

NEW ECONOMICS FOUNDATION (NEF)

DEADLINE 3:

NEF COMMENTS AND RESPONSE TO APPLICANT

Registration Identification Number: 20040182

Written by: Dr Alex Chapman

Published: October 2023

Purpose of this document

1. This document provides NEF's response to two documents published by the Applicant. Inquiry document 8.39, *Applicant's response to written representations made by Non-statutory Organisations at Deadline 1*, and the associated *Appendix (NEF)* to the same document (referred to here as 8.39A), which responds exclusively to NEF's comments. We also make comments relevant to issues raised orally at ISH2 on Wednesday 27th September.

Unaddressed issue: Cost-benefit analysis

2. The applicant responds to some of the points NEF have made, but leaves some critical issues unaddressed. One of the most important of these relates to the Applicant's cost-benefit analysis and their decision to include benefits accruing to foreign residents and exclude some environmental costs.
3. *Flightpath to the Future*, published by the Department for Transport in 2022 and described by government as a "strategic framework" states that government will (emphasis added): "*support growth in airport capacity where it is justified, ensuring that capacity is used in a way that delivers for the UK*" (p. 9). Government support for airport expansion is clearly conditional on a justification grounded in benefits accruing to the UK.
4. Table 8.8 (p. 207) of the Need Case (Inquiry document 7.04) shows that 58% of the benefits of the proposed scheme accrue to foreign residents. Without these benefits the scheme has a negative overall net present value. Furthermore, the applicant has included benefits to foreign residents, but not the carbon costs they will incur (i.e. those related to inbound flights). This is an inconsistent approach which skews the balance of the overall assessment.
5. Government guidance is clear that inclusion of greenhouse gas emissions that occur overseas is desirable, stating:
"Where appropriate, proportionate and possible to identify the impact of the proposal on emissions overseas or that occur outside the target framework (e.g. radiative forcing from aviation), the change in emissions overseas should be valued at the Value of Carbon" (p.16) – BEIS (January 2023) Valuation of Energy Use and greenhouse gas (GHG) emissions.

6. The applicant has also not included the cost of non-carbon emissions in the cost-benefit analysis, nor costs related to noise and air quality, all of which would further diminish the scheme's net present value. Overall, even within the bounds of the Applicant's own skewed assessment, the scheme does not seem to offer a net benefit to the UK.

Climate impacts

7. The Applicant continues to put forward a flawed interpretation of the Jet Zero Strategy. The Jet Zero Strategy's High Ambition scenario is said by the Applicant to "*represent current Government policy on aviation*" (8.39, p.94). It is then relied upon by the applicant as a single, fixed, future. In reality, whether the High Ambition scenario plays out will depend on many factors outside of Government's direct control. That uncertainty is clearly recognised in the language used by government, including frequent use of words such as 'ambition' and 'aspiration'. Furthermore, a large number of the policies which might be required to turn that future into reality have yet to be designed and/or legislated. Indeed, the Jet Zero Strategy contains few policies which will materially impinge or limit the aviation sector's emissions. At page 39 of Jet Zero, the High Ambition scenario is described as an "*illustrative scenario*" and later, as a "*trajectory*" which will be used to "*monitor the sector's emissions*" (p.60). Nowhere in Jet Zero, or in the Making Best Use policy, does the government say that as a result of its policy decisions, greenhouse gas emissions can now be ignored in the planning process.
8. Further sensitivity testing should have been conducted to test the proposed scheme's climate impact should the pace of future technological development be slower than hoped for in the High Ambition scenario of the Jet Zero Strategy.
9. All additional greenhouse gas emissions make Government's job of meeting its legal net zero obligations harder, and entail opportunity cost. Even where emissions are capped under the UK ETS, other businesses will suffer as the price of a carbon permit rises. This opportunity cost should be set out more clearly by the Applicant.

10. The applicant continues to advance the issue of uncertainty as a reason for non-carbon emissions to be dismissed. To the contrary, this uncertainty, coupled with the emerging evidence of their severe impact on the climate, is reason to refuse the application under the precautionary principle. The applicant challenges the idea that the precautionary principle applies on the basis that the Environmental Principles Policy Statement addresses the design of policy, not individual decisions. For the UK's commitment to the precautionary principle, as set out in a range of policy documents and UN treaties, to mean something, the principle must apply at the point of decision making, and not only on paper.
11. It is untrue for the applicant to state that non-CO2 emissions "*cannot be quantified*" (8.39A, para 6.1.3). The DfT view, as set out in WebTAG (unit A5-2) is that "*a quantitative assessment can be made as a sensitivity test*" (p. 10). The Applicant continues to ignore the fact that government has provided specific guidance for company reporting of greenhouse gas emissions which sets out how to create a best-estimate quantification of non-carbon emissions. Current guidance is to apply a multiplier of 1.7 to carbon emissions. This is set out in the Department for Energy Security and Net Zero document *2023 Government Greenhouse Gas Conversion Factors for Company Reporting*.
12. It is also incorrect for the Applicant to imply that non-CO2 impacts cannot be benchmarked. The monetisation and cost-benefit analysis approach is endorsed by the government in WebTAG and the Green Book and provides an effective, and well-established, method for establishing the proportionality of negative impacts versus claimed benefits.
13. Finally, on the issue of monetisation of emissions. The Applicant presents a range of evidence from WebTAG that confirms that emissions should be monetised and included in the cost-benefit analysis. The Applicant correctly highlights that traded-sector emissions may be excluded from the final cost-benefit table on the basis that they are already internalised within the forecasts. Non-traded sector emissions, which make up the majority of aviation's impact on the climate, should be included. Our principle points of disagreement seem to be:

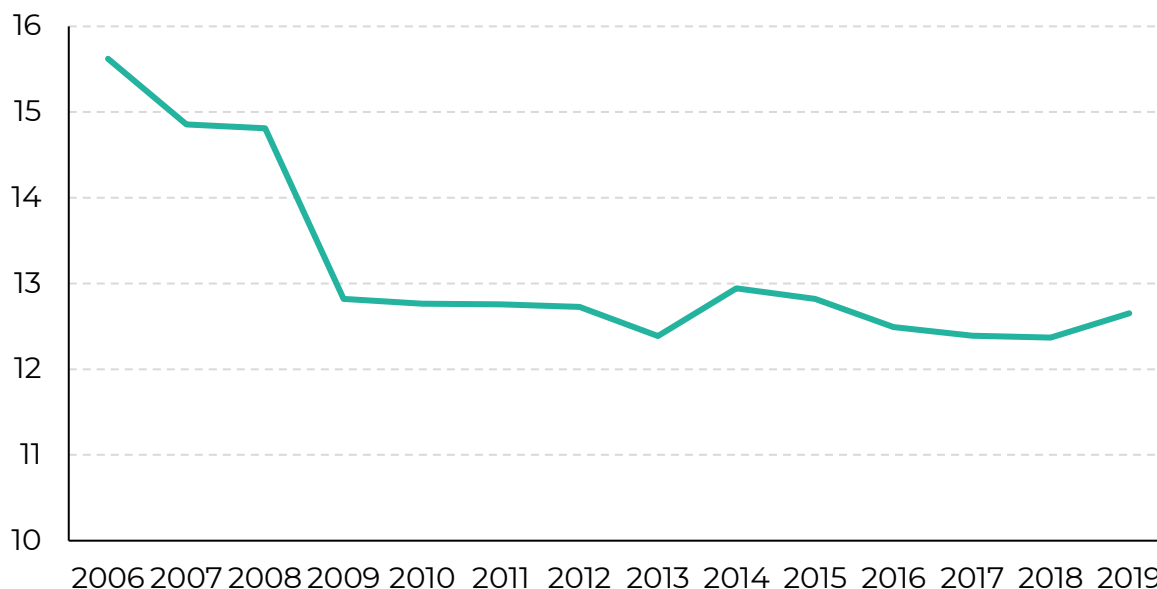
- a. NEF advocates that non-CO2 emissions should be included. It is not clear why they would not be when DESNZ have provided a simple route to doing so.
- b. NEF advocates that traded-sector emissions should still be presented in the economic assessment, if not in the final cost-benefit analysis table. This is supported by BEIS guidance as set out in our initial Written Representation. This is useful because additional traded-sector emissions still come with a significant opportunity cost to other sectors of the economy, increasing the price of carbon permits for other emitters.

Business impacts

14. NEF notes the applicant's agreement that there has been no net growth in business passenger numbers since 2006. The "growth" described by the applicant over the period 2010 to 2019 might also be described as "recovery", and as of 2019, that recovery was incomplete despite significant growth in real GDP, leisure passenger numbers, and air connectivity.
15. The applicant describes a current context in which GDP has returned to 2019 levels but overall business air passenger numbers are at 69-74% of 2019 levels (8.39A, para 3.2.3). This implies a decline of 26-31% in the 'business travel intensity' of the economy, and looks very similar to the structural adjustment which took place after the 2007/08 crisis. Between 2006-2009 the 'business travel intensity' of the economy fell by around 20%. As such, there are early indications that the Covid adjustment may go deeper than the last financial crisis. The 2006-2009 adjustment is shown in Figure 1, which uses similar inputs to the applicant's own Figure 3.2 but includes the key years 2006-2009, the peak period of recession.
16. Oddly, at para 3.2.3 of their Appendix (8.39A) the Applicant seems to agree with NEF's assessment that trends appear to be mirroring those after the 2007/08 financial crisis. If this is the case, the Applicant's forecasts are incorrect by a significant margin. There will be no net growth in business passenger numbers until at least 2035 (see Figure 2 of NEF's Written Representation). By contrast, the Applicant is forecasting growth in the order

of 20% at the London Airport System level over the same period. The applicant's forecasts are not aligned with their own commentary.

Figure 1: Business air trips (scheduled terminating passengers) in the London Airports system per million pounds of national real GDP (chained volume measure)



Source: ONS national accounts and CAA passenger survey

17. NEF made one further core argument. That is, according to the DfT, when capacity is constrained, business passengers continue to fly. The applicant appears to accept this point is at least “theoretically correct”. The remainder of the applicant's comments on this point are confused, and do not appear to materially impact the central proposition. While it is true that a small number of extremely marginal business trips might not take place in a capacity constrained scenario, those trips are marginal, and therefore of much lower value to society than the majority of trips which will continue to take place. If there is serious business demand for routes, airports and airlines will service that demand irrespective of capacity limits.

Productivity effects

18. NEF made the simple point that productivity benefits from aviation growth are subject to diminishing returns, and that relationships calibrated on data from the 1980s through to the early 2000s are not appropriate in 2023. The applicant's arguments on this matter appear to be self-contradictory. At paragraph 3.2.7 (8.39A) the applicant appears to agree with NEF:

“In any event, past patterns are not representative of the value of future business trips and do not provide an evidential base for the assessment of the productivity benefits of future growth in the volume and value of business air trips.”

Then, at paragraph 3.3.4 (8.39A) the applicant changes their position:

“In terms of assessing those business productivity effects, Dr Chapman is incorrect to dismiss a 30-year time period (1980-2010), as used by the DfT in developing its elasticities for its UK Aviation Forecasts 2017, as the basis for identifying a robust relationship. That period included significant changes in the air transport market, the economy and technology. It included periods of economic prosperity and recession. To say it is not reflective of a post-pandemic world is pure speculation and without logic.”

19. NEF’s core point on the matter of productivity growth is simple. The applicant’s own relationship (adopted from Oxford Economics) requires there to be net growth in business passenger numbers if airport passenger capacity growth is to deliver wider productivity growth. There has been no such growth since 2007, there is highly unlikely to be any such growth for many years to come, and any such growth is not contingent on airport expansion (due to the displacement effect discussed above and presented by the DfT).

Jobs and GDP

20. NEF pointed out that at the national level employment in air transport and supporting services in 2019 was less than in 2006, despite significant growth in passenger numbers. NEF highlighted that this is also true of Luton and Bedfordshire. Local employment in air transport and supporting services sits well below its peaks in 2005 and 2007 in both geographies. The applicant has not disputed these figures. The applicant does however, attempt to place the blame on the pandemic (para 5.1.7). This is odd given that NEF presented the full time-series of data, which shows that employment in the two geographies was even lower in 2019.

Job quality

21. NEF highlighted that at the national level, air transport has seen the steepest decline in real wages of any subsector of the UK economy. The applicant has

not disputed this fact. The applicant does, however, try to blame this decline on the pandemic, which would have influenced the 2022 figures. This argument is flawed. As set out in NEF's *Losing Altitude* report, real wages in air transport saw the second steepest decline of any sub-sector of the UK economy between 2008 and 2019. As such, it remains robust to say that at the national level, workers have not received the benefits of the rapid passenger growth over the period.

22. NEF also highlighted that, based on the salaries reported in the Halcrow and Oxford Economics reports, this trend has also played out at Luton Airport. Figures presented in the two reports suggest a real-terms decline in wages of around 9.5%. The pandemic will not have affected this conclusion as Oxford Economics use 2019 data. It is true that the differing methodologies of Halcrow and Oxford Economics will introduce a degree of error into the calculation however, it seems highly unlikely that this methodological difference can explain all of the large, 9.5%, decline in real wages implied. Indeed, it is equally possible that the decline was in fact larger still. The Applicant could have presented further evidence on this matter, but has declined to do so.
23. Taken alongside the Applicant's own data which shows that salaries paid to Luton Airport workers in the Luton and Bedfordshire region are similar to those of the wider local economy, the evidence remains strong that Luton Airport provides minimal contribution to the 'levelling-up' of the area.

Tourism and travel spending

24. The applicant makes the bold claim that "*There is simply no evidence to suggest that overseas travel by UK residents has any negative impact on the UK economy*" (8.39A, para 4.1.5). This is not true, the issue is indeed complex and is discussed at length in NEF's report *Losing Altitude*, where a range of different sources of evidence are presented. However, to summarise, there is evidence which suggests that growth in the outbound leisure travel market has taken spending away from: (i) the domestic tourism industry (ii) high streets, and particularly (iii) less well-off areas of the UK that see large outbound flows but virtually none of the inbound flows.

25. The proposition that domestic and international tourism are partial substitutes is well established by academic evidence (see Appendix A of *Losing Altitude*). Meanwhile ONS data clearly shows that cash and spending leaves from the UK's wider regions, but what returns, via inbound tourism and Foreign Direct Investment (FDI), goes primarily to London and the South East. Furthermore, one only need look at the fortunes of the UK's deprived coastal communities over the past two decades to see that consumer choices, incentivised by the proliferation of low-cost flights from airports such as Luton, have had negative economic ramifications for UK communities.
26. NEF's position on this matter has not changed, as implied by the applicant, since the Bristol Airport expansion application in 2019. Just as we stated in 2019 on Bristol, we state now - the applicant has understated the negative effects of outbound tourism. At that time we recognised, as we do now, the position set out by the government in the Aviation Policy Framework (APF) in 2013, which suggested that the net tourism spending deficit, on its own, should not be reason to halt plans to increase inbound tourism.
27. However, there are a number of caveats to this. The APF was published ten years ago, and the world has changed significantly since then. The APF does not mandate completely ignoring the issue in an appraisal such as this one. To do so would undermine its credibility. The Luton Airport expansion application is seven times larger than that at Bristol, and as such the analysis should go significantly deeper and should consider serious matters such as this, particularly given their clear relevance to the 'levelling-up' agenda.
28. Furthermore, the government has made further statements since 2019 which provide reason to review the outbound tourism issue. This includes the 2021 Tourism Recovery Plan, thus far ignored by the Applicant, which states the government's aim to "*embed domestic travel as a sustained consumer behaviour*", as well as comments from the UK's national tourism agency, VisitBritain, which has also called for the tourism spending deficit to be reduced via incentivising British residents to "*holiday at home*".

Misrepresenting NEF's previous involvement in airport expansion processes

29. The Applicant makes a number of misleading claims about NEF and Dr Chapman's prior involvement in airport proceedings. The first relates to Dr Chapman's involvement in the 2022 Luton Airport inquiry, where the Applicant states:

"Dr Chapman's position here is not consistent with the position that he took at the 2022 Public Inquiry into London Luton Airport Operations Ltd.'s application for 19 mppa where he described the OE [Oxford Economics] work in connection with the DCO17 as providing a "true" estimate of the employment generated by the airport." (8.39A, para 5.1.8)

In fact, the position taken by Dr Chapman was entirely consistent with that put forward in this DCO process. The full context of Dr Chapman's use of the word "true" (which should have been given by the Applicant) is as follows:

"Halcrow stated in their original assessment that their with-development scenario, medium forecast, puts total direct employment at Luton Airport at 13,350, they did present a range, albeit a very wide range, between 10,100 to 17,450. And then of course we come to the Oxford Economics Report for Luton Rising which concludes that as of 2019 the true level of employment was 10,900, some 2,450 lower than the central forecast put forward by Halcrow."

30. To be clear, Dr Chapman was not describing Oxford Economics forecasts as "true", he was referring to their estimate of 2019 (i.e. historic) employment at the airport.

31. Secondly, in relation to a short report produced by the consultancy Volterra in 2020 reviewing NEF's work on Leeds Bradford Airport, the applicant states:
"In the case of Leeds Bradford Airport, the views expressed by NEF were peer reviewed and the arguments relating to overstatement of employment, displacement and the tourism deficit largely rejected." (8.39A, para 1.2.3)

32. NEF does not recognise this interpretation of the Volterra report. While the Inspectorate is free to consult the full report, for information we share below Volterra's summary of NEF's contribution [emphasis added]. To say that our

representations were “*largely rejected*” is untrue, they described variously as “*fair*”, “*valid*”, and “*balanced*”:

“In summary, NEF consulting put forward some valid arguments in their rebuke of the proposed expansion of LBA. Given the variation in direct employment supported at UK airports, it is considered a fair challenge to query the direct employment estimate, although having reviewed the approach and queried the methodology with York Aviation, Volterra does not consider it to be overestimated in this case. Furthermore, the arguments put forward about product displacement are valid – there would be product displacement if impacts were to be considered at a wider (e.g. national) study area. Despite the reasoning being logical, the product displacement impacts claimed by NEF, such as the ‘impoverishment’ of Manchester Airport, are considered to be overstated. For example, even in the unrealistic worst-case scenario whereby all additional passengers forecast at LBA are displaced from Manchester Airport, this would only amount to approximately 10% of Manchester Airport’s 2019 total passenger numbers. Finally, the inclusion of social welfare costs – such as noise, air quality and surface access costs – present a more balanced view of the social welfare impacts, albeit some of the costs appear slightly too high.”

33. Interestingly, on the matter of outbound tourism costs, Volterra stated:

“It would be reasonable to include this within the cost benefit consideration to some degree” (p. 4).

In Table 1 of their report, Volterra then quantified the cost of outbound tourism resulting from the scheme, estimating its value at -£533m net present value in the Leeds City Region. The Applicant has not completed such an assessment.

34. Finally, it is important to note the context of the Volterra report. Volterra, a private sector transport consultancy, were commissioned by Leeds City Council. At the time, Leeds City Council were strongly in favour of the expansion of the airport. The applicant describes NEF as having been “*commissioned [...] to oppose growth*” (8.39A, para 1.2.1). If it is true that NEF were commissioned for this purpose, then Volterra were commissioned for the opposite purpose: to support the case for growth. The same can be said of York Aviation in their work on Luton Airport, Bristol Airport, Glasgow

Airport, Leed Bradford Airport, City of Derry Airport, Newcastle Airport, Dundee Airport, Stansted Airport, Manchester Airport, East Midlands Airport, Birmingham Airport, and Liverpool Airport.

WebTAG

35. The applicant is at pains to distance itself from WebTAG, and keen (8.39A, para 1.2.3) to show that the Planning Inspectorate endorses this position. This is strange. Irrespective of whether WebTAG is a mandatory requirement for an application such as this (which is far from clear), the DfT is absolutely clear that it regards WebTAG to be best practice in aviation sector appraisal. It is relevant to all airport expansion applications, but particularly those in the DCO process. It unclear why the applicant is so keen to distance itself from best practice.

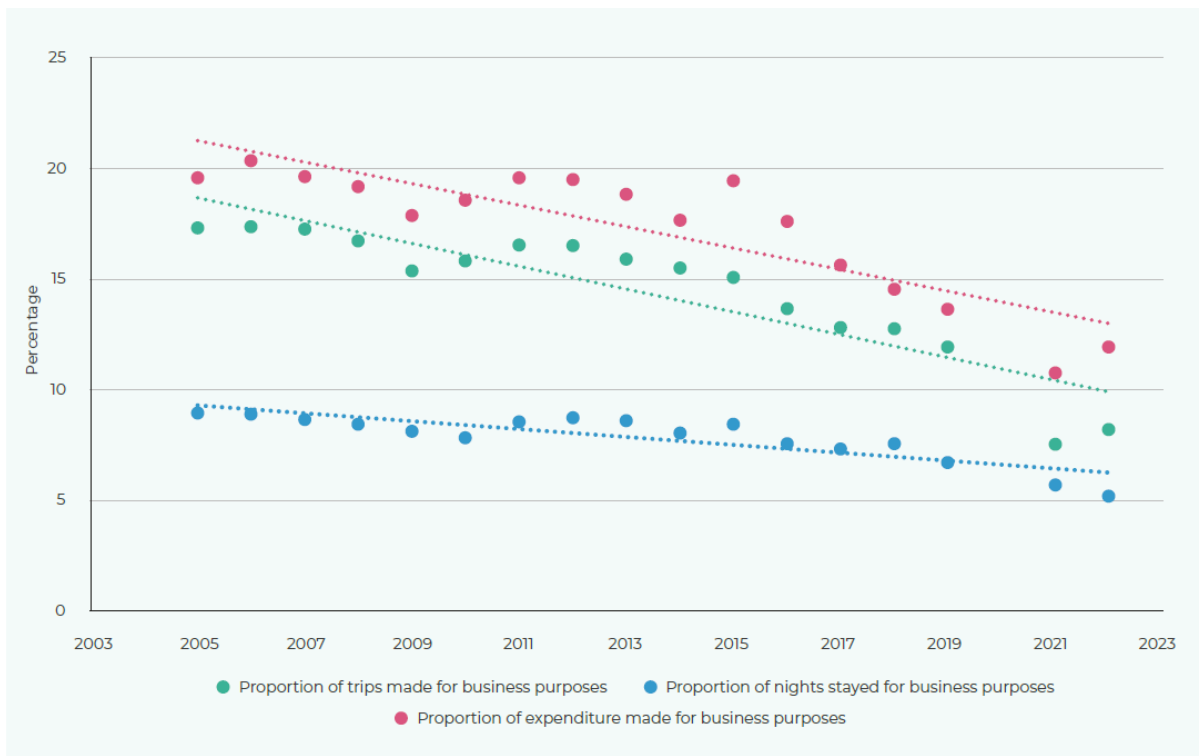
Core position on the merit of air transport growth

36. The applicant seeks to present NEF's view on the relationship between aviation and the economy as fringe, and unevidenced. NEF is accused of presenting "*no evidence*" to support its claims around the impacts of the pandemic, and the literature review presented in our recent report *Losing Altitude: The Economics of Air Transport* is described as "*selective*" (8.39A, para 7.2.4). NEF refutes both of these claims.
37. NEF's report includes over 50 references, of which 22 are academic studies published in credible journals. One of those studies, Zhang and Graham (2020) presents a synthesis of academic evidence on the same topic. Many of the studies we cite describe contexts in which air transport growth was shown to have a beneficial effect on an economy. Our report does not downplay that fact, instead we seek to identify the necessary pre-conditions for that positive impact to prevail, and explore whether they are present in the UK in 2023.
38. NEF's conclusions on this matter align closely with those presented by Peak Economics (academics from the University of Leeds) to the DfT in 2018, i.e. that positive wider economic impacts are pre-conditioned upon the presence of (i) net additional impacts (as opposed to displaced impacts), (ii) business passenger growth, and (iii) a net positive tourism balance. The applicant has

“noted” the Peak Economics report, but chosen not to engage with it. In addition, NEF’s *Losing Altitude* report was subject to a peer review by John Siraut, leading UK transport economist, and Chair of the Transport Economics Committee of the European Transport Conference, Europe’s largest and most respected academic transport symposium.

39. *Losing Altitude* contains a wide range of analyses based on official datasets. This includes evidence showing impacts post-pandemic, such as an acceleration in the decline of the market share of business-purposes passengers in 2021 and 2022, as shown in Figure 2 below. Even more recent data from the ONS suggests business air trips had a market share of 10.4% in Q1 2023, down from 14.2% in Q1 2019. Statements from the industry support this diagnosis, in September 2023, Southampton Airport told the BBC of the challenges their airport was facing due to “a reduction in business travel since the pandemic”.¹

Figure 2: Trends over time in three measures of the UK business air travel market.



Source: NEF analysis of ONS Travepac

¹ BBC News (September 2023) Southampton Airport’s extended runway completed.

40. In contrast, the applicant has not paid due regard to the emerging evidence on the link between air transport and the economy. The applicant's submissions are largely devoid of academic evidence. In defence of their position the applicant points to the papers referenced at paragraph 2.5.8. of the Need Case. These studies are referenced in relation to FDI and not the wider economics impacts of air travel. The 7 studies cited are dated 2004, 2005, 2006, 2008, 2008, 2011, and 2013. At least 5 of the studies appear to have been produced by private sector consultancies. None of these studies had access to data on the key shift in the relationship between air travel and the economy which emerged in the aftermath of the 2008 financial crisis.

New Economics Foundation
www.neweconomics.org
info@neweconomics.org
+44 (0)20 7820 6300

NEF is a charitable think tank. We are wholly independent of political parties and committed to being transparent about how we are funded.

Registered charity number 1055254
© 2023 The New Economics Foundation

