

A briefing on building a 3rd Runway at Heathrow.

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Part 1. Introduction and summary

Building a third runway is a massive undertaking involving nationally important economic and environmental factors, re-routing of transport networks and huge disruption of local communities. The Kew Society acknowledges that some members of the public are strongly in favour of a 3rd runway whilst others are strongly against it. **This briefing is presented in three parts. (1) An Introduction** outlining the current standing of the project **and a summary of each of the five main detailed sections** (i) airport capacity, (ii) economic benefit of a 3rd runway, (iii) expansion and climate change targets, (iv) impact on local communities, transport networks and air quality, (v) benefit or disadvantage of expansion to areas outside SE England. **(2) Detailed discussion of the pros and cons of the 3rd runway under these five headings.** We encourage the reader to delve into these detailed sections after reading the summaries. **(3) A reference list of government and other documents cited in the briefing.** We hope this format will help readers to make up their own minds about the 3rd runway project whether they want to make a quick, or a detailed assessment.

Adding a third runway to Heathrow's existing two runways has a long history. The Labour government approved airport expansion in 2009 but this was cancelled by the Coalition government in 2010. An independent Airports Commission (AC) was set-up subsequently by the Conservative government with a brief to make recommendations "which will allow the UK to maintain its position as a global hub for aviation". Its report in 2015, supported building a third "North West Runway" at Heathrow¹. The House of Commons voted in favour of it in 2018. Flights at Heathrow with 2 runways are capped at 480,000 p.a. but with 3 runways this would increase by over 50% to 740,000 p.a. Passenger numbers would almost double from 74 million in 2015 to 135 million p.a. by 2050. Environmentalists oppose the third runway on multiple grounds and especially on increased greenhouse gas (GHG) emissions from increased flights and ground transportation having a detrimental effect on climate change.

The United Nations Climate Change Conference in Paris (COP21), 2015, warned that global warming from CO₂ and other GHG emitted when burning fossil fuels (e.g. kerosene jet fuel) must be kept well below 2°C, and ideally at no more than 1.5°C above pre-industrial levels by 2100 to avoid catastrophic consequences for life on Earth (for more information on this see Kew Society Symposium, 2023²). The Paris Agreement 2015, signed by 192 countries, including the UK, and the European Union, commits those countries to achieving this goal³.

In 2018, the UK Government supported Heathrow Airport's plan to develop the 3rd Runway through an Airports National Policy Statement (ANPS)⁴, drawn up by its Department for Transport (DfT). Environmental organisations challenged the lawfulness of the ANPS in the High Court on grounds that the Secretary of State (SoS) for Transport had not considered the climate change implications of the Paris Agreement when outlining the plans for the 3rd Runway in the statement. The

Divisional Court dismissed these claims but, following an appeal by Friends of the Earth, The Appeal Court held that the SoS had acted unlawfully in failing to take the Paris Agreement into account⁵. Heathrow Airport appealed this decision in the Supreme Court which unanimously overturned the Appeal Court ruling in December 2020. It held that the 2018 ANPS ensures that when Heathrow Airport applies for a development consent order (DCO), that is, planning permission, to build the 3rd runway it will then have to show that it is fully compatible with the up-to date requirements under the Paris Agreement and the Climate Change Act 2008⁶.

Following the publication of the Airports Commission Report in 2015 the Labour party, in opposition at the time, proposed four tests to determine whether it would support a third runway being built at Heathrow⁷. Briefly these are:-

- (i) That increased capacity will be delivered
- (ii) That CO2 reduction commitments can be met
- (iii) That noise and local environmental impacts can be minimised
- (iv) That the benefits of expansion will be felt across all regions of the UK, not just the south-east.

The Labour Party declared that when applied to the ANPS, tests (i) – (iii) failed and (iv) had not yet been met. The tests still underlie questions which are pertinent to the building of the 3rd Runway and will be addressed below.

Not with-standing their Party's tests and conclusions many Labour MP's voted with the government to approve the 3rd Runway in parliament in 2018. One was Rachel Reeves MP. In January 2025, now Chancellor of the Exchequer, she announced the new Labour government's backing for a third runway⁸, saying that it will "unlock further growth, boost investment and make the UK more open and connected" and that a new report by Frontier-Economics*, a consultancy, showed it "would benefit GDP by 0.43% by 2050"⁹.

**It should be noted that this report, "Heathrow Expansion Benefits", was commissioned by Heathrow Airport and has only been published as an Executive Summary to date.*

Summaries

- 1. Heathrow is full.** Heathrow is not full. It has expanded over 10% from 74 million passengers p.a. at the time of the AC to 83.9 million by 2024. The need to build a third runway at Heathrow must also be assessed in the light of the enormous expansion of other London airports which is already approved. That expansion will accommodate a further 60 million passengers p.a. using London's airports. If passenger demand is constrained in later decades, which is very possible, this and Heathrow's own expansion using two runways is likely to meet future passenger number projections.
- 2. Economic benefit of a 3rd runway.** Predicting the economic benefit of a 3rd runway is an inexact science. Very different answers, varying from a negative "Net Present Value" to a positive £61 billion over 60 years are obtained, depending on which forecasting model is used and the assumptions programmed into it. Some economists believe that the Chancellor's approval statement for the 3rd runway may be based on flawed economics.

- 3. The third runway and UK climate change objectives.** The present Government policy (Jet Zero Strategy) relies on technological developments in Sustainable Aviation Fuels (SAF) and Direct Air Carbon Capture and Storage (DACCS) to come into play at scale to reduce aviation greenhouse gas emissions to Net Zero by 2050. SAF technologies are new, costly, and there are problems in scaling them up to provide the required amount of fuel in the future. DACCS technology is in its infancy and is unlikely to make a significant contribution to removing aviation carbon emissions by 2050. The government's independent advisory body, the Climate Change Committee advises that CORSIA, a carbon offsetting scheme supported by Heathrow, is unreliable and should not be used in off-setting aviation emissions. Responding to these uncertainties, parliament's Environmental Audit Committee has raised concerns about whether the Jet Zero Strategy is progressing rapidly enough to meet Net Zero targets and has asked for it to be reviewed. The government and the CCC, are in conflict with one another over future policy, the former being driven by possibly unreliable economic gains from airport expansion (see above) and the latter by concern that the UK should meet its Net Zero targets by 2050 to combat climate change. It recommends in its 6th Carbon budget that there should be no expansion of UK airports until the aviation sector is on track to outperform its emissions. The government does not agree. The 7th carbon budget recommends that flying should be kept close to today's levels until technology develops at the required scale to decarbonise aviation in line with Net Zero. It recommends active management of passenger demand for flying as the major route to achieve this.
- 4. The third runway and its impact on local communities, road networks, rail transport and air quality.** Supporters say that a third runway would create over 100,000 jobs locally and would lead to thriving local businesses, particularly those supporting aviation and passenger needs like hotels and catering. Those opposing the runway say this would come at a huge cost to local communities and the environment. Over 750 residents would be served compulsory purchase orders and their homes bulldozed. Heathrow would encourage 3750 other residents to move from the area by offering to buy their homes at above market prices. They also plan to reroute the M25 into a tunnel under the new runway which would cause massive traffic disruption during the years of its construction, delaying commuters, other road users and freight delivery times, with consequent damage to UK business. The proposed diversion of two waterways into a culvert under the 3rd runway would have adverse effects on local ecosystems. Heathrow's ambition to keep road traffic levels down to current levels after building the runway and almost doubling passenger numbers to 135 million p.a. by 2050 would require, if ever achieved, up to 200,000 additional trips per day to the airport by public transport, or an increase of 210% over today's public transport trips. This would need massive expansion of railway access through building of new lines and stations and updating of the Piccadilly, Elizabeth and Windsor lines. All these schemes are expected to be financed by private investment sources which have not, as yet, been formally identified. TfL predict that at peak times railways would still be overcrowded and there would be significant road traffic

delays across West London, extending as far in as Westminster. Air pollution around Heathrow has improved in recent years and most local sites monitored by local authorities are now compliant with UK legal requirements. However, the current legal UK pollutant concentrations were set in 2010 and, at the time, were thought to be safe for human health. Subsequent research showed this not to be the case and local authorities and the GLA in London are now aiming in their air quality strategies to work to the much lower safe pollutant levels defined by the WHO in 2021. With a third runway, pollutant emissions from the greatly increased number flights, transport to and from the airport, and the construction of new buildings and the runway itself, achieving WHO air quality standards at Heathrow is unlikely. The health hazard of aircraft noise, currently affecting millions of West Londoners, is also likely to increase rather than decrease with 3rd runway expansion.

- 5. Would the third runway benefit or disadvantage areas of the UK outside SE England?** There are very different views about the benefits or disadvantages of a third runway for regions outside London and the South East. Chancellor Reeves and Heathrow believe that it would boost their economy but a report by the airport's own consultants says that London and the South East would gain 41% of the overall economic benefit of the runway whilst many poorer regions of the UK gain hardly at all. Heathrow promises to establish more domestic routes following expansion which they say would benefit business and exports in the regions. The government's own Department for Transport has data on the regional effects of a 3rd runway which was examined by The New Economics Foundation, an independent think tank. They report that with a 3rd runway, passengers departing from Heathrow would increase by 43 million by 2050 and that international passengers using Heathrow as a hub would increase by 11 million. However, the Heathrow expansion would reduce the flow of passengers through non-London airports by 17million by 2050. Up to 27,000 jobs in the regions would be lost through relocation of employees to London and the South East and this in turn would cause a loss of up to £43 billion GDP in non-London/SE regions, which would shift to London. The regional losses would be heavily concentrated in the West Midlands and the North West. A 3rd runway would massively increase Heathrow's carbon emissions. This would have to be accommodated within the UK's overall carbon budget to meet our climate change targets. That accommodation would be at the expense of carbon budgets for other industries and regions of the UK, potentially causing further disadvantage in poorer parts of the country.