

Summary

This briefing highlights the air pollution impacts of Heathrow expansion. The Heathrow area remains one of London's most persistent air pollution hotspots, with long-standing breaches of nitrogen dioxide (NO₂) limits. Previous Government assessments have acknowledged that Heathrow expansion would have a **“significant negative”** impact on air quality. There has been no evidence presented that demonstrates how a third runway could be delivered within existing legal limits. There are also currently no effective enforcement mechanisms to prevent expansion proceeding in the event of non-compliance.

Background

Air pollution around Heathrow is already among the worst in the UK. After central London, it is the second most significant hotspot for NO₂, with surrounding roads exceeding legal limits for over a decade. Expansion is expected to increase pressure on an already constrained system.

The Government's own Appraisal of Sustainability for the Airports National Policy Statement (ANPS) concludes that even with mitigation, expansion would have **“significant negative” effects on air quality**.

Expansion would also worsen local road congestion, increasing emissions through slower speeds and longer delays. Achieving compliance would likely require substantial behavioural change, including no net increase in airport-related traffic and according to TfL potentially a road user charging scheme of approximately £40 per trip.

Legal and Policy Risks

The UK is legally bound by the Air Quality Standards Regulations 2010 and the Environment Act 2021, including a PM_{2.5} target of 10 µg/m³ (micrograms per cubic meter). In addition, the World Health Organisation (WHO) has set stricter interim targets for 2030, including 20 µg/m³ for NO₂, which the EU has adopted as binding limits. There is a clear risk that Heathrow expansion would:

- Cause new breaches of legal air quality limits.
- Worsen existing breaches in already non-compliant areas.
- Undermine progress achieved through policies such as London's Ultra Low Emission Zone (ULEZ).

Responsibility for compliance has effectively been delegated to the airport operator, without a clear enforcement framework or defined consequences for failure.

Air Pollution Assessment

Any proposal for Heathrow expansion must be subject to a robust set of tests and assessments to ensure compliance with legal and health-based standards. Expansion must demonstrably:

- Not cause a new breach, nor worsen an existing breach, of UK legal air quality limits.
- Comply with WHO air quality guidelines, including interim 2030 targets for NO₂ and PM_{2.5}.
- Be compatible with current and future regulations on ultrafine particles (UFPs), applying the precautionary principle.

Key Assessment Requirements

For any proposal for Heathrow expansion to be considered seriously, the scheme promoter should be able to:

- Demonstrate compliance with all legal and WHO air quality limits, including UK Air Quality Regulations 2010, Environment Act and UK National Emissions Ceiling Regulations (NECR) and successor regimes.
- Verify that expansion does not reverse air quality improvements achieved through ULEZ and other interventions.
- Commit to no net increase in airport-related road traffic.
- Produce an assessment of the cumulative air pollution impacts on ecosystems and public health, including a distributional analysis of health impacts on local communities.
- Provide robust evaluation of congestion impacts on local roads and associated emissions.
- Set a clear financial contribution to deliver public transport improvements capable of achieving world leading mode share targets (65%) by date of third runway opening.
- Agree to independent and continuous monitoring of NO_x, PM_{2.5}, ozone, and UFPs, with enforceable thresholds and a commitment to meet future WHO standards.
- Accept a clear enforcement mechanism, including operational restrictions if limits are breached.

Key Questions for Government

1. What is the latest assessment undertaken that models the air pollution impact of a third runway at Heathrow?
2. Will Government commit to introducing air pollution targets that align with either EU or WHO guidance? Or at the very least modelling these impacts as part of the ANPS review?
3. What assessment has the Government undertaken on the impact of expansion at Heathrow on the improvements to air quality delivered by the Mayor of London?
4. Has the Government undertaken any analysis of the achievability of expansion proceeding without any increased in landside airport related traffic?
5. How can an expanded Heathrow achieve a doubling of freight without breaching legal air quality limits or WHO guidance levels?
6. What assessment has Government undertaken on the impact of expansion on local road networks in terms of congestion, air pollution levels and associated negative economic impact?
7. What assessment has been made of air pollution emissions around Heathrow should anticipated technological advances in aircraft not materialise?
8. What is the effect on the emission and concentration of ultrafine particles expected to be caused by expansion? Has this been modelled?
9. Will Government commit to independent monitoring of the air pollution created by any expansion at Heathrow?