowding. The AC's "Volume capacity analysis 2030 Acton Town Earls Court" already forecasts 342% hourly seated capacity.
- Luggage is a serious problem on Heathrow trains and reduces standing room. This has
 not been factored in to the capacity assessments. It needs to be modelled.
- It is not clear how the promoters or the AC have allowed for background growth in their modelling. TfL states that the AC has used Railplan v6 instead of the latest Railplan v7, so the figures used are out of date and need re-modelling.
- Forecasts for passenger numbers stop at 2030. To be credible there must be modelling
 of how rail traffic will operate when expansion is a full capacity in 2050.

Noise

4. Minimising and where possible reducing noise impacts

From the information provided so far, it appears that aircraft noise would increase over Hammersmith & Fulham under both expansion proposals, and this is clearly the case under the Heathrow Hub option. Aircraft noise over parts of the borough is already unacceptable for many residents and both proposals would make matters worse by

increasing the frequency of flights.

Flights are heavily concentrated over the two approach paths, with an average of 77% of flights arriving over the borough. A new runway would therefore increase the annual number of flights from about 370,000 (or 1,013/day) to about 570,000 (or 1,561/day).

Currently the only respite provided is the system of runway alternation. However, this does not operate in the early morning period from 6am-7am and in any case, many people live between the two approach paths and hear the aircraft on both. In the period before 6am, flights should operate equally from West and East, but it appears that this policy was never properly implemented by NATS and therefore most night flights also arrive over H&F. As we discuss in the next section, the new opportunities to provide respite are largely speculative and cannot therefore be relied on when assessing the impact of the expansion proposals.

While it is true that aircraft continue to get quieter, and new quieter aircraft will progressively replace older noisier ones, much of the noise benefit is on departure rather than arrival, where the noise of air flowing over the airframe is a major component compared to engine noise. A paper by NATS providing Lmax data reported analysis by the CAA's Environmental Research & Consultancy Department. This showed that at a height of 2,000-3,000ft, a 400 seat 4 engine aircraft (a B744) would emit 77-71dB, compared with 78-72dB for a 500 seat 4 engine aircraft (An A380). Therefore it is not possible to rely on fleet replacement to improve the arrivals noise climate to an acceptable level.

Unless and until fewer flights use the current arrivals paths, it is considered that the impact of airport expansion on this borough is unacceptable. Other key points in relation to the AC's noise assessments include:

- It is difficult to make proper, informed judgements and comments at this stage as one of the key factors that will determine noise impacts – flight path information – is only available in indicative form so far.
- The noise assessments are presented for a large geographic area and it is not possible
 to clearly see or assess impacts at borough or local community level. This makes it
 difficult to draw conclusions on the noise assessment information.
- The level of uncertainty on other key aspects of this option (in addition to flight paths) such as fleet mix and runway use means that the forecast noise impacts could be very different to actual impacts, should expansion proceed.
- The assessments show that this expansion option will increase noise impacts compared to the future noise environment that would exist if Heathrow continued to operate with 2 runways and 5 terminals and within its current operational limits.
- The proposed expansion means that the improvements in noise impacts, from which residents would have benefitted, will be lost.
- Even with optimistic assumptions, modelling work suggests that noise from an expanded Heathrow could still impact on over 700,000 people not only in the immediate vicinity of Heathrow but also some distance away, including residents in H&F, around 10 miles from the airport.
- Use of a range of noise metrics in the noise assessment is welcomed, but it still feels like the role that the number of aircraft movements plays in causing noise impacts is not properly represented or accounted for.
- Expansion will either increase impacts for those already affected by Heathrow

- operations or create impacts for communities not currently affected. The pros, cons and acceptability or otherwise of either of these two broad approaches to concentrate noise or disperse it have not been established
- Not enough is known about the impacts of aircraft noise on local communities adjacent to the airport and under flight paths and there is a need for more research before any decisions on expansion can be made. It is our contention that Heathrow is not a suitable site for further expansion because of a range of impacts, including noise
- It feels like noise mitigation measures are presented as only being possible if expansion is allowed to proceed, which is unfair. In reality many, if not all, of the measures could be introduced without expansion and provide noise benefits to those communities affected by current operations.

Option (a) One new runway to the northwest (Heathrow's official proposal)

- Of the three main scenarios tested in the noise assessment, the 'minimise total impacts' and 'minimise new impacts' options show that parts of H&F are inside the 54dB day-time noise contour, including new areas not currently impacted.
- Although the 'respite' option shows no part of H&F in the daytime or night-time contours, there could still be flight paths over the borough – in fact, more than in the present day. We may be outside the contours but there could be significantly more flights over the borough. Impacts will therefore continue.
- Even in Heathrow's 'highly mitigated' scenarios, the noise impacts are still considered to be unacceptable.
- Expansion will reduce the amount of respite from noise that some communities (e.g. those under approach paths for the southern runway) benefit from as there will be increased use of mixed mode
- Health impacts of expansion are significant as assessed by the monetisation assessment which shows that annoyance, heart attacks, hypertension, sleep disturbance are calculated to cost £25 billion to mitigate. It is unclear if these impacts and their associated costs are considered to be acceptable, how the costs and impacts would be mitigated or who would do this.

Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

- Of the two main scenarios tested in the noise assessment, the standard expansion scenario and the respite scenario both show that parts H&F are inside the 54dB contour for day and night-time noise, including new areas not currently impacted (in some scenarios).
- The noise impacts for this option are, if anything, worse than for the airport's own proposal. The impacts are therefore considered to be unacceptable.
- Expansion will reduce the amount of respite from noise that some communities (e.g. those under approach paths for the southern runway) benefit from as there will be increased use of mixed mode
- Health impacts of expansion are significant as assessed by the monetisation assessment which shows that annoyance, heart attacks, hypertension, sleep disturbance are calculated to cost £25 billion to mitigate. It is unclear if these impacts and their associated costs are considered to be acceptable, how the costs and impacts would be mitigated or who would do this.

Air quality

5. Improving air quality consistent with EU standards and local planning policy requirements

There are 2 sets of air quality limit values to consider here; National mass emissions of Nitrogen Oxides (NOx) and Particulate Matter (PM) and local air quality requirements. HH asserts that improving air quality and meeting EU standards and local air quality objectives is fundamental and that their scheme is required to comply as the UK is legally bound to meet these objectives. On this we agree.

To take the local air quality issue first, the AC and HAL assert that air pollution's impact on sensitive receptors (people and natural habitat) is increased by its proximity to the receptor - hence road traffic is the dominant emission source resulting from expansion at Heathrow to affect our borough. TfL agrees with this assumption but they add that they would challenge the assertion that airport emissions (from airplane engines, break and tyre wear, Auxiliary Power Units) do not affect air quality outside the airport perimeter.

Many areas in London including H&F continue to exceed the national air quality standards. H&F is already an AQMA (Air Quality Management Area). There are 9 monitoring sites across the borough, 25% of which are at high risk of being in breach of these legally binding EULVs (EU limit values).

As Friends of the Earth stressed at our Oral Evidence Hearing, a small increase in traffic emissions could make the difference between complying and breaching the legally binding EU limits.

We do not agree with the HAL and HH statements to the effect that their proposals will have no or negligible impacts on road traffic and find this approach to be optimistic and unrealistic on many levels:

- The AC assessment only looks at the surface access impacts of 103.6 million airport passengers per annum (mppa) in 2030. No assessment is done of the 149 mppa that the Commission estimates to be the maximum throughput of HAL's proposal. We agree with TfL that "not testing a worst case scenario underplays any potential impacts".
- We understand from TfL that the upgrades and additions to rail infrastructure have been implemented as a response to background demand and therefore will not have capacity to encompass further airport demand, with particular reference to the Piccadilly line and Crossrail, both of which will be over capacity.
- We take HACAN's comments that population growth as a whole and in West London in particular needs to be factored into the transport models. HACAN do accept that there will be some behavioural shift, but ask HAL to justify their claims in more detail. We would agree with this.
- Friends of the Earth take a less optimistic approach and suggest that really the only way to change behaviour is to "force" people out of their cars with financial disincentives.
- TfL also believes that the shift in passenger behaviour predicted is "optimistic considering the limited additional rail infrastructure....Little new infrastructure is envisaged by the Commission, placing greater strain on the Great Western mainline and Piccadilly line corridors."

To use an example taken from TfL's submitted evidence: "the Commission predicts a passenger mode shift to rail, from 28% in 2012 to 43% in 2030. If only one third of the predicted mode share is achieved, this could result in an additional 1,000 peak private car trips on the highway network, based on initial estimates using Commission data. This would be on top of the approximately 20,000 peak hour two-way airport related staff and passenger movements forecast at Heathrow in 2030 (as well as background demand)".

According to the AC, Pollution Climate Mapping (PCM) modeling indicates that there is a low to likely risk of the annual Nitrogen Dioxide (NO2) EULVs being exceeded within the Heathrow study area in 2030. These high risk zones, including the A4 Bath Road and M4 in Hillingdon lead directly into and out of the A4 Great West Road that runs through our borough and beside which are 6 schools and their playgrounds. Therefore it is to be noted that neither the AC nor HAL have conducted detailed analysis of the impact of airport expansion on the A4 in H&F. We agree with TfL's statement that: "it is imperative that more detailed analysis is carried out by the Commission to fully assess the demand impacts." With the above in mind it is our conclusion that HAL's expansion proposal at Heathrow will result in air quality EULVs being breached in our borough due to road traffic. In order to accept HALs claim of "no additional road traffic" and their commitment to improve air quality as a result, we would require further extensive evidence to support the modal shift assumptions being made. We would also require detailed modeling and air quality monitoring on H&F main arterial roads such as the A4 and Hammersmith gyratory.

When questioned on this same issue, HH said that they planned to carry out detailed local dispersion air quality assessments and that they would consider the Great West Road in H&F as a potential site, but they couldn't guarantee that it would be selected for assessment.

The AC has published projected 'with expansion' mass emissions figures. Please note these are significantly higher than HAL's submitted emissions inventory. The Commission estimates that by 2050 NOx will increase by 38%, PM10 by 54.9% and PM2.5 by 50%. In terms of exceedances, according to the AC's studies, the HAL proposal will not exceed the Gothenburg Protocol targets for NOx in both 2025 and 2030, however it is to be noted that it is likely that target limits may tighten by 2030 and that the airport won't be running at full capacity until 2050. HH did not submit a mass emissions inventory, and on a local level existing monitoring data was analysed instead. The National Atmospheric Emissions Inventory (NAEI) has been used. However, it is advisable that the 2010 London Atmospheric Emissions Inventory (LAEI) should be used in conjunction with the NAEI. The LAEI is more appropriate for the Heathrow area and provides a more detailed emission inventory.

UK PM2.5 emissions are expected to exceed the Gothenburg Protocol targets by 2030 with emissions associated with Heathrow airport activity representing 9% of the projected exceedence of the 2020 target (without mitigation). This compares to 4% for the Gatwick scheme. The principle source of PM2.5 is aircraft brake and tyre wear and use of Auxiliary Power Units.

Take into account also the recent European Court of Justice's ruling that the UK must comply with NOx limit values "as soon as possible" – therefore national mass emissions, although not a local impact to H&F residents, should be very high on the agenda for the AC and need to be fully considered as part of the current assessment work.

The EU is already seeking to fine the Government for exceedances of limit values,

therefore any exceedance of either EU or Gothenburg protocol targets is deemed to be unacceptable. The AC would need to provide full details of any proposed mitigation scheme and quantify the benefits.

Option (a) One new runway to the northwest (Heathrow's official proposal)

HAL admit that air quality in the London context is a serious problem, but assert that although Heathrow contributes, other traffic has impacts. We agree with this statement but regard Heathrow's contribution to the problem as significant and therefore it should be monitored, modelled and considered very carefully in the context of the proposed expansion scheme.

HAL's case for mitigating the impact of expansion and improving local air quality (including in H&F) rests on a modal shift from cars to public transport for airport journeys. They claim that their expansion plan will bring no additional traffic to roads, including the A4 Great West Road (one of the main arterial roads into central London in H&F) as the public transport infrastructure is set to improve and be upgraded. They suggest that the rail services connecting Heathrow and south London, Crossrail, planned Piccadilly line upgrades and the new HS2 link into Old Oak Common - all of which have the go-ahead (bar HS2 which is considered likely) - will motivate and ensure this shift in passenger behaviour.

When questioned at the Oral Evidence Hearing, HAL did not seem to consider national emissions an issue and claimed that PM limits were met. We asked them which mitigation measures they would be putting into practice without expansion and they listed the following measures:

- Landing charges that are already in place to encourage the cleanest fleet will continue
- Airside measures to incentivize cleaner vehicles and vehicle pooling
- New technologies including electric airside charging will continue
- Encouraging taxis, buses with cleaner engines will continue. They encourage TfL to invest in cleaner vehicles. The airport is already working with taxis to reduce "empty" journeys.
- Steeper and curved flight paths

It is to be noted then that the majority of the proposed mitigation measures are already in place and few are reliant on expansion. We actively encourage the continuation of these mitigation measures with or without expansion. We also encourage additional mitigation measures that could be implemented. These are noted in Section B.

HAL have undertaken detailed dispersion modeling and forecasting that the AC has yet to undertake, and these results underpin their claims regarding improved air quality. Bearing in mind their mass emissions inventory is significantly underestimated according to the Commissions' independent studies, we conclude therefore that it is unhelpful that the Commission's comparative data is not yet available and especially concerning that it will only be available after the public consultation process is closed.

Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

HH's case for mitigating the impact of expansion and improving air quality locally (including in H&F) rests on a significant modal shift from cars to public transport on airport journeys. They claim that their expansion proposal will bring negligible additional airport traffic to roads, including the A4 Great West Road. This change in public transport mode share is underpinned by HH's surface access strategy, which they claim increases accessibility and reduces journey times to the airport, making rail an attractive alternative to the car. They allege that the number of interchanges is a determining factor in achieving mode transfer from private cars and taxis to rail, and that their strategy would give the majority of Heathrow passengers direct access to the airport or a maximum of one interchange.

This strategy relies heavily on the existing planned infrastructure upgrades already being implemented: Crossrail, Piccadilly line upgrades and the Southern Access line from Waterloo. HH confirm that they would like to see Heathrow put on a mainline but this is not currently a planned infrastructure improvement and therefore not to be included in their surface access strategy. We are particularly concerned as according to HH, 51% of all surface access routes to Heathrow come from Greater London.

We are also concerned that HH includes "embedded mitigation" as one of their mitigation measures which is proposed to increase the modal shift of passengers travelling by public transport to/from the airport from 38% to 50%. We would need more detailed, modeling and assessment to substantiate this claim. Since being questioned on this at the Oral Evidence Hearing, HH has submitted written evidence to back their assumption. We do not find this evidence conclusive or convincing, as it is repetitious of evidence already processed and received.

It is our conclusion that the HH expansion proposal at Heathrow will result in air quality EULVs being breached in H&F due to road traffic, and we would require detailed evidence to disprove this.

In order to accept HH's claim of 'negligible additional road traffic' and their commitment to improved air quality as a result we would require further extensive evidence to support the modal shift assumptions being made. We would also require detailed modeling and air quality monitoring on H&F main arterial roads such as the A4 and Hammersmith gyratory.

In line with the AC's conclusions, the stage 1 air quality assessment for both HAL and HH schemes is currently insufficient. They are considered inadequate for the following reasons, among others:

- Predictions are based on a high-level DEFRA model used for reporting national air pollution statistics to the European Commission which omits many hotspots. Therefore it is not appropriate to determine whether they will exceed national objectives for NO2 and PM.
- Lacks sufficient input data to produce a sufficiently detailed assessment
- Lacks an appropriate dynamic traffic model (the promoters have not submitted detailed traffic modelling).
- Reference to the previous 2008 assessment does not allow sufficiently for uncertainties e.g. range of road traffic scenarios, meteorology and climate change, background air quality and atmospheric chemistry.
- A lack of validation/sensitivity testing therefore no reliable relationship between

- monitoring projections and modelling predictions.
- No modelling/predictions for additional traffic on access routes to Heathrow, e.g. A4/M4, so no way of assessing local traffic impacts in H&F. The A4/M4 corridor continues to be a major source of poor air quality with serious exceedences.

It is our conclusion that air quality must be given the weighting and gravitas it deserves in this consultation. It is a basic human right to breathe clean air. Poor air quality can have devastating effects on people's health and quality of life. Government data shows that the average reduction in life expectancy of UK residents as a result of long-term exposure to PM2.5 is 6 months. It is also estimated that in 2008, 29,000 premature deaths in the UK were attributed to long-term exposure to PM2.5. This compares with 2,222 people killed in road traffic collisions in 2009, 15,479 deaths partially or wholly attributable to alcohol in England in 2010 and 81,700 deaths wholly or partially attributable to smoking in 2010. In London, it is estimated that in 2008 there were 4,267 deaths attributable to long-term exposure to small particles. This figure is based upon an amalgamation of the average loss of life of those affected, of 11.5 years.

Biodiversity

6. Protecting and maintaining natural habitats and biodiversity

Expansion of Heathrow is not expected to have direct impacts in relation to biodiversity in Hammersmith & Fulham. Given the limited time we have had to check and comment on the Commission's consultation documents, we have not made comments on this issue.

Carbon Emissions

7. Minimising carbon emissions in airport construction and operation

Generally there is little information on carbon emissions relating to construction in the consultation document. The AC has not modelled the effects and impacts in their assessments and neither has HAL. Therefore the immediate conclusion to be drawn is that the information in this area is lacking and more assessment and modelling needs to be commissioned.

Friends of the Earth suggest that we cannot afford expansion in terms of expected increases in carbon emissions. We need to decrease not increase and obviously expansion means increase in emissions. It is difficult to meet our CO2 objectives and if expansion goes ahead at Heathrow it will mean that expansion elsewhere must be curtailed.

The HH proposal incorporates a tunnel to divert the M25 under the extended runway. Presumably the carbon emissions relating to this infrastructure change are considerable and should also be factored in.

Friends of the Earth also allege that building an additional runway in London or the South East would be inconsistent with climate change obligations wherever it is built.

The Committee on Climate Change has said (para 2.41 of the main AC consultation document): "It has not been possible to assess the transport economic efficiency, delays or wider economic impacts under a carbon-capped forecast. This is because carbon prices are much higher in each scheme option than the 'do minimum baseline, meaning the

carbon policy component of the appraisal dominates capacity appraisal. This is particularly problematic as appropriate carbon policies have not been investigated in detail."

The AC intends to carry out further work to complete a fuller economic assessment of the case where UK emissions are constrained, i.e. 'capped'. This work will be available for the final report in summer 2015. It is our opinion that the full assessment should have been carried out and made available as part of the current consultation.

Water & Flood Risk

8. Protecting the quality of surface and ground waters, using water resources efficiently and minimising flood risk

Expansion of Heathrow is not expected to have direct impacts in relation to water/flood risk in Hammersmith & Fulham. Given the limited time we have had to check and comment on the Commission's consultation documents, we have not made comments on this issue.

Place

9. Minimising impacts on existing landscape character and heritage assets

Expansion of Heathrow is not expected to have direct impacts in relation to landscape or heritage issues in Hammersmith & Fulham. Given the limited time we have had to check and comment on the Commission's consultation documents, we have not made comments on this issue.

Environment TBD

10. Identifying and mitigating any other significant environmental impacts

No additional comments other than those made elsewhere.

Quality of Life

11. Maintaining and where possible improving the quality of life for local residents and wider population

The AC commissioned a study of quality of life for those living near airports, which said:

- "We can be confident that aircraft noise is bad for subjective well-being."
- "Those living in noise contours but not close enough to airports to benefit from the
 potential advantages, for example in terms of access to employment opportunities,
 will be likely to suffer negative effects on their subjective well-being due to noise."

The AC mentioned the benefits of connectivity for individuals taking more flights for leisure purposes. Hammersmith & Fulham is ninth in Heathrow's frequent fliers list. However many residents use other London airports, sometimes for cost reasons, which is unsurprising since average incomes of people who make international flights are £77,249 for businesses travellers and £53,566 for leisure travellers (CAA Passenger Survey Report 2013). In this regard, we were interested to note the proposers' comments that air fares might need to increase.

The study recommended putting monetary values on various aspects to build into the sustainability assessments of the options. However, instead, the AC rowed back from doing this and sought views in its consultation.

The AC's assessment of quality of life impact puts people into three categories, which they assess accordingly:

- Local within 5km where the AC nets off the positive (mostly jobs) and negative effects to get an overall neutral rating
- Local outside 5km within flight path which the AC fails to assess apart from saying that noise will be negative
- National where any economic benefits represent pure gain since there are no local negative impacts

At 16km from Heathrow, our borough clearly falls into the middle category and, again, there is relatively little about the impacts on us. There are several other boroughs in a broadly analogous position to H&F, i.e. outside the 5km radius but affected negatively by noise, traffic and air pollution and benefiting minimally from new inward investment and jobs.

Whilst we are encouraged to see a Quality of Life Assessment included in the AC's assessment – as this sort of analysis has never been done previously – we are concerned about the way positive and negative impacts are measured against each other, and in some cases judged to balance each other out. Further work is required to develop suitable assessments that can be used as part of the decision-making process that will inform the AC's final recommendations.

Community

12. Reducing or avoiding disproportionate impacts on any social group

No additional comments other than those made elsewhere.

B. How could the options be improved?

Local Economy Impacts

13. Promoting employment and economic growth in the local area and surrounding region

The territory assessed for local impact was chosen as representative because '76% of the assessment area workforce lives there' (see Local Economy Impacts Assessment page 14). Whilst this may be a fact, there seems no statistical validity for this figure of 76%. Whilst it would certainly complicate the study by widening the territorial area, might it not be more rational to study impact on a straight 'distance measured' from Heathrow, i.e. a circle centred on Heathrow, with a radius perhaps in the centre of West Berkshire and described through London and the home counties? Was this considered?

Local Economy Impacts

14. Producing positive outcomes for local communities and the local economy from any surface access that may be required to support the proposal

Page 115 of the Local Economy Impacts Assessment states "The expansion of Heathrow could provide opportunities for unemployed local residents to take up new roles...HAL has also highlighted that they plan to recruit and upskill local workers through programmes such as Heathrow Academy. This being said, any increased employment pressure within the area "may force the airport to consider further schemes in order to gain the workforce they require."

Positive outcomes for local communities will primarily be achieved through employment. H&F's Urban Partnership Group understands the challenges of working with low / no skilled people and employers to get unemployed people work-ready and support them in the early months and years of employment. Firm commitments must be agreed by all parties to ensure that the maximum positive outcomes can be captured by those members of the community who have, otherwise, the least opportunities to benefit. Particularly we would be talking here about single parents, older people who live alone and those who have been out of the jobs market for a considerable period of time. The page 155 statement above is already indicating that employers can opt out of this.

Surface Access

15. Accommodating the needs of other users of transport networks, such as commuters, intercity travellers and freight

On the basis of the AC's work so far it is hard to see how either Heathrow expansion option could be achieved without damaging impacts on residents and commuters in Hammersmith as far as surface access issues are concerned. The following would at least ensure the likely impact on H&F could be more clearly assessed:

- Surface access appraisal and modelling must include the impact on the A4 corridor through Hammersmith to Earl's Court as this is the main road gateway from Heathrow to central London, and appraisal and modelling of the impact on the Piccadilly Line in the same area.
- In depth modelling must be carried out of A4 capacity now, in 2030 and in 2050 with background growth and with/ without Heathrow expansion.
- Forecasting is required of increased Heathrow related HGV traffic on the A4 corridor through Hammersmith.
- Assessment/ forecasting are required of how the key junctions at Hogarth, Hammersmith and Earl's Court will cope.
- Assessment should be carried out of the impact on traffic flow of tunnelling the A4 at Hammersmith ("Flyunder")
- Working with TfL, in depth modelling of passenger numbers on Heathrow-bound Piccadilly Line trains and detailed background growth forecasts must be carried out
- Forecast dispersal of passengers between the extended public transport offer into Central London must be modelled.
- Forecasts up to 2050, not just 2030 must be modelled.
- Details must be published of what additional upgrades could be carried out to Piccadilly line to accommodate Heathrow expansion numbers in line with Jacobs' statement that the planned upgrade will not be sufficient to meet Heathrow passenger numbers.
- Heathrow Express (HEX) ticketing should be brought into Oyster pricing, to enable HEX to be used to capacity and relieve Piccadilly Line and Crossrail.
- Research and forecasting is required into the effects on public transport in case of an

early and successful modal shift to public transport – will rail be able to cope with forecast numbers.

In addition there should be investigation of more radical road traffic deterrents: e.g. early introduction of high-level congestion charging at the airport from the outset of expansion, and elimination of or extra charge for "kiss and drive" quick drop-off facilities, which Jacobs says will continue to give increased traffic from Central London.

A Delivery Authority to coordinate the necessary public transport and road infrastructure projects should be given serious consideration.

Noise

16. Minimising and where possible reducing noise impacts

The policy of concentrating arrivals noise over two approach paths along with the policy of Westerly preference has led to a major concentration of aircraft noise over the borough. This concentration over a relatively small area has blighted that area and led to very strong opposition to the airport, to night flights and to proposals for further expansion. These policies are based on circumstances that have changed over the years and should therefore be reviewed.

Westerly preference was designed to protect communities under departure routes, at a time when departure noise was a much greater problem than arrivals noise. That balance has changed as engine noise has reduced significantly and as many aircraft climb more quickly. Arriving aircraft still approach the airport at a 3 degree angle and, while there has been some reduction in arrivals noise, it is much less significant. Most complaints are now due to arriving aircraft rather than departing aircraft. This change has also led to a removal of the Cranford Arrangement. The time has come for a major review of Westerly Preference.

We would like to see some of the mitigation improvements suggested by HAL as part of their expansion package, such as a steeper approach angle, trialled and implemented whether or not a new runway is built. However, most of the HAL's proposed noise mitigation improvements require a change in Government policy, major consultation, safety assessments and perhaps the support of international bodies. Therefore, none can be relied upon as neither airport, nor the Commission, can deliver them. We discuss specific mitigations further below.

- Routing of all flight paths so that no aircraft movements occur over or close to H&F so
 that there are no noise impact on residents would obviously improve on the current and
 forecast impacts. However, such a radical change to airspace use over London seems
 unlikely and there is also the issue of how fair such a move would be for other
 boroughs in the vicinity of Heathrow but even if such a measure was implemented,
 the expected impacts of expansion in other respects would still be such that this
 expansion option would not be supported.
- Heathrow should seek to minimise the noise impacts of the airport's operations through the adoption of progressively tougher measures that encourage the use of less noisy aircraft and penalise heavily the use of noisier aircraft.
- The use of an increased angle of descent should be trialled at Heathrow with a view to moving from a 3 degree angle to a 3.5 degree (or greater) angle for arrivals.
- Improved compliance with Continuous Descent Approach (CDA) should be encouraged

and a report on non-compliance should examine the reasons. It is understood that safety cannot be compromised, but residents should be entitled to expect that good practice is followed whenever this is possible. An assessment should also be made of the point at which landing gear is lowered, as this contributes to noise impacts

- The move away from a "Westerly Preference" to an "Easterly preference", "No Preference" or "Equal shares preference" in terms of operations should be assessed to see if this can provide benefits to communities under arrivals flight paths on the east side of the airport such as H&F.
- Night flights should not increase. Over time, they should be phased out or there should be a longer curfew.
- The airport should continue to operate within its current design as a 2 runway airport and comply with the 480,000 flight limit imposed as part of the T5 planning permission.

Option (a) One new runway to the northwest (Heathrow's official proposal)

This expansion option is not supported. The Heathrow expansion option is already
presented in a range of "highly mitigated" assessment scenarios, but we still consider
that the noise impacts on H&F will be unacceptable.

Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

This expansion option is not supported. The Heathrow Hub expansion option is already
presented with mitigation measures and respite options included (although the latter is
not included for all forecast years), but we still consider that the noise impacts on H&F
will be unacceptable.

Air Quality

17. Improving air quality consistent with EU standards and local planning policy requirements

The omission of modelling/predictions for additional traffic on access routes such as the A4 Great West Road into central London is an issue that requires resolution. Increased traffic flows along this main arterial road would have a significant impact on the already elevated concentrations of NOx and PM.

As we have established HAL's key commitment in terms of air quality is "no new airport related air traffic". This is a heroic statement and in order to achieve this we believe that the following measures should be implemented alongside expansion, and without expansion to mitigate the impacts of airport traffic/and airport related emissions on air quality at both a local and national level:

- New rail airport expansion specific infrastructure, for example connecting Heathrow on a mainline instead of a branch line.
- Introduce baggage check in points at mainline stations going direct to Heathrow so travellers with luggage are encouraged to use public transport instead of taxi or car.
- Incentives for modal shift to alternative means of transport, such as:
- Introduce a congestion charge for Heathrow traffic.
- Cut car parking spaces and raise car parking rates at Heathrow to disincentivise car users.

- Urban greening of the roadside environment
- Incentivise bus companies and taxis to use cleaner engines in the same way as cleaner aircraft are incentivised.
- Incentives for use of alternative fuel source vehicles.
- Reinforce the Mayors ultra-low emission zone.
- Impose a tariff for vehicles not conforming to new emissions standards at the airport including private cars
- Continue to incentivise cleaner aircraft, electric airside vehicles, vehicle pooling, revised shorter taxiing schedules etc
- Introduce steeper landing and take off paths and curved approaches.

Biodiversity

18. Protecting and maintaining natural habitats and biodiversity

Expansion of Heathrow is not expected to have direct impacts in relation to biodiversity in Hammersmith & Fulham. Given the limited time we have had to check and comment on the Commission's consultation documents, we have not made comments on this issue.

Carbon

19. Minimising carbon emissions in airport construction and operation

Water & Flood Risk

20. Protecting the quality of surface and ground waters, using water resources efficiently and minimising flood risk

Expansion of Heathrow is not expected to have direct impacts in relation to water/flood risk in Hammersmith & Fulham. Given the limited time we have had to check and comment on the Commission's consultation documents, we have not made comments on this issue.

Place

21. Minimising impacts on existing landscape character and heritage assets

Expansion of Heathrow is not expected to have direct impacts in relation to landscape or heritage issues in Hammersmith & Fulham. Given the limited time we have had to check and comment on the Commission's consultation documents, we have not made comments on this issue.

Environment TBD

22. Identifying and mitigating any other significant environmental impacts

No additional comments other than those made elsewhere.

Quality of Life

23. Maintaining and where possible improving the quality of life for local residents and wider population

We have already mentioned above that we welcome this. However, without following through and assigning monetary values we do not understand how quality of life assessment will be brought into the AC's final judgement.

It is not clear what assessment is being given to a range of factors for communities living outside the 5km radius but within the flight path area (category 2 in the table at paragraph 15 above) as there is currently a blank in this box. The numbers of people in this category should be quantified. We consider Hammersmith & Fulham falls within this category as well as several other inner London boroughs.

The cut-off point of the 55dB in the technical paper probably only reflects the accepted use of this contour and is presumably shorthand for 55dB Leq. However many argue that it should be lower and also argue for measurement in dB Lden. Without this starting point we would presumably expected a graduated finding (cf the marginal negative effect for additional dB's above 55) with annoyance starting at lower levels and having at least some effect on quality of life.

The physical health effects of noise are only represented in a very limited fashion in the datasets used. The association between noise and health conditions cannot be scored anywhere else in the Appraisal Framework. More weight should be given to the negative health effects, such as strokes, heart disease and hypertension, on which there is supporting academic evidence.

Community

24. Reducing or avoiding disproportionate impacts on any social group

No additional comments other than those made elsewhere.

C. Comments on the Airports Commission process

25. How appraisal overall carried out

- It is not clear how the Commission's findings for each module are to be assessed against each other, how interactions and knock on effects between modules are being modelled or if any weightings will be applied in any final assessment before the Commission makes its recommendations. At the stakeholder event, we were informed verbally that there are no weightings to be applied and that the Commissioners would use their professional judgement. There is therefore a danger that there will be a lack of transparency in terms of how positive and negative impacts and costs and benefits, particularly in relation to measuring economic growth versus environmental impacts will be balanced.
- It seems clear, as indicated by comments made by both Heathrow Airport and Heathrow Hub, that new information will be submitted by them to the Commission to support their proposals for expansion. The Commission itself, will also need to produce additional assessments of the expansion proposals (e.g. in relation to carrying out more air quality modelling work and assessing newly submitted evidence by the scheme proposers). Yet it would appear that all of this new information will not be available for consultees to see, challenge and comment on prior to the Commission making a final recommendation for airport expansion. If this approach is taken it damages the consultation process and will impact on the credibility of the Commission

and its recommendations.

26. Relevant factors omitted

Noise

- The Commission acknowledges that people's response to noise is not just about sound volume and tonal frequency but also determined by its duration, regularity and the time of day it occurs. It is useful that "regularity" of noise events is recognised as an important factor in terms of response to noise as both Heathrow options result in a very large increase in aircraft movements (around 250,000 extra compared to current levels). However, the use of N60 and N70 to try to measure the impacts of movements needs to be supplemented with further metrics with reference to the results from a new social survey to try to improve the relationship between the technical assessment results to people's actual response on the ground to aircraft noise.
- The ANASE (Attitudes to Noise from Aviation Sources in England) Report is referenced, but only in relation to indicating support for LAeq method of measuring noise impacts and annoyance. The study was recently updated and its other findings in terms of annoyance response (at lower levels of noise that normally modelled by noise contours) and in relation to regularity of noise events should have also been factored into account in the noise assessment work. A new noise annoyance study is needed urgently to inform any planning inquiry.
- No reference has been made to the World Health Organisation's guidelines for community noise impacts which include recommendations on noise level limits on issues such as preventing adverse health effects from night noise. Given the timescales being looked at for the expansion scenarios, these guidelines should be referenced and taken into account.
- Although health issues are covered in the respect that a monetisation assessment has been carried out by the AC, the implications of causing potentially £25 billion worth of health impacts, including heart attacks, strokes, sleep deprivation etc have not been acknowledged, discussed or justified in any detail, should this expansion option proceed.
- It is also not clear if the assessment covers all impacts that need mitigating e.g. insulation of properties (houses, schools etc) which in themselves would most likely represent significant costs. How are these costs going to be met i.e. who is paying for the health costs caused by expansion?
- From 2050 for the remainder of the assessment period (calculated to be 35 years), health impacts are presumed to hold – but couldn't impacts (and associated costs) increase? This could have been clarified.
- In the Sustainability Assessment, the Commission note that "It is well understood that people who live beyond an airport's noise contours can often be irritated and upset by the overflight of planes. And an expanded Heathrow would lead to more planes overflying the capital". Despite this recognition, the issue of the impacts on communities such as H&F which are often on the outer edge or beyond the noise contours presented in noise assessments is not well covered or accounted for in the Commission's assessments.
- The Commission is also urged to note the findings of the All Party Parliamentary Group on Noise from Heathrow Airport, published on 18th December 2014.

Option (a) One new runway to the northwest (Heathrow's official proposal)

 There are some aspects of the proposer's scheme that should have been picked out and highlighted by the Commission –e.g. the potential increasing use of mixed mode type operations with associated knock on effects in terms of a reduction in the amount of respite time that communities would receive – which would appear to be particularly significant for those under the southern runway flight path approaches.

Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

 The noise assessment scenarios for the Hub option are not consistent with the assessment of the Heathrow airport option. We would have expected consistency in the Commission's assessments of both Heathrow proposals which would have helped to compare their relative impacts.

Safety

- It is disappointing that a key issue such as safety was not highlighted as a stand-alone issue for comment as part of the consultation. Safety is an issue that concerns H&F residents, particularly with the large-scale increase in flight numbers that expansion would bring.
- Many H&F residents are concerned about safety risks. While we accept that the likelihood of an accident is small, it is difficult for most people to understand the size of the risk. However, the impact of an accident is clear: it would be devastating.
- We do not believe that the risks for approaching aircraft, however small, should be so heavily concentrated over densely populated West London because the impact would be so large. Any significant increase in flights should therefore prompt a review of westerly preference, for safety as well as noise reasons.
- We are concerned that the CAA will not assess safety until very late in the process, even after planning permission has been granted for one of the schemes. While it is reassuring to hear that safety will be assessed fully, the CAA paper states that safety mitigations might compromise some noise respite options. It is unacceptable for safety to be reviewed so late in the process. We propose that the chosen developer makes an outline application for a safety licence before the planning application is submitted, so the main parts of the safety case can be properly reviewed before planning permission is granted.

Option (a) One new runway to the northwest (Heathrow's official proposal)

- Safety mitigations will be needed because the new runway is closer to an existing runway than the international recommendations and it is also to be offset. This will affect the way adjacent runways are operated;
- The safety of the air traffic control tower would need to be reassessed;
- Car parking within the airport public safety zone must be reviewed;

- A complete review of the entire air traffic operation would need to be assessed, including existing mitigations, the relationship with RAF Northolt, missed approach procedures, and helicopter crossings.
- Significant airspace changes would be needed. Existing departure routes would need
 to be redesigned. A case might need to be made to extend controlled airspace.
 Possible conflicts with other airports would need to be assessed. Airspace changes
 alone could take 5-7 years to implement.

Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

- The design is a "novel concept without any pre-existing standards or experience globally". The CAA is "open minded";
- A particular concern is the risk between missed approaches and departures;
- Safety mitigations will also be needed because the new runway is slightly closer to the southern runway than international standards and is offset;
- The safety of the air traffic control tower would need to be reassessed;
- The risks of ILS localizer interference, location and protection needs review;
- Approach lighting could be an issue as it has to be on the airfield;
- Aircraft waiting to depart would be within the safety zone, contrary to policy.
- Significant air traffic and airspace redesign would be needed, as with the other Heathrow option, but with greater safety issues due to the new design

27. How appraisal of specific modules carried out

Noise

- H&F welcomes the use of broader metrics than the traditional 57dB Leq contour. Use
 of a variety of measures gives an improved assessment of the impact (e.g. by using the
 metric incorporating flight numbers) although further refinement of the metrics is
 required so that they more closely align with the community impacts they are supposed
 to represent.
- The sheer range of scenarios tested produces a mass of data and maps which are very difficult to assess and the modelling results are not always presented in a way that makes comparisons easy.
- Some data is not presented as clearly as it could or should have been. There is also sometimes an issue with inconsistencies in terms of the way information is presented which makes assessment and comparisons difficult. As an example, see the monetisation section of the Noise Assessment. Information that could have been tabulated to aid assessment of various impacts and scenarios has been presented in text. Within subsections of the assessment (e.g. those on hypertension and heart attack impacts) different approaches are taken to presenting data for the 3 scenario years of 2030, 2040 and 2050 and the 3 sensitivity scenarios of low, medium and high costs.
- Although a warning is given in the noise assessment report to the effect that "there is a
 risk that the results are accorded a level of accuracy and precision that is inappropriate
 for the level of assessment undertaken", it feels like results are presented throughout
 the document without appropriate caveats so there is a risk that greater certainty will be
 attached to these findings.

- Modelling assumptions such as flight paths, number of movements, fleet mix etc that
 are critical to determining the outputs of the noise model are ambitious and/or
 indicative which means that very little faith can be placed in the final results. Just as a
 range of scenarios have been tested in some respects of the assessments, further
 sensitivity tests could have been carried out on these critical inputs.
- In many respects, the noise assessment results have not been presented in a clear and easily understandable manner
- Multiple scenarios and sensitivity tests have been carried out in some parts of the assessment which have produced huge amounts of data and information but this is not always provided down to the level required to make informed judgements on potential impacts. For example, the noise assessment results are presented for the Heathrow study area only and it is very difficult to determine local impacts from the maps and tables provided. Councils and communities need local information in order to respond properly to the consultation. H&F specific information has been requested in terms of noise impacts (not yet received after 2 weeks). The Commission gives itself 20 working days to respond to queries sent in to it. Potentially this is 1 month out of the 3 month consultation period that we have to wait for more detailed information thus significantly reducing the time available to review and comment on important aspects of the consultation.

28. Sustainability assessments

One of the aims of the Sustainability Assessment (SA) is to provide robust information on, amongst other matters, the environmental impacts of the proposed expansion options. The issues and omissions highlighted above suggest that the SA cannot be regarded as robust in terms of noise impacts.

Option (a) One new runway to the northwest (Heathrow's official proposal)

- The SA highlights that in terms of the 'do minimum' and 'do something' scenarios for 2030, 2040 and 2050 (lower end, carbon capped) that "higher numbers of people are forecast to fall within the 57 DB day noise contour and to experience 50 or more 70dB overflights in a day". However, "fewer people are forecast to fall into the 54dB day noise contour, the 48dB night noise contour, the 55Lden 24-hr contour and to experience 25 or more 60dB overflights during the night".
- These impacts are considered to be "significantly adverse" by the Commission, although they consider that further mitigation measures could be implemented to reduce impacts to 'adverse'.
- From a noise perspective, even with high levels of mitigation, it is considered that the SA shows that noise impacts remain as adverse which is unacceptable.

Option (b) Extending the northern runway to the west (Independent proposal by organisation called Heathrow Hub)

- The SA highlights that in terms of the 'do minimum' and 'do something' scenarios for 2030, 2040 and 2050 (lower end, carbon capped) that "higher numbers of people are forecast to fall within the noise footprint of the airport across every type of noise measurement. Both the 54LAeq and 55Lden show growth of over 25% in the 'do something' scenario". These impacts are clearly "significantly adverse" as acknowledged by the Commission.
- Although the Commission considers that further mitigation measures could be

implemented to reduce impacts to 'adverse', "the effects of such mitigations would have to be extremely significant" to be able to achieve this.

 From a noise perspective, it is considered that the SA shows this proposal to be unviable.

29. Business Cases

A separate Business Case and Sustainability Assessment have been carried out for both of the Heathrow expansion options. The Business Case consists of the following:

- Strategic case
- Economic case
- Financial & Commercial Case
- Management Case

It is not immediately clear, but it seems that environmental impact issues are covered under the strategic case assessment, albeit very briefly. The strategic fit assessments carried out are very focussed on meeting the expected demand for aviation services, improving the passenger experience and maximising benefits to the economy. There is little if any reference to environmental impacts, health impacts or community impact issues.

The Strategic Case does not precisely follow the HM Treasury Green Book format, but it at the same time replicates much of the function of the strategic case implied by the Green Book. It is unclear which aspects of the assessment are not in line with Government's guidance, neither is it explained why the assessment has deviated from it.

There is concern that significant and adverse impacts for a range of critical issues such as noise, air quality, carbon emissions etc will be deemed to be acceptable without full and proper assessment of their costs and impacts.

The Business Case also needs to take into account the issue of how national economic benefits are assessed against local negative impacts – there is concern that, if expansion goes ahead, there is an imbalance between the groups that benefit from a larger Heathrow and those communities that have to bear the brunt of the negative social and environmental impacts.

The Business Case assessments clearly present figures for the costs associated with capacity constraints – i.e. the costs associated with not expanding Heathrow, but there does not appear to be any similarly presented figures on costs associated with expansion.

It is not clear how the 2 are to be considered together in terms of forming a 'total scheme' impact assessment. The Commission appears to be reserving judgement at this stage on how all the relevant factors will be assessed in determining their final recommendations. It is concerning that the Business Case/Sustainability Assessment report states that even if the schemes show lots of adverse environmental impacts then that doesn't mean a scheme is not suitable. There needs to be more transparency on the process of how all of the costs and benefits will be weighed up.

The Business Case assessment states that high levels of unmet demand for travel from Heathrow would see traffic movements increase rapidly if expansion takes place. By 2040, the airport is forecast to be operating at its capacity of 740,000 movements across all but 1 scenario. In some scenarios, capacity is reached sooner. This suggests that within around

10-15 years of having a 3rd Runway we can expect Heathrow to already be pressing for a 4th Runway. This issue needs to be acknowledged and discussed in the Commission's assessment.

D. Other comments

30. Other Comments

- Given the sheer volume of information produced, the consultation period of 12 weeks is inadequate. The volume of consultation information provided makes it extremely difficult for local authorities, resident and community groups to adequately assess and report on the Commission's work before making any consultation response.
- Also, holding the consultation over the Christmas and New Year period does not encourage people to engage fully with the consultation process when they are clearly going to be busy with other arrangements.
- The consultation should have either been extended through to early 2015 or not started until the New Year. The Airports Commission do not need to report on their final recommendations until summer 2015, so there is no need to rush through the consultation process now.
- The Chair of our residents Commission group wrote to Sir Howard Davies on 27 November to ask for an extension to the consultation period but as of 18 December no reply has been received. We also wrote to the Commission on 21 November to request H&F specific noise data so we could better understand the potential local impacts of the expansion proposals. We were informed on 15 December that this local information was not available.
- Consultation information only appears to be available online. This is not regarded as
 adequate in terms of engaging as fully as possible with the communities who could
 potentially be impacted by the expansion options under consideration. Information
 should be provided in hard copy. It was only after a number of requests that hard copy
 documents were provided.
- Feedback from some resident representatives in the borough suggest that there is not widespread awareness about the Commission's current consultation. We expect this is linked to the limited availability of information that the Commission has made public.
- Only 1 day was set aside by the Commission for its stakeholder event at Heathrow. We received no information about the ticket only event on 3 December. By the time we had found out that tickets were being distributed it seems that it was too late to receive an invite. Despite contacting the Commission about ticket availability we did not receive any response. In addition to the ticket-only event there was a single event, open to the public without invitation, held at a Heathrow hotel on the evening of 3 December. We do not consider that such a low level of engagement with local communities is acceptable.
- A representative of our own residents Commission attended the evening event and noted the extremely poor turnout. The purpose of this event appears to have been to raise awareness, but we doubt that it achieved this aim. Details of the event were circulated at a very late stage and the postcode for the hotel venue was wrong. The Commission should have made better efforts to publicise the event much earlier, should not have limited it to a single event and should have hosted additional events closer to other affected communities, not just in the immediate vicinity of the airport.
- There is a danger that the Commission is repeating the mistakes of the airport in terms
 of poor engagement with communities who may not be in the immediate vicinity of the

- airport but who are impacted and will continue to be impacted by expansion at Heathrow if this is what the Commission proposes in its final report.
- There appear to be gaps in some of the information presented in the consultation, e.g.
 full information is not presented on potential air quality impacts as further air quality
 modelling assessments still need to be carried out. There is also concern about the
 dearth of information on how traffic and public transport impacts in the borough would
 be addressed. The consultation should not begin until all required assessments have
 been completed and are available for review.
- No consultation information from the Commission has been distributed to the areas that could potentially be impacted by the expansion options under consideration. Residents are however, receiving numerous flyers, leaflets etc from Heathrow (via its "Back Heathrow" campaign) on its 3rd runway proposals. There are concerns that the main contact that residents are receiving on the issue of Heathrow expansion are not presenting issues in a balanced and independent way i.e. presenting down-sizing or closure of the airport as the alternative to allowing expansion to proceed.
- A number of consultations have been undertaken in relation to expansion proposals and operational changes at Heathrow over the last 10 years. Many people will have responded consistently to these (as has H&F council) to say that we do not support expansion or changes that increase environmental impacts such as noise. There is a danger of "consultation fatigue" for people on the issue of Heathrow expansion who feel that they are continually being consulted on issues but not being listened to.

ANNEX 1: RESIDENTS' VIEWS

The evidence we have about residents' views on Heathrow expansion is qualitative in nature. Comments by residents on the initial website news page (see 'A' below), and subsequently responses to the call for written evidence (see 'B' and 'C' below), have enabled us to identify the salient issues.

While these also show a majority against Heathrow expansion, this can only be a rough indication of the weight of resident opinion. We had neither the time nor the resources to commission a quantitative survey, however it is worth noting the results of the 2008 Council consultation exercise about the most recent previous proposal for a new runway at Heathrow which were as follows:

• Out of a total of 4,039 responses, an overwhelming majority of 3,765 respondents (93%) objected to further expansion at Heathrow, with just 227 (6%) being in favour. The remaining 1% expressed no clear opinion. The main reason people objected at that time to further expansion was the increase in noise impacts - 3,688 people highlighted noise as a concern. Almost as many people (3,507) also rated increased air pollution as a reason for their opposition. Strain on the roads and Underground was of concern for 2,998 people. The majority of respondents were concerned about all of these issues and many also expressed concern about other impacts including: nightflights; climate change and safety issues. We believe these results and the issues raised are still broadly relevant.

An important factor at work is the information environment over the timescale of the AC. The AC's public consultation has been poorly publicised, and H&F is not included in the target boroughs, who were invited to the "Heathrow Public Discussion" event on 3 December. We found a lack of awareness that this consultation was taking place, although we were assured by officials at the "Heathrow Public Drop-in" evening event on 3 December that the consultation was for the general public and not a technical consultation. Despite this assurance, we consider this to be the most technically complex consultation ever undertaken on airport expansion, which we fear has discouraged people from checking proposals and considering the potential impacts for their quality of life.

During the same period, and into a virtual information vacuum, "Back Heathrow" has undertaken a regular and comprehensive direct mail and local press campaign, presenting arguments exclusively for expansion. As far as we know, this was the main source of information on the expansion debate that residents received during the Commission's consultation. We have written to "Back Heathrow" to obtain more details and await a reply.

None of the organisations campaigning against Heathrow expansion has had a fraction of the resources to achieve this sort of coverage — or indeed any mailshots at all. Consequently, it feels as if the consultation and the accompanying "debate" on expansion has very much been weighted in favour of the pro-expansion lobby.

A: www.lbhf.gov.uk - "Have Your Say on Heathrow" - Analysis of Comments

Total of comments – 186

Against Heathrow expansion – **101** (or 54.3%) **For** Heathrow expansion – **59** (or 31.7%) **Neutral** or incidental comments – **26** (or 14.0%)

Thematic analysis

Where comments have more than one theme, these have all been recorded.

• Against:

Pollution - noise (including effects on sleep)	70
Expand Gatwick instead	18
Build new airport e.g. "Boris Island" instead	18
Airport in densely-populated area	15
Security/safety risk	13
Expand elsewhere instead/balanced regional development	12
Detrimental to health/quality of life	8
Pollution - general	6
Pollution - air quality	6
Inadequate road capacity	3
Inadequate public transport capacity	2
Detrimental to house prices	2
Carbon emissions	2
Wrong reasons for expansion	1
Deliver expanded capacity by other means, e.g. HS2	1

• For:

Good for the economy/jobs/competitiveness	25
Noise not an issue/planes becoming quieter	16
Added travelling convenience	7
SE England needs hub airport	6
Objectors are NIMBYs/incomers	6
Environmental safeguards/mitigation must be incorporated	5
More capacity required at Heathrow	5
Depend on Heathrow for livelihood	3
Insulation for homes must be provided	3
Increases attractiveness of borough	2
Lack of suitable capacity/infrastructure elsewhere	2
Benefits outweigh negatives	2
Night flights should not be allowed	1

• **Neutral**/incidental comments:

Noise is a problem from Heathrow	4
Capacity issues solved by moving short-haul flights elsewhere	3
Capacity issues solved by investing in high-speed rail network	3
Capacity issues solved by better slot management	2
Heathrow not run for benefit of UK/London	2
Review Westerly Preference to reduce noise issue	2
Why should convenience take precedence over quality of life?	2
Noise not an issue/can be reduced by using quieter planes	2
Security/safety risk	1
Heathrow most accessible airport from H&F	1
New hub airport should be served by HS2	1
A third runway would increase noise in Hammersmith	1
Landing taxes should be given to boroughs as compensation	1
Ban night-time flying	1
NIMBYs should move somewhere quieter	1
Heathrow major asset for west London	1
Expand Doncaster Airport instead due to better transport links	1
What plans does Heathrow have to improve public transport?	1

B: Call for written evidence - Thematic analysis of residents' written submissions

Total submissions – 113

Against Heathrow expansion – **65** (or 57.5%)
For Heathrow expansion – **41** (or 36.3%)
[For Heathrow Hub specifically – **6** (or 5.3%)]
[For HAL specifically – **1** (or 0.9%)]
Neutral or incidental comments – **6** (or 5.3%)
Not in scope – 1 (or 0.9%)

Individual submissions - 107 Group/organisation submissions - 6

Friends of Margravine Cemetery (113 members)
Hammersmith Society
Margravine Gardens and St Dunstans Road Residents Association (200)
Piper Residents' Association (75)
Peterborough Road & Area Residents' Association
Ravenscourt Action Group

Thematic analysis

Where submissions have more than one theme, these have all been recorded.

• Against:

Pollution - noise (including effects on sleep)	41
More traffic/inadequate road capacity	18
Flights start too early/finish too late	17
Increase in number of flights/aircraft movements	14
Detrimental to health/quality of life	12
Expand Gatwick instead	10
Inadequate public transport capacity	10
Security/safety risk	9
Airport in densely-populated area	8
Pollution – general	8
Pollution - air quality	7
Alter landing patterns/remove Westerly Preference	6
Build new airport e.g. "Boris Island" instead	4
Expand elsewhere instead/balanced regional development	4
Wrong reasons for expansion	2
Deliver expanded capacity by other means, e.g. HS2	2
No additional benefit to economy from extra hub traffic	1
No compensation for overflying	1
Carbon emissions/climate change	1
Contrary to London Plan	1
Disruption and destruction required for expansion	1

• For:

Good for the economy/jobs/competitiveness	20
Noise not an issue/planes becoming quieter	14
Added travelling convenience	12
More capacity required at Heathrow	6
London needs a hub airport	6
Lack of suitable capacity/infrastructure elsewhere	
Expansion requires limits on pollution	3
Increases attractiveness of borough	3
In the national interest	2
Investment in transport networks required	5 3 3 2 2 2
Supply chain dependence on existing set-up	2
Environmental safeguards/mitigation must be incorporated	1
Reduce noise through changing angle of approach	1
Depend on Heathrow for livelihood	1
Clarity required on future of airspace utilisation	1
Benefits outweigh negatives	1
Night flights should not be allowed	1
For Heathrow Hub specifically:	
Minimises cost of airport expansion	2
Protects economic competitiveness	3
Makes most of existing transport infrastructure	2
Avoids significant expansion of noise footprint	2
Least disruptive of all three options	2
Allows early-morning noise mitigation	2
The training helps margaren	_
Neutral/incidental comments:	
Noise is a problem from Heathrow	1
Demand for air travel steadily increasing	1
Regional economy benefits by Heathrow's presence	1
Current plans for one additional runway too short-term/simplistic	1
Stacking of planes will increase with expansion	1
Why should convenience take precedence over quality of life?	1
Helicopter flights should be banned over west London	1

C: Call for written evidence - publicity poster



ANNEX 2: H&F COMMISSION PROCESS, MEMBERSHIP AND CHRONOLOGY

This annex sets out in chronological order the process by which the Hammersmith & Fulham Commission on Airport Expansion (HFCAE) was established, appointed, went about its work and reported, both to Hammersmith & Fulham Council and to the Airports Commission consultation on the final shortlisted options for airport expansion.

4 November 2014: Launch of the Hammersmith & Fulham Commission (HFCAE)

A group of Hammersmith & Fulham residents formed a local commission, the Hammersmith & Fulham Commission on Airport Expansion (HFCAE), to assess the impact on H&F of the two Heathrow-based proposals for airport expansion as set out in the Airports Commission (AC) interim report of December 2013 and to provide a response to the AC's consultation on its final shortlisted options. This was launched on 11 November 2014 with a deadline for responses of 3 February 2015. The Council provided support, under the aegis of the Community Safety, Environment and Residents' Services Policy and Accountability Committee (CSERS PAC), with terms of reference and a secretariat comprised of three Council officers.

A long-standing resident of the borough, Christina Smyth, agreed to chair the HFCAE. The Chair identified, through stakeholder consultation, six other long-term residents of Hammersmith & Fulham, active in community affairs, with particular areas of knowledge germane to the task. The HFCAE members are:

• Christina Smyth (Chair)

Christina has lived in the borough for 32 years. Formerly a senior civil servant, she now works with a charity supporting West London families in need. She has chaired the Safer Neighbourhood Police Panel for Hammersmith Broadway Ward, served on the Brackenbury Residents' Association Committee and sings with the Addison Singers.

Stephen Claypole

Stephen is Chair of the Hammersmith Mall Residents' Association (HAMRA). He is a former senior editor of BBC News and Current Affairs and is currently President of the international TV production company DMA-Media Ltd.

Natasha Gabb

Natasha is a member of HAMRA. She has lived in the borough since 1998, working as a project manager in the construction industry, and is now occupied as a mother of a young family.

• Isobel Hill-Smith

Isobel is Honorary Treasurer of The Fulham Society and has lived in Fulham for 31 years. She retired recently from British Airways, where she worked on a range of government policy and regulatory matters.

Andy Sharpe

Andy is Secretary of the Wormholt and White City Neighbourhood Forum. He has been a local resident for 24 years and works for a local regeneration agency based in the borough.

Victoria Timberlake

Victoria is a member of the Board of Representatives of HAMRA and edits its newsletter.

Melanie Whitlock

Melanie is past Chair of the Hammersmith Society and has lived in Hammersmith for 35 years.

HFCAE was supported by the following Council officials, with the understanding that the resident members were independent of the Council and any other Council officers who were subsequently invited to give advice:

- Tom Conniffe, Principal Policy & Strategy Officer Clerk to the Commission
- Paul Baker, Senior Environment Policy & Projects Officer
- Dan Hodges, Communications Officer

Five stages were identified to the evidential examination process, which were designed to answer the questions set by AC in its consultation. These stages were:

- review of all existing written evidence
- call for further written evidence
- oral evidence hearing
- discussion of findings with CSERS PAC
- submission and publication of findings

HFCAE worked to a deadline of 31 December 2014 to produce a near-final draft for discussion at the January 2015 meeting of the Council's CSERS PAC. This allowed sufficient time to inform the Council's own submission to the AC consultation and to refine the HFCAE report in time to meet the AC's 3 February 2015 deadline. The Council allocated a budget of £7,250 to cover staff resources and other sundry overheads.

11 November 2014: HFCAE Meeting 1

Due to time constraints, HFCAE decided to focus on the following seven topics of major interest to residents within the Appraisal and Consultation Framework: noise; safety; traffic and public transport congestion; air quality; carbon emissions; economy; and quality of life. HFCAE judged that items including biodiversity, water and flood risks, while important, were less relevant to our borough, as was the AC's third final shortlisted proposal for a second runway at Gatwick. The Council published a news page on HFCAE and its work, including a mechanism for resident views on the potential Heathrow expansion. It also started using its Twitter account to publicise HFCAE's call for evidence.

18 November: HFCAE Meeting 2

Local Resident Outreach and Evidence

A video was added to the news page on the Council website, which strongly encouraged people to respond with their views. In order for written evidence to be considered, a name and address were required of both email and hard copy responses. A downloadable and printable publicity poster was also included. (See Annex 1)

It was agreed to send letters calling for written evidence to the Council's list of 250 residents' associations, civic societies and community groups, along with a copy of the poster shown in Annex 1. A deadline of 13 December was set for responses.

• Expert Evidence

Five of the major topics HFCAE identified were allocated to individual members of the committee, who in turn 'paired up' where necessary with relevant experts from within the Council. Members were to review evidence from the report, examine other expert evidence, consult with the relevant experts and, as a Commission, issue letters to nominated organisations calling for their evidence of impacts on the borough of the two shortlisted Heathrow-based options.

- Surface access: Melanie Whitlock with Chris Bainbridge, H&F Head of Transport Policy and Network Management
- Air Quality: Natasha Gabb with Dr Davene Chatter-Singh, H&F Environmental Quality Officer
- Local Economy: Andy Sharpe with Kim Dero, H&F Head of Economic Development, Learning and Skills
- Noise and safety: Isobel Hill Smith with Paul Baker, H&F Senior Environmental Policy and Projects Officer
- · Quality of Life: Christina Smyth

Oral Evidence Hearing

HFCAE invited the following witnesses to the oral evidence hearing on 10 December: Heathrow Airports Limited, Heathrow Hub, HACAN, West London Friends of the Earth, West London Business, Transport for London, H&F Chamber of Commerce and the Civil Aviation Authority. Draft letters inviting each organisation were circulated to and approved by HFCAE members.

- 21 November Letters issued to expert witnesses with a 3 December deadline for supporting information to be submitted.
- 21 November Letters issued to residents' associations, civic societies and community groups with a 13 December deadline for responses.

26 November: HFCAE Meeting 3

The AC's 3 December "Heathrow Public Discussion" event was raised, along with the fact that no invitations had been sent to H&F Council or its representatives. This was checked afterwards and no invitations had been received.

Andy Sharpe drafted a letter to Sir Howard Davies, AC chair, outlining shortcomings of consultation and communications, including inadequacy of consultation period and lack of high-level air quality modelling preventing the Airports Commission from examining the issue robustly.

- 1 December Christina Smyth sends above letter to Sir Howard Davies.
- 1 December HFCAE members circulated topic papers to other committee members.

3 December 2014: HFCAE Meeting 4

HFCAE members reviewed topical evidence and shared their questions covering areas and issues for which further clarification was required. HFCAE sent these to the secretariat by 6 December for collation and circulation.

Posters calling for written evidence were circulated to all libraries in the borough as well as posted by the Town Hall entrance.

Christina Smyth attended the AC's "Heathrow Public Drop-in" evening session with just 3 other members of public in attendance. In a room with capacity for 400 she raised the following concerns with the large number of officials in attendance.

- 1 There was to be no weighting of modules for airport expansion and was told that the Commissioners would 'use their judgement'
- 2 The AC report was judged to be 'transparent' even though the air quality model was incomplete and final statistics would be published *after* the response deadline.
- 3 The Populus Survey was deemed accurate and sufficient even though the Commissioner responding to her query had not seen the interview script.

9 December: HFCAE Meeting 5

HFCAE finalised details of oral evidence hearing and questions.

10 December: HFCAE Meeting 6 - Oral evidence hearing

The oral evidence hearing started at 9.30am sharp (see 'D'). Witnesses were questioned by HFCAE members and asked to submit further information for clarification as required.

- 13 December Deadline of receipt of residents' views direct or via local organisations.
- 15 December HFCAE members submitted revised evidence papers plus completed entries for relevant sections of the Airports Commission's Appraisal Framework.
- 18 December Chair circulated draft 1 of Executive Summary

Secretariat circulated draft 1 of detailed report and thematic analysis.

- 30 December Commission members circulate comments on Draft 1
- 31 December Chair and Secretariat prepare draft 2 for PAC
- 31 December Draft 2 submitted to PAC Secretariat

7 January 2015: HFCAE Meeting 7

Briefing for HAL meeting with members of Council

- 13 January Draft 2 before CSERS PAC and HAL meeting with members of Council Weekly meetings scheduled throughout remainder of January.
- 30 January Final report signed off by HFCAE and submitted to Airports Commission for their 3 February 2015 deadline.

D: Oral evidence hearing timetable

Hammersmith & Fulham Commission on Airport Expansion

Oral Evidence Hearing 10 December 2014 - Small Hall, Hammersmith Town Hall Timetable

0930-1030	Heathrow Airport Ltd
1030-1035	Summation
1035-1135	Heathrow Hub
1135-1140	Summation
1140-1155	Break
1155-1235	HACAN
1235-1240	Summation
1240-1320	H&F Friends of the Earth
1320-1325	Summation
1325-1400	Lunch
1400-1440	West London Business
1440-1445	Summation
1445-1545	Transport for London
1545-1550	Summation
1550-1605	Break
1605-1645	Deliberations
1700	Room handover