Town and Country Planning Act 1990

Planning Objection

Application Ref: 26/P/0686/OU2

Address: Bristol Airport North Side Road Felton Wrington BS48 3DY

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1. INTRODUCTION

1.1. This Planning Statement has been prepared by the Parish Councils' Airport Association to OBJECT to the application for planning permission at Bristol Airport.

1.2. The purpose of the PCAA is to advise and represent its member councils on matters affecting them which are connected with Bristol airport and its operations. It reports back to, and reflects the views of, some 25 Parish Councils and two Town Councils which, in turn, are responsive to the views of many thousands of electors.

1.3. This submission is based on detailed examination of the relevant documents referred to in the planning application. The Parish Councils Airport Association (PCAA) is a group of elected representatives from 25 parishes and two Town Councils.

North Somerset: Backwell, Barrow Gurney, Brockley, Burrington, Butcombe, Churchill, Cleeve, Congresbury, Dundry, Kingston Seymour, Long Ashton, Portishead Town Council, Puxton, Winford, Wraxall and Failand, Wrington, Yatton

BANES: Chew Magna, Chew Stoke, Compton Dando, Compton Martin, East Harptree, Keynsham Town Council, Nempnett Thrubwell, Publow with Pensford, Saltford, Stanton Drew, Stowey Sutton

In total these councils represent approximately 97,000 residents. It was estimated to be 94K in 2021 and 97K in 2024.

1.4. The purpose of this statement is to set out the basis of this objection to the proposed development, providing an assessment of the key planning issues arising from the scheme when considered against the relevant national and local planning policy framework, applicable guidance, and other material considerations.

1.5. In preparing this objection, the PCAA has commissioned independent reports relating to biodiversity, noise and economic impacts. The PCAA has also had regard to additional technical evidence prepared on behalf of Bristol Airport Action Network (BAAN) and Save Felton Common. These reports are appended to this submission and are referred to where relevant throughout this objection.

2. EXECUTIVE SUMMARY OF THE OBJECTIONS

2.1. The Parish Councils Airport Association (PCAA) objects to the proposed expansion of Bristol Airport from 12 million passengers per annum (mppa) to 15 mppa together with the extensive operational, parking, airfield and infrastructure works required to facilitate that growth.

2.2. The PCAA acknowledges the important role Bristol Airport plays within the regional economy and accepts that national aviation policy supports the principle of making best use of existing runway infrastructure. However, such support is expressly qualified and does not override the statutory development plan, the National Planning Policy Framework (NPPF), the Habitats Regulations or other environmental protections.

2.3. Having reviewed the planning application, Environmental Statement and supporting documentation, together with independent technical evidence commissioned on behalf of the PCAA, it is concluded that the proposal does not represent sustainable development and would result in substantial environmental, social and planning harm which significantly outweighs the benefits claimed by the application.

2.4. A very significant issue arises in relation to the North Somerset and Mendip Bats Special Area of Conservation (SAC) and the extensive areas of functionally linked habitat affected by the proposal. The application relies heavily upon mitigation, compensation and habitat creation measures in order to address the loss and degradation of habitat associated with internationally protected horseshoe bat populations.

2.5. However, the evidence submitted does not remove reasonable scientific doubt that adverse effects on the integrity of the SAC can be avoided. The proposal therefore fails to satisfy the requirements of the Habitats Regulations and paragraph 195 of the NPPF. This is a fundamental obstacle to the grant of planning permission.

2.6. The proposal also engages a number of the protected areas identified within footnote 7 of the NPPF, including internationally designated habitats, the SAC, and Green Belt land. Accordingly, paragraph 11(d)(i) of the NPPF is engaged and the presumption in favour of sustainable development does not apply.

2.7. The application would result in substantial harm to the Bristol and Bath Green Belt. It would extend airport-related development onto currently open land at Cook's Farm, Felton Common and the Silver Zone, eroding openness, encroaching into the countryside and contributing to the continuing urbanisation of the area surrounding the Airport. The very special circumstances advanced by the Applicant do not clearly

outweigh the Green Belt harm and the numerous additional harms arising from the proposal.

2.8. The proposal would also result in significant adverse impacts upon landscape character, tranquillity, dark skies and the setting of the Mendip Hills National Landscape. The continued outward spread of airport infrastructure would further industrialise a predominantly rural landscape and erode the qualities that make the surrounding countryside distinctive and valued.

2.9. Particular concern arises in relation to Felton Common. The proposal would introduce airport infrastructure and approach lighting onto common land, facilitate lower aircraft approaches over the Common and adversely affect an area valued for recreation, biodiversity and public enjoyment. The application has failed to demonstrate that these impacts are justified or that the necessary compulsory acquisition powers, common land consents and any required replacement land can be satisfactorily secured.

2.10. The transport strategy remains heavily reliant upon private car travel and is accompanied by substantial increases in airport parking provision. Concerns have been raised regarding the realism of the proposed modal shift targets, the assessment of traffic impacts, the treatment of parking demand and the reliance upon mitigation measures that are not fully committed, funded or secured. Rather than reducing dependence upon the private car, the proposal risks embedding it.

2.11. The application would also result in increased aviation and surface transport emissions and relies heavily upon future technological change, Sustainable Aviation Fuel, operational efficiencies and carbon reduction measures which remain uncertain in terms of scale, timing, deliverability and environmental effectiveness. The proposal therefore conflicts with wider climate objectives and fails to demonstrate a credible pathway to achieving growth without unacceptable environmental cost.

2.12. Independent technical reviews commissioned on behalf of the PCAA identify significant concerns regarding biodiversity, transport, noise, air quality and the economic justification advanced by the Applicant. In particular, Appendix 6 questions the adequacy of the Applicant's assessment of ultrafine particle emissions associated with aircraft operations and whether the resulting health implications have been fully understood or assessed. Collectively, these reports challenge key assumptions underpinning the application and materially weaken the case that the environmental harms arising from the proposal are justified by the benefits claimed.

2.13. When assessed cumulatively alongside the recently approved 12 mppa expansion and the Airport's wider pattern of incremental growth, the proposal represents a further substantial intensification of development within a highly constrained location. The cumulative effects on ecology, climate, Green Belt, landscape, transport, noise, public amenity and community wellbeing are significant and should not be viewed in isolation.

2.14. The central question raised by this application is whether further expansion beyond the recently approved 12 mppa position can occur at Bristol Airport without causing unacceptable environmental harm. The evidence presented within this objection demonstrates that it cannot.

2.15. The proposal conflicts with the Development Plan when read as a whole, fails to satisfy the requirements of paragraph 195 of the NPPF, engages the restrictions identified within footnote 7 and paragraph 11(d)(i), results in substantial Green Belt and environmental harm, and has not been shown to constitute sustainable development.

2.16. For these reasons, and those set out in detail throughout this objection, planning permission should be refused.

3. SITE CONTEXT

3.1. The application site comprises approximately 235 hectares at Bristol Airport, located around 11 kilometres to the south-west of Bristol on an elevated plateau at Broadfield Down, approximately 190 metres Above Ordnance Datum. The Airport occupies a prominent position within a predominantly rural landscape of agricultural land, hedgerows and dispersed settlements.

3.2. The site lies within the Bristol and Bath Green Belt, with areas required for expansion, including Cook's Farm and land to the south and east, remaining designated Green Belt. The Airport therefore represents a substantial developed use within a sensitive policy designation, where further expansion would extend built form and activity into open countryside.

3.3. The surrounding area contains a number of important environmental and heritage constraints. The Mendip Hills National Landscape lies approximately 3 kilometres to the south and has a strong visual relationship with the site. Designated ecological sites are located in close proximity, including the North Somerset and Mendip Bats Special Area of Conservation to the west, Goblin Combe and King's Wood Sites of Special Scientific Interest within approximately 2 kilometres, and Lulsgate Quarry SSSI less than 1 kilometre to the north-east. Felton Common Local Nature Reserve lies immediately to the east, with part of it falling within the application site, and comprises open-access grassland of ecological and recreational value.

3.4. The wider landscape also contains a number of designated heritage assets. There are six Scheduled Monuments within 500 metres of the site, comprising prehistoric burial features including bowl barrows and long barrows, the closest being a long barrow located approximately 70 metres to the south-west of the site boundary. In addition, Barley Wood Registered Park and Garden lies within approximately 2 kilometres.

3.5. Public access and recreational routes are a notable feature of the area. A network of public rights of way lies in close proximity to the site, including Cooks Bridle Path (AX30/42/70) along the western boundary, and a series of footpaths and bridleways within and around Felton Common, including LA19/93/10 to the east. Additional routes, including AX30/69/10 to the south and LA19/77/70 to the north-east, pass within close proximity of the Airport boundary. These routes contribute to the recreational value of the landscape and increase the sensitivity of the area to visual, noise and environmental effects.

3.6. Residential dwellings lie immediately adjacent to the site, including properties at Felton, Lulsgate Bottom and along Downside Road and Cooks Bridle Path, with further settlements such as Backwell, Cleeve, Dundry, Winford and Wrington nearby. These communities are closely related to the Airport and experience direct effects from its operation.

3.7. Overall, the site is characterised by a combination of established airport infrastructure and significant environmental and policy constraints, including Green Belt designation, proximity to nationally and locally designated landscapes and ecological sites, the presence of heritage assets, and a well-used network of public rights of way. This context highlights the sensitivity of the location and the potential for further expansion to give rise to significant and wide-ranging impacts.

4. THE PROPOSAL

4.1. The application seeks planning permission for a substantial expansion of Bristol Airport to enable growth beyond the recently permitted 12 million passengers per annum. The proposals comprise a combination of operational changes and extensive new infrastructure, including both detailed and outline elements.

4.2. The proposed development at Bristol Airport is organised across four principal zones as defined within the Environmental Statement: the Northern Zone, Central Zone, Southern Zone and the A38 corridor. The key elements within each area are summarised below, using the site-specific descriptions referenced within the application documents.

4.3. Capacity and Night flights

- Increase in permitted passenger throughput from 12 million passengers per annum to 15 million passengers per annum, representing a 25% uplift in capacity
- Increase in the annual cap on air transport movements from 85,990 to 99,931, facilitating additional flight activity across the year
- Increase in permitted night flights (23:30–06:00) from 4,000 to 4,974 movements within a rolling 12-month period
- Retention of existing shoulder period controls and quota count system, but applied to a higher overall level of activity
- Associated intensification of airport operations, including increased aircraft movements, passenger numbers, surface access trips and on-site activity

4.4. Northern Zone (Terminal Area, Cook's Farm, Northside)

- Terminal extensions to the north, west and east of the existing terminal building to accommodate increased passenger throughput
- Construction of a new east pier extending from the terminal into the eastern apron area
- Construction of multiple west-facing piers (Pier 1 West, Pier 2 Mid West and Pier 3 West) extending into the Cook's Farm area
- West Pier Link (sub-surface tunnel) and West Bridge Link providing passenger access to western stands
- Significant extension of the western apron into Cook's Farm to provide additional aircraft stands
- Development of land at Cook's Farm, currently agricultural Green Belt land, to accommodate apron infrastructure and associated development

- New surface-level car park (approximately 2,000 spaces) within the northern area, including land at or adjacent to Cook's Farm
- Reconfiguration of internal roads, access arrangements and operational infrastructure within the Northside terminal area

4.5. Central Zone (Runway, Taxiways, Felton Common Interface)

- Extension of the runway by approximately 170 metres at the eastern end (Runway 27)
- Relocation and extension of approach lighting infrastructure into Felton Common, including land within the Local Nature Reserve and common land
- Reconfiguration of central and eastern apron areas
- Construction of new taxiways and widening/realignment of Taxiway GOLF
- Intensification of airfield operations across the existing runway and taxiway network
- Expansion of operational infrastructure eastwards towards Felton Common

4.6. Southern Zone (Silver Zone, Staff Parking, Operational Land)

- Expansion of the Silver Zone car park, including approximately 1,960 additional spaces (block parking)
- Construction of a new staff car park providing approximately 1,720 spaces
- Provision for additional decked parking structures within the Silver Zone and car rental areas (outline)
- Extension of car rental parking areas and associated facilities
- Relocation and expansion of the aviation fuel farm within the southern operational area
- Construction of a maintenance, repair and overhaul (MRO) hangar and ground run-up pen
- Development of ancillary operational buildings and infrastructure across existing and adjacent land
- Construction of a bus maintenance and washing facility
- Further use and potential development of currently undeveloped or agricultural land within the southern Green Belt area

4.7. A38 Corridor (Access and Highway Infrastructure)

- Upgrades to the existing northern access roundabout serving the terminal area

- Construction of a new southern roundabout providing access to the Silver Zone and southern operational areas
- Widening of the A38 to accommodate an additional bus lane
- Associated highway works, access improvements and integration with the Airport's internal road network

4.8. Taken together, the proposals extend development westwards into Cook's Farm, eastwards towards Felton Common, and intensify activity within the existing operational core and southern parking areas, resulting in a comprehensive expansion of the Airport across all zones.

4.9. Specifically, the following information distinguishes the proposal from the existing permission:

4.10. The current permission (12 mppa) limits passenger throughput to 12 million per annum, with a cap of 85,990 air transport movements and 4,000 night flights.

4.11. The proposed development therefore represents a material uplift across all key operational parameters, including passenger numbers, flight movements and night-time activity.

4.12. The scale of increase goes beyond that recently approved at appeal in 2022, which itself was subject to significant scrutiny in terms of environmental and community impacts.

4.13. The proposals also introduce new operational demands that require additional infrastructure and land take, including expansion into Green Belt land and areas such as Cook's Farm and Felton Common.

4.14. As such, the application is not simply a continuation of the consented scheme but a further phase of expansion involving both intensification and spatial growth beyond the currently permitted baseline.

5. PLANNING HISTORY

5.1. The application site at Bristol Airport has been subject to a long history of incremental expansion through successive planning permissions, reflecting its evolution from a regional airport into a major international gateway.

5.2. Planning permission was granted in 2011 for expansion to accommodate 10 million passengers per annum. That consent established the broad pattern of development across the site, including extensions to the terminal building, construction of walkways and piers, additional aircraft stands, reconfiguration of internal road infrastructure, and significant increases in car parking provision, including multi-storey car parks and expansion of the Silver Zone long-stay parking.

5.3. In December 2018, an application was submitted to increase capacity to 12 million passengers per annum. This was refused by North Somerset Council in March 2020, primarily on the basis of environmental and transport impacts. Planning permission was subsequently granted on appeal in February 2022. That decision is a key material consideration and demonstrates that expansion at this location has been, and remains, contentious.

5.4. The 12 mppa permission allowed for a further intensification of the Airport through a combination of operational changes and additional infrastructure. This included extensions to the terminal building, the construction of a new east pier and associated passenger facilities, additional aircraft stands and taxiway works, and a substantial increase in car parking provision, including a third multi-storey car park and further expansion of the Silver Zone. Surface access improvements to the A38 and internal road network were also secured as part of that consent, alongside a range of planning conditions and obligations aimed at managing environmental impacts, including controls on aircraft movements, noise limits and night flight restrictions.

5.5. Importantly, not all elements of the 12 mppa permission have been implemented. While the operational uplift and certain infrastructure works have been brought forward, other components, including the previously approved eastern pier and taxiway link, are no longer proposed to be delivered in their consented form and are instead replaced or reconfigured within the current application. This creates a degree of uncertainty as to the baseline against which the impacts of the present proposals should be assessed.

5.6. Since the grant of the 12 mppa permission, further operational and infrastructure works have also been undertaken or approved under separate permissions and permitted development rights, reflecting the ongoing intensification of the site.

5.7. The current application therefore represents the next phase in a pattern of incremental growth, seeking to extend capacity beyond the recently approved 12 mppa limit to 15 mppa, with associated new infrastructure and operational changes. It builds upon, but also partially replaces, elements of the 12 mppa scheme, and must be considered in the context of both the cumulative effects of past development and the unresolved impacts identified through previous decision-making processes.

6. PLANNING POLICY CONTEXT

Local Policy

6.1. Section 38(6) of the Planning and Compulsory Purchase Act 2004 places a duty on local planning authorities to determine proposals in accordance with the development plan unless material considerations indicate otherwise.

6.2. The Council's Development Plan comprises:

- North Somerset Core Strategy (the "CS") (adopted 10 January 2017)
- Sites and Policies Plan Part 1: Development Management Policies ("DMP") (adopted 19 July 2016)
- Sites and Policies Plan Part 2: Site Allocations Plan ("SAP") adopted 10 April 2018

6.3. The following policies of the North Somerset Core Strategy (CS) are relevant to the determination of this application:

- CS1 Addressing climate change and carbon reduction
- CS2 Delivering sustainable design and construction
- CS3 Environmental impacts and flood risk management
- CS4 Nature Conservation
- CS5 Landscape and the historic environment
- CS6 North Somerset's Green Belt
- CS10 Transport and movement
- CS11 Parking
- CS12 Achieving high quality design and place making
- CS20 Supporting a successful economy
- CS22 Tourism Strategy
- CS23 Bristol Airport
- CS34 Infrastructure delivery and Development Contributions

6.4. The following policies of the Sites and Policies Plan Part 1: Development Management Policies (DMP) are relevant to the determination of this application:

- DM1 Flooding and drainage
- DM2 Renewable and low carbon energy
- DM6 Archaeology
- DM7 Non-designated heritage assets
- DM8 Nature Conservation
- DM9 Trees

- DM10 Landscape
- DM11 Mendip Hills Area of Outstanding Natural Beauty
- DM12 Development within the Green Belt
- DM20 Major Transport Schemes
- DM24 Safety, traffic and infrastructure associated with development
- DM26 Travel plans
- DM27 Bus accessibility criteria
- DM29 Car parks
- DM30 Off-airport car parking
- DM31 Air safety
- DM32 High quality design and place making
- DM33 Inclusive access into non-residential buildings and spaces
- DM50 Bristol Airport
- DM70 Development infrastructure
- DM71 Development contributions / Community Infrastructure Levy

6.5. A summary of the most relevant policies is provided below:

6.6. Policy CS6 – North Somerset's Green Belt, seeks to maintain the openness and permanence of the Bristol and Bath Green Belt and resist inappropriate development unless exceptional circumstances exist. In the context of Bristol Airport, the policy is important because it recognises the sensitivity of further expansion within the Green Belt and confirms that additional amendments to Green Belt boundaries should only occur following proper evidence of need and exceptional circumstances.

6.7. Policy CS23 – Bristol Airport relates specifically to development at Bristol Airport and supports airport development where environmental impacts are satisfactorily addressed, particularly in relation to surrounding communities and surface access. The policy places emphasis on sustainable transport improvements and environmental mitigation rather than unrestricted airport growth.

6.8. Policy DM11 – Mendip Hills Area of Outstanding Natural Beauty seeks to protect the landscape character, scenic beauty and setting of the Mendip Hills AONB (now National Landscape). Development proposals should avoid adverse impacts on the special qualities of the designation. This is highly relevant given the visual relationship between Bristol Airport and viewpoints within the Mendips, particularly in relation to lighting, large-scale built form and parking infrastructure.

6.9. Policy DM12 – Development within the Green Belt sets out the Council's detailed development management approach to Green Belt proposals and resists inappropriate development unless very special circumstances exist. The policy gives substantial weight to the protection of openness and prevention of encroachment into the countryside, making it a key policy in the assessment of the proposed expansion onto land at Cook's Farm, Felton Common and other Green Belt areas.

6.10. Policy DM24 – Safety, Traffic and Provision of Infrastructure requires development proposals to provide safe and suitable access, minimise traffic impacts and promote sustainable transport choices. The policy is particularly relevant to Bristol Airport given the reliance on the A38 corridor, increased passenger numbers, substantial additional parking provision and concerns regarding continued dependency on private vehicle access.

6.11. Policy DM31 – Air Safety relates to air safety and seeks to ensure that development does not prejudice the operational safety of Bristol Airport or conflict with safeguarded areas and Public Safety Zones. This policy is relevant to the proposed runway extension and any implications arising for safeguarding, approach lighting and operational safety constraints around the Airport.

6.12. Policy DM50 – Bristol Airport specifically addresses development at Bristol Airport. The policy supports operational development where it is essential for airport purposes and where environmental, transport and amenity impacts are satisfactorily mitigated. Importantly, the policy does not provide unconditional support for expansion and requires careful consideration of impacts on surrounding communities, surface access and the environment.

Other Relevant Policies

6.13. Policy CS10 – Transport and Movement promotes sustainable transport and seeks to reduce reliance on the private car. The policy is highly relevant given the scale of proposed parking expansion and questions regarding whether sufficient modal shift can realistically be achieved.

6.14. Policy CS4 – Nature Conservation seeks to conserve and enhance biodiversity and ecological networks. The policy is particularly important given the proximity of the Airport to the North Somerset and Mendip Bats SAC, Felton Common and surrounding habitats.

6.15. Policy DM8 – Nature Conservation and Landscape seeks to protect landscape character, ecological assets and the quality of the natural environment. It is directly

relevant to the proposed impacts on Green Belt land, Felton Common, ecological habitats and the wider rural landscape surrounding the Airport.

6.16. Policy DM32 – High Quality Design and Place-making requires development to respond positively to local character, landscape setting and visual amenity. This policy is relevant to the extensive built development, parking areas and operational infrastructure proposed as part of the expansion.

National Planning Policy Framework (NPPF) 2024

6.17. The following is particularly relevant to this proposal:

- 2 - Achieving Sustainable Development
- 4 - Decision Making
- 6 - Building a strong, competitive economy
- 8 - Promoting healthy and safe communities
- 9 - Promoting sustainable transport
- 11 – Making effective use of land
- 12 - Achieving well designed places
- 13 - Protecting Green Belt land
- 14 - Meeting the challenge of climate change, flooding and coastal change
- 15 – Conserving and enhancing the natural environment
- 16 - Conserving and enhancing the historic environment

National Aviation Policy

6.18. The Government's aviation policy is set out in a series of documents including:

- Aviation Policy Framework (2013)
- Beyond the Horizon – The Future of UK Aviation: Making Best Use of Existing Runways (2018)
- Airports National Policy Statement (2018)
- Flightpath to the Future (DfT, 2022)
- Jet Zero Strategy (DfT, 2022)
- The draft revision to the Airports National Policy Statement

6.19. While national aviation policy documents, including the Aviation Policy Framework, the Airports National Policy Statement, Flightpath to the Future and the Jet Zero Strategy, recognise the economic importance of aviation and generally support airports making best use of existing runways, such support is not unconditional and does not override the statutory development plan or the wider environmental protections within the NPPF

and other legislation. In particular, Government policy confirms that airport expansion proposals must continue to be assessed through the statutory planning process, having regard to site-specific environmental, transport, climate, Green Belt, ecological and community impacts. Accordingly, the existence of broad national support for aviation growth does not in itself establish that expansion at Bristol Airport, or at the scale proposed, represents sustainable development or complies with the development plan when considered against the substantial harms identified within this objection. Please refer to the BAAN representations to the planning application for more detailed submissions on national aviation policy, which PCAA endorses.

West of England Joint Local Transport Plan 4 (JLTP4) 2020–2036

6.20. The West of England Joint Local Transport Plan 4 ("JLTP4") was formally adopted in March 2020 by the West of England Combined Authority and the constituent authorities of Bath and North East Somerset, Bristol City, North Somerset and South Gloucestershire Councils.

6.21. JLTP4 provides the strategic transport framework for the West of England up to 2036 and seeks to deliver a well-connected, sustainable transport network with a strong emphasis on reducing reliance on the private car, increasing the use of public transport, walking and cycling, reducing carbon emissions and supporting sustainable patterns of growth.

6.22. The Plan promotes a vision-led approach to transport planning focused on decarbonisation, climate resilience, improved public transport connectivity and integration between transport and spatial planning. In relation to major trip-generating development, JLTP4 places significant emphasis on achieving modal shift away from private vehicle use and ensuring that growth is aligned with sustainable transport infrastructure.

6.23. JLTP4 is therefore relevant to the assessment of the current proposal given the substantial increase in passenger numbers, aircraft movements, parking provision and associated surface access demands arising from the proposed expansion of Bristol Airport. In particular, the extent to which the proposal would genuinely support sustainable transport objectives and reduce reliance on private car travel represents a significant material consideration.

Supplementary Planning Guidance (SPDs)

6.24. The following SPDs are relevant to the proposal:

- North Somerset Landscape Character Assessment SPD (2018)
- North Somerset and Mendip Bats Special Area of Conservation (SAC) – Guidance on development (2018/2026)
- Mendip Hills National Landscape Management Plan
- Creating sustainable buildings and places SPD (adopted March 2015)
- Travel Plans SPD (adopted November 2010)
- Biodiversity and Trees SPD (adopted December 2005)

Emerging North Somerset Local Plan

6.25. North Somerset Council has now submitted the emerging North Somerset Local Plan 2041 for Examination in Public. The submission of the Plan is a material consideration and increases the weight that may be afforded to emerging policies. However, the examination process has not yet tested the soundness of the Plan or the appropriateness of its proposed approach to Bristol Airport. Accordingly, while some weight may be afforded to the emerging Plan, it remains subject to examination and potential modification.

6.26. Policy SP7 of the emerging North Somerset Local Plan confirms the continued importance of the Green Belt in preventing urban sprawl and protecting the countryside around Bristol. In relation to Bristol Airport, Policies LP9 and LP12 propose a revised inset boundary and policy framework intended to reflect the operational extent of the development already approved through the 2022 appeal permission for expansion to 12 million passengers per annum.

6.27. Policy LP9 specifically identifies the proposed revised Green Belt inset boundary for Bristol Airport. The supporting text confirms that the amendment is intended to regularise and reflect the spatial extent of the already approved 12 mppa scheme. Importantly, the supporting text also confirms that, outside the revised inset boundary, Green Belt policy continues to apply and proposals would need to demonstrate very special circumstances.

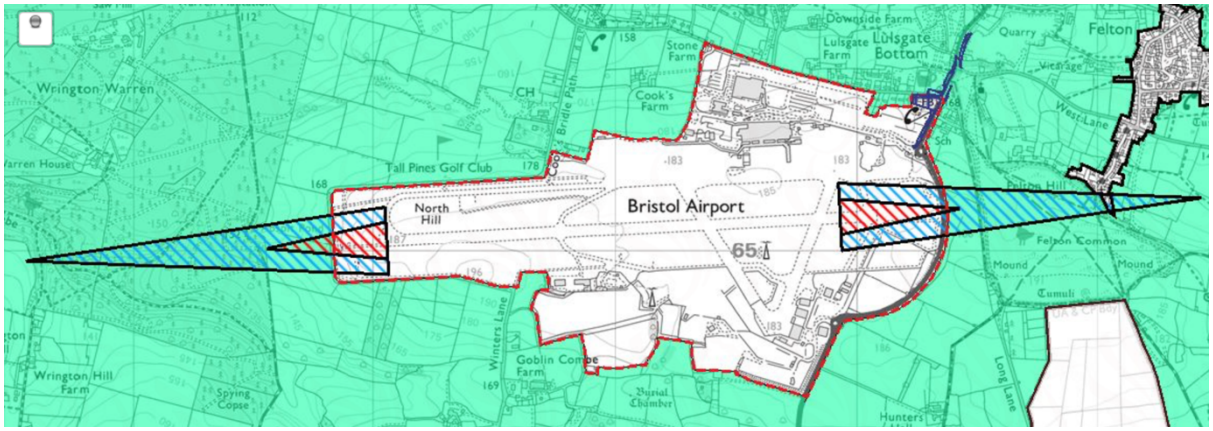


Figure 6.1: Bristol Airport Green Belt Inset Boundary Proposed by Policy LP9 of the Emerging North Somerset Local Plan

6.28. The significance of the proposed inset boundary is that it was prepared to reflect the operational extent of the previously approved 12 mppa scheme rather than the further expansion now proposed. The emerging Local Plan therefore cannot be taken as providing plan-led support for expansion to 15 mppa or the additional development and environmental effects associated with the current application.

6.29. Policy LP12 specifically relates to Bristol Airport and supports airport-related development within the revised inset boundary, subject to environmental mitigation, surface access improvements and compliance with wider environmental policy requirements. The policy support is therefore qualified and closely tied to the previously approved 12 mppa position.

6.30. Importantly, neither Policy SP7, LP9 nor LP12 takes account of the proposed expansion to 15 mppa. The emerging Local Plan does not allocate or endorse the further expansion now proposed, nor does it assess the additional operational impacts, land take, infrastructure requirements or Green Belt harm associated with the current scheme.

6.31. Accordingly, while limited weight may be afforded to the emerging policies in relation to the existing 12 mppa consent, they provide no clear plan-led support for the current proposals, which instead represent a further phase of expansion beyond the scope of the emerging development plan strategy and must therefore be assessed on their own merits against national and local policy.

7. CONTEXT FOR THE PROPOSED DEVELOPMENT

7.1. This section sets out the planning and site context relevant to the proposed expansion of Bristol Airport. It draws on the Applicant's submitted Planning Statement but presents the context in a manner that properly reflects the planning constraints of the site, the cumulative effects of previous development, and the implications for the surrounding environment and communities.

7.2. In particular, this section highlights that the Airport is not a standalone or unconstrained site, but one where successive phases of development have incrementally intensified activity, giving rise to increasing environmental, infrastructure and community impacts which are directly relevant to the assessment of the current proposal.

Development History and Incremental Expansion

7.3. The Airport has operated from its current site since 1957, with successive phases of expansion over several decades involving extensions to the runway, terminal facilities, car parking and associated infrastructure.

7.4. While the Applicant presents this history as a narrative of growth and investment, it is equally important to recognise that this represents a pattern of incremental intensification within a constrained rural and Green Belt location, where each phase of development has contributed to a cumulative increase in environmental effects.

7.5. More recent phases of expansion have been particularly significant. Planning permission was granted in 2011 to increase capacity to 10 million passengers per annum (mppa). The 10 mppa consent was challenged in the High Court in October 2011. It was followed by the grant of permission at appeal in 2022 to increase capacity to 12 mppa.

7.6. The 12 mppa permission was itself the subject of substantial objection, refusal by the local planning authority, and subsequent appeal and legal challenge. This is a material consideration which demonstrates that the principle of expansion at this location is not uncontentious and has previously been found to give rise to significant planning harm requiring careful balancing.

7.7. Notwithstanding that permission, the Airport has continued to pursue further growth, with the current application seeking to increase capacity to 15 mppa. This represents a further and substantial intensification beyond that recently permitted, raising clear issues of cumulative impact and the adequacy of previously accepted mitigation measures.

7.8. The Airport currently operates as a major regional airport serving the South West of England and South Wales, with passenger throughput reaching approximately 10.6 million passengers in 2024.

7.9. The Applicant identifies continued growth in passenger demand as justification for expansion. However, this must be considered in the context of the existing operational impacts already experienced by surrounding communities, including noise, traffic generation, air quality effects and general disturbance.

7.10. The existing level of activity is therefore not a neutral baseline, but one which already gives rise to identified environmental and amenity impacts, forming an important reference point for assessing the additional effects of the proposed development.

Social and Economic Role – Balanced Against Harm

7.11. The application places significant weight on the social and economic role of the Airport, including employment generation, connectivity and support for regional economic growth. Any such benefits as a result of the proposed expansion (which are disputed) must be considered within the proper planning framework, which requires a balanced assessment against environmental harm, policy constraints and impacts on local communities.

7.12. It is notable that the Airport's growth has been accompanied by ongoing concerns relating to traffic congestion, noise, air quality, climate change and landscape impact, many of which remain unresolved and are directly relevant to the current proposal.

Master Plan and Future Growth Strategy

7.13. The Airport’s Master Plan sets out a strategy for continued growth beyond 12 mppa, including expansion to 15 mppa and beyond.

7.14. However, the Master Plan is not part of the statutory development plan and carries limited weight in decision-making. Its identification of future growth does not in itself justify development, particularly where such growth would conflict with adopted planning policy or give rise to unacceptable impacts.

7.15. The current application must therefore be assessed on its own merits against the development plan and other material considerations, rather than on the basis of an aspirational growth strategy promoted by the Applicant.

7.16. In those circumstances, the current application effectively seeks to advance a materially larger scale of airport growth before the strategic implications of that scale of growth have been considered through the emerging plan-making process. The wider

implications of the Master Plan proposals, including the extent of Green Belt release, surface access consequences, landscape effects and environmental impacts, have therefore not yet been fully tested through the statutory development plan process.

7.17. The Applicant's Master Plan did not clearly identify that the proposed runway extension would necessitate the relocation of the eastern approach lighting array from agricultural land east of the A38 onto Felton Common, nor did it adequately explain the consequential operational changes associated with aircraft approaching at a lower altitude. Those works are directly associated with the runway extension and the facilitation of longer-haul operations by Code E aircraft.

7.18. The significance of those effects is demonstrated by the separate public consultation undertaken in November 2025 in relation to the proposed lighting array. However, those impacts were not transparently presented within the Master Plan documentation at the strategic stage, despite their clear relationship to the wider expansion proposals.

7.19. As a consequence, the earlier Scoping Opinion process submitted to the Council did not properly identify the potential effects arising from the relocated lighting infrastructure and altered aircraft approach characteristics, including impacts relating to landscape character, visual amenity, tranquillity, dark skies and the setting of nearby sensitive receptors. The absence of clear strategic identification of those consequences materially limited the ability of the Council, their consultees and all other interested parties to engage fully with the likely environmental effects of the proposed expansion from the outset.

8. PLANNING ANALYSIS

8.1. **PRINCIPLE OF DEVELOPMENT**

Extent of Policy Support

8.1.1. The Applicant places substantial reliance on national aviation policy documents in support of the principle of expansion at Bristol Airport, including the Aviation Policy Framework (2013), Beyond the Horizon: Making Best Use of Existing Runways (2018), Flightpath to the Future (2022) and the Jet Zero Strategy (2022). These documents recognise the economic importance of aviation and support airports making best use of existing runways in order to maintain connectivity and support economic growth.

8.1.2. However, that support is expressly qualified and does not amount to an unconditional presumption in favour of airport expansion irrespective of environmental impacts. National aviation policy consistently confirms that proposals must be assessed through the statutory planning process having regard to site-specific environmental, transport, climate, ecological and community impacts.

8.1.3. In the 2022 Bristol Airport appeal decision relating to expansion to 12 million passengers per annum, the Inspectors concluded that the Aviation Policy Framework and Making Best Use of Existing Runways remained the up-to-date material considerations attracting weight in the planning balance. However, there have been significant developments since 2022 and in any event proposals for airport expansion must be judged on their individual merits, taking careful account of all relevant considerations, particularly environmental impacts and proposed mitigation measures.

8.1.4. Other relevant considerations include:

- the statutory requirement under Section 38(6) of the Planning and Compulsory Purchase Act 2004;
- the protections afforded to Green Belt land under Chapter 13 of the NPPF;
- the requirements of paragraph 195 of the NPPF and the Habitats Regulations;
- the requirement to pursue genuinely sustainable development; or
- the wider environmental protections contained within the Development Plan and the NPPF.

8.1.5. The current proposal must therefore be assessed on its own merits having regard to the significantly greater scale of development now proposed, including increased passenger numbers, additional night flights, further Green Belt encroachment,

additional parking provision, expanded operational infrastructure and the cumulative environmental impacts arising from growth beyond the recently approved 12 mppa position.

Limits of Policy Support

8.1.6. While Policy CS23 and Policy DM50 of the Development Plan provide support for operational development at Bristol Airport, that support is expressly conditional upon environmental, transport and amenity impacts being satisfactorily addressed.

8.1.7. Neither policy provides unrestricted or in principle support for continual airport expansion irrespective of environmental consequences. Instead, the policies require careful balancing against other Development Plan policies relating to Green Belt protection, biodiversity, landscape impact, climate change, sustainable transport and residential amenity.

8.1.8. This is particularly important given the location of the Airport within the Bristol and Bath Green Belt and in close proximity to a range of sensitive environmental designations including the Mendip Hills National Landscape, the North Somerset and Mendip Bats SAC, Felton Common Local Nature Reserve, Felton Common Local Green Space and a number of designated heritage assets.

8.1.9. The proposal must therefore be assessed against the wider policy framework as a whole, including:

- the strong policy protection afforded to Green Belt land under Chapter 13 of the NPPF;
- the requirement to conserve and enhance the natural environment under Chapter 15 of the NPPF;
- the requirement to promote sustainable transport under Chapter 9 of the NPPF;
- the statutory duties relating to habitats sites under the Habitats Regulations;
- and the requirement to pursue genuinely sustainable development under paragraphs 7 to 11 of the NPPF.

No Allocation or Plan-Led Support for 15 mppa

8.1.10. It is also material that there is currently no adopted or emerging development plan allocation supporting expansion of Bristol Airport to 15 mppa.

8.1.11. The recently approved 12 mppa expansion was granted following a contentious appeal process after refusal by North Somerset Council. The current application therefore seeks a further substantial intensification beyond the level of development most recently considered through the statutory planning process.

8.1.12. The submitted North Somerset Local Plan 2041 is particularly important in this regard. Policies SP7, LP9 and LP12 of the emerging Plan specifically reflect the existing 12 mppa position and the operational boundary associated with the 2022 appeal permission.

8.1.13. Policy LP9 identifies the proposed revised Green Belt inset boundary associated with Bristol Airport and makes clear that the amendment is intended to reflect the spatial extent of the already approved 12 mppa development. The supporting text confirms that, outside the inset boundary, Green Belt policy continues to apply and development would need to demonstrate very special circumstances.

8.1.14. Critically, the emerging Plan does not allocate, endorse or plan for expansion to 15 mppa. The supporting text confirms that the proposed Green Belt inset boundary amendments are intended solely to reflect the development already approved through the 2022 appeal decision.

8.1.15. This is a significant matter because the additional impacts associated with expansion to 15 mppa have not been tested or endorsed through the statutory plan-making process.

- the additional operational impacts associated with 15 mppa have not been tested through the plan-making process;
- the further Green Belt impacts associated with the current proposal have not been endorsed through the emerging Local Plan;
- and the proposal does not benefit from any clear spatial or strategic policy allocation supporting development at this scale.

8.1.16. While Policies CS23 and DM50 anticipate that airport-related development may come forward within the context of longer-term airport planning and operational management, that does not amount to unrestricted support for future expansion irrespective of environmental effects or conflict with other development plan policies.

Nor does it elevate the Applicant's Master Plan to the status of a statutory policy document or development allocation.

8.1.17. In this case, the emerging Local Plan has only carried forward limited Green Belt amendments associated with the already approved 12 mppa airport operation. It has not embedded or strategically endorsed the materially greater scale of growth and associated infrastructure now proposed through the Applicant's wider Master Plan strategy.

8.1.18. In effect, while the emerging Local Plan has deliberately accommodated the already-permitted 12 mppa position, it stops short of supporting the further expansion now proposed. This materially limits the weight that can reasonably be attributed to any suggestion that the principle of development is supported through the development plan process.

Principle of Development – Overall Position

8.1.19. The principle of operational development at Bristol Airport is therefore not disputed in the broadest sense. The Airport is an established regional airport and both local and national policy recognise the economic role that aviation can play.

8.1.20. However, the current application is not simply a continuation of the existing lawful operation of the Airport, it represents a further substantial phase of expansion involving:

- increased passenger throughput from 12 mppa to 15 mppa;
- increased aircraft movements;
- increased night flights;
- significant additional parking provision;
- expansion into Green Belt land; and
- additional operational infrastructure extending into environmentally sensitive areas.

8.1.21. It is also material that the emerging North Somerset Local Plan only reflects the already approved 12 mppa airport operation and associated Green Belt inset boundary. It does not allocate or strategically endorse the materially greater scale of expansion now proposed.

8.1.22. The proposal must be assessed against the full policy framework, including Green Belt policy, sustainability principles, ecological protections and the development plan as a whole.

8.1.23. **For the reasons set out throughout this objection, it is considered that the Applicant has failed to demonstrate that the proposal represents sustainable development or that the substantial harms arising from the scheme are outweighed by the claimed benefits. Accordingly, only limited weight can be attributed to the general policy support for aviation growth in the overall planning balance.**

8.2. **SUSTAINABLE DEVELOPMENT**

8.2.1. The Applicant seeks to present the proposal as sustainable growth, principally by reference to national aviation policy support for making best use of existing airport infrastructure and the asserted economic benefits associated with increased passenger throughput from 12 mppa to 15 mppa. However, the existence of general policy support for airport growth does not displace the requirement for the proposal to accord with the development plan when read as a whole, nor does it override the environmental protections contained within the NPPF and the Habitats Regulations.

8.2.2. Paragraph 7 of the NPPF confirms that the purpose of the planning system is to contribute to the achievement of sustainable development through the pursuit of economic, social and environmental objectives in mutually supportive ways. In the present case, the Proposed Development gives rise to substantial environmental concerns including Green Belt harm, landscape and visual impacts within the setting of the Mendip Hills National Landscape, increased reliance upon private car travel, climate impacts, and significant ecological effects associated with habitats sites and functionally-linked habitat.

8.2.3. Of particular importance is paragraph 195 of the NPPF. Unlike many other policy considerations which are weighed within the general planning balance, paragraph 195 operates as a gateway policy linked directly to the statutory requirements of the Habitats Regulations. Where a proposal is likely to have a significant effect on a habitats site, either alone or in combination with other plans or projects, the presumption in favour of sustainable development does not apply unless an Appropriate Assessment has concluded that the proposal would not adversely affect the integrity of the habitats site. While the 2022 appeal decision relating to expansion

to 12 mppa is a material consideration, that decision does not establish an unrestricted principle of continued expansion at Bristol Airport irrespective of environmental effects. Rather, the current proposal must be assessed on its own merits against the materially different baseline which now includes both the operational airport and the already approved 12 mppa expansion.

8.2.4. **In this case, the Applicant's own submissions confirm that the proposal gives rise to impacts upon the North Somerset and Mendip Bats SAC and relies upon extensive mitigation in order to conclude that there would be no adverse effect on integrity. As such, the paragraph 195 issue is central to the determination of the application and substantially weakens the Applicant's assertion that the proposal plainly represents sustainable development in principle.**

Paragraph 195 of the NPPF and Habitats Sites

8.2.5. Paragraph 195 of the NPPF states that the presumption in favour of sustainable development does not apply where a plan or project is likely to have a significant effect on a habitats site, either alone or in combination with other plans or projects, unless an appropriate assessment has concluded that the proposal will not adversely affect the integrity of the habitats site.

8.2.6. The application site lies within the consultation zones associated with the North Somerset and Mendip Bats SAC, a European protected site designated in part for greater and lesser horseshoe bats. The airport lies within Zone A of the Greater Horseshoe Bat consultation zone and Zone B of the Lesser Horseshoe Bat consultation zone and the submitted material confirms that the Proposed Development would result in the permanent loss of substantial areas of functionally-linked habitat used by horseshoe bats associated with the SAC.

8.2.7. The Applicant's own ecological appendices further demonstrate substantial and sustained bat activity within and surrounding the Airport, including repeated recordings of both greater and lesser horseshoe bats within areas associated with proposed operational works, lighting changes and infrastructure expansion. The submitted appendices identify repeated instances of bat activity occurring within recognised emergence thresholds indicating the potential nearness of roosts, including significant levels of horseshoe bat activity recorded at locations surrounding the Airport and associated woodland corridors. The appendices also expressly

acknowledge the sensitivity of horseshoe bats to artificial lighting and the importance of dark commuting corridors and foraging habitat.

8.2.8. The legal significance of that position is important. In People Over Wind v Coillte Teoranta (Case C-323/17), the Court of Justice confirmed that mitigation measures intended to avoid or reduce harmful effects cannot be taken into account at the screening stage when determining whether an Appropriate Assessment is required. Given the identified effects pathways and the acknowledged need for mitigation in order to avoid ecological harm, it is clear that the proposal engages the Appropriate Assessment process.

8.2.9. Furthermore, the threshold for a lawful conclusion of no adverse effect on integrity is intentionally high. In Waddenzee (Case C-127/02), the Court confirmed that consent may only lawfully be granted where the competent authority has made certain that the plan or project will not adversely affect the integrity of the European site and where no reasonable scientific doubt remains as to the absence of such effects.

8.2.10. That test is particularly important in the present case because the ecological effects of the proposed development cannot be considered in isolation. The Habitats Regulations require assessment both alone and in combination with other plans and projects. The relevant baseline already includes a substantial operational airport together with the previously approved expansion to 12 mppa. The current proposal therefore represents a further phase of airport intensification involving additional land take, increased lighting, expanded operational areas, increased aircraft activity and further pressure upon the ecological network surrounding the Airport.

8.2.11. Importantly, the ecological network surrounding the Airport is already required to accommodate the effects of the previously approved 12 mppa expansion and associated mitigation strategy. The current proposal therefore raises a significant question as to whether there is now an incremental erosion of ecological resilience arising from successive phases of airport intensification, particularly having regard to the sensitivity of horseshoe bats to lighting, habitat fragmentation, disturbance and the erosion of dark commuting corridors.

8.2.12. While the Applicant seeks to rely upon mitigation and habitat replacement measures, the submitted material nevertheless confirms the permanent loss of functionally-linked habitat and demonstrates that the integrity conclusion is dependent upon the successful delivery and long-term effectiveness of extensive mitigation measures. The ecological appendices further demonstrate that bat activity within the surrounding

landscape is dynamic, variable and dependent upon sensitive landscape corridors and flight behaviour patterns identified through automated monitoring and statistical interpretation. In those circumstances, the issue is not simply whether mitigation is proposed in principle, but whether the competent authority can be satisfied beyond reasonable scientific doubt that such measures are effective, deliverable, appropriately phased and capable of maintaining the ecological functionality of the SAC and its supporting habitat network over the long term.

8.2.13. These concerns are reinforced by the specialist ecological and biodiversity reports submitted with this objection. Appendix 1, Save Felton Common Biodiversity Impacts Report, concludes that the Environmental Statement has significantly understated the biodiversity importance of Felton Common and has failed to adequately assess the direct and indirect impacts arising from the proposed approach lighting infrastructure and associated works. In particular, Appendix 1 identifies serious omissions in relation to Priority Habitat, Priority Species, breeding birds, invertebrates, fungi, nutrient deposition, lighting effects, disruption to habitat management and the adequacy of the Applicant's baseline survey work.

8.2.14. Appendix 2, Bristol Tree Forum BNG and Veteran Tree Report, raises further fundamental concerns regarding the reliability of the Applicant's ecological and biodiversity evidence base. It identifies significant inconsistencies between the Biodiversity Net Gain metric, habitat survey information, hedgerow data and arboricultural evidence, together with concerns that the tree survey information does not fully comply with BS5837:2012. These are not minor technical criticisms. They go directly to whether the Applicant has properly identified, quantified and assessed the ecological baseline and the resulting biodiversity impacts.

8.2.15. Taken together, Appendix 1 and Appendix 2 materially strengthen the objection that the ecological evidence base is incomplete, inconsistent and unreliable. This is highly significant in the context of paragraph 195 of the NPPF and the Habitats Regulations, because the Applicant's conclusion of no adverse effect depends upon confidence in the baseline, impact assessment, mitigation strategy and long-term effectiveness of replacement and compensation measures. Where the baseline itself is materially disputed, and where important ecological impacts appear to have been understated or omitted, the Council cannot safely conclude beyond reasonable scientific doubt that the proposal would avoid adverse effects on the integrity of the North Somerset and Mendip Bats SAC or its supporting ecological network.

8.2.16. At the very least, the submitted information demonstrates that paragraph 195 is fully engaged and substantially weakens the Applicant's assertion that the proposal plainly represents sustainable development in principle. Unless and until the competent authority is able to lawfully conclude through Appropriate Assessment that the proposal would not adversely affect the integrity of the North Somerset and Mendip Bats SAC, the proposal cannot benefit from the presumption in favour of sustainable development under paragraph 11 of the NPPF.

8.2.17. In those circumstances, the proposed development cannot simply be characterised as sustainable development on the basis of general economic benefits associated with airport growth. Rather, the proposal engages one of the most stringent environmental protection regimes within the planning system and raises substantial uncertainty as to whether the development is acceptable in principle having regard to the requirements of the Habitats Regulations and paragraph 195 of the NPPF.

8.2.18. **Accordingly, it has not been demonstrated beyond reasonable scientific doubt that the proposal would avoid adverse effects on the integrity of the North Somerset and Mendip Bats SAC and the proposal cannot presently benefit from the presumption in favour of sustainable development.**

Paragraph 11(d)(i), Footnote 7 and Strong Reasons for Refusal

8.2.19. Paragraph 11(d)(i) of the NPPF states that the presumption in favour of sustainable development does not apply where policies within the Framework that protect areas or assets of particular importance provide a clear reason for refusing the development proposed. Footnote 7 identifies those protected areas and assets and includes, amongst other matters, Green Belt land and habitats sites.

8.2.20. The current proposal engages both of those policy constraints simultaneously and to a substantial degree. Most notably, the proposal involves:

- further operational expansion within the Bristol and Bath Green Belt; and
- impacts upon a habitats site, namely the North Somerset and Mendip Bats SAC and associated functionally-linked habitat.

8.2.21. While the implications of paragraph 195 of the NPPF and the Habitats Regulations are addressed above, it is important to recognise that the existence of impacts upon the SAC and associated functionally-linked habitat is also directly relevant to paragraph 11(d)(i) and Footnote 7. In particular, the conclusions reached above identify substantial uncertainty as to whether it can lawfully be concluded, beyond

reasonable scientific doubt, that the proposal would not adversely affect the integrity of the SAC having regard to the permanent loss of functionally-linked habitat and the reliance upon extensive mitigation measures.

8.2.22. In those circumstances, the identified impacts upon the SAC and associated ecological network are capable of representing a clear reason for refusing the proposal for the purposes of paragraph 11(d)(i) of the NPPF. This is particularly important given that the glossary definition of Grey Belt expressly excludes land where the application of policies relating to Footnote 7 assets would provide a strong reason for refusing or restricting development. The Applicant's own ecological appendices reinforce that concern through the identification of substantial horseshoe bat activity, potential roost proximity and reliance upon sensitive dark corridor functionality surrounding the Airport.

8.2.23. The Applicant's Green Belt Assessment seeks to conclude that the relevant parcels comprise Grey Belt land. However, that conclusion is dependent upon demonstrating that policies relating to Footnote 7 assets do not provide a strong reason for refusal. For the reasons set out above in relation to paragraph 195, the Habitats Regulations and the identified impacts upon the SAC and associated functionally-linked habitat, this has not been conclusively demonstrated.

8.2.24. Furthermore, these policy constraints do not arise in isolation. The proposal must be considered against the background of the existing operational airport, the already approved 12 mppa expansion, and the cumulative intensification of airport-related activity over time. The current application would introduce further Green Belt encroachment, increased aircraft activity, additional lighting, expanded parking provision and additional pressure upon the surrounding ecological network.

8.2.25. Accordingly, it has not been conclusively demonstrated that policies relating to habitats sites and associated ecological networks would not provide strong reasons for refusal for the purposes of paragraph 11(d)(i) and Footnote 7 of the NPPF.

8.2.26. The NPPF affords substantial weight to Green Belt protection and stringent protection to habitats sites and ecological networks. In the present case, the cumulative interaction of those harms materially undermines the planning balance and the Applicant's contention that the proposal represents sustainable development.

8.2.27. Accordingly, it has not been demonstrated that the proposal satisfies the glossary definition of Grey Belt within the NPPF. Furthermore, the identified impacts upon the

SAC and associated functionally-linked habitat are capable of representing strong reasons for refusal under paragraph 11(d)(i) and Footnote 7 of the NPPF.

8.2.28. **Accordingly, the proposal engages multiple Footnote 7 policy constraints which are capable of providing strong reasons for refusal under paragraph 11(d)(i) of the NPPF and which materially undermine the Applicant's contention that the proposal represents sustainable development.**

Setting of the Mendip Hills National Landscape

8.2.29. Although the application site does not lie within the Mendip Hills National Landscape, the Airport occupies an elevated and visually prominent position on Broadfield Down which has a strong spatial and visual relationship with the surrounding rural landscape, including views from and towards the National Landscape. The setting of the National Landscape is therefore a material consideration in the assessment of the proposed development, particularly having regard to the scale of expansion proposed and the intensification of operational activity associated with the Airport.

8.2.30. Paragraph 190 of the NPPF confirms that planning decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes in a manner commensurate with their statutory status and identified quality in the development plan. Similarly, Policy DM11 of the North Somerset Sites and Policies Plan seeks to protect the character, scenic quality and setting of the Mendip Hills National Landscape. While the proposed development lies outside the designated area itself, the effects of development on the setting, tranquillity and experience of the National Landscape remain capable of attracting substantial weight within the planning balance.

8.2.31. The current proposal would not merely intensify operational activity within the existing airport envelope, but would extend and intensify the urbanising influence of the Airport across surrounding Green Belt countryside through additional built form, apron expansion, parking areas, lighting infrastructure, runway lighting extensions, increased aircraft activity and associated operational development. The proposal therefore has the potential to materially alter the character of parts of the wider landscape surrounding the Airport, including areas which contribute to the rural setting experienced from the National Landscape.

8.2.32. Particular concern arises in relation to the cumulative effects of lighting and night-time activity. The proposed increase in passenger throughput, aircraft movements and

night flights, together with additional apron lighting, approach lighting infrastructure and expanded operational areas, would likely increase the extent and intensity of visible illumination within what remains a predominantly rural landscape. This has potential implications for tranquillity, dark skies and the perception of urbanisation within the wider landscape setting of the National Landscape.

8.2.33. These impacts are also relevant in the context of sustainable development. While national policy recognises the economic role of aviation infrastructure, the environmental objective of sustainable development requires planning decisions to protect and enhance the natural environment, including valued landscapes and the character of the countryside. In this regard, the proposal gives rise to a clear tension between the claimed economic benefits of airport expansion and the environmental effects associated with the further spread and intensification of airport-related development within a sensitive rural landscape.

8.2.34. The Applicant's assessment places substantial reliance on mitigation measures, landscape planting and lighting controls to reduce visual and landscape effects. However, the effectiveness of such measures in fully mitigating the cumulative urbanising influence of a substantially expanded airport operation remains uncertain, particularly given the elevated and exposed nature of the site and the operational characteristics of a major international airport operating on a continuous basis.

8.2.35. Accordingly, while the detailed landscape and visual effects of the proposal are addressed separately elsewhere within this objection, the impacts on the setting, tranquillity and rural character of the wider landscape surrounding the Airport, including the setting of the Mendip Hills National Landscape, weigh materially against the proposal in the assessment of whether the development represents sustainable development within the meaning of the NPPF.

8.2.36. **The proposal would result in a material intensification of airport-related urbanising effects within the wider rural landscape surrounding Bristol Airport, including within the setting of the Mendip Hills National Landscape. It therefore conflicts with the environmental objectives of sustainable development in the NPPF and is inconsistent with the statutory duty under section 245 of the Levelling-up and Regeneration Act 2023 to seek to further the purposes of National Landscapes. This is a further and significant reason why the proposal cannot properly be regarded as sustainable development.**

Climate Change

8.2.37. Climate change is a relevant consideration in the overall assessment of sustainable development. Whilst this objection does not repeat the detailed legal and technical submissions made separately by Bristol Airport Action Network (BAAN), PCAA fully endorses those representations, which should be read alongside this objection. The BAAN submissions provide a comprehensive assessment of the shortcomings in the Applicant's climate change assessment and its compliance with national planning policy, environmental assessment requirements and the statutory framework.

8.2.38. In summary, the BAAN representations demonstrate that the Environmental Statement materially understates the climate impacts of the proposed development. In particular, they identify significant concerns regarding the fragmented assessment of greenhouse gas emissions, the reliance on assumptions within the Jet Zero Strategy that are now demonstrably uncertain, the failure to undertake appropriate sensitivity testing, the omission of well-to-tank emissions, the absence of any meaningful cumulative assessment alongside other airport expansion proposals, and the failure to assess the significant climate impacts arising from non-CO_2 aviation effects. The submissions also conclude that the Environmental Statement does not adequately assess the overall climate consequences of the development using the best available scientific evidence and current assessment methodologies.

8.2.39. The BAAN representations further conclude that these deficiencies are not merely matters of methodology but go to the lawfulness of the Environmental Statement itself. They contend that the Applicant has failed to demonstrate the satisfactory resolution of climate change impacts required by Policy CS23 and that the environmental information before the Council is insufficient to enable a lawful planning decision. They also conclude that neither national nor local planning policy supports airport expansion where environmental harm has not been properly assessed and weighed in the planning balance. PCAA endorses those conclusions.

8.2.40. **Taken together with the other environmental harms identified throughout this objection, the unresolved climate impacts of the proposal provide further evidence that the development does not represent sustainable development. The significant uncertainty surrounding the true extent of the proposal's greenhouse gas emissions, combined with the acknowledged shortcomings in the Applicant's assessment, weighs materially against the grant of planning permission.**

Transport Sustainability

8.2.41. Paragraphs 114 to 117 of the NPPF seek to ensure that development provides safe and suitable access, promotes sustainable transport modes and minimises environmental impacts arising from transport. Similarly, Policy CS10 of the Core Strategy and the objectives of JLTP4 place significant emphasis on reducing reliance upon private car travel and achieving modal shift towards more sustainable forms of transport.

8.2.42. In this case, the proposed expansion of Bristol Airport continues to rely heavily upon private vehicle access. The application proposes substantial additional parking provision, including approximately 2,000 additional spaces within the northern zone, approximately 1,960 additional spaces within the expanded Silver Zone area and approximately 1,720 additional staff parking spaces. The scale of additional parking proposed is itself indicative of the continued dependence of the Airport upon private car travel for both passengers and employees.

8.2.43. While the application includes certain sustainable transport measures and highway improvements, including bus infrastructure and works to the A38 corridor, these measures do not fundamentally alter the underlying transport characteristics of the site. Bristol Airport remains a major trip-generating development located within a relatively rural and constrained location with limited realistic alternatives to private vehicle access for a substantial proportion of users.

8.2.44. The proposal would therefore result in further increases in road traffic associated with passenger growth, staff travel and operational activity. This would contribute to additional congestion, increased surface access emissions and further pressure upon the surrounding highway network and nearby communities.

8.2.45. **In overall terms, the proposal does not demonstrate a genuinely transformational shift towards sustainable transport patterns and instead largely accommodates continued growth through additional parking provision and highway infrastructure.**

Overall Conclusion on Sustainable Development

8.2.46. The Applicant seeks to characterise the proposal as sustainable development principally by reference to the economic benefits associated with airport growth and national policy support for making best use of existing runways. However, national aviation policy support is expressly qualified and does not override the statutory

development plan, Green Belt policy, the Habitats Regulations or the wider environmental protections contained within the NPPF.

8.2.47. As set out throughout this objection, the proposal gives rise to substantial concerns in relation to Green Belt harm, impacts upon the North Somerset and Mendip Bats SAC and associated functionally-linked habitat, the setting of the Mendip Hills National Landscape, transport sustainability, cumulative environmental effects and the continued intensification of airport-related development within a constrained rural location.

8.2.48. In particular, the proposal engages paragraph 195 of the NPPF and raises substantial uncertainty as to whether it can lawfully be concluded, beyond reasonable scientific doubt, that the proposal would not adversely affect the integrity of the North Somerset and Mendip Bats SAC. The proposal also engages multiple Footnote 7 policy constraints which are capable of providing strong reasons for refusal under paragraph 11(d)(i) of the NPPF.

8.2.49. The proposal therefore conflicts with Policies CS1, CS3, CS4, CS5, CS6, CS10 and CS23 of the Core Strategy and Policies DM8, DM10, DM11, DM12, DM24 and DM50 of the Sites and Policies Plan Part 1. Those policies, read together, require airport-related development to address environmental, ecological, transport, Green Belt, landscape and community impacts satisfactorily. For the reasons set out above and throughout this objection, those requirements have not been met.

8.2.50. **Accordingly, the proposal cannot be regarded as sustainable development. The Applicant has failed to demonstrate compliance with the Habitats Regulations, paragraph 195 of the NPPF and the wider environmental objectives of the Framework. The proposal engages multiple Footnote 7 policy constraints, gives rise to substantial environmental harm and conflicts with the Development Plan when read as a whole. Planning permission should therefore be refused.**

8.3. **GREEN BELT AND GREY BELT ASSESSMENT**

8.3.1. The majority of Bristol Airport, and the application site, lies within the Bristol-Bath Green Belt, save for an area on the northern side of the site that is inset from the Green Belt designation. As a result, a Green Belt Assessment has been submitted which seeks to conclude that the proposed development would take place on Grey Belt land and should therefore not be regarded as inappropriate development within the Green Belt.

8.3.2. The Applicant identifies a number of assessment parcels comprising N1 Cook's Farm, C1 Runway, C2 Land East of the A38, C3 Felton Common, S1 Silver Zone and E1 Silver Zone East.

Does the Proposal Meet the Definition of Grey Belt?

8.3.3. The glossary of the NPPF defines Grey Belt as land in the Green Belt comprising previously developed land and/or any other land that, in either case:

- does not strongly contribute to purposes (a), (b) or (d) in paragraph 143 of the NPPF; and
- is not land where the application of policies relating to the areas or assets listed in Footnote 7 would provide a strong reason for refusing or restricting development.

8.3.4. The Green Belt Assessment concludes that the identified parcels do not strongly contribute to Green Belt purposes (a), (b) or (d), namely:

(a) checking the unrestricted sprawl of large built-up areas;
(b) preventing neighbouring towns from merging into one another; and
(d) preserving the setting and special character of historic towns.

8.3.5. However, those conclusions are disputed. The Assessment adopts an overly localised parcel-based approach which understates the strategic role of the Bristol and Bath Green Belt in preventing outward expansion associated with Bristol and in safeguarding the open countryside and settlement pattern across North Somerset.

8.3.6. The proposal would facilitate a substantial further intensification and urbanisation of a major airport complex extending beyond the currently approved operational envelope. The development would introduce additional apron areas, operational infrastructure, parking, lighting, engineering works and airport-related activity into currently open Green Belt land.

8.3.7. Furthermore, and more fundamentally, the glossary definition of Grey Belt expressly excludes land where the application of policies relating to Footnote 7 assets would provide a strong reason for refusing or restricting development.

8.3.8. In this case, the proposal directly engages multiple Footnote 7 policy constraints, including:

- Green Belt land; and
- impacts upon a habitats site, namely the North Somerset and Mendip Bats SAC and associated functionally-linked habitat.

8.3.9. As set out in Sections 8.1 and 8.2 of this objection, and further evidenced by Appendix 1 (Save Felton Common Biodiversity Impacts Report) and Appendix 2 (Bristol Tree Forum BNG and Veteran Tree Report), the proposal gives rise to substantial concerns in relation to paragraph 195 of the NPPF, the Habitats Regulations and the adequacy of the ecological evidence submitted in support of the application.

8.3.10. Accordingly, it has not been demonstrated beyond reasonable scientific doubt that the proposal would avoid adverse effects on the integrity of the North Somerset and Mendip Bats SAC. In those circumstances:

- paragraph 195 of the NPPF is engaged;
- paragraph 11(d)(i) and Footnote 7 are engaged; and
- the identified ecological impacts are capable of representing strong reasons for refusal.

8.3.11. **In the above circumstances, it has not been demonstrated that the proposal satisfies the glossary definition of Grey Belt within the NPPF.**

Assessment Against Paragraph 155

8.3.12. Even if the proposal were considered to meet the definition of Grey Belt, paragraph 155 of the NPPF requires all of the following criteria to be satisfied before development can properly be regarded as not inappropriate development within the Green Belt and states that:

Development on Green Belt land should not be regarded as inappropriate where all of the following apply:

(a) the development would utilise Grey Belt land and would not fundamentally undermine the purposes (taken together) of the remaining Green Belt across the area of the plan;

(b) there is a demonstrable unmet need for the type of development proposed;

(c) the development would be in a sustainable location, with particular reference to

paragraphs 110 and 115 of the NPPF; and

(d) where applicable, the development would meet the Golden Rules requirements.

8.3.13. Each criterion must be satisfied before development can properly be regarded as not inappropriate development in the Green Belt.

Assessment Against Paragraph 155(a)

8.3.14. Paragraph 155(a) requires consideration of whether the proposal would fundamentally undermine the purposes, taken together, of the remaining Green Belt across the wider plan area, namely the North Somerset section of the Bristol-Bath Green Belt as a whole.

8.3.15. The Green Belt Assessment concludes that the identified parcels do not strongly contribute to Green Belt purposes (a), (b) or (d) and further concludes that, while the proposal would result in additional airport-related encroachment into Green Belt land, it would not fundamentally undermine the wider strategic purposes of the remaining Green Belt across the plan area.

8.3.16. While the localised impacts of the proposal on open Green Belt land, particularly around Felton Common, Cook's Farm and land east of the A38, are not necessarily agreed with and clearly represent a further extension of airport-related development into the countryside, paragraph 155(a) is ultimately a high-level strategic assessment of the Green Belt as a whole across the wider plan area rather than a detailed assessment of site-specific openness impacts.

8.3.17. **In this regard, and notwithstanding the concerns identified elsewhere in this objection, it is acknowledged that the Applicant has advanced an arguable case that the proposal is likely to satisfy criterion (a) of paragraph 155.**

Assessment Against Paragraph 155(b)

8.3.18. Paragraph 155(b) requires there to be a demonstrable unmet need for the type of development proposed.

8.3.19. The Applicant relies heavily upon forecast passenger demand, economic benefits, connectivity improvements and the operational role of Bristol Airport in seeking to justify expansion from 12 mppa to 15 mppa.

8.3.20. However, the existence of forecast commercial demand for increased passenger throughput is not necessarily equivalent to a demonstrable unmet need within the meaning of paragraph 155(b).

8.3.21. The Green Belt Assessment does not robustly assess whether the proposed expansion is genuinely required, whether the need is presently unmet, whether the scale of development proposed is necessary as opposed to commercially desirable, or whether that need can only reasonably be accommodated through further Green Belt expansion at Bristol Airport.

8.3.22. **Accordingly, it has not been conclusively demonstrated that criterion (b) of paragraph 155 has been satisfied.**

Assessment Against Paragraph 155(c)

8.3.23. Paragraph 155(c) requires the development to be located in a sustainable location, with particular reference to paragraphs 110 and 115 of the NPPF.

8.3.24. The Applicant's Green Belt Assessment expressly acknowledges that this issue is addressed separately within the Planning Statement rather than within the Green Belt Assessment itself.

8.3.25. However, for the reasons set out throughout Sections 8.1 and 8.2 of this objection, it has not been demonstrated that the proposal represents sustainable development within the meaning of the NPPF.

8.3.26. In particular, paragraphs 110 and 115 of the NPPF seek to ensure that development proposals promote sustainable transport patterns, maximise the use of sustainable modes of transport and secure safe, suitable and efficient access arrangements. However, the current proposal remains heavily reliant upon private car travel and substantial additional parking provision, notwithstanding the Applicant's proposed modal shift measures.

8.3.27. Furthermore, the proposal gives rise to significant impacts upon the North Somerset and Mendip Bats SAC and associated functionally-linked habitat, together with cumulative environmental harm arising from successive phases of airport intensification.

8.3.28. The proposal therefore engages paragraph 11(d)(i), Footnote 7 and paragraph 195 of the NPPF. The identified impacts upon the SAC and associated ecological network are capable of representing strong reasons for refusal and, in those circumstances,

the proposal cannot presently benefit from the presumption in favour of sustainable development.

8.3.29. **Accordingly, it has not been demonstrated that the proposal represents sustainable development for the purposes of paragraph 155(c) and criterion (c) has therefore not been satisfied.**

Assessment Against Paragraph 155(d)

8.3.30. Paragraph 155(d) relates to the Golden Rules requirements where applicable.

8.3.31. The Applicant concludes that the Golden Rules provisions are not applicable to the proposed development as the scheme does not comprise housing-led development which is correct.

Overall Conclusion on whether the site is Grey Belt

8.3.32. The overall conclusion is that the application has failed to conclusively demonstrate that the proposal satisfies either the glossary definition of Grey Belt or the requirements of paragraph 155 of the NPPF. The proposal has therefore not been shown to constitute Grey Belt and must instead be assessed as inappropriate development within the Green Belt.

Harm to the Green Belt and Openness

8.3.33. Having concluded above that the proposal has not been demonstrated to satisfy the glossary definition of Grey Belt, fails to satisfy the requirements of paragraph 155 of the NPPF the application falls to be considered against the rest of Chapter 13 of the NPPF and whether the development is 'not inappropriate' for other reasons.

8.3.34. In that respect, paragraph 142 of the NPPF confirms that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. It further confirms that the essential characteristics of Green Belts are their openness and permanence.

8.3.35. Paragraph 153 of the NPPF then states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in Very Special Circumstances. The paragraph further confirms that substantial weight should be given to any harm to the Green Belt.

8.3.36. Paragraph 154 of the NPPF then identifies certain forms of development which are capable of being regarded as not inappropriate development within the Green Belt. Of relevance in the present case, paragraph 154(h) (ii) and (iii) which include engineering operations and local transport infrastructure which can demonstrate a requirement for a Green Belt location, provided that the development preserves openness and does not conflict with the purposes of including land within the Green Belt.

8.3.37. The Applicant's Green Belt Assessment refers specifically to paragraph 154(h)(ii) and (iii) of the NPPF, namely engineering operations and local transport infrastructure which can demonstrate a requirement for a Green Belt location. Certain individual elements of the proposal may, in broad terms, comprise engineering operations or transport-related infrastructure. However, the proposal must be assessed as a whole having regard to its cumulative scale, extent and operational effects rather than by artificially separating out individual components of the wider airport expansion scheme.

8.3.38. In this case the current application is not limited to isolated engineering works or local transport infrastructure, rather, it comprises a substantial further phase of airport expansion involving increased passenger throughput, increased aircraft movements and night flights, substantial additional parking provision, apron expansion, operational infrastructure, lighting, engineering works and the outward spread and intensification of airport-related activity into open Green Belt land. This is strategic level transport infrastructure, not local.

8.3.39. In light of this it is considered that the proposal does not comply with paragraph 154(h) (ii) or (iii) and therefore comprises inappropriate development in the Green Belt.

8.3.40. In any case, paragraph 154(h) only applies where development preserves the openness of the Green Belt and does not conflict with the purposes of including land within it. The key issue is therefore whether the proposal, considered as a whole, preserves openness and avoids conflict with Green Belt purposes. For the reasons set out below, it does not.

8.3.41. The proposal would result in substantial harm to the openness of the Green Belt both spatially and visually through the extension and intensification of airport-related infrastructure and activity into currently open countryside. The proposal would therefore contribute to the progressive urbanisation of the countryside surrounding Bristol Airport and materially erode the openness of the Green Belt.

8.3.42. In particular, the proposal would extend beyond the existing operational airport envelope into presently open Green Belt land at Cook's Farm, Felton Common and other peripheral areas. The scheme therefore represents not simply an intensification of activity within the existing airport core, the majority of which is also located within the Green Belt, but a continued outward spread of airport-related development across a wider area of countryside.

8.3.43. The Applicant places substantial reliance upon the argument that lower-profile and dispersed development reduces visual impacts within the Green Belt through the use of lower lying land, landscaping and the avoidance of taller structures. However, that approach gives disproportionate weight to visual mitigation and insufficient weight to the spatial dimension of Green Belt openness and the importance of preventing encroachment into the countryside.

8.3.44. While certain individual components may be lower in height or less visually prominent than more concentrated forms of development, the cumulative effect of the proposal is nevertheless to extend the spatial footprint and urbanising influence of the Airport across a wider area of Green Belt land.

8.3.45. This issue is particularly relevant within the southern operational areas associated with the Silver Zone and staff parking expansion. The Applicant's own submissions acknowledge that parts of the southern area are comparatively sensitive in Green Belt terms, yet the proposal nevertheless relies heavily upon the outward spread of parking and operational infrastructure across extensive areas of land rather than concentrating development more effectively within the existing operational airport envelope.

8.3.46. In this regard, there appears to be greater opportunity within the existing operational airport area, particularly within the Silver Zone and associated parking areas, to intensify development vertically through decked or multi-level parking provision, in addition to that already proposed, rather than extending surface-level parking and operational infrastructure further across open Green Belt land.

8.3.47. While taller or more concentrated forms of development may themselves give rise to visual impacts, Green Belt policy is concerned not only with visual effects but also with spatial openness, encroachment and the prevention of urban sprawl. There is therefore an important distinction between intensifying development within an already substantially operationalised airport core and extending development into previously undeveloped Green Belt land.

8.3.48. It is also material that significant parts of the existing operational airport, including the Silver Zone area, are proposed, through the emerging Local Plan, to be inset from the Green Belt in order to reflect the already approved 12 mppa expansion. In this circumstance, there is a clear distinction between intensifying development within an already operationalised airport envelope and extending development further into presently open Green Belt land at Cook's Farm and surrounding areas. The Applicant has not robustly demonstrated why greater concentration of development within the existing operational airport area, which is due to be removed from the Green Belt, could not materially reduce the need for further Green Belt encroachment.

8.3.49. The Applicant's own LVIA identifies a range of adverse landscape and visual effects arising from the proposal, including increased visibility of built form and lighting, urbanising influences within the wider landscape and night-time effects associated with expanded airport operations. Particular concern arises in relation to lighting impacts and the spread of visible airport infrastructure across the elevated and exposed landscape surrounding the Airport which would further erode the perception of openness and rural character surrounding the site.

8.3.50. While mitigation planting and landscape measures are proposed, much of that planting would take considerable time to mature and would not alter the fundamental change in character arising from the proposals.

8.3.51. The proposal would also conflict with the purposes of including land within the Green Belt. While the Applicant's Planning Statement seeks to conclude that the site does not strongly contribute to certain Green Belt purposes, particularly in relation to unrestricted sprawl and safeguarding the countryside from encroachment, those conclusions are disputed. The assessment places substantial reliance upon the existing operational presence of the Airport and the containment of parts of the site by existing infrastructure, but in doing so underplays the significance of the continued outward spread and cumulative urbanisation of airport-related development within the countryside surrounding Bristol Airport.

8.3.52. In particular, the proposal would result in further encroachment into currently open Green Belt land at the periphery of the Airport, including at Cook's Farm to the north, the operational and parking areas to the south and Felton Common to the east, extending the spatial influence and operational footprint of the Airport beyond the extent currently established.

8.3.53. Even if the proposal is considered to perform less harmfully against certain Green Belt purposes, that does not negate the substantial harm arising in relation to encroachment into the countryside associated with successive phases of airport expansion. Conflict with any of the purposes of the Green Belt is capable of giving rise to substantial Green Belt harm and must be afforded significant weight within the planning balance.

8.3.54. The cumulative context of the proposal is also important. The Airport has already undergone successive phases of expansion over recent decades, culminating most recently in the 12 mppa appeal permission just a few years ago. The current proposal represents a further substantial phase of intensification beyond that already approved and would result in an increased operational footprint, additional infrastructure and further Green Belt encroachment beyond the extent currently contemplated through the emerging Local Plan.

8.3.55. The previous 12 mppa appeal decision is also material in this regard. While the Inspectors ultimately concluded that Very Special Circumstances existed in that case, the decision nevertheless identified significant Green Belt and environmental harms requiring careful balancing. Those identified harms remain highly relevant and are materially intensified by the further expansion now proposed.

8.3.56. **Accordingly, the proposal would result in substantial harm to the openness of the Green Belt, conflict with the purposes of including land within it and contribute to the continuing urbanisation and outward spread of airport-related development within the countryside surrounding Bristol Airport.**

Very Special Circumstances

8.3.57. It has now been established above that the proposed development represents inappropriate development in the Green Belt that also would have a substantially harmful impact on its openness. Therefore, in accordance with paragraph 153 of the NPPF, permission should not be granted except in very special circumstances. Furthermore ‘‘very special circumstances” will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposals, is clearly outweighed by other considerations’.

8.3.58. In this regard, the Applicant relies heavily upon the economic and connectivity benefits associated with airport expansion together with national aviation policy support for

making best use of existing runways as the Very Special Circumstances necessary to justify the proposal and outweigh the harm.

8.3.59. However, national aviation policy support is expressly qualified and does not override Green Belt policy and, furthermore, the national aviation policy support relied upon is strategic and generic in nature. It does not amount to a site-specific endorsement of expansion at Bristol Airport to 15 million passengers per annum within this highly constrained Green Belt and environmentally sensitive location.

8.3.60. This is reinforced by the emerging North Somerset Local Plan which deliberately reflects only the already approved 12 mppa position and does not allocate or support the further expansion now proposed.

8.3.61. The previous 12 mppa appeal decision is also material in this regard. While the Inspectors concluded that very special circumstances existed in that case, the current proposal represents a materially greater level of expansion involving increased passenger throughput, increased aircraft movements, increased night flights, further Green Belt encroachment, additional parking provision and further environmental impacts beyond the already approved position.

8.3.62. **Accordingly, when substantial weight is afforded to Green Belt harm the arguments advanced by the Applicant do not clearly outweigh the resulting harm so as to amount to the very special circumstances required by paragraph 153 of the NPPF.**

Conclusion on Impact on the Green Belt

8.3.63. In conclusion, the proposal has not been demonstrated to satisfy either the glossary definition of Grey Belt or the requirements of paragraphs 154 and 155 of the NPPF. The proposal would therefore result in substantial harm to the openness of the Green Belt, conflict with the purposes of including land within it and contribute to the continuing outward spread and cumulative urbanisation of airport-related development within the countryside surrounding Bristol Airport.

8.3.64. The proposal conflicts with Chapter 13 of the NPPF and with Policies CS6 and DM12 of the Development Plan, both of which seek to protect the openness and permanence of the Green Belt and resist inappropriate development unless very special circumstances exist.

8.3.65. The considerations advanced by the Applicant do not clearly outweigh the substantial harm to the Green Belt and its openness so as to amount to the very special circumstances required by paragraph 153 of the NPPF.

8.3.66. While the Green Belt policies within the adopted Development Plan pre-date the 2024 revisions to the NPPF and therefore do not expressly refer to Grey Belt, the proposal nevertheless fails to satisfy the revised national policy tests relating to Grey Belt and the exceptions contained within paragraphs 154 and 155 of the NPPF.

8.3.67. While the emerging Local Plan reflects the already approved 12 mppa position through amendments to the Green Belt boundary associated with the existing operational airport, it does not allocate, endorse or otherwise promote the further release or operational expansion of the airport onto Green Belt land as now proposed through the current application.

8.3.68. Instead, the current proposal represents a further phase of expansion beyond that already permitted and beyond the extent of Green Belt release currently contemplated through the emerging plan-led strategy for Bristol Airport.

8.3.69. **The proposal therefore constitutes inappropriate development within the Green Belt, which is, by definition, harmful. No Very Special Circumstances have been demonstrated and, when taken together with the additional harm to openness and the purposes of including land within the Green Belt, the resulting Green Belt harm attracts substantial weight against the grant of planning permission.**

8.4. **IMPACT ON THE SETTING OF THE MENDIP HILLS NATIONAL LANDSCAPE**

8.4.1. The Mendip Hills National Landscape is a nationally protected landscape of the highest status in relation to its natural beauty, landscape character and special qualities.

8.4.2. The National Landscape extends across approximately 200 square kilometres and is designated for its outstanding natural beauty, distinctive limestone ridges and escarpments, panoramic views, rich biodiversity, historic landscape character and strong sense of place. It is widely valued for its open countryside, dark skies, tranquillity, relative remoteness and opportunities for informal recreation and enjoyment of the natural environment.

8.4.3. The application site does not lie within the designated boundary. However, it lies approximately 2.9 kilometres from the National Landscape at its closest point and

occupies a prominent elevated position within its northern setting. As a consequence, there is a clear visual, environmental and perceptual relationship between Bristol Airport and the National Landscape.

8.4.4. The importance of that relationship is recognised within the Mendip Hills National Landscape Management Plan. The Management Plan identifies a number of special qualities which contribute to the significance of the designation, including its dark skies, tranquillity, sense of remoteness and naturalness, extensive panoramic views and opportunities for outdoor recreation. Importantly, the Applicant's own LVIA acknowledges that the Management Plan identifies development pressure within the northern setting of the National Landscape, including proposals for the expansion of Bristol Airport, as a matter requiring careful consideration.

8.4.5. The Applicant's LVIA further acknowledges that the proposal has the potential to affect perceptual characteristics of the National Landscape, including:

- tranquillity;
- dark skies;
- views and panoramas; and
- enjoyment of the landscape whilst engaging in outdoor activities.

8.4.6. These matters are not peripheral considerations. They form part of the recognised special qualities of the National Landscape and are central to the purpose of its designation. Any development capable of adversely affecting those qualities must therefore be subject to careful scrutiny.

Statutory and Policy Framework

8.4.7. Section 85 of the Countryside and Rights of Way Act 2000, as amended by Section 245 of the Levelling-up and Regeneration Act 2023, requires relevant authorities exercising functions in relation to, or so as to affect, land within a National Landscape to seek to further the purpose of conserving and enhancing the natural beauty of that area.

8.4.8. This represents a strengthened statutory duty. It is no longer sufficient merely to have regard to the purposes of designation. Decision-makers must actively seek to further the conservation and enhancement of the natural beauty of the National Landscape when exercising planning functions capable of affecting it.

8.4.9. The duty is not confined to development physically located within the designated boundary. It also applies where development outside the National Landscape affects its natural beauty, setting, special qualities or enjoyment. Given the acknowledged relationship between the Airport and the National Landscape, that duty is directly relevant to the determination of the current application.

8.4.10. National policy reinforces this statutory protection. Paragraph 189 of the NPPF states that great weight should be given to conserving and enhancing landscape and scenic beauty in National Landscapes, which have the highest status of protection in relation to these issues. It further requires development within their setting to be sensitively located and designed so as to avoid or minimise adverse impacts on the designated area.

8.4.11. Whilst paragraph 190 of the NPPF applies specifically to major development within National Landscapes, it nevertheless provides important context by emphasising the high level of protection afforded to these nationally designated landscapes and the need to carefully consider alternatives, environmental impacts and recreational effects where major development affects such areas.

8.4.12. Paragraph 198 of the NPPF is also directly relevant. It requires planning decisions to recognise and protect tranquil areas which are prized for their recreational and amenity value and to limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation interests.

8.4.13. At the local level, Policy CS5 of the North Somerset Core Strategy seeks to conserve and enhance landscape character and distinctiveness. Policy DM10 seeks to protect landscape character and visual amenity. Policy DM11 specifically seeks to protect the Mendip Hills National Landscape and its setting, whilst Policy DM50 requires airport-related development to satisfactorily address environmental impacts arising from airport operations and expansion.

8.4.14. **Accordingly, the statutory duty, national policy and development plan policies require the decision-maker to give substantial weight to the conservation and enhancement of the Mendip Hills National Landscape and its setting. The question is therefore not whether some harm can be identified, but whether the proposal has been shown to avoid or minimise adverse impacts on the National Landscape and its special qualities.**

Applicant's Assessment

8.4.15. The Applicant's LVIA accepts that the National Landscape is a receptor of high value and high susceptibility to the type of change proposed and therefore possesses a high level of sensitivity.

8.4.16. The Applicant further accepts that the proposal may affect the very qualities for which the National Landscape is valued, namely tranquillity, dark skies, views and enjoyment of the landscape.

8.4.17. The Green Belt Assessment also acknowledges the importance of the National Landscape relationship, extending the study area specifically to include those parts of the National Landscape from which the proposed development may be visible.

8.4.18. Notwithstanding those acknowledgements, the Applicant ultimately concludes that the proposal would result in moderate adverse permanent effects upon the National Landscape but that those effects would not be significant in EIA terms.

8.4.19. However, the planning assessment required by the NPPF, the statutory duty and Development Plan policies is not limited to whether effects are significant for EIA purposes. Moderate adverse effects upon a nationally protected landscape receptor carry substantial weight in the planning balance, EIA or otherwise.

8.4.20. Furthermore, whilst the LVIA focuses upon those special qualities considered most susceptible to the proposal, the planning assessment should consider the effect of the development upon the National Landscape as a whole, including its setting, character, scenic beauty and overall special qualities.

8.4.21. **Importantly, the Applicant's own evidence therefore establishes that the National Landscape is highly sensitive and that adverse effects would arise. The principal dispute is not whether effects occur, but the weight which should be attached to those effects in the planning balance.**

Harm to the Setting of the National Landscape

8.4.22. A recurring theme throughout the Applicant's assessment is reliance upon the existing presence of Bristol Airport and the already approved 12 mppa position. The LVIA repeatedly concludes that changes would be perceived within the context of the existing Airport and existing airport activity.

8.4.23. That approach risks significantly understating the cumulative nature of the harm. The existence of Bristol Airport within the wider landscape cannot justify continued

incremental expansion or diminish the sensitivity of the National Landscape to further airport-related development.

8.4.24. The proposal would facilitate a substantial increase in airport activity beyond the recently approved 12 mppa position. It would involve increased passenger throughput, additional aircraft movements, expanded apron and taxiway infrastructure, substantial additional parking provision, new and altered lighting infrastructure, a runway extension and the further outward spread of airport-related development into currently undeveloped countryside.

8.4.25. The cumulative consequence of those changes would be a further intensification of the Airport's influence within the wider landscape. The principal harm is therefore not simply a question of whether individual structures are visible from particular viewpoints. Rather, it arises from the continuing urbanisation of the rural landscape surrounding the Airport and the corresponding erosion of the setting of the National Landscape.

8.4.26. This issue is particularly significant because the proposal extends airport-related development into areas presently characterised by agricultural land, Green Belt land, common land and open countryside. The proposal therefore represents a further outward spread of airport infrastructure beyond the existing operational airport area.

8.4.27. The Applicant’s own evidence demonstrates that the proposal has the potential to affect tranquillity, dark skies and recreational enjoyment. These are amongst the most sensitive and valued characteristics of the National Landscape and are qualities which, once eroded, are difficult to restore.

8.4.28. **The proposal would therefore extend and intensify the urbanising influence of Bristol Airport within the setting of the National Landscape. That effect is contrary to the objective of conserving and enhancing landscape character, scenic beauty and the special qualities for which the designation is recognised nationally.**

Dark Skies and Landscape Character

8.4.29. Particular concern arises in relation to the effects upon dark skies and landscape character.

8.4.30. The proposal would introduce additional operational lighting across multiple parts of the Airport, including parking areas, operational infrastructure and runway-related

development. It would also require the extension of approach lighting infrastructure eastwards onto Felton Common as part of the runway extension proposals.

8.4.31. Whilst the Applicant relies heavily upon lighting controls, shielding measures and modern lighting technology, these measures do not alter the fact that the proposal represents a larger and more intensive airport operation with an expanded operational footprint and additional lighting infrastructure.

8.4.32. The relevant question is therefore not whether individual lighting columns comply with technical standards, but whether the cumulative effect of a larger airport operation conserves and enhances the dark skies and natural character which form part of the National Landscape's special qualities.

8.4.33. The proposal would also reinforce the Airport's visual and operational presence within the wider landscape. Whilst individual structures may often be viewed against the backdrop of existing airport development, the cumulative effect would nevertheless be to strengthen the perception of airport urbanisation within the setting of the National Landscape.

8.4.34. These effects are particularly important because dark skies and landscape character are recognised components of the National Landscape's special qualities and contribute directly to its scenic beauty, recreational value and sense of place.

8.4.35. **Accordingly, the proposal would fail to conserve and enhance the dark skies and landscape character of the Mendip Hills National Landscape and would further extend the urbanising influence of Bristol Airport within its setting.**

Tranquillity and Experiential Qualities

8.4.36. The Applicant's assessment places considerable emphasis upon the limited increase in aircraft movements predicted over parts of the Mendip Hills National Landscape and concludes that any resulting reduction in tranquillity would be limited. However, tranquillity is not experienced solely by reference to aircraft numbers or the duration of individual overflights.

8.4.37. The special qualities of the National Landscape include tranquillity, dark skies, remoteness and naturalness. These qualities are experienced cumulatively through the character of the landscape as a whole, including the extent of visible development, the presence of artificial lighting, levels of activity and movement, the perception of urban influence and the ability of users to experience a sense of separation from major urban and commercial development.

8.4.38. The proposal would facilitate a further phase of airport expansion beyond the recently approved 12 mppa position. Increased passenger throughput, additional aircraft movements, expanded parking provision, new lighting infrastructure, operational development on currently undeveloped land and the outward spread of airport activity would all contribute to the perception of a larger and more intensive airport operation within the wider landscape.

8.4.39. While some individual components of the proposal may appear limited when viewed in isolation, the cumulative effect would be to reinforce the visual and perceptual presence of Bristol Airport within the setting of the National Landscape. This is particularly relevant where the Applicant's own assessment acknowledges the potential effects upon tranquillity, dark skies and recreational enjoyment.

8.4.40. The National Landscape is valued not only for what can be seen from individual viewpoints, but also for the experience it provides to residents and visitors using public rights of way, open access land and recreational routes. The gradual extension of airport infrastructure, activity and lighting into the surrounding countryside risks eroding those experiential qualities over time, even where individual changes may be perceived against the backdrop of the existing Airport.

8.4.41. The proposal must therefore be assessed not only in terms of visibility or landscape character effects, but also by reference to its impact upon the tranquillity, remoteness and sense of place which form an integral part of the special qualities of the Mendip Hills National Landscape.

8.4.42. **Accordingly, the proposal would erode the tranquillity, remoteness and experiential qualities which form an important part of the National Landscape's special qualities. These effects should not be dismissed simply because they arise incrementally, as it is precisely the cumulative intensification of airport activity that gives rise to the harm.**

Landscape Character Areas and Special Qualities

8.4.43. The Applicant's LVIA concludes that the magnitude of permanent effects on the Mendip Hills Landscape Character Areas would be low and that, when combined with the high sensitivity of the receptor, the significance of permanent effects would be Moderate, albeit not significant in EIA terms. The Planning Statement summarises this conclusion as resulting in moderate permanent adverse effects on the Mendip Hills National Landscape.

8.4.44. Whilst the Applicant ultimately concludes that those effects are not significant in EIA terms, the assessment nevertheless acknowledges adverse effects on a nationally protected landscape receptor and identifies potential effects on tranquillity, dark skies, views and recreational enjoyment.

8.4.45. The proposal would therefore fail to conserve and enhance the setting, character and special qualities of the Mendip Hills National Landscape. Instead, it would contribute to their gradual erosion through the cumulative intensification of airport operations, increased activity, additional lighting, further infrastructure and the continued outward spread of development into the surrounding countryside.

8.4.46. The effects identified above must also be considered alongside the separate impacts arising from lighting, noise, transport, ecology and air quality, each of which is addressed elsewhere within this objection and each of which has the potential to further affect the tranquillity, natural beauty and recreational value of the National Landscape.

8.4.47. **Accordingly, the proposal would result in harm to the setting, scenic beauty, landscape character, dark skies, tranquillity and special qualities of the Mendip Hills National Landscape through the cumulative intensification of airport activity, lighting, infrastructure and urbanising influences within its setting. The proposal has not demonstrated that these adverse impacts have been avoided or minimised as required by paragraph 189 of the NPPF and Policy DM11. Significant weight should therefore be afforded to this harm within the overall planning balance.**

8.5. **IMPACT ON BIODIVERSITY AND ECOLOGY**

North Somerset and Mendip Bats Special Area of Conservation

8.5.1. The North Somerset and Mendip Bats Special Area of Conservation ("SAC") is an internationally important European protected site designated for its populations of Greater Horseshoe Bat and Lesser Horseshoe Bat. The Application Site lies within Zone A of the Greater Horseshoe Bat Consultation Zone and Zone B of the Lesser Horseshoe Bat Consultation Zone. The Applicant's own ecological evidence acknowledges that suitable foraging habitat at and around Bristol Airport is required to maintain the favourable conservation status of the SAC and its qualifying species.

8.5.2. The significance of the SAC extends beyond the designated roost sites themselves. The qualifying bat populations rely upon an extensive network of functionally linked

habitat, including pasture, woodland edge, hedgerows, commuting corridors and foraging areas. The Habitats Regulations therefore require consideration not only of direct effects upon designated sites, but also impacts upon the wider ecological network upon which SAC populations depend.

8.5.3. The submitted ecological evidence accepts that the proposal would result in the permanent loss of habitat utilised by SAC bat populations and identifies likely significant effects requiring Appropriate Assessment. The submission further acknowledges impacts arising from habitat loss, habitat fragmentation, lighting, disturbance and changes to ecological connectivity. Accordingly, this is not a case where the submission contends that no impacts would arise. Rather, the conclusion of no adverse effect on integrity is dependent upon the successful implementation of an extensive package of mitigation, habitat enhancement, replacement habitat provision, ecological management and long-term monitoring measures.

8.5.4. The Applicant therefore bears a substantial evidential burden. The relevant question is not whether mitigation can be proposed in principle, but whether it has been demonstrated beyond reasonable scientific doubt that the mitigation package will be sufficient to maintain the integrity of the SAC over the long term. The Habitats Regulations establish a deliberately high threshold because of the international importance of European protected sites and the serious consequences of ecological harm.

8.5.5. The current proposal must also be considered in the context of the Airport's recent expansion to 12 million passengers per annum. The ecological network surrounding the Airport is therefore already expected to accommodate the effects of existing operations and previously approved development. The current application seeks a further increase to 15 million passengers per annum together with additional infrastructure, habitat loss, lighting and operational activity. Habitat creation, woodland enhancement and ecological management measures require considerable time to establish and become fully effective. However, limited evidence is provided demonstrating that the ecological outcomes anticipated from previous mitigation measures have been fully realised before a further significant phase of expansion is proposed.

8.5.6. The submission repeatedly relies upon future habitat enhancement, future management measures, future monitoring and future ecological controls in order to conclude that adverse effects on integrity can be avoided. Such measures may ultimately prove successful. However, the Habitats Regulations require more than

confidence or optimism that mitigation will succeed. They require sufficient evidence to enable the competent authority to conclude that adverse effects on integrity can be excluded beyond reasonable scientific doubt.

8.5.7. As set out in the following sections of this chapter, Appendix 1 (Save Felton Common Biodiversity Impacts Report) and Appendix 2 (Bristol Tree Forum BNG and Veteran Tree Report) raise significant concerns regarding the adequacy, consistency and robustness of elements of the ecological evidence submitted in support of the application. Whilst those concerns relate to specific aspects of the ecological assessment, they inevitably reduce confidence in the wider conclusions reached regarding SAC impacts, mitigation effectiveness and ecological functionality.

8.5.8. **The Applicant accepts that the proposal would affect habitat relied upon by qualifying SAC species and relies upon extensive mitigation and future ecological measures in order to conclude that no adverse effect on integrity would arise. Given the acknowledged impacts, the scale of habitat change proposed and the uncertainties identified within the supporting ecological evidence, it has not been demonstrated to the high standard required by the Habitats Regulations and paragraph 195 of the NPPF that the integrity of the North Somerset and Mendip Bats SAC would be preserved beyond reasonable scientific doubt.**

Permanent Loss of Functionally Linked Habitat

8.5.9. The ecological assessment states that the proposed development would result in the permanent loss of approximately 39.02 hectares of functionally linked habitat associated with the North Somerset and Mendip Bats SAC. This includes the loss of grassland, hedgerows, hedgerow trees and other habitat features which contribute to the wider ecological network used by Greater Horseshoe Bats and Lesser Horseshoe Bats for foraging and commuting.

8.5.10. The significance of this loss should not be underestimated. Functionally linked habitat performs an essential role in maintaining the integrity of the SAC by supporting movement between roosting sites, feeding areas and wider ecological corridors. The ecological value of such habitat is derived not only from its individual characteristics, but from its contribution to a connected landscape relied upon by SAC bat populations.

8.5.11. The submission repeatedly seeks to place the affected habitats within the context of the wider landscape, emphasising the availability of additional habitat within the

surrounding area. Whilst the existence of habitat elsewhere is relevant, it does not in itself demonstrate that the loss of existing habitat is acceptable. The fact that bats may be capable of utilising other areas does not demonstrate that the affected habitats are unimportant, nor does it establish that ecological functionality can be displaced without consequence.

8.5.12. The Applicant's own surveys recognise the importance of established commuting routes, dark corridors, hedgerows, woodland edges and connected foraging habitat. These features have developed over time and form part of a wider ecological network supporting SAC populations. The loss or degradation of individual components of that network may therefore have consequences extending beyond the immediate footprint of the development.

8.5.13. The ecological assessment relies heavily upon the assumption that habitat enhancement and management measures elsewhere within the landscape will maintain overall ecological functionality. However, the submission provides limited evidence demonstrating that habitats currently used by SAC species can be removed without adverse effects provided that improvements are secured elsewhere. The conclusion therefore depends upon assumptions regarding future habitat performance, future ecological connectivity and future species behaviour rather than demonstrated ecological outcomes.

8.5.14. Particular caution is required because the proposal follows closely on from the recently approved expansion of Bristol Airport to 12 million passengers per annum. That permission was granted in 2022 and was itself accompanied by extensive ecological mitigation, habitat enhancement and habitat management measures intended to address impacts upon SAC bat populations and the wider ecological network. However, habitat creation, hedgerow establishment, woodland enhancement and ecological management measures require many years, and in some cases decades, to become fully functional and demonstrate measurable ecological success.

8.5.15. The current application has been promoted only a short period after the previous expansion was approved and the submission provides limited evidence demonstrating that the ecological outcomes anticipated from the earlier mitigation package have been fully achieved, fully monitored and proven effective. In those circumstances, there is a genuine risk that the cumulative effects of successive phases of habitat loss and airport expansion are being assessed on the basis of assumed mitigation success rather than demonstrated ecological outcomes.

8.5.16. The concerns identified within Appendix 1 are relevant in this regard. Whilst focused upon Felton Common, the report questions whether the ecological importance of affected habitats has been consistently identified and assessed. The findings do not prove that equivalent deficiencies exist elsewhere across the application area. However, they do raise legitimate concerns regarding the robustness of the wider ecological baseline and whether the significance of affected habitats may have been underestimated. In circumstances where the Habitats Regulations require certainty, such concerns cannot simply be disregarded.

8.5.17. The permanent loss of habitat is a certain consequence of the proposal. By contrast, the ability of mitigation, enhancement and management measures to maintain equivalent ecological functionality remains dependent upon future delivery, future management and future ecological response. The ecological assessment therefore asks the decision-maker to assume that future measures will fully compensate for present losses, notwithstanding the acknowledged uncertainty associated with ecological systems and species behaviour.

8.5.18. **The proposal would result in the permanent loss of over 39 hectares of functionally linked habitat associated with the North Somerset and Mendip Bats SAC. Whilst the submission contends that these impacts can be addressed through mitigation and habitat enhancement measures, it has not demonstrated to the high degree of certainty required by the Habitats Regulations that the ecological functionality of the affected habitat can be maintained and reasonable scientific doubt therefore remains.**

Reliance on Mitigation, Compensation and Habitat Creation

8.5.19. The conclusion that the proposal would not adversely affect the integrity of the North Somerset and Mendip Bats SAC is dependent upon an extensive package of mitigation, habitat enhancement, replacement habitat provision, ecological management and monitoring measures. The submission does not contend that the proposed development would avoid impacts upon functionally linked habitat, rather, it accepts that impacts would occur and seeks to demonstrate that they can be addressed through a combination of mitigation and long-term ecological interventions.

8.5.20. The ecological strategy is therefore fundamentally dependent upon future actions and future outcomes. The submitted documents rely upon habitat enhancement, habitat creation, hedgerow planting, woodland management, ecological monitoring, lighting controls, management plans and off-site measures in order to conclude that the

integrity of the SAC would be maintained. Whilst such measures may have ecological benefits, the effectiveness of many of those measures remains dependent upon future delivery, future management and future species response.

8.5.21. The submission places considerable emphasis upon replacement habitat and habitat enhancement measures intended to maintain ecological functionality for qualifying SAC species. However, existing habitat is established, connected and currently utilised by protected species. By contrast, the ecological functionality of replacement or enhanced habitat can only be predicted. The submission has not demonstrated that habitats currently supporting foraging and commuting activity can be removed without adverse effects provided that enhancement measures are delivered elsewhere within the wider landscape.

8.5.22. The distinction is important. The loss of habitat associated with the proposal is certain and immediate. The ecological benefits relied upon to justify that loss are future, dependent upon successful implementation and inherently uncertain. The conclusion of no adverse effect on integrity therefore relies upon a series of assumptions regarding habitat establishment, habitat quality, ecological connectivity, long-term management and species behaviour.

8.5.23. The submission also relies heavily upon future management plans, monitoring programmes and operational controls. Whilst such measures may be capable of reducing impacts, they do not remove the requirement for certainty at the decision-making stage. The Habitats Regulations require confidence that mitigation will be effective, not merely confidence that mechanisms exist through which mitigation may subsequently be refined or improved.

8.5.24. Particular concern arises from the fact that the current proposal follows closely on from the recently approved expansion of Bristol Airport to 12 million passengers per annum. That permission was accompanied by extensive ecological mitigation, habitat enhancement and habitat management measures intended to address impacts upon SAC bat populations and the wider ecological network. However, these measures require many years, and in some cases decades, to become fully functional and demonstrate measurable ecological success.

8.5.25. The current application has been promoted only a short period after the previous expansion was approved and the submission provides limited evidence demonstrating that the ecological outcomes anticipated from the earlier mitigation package have been fully achieved, fully monitored and proven effective. In those

circumstances, there is a genuine risk that the cumulative effects of successive phases of habitat loss and airport expansion are being assessed on the basis of assumed mitigation success rather than demonstrated ecological outcomes.

8.5.26. The concern is not that mitigation measures are absent. On the contrary, the submission relies upon an extensive package of mitigation and management measures. The previous 12 million passengers per annum permission was granted only in 2022 and was itself accompanied by substantial ecological mitigation and habitat enhancement measures intended to address impacts upon SAC bat populations. Many of those measures require years and in some cases decades before their ecological effectiveness can be properly evaluated. Yet only a short period later, the current application seeks to rely upon further mitigation and habitat enhancement measures to justify additional habitat loss and ecological disturbance. The submission provides insufficient evidence to demonstrate that the ecological outcomes anticipated from the previous mitigation package have been fully realised before a further phase of expansion is proposed. In these circumstances, the conclusion that adverse effects on SAC integrity can be excluded beyond reasonable scientific doubt is premature.

8.5.27. **The submission seeks to justify the permanent loss of established habitat through a mitigation strategy dependent upon future habitat enhancement, future management, future monitoring and future ecological success. The loss is certain, whereas the effectiveness of the mitigation strategy remains dependent upon a range of future assumptions. In those circumstances, the submission has failed to demonstrate beyond reasonable scientific doubt that the integrity of the North Somerset and Mendip Bats SAC would be preserved, contrary to the requirements of the Habitats Regulations and paragraph 195 of the NPPF.**

Felton Common and Ecological Importance

8.5.28. Appendix 1, the Save Felton Common Biodiversity Impacts Report, raises serious concerns regarding the Applicant's assessment of the ecological value of Felton Common and the adequacy of the Environmental Statement. The report concludes that the biodiversity importance of the Common has been materially understated and that the application fails to properly identify and assess a number of important ecological receptors and impact pathways.

8.5.29. Felton Common is one of the largest remaining areas of semi-natural habitat in the immediate vicinity of the site and performs an important ecological function within the wider network of habitats supporting biodiversity and ecological connectivity around the Airport. The Common supports a mosaic of grassland, scrub, hedgerows and associated habitats which provide ecological connectivity and habitat diversity within an otherwise increasingly fragmented environment.

8.5.30. Of particular concern is the report's conclusion that the Applicant appears to have incorrectly classified important areas of habitat. The report identifies evidence that parts of Felton Common display characteristics consistent with Lowland Dry Acid Grassland, a Priority Habitat recognised as being of principal importance for biodiversity conservation. The report notes that this habitat type appears to have been overlooked or inadequately recognised within the submitted assessment despite the presence of characteristic indicator species.

8.5.31. If correct, this would represent a fundamental flaw in the ecological assessment of Felton Common because the biodiversity value and sensitivity of the affected habitat would have been materially underestimated. The distinction is important because development affecting Priority Habitat attracts a greater level of policy protection and requires a more robust assessment of avoidance, mitigation and compensation measures.

8.5.32. The report further identifies shortcomings in the assessment of species associated with the Common. Particular concerns are raised regarding the treatment of breeding birds, invertebrates and fungi. The report concludes that the Environmental Statement focuses heavily upon a limited number of ecological receptors whilst failing to adequately assess the wider biodiversity resource present within the Common and its surrounding habitats.

8.5.33. The proposed approach lighting infrastructure, associated engineering works and operational changes have also not been fully assessed. Appendix 1 concludes that the Environmental Statement places undue emphasis on the relatively small physical footprint of the lighting columns themselves whilst failing to properly assess wider indirect effects, including habitat disturbance, changes in management practices, lighting impacts, nutrient deposition and the cumulative consequences of increased airport activity.

8.5.34. The report is particularly critical of the assumption that ecological impacts can be discounted because sufficient habitat exists elsewhere within the wider 10 kilometre

landscape surrounding Bristol Airport. The existence of habitat elsewhere does not in itself demonstrate that affected species will successfully relocate, nor does it remove the need to assess the ecological importance of the habitat being lost or disturbed. This is especially relevant where species exhibit site fidelity, established commuting routes or reliance upon particular habitat characteristics.

8.5.35. Appendix 1 identifies substantial shortcomings in the assessment of Felton Common and raises serious doubt as to whether the ecological importance of the Common, the presence of Priority Habitat and the full biodiversity consequences of the proposal have been properly identified or assessed.

8.5.36. Whilst the findings of Appendix 1 relate specifically to Felton Common, they raise wider concerns regarding the methodology, assumptions and extent of ecological survey work underpinning the application as a whole. This objection does not contend that equivalent deficiencies necessarily exist across all ecological assessments submitted in support of the proposal. However, the findings demonstrate that the ecological evidence cannot simply be accepted at face value and reinforce the need for a precautionary approach when determining whether adverse effects upon the integrity of the North Somerset and Mendip Bats SAC can genuinely be excluded beyond reasonable scientific doubt.

8.5.37. **The independent ecological evidence contained within Appendix 1 raises substantive concerns regarding the assessment of Felton Common and calls into question whether the ecological value of affected habitats has been properly understood. In circumstances where the proposal affects functionally linked habitat associated with an internationally protected SAC, those deficiencies significantly undermine confidence in the wider ecological conclusions of the submission and reinforce the conclusion that the high evidential threshold required by the Habitats Regulations has not been met.**

Deficiencies in the Ecological Assessment

8.5.38. Beyond the specific concerns relating to Felton Common, both Appendix 1 (Save Felton Common Biodiversity Impacts Report) and Appendix 2 (Bristol Tree Forum BNG and Veteran Tree Report) raise wider concerns regarding the adequacy, consistency and reliability of the ecological evidence submitted in support of the application.

8.5.39. Appendix 1 identifies a recurring reliance upon assumptions rather than demonstrated ecological outcomes. In particular, the ecological assessment repeatedly seeks to justify impacts on habitats within and adjacent to the application site by reference to the availability of alternative habitat elsewhere within the wider landscape. However, the existence of habitat within a wider geographical area does not demonstrate that affected species will successfully relocate, nor does it establish that habitats proposed to be lost, fragmented or disturbed are of limited ecological importance. The assessment therefore relies upon assumptions regarding species behaviour and ecological functionality which have not been demonstrated to the degree of certainty required by the Habitats Regulations.

8.5.40. The report further concludes that a number of ecological receptors and impact pathways have either been omitted from the assessment or considered only superficially. Concerns are raised regarding the treatment of breeding birds, invertebrates, fungi, nutrient enrichment, indirect ecological effects and the implications of operational changes associated with the runway extension and approach lighting infrastructure.

8.5.41. Of particular concern is the repeated tendency within the ecological assessment to focus upon the direct physical footprint of proposed works whilst giving comparatively limited consideration to wider ecological consequences. Habitat fragmentation, disturbance, changes in management practices, lighting effects, noise, nutrient deposition and altered species behaviour can all affect ecological function beyond the immediate area of land take. In several instances, the submission appears to assume that such effects will be negligible or capable of mitigation without providing sufficient evidence to substantiate those conclusions.

8.5.42. Appendix 2 raises a separate but equally important concern regarding the reliability of the ecological baseline. The report identifies significant inconsistencies between the Biodiversity Net Gain Metric, habitat surveys, hedgerow assessments and arboricultural information submitted as part of the application. The report concludes that it is not possible to readily reconcile elements of the biodiversity evidence base and that important habitat data appear to be inconsistent between submitted documents.

8.5.43. The report identifies substantial discrepancies between the number of trees, areas of habitat and lengths of hedgerow recorded within the Biodiversity Net Gain calculations and those recorded within the supporting ecological and arboricultural documents. As a result, concerns are raised regarding whether the ecological baseline has been

accurately recorded and whether the resulting habitat losses have been properly quantified.

8.5.44. The Bristol Tree Forum report also identifies shortcomings within the arboricultural information itself, including concerns regarding compliance with BS5837:2012 and omissions within the tree survey data. While some of these matters may appear technical in nature, they are important because they affect confidence in the underlying data used to assess impacts and calculate biodiversity outcomes.

8.5.45. **The combined effect of these concerns is not merely to challenge individual conclusions within the Environmental Statement. Rather, they call into question the reliability of the ecological baseline upon which the wider assessment depends. Where baseline information is disputed, habitat classifications are uncertain, important ecological receptors may have been overlooked and biodiversity calculations cannot be readily reconciled, confidence in the resulting conclusions is inevitably reduced. This is particularly significant in the context of the Habitats Regulations, where the burden rests upon the Applicant to demonstrate that adverse effects on integrity can be excluded beyond reasonable scientific doubt.**

Protected Species and Priority Habitat

8.5.46. Whilst much of the ecological assessment focuses upon the North Somerset and Mendip Bats SAC, the biodiversity importance of the site and its surroundings extends beyond qualifying SAC species. The application affects a complex mosaic of habitats supporting a wide range of protected and notable species, together with habitats of recognised ecological importance.

8.5.47. Appendix 1 raises concerns that the ecological assessment places disproportionate emphasis upon a limited number of ecological receptors whilst giving comparatively limited consideration to the wider biodiversity resource present within and around the application site. In particular, concerns are raised regarding the treatment of breeding birds, invertebrates, fungi and Priority Habitat, together with the extent to which indirect ecological effects have been properly assessed.

8.5.48. Of particular concern is the potential presence of Lowland Dry Acid Grassland within Felton Common. Appendix 1 identifies evidence suggesting that parts of the Common exhibit characteristics consistent with this Priority Habitat and notes the presence of characteristic indicator species. If correct, this would represent a significant omission

from the ecological assessment and could materially affect the assessment of ecological value, habitat sensitivity and resulting impacts.

8.5.49. The ecological assessment also acknowledges the presence of a range of protected and notable species within the wider application area, including badgers, breeding birds and other species associated with the varied habitats surrounding the Airport. Whilst mitigation measures are proposed, the conclusions reached are again heavily dependent upon assumptions regarding habitat retention, habitat enhancement, species adaptation and the effectiveness of future management measures.

8.5.50. Appendix 1 further identifies concerns regarding the assessment of breeding birds, noting that potential impacts upon species using Felton Common and surrounding habitats may not have been fully explored. Similar concerns are raised in relation to invertebrates and fungi, both of which can make an important contribution to biodiversity value and ecosystem function but appear to have received comparatively limited consideration within the submitted assessment.

8.5.51. The issue is not necessarily that impacts upon every protected or notable species have been underestimated. Rather, the concern is that the ecological assessment appears to adopt a relatively narrow focus in certain areas, creating a risk that the cumulative biodiversity consequences of the proposal have not been fully identified or understood. This is particularly important where ecological value arises from habitat mosaics, species interactions and wider ecosystem function rather than individual protected species alone.

8.5.52. The concerns raised within Appendix 1 reinforce a wider theme running throughout the ecological evidence. The submission repeatedly relies upon mitigation, habitat enhancement and future management measures to conclude that biodiversity impacts can be reduced to acceptable levels. However, where there is uncertainty regarding the ecological baseline, habitat classification and species presence, confidence in those conclusions is inevitably reduced.

8.5.53. **The ecological impacts of the proposal extend beyond SAC bats and functionally linked habitat. Significant concerns remain regarding the treatment of Priority Habitat, breeding birds, invertebrates, fungi and other protected species. The submission has failed to demonstrate that the full biodiversity consequences of the proposal have been properly identified and assessed, further undermining confidence in the ecological conclusions upon which the application relies.**

Biodiversity Net Gain and Arboricultural Assessment

8.5.54. Appendix 2, the Bristol Tree Forum BNG and Veteran Tree Report, raises significant concerns regarding the Biodiversity Net Gain assessment and the supporting arboricultural evidence submitted with the application. The report identifies inconsistencies between the Statutory Biodiversity Metric, habitat survey information and tree survey data which, in its view, prevent the biodiversity calculations from being independently verified.

8.5.55. The report concludes that habitat parcels identified within the Biodiversity Net Gain Metric cannot be readily reconciled with those shown within the supporting ecological documentation. Similar concerns are raised regarding hedgerows, where differing datasets appear to record materially different habitat resources without a clear explanation of how those figures have been derived or how they relate to one another.

8.5.56. Particular concern is raised regarding the treatment of trees within the Biodiversity Net Gain calculations. The report identifies significant discrepancies between the number of trees and tree groups recorded within the arboricultural information and the tree habitat data incorporated within the metric calculations. The report concludes that the area of individual tree habitat affected by the development may be substantially greater than indicated within the submitted Biodiversity Net Gain calculations.

8.5.57. These discrepancies are important because the Biodiversity Net Gain assessment is dependent upon the accuracy of the baseline information. If habitats, hedgerows or trees have not been consistently recorded, there can be no confidence that the resulting biodiversity losses have been accurately quantified or that the claimed biodiversity gains genuinely offset the impacts of the development.

8.5.58. The report also identifies concerns regarding the quality and completeness of the arboricultural information submitted in support of the application. A number of omissions and inconsistencies are identified within the tree survey data, including concerns regarding compliance with BS5837:2012. While some may appear technical matters, they are directly relevant to the reliability of the assessment and the robustness of mitigation and compensation proposals.

Veteran Trees and Irreplaceable Habitat

8.5.59. Of particular significance is the proposed loss or translocation of veteran trees associated with the Cook's Farm area. Veteran trees are recognised as irreplaceable

habitats and attract a high level of protection within national planning policy because their ecological value cannot realistically be recreated within normal planning timescales.

8.5.60. Appendix 2 is highly critical of the proposed translocation strategy and questions whether successful relocation of the affected veteran trees is realistically achievable. The report notes that veteran tree translocation is rarely undertaken successfully and that the submitted information provides insufficient evidence to demonstrate that the ecological value of the affected trees can be retained following relocation.

8.5.61. This issue is particularly important because paragraph 193(c) of the NPPF requires development resulting in the loss or deterioration of irreplaceable habitats, including veteran trees, to be refused unless wholly exceptional reasons exist and a suitable compensation strategy is secured. The policy test is intentionally stringent and reflects the fact that habitats which have developed over many decades or centuries cannot simply be recreated elsewhere.

8.5.62. While the submission proposes replacement planting and future veteranisation measures, these proposals cannot replicate the ecological value of existing veteran trees within any meaningful planning timescale. The loss or deterioration of veteran trees would represent the loss of irreplaceable habitat which cannot realistically be recreated within any meaningful planning timescale.

8.5.63. The concerns identified within Appendix 2 extend beyond the detailed operation of the Biodiversity Net Gain Metric. They raise a more fundamental question as to whether the biodiversity baseline has been properly established, whether ecological losses have been accurately quantified and whether the proposed mitigation and compensation measures are capable of delivering the ecological outcomes relied upon by the submission. If the baseline information is unreliable, confidence in the resulting conclusions is inevitably reduced.

8.5.64. **Appendix 2 raises substantive concerns regarding the reliability of the Biodiversity Net Gain assessment, the consistency of the ecological evidence base and the treatment of veteran trees and irreplaceable habitat. In circumstances where the proposal relies heavily upon mitigation, compensation and biodiversity enhancement measures to justify ecological impacts, the inability to readily verify the underlying data significantly undermines confidence in the claimed biodiversity outcomes.**

Overall Conclusion on Ecology and Biodiversity

8.5.65. The ecological concerns arising from this proposal extend well beyond the loss of individual habitat parcels or the effectiveness of specific mitigation measures. Appendix 1 (Save Felton Common Biodiversity Impacts Report) and Appendix 2 (Bristol Tree Forum BNG and Veteran Tree Report) identify broader concerns regarding the adequacy, consistency and reliability of the ecological evidence submitted in support of the application.

8.5.66. Appendix 1 concludes that the ecological importance of Felton Common has been materially understated and that a number of important habitats, species and impact pathways have not been adequately assessed. Appendix 2 identifies significant inconsistencies within the Biodiversity Net Gain calculations, habitat data and arboricultural evidence, raising concerns regarding the reliability of the ecological baseline upon which the assessment depends.

8.5.67. The submission relies heavily upon mitigation, habitat creation and compensation measures to conclude that significant ecological effects can be avoided. However, where there is uncertainty regarding the baseline, disagreement regarding habitat classification, concerns regarding the completeness of survey work and doubt regarding the effectiveness of proposed mitigation, confidence in those conclusions is inevitably reduced.

8.5.68. Of particular concern are the potential effects on the ecological network supporting the North Somerset and Mendip Bats SAC, the ecological importance of Felton Common, the treatment of Priority Habitat, the claimed Biodiversity Net Gain outcomes and the proposed impacts upon veteran trees and irreplaceable habitat.

8.5.69. Subsequent HEP calculations submitted by the Applicant seek to demonstrate numerical habitat equivalence through off-site habitat creation; however, they do not remove the uncertainty identified within this objection regarding the effectiveness, functionality and long-term delivery of replacement habitat for SAC horseshoe bats.

8.5.70. The proposal therefore conflicts with Core Strategy Policy CS4 and Development Management Policies DM8 and DM9, which seek to protect biodiversity, ecological networks, trees and nature conservation interests. It also conflicts with Policy CS23 and Policy DM50, insofar as those policies only support airport-related development where environmental impacts are satisfactorily addressed. In the absence of certainty that the integrity of the North Somerset and Mendip Bats SAC would be protected, and given the unresolved concerns regarding habitat loss, biodiversity baseline

evidence, veteran trees and mitigation, the proposal cannot be regarded as policy compliant.

8.5.71. **The submission has failed to demonstrate that the full ecological consequences of the proposal have been properly identified, assessed and mitigated. Significant uncertainty remains regarding the loss of functionally linked habitat, the effectiveness of mitigation measures, the ecological importance of Felton Common, the treatment of Priority Habitat, the claimed Biodiversity Net Gain outcomes and the impacts upon veteran trees and irreplaceable habitat. The evidence before the Council falls well short of the exceptionally high evidential threshold required by the Habitats Regulations and paragraph 195 of the NPPF. In the absence of certainty that the integrity of the North Somerset and Mendip Bats SAC would be preserved, planning permission should be refused.**

8.6. TRANSPORT, SURFACE ACCESS AND AIRPORT PARKING STRATEGY

8.6.1. The transport impacts of the proposal fall to be assessed against the transport and airport-related policies of the development plan and the National Planning Policy Framework. Policy CS10 of the North Somerset Core Strategy seeks to ensure that development is served by a transport network which is safe, accessible and capable of supporting sustainable movement. Policy CS1 is also relevant insofar as it seeks to reduce carbon emissions and support patterns of development which reduce the need to travel and encourage more sustainable modes of transport. Policy CS23 provides the strategic development plan policy for Bristol Airport, including the need for proposals to be considered having regard to their environmental, transport and community impacts.

8.6.2. Policy DM24 of the North Somerset Sites and Policies Plan Pt 1 requires development to provide safe access and to avoid unacceptable impacts on highway safety and the operation of the highway network. Policy DM30 is also directly relevant because it controls airport-related car parking outside the airport boundary and seeks to avoid unacceptable environmental, highway and amenity impacts from off-site airport parking. Policy DM50 is also relevant insofar as it relates specifically to Bristol Airport and the need for development to be supported by appropriate surface access, parking and transport mitigation.

8.6.3. Chapter 9 of the NPPF sets out the national policy framework for promoting sustainable transport. Paragraph 109 requires transport issues to be considered from

the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. Paragraph 110 requires the planning system to actively manage patterns of growth in support of sustainable transport objectives, and that significant development should be focused on locations which are or can be made sustainable. Paragraph 115 is quite clear that, in assessing applications, it should be ensured that sustainable transport modes are prioritised, taking account of the vision for the site, the type of development and its location and that any significant impacts should be cost effectively mitigated through a vision-led approach.

8.6.4. The clear direction of national and local policy is therefore that significant development should not simply accommodate additional vehicle movements, but should be planned so that safe access, sustainable movement, modal shift and reduced reliance on private car travel are integral to the acceptability of the scheme. This is particularly important for a major trip-generating use such as an airport, where passenger growth, staff travel, car parking provision, public transport accessibility and effects on surrounding communities are all closely connected. The question is not only whether the surrounding highway network can technically accommodate additional traffic, but whether the proposed surface access strategy represents a sustainable, deliverable and enforceable basis for growth to 15 mppa.

8.6.5. Paragraph 116 is also relevant, but the objection is not advanced as a detailed technical highways capacity objection. Rather, the concern is that the proposal has not demonstrated a genuinely sustainable, deliverable and enforceable surface access strategy for growth to 15 mppa.

8.6.6. Appendix 3 (BAAN Transport Report) provides an independent review of the Transport and Surface Access Assessment, Transport Assessment and Airport Parking Strategy submitted in support of the application. The review identifies a number of concerns regarding the robustness of the Applicant's transport evidence, including the realism of the proposed public transport modal share targets, the assessment of traffic impacts, the treatment of airport parking demand and the reliance upon future mitigation measures which are not fully committed or secured. The report concludes that significant uncertainty remains regarding the deliverability of the surface access strategy upon which the proposed expansion to 15 mppa depends. The detailed technical evidence is contained within Appendix 3 and should be read alongside the planning concerns set out below.

Strategic Transport Context

8.6.7. The Airport occupies a highly constrained location on an elevated plateau, with no rail connection, no mass transit connection, no nearby motorway junction and no dual carriageway access directly serving the site. Access is heavily dependent upon the A38 and A370 corridors, together with a network of smaller rural roads which already experience pressure from airport-related traffic, congestion, rat-running and displacement effects.

8.6.8. The Environmental Statement explains that the assessment considers both construction and operational effects, with an interim assessment year of 2029 and a core operational assessment year of 2038, when 15 mppa is forecast to be reached. It also recognises that construction and operational phases would overlap, with development anticipated to take place over a ten-year period following mobilisation. This means that surrounding communities could experience an extended period of construction activity, highway works and increasing airport-related traffic.

8.6.9. The Applicant's case is dependent upon a package of assumptions and mitigation, including public transport improvements, modal shift, highway works, on-site parking management and continued enforcement activity in relation to off-site parking. However, the proposal would still remain heavily dependent upon private car access.

8.6.10. Even if the Applicant's public transport modal share targets are achieved, the increase from 12 mppa to 15 mppa would still result in a substantial number of additional car-based journeys to and from the Airport.

8.6.11. Independent Review of the Surface Access Strategy.

8.6.12. Appendix 3 - BAAN Transport Report, provides an independent review of the Transport and Surface Access chapter, Transport Assessment and Airport Parking Strategy submitted in support of the application.

8.6.13. The review concludes that significant reliance is placed upon future increases in public transport modal share, despite the absence of any direct rail connection, mass transit link or fully committed package of public transport improvements capable of demonstrating how the proposed 26% public transport modal share target will be achieved.

8.6.14. The review also questions aspects of the traffic modelling methodology, including the treatment of baseline conditions, the assessment of impacts during peak periods and

the extent to which traffic impacts on routes beyond the agreed study area have been properly assessed.

8.6.15. Particular concern is raised regarding reliance upon future mitigation measures and transport interventions which are not yet fully specified, secured or guaranteed to be delivered. The report notes that a number of public transport initiatives relied upon by the Applicant remain aspirational in nature and are dependent upon future funding, third-party delivery or separate approvals.

8.6.16. **Appendix 3 demonstrates that there remains considerable uncertainty regarding the deliverability of the proposed modal shift strategy and the extent to which reliance on private car travel can realistically be reduced as passenger numbers increase to 15 million passengers per annum.**

What Happens if the Public Transport Modal Share Targets are Missed?

8.6.17. Particular concern arises in relation to modal share targets. A public transport modal share of 26% has been put forward for 2038. The existing, 2026, modal share is that 19% of passengers take public transport journeys. It is assumed that the modal share will reach 20.1% at 12 mppa. The target for sustainable modes of transport for staff travel is 40% in 2038.

8.6.18. A 20.1% modal share at 12mppa implies 4.6m car journeys (assuming 2.1 passengers per car). A 26% modal share at 15mppa implies 5.3m car journeys, an increase of over 15% (again assuming 2.1 passengers per car).

8.6.19. Around 1 in 4 passengers are predicted to take public transport by 2038. This will be tracked using Key Performance Indicators (KPI). This improvement is predicted over roughly 10 years. The target may therefore be a 0.5% average increase in public transport usage per year.

8.6.20. The proposed modal share target is therefore central to the transport case. It affects not only traffic generation, but also the level of airport car parking, air quality effects and traffic-related carbon emissions. The target should not be treated as a broad aspiration. It should be secured through clear annual milestones, transparent monitoring and enforceable consequences if those milestones are missed.

8.6.21. The application states that the proposed public transport modal share target would be monitored through Key Performance Indicators. Given that the target would require improvement over a long period, the annual trajectory is important. If the improvement

from the current position to the 2038 target equates to an average increase of around 0.5% per annum, then annual targets should be published before any permission is granted and secured through the planning obligation.

8.6.22. The enforcement mechanism is particularly important. If public transport modal share targets are missed, a response which simply reduces on-site car parking spaces would not necessarily reduce airport-related car travel. It may instead displace parking demand into surrounding villages, rural lanes, agricultural land and unauthorised off-site parking sites. That would worsen the very impacts which the transport strategy is intended to manage.

8.6.23. Any enforcement mechanism should therefore be directly linked to the scale of airport activity and air transport movements, rather than relying solely on reductions in on-site parking capacity. Reducing air transport movements would reduce the level of passenger demand and associated traffic. Reducing parking spaces alone would not necessarily do so.

Airport Parking Strategy

8.6.24. The Airport Parking Strategy is a central component of the surface access case. It needs to address both the provision of on-site airport parking and the control of off-site airport-related parking, including the enforcement of parking controls.

8.6.25. The Airport Development Plan seeks to provide sufficient parking to accommodate growth in flights and passenger numbers without decanting demand outside the Airport into the surrounding countryside and nearby villages. That objective is important. However, it also demonstrates why the relationship between passenger growth, on-site parking capacity, modal share and off-site parking enforcement must be robustly controlled.

8.6.26. The issue of off-site parking is significant. There is a longstanding problem of unauthorised airport-related parking in the surrounding countryside, including the use of rural land for temporary parking. If there are insufficient car parking spaces on site, or if official parking becomes less attractive to users, passengers are likely to look for alternatives. This risks encouraging further parking in surrounding villages, on rural lanes and on green fields.

8.6.27. Unauthorised off-site parking is also commercially attractive. It provides passengers with a lower-cost alternative to official airport parking and provides landowners with

an income stream which may require limited investment. That commercial incentive is unlikely to reduce as passenger numbers increase. It follows that off-site parking controls need to be preventative, enforceable and long-term, rather than reactive.

8.6.28. The Airport Parking Strategy cannot therefore be considered in isolation from the wider transport strategy. On-site parking provision, public transport modal share, off-site parking enforcement, traffic generation, air quality, carbon emissions and highway impacts are all interrelated. If one element fails, the consequences are likely to be experienced by surrounding communities rather than contained within the Airport boundary.

Off-Site Parking, Permitted Development Rights and Article 4 Direction

8.6.29. The spread of unauthorised car parks is assisted by landowners relying on permitted development rights for temporary uses of land under Part 4 of Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015. These rights can allow the use of land for temporary purposes for up to 28 days in a calendar year, subject to limitations.

8.6.30. Those permitted development rights can be removed by an Article 4 Direction, either temporarily or permanently, in relation to a defined area and a specified form of development. North Somerset Council consulted in October and November 2016 on an Article 4 Direction made on 22 August 2016. That Direction sought to remove permitted development rights for the storage, parking, cleaning, maintenance or repair of motor vehicles where the use was not associated with the authorised use of the land.

8.6.31. Following consultation, the Council resolved to cancel that Article 4 Direction in order to allow further time to consider representations before deciding whether to proceed with a further Direction. In the years since, there appears to have been no resumption of the attempt to apply an Article 4 Direction to unauthorised off-site airport parking, although the possibility is referred to in the Community Parking Action Plan.

8.6.32. Article 4 Directions can give rise to compensation issues in some circumstances, including where permitted development rights are withdrawn and planning permission is subsequently refused or granted subject to more limiting conditions. That does not mean an Article 4 Direction should not be pursued. Rather, it reinforces the need for North Somerset Council and the Airport to address the issue proactively and

comprehensively as part of the current application, rather than allowing off-site parking pressure to increase further.

8.6.33. Current Local Plan policy for the Airport is contained in Policy CS23 of the Core Strategy, with off-site airport parking controlled separately by Policy DM30 of the Sites and Policies Plan Part 1. Emerging Policy DP20 of the North Somerset Local Plan seeks to apply the approach of the Airport Surface Access Strategy by meeting, within the airport boundary, the demonstrated need for parking arising from airport operations whilst reducing the proportion of trips made by car.

8.6.34. Policy DM50 is also directly relevant; it requires proposals at Bristol Airport to be supported by appropriate surface access, parking and transport mitigation, and reinforces the need for airport-related development to be considered in terms of its operational requirements, transport effects and impacts on surrounding communities. Read together, Policies CS23, DM30 and DM50 require the parking strategy to be robust, enforceable and capable of containing airport-related parking impacts without displacing harm into the surrounding countryside.

8.6.35. That policy approach would be materially undermined if airport growth were permitted on the basis of optimistic modal share assumptions without enforceable consequences if those assumptions are not achieved. If the Airport is to grow to 15 mppa, there must be a robust and enforceable strategy to prevent the increase in passenger numbers from generating further unauthorised parking pressure in surrounding villages and countryside.

8.6.36. The Airport has recognised the case for financial contributions to support North Somerset Council's enforcement of planning controls on off-site car parking. However, in the absence of a Section 106 Agreement or unilateral undertaking, there can be no certainty that sufficient long-term funding and control would be secured.

8.6.37. The problems of off-site car parking are likely to increase in proportion to passenger numbers. It is therefore reasonable and necessary to review the approach to planning controls on off-site parking and their enforcement as part of the current planning application. If permission is granted, controls on off-site car parking and their enforcement should be secured through planning conditions, a Section 106 Agreement, unilateral undertaking and Article 4 Direction as appropriate.

Internal Road Infrastructure and Cook's Farm/C1 Car Park

8.6.38. There is also concern regarding the proposed internal road infrastructure and access arrangements. The submitted material refers to the realignment of approximately 250 metres of the existing Northside Road alignment, from the proposed A38 signalised roundabout to align with the Public Transport Interchange and one-way road system. It also refers to a new 8 metre wide service road providing access to the new fuel farm, new main landside/airside gate, vehicular access point for ancillary facilities and engineering support.

8.6.39. A specific concern is raised regarding the proposed reconfiguration of internal roads and the lack of clarity as to how the Cook's Farm/C1 car park would be accessed. The submitted material refers to the realignment of Northside Road and the creation of a new service road, but it is not clear from the material reviewed whether the Cook's Farm/C1 car park would be accessed wholly through the Airport's internal road network or whether any access could be sought from, or linked to, Brockley Combe Road/Downside Road.

8.6.40. This is an important point because the ES identifies an additional access point to the north of the Airport via Downside Road, albeit described as being for operational and emergency use only. Any use of Brockley Combe Road/Downside Road for passenger car park access would raise materially different transport, amenity and environmental considerations and should not be allowed to occur by implication or through later detailed design.

8.6.41. The objection does not assert that such access is definitely proposed. Rather, the concern is that the submitted information does not appear to provide sufficient clarity. Given the scale of the proposed Cook's Farm/C1 car park and the sensitivity of the surrounding rural road network, any ambiguity over access is unacceptable.

8.6.42. If permission is granted, a condition should expressly prevent the construction or use of any road, access or vehicular link from the Cook's Farm/C1 car park to Brockley Combe Road, Downside Road or the B3130 for passenger car park access associated with the 15 mppa development, unless such access has first been subject to separate planning assessment and approved in writing by the local planning authority.

Fuel Deliveries and Tanker Routing

8.6.43. Chapter 8.9.19 of the Environmental Statement states that 16 fuel tanker deliveries are anticipated at 12 mppa, increasing to 40 deliveries at 15 mppa. This is a substantial increase. A rise from 16 to 40 deliveries represents a 150% increase in tanker deliveries, compared with a 25% increase in passenger numbers from 12 mppa to 15 mppa. On a proportionate basis, a figure closer to around 20 deliveries might be expected. The basis for the projected increase to 40 deliveries should therefore be clearly explained and justified.

8.6.44. The fuel delivery assumptions also require further clarification. It is understood that fuel is currently assumed to come from Avonmouth, but the submitted material does not appear to provide clear information on the source of sustainable aviation fuel at 12 mppa or where it would be obtained from at 15 mppa. This is material to the assessment of transport impacts, carbon emissions and air quality effects associated with fuel delivery movements.

8.6.45. It is also unclear whether the fuel tankers themselves would use biofuel or other lower-carbon fuels, and where the carbon emissions associated with these delivery movements have been accounted for within the application. Given the scale of the proposed increase in tanker deliveries, this should be expressly addressed.

8.6.46. The proposal also raises the question of whether a fuel pipeline should be considered as part of the necessary infrastructure for airport growth. A pipeline could potentially remove a significant number of HGV movements from the road network and reduce associated carbon emissions, air quality impacts and highway effects. If a pipeline is not proposed, the Applicant should explain why that option has not been pursued and how the impacts of increased tanker movements would otherwise be mitigated.

8.6.47. The routing of fuel tankers is also a legitimate planning concern. In particular, tankers should not be routed via Portbury, M5 Junction 19, the A369, Martcombe Road/Abbots Leigh Road and the A370 in order to reach the South Bristol Link and the A38. This route may have become more attractive following the introduction of the Clean Air Zone, but it would be unsuitable for large tanker movements given the nature of the corridor and the communities affected.

8.6.48. If permission is granted, a condition or planning obligation should require an agreed fuel tanker routing strategy and should expressly prevent large fuel tankers from using the A369/Martcombe Road/Abbots Leigh Road corridor unless that route has been specifically assessed and approved in writing by the local planning authority.

A38 and Wider Highway Works

8.6.49. Further concern arises from the cumulative disruption associated with highway works. The client's review identifies that under Phase 1 of the Epic Development, changes to the A370/Colliters Way junction and other minor improvements are to be made by 2033. At the same time, from 2029, the Airport's road improvements on the A38 are expected to commence and continue until 2036.

8.6.50. It therefore appears that road infrastructure around the Airport could be constrained for many years. This would have practical consequences for residents of North Somerset, including delays, temporary traffic management, construction disruption and the potential for drivers to seek alternative routes through surrounding villages and rural lanes.

8.6.51. This is particularly important because the Airport has already been the subject of successive phases of development, highway works and operational change. The surrounding communities have experienced repeated disruption associated with airport growth. The current proposal would extend that pattern over a further substantial period, while also increasing the long-term level of airport-related movement.

8.6.52. The objection does not assert, at this stage, that the highway capacity modelling is technically wrong. However, the planning concern is wider than technical junction capacity. The proposal must demonstrate that it would provide a genuinely sustainable surface access strategy, that its mitigation is deliverable, that its assumptions are robust, and that its impacts would not be displaced into surrounding rural communities.

Mass Transit and Public Transport Contributions

8.6.53. The Applicant's reliance on public transport improvements must be treated with caution. Mass transit is not included as part of the Proposed Development. The ES records that mass transit is not part of the application and that its environmental effects are not assessed.

8.6.54. This is material because national and local policy require more than the accommodation of additional vehicle movements. NPPF paragraphs 109, 110 and 115 require transport issues to be considered from the earliest stages, patterns of growth to be actively managed in support of sustainable transport objectives, and sustainable

transport modes to be prioritised having regard to the type and location of development. Policy CS10 similarly seeks safe, accessible and sustainable movement, while Policies CS23 and DM50 require airport-related development to be considered having regard to transport impacts, surface access, parking and mitigation.

8.6.55. In those circumstances, the Airport should not be allowed to rely on the prospect of future mass transit as a justification for expansion unless there is a clear, funded and deliverable mechanism for securing it. The Airport is seeking permission for growth to 15 mppa now, but the most transformative sustainable transport intervention remains outside the application.

8.6.56. The proposal therefore continues to rely on bus, coach, parking management and highway mitigation measures, rather than a step-change in sustainable access. That is a fundamental weakness in the transport case.

8.6.57. For a proposal of this scale, in this location, mass transit is not a peripheral matter but goes to the heart of whether growth to 15 mppa can be regarded as acceptable in transport and sustainability terms. Its absence also sits uneasily with emerging Policy DP20, which seeks to meet airport parking need within the airport boundary whilst reducing the proportion of trips made by car.

8.6.58. **In the absence of a clear, funded and deliverable mechanism for securing mass transit, the Applicant has not demonstrated that the proposed expansion would be supported by the sustainable transport infrastructure necessary to make the development acceptable.**

Conditions and Planning Obligations

8.6.59. Suggested planning conditions and obligations are addressed later in this objection. However, on a without prejudice basis, at this stage it is important to record that the acceptability of the proposal would depend upon legally enforceable controls.

8.6.60. These should include robust public transport modal share targets, annual monitoring and public reporting, meaningful consequences if targets are missed, enforcement mechanisms linked to air transport movements rather than simply the removal of car parking spaces, and long-term funding for a parking and planning enforcement officer.

8.6.61. Funding for a dedicated parking and planning enforcement officer should continue until at least 2038 under the core case, or 2043 under the slower growth case, so that

enforcement does not fall away before the full effects of the proposed expansion are known.

8.6.62. The package should also include a comprehensive strategy for unauthorised off-site parking, consideration of an Article 4 Direction where necessary, controls over access to the Cook's Farm/C1 car park, restrictions on inappropriate fuel tanker routing, consideration of a fuel pipeline, appropriate contributions towards public transport and mass transit, and funding for highway mitigation directly related to the 15 mppa proposal.

8.6.63. The funding of highway improvements on the A38 directly linked to growth to 15 mppa should be secured from Bristol Airport and should not fall to the public purse. The surrounding parishes and communities would face the consequences of continual disruption to the A38, construction works and dispersal of traffic onto alternative routes. It is therefore reasonable that mitigation required to make the development acceptable should be funded by the Applicant.

8.6.64. Construction traffic management controls would also be required to minimise disruption to surrounding communities over the lengthy construction period. Those controls should address routing, timing, monitoring, communication with local communities and mechanisms for responding to complaints or unexpected impacts.

Conclusion on Transport

8.6.65. Overall, the transport case remains dependent upon future behavioural change, public transport improvements, highway works and enforcement mechanisms which are not yet shown to be sufficiently certain, robust or enforceable. The proposal would increase airport-related travel demand in a location which is already constrained and heavily car-dependent. It would also prolong disruption from highway works and construction activity over a substantial period.

8.6.66. Appendix 3 provides independent transport evidence which supports these concerns and raises additional questions regarding the robustness of the traffic modelling, the realism of the proposed modal share assumptions and the deliverability of the surface access strategy. Whilst the applications presents the transport impacts as manageable, the independent review demonstrates that significant uncertainty remains regarding whether the proposed transport measures are capable of achieving the outcomes upon which the application depends.

8.6.67. **Accordingly, it has not been demonstrated that the proposed expansion would be served by a genuinely sustainable, deliverable and enforceable transport strategy. In particular, the absence of a clear, funded and deliverable mechanism for securing mass transit goes to the heart of whether growth to 15 mppa can be acceptable in transport and sustainability terms. The proposal would remain heavily dependent upon private car access, would increase pressure on an already constrained highway network, and would risk further displacement of airport-related traffic, parking and environmental impacts into surrounding rural communities.**

8.7. LIGHTING, DARK SKIES AND NIGHT-TIME URBANISATION

8.7.1. The lighting impacts of the proposal fall to be assessed against the development plan, the NPPF and the wider environmental context of the site. Policy CS3 of the Core Strategy requires environmental impacts to be satisfactorily mitigated, including light. Policy CS4 seeks to protect biodiversity and ecological networks. Policy CS5 requires development to respect landscape character and the historic environment. Policy CS6 seeks to protect the openness and permanence of the Green Belt. Policy CS23 requires airport-related development to satisfactorily address environmental and community impacts.

8.7.2. Policies DM8, DM10, DM11, DM12 and DM50 are also directly relevant. Together, these policies require development to protect nature conservation interests, landscape character, the setting of the Mendip Hills National Landscape, the Green Belt and its openness and the amenity of surrounding communities. Policy DM50 does not provide unconditional support for airport development; rather, it requires airport-related proposals to be assessed having regard to their environmental, transport and amenity impacts.

8.7.3. The lighting impacts of the proposal cannot be assessed solely as a technical matter under paragraph 198(c) of the NPPF. They are relevant to the overall planning balance and to a number of protected policy interests. In particular, lighting is relevant to the application of paragraph 11(d)(i) and Footnote 7, because it contributes to the impacts of the proposal on Green Belt land and habitats sites. It is relevant to paragraph 195, given the sensitivity of the North Somerset and Mendip Bats SAC and associated functionally-linked habitat to artificial lighting, and to paragraph 189, insofar as additional night-time illumination may affect the setting, tranquillity and dark skies associated with the Mendip Hills National Landscape.

8.7.4. Paragraph 198(c) of the NPPF provides the specific policy requirement in relation to light pollution, requiring planning decisions to limit the impact of artificial light on local amenity, intrinsically dark landscapes and nature conservation.

8.7.5. In this case, lighting is not a narrow technical matter. Its impacts extend beyond visual amenity and are directly relevant to ecological functionality, Green Belt openness, residential and recreational amenity, landscape character, dark skies, tranquillity and the wider perception of airport urbanisation.

Overall Lighting Effects

8.7.6. The proposed development would introduce new and intensified lighting across a wide area of the Airport and its surroundings, including Felton Common, Cook's Farm, the western apron, staff parking areas, the Silver Zone, operational roads, highway infrastructure and associated airport facilities.

8.7.7. The proposal is therefore not limited to replacing or improving lighting within the existing terminal core, it would extend the illuminated operational footprint of the Airport into areas of countryside which are presently dark, open or comparatively less affected by airport infrastructure.

8.7.8. This is particularly significant because the Airport occupies an elevated plateau at approximately 190 metres AOD. Lighting associated with the Airport is therefore capable of being perceived across a wide surrounding area, including nearby settlements, public rights of way, common land, the North Somerset Levels and parts of the wider rural landscape.

8.7.9. The cumulative effect would be to increase the night-time presence of the Airport as an urbanising feature within the countryside. Even where individual lighting units are designed to modern standards, the planning issue is the overall spread, intensity and operational character of lighting associated with a larger airport operating over longer periods and across a wider land area.

Felton Common and Approach Lighting

8.7.10. Of significant concern are the proposals relating to Felton Common. The proposal includes the relocation and extension of approach lighting infrastructure into Felton Common as a consequence of the proposed eastern runway extension.

8.7.11. Felton Common is not simply vacant or incidental land at the edge of the Airport. It is a high-value open space, comprising common land, a Local Nature Reserve, an important recreational resource and part of the rural landscape setting of the Airport. It is highly valued and used by walkers, cyclists, horse riders and local residents, its value derives not only from formal designation but also from its open, dark, undeveloped and accessible character. That character is particularly sensitive to the introduction of engineered airport infrastructure and artificial lighting.

8.7.12. The introduction of approach lighting infrastructure into Felton Common would permanently alter its character. The harm would not be limited to the physical footprint of the lighting columns or associated works. The greater harm arises from the introduction of engineered airport infrastructure and artificial illumination into an area currently experienced as open common land.

8.7.13. The Applicant's case appears to rely on the proposition that the lighting would operate only when required. However, the proposal must be assessed in the context of the wider expansion to 15 mppa, including increased aircraft movements and an increased night flight cap. There is insufficient certainty that the lighting would remain limited in practice, particularly during periods of delayed arrivals, night operations, poor weather or operational disruption.

8.7.14. The effect on users of Felton Common must also be considered in lighting terms. The new approach lighting infrastructure would introduce a permanent visual and operational reminder of the Airport into a recreational landscape which is currently valued for its open, dark and undeveloped character. The wider cumulative impacts on Felton Common, including the combined effects of the runway extension, lower aircraft approaches, noise, disturbance, ecological impacts and perceived urbanisation, are addressed separately within this objection.

8.7.15. For these reasons, the proposed approach lighting on Felton Common gives rise to significant planning harm. It would introduce permanent airport lighting infrastructure into a high-value area of common land and Local Nature Reserve, eroding its open, dark and undeveloped character and reducing its recreational and ecological value.

8.7.16. The proposal would therefore fail to satisfactorily address the environmental and community impacts of airport development, contrary to Policies CS23 and DM50. It would also conflict with Policies DM8 and DM10 by harming the ecological and landscape role of Felton Common, and with paragraph 198(c) of the NPPF by failing

to limit the impact of artificial light on local amenity, intrinsically dark landscapes and nature conservation.

8.7.17. **The proposed approach lighting would materially erode the open, dark and recreational character of Felton Common and would introduce permanent airport infrastructure into a high-value common land and ecological receptor. This harm has not been satisfactorily justified or mitigated.**

Cook's Farm, Western Apron and Operational Lighting

8.7.18. The proposed development at Cook's Farm would introduce substantial new airport infrastructure and associated lighting into presently open Green Belt land. This includes lighting associated with apron expansion, aircraft stands, operational roads, parking areas and related airport facilities.

8.7.19. Cook's Farm currently contributes to the open rural setting of the Airport and forms part of the Green Belt context around the existing operational area. The introduction of apron lighting and operational infrastructure would materially change its character from open countryside to part of the illuminated airport complex.

8.7.20. While the detailed Green Belt assessment of Cook's Farm is addressed separately in Section 8.3, the lighting impacts are relevant in their own right. The proposed lighting would extend the visible night-time operational footprint of the Airport beyond the existing core and would reinforce the perception of Cook's Farm as part of the illuminated airport complex rather than open countryside.

8.7.21. This is particularly harmful because the lighting would be associated with operational airport infrastructure, including apron activity, aircraft stands, vehicle movements and related servicing. The effect would not be comparable to low-level rural lighting; it would introduce a distinctly urban and operational form of illumination into a part of the site which currently contributes to the dark rural edge of the Airport.

8.7.22. The Applicant's reliance on directional fittings, lighting controls and future landscaping does not overcome this concern. Even if individual lighting units are designed to modern standards, the overall effect would be a substantial increase in the extent and perception of airport-related lighting. Landscaping would also take time to establish and would not remove the immediate change in night-time character.

8.7.23. Accordingly, the proposal would fail to limit the impact of artificial light on local amenity, intrinsically dark landscapes and nature conservation, contrary to paragraph 198(c) of

the NPPF, and would fail to satisfactorily address the environmental impacts of airport development as required by Policies CS3, CS5, CS23, DM10 and DM50.

8.7.24. **The proposed lighting at Cook's Farm would materially extend the illuminated airport environment into presently open countryside and would add to the wider urbanising harm identified elsewhere in this objection.**

Staff Parking, Silver Zone and Southern Operational Areas

8.7.25. The proposed staff parking, Silver Zone expansion and southern operational areas would also introduce extensive additional lighting across land already sensitive in Green Belt, landscape and amenity terms.

8.7.26. The scale of parking proposed is significant. Lighting associated with large areas of surface-level parking would materially increase the spread of illumination across the southern and peripheral parts of the Airport. This is not simply a matter of lighting columns, but of the wider night-time activity associated with vehicles, staff movements, passenger movements, buses, security, maintenance and operational traffic.

8.7.27. The Applicant's reliance on sensor-controlled or smart lighting does not overcome the planning concern. A 24-hour airport environment necessarily requires lighting for operational, security and safety reasons. In practice, dimming, sensor-control or part-night operation would be unlikely to restore the darkness or rural character of these areas, given the operational, security and safety requirements of a 24-hour airport.

8.7.28. These impacts are directly relevant to Policies CS3, CS5, CS6, CS23, DM10, DM12 and DM50. They also reinforce the concern identified elsewhere in this objection that the proposal relies heavily on outward expansion and surface-level infrastructure rather than containing development within the existing operational airport envelope.

8.7.29. **The proposed lighting controls therefore reduce, but do not resolve, the fundamental harm arising from the spread of airport lighting into currently darker rural areas.**

Ecology and Horseshoe Bats

8.7.30. Lighting is also a significant ecological issue. The Airport lies within the consultation zones associated with the North Somerset and Mendip Bats SAC, which is designated in part for greater and lesser horseshoe bats. These species are particularly sensitive

to artificial lighting, especially where lighting affects commuting routes, foraging areas and dark landscape corridors.

8.7.31. The proposed development would introduce additional lighting into areas which form part of the wider ecological network around the Airport. This includes land at Felton Common, Cook's Farm and other peripheral areas where lighting, habitat loss and operational activity must be considered cumulatively. As discussed in Chapter 8.5, Appendix 1 raises specific concerns regarding the ecological importance of Felton Common and whether the full biodiversity implications of the proposed works have been properly assessed.

8.7.32. The reliance placed upon lighting controls, operational restrictions and mitigation measures does not in itself demonstrate that ecological impacts have been avoided. As set out in Chapter 8.5 and Section 8.2 of this objection, the competent authority must be satisfied beyond reasonable scientific doubt that the proposal would not adversely affect the integrity of the North Somerset and Mendip Bats SAC. The existence of mitigation measures is not sufficient if their effectiveness remains uncertain or dependent upon future management and monitoring.

8.7.33. **Lighting impacts are not secondary or incidental. They go directly to the ecological functionality of retained habitat, the effectiveness of mitigation measures and the ability of horseshoe bats to continue using established commuting routes, dark corridors and foraging habitat around the Airport. The ecological significance of lighting therefore extends well beyond its physical footprint and further undermines confidence that adverse effects on the integrity of the North Somerset and Mendip Bats SAC can be excluded beyond reasonable scientific doubt.**

Mendip Hills National Landscape and Wider Rural Character

8.7.34. The lighting impacts are also relevant to the setting of the Mendip Hills National Landscape. Although the Airport lies outside the designated boundary, it occupies an elevated and visually prominent position within the wider rural landscape.

8.7.35. The special qualities of the National Landscape include dark skies, tranquillity, remoteness, naturalness, views and outdoor recreational enjoyment. The further spread of airport lighting, increased night-time activity and intensified aircraft operations would contribute to the perception of urbanisation within the wider setting of the National Landscape.

8.7.36. The Applicant's conclusion that lighting effects would be limited, or potentially beneficial in some respects because of improved lighting technology, should be treated with caution. Technical improvements to individual fittings do not alter the fact that the proposal would facilitate a larger, more intensive and more widely illuminated airport operation.

8.7.37. **The lighting impacts therefore add to the harm identified in Section 8.4 of this objection and weigh against the proposal when assessed against paragraph 189 of the NPPF, Policy DM11 and the statutory duty to seek to further the purpose of conserving and enhancing the natural beauty of the National Landscape.**

Residential and Recreational Amenity

8.7.38. The lighting impacts would also affect local amenity. Surrounding communities already experience the effects of airport operations through aircraft noise, traffic, parking pressure, lighting and general disturbance. The proposal would intensify those effects through increased operational activity and a wider illuminated footprint.

8.7.39. These impacts would be particularly apparent where lighting affects recreational routes, common land and nearby rural communities, where darkness and tranquillity form part of the amenity value of the area. The proposal would therefore fail to satisfactorily limit the effects of light pollution on local amenity and living conditions, contrary to paragraph 198(c) of the NPPF and Policies CS3, CS23 and DM50.

8.7.40. **The lighting strategy may reduce some technical spill effects, but it would not overcome the wider amenity harm caused by extending airport lighting into darker rural and recreational areas.**

Conclusion on Lighting

8.7.41. The proposed lighting strategy would result in a material increase in the extent, intensity and perception of airport-related lighting across the surrounding countryside. The impacts would be experienced not only within the existing airport core, but across Felton Common, Cook's Farm, the Silver Zone, staff parking areas, operational roads and other peripheral locations.

8.7.42. The proposal would therefore contribute to the further urbanisation of the rural night-time environment, harm Green Belt openness, affect local and recreational amenity,

increase pressure on sensitive ecological corridors and contribute to harm within the setting of the Mendip Hills National Landscape.

8.7.43. Accordingly, the Applicant has not demonstrated that the lighting impacts of the proposal would be satisfactorily mitigated. The proposal conflicts with Policies CS3, CS4, CS5, CS6, CS23, DM8, DM10, DM11, DM12 and DM50 of the development plan and with paragraphs 189, 195 and 198 of the NPPF.

8.7.44. **The proposed lighting would materially extend the night-time urbanising influence of Bristol Airport into surrounding Green Belt countryside, Felton Common and sensitive ecological and landscape receptors, and this harm weighs significantly against the proposal.**

8.8. **NOISE**

8.8.1. Noise is one of the principal environmental effects associated with airport expansion and is a particularly important consideration in the assessment of proposals which would increase passenger throughput, aircraft movements and night-time operations.

8.8.2. Paragraph 198 of the NPPF requires planning decisions to ensure that development is appropriate for its location, taking account of the likely effects of pollution on health, living conditions and the natural environment. In relation to noise, the NPPF requires decision-makers to mitigate and reduce adverse impacts, avoid significant adverse effects on health and quality of life, and identify and protect tranquil areas.

8.8.3. At a local level, Policies CS3, CS23 and DM50 of the Development Plan require environmental impacts and effects on residential amenity to be satisfactorily addressed before airport-related development can be supported.

8.8.4. The submitted noise assessment concludes that the proposed expansion would not give rise to significant operational noise effects. However, an independent review by the Aviation Environment Federation, commissioned on behalf of the PCAA is attached at Appendix 5 and raises a number of concerns regarding the methodology, assumptions and conclusions of the assessment.

8.8.5. In particular, the review highlights that the Environmental Statement relies heavily upon average noise contour modelling and evidence derived from the Survey of Noise Attitudes ("SoNA 2014"). Since publication of the Environmental Statement, the Civil Aviation Authority and Government have published the Aviation Noise Attitudes Survey ("ANAS 2026") and Aviation Night Noise Effects ("ANNE 2026") studies, which

indicate that significant annoyance and sleep disturbance may occur at substantially lower aircraft noise levels than previously assumed.

8.8.6. The review concludes that if the updated evidence were applied to the assessment, a substantially greater number of people may be identified as experiencing adverse effects from aircraft noise than is currently reported by the Applicant.

8.8.7. Appendix 5 also questions the extent to which average noise metrics adequately reflect the lived experience of communities affected by airport operations. Whilst average noise levels may show only modest increases, the proposal would facilitate additional aircraft movements, including additional night flights, resulting in more frequent overflights and disturbance for surrounding communities.

8.8.8. Particular concern arises in relation to night-time operations. The report identifies growing evidence linking aircraft noise, especially at night, with sleep disturbance, cardiovascular effects and wider health impacts. This is directly relevant to the requirement within paragraph 198 of the NPPF to avoid significant adverse effects on health and quality of life.

8.8.9. The review also identifies concerns regarding the potential effects of larger aircraft, lower approach profiles associated with the runway extension and the cumulative interaction between aircraft noise and other environmental effects arising from the proposal.

8.8.10. The detailed technical evidence is contained within Appendix 5 and should be read alongside this objection. The report demonstrates that significant uncertainty remains regarding the scale of the noise impacts arising from the proposed expansion and whether the Environmental Statement reflects the most up-to-date evidence concerning aircraft noise and public health.

8.8.11. Accordingly, it has not been demonstrated that the proposal would avoid unacceptable impacts upon residential amenity, health, wellbeing and tranquillity, contrary to paragraph 198 of the NPPF and Policies CS3, CS23 and DM50 of the Development Plan.

8.8.12. **The Applicant has failed to demonstrate that expansion to 15 million passengers per annum can be accommodated without causing unacceptable harm to residential amenity, health, wellbeing and tranquillity. The reliance upon an assessment which does not reflect the most recent evidence concerning aircraft noise and sleep disturbance creates significant uncertainty regarding**

the true scale of the impacts. That uncertainty should be afforded substantial weight and weighs materially against the grant of planning permission.

8.9. IMPACT ON HEALTH

8.9.1. Health and wellbeing are central planning considerations in the assessment of a major airport expansion proposal. The effects of airport development are not confined to the airport boundary or to technical assessments of individual environmental topics. Increased aircraft movements, night flights, road traffic, lighting, air quality impacts, noise, disturbance and loss of tranquillity can have direct and cumulative effects on how surrounding communities live, sleep, travel, use open spaces and experience their local environment.

8.9.2. This is particularly important in the present case because the proposal represents a further phase of expansion beyond the recently approved 12 mppa position. The communities surrounding Bristol Airport already experience the effects of an established and intensifying airport operation. The proposed increase to 15 mppa would add further pressure to that existing baseline and must therefore be assessed in terms of its cumulative effect on public health, wellbeing, residential amenity and recreational amenity.

8.9.3. Paragraph 96 of the NPPF requires planning decisions to promote healthy and safe communities and to support social, recreational and cultural wellbeing. Paragraph 198 of the NPPF is also directly relevant. It requires planning decisions to ensure that new development is appropriate for its location, taking into account the likely effects, including cumulative effects, of pollution on health, living conditions and the natural environment. It also requires decision-makers to mitigate and reduce to a minimum potential adverse impacts resulting from noise, avoid noise giving rise to significant adverse impacts on health and quality of life, identify and protect tranquil areas, and limit the impact of light pollution on local amenity, intrinsically dark landscapes and nature conservation.

8.9.4. At a local level, Policy CS3 of the Core Strategy requires environmental impacts to be satisfactorily addressed, including impacts on health, living conditions and environmental quality. Policy CS23 and Policy DM50 are also relevant because support for airport-related development is conditional upon environmental and community impacts being properly addressed. Policy DM24 is relevant insofar as it

requires development to provide safe and suitable access and to avoid unacceptable impacts on highway safety and infrastructure.

8.9.5. The proposal must therefore be assessed not simply by reference to technical compliance with individual environmental thresholds, but by considering the cumulative effects of increased aircraft movements, night flights, traffic, lighting, air quality impacts, disturbance, loss of tranquillity and environmental change upon surrounding communities and users of nearby recreational routes and open spaces.

8.9.6. **The Applicant has not demonstrated that the cumulative health and wellbeing effects of the proposed expansion have been properly assessed or satisfactorily mitigated.**

Adequacy of the Health Assessment

8.9.7. The Environmental Statement considers health within Chapter 12. However, given the scale of the proposed expansion, the assessment is considered to be limited in scope and insufficiently responsive to the lived experience of surrounding communities affected by airport operations.

8.9.8. The proposal would increase passenger throughput from 12 mppa to 15 mppa, increase aircraft movements, and increase permitted night flights from 4,000 to 4,974 movements between 23:30 and 06:00, representing an additional 974 night flights per year – a 24.35% increase. It would intensify associated surface access, lighting, ground operations and construction activity. These impacts would not be experienced in isolation, they would interact cumulatively and would be experienced by communities already affected by the existing airport operation and the recently approved 12 mppa expansion.

8.9.9. In this context, the absence of a standalone Health Impact Assessment is a significant weakness. The proposal represents a further substantial phase of airport growth and raises complex issues relating to noise, sleep disturbance, air quality, mental wellbeing, recreational amenity, tranquillity and perceived safety. These matters require a clear, integrated and transparent assessment rather than fragmented consideration across several ES chapters.

8.9.10. **The absence of a standalone Health Impact Assessment materially weakens the Applicant's case and fails to provide a clear basis for concluding that the proposal would avoid unacceptable health and wellbeing impacts.**

Noise, Sleep Disturbance and Public Health

8.9.11. The proposed increase in aircraft movements and night flights gives rise to significant concerns in relation to noise, sleep disturbance and wider public health impacts. The detailed technical assessment of aircraft noise is addressed separately within this objection and will also be supplemented by separate noise evidence. However, noise remains relevant to this section insofar as it affects sleep, rest, stress levels, quality of life and the wider wellbeing of surrounding communities.

8.9.12. Aircraft noise, ground noise and associated traffic noise are experienced across a wide geographical area. The effects are particularly acute during the night-time, early morning and evening shoulder periods, when background noise levels are lower and communities are more sensitive to disturbance.

8.9.13. The proposal would also intensify activity during periods which are particularly important for rest and recovery. The increase in night flights, together with the continued use of shoulder periods and the potential for delayed or unscheduled night-time operations, would add to existing concerns regarding sleep disruption, stress and reduced quality of life.

8.9.14. These impacts must also be considered cumulatively. The local community has already experienced successive phases of airport growth, and the current proposal would add further aircraft activity, ground operations and traffic movements beyond the recently approved 12 mppa position.

8.9.15. **It has not been demonstrated that the proposal would avoid unacceptable cumulative noise, sleep disturbance and public health impacts upon surrounding communities.**

Air Quality, Traffic and Health

8.9.16. The proposal would increase passenger numbers, staff travel, operational vehicle movements and associated road traffic. This would have implications for air quality and public health, particularly in relation to emissions from surface access traffic and airport-related activity.

8.9.17. The concern is heightened by the continued reliance on private car travel. The substantial additional parking provision proposed across the Airport estate demonstrates that the expansion remains heavily dependent upon road-based

access. This would increase exposure to traffic-related emissions and would undermine the Applicant's claim that the proposal represents genuinely sustainable development.

8.9.18. While air quality, transport and parking provision are addressed in detail elsewhere within this objection, the health implications of increased emissions and traffic-related environmental effects have not been adequately integrated into the overall assessment of public health effects. This is particularly important for children, older people and vulnerable groups who may be more susceptible to respiratory and cardiovascular effects associated with poor air quality.

8.9.19. **The proposal has not demonstrated that increased airport-related traffic and emissions would avoid harmful effects on public health and environmental quality.**

Felton Common, Recreational Amenity and Perceived Safety

8.9.20. The detailed site-specific impacts on Felton Common are addressed separately within this objection. However, the effect of the proposal on recreational amenity, perceived safety and wellbeing is also relevant to the health assessment, particularly given the use of Felton Common and nearby public rights of way by walkers, cyclists and horse riders.

8.9.21. In health and wellbeing terms, the concern is that the proposal would introduce lower aircraft approaches, additional lighting infrastructure and increased airport-related activity over and around a valued recreational area. The Applicant's assessment does not appear to have adequately considered the wellbeing and perceived safety implications of these changes, including sudden increases in aircraft noise, go-around manoeuvres, adverse weather conditions, or the potential effects on horse riders and other recreational users.

8.9.22. These matters are not advanced as technical aviation safety objections, but as planning considerations relating to recreational amenity, perceived safety, public rights of way, wellbeing and the adequacy of the Environmental Statement. The same concern applies to the interaction between lower aircraft approaches and users of the A38 corridor, including high-sided vehicles, buses and HGVs.

8.9.23. **It has not been demonstrated that the proposal would avoid unacceptable effects upon the amenity, perceived safety and recreational use of Felton Common, nearby bridleways and the A38 corridor.**

Lighting, Tranquillity and Wellbeing

8.9.24. Lighting impacts are addressed in detail elsewhere within this objection. However, lighting is also relevant to health and wellbeing because it can affect residential amenity, tranquillity, sleep, perception of rural character and the quality of recreational open space.

8.9.25. Surrounding communities already experience the effects of airport operations through aircraft noise, traffic, parking pressure, lighting and general disturbance. The proposal would intensify those effects through increased operational activity and a wider illuminated footprint.

8.9.26. Particular concern arises for users of Felton Common and nearby public rights of way, where the experience of darkness, tranquillity and rural character forms part of the amenity value of the area. The introduction of additional lighting infrastructure, together with lower aircraft approaches and increased night-time activity, would materially reduce that amenity.

8.9.27. **The proposal would erode tranquillity and increase lighting-related disturbance in a sensitive rural location, with consequential harm to local amenity and wellbeing.**

Climate Change, Environmental Anxiety and Health

8.9.28. The relationship between aviation growth, climate change and public health is also relevant. The proposal would facilitate additional aviation emissions through increased passenger throughput, aircraft movements and associated airport activity. It would also increase surface access emissions, particularly given the substantial additional parking provision and continued reliance on private car travel.

8.9.29. The health implications of climate change are not limited to direct physical effects. For many communities, particularly younger people, the continued expansion of high-emission infrastructure during a climate emergency contributes to environmental anxiety and a sense of loss of control over local environmental quality.

8.9.30. Climate change may also increase the frequency and severity of extreme weather events, with potential implications for airport delays, unscheduled night-time operations, disruption and further disturbance to surrounding communities.

8.9.31. **While climate impacts may be addressed separately within the planning balance, the Applicant has not adequately considered the relationship between aviation growth, climate change and public health and wellbeing.**

Ultrafine Particles (UFPs)

8.9.32. Appendix 6 contains an independent technical report commission by BAAN and prepared by Dr Peter Knapp, who holds a PhD in Aerosol Science and whose research has focused on air pollution associated with airports. The report raises concerns regarding the adequacy of the Applicant's Air Quality Assessment and, in particular, its treatment of ultrafine particles (UFPs).

8.9.33. The report explains that aircraft engines generate very large numbers of ultrafine particles which are generally too small to be adequately represented through conventional PM2.5 mass-based measurements. It is argued that these particles may be of particular concern because of their ability to penetrate deep into the lungs and enter the bloodstream. The report also highlights a growing body of scientific literature linking long-term exposure to UFPs with adverse health outcomes, including cardiovascular disease, respiratory disease and lung cancer.

8.9.34. Dr Knapp concludes that the Environmental Statement relies heavily upon older evidence when dismissing the significance of UFPs and does not assess UFP concentrations, dispersion or health effects arising from the proposed increase in aircraft activity. The report therefore questions whether the Environmental Statement provides a sufficiently robust assessment of the potential health consequences of the proposed development. The detailed technical evidence contained within Appendix 6 should be read alongside the concerns set out in this objection regarding human health impacts.

8.9.35. The report also notes that concern regarding ultrafine particle emissions is not confined to Bristol Airport. Reference is made to monitoring and research undertaken at Heathrow, Gatwick, Schiphol and Los Angeles airports together with emerging World Health Organisation guidance on ultrafine particle exposure. The report further notes that Heathrow Airport has accepted monitoring of ultrafine particles as a planning issue in connection with future airport development. Dr Knapp therefore

concludes that the Environmental Statement's reliance upon older evidence and its failure to assess ultrafine particle concentrations represents a material omission within the assessment of health effects associated with the proposed expansion.

8.9.36. The report also notes that ultrafine particle emissions are increasingly being recognised as a legitimate planning and public health issue in the context of airport development. In December 2025, the London Borough of Hillingdon secured a planning obligation requiring Heathrow Airport Limited to prepare and implement an Ultrafine Particle Monitoring and Action Plan in connection with airport development proposals. Whilst the scientific understanding of UFPs continues to evolve, this demonstrates that local planning authorities are increasingly recognising the need to monitor, review and respond to potential UFP impacts through the planning process.

8.9.37. **The absence of any meaningful assessment of ultrafine particle emissions introduces further uncertainty regarding the likely health effects of the proposal and weighs against a conclusion that the environmental and health impacts of the development have been adequately assessed.**

Cumulative Health and Wellbeing Effects

8.9.38. The key issue is the cumulative effect of the proposal. The impacts of airport expansion are not experienced by local communities as separate technical disciplines. Noise, lighting, traffic, air quality, loss of tranquillity, recreational disruption, night-time disturbance and environmental change are experienced together.

8.9.39. This is particularly important because the current application follows shortly after the consented 12 mppa expansion. The proposal therefore represents a further phase of growth beyond an already contentious baseline and raises legitimate concerns regarding the cumulative or incremental effects of successive airport expansion.

8.9.40. The Applicant’s assessment does not adequately grapple with this cumulative reality. Instead, it tends to assess individual effects separately and then concludes that each can be mitigated or managed. That approach risks understating the overall burden placed on surrounding communities and sensitive recreational receptors.

8.9.41. **The cumulative health and wellbeing impacts of the proposal have not been adequately assessed and weigh materially against the proposed development.**

Overall Conclusion on Health and Wellbeing

8.9.42. The proposal would intensify airport operations in a location where surrounding communities already experience the effects of aircraft noise, traffic, lighting, night-time disturbance, air quality impacts and loss of tranquillity. It would also materially affect the experience of Felton Common and nearby public rights of way, including for walkers, cyclists and horse riders.

8.9.43. The absence of a standalone Health Impact Assessment, together with the limited consideration given to cumulative effects, recreational amenity, perceived safety and the interaction between noise, lighting, traffic and wellbeing, materially weakens the Applicant's case. Similar concerns arise in relation to the treatment of air quality impacts. Appendix 6 concludes that the Environmental Statement relies upon outdated evidence when considering ultrafine particle emissions and fails to assess a pollutant which may be strongly associated with adverse cardiovascular, respiratory and cancer-related health outcomes. The report therefore introduces a further area of uncertainty regarding the public health consequences of the proposed expansion.

8.9.44. **Accordingly, it has not been demonstrated that the proposal would avoid unacceptable impacts upon public health, residential amenity, recreational amenity and wellbeing, contrary to the requirements of the NPPF and Policies CS3, CS23, DM24 and DM50 of the Development Plan.**

8.10. ECONOMIC BENEFITS AND ECONOMIC RISKS

8.10.1. The Applicant places significant reliance upon the economic benefits associated with the proposed expansion of Bristol Airport, including additional employment, increased Gross Value Added ("GVA"), improved connectivity and wider productivity benefits. The Environmental Statement concludes that the proposal would generate significant beneficial economic effects at both local and national levels.

8.10.2. It is accepted that Bristol Airport is an important regional employer and transport facility. National planning policy recognises the importance of supporting sustainable economic growth and the role that major transport infrastructure can play in facilitating investment, employment and connectivity.

8.10.3. However, any economic benefits of the proposal must be considered alongside the significant environmental, ecological, transport, climate change and Green Belt impacts identified elsewhere in this objection. Development Plan Policy CS23 requires

that economic growth at Bristol Airport is balanced against the need to satisfactorily address environmental impacts and protect surrounding communities.

8.10.4. The New Economics Foundation Economic Impact Report (Appendix 4) raises significant concerns regarding the Applicant's economic assessment. In particular, it questions the decision to largely exclude the economic effects of outbound tourism, despite approximately 75% of Bristol Airport passengers being outbound leisure travellers, and argues that the assessment places disproportionate reliance upon claimed productivity, employment and Gross Value Added ("GVA") benefits which are not adequately evidenced.

8.10.5. The report concludes that expansion of the Airport may increase economic leakage from the South West through the diversion of expenditure overseas and highlights evidence suggesting that the region's domestic tourism economy has experienced a sustained decline in recent years. It further argues that the Applicant's employment figures do not represent genuine net economic gains because they fail to account for jobs potentially displaced from other sectors of the economy, particularly tourism, hospitality and retail.

8.10.6. The report also challenges the methodologies used to calculate productivity and wider economic benefits, arguing that aspects of the assessment may involve double counting and that the claimed economic gains are subject to considerable uncertainty. It further questions whether the economic costs associated with additional aviation emissions have been fully reflected. Overall, the report concludes that the economic benefits of the proposal are materially less certain, and potentially substantially lower, than suggested by the Applicant.

8.10.7. Accordingly, while the claimed economic benefits are material and should be afforded weight, they do not demonstrate compliance with Policy CS20, Policy CS22, Policy CS23 or Policy DM50 when those policies are read alongside the wider development plan. The economic role of Bristol Airport does not override the requirement for airport-related development to satisfactorily address environmental, transport, amenity and community impacts. The economic benefits therefore do not, either individually or cumulatively, outweigh the policy conflicts identified elsewhere in this objection.

8.10.8. **Accordingly, whilst economic benefits should be afforded weight in the planning balance, the independent evidence contained within Appendix 4 demonstrates that the scale, distribution and net value of those benefits remain subject to significant uncertainty. The Applicant has not demonstrated that the**

claimed economic benefits outweigh the substantial environmental, ecological, climate change, transport, landscape and Green Belt harms arising from the proposal and they should therefore be afforded only moderate weight in the overall planning balance.

8.11. FOCUS ON SPECIFIC SITES WITHIN THE APPLICATION FELTON COMMON

Status and Importance of Felton Common

8.11.1. Felton Common is a particularly sensitive part of the application site and should be considered as a distinct issue in its own right. It is not simply undeveloped land adjacent to the Airport, it is registered common land and is valued by the local community for informal recreation, walking, access to open space, tranquillity and enjoyment of the rural landscape.

8.11.2. Its importance lies not only in its physical extent, but also in its openness, accessibility and community function. The Common provides a locally important recreational and amenity resource in an area already heavily influenced by airport activity, traffic, noise, lighting and associated operational pressures.

Airport Infrastructure and Operational Effects

8.11.3. The proposal would introduce airport-related infrastructure into, and directly affecting, Felton Common. This includes approach lighting associated with the runway extension, together with the operational consequences of lower aircraft approaches, increased night-time activity, additional lighting and wider airport intensification.

8.11.4. The impact on Felton Common therefore arises not only from the physical land-take of the lighting equipment, but also from the change in the character and experience of using the Common. The introduction of aviation lighting infrastructure would materially alter the perception of the Common from a rural recreational space to land increasingly influenced by operational airport development.

8.11.5. Those effects would be experienced cumulatively with other impacts considered elsewhere in this objection, including lighting, noise, ecology, landscape, health and public amenity. However, the common land status of Felton Common gives this issue additional significance and requires a clear, focused assessment.

Common Land, Statutory Procedures and CPO

8.11.6. The proposal requires land associated with Felton Common which will need to be secured through compulsory acquisition and/or other statutory powers. That point should be expressly identified and given significant weight in the determination of the application.

8.11.7. The use of common land for airport infrastructure is materially different from works within the established operational airport boundary. It raises separate issues of public amenity, recreational access, community rights and the statutory protection afforded to common land.

8.11.8. The common land implications have not been clearly or adequately explained in the application material. The application should identify the precise extent of common land affected, including the area required for lighting columns and associated equipment, access and maintenance routes, any safety or operational exclusion zones, and whether any part of the Common would be physically occupied, fenced, restricted, deregistered or otherwise removed from public use.

8.11.9. Where registered common land is to be released from common use, the Commons Act 2006 regime is engaged. If release land exceeds 200 square metres, replacement land will normally be required as part of a deregistration and exchange process. Separate consent may also be required for restricted works on common land where works would prevent or impede access to or over the land.

8.11.10. These matters are directly relevant to the planning judgment. The Applicant has acknowledged that, should agreement not be reached with Felton Parish Council, it intends to rely upon compulsory purchase powers to secure the land required for the approach lighting infrastructure. The prospect that the grant of planning permission may be relied upon to justify the compulsory acquisition of registered common land is itself a significant material planning consideration. It goes directly to the deliverability of the proposal, the extent of harm, the adequacy of mitigation and the overall public interest balance.

Replacement Land and Unresolved Mitigation

8.11.11. The application has not demonstrated that replacement land of equivalent quality, accessibility, recreational value and community benefit can be secured. Whilst replacement land may ultimately be required under the statutory common land

procedures, no satisfactory evidence has been provided to demonstrate that land of genuinely equivalent value exists or could be delivered.

8.11.12. This is a material omission. The issue is not simply whether replacement land can be identified, but whether it would genuinely compensate for the permanent loss or alteration of part of Felton Common. Common land derives its value from its location, accessibility, recreational function, landscape character and long-established community use. These qualities cannot necessarily be replicated elsewhere.

8.11.13. In the absence of clear evidence that equivalent replacement land can be secured, the decision-maker cannot properly conclude that the statutory requirements relating to common land can be satisfied or that the resulting harm would be adequately mitigated.

Amenity, Recreational Use, Ecology and Community Rights

8.11.14. The amenity value of Felton Common is central to the objection. Common land is protected because it performs a public and community function. Its value is not limited to the precise area occupied by any structure. It includes the ability of local people to access and enjoy the land as open, informal recreational space.

8.11.15. The proposal would cause substantial harm to that amenity value. It would not merely place isolated lighting equipment within an otherwise unaffected area of land. It would introduce permanent airport infrastructure into registered common land and would fundamentally alter the way in which the Common is experienced and enjoyed.

8.11.16. Felton Common currently provides an open, informal and publicly accessible recreational space. Its value lies in its openness, rural character, tranquillity, relative darkness and separation from the operational airport environment. The introduction of approach lighting infrastructure, together with associated maintenance requirements and lower aircraft approaches, would materially erode those qualities.

8.11.17. The harm would be experienced by local residents, walkers and recreational users through increased visual intrusion, the urbanising effect of aviation infrastructure, additional lighting, increased perception of airport activity, and a reduction in the sense of openness and tranquillity. This would be particularly harmful because the land is common land, where public access and enjoyment are central to its purpose and value.

8.11.18. Particular concern also arises in relation to horse riders using Felton Common. Horses can be highly sensitive to sudden noise, movement and low overhead aircraft activity. The proposal would bring lower aircraft approaches and increased airport activity into closer relationship with a recreational area used by horse riders. This has the potential to create fear, disturbance and safety risks for riders, horses and other users of the Common. That is a further way in which the proposal would reduce the safe and enjoyable recreational use of Felton Common.

8.11.19. There are also ecological concerns. Felton Common forms part of the wider ecological context around the Airport, including habitats used by bats and other wildlife. The introduction of additional lighting infrastructure, ground disturbance, vegetation clearance, construction activity and ongoing operational lighting has the potential to affect habitat value, dark corridors, foraging and commuting routes. These impacts are especially important given the wider concerns raised in this objection regarding the North Somerset and Mendip Bats SAC and functionally linked habitat.

8.11.20. The proposal therefore needs to be assessed not only as a matter of land-take, but as a combined impact on public amenity, ecology, landscape character and recreational enjoyment. It is not sufficient for the Applicant to treat the lighting infrastructure as a necessary technical component of the runway extension. The Common is a protected and valued public resource, and the harm arising from its physical and experiential alteration should attract significant weight.

8.11.21. Interference with common land and its amenity value can also raise wider issues concerning public rights, community access and the protection of established recreational use. That reinforces the importance of treating Felton Common as a protected public amenity resource, rather than as ordinary developable land.

8.11.22. The effect on public use and enjoyment should therefore be given substantial weight. The proposal would erode the openness, tranquillity, ecological value, recreational value and community function of the Common and would introduce operational airport infrastructure into land which is publicly valued and subject to specific statutory protections.

Planning Policy Conflict

8.11.23. The harm to Felton Common is directly relevant to the planning policy framework. At national level, the NPPF requires planning decisions to recognise the intrinsic character and beauty of the countryside, protect valued landscapes, minimise

pollution, conserve and enhance biodiversity, and limit the impact of light pollution on local amenity, intrinsically dark landscapes and nature conservation. Paragraph 198 is particularly relevant because the proposal would introduce additional lighting infrastructure and operational lighting effects into a sensitive recreational and ecological context.

8.11.24. The proposal is also relevant to the NPPF's approach to Green Belt, given that Felton Common forms part of the wider open Green Belt setting around the Airport. The introduction of airport lighting infrastructure into common land would contribute to the further urbanisation and operational spread of the Airport into the surrounding countryside.

8.11.25. At local level, the impacts on Felton Common are relevant to North Somerset Core Strategy Policies CS3, CS4, CS5, CS9 and CS23, together with Development Management Policies DM8, DM10 and DM50. These policies seek, amongst other matters, to protect environmental quality, biodiversity, landscape character, green infrastructure, public amenity and to ensure that airport-related development satisfactorily addresses environmental and community impacts.

8.11.26. The proposal has not demonstrated compliance with that policy framework. It would cause harm to public amenity, recreational enjoyment, landscape character, tranquillity, ecological value and the special status of registered common land. Those harms should attract significant weight in the overall planning balance.

Conclusion on Felton Common

8.11.27. The principle of development affecting Felton Common should not be accepted without a clear assessment of the common land implications, ecological effects, lighting impacts, loss of public amenity and harm to recreational enjoyment. In particular, the application should be required to explain whether common land would be lost, occupied or restricted; whether a compulsory purchase order is required; whether deregistration, exchange land or works consent is required; whether replacement land has been identified; and how the public's use and enjoyment of the Common would be protected.

8.11.28. Accordingly, the proposal gives rise to a serious and distinct objection in relation to Felton Common. The application has failed to demonstrate that the implications of acquiring and developing registered common land have been properly assessed, that any compulsory acquisition is justified in the public interest, that equivalent

replacement land can be secured, or that the resulting harm to public amenity, recreation and the statutory protection afforded to common land would be adequately mitigated.

8.11.29. The proposal would cause substantial harm to Felton Common by introducing operational airport infrastructure into registered common land, eroding its openness, tranquillity, ecological value, recreational enjoyment and perceived safety, with unresolved implications for statutory common land procedures, replacement land and public amenity.

SILVER ZONE

8.11.30. The Silver Zone area also warrants specific consideration because it illustrates many of the principal concerns arising from the application. Whilst individual impacts are addressed elsewhere in this Statement, the Silver Zone proposals bring together issues relating to Green Belt harm, loss of open countryside, landscape and visual impact, lighting, transport sustainability and the assessment of reasonable alternatives.

8.11.31. The area currently comprises a largely open landscape on the southern side of the airport complex which provides a degree of separation between the operational airport and the wider countryside. The proposals would increase the extent and intensity of airport-related development in this location through the expansion and intensification of parking and associated infrastructure.

Green Belt and Loss of Open Land

8.11.32. The Silver Zone proposals would extend airport-related development further into the Bristol-Bath Green Belt. Whilst parts of the area already contain airport parking and associated infrastructure, significant areas remain open in character and continue to contribute to the openness of the Green Belt.

8.11.33. The introduction of additional parking areas, circulation routes, lighting columns, signage, fencing and associated infrastructure would materially increase the urbanising influence of the airport within an area presently characterised by a more rural appearance.

8.11.34. The cumulative effect would be to extend the visual and operational footprint of the airport further into the surrounding countryside, reducing the distinction between the developed airport estate and adjoining Green Belt land.

Landscape Character and Airport Urbanisation

8.11.35. The Silver Zone proposals would contribute to the progressive expansion of airport infrastructure beyond the historic operational core of the airport.

8.11.36. Whilst individual elements of the development may appear relatively modest when considered in isolation, collectively they would reinforce the perception of a larger and more urbanised airport complex extending into the surrounding countryside.

8.11.37. This form of incremental expansion is particularly significant because the Silver Zone occupies one of the principal transition areas between the airport and the wider rural landscape. The proposals would therefore increase the extent to which airport infrastructure influences the character of the surrounding area.

Lighting and Night-Time Effects

8.11.38. The proposed expansion of parking infrastructure would inevitably be accompanied by additional lighting and associated night-time activity.

8.11.39. As identified in the Statement above, lighting can affect landscape character, visual amenity, tranquillity, dark skies and ecological receptors. The concentration of extensive parking areas and associated infrastructure within the Silver Zone would increase the extent of illuminated airport development visible within the wider landscape.

8.11.40. The effects would be experienced not only during daylight hours but throughout the evening and night-time periods when lighting infrastructure becomes most apparent. The proposals would therefore contribute to the wider urbanisation of the airport environment and the erosion of rural character.

Sustainable Transport and Car Dependency

8.11.41. The Silver Zone proposals are also significant because they demonstrate the continuing reliance of the airport upon private vehicle access.

8.11.42. The application seeks permission to increase passenger throughput to 15 million passengers per annum whilst simultaneously providing substantial additional parking capacity. This reflects an operational strategy that remains heavily dependent upon private car travel rather than demonstrating a fundamental shift towards more sustainable modes of transport.

8.11.43. The provision of further airport parking infrastructure may also undermine the Applicant's assertions regarding future reductions in car-based travel by embedding additional long-term parking capacity within the airport estate. Once this additional capacity has been constructed and becomes an established part of the airport's operational and commercial model, there is a significant risk that private car travel becomes further entrenched. The proposal therefore raises legitimate questions as to whether the ambitious modal shift targets relied upon by the Applicant can realistically be achieved, particularly where substantial investment is simultaneously being made in infrastructure that facilitates and encourages continued car-based access to the airport.

Consideration of Alternatives

8.11.44. Notwithstanding the above, particular concern arises from the apparent absence of a robust assessment of whether additional parking demand could be accommodated through a more intensive use of existing developed airport land.

8.11.45. The application itself proposes limited decked parking structures within the Silver Zone area. This demonstrates that vertical parking solutions are technically feasible and capable of being incorporated into the airport estate.

8.11.46. However, the application provides limited evidence that more comprehensive decked or multi-storey parking solutions have been properly assessed as a means of reducing the extent of Green Belt land required for airport expansion.

8.11.47. Given the sensitivity of the Green Belt and the acknowledged environmental effects arising from the proposals, it is considered unacceptable that the application provides so little evidence that realistic alternatives to further Green Belt encroachment have been properly assessed. The application itself demonstrates that decked parking structures are capable of being accommodated within the airport estate, yet there appears to have been no meaningful assessment of whether a more comprehensive multi-storey parking solution could meet operational requirements whilst reducing the extent of Green Belt land required. In the context of a proposal seeking substantial

and permanent development within the Green Belt, this represents a significant deficiency in the Applicant's case.

Cumulative Impact

8.11.48. The significance of the Silver Zone proposals cannot be assessed solely by reference to the individual parking areas proposed. They form part of a wider programme of airport expansion that includes increased passenger numbers, additional aircraft movements, new infrastructure, expanded operational areas and further encroachment into the Green Belt.

8.11.49. The Silver Zone therefore provides a clear example of the cumulative effects arising from the proposal. It demonstrates how airport growth would increasingly extend beyond the established airport core and into adjoining areas of countryside, resulting in greater urbanisation, loss of openness and environmental harm.

8.11.50. The Silver Zone proposals therefore conflict with Policies CS6, CS10, CS11 and CS23 of the Core Strategy and Policies DM12, DM24, DM29, DM30 and DM50 of the Sites and Policies Plan Part 1. Those policies require Green Belt openness to be protected, airport parking to be properly justified and managed, sustainable transport objectives to be advanced, and environmental and community impacts to be satisfactorily addressed. The proposal would instead extend airport parking and associated infrastructure further into Green Belt land, reinforce car dependency and increase the urbanising influence of the Airport within the surrounding countryside.

8.11.51. Taken as a whole, the Silver Zone proposals exemplify the wider shortcomings of the application, namely the continued expansion of airport infrastructure onto Green Belt land, increasing urbanisation of the countryside, additional lighting impacts, a continued reliance on private car travel and an unacceptable failure to demonstrate that less harmful alternatives have been properly explored. By providing substantial additional parking capacity, the proposals also risk embedding long-term car dependency and reducing the incentive to deliver the modal shift and sustainable transport measures upon which the application's case for expansion substantially relies.

COOKS FARM

8.11.52. The Cooks Farm area warrants specific consideration because it represents one of the clearest examples of the physical expansion of Bristol Airport beyond its established operational footprint and into the surrounding Green Belt. Whilst individual elements of the proposals are assessed elsewhere in this Statement, the Cooks Farm proposals bring together a number of the principal concerns arising from the application, including Green Belt harm, the loss of agricultural land, the outward spread of airport infrastructure, potential compulsory acquisition of land and the cumulative urbanisation of the countryside surrounding the airport.

8.11.53. Unlike the Silver Zone proposals, which are principally associated with passenger parking and surface access, the Cooks Farm proposals relate directly to the operational functioning of an enlarged airport and involve infrastructure associated with aircraft operations and the day-to-day operation of the airport. The significance of the proposals is therefore not simply the area of land affected, but the nature of the development proposed and its role in facilitating airport expansion.

Green Belt and Loss of Agricultural Land

8.11.54. The land at Cooks Farm Is within the Green Belt and currently contributes to the openness and rural character of the countryside surrounding Bristol Airport. The land is presently agricultural in nature and remains distinct from the operational airport estate.

8.11.55. The proposals would result in the permanent loss of agricultural land and its replacement with airport-related operational infrastructure. This would fundamentally alter both the character and function of the land, incorporating it into the operational airport estate and extending airport activities further into the Green Belt.

8.11.56. Unlike development occurring within the established airport complex, the proposals would extend the operational footprint of the airport into an area that presently remains outside the airport environment. The significance of this encroachment lies not simply in the area of land affected but in the permanent outward expansion of core airport infrastructure into the surrounding countryside.

8.11.57. The proposal therefore represents considerably more than the redevelopment or intensification of existing airport land. It constitutes a further stage in the gradual

spread of airport operations into the Green Belt and contributes to the cumulative erosion of openness identified in the Statement above.

Compulsory Acquisition and Private Land Rights

8.11.58. A particular concern arises from the apparent requirement to acquire land currently outside the Applicant's ownership in order to facilitate the proposed development.

8.11.59. The application therefore raises important questions regarding the necessity and justification for the acquisition of private land to enable airport expansion. The potential acquisition of third-party land is significant because it demonstrates that airport growth can no longer be accommodated solely within the existing airport estate and instead requires the incorporation of additional countryside into airport use.

8.11.60. Whilst compulsory acquisition powers may be available in certain circumstances, such powers should only be exercised where there is a compelling case in the public interest. Given the substantial concerns identified throughout this Statement relating to Green Belt harm, ecological impacts, climate change, transport sustainability, landscape effects and impacts on local communities, it is far from clear that such a compelling case has been demonstrated.

8.11.61. The potential interference with existing private land ownership rights therefore adds further weight to the concerns arising from the proposal and reinforces the need for careful scrutiny of whether the development is genuinely necessary or acceptable.

Airport Urbanisation and Operational Expansion

8.11.62. The Cooks Farm proposals provide a clear example of the gradual outward spread of airport infrastructure into the surrounding countryside.

8.11.63. The issue is not simply the individual structures or facilities proposed. Rather, it is the cumulative effect of extending operational airport activities beyond their existing limits and into land that presently forms part of the wider Green Belt landscape.

8.11.64. The development would contribute to the increasing urbanisation of the airport's surroundings and further erode the distinction between the operational airport and the rural landscape beyond. This process of incremental expansion is particularly concerning because it establishes airport infrastructure in areas that have historically remained outside the airport estate, creating pressure for further associated

development and reinforcing the long-term spread of airport activity into the countryside.

8.11.65. The infrastructure proposed at Cooks Farm is directly linked to the operation of a larger airport and would facilitate the increase in passenger throughput and aircraft activity sought by the application. The proposals therefore represent a permanent physical manifestation of airport growth within the Green Belt rather than a temporary or ancillary form of development.

Cumulative Impact

8.11.66. The significance of the Cooks Farm proposals cannot be assessed in isolation. They form part of a wider package of development that includes increased passenger numbers, increased aircraft movements, expanded operational areas, additional airport infrastructure and further encroachment into Green Belt land.

8.11.67. The Cooks Farm area therefore provides a clear illustration of the wider trajectory of the application, namely the continued outward expansion of airport infrastructure beyond its existing footprint and into the surrounding countryside.

8.11.68. The Cooks Farm proposals therefore conflict with Policies CS6 and CS23 of the Core Strategy and Policies DM12, DM24 and DM50 of the Sites and Policies Plan Part 1. The development would extend operational airport infrastructure into Green Belt agricultural land, erode openness, increase airport-related urbanisation and potentially require the acquisition of third-party land. Those impacts have not been shown to be necessary, unavoidable or outweighed by benefits sufficient to satisfy the relevant Green Belt and airport-related development policies.

8.11.69. The Cooks Farm proposals represent a significant and unjustified extension of operational airport infrastructure into the Green Belt. The permanent loss of agricultural land, the potential acquisition of third-party land and the outward spread of airport operations beyond the established airport estate demonstrate a continued reliance on expansion into the countryside, resulting in further harm to Green Belt openness, rural character and the wider environmental objectives that Green Belt designation is intended to protect.

8.12. FAILURE TO PROPERLY CONSIDER REASONABLE ALTERNATIVES

8.12.1. The Applicant seeks to justify the proposed expansion on the basis that Bristol Airport should continue to make best use of its existing runway infrastructure in order to accommodate forecast passenger demand and support economic growth. However, the current application demonstrates a repeated preference for the cheapest, easiest and most operationally convenient forms of development rather than those which would minimise environmental harm and reduce impacts on surrounding communities and the Green Belt.

8.12.2. This is particularly important given the highly constrained nature of the Airport site. Bristol Airport occupies an elevated Green Belt location surrounded by sensitive ecological receptors, rural landscapes, public rights of way and nearby communities. As expansion moves beyond the recently approved 12 mppa position, the operational and environmental constraints affecting the Airport become increasingly significant.

8.12.3. The proposal now requires:

- further expansion onto Green Belt land;
- compulsory acquisition of land associated with Felton Common;
- additional operational lighting infrastructure within common land;
- substantial additional surface-level parking provision; and
- the loss of agricultural land and functionally-linked ecological habitat associated with the North Somerset and Mendip Bats SAC.

8.12.4. The cumulative effect of those impacts strongly suggests that the Airport is approaching the practical environmental limits of expansion at this location. However, despite those constraints, the application provides only limited consideration of whether less harmful or more efficient alternatives could reasonably reduce the environmental impacts of the scheme.

Runway Extension and Felton Common

8.12.5. The proposal includes a runway extension and associated approach lighting infrastructure extending into Felton Common. This would require development within common land together with additional lighting infrastructure and lower aircraft approaches over the Common itself.

8.12.6. The Applicant acknowledges that the extension of the runway to the east has been selected because extension to the west is constrained by topography. However, while the eastern option may represent the easiest, cheapest and most deliverable

operational solution, the application fails to adequately explain why the resulting impacts on Felton Common and surrounding communities are acceptable or unavoidable and also why they are less harmful than an extension to the western approach.

8.12.7. The Applicant should be required to explain why expansion without the proposed runway extension has not been assessed as a reasonable alternative. If the central objective is increased passenger throughput, the application should identify whether some or all of that growth could be achieved without extending the runway and without the consequential relocation of approach lighting onto Felton Common.

8.12.8. In addition, the Applicant should provide a detailed explanation of why the runway cannot be extended in a western direction. It is not sufficient simply to state that this option was ruled out on grounds of cost, topography or business case. Given the serious environmental, amenity and common land consequences of the eastern extension, the decision-maker requires a clear comparative assessment of the western option, including engineering feasibility, cost, operational implications, environmental effects and the extent to which it would avoid or reduce harm to Felton Common.

8.12.9. In the absence of that information, the decision-maker cannot be satisfied that the proposed eastern runway extension and associated lighting works on Felton Common represent the least harmful reasonable option.

8.12.10. In particular, no meaningful alternatives assessment has been undertaken in relation to the proposed lighting infrastructure on Felton Common or the environmental and amenity consequences arising from lower aircraft approaches over the Common. This is especially significant given the acknowledged recreational, ecological and landscape value of the Common and the concerns raised above regarding lighting, health and public amenity impacts.

Surface Car Parking and Green Belt Expansion

8.12.11. Particular concern arises in relation to the proposed parking strategy. The application seeks substantial additional parking provision across a number of areas including:

- approximately 2,000 additional spaces within the Cook's Farm area;
- approximately 1,960 additional spaces within the expanded Silver Zone area;
- approximately 1,720 staff parking spaces;

- together with further decked parking associated with the Silver Zone and car rental areas.

8.12.12. The proposal therefore relies heavily upon the outward spread of surface-level parking infrastructure onto open Green Belt land and agricultural land. This approach appears to prioritise lower-cost operational expansion over minimising environmental harm and preserving openness.

8.12.13. Importantly, the application provides limited assessment of whether a more comprehensive decked or multi-storey parking solution within the existing operational airport area could reduce the extent of land take and associated Green Belt encroachment. No full multi-storey car park solution appears to have been advanced as part of the application, despite the scale of additional parking proposed.

8.12.14. This issue is particularly relevant within the Silver Zone area where the Applicant already proposes limited decked parking structures. The Environmental Statement acknowledges that the proposed decked parking structures would largely be perceived against the backdrop of existing airport infrastructure and would not materially affect the special qualities of the Mendip Hills National Landscape. This reinforces the need for a clearer explanation as to why a more compact, vertically intensified parking strategy has not been pursued in preference to further surface-level expansion onto Green Belt land.

8.12.15. In those circumstances, it is unclear why a more comprehensive decked parking strategy has not been properly explored, particularly where such an approach could:

- reduce the need for additional surface-level parking on Green Belt land;
- reduce impacts on biodiversity and functionally-linked bat habitat;
- contain the operational footprint of the Airport;
- and minimise the further outward spread and urbanisation of the countryside surrounding the Airport.

8.12.16. The omission of a robust assessment of more intensive parking solutions is a significant weakness in the Applicant's case, particularly given that paragraph 129 of the NPPF encourages the effective use of land and Chapter 13 seeks to safeguard Green Belt openness and prevent encroachment into the countryside.

Incremental Expansion and Operational Creep

8.12.17. The current proposals must also be viewed in the context of the Airport's wider pattern of incremental expansion and operational creep over recent years.

8.12.18. The objection notes that the Airport has repeatedly sought to extend development into Green Belt land where operationally convenient, including:

- previous proposals to relocate and enlarge administrative buildings within Green Belt land;
- continued operational development within the southern operational areas; and
- longstanding efforts through successive plan-making exercises to secure removal of additional land from the Green Belt designation.

8.12.19. The emerging North Somerset Local Plan only proposes Green Belt inset amendments associated with the already approved 12 mppa position. It does not allocate or endorse the further Green Belt expansion now proposed through the current application.

8.12.20. The current proposal therefore represents a further phase of outward operational expansion beyond the extent currently reflected within the emerging plan-led strategy for the Airport.

Sustainable Development and Environmental Limits

8.12.21. The limited consideration given to less harmful alternatives is also relevant to the wider question of whether the proposal genuinely represents sustainable development.

8.12.22. While the Applicant relies heavily upon economic growth forecasts and operational demand, the application demonstrates increasing dependence upon:

- Green Belt release;
- expanded parking provision;
- further lighting infrastructure;
- continued reliance upon private car travel; and
- the erosion of ecological and landscape constraints surrounding the Airport.

8.12.23. The proposal therefore raises a broader question as to whether continued expansion beyond 12 mppa can realistically occur at Bristol Airport without causing progressively greater environmental harm and increasing conflict with the objectives of the development plan and the NPPF.

8.12.24. Furthermore, the Applicant has not robustly assessed whether a greater proportion of parking and operational infrastructure could be accommodated through intensified or decked development within the existing operational airport area, particularly within the Silver Zone. This is of particular relevance given that the emerging Local Plan proposes to inset substantial parts of the existing operational airport from the Green Belt in order to reflect the already approved 12 mppa expansion. In those circumstances, there is a clear distinction between concentrating development within an existing operational airport envelope and extending surface-level parking and associated infrastructure further into presently open Green Belt land at Cook's Farm, the southern area and surrounding areas.

8.12.25. While additional decked parking structures may give rise to increased visual effects in certain views, particularly within the setting of the Mendip Hills National Landscape, those impacts would need to be balanced against the substantial Green Belt, ecological and countryside encroachment impacts arising from the continued outward spread of surface-level parking across open land. The submitted alternatives assessment does not adequately demonstrate why the less land-intensive option has been discounted.

8.12.26. The absence of a robust and transparent assessment of reasonable alternatives materially weakens the Applicant's case, particularly where less harmful approaches may exist which would reduce Green Belt impacts, ecological harm, landscape effects and operational sprawl.

8.12.27. **Accordingly, the application fails to demonstrate that the proposed form of expansion represents the least harmful or most sustainable means of accommodating future airport growth, and insufficient consideration has been given to reasonable alternatives capable of reducing the substantial environmental harm arising from the proposal.**

8.13. CUMULATIVE IMPACT

Cumulative Environmental Effects

8.13.1. The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 require the likely significant effects of development on the environment to be identified, described and assessed. This includes the cumulative effects arising from the interaction of environmental impacts and the combined consequences of development when considered alongside other relevant plans, projects and committed development.

8.13.2. The current application cannot properly be viewed as a standalone proposal. It follows the recently approved expansion of Bristol Airport to 12 million passengers per annum and seeks a further increase to 15 million passengers per annum, together with additional aircraft movements, night flights, parking provision, operational infrastructure, lighting and development within Green Belt land.

8.13.3. The proposal therefore represents a further phase of airport expansion beyond that recently approved through the appeal process. The environmental effects of the current application must be considered not only in terms of the direct impacts arising from the development itself, but also in the context of the cumulative consequences of successive phases of airport growth.

8.13.4. This is particularly important because the proposal comprises a package of interrelated development including a runway extension, additional aircraft parking, expanded operational infrastructure, substantial new parking provision, lighting infrastructure, highway and transport measures, development within Green Belt land and works affecting environmentally sensitive areas including Felton Common. The environmental consequences of those individual elements cannot properly be understood in isolation.

8.13.5. North Somerset Council's EIA Scoping Opinion specifically identified the importance of cumulative effects and noted that the current proposal represents a further phase of growth beyond the recently approved expansion to 12 mppa. The Council recognised that, when viewed against the historic 10 mppa baseline, the combined effect of successive phases of airport expansion represents a substantial increase in airport activity and that the cumulative implications of that growth would require robust assessment.

8.13.6. Paragraph 195 of the NPPF, the Habitats Regulations and development plan policies, together with the wider objectives of sustainable development, all require

consideration of the combined effects of development rather than simply the individual impacts assessed within separate technical chapters.

8.13.7. Throughout this objection concerns have been identified in relation to biodiversity, Green Belt harm, landscape and visual impacts, lighting, transport, climate change, noise, public amenity, health and safety. Whilst each of those matters attracts weight individually, the proposal must also be assessed having regard to the cumulative effects arising from their interaction and the wider consequences of continued airport expansion.

8.13.8. **The proposal represents a further phase of airport expansion beyond the recently approved 12 mppa position, and its environmental effects cannot properly be considered in isolation from the cumulative consequences of successive phases of growth.**

Interaction of Individual Impacts

8.13.9. The Environmental Statement does not provide a single overarching assessment of the cumulative environmental consequences of the proposal. Instead, cumulative and combined effects are dispersed throughout the individual technical chapters and assessed largely by reference to specific environmental topics. Whilst this approach may satisfy the Applicant's chosen EIA methodology, it provides no clear assessment of the overall planning consequences arising from the interaction of multiple environmental effects.

8.13.10. The Environmental Statement also treats the approved 12 mppa expansion as part of the future baseline against which the current proposals are assessed. As a consequence, much of the assessment focuses upon the incremental effects of growth from 12 mppa to 15 mppa rather than the wider cumulative consequences of successive phases of airport expansion, for example, from 10mppa to 15mppa, a 50% increase. This approach does not fully address the concerns identified within the Council's Scoping Opinion regarding the cumulative implications of continued airport growth over time.

8.13.11. It therefore falls to decision-makers to consider not only the conclusions reached within individual technical chapters, but also the cumulative planning consequences arising from the proposal as a whole.

8.13.12. A particular concern arising from the current proposal is that many of the identified impacts affect the same locations, communities and environmental receptors

simultaneously. Whilst the Environmental Statement assesses individual effects within separate technical chapters, the practical reality is that those effects will often be experienced cumulatively.

8.13.13. Felton Common provides a clear example. The proposal would result in the relocation of approach lighting infrastructure onto the Common together with the consequences arising from the runway extension and associated operational changes. As identified elsewhere within this objection, Felton Common is valued for its ecological importance, recreational function, rural character and contribution to local amenity. The impacts upon the Common therefore extend beyond a single environmental topic and include landscape effects, lighting impacts, ecological effects, public amenity concerns, potential impacts upon tranquillity and concerns relating to public safety.

8.13.14. These impacts should not be viewed as separate and unrelated effects. Rather, they represent multiple forms of change affecting the same area of land and the same community resource. The combined effect is likely to be materially greater than any individual impact considered in isolation.

8.13.15. A similar position arises in relation to the proposed expansion of parking and operational infrastructure within Green Belt land. The Green Belt impacts identified elsewhere within this objection are not limited solely to questions of openness. The proposed development would also introduce additional lighting, increased traffic movements, greater visual urbanisation, loss of countryside character and ecological impacts arising from land take and habitat disturbance.

8.13.16. Consequently, the cumulative effect upon Green Belt land extends beyond the physical footprint of individual structures or parking areas. The proposal would contribute towards a broader process of urbanisation and operational intensification which, when considered collectively, would further erode the rural character of land surrounding the Airport and weaken the separation between the Airport and the surrounding countryside.

8.13.17. Local communities would also experience a combination of impacts arising from increased passenger numbers and associated airport activity. Residents may be affected simultaneously by increased traffic, longer journey times, increased aircraft movements, noise, lighting effects, changes to landscape character and wider amenity impacts. Whilst each effect may be assessed separately within the Environmental Statement, the lived experience for affected communities is one of cumulative environmental change.

8.13.18. The ecological impacts of the proposal similarly extend beyond individual habitat losses. The objection has identified concerns regarding functionally linked habitat associated with the North Somerset and Mendip Bats SAC, together with concerns regarding lighting effects, habitat fragmentation and the adequacy of ecological assessment. The interaction of habitat loss, disturbance and lighting impacts may have greater consequences for ecological networks than would be apparent from consideration of each impact in isolation.

8.13.19. The cumulative interaction of these impacts is particularly relevant when considering whether the proposal represents sustainable development. Whilst the Applicant relies heavily upon mitigation measures to reduce individual effects, the effectiveness of mitigation must also be considered in the context of the wider accumulation of environmental impacts arising across the site and surrounding area.

8.13.20. Accordingly, the proposal gives rise to a range of interrelated environmental effects which affect the same receptors simultaneously. The cumulative consequences for local communities, ecological networks, Green Belt land and the wider rural environment are materially greater than would be suggested by consideration of individual impact categories alone.

8.13.21. **The proposal would result in multiple environmental harms affecting the same communities, landscapes and ecological receptors simultaneously, creating cumulative impacts which are significantly greater than the sum of their individual parts.**

Wider Development Pressures

8.13.22. The cumulative impacts of the proposal should also be considered in the context of wider growth pressures affecting the Bristol city region and the transport corridors serving the Airport. Bristol Airport does not operate in isolation and relies upon a transport network which serves a rapidly growing population across North Somerset, Bristol, Bath and North East Somerset and South Gloucestershire.

8.13.23. The principal routes serving the Airport, including the A38 and associated strategic road network, already accommodate a wide range of traffic movements associated with residential, employment, commercial and recreational activity. These routes are also expected to experience additional pressure arising from planned and emerging development across the wider region.

8.13.24. Whilst individual development proposals will be assessed through their own planning processes, the existence of significant growth aspirations across the West of England highlights the importance of considering whether transport infrastructure and environmental capacity can continue to accommodate successive phases of airport expansion without giving rise to unacceptable cumulative effects.

8.13.25. Particular concern arises from the continued reliance of the Airport upon private car travel. As identified within this objection, the transport strategy remains dependent upon achieving ambitious modal shift targets and reducing the proportion of journeys undertaken by private vehicle. However, those assumptions become increasingly uncertain when considered alongside wider population growth, increasing travel demand and continuing pressure on the regional highway network.

8.13.26. The cumulative harm to Felton Common is also materially increased by the unresolved common land and compulsory acquisition implications of the proposal. The issue is not simply that airport infrastructure would affect a valued recreational and ecological space, but that the proposal may require the compulsory acquisition or statutory release of registered common land in order to facilitate further airport expansion. That adds a further layer of public interest harm, because the recreational, ecological, landscape and amenity impacts would be combined with interference with land subject to specific statutory protection and long-established community use.

8.13.27. Similar considerations arise in relation to environmental receptors. Increased development across the wider area may place additional pressure upon ecological networks, landscape character, recreational resources and environmental infrastructure. Whilst those impacts may not be directly attributable to the Airport, they form part of the wider context within which the environmental capacity of the area must be considered.

8.13.28. The proposal therefore falls to be assessed not simply against existing conditions, but against a backdrop of continued regional growth and increasing pressure upon transport infrastructure, environmental assets and public services. These wider growth pressures increase the importance of ensuring that airport expansion does not contribute to cumulative impacts which exceed the capacity of surrounding communities and the environment to accommodate them.

8.13.29. **The proposal would add further pressure to transport networks, environmental assets and local communities already facing the effects of significant regional growth, increasing the risk of unacceptable cumulative impacts.**

Climate Change and Aviation Growth

8.13.30. The cumulative impacts of the proposal must also be considered in the context of wider aviation growth across the United Kingdom. The current application does not arise in isolation. It follows the recently approved expansion of Bristol Airport to 12 mppa and seeks a further increase to 15 mppa, together with additional aircraft movements, night flights and supporting infrastructure.

8.13.31. At the same time, a number of other UK airports have either secured, or are actively pursuing, significant expansion proposals. Whilst each proposal is assessed individually through the planning process, the cumulative implications of multiple airport expansion schemes occurring concurrently are clearly relevant when considering national carbon reduction objectives and the transition towards net zero. As set out in the BAAN representations, the Environmental Statement fails to provide any meaningful assessment of these cumulative aviation growth effects, despite their obvious relevance to the significance of the proposal's greenhouse gas emissions..

8.13.32. The Climate Change Committee (CCC), which provides independent advice to Government on carbon budgets and net zero policy, has consistently identified aviation as one of the most difficult sectors to decarbonise. Unlike many other sectors of the economy, opportunities for rapid emissions reduction through electrification or technological substitution remain limited and remain dependent upon technological advances which have yet to be delivered at scale.

8.13.33. The CCC's advice on the Seventh Carbon Budget recognises that future growth in passenger demand can only be accommodated within a net-zero pathway if substantial progress is achieved in relation to sustainable aviation fuels, aircraft efficiency improvements and other decarbonisation measures. However, as explained in the BAAN submissions, there is increasing evidence that many of the assumptions underpinning the Jet Zero Strategy High Ambition Scenario, are no longer robust, creating significant uncertainty as to whether the projected emissions reductions can realistically be achieved.

8.13.34. The concern arising from the current proposal is therefore not simply the emissions associated with Bristol Airport in isolation, but whether the cumulative effect of successive airport expansion schemes across the United Kingdom can realistically be reconciled with national carbon reduction commitments.

8.13.35. This issue is particularly important because many of the assumptions underpinning aviation decarbonisation depend upon matters entirely outside the control of Bristol

Airport, including the commercial availability of sustainable aviation fuels, future aircraft technology, national energy infrastructure, international regulation and carbon offsetting mechanisms. The Applicant cannot guarantee that these assumptions will be realised, yet they form a fundamental part of the case advanced in support of the proposal.

8.13.36. Accordingly, the cumulative climate implications of the proposal extend beyond the direct effects of the development itself. They raise a broader question as to whether successive phases of airport expansion, both at Bristol Airport and nationally, are proceeding at a pace which exceeds the rate at which meaningful aviation decarbonisation can realistically be achieved.

8.13.37. **The proposal contributes to a wider pattern of cumulative aviation growth which risks outpacing the delivery of effective decarbonisation measures, creating significant uncertainty as to whether continued expansion remains compatible with national climate objectives and the transition to net zero.**

Transport, Noise and Economic Effects

8.13.38. The cumulative assessment should not be limited to physical development projects alone. The Environmental Impact Assessment process also requires consideration of the interaction of environmental effects and the combined consequences arising from the proposal.

8.13.39. The transport evidence contained within Appendix 3 identifies concerns regarding the realism of the proposed modal shift assumptions, continued reliance upon private car travel, increasing parking demand and the wider implications for the local highway network. These matters are directly relevant to Policies CS10, CS23, DM24 and DM50 and to paragraphs 110, 115 and 116 of the NPPF which seek to ensure that development is served by safe, suitable and sustainable transport arrangements.

8.13.40. The noise evidence contained within Appendix 5 identifies concerns regarding increasing aircraft noise exposure, night-time disturbance and the adequacy of aspects of the Applicant's assessment methodology. Noise impacts interact with wider issues relating to residential amenity, health and wellbeing and are relevant to paragraph 198 of the NPPF together with Policies CS3, CS23 and DM50.

8.13.41. The economic evidence contained within Appendix 4 accepts that the Airport generates economic activity but questions aspects of the Applicant's assessment of

employment, productivity and wider economic benefits. The report highlights the importance of considering claimed economic benefits alongside the environmental, social and climate-related costs associated with continued airport expansion.

8.13.42. These findings reinforce the broader conclusion that the proposal would not simply generate isolated transport, noise, economic, ecological, climate change and landscape effects. Rather, the same communities would experience increased aircraft activity, additional traffic, greater noise exposure, increased lighting effects, loss of tranquillity, pressure on environmental resources and continuing urbanisation of the surrounding countryside. Equally, the claimed economic benefits cannot properly be considered in isolation from the environmental and social costs arising from the development.

8.13.43. **The cumulative interaction of these effects is materially more significant than the assessment of individual topics in isolation and further reinforces concerns regarding whether expansion beyond the approved 12 mppa position can occur without causing progressively greater conflict with the objectives of the Development Plan and the NPPF.**

Overall Conclusion on Cumulative Impact

8.13.44. The Environmental Statement assesses cumulative and combined effects largely within individual technical chapters and treats the approved 12 mppa expansion as part of the future baseline. Whilst this approach follows the Applicant's chosen EIA methodology, it has the effect of fragmenting cumulative impacts across multiple technical disciplines and risks understating the overall significance of the environmental effects arising from successive phases of airport expansion. It also means that important cumulative issues, including the wider climate implications of successive airport expansion, are not assessed holistically. The cumulative consequences of growth from 10 mppa to 12 mppa and now to 15 mppa are therefore not fully assessed in the round, nor are they clearly presented as a single overall planning judgement for decision-makers.

8.13.45. The proposal therefore falls to be assessed not only in terms of its individual environmental effects, but also in the context of the cumulative consequences of airport growth from 10 mppa to 12 mppa and now to 15 mppa. The cumulative implications of that growth are experienced through the interaction of increased aircraft activity, traffic generation, parking demand, noise, lighting, ecological impacts,

climate effects and continuing encroachment into the Green Belt and surrounding countryside.

8.13.46. The Applicant has not demonstrated that the cumulative environmental consequences of successive phases of airport expansion can be accommodated without unacceptable harm to the environment, surrounding communities, ecological interests, transport networks and the purposes of the Green Belt.

8.13.47. **The cumulative impacts of the proposal are substantially greater than the sum of their individual parts. When considered alongside the approved 12 mppa expansion and assessed as a whole rather than through individual technical disciplines, the combined effects of airport growth weigh heavily against the proposal and further demonstrate that continued expansion at Bristol Airport is approaching the environmental limits of what can be sustainably accommodated at this location.**

9. PLANNING BALANCE AND CONCLUSIONS

9.1. OVERVIEW OF THE PROPOSAL

9.1.1. The application seeks permission for a substantial further expansion of Bristol Airport beyond the recently approved 12 million passengers per annum ("mppa") position. The proposals would facilitate growth to 15 mppa and comprise a package of interrelated development including a runway extension, additional aircraft parking stands, taxiway works, expanded passenger and operational infrastructure, additional parking provision, lighting infrastructure, highway works and development affecting Green Belt land and environmentally sensitive areas including Felton Common.

9.1.2. The application therefore represents a significant further phase of airport growth which would increase passenger numbers, aircraft activity, surface access movements and supporting infrastructure requirements. The proposal must be considered against the Development Plan, the National Planning Policy Framework ("NPPF"), the Habitats Regulations and all other material considerations.

9.1.3. Throughout this objection concerns have been identified regarding biodiversity, sustainable transport, Green Belt protection, landscape character, climate change, noise, lighting, public amenity, cumulative impacts and the adequacy of mitigation measures. The purpose of this concluding chapter is to consider those matters in the planning balance.

9.2. SUSTAINABLE DEVELOPMENT

9.2.1. The National Planning Policy Framework makes clear that the purpose of the planning system is to contribute to the achievement of sustainable development. This requires the economic, social and environmental objectives of the planning system to be pursued in a mutually supportive manner and for development proposals to be considered against the policies of the Development Plan and the Framework as a whole.

9.2.2. The Applicant contends that expansion of Bristol Airport to 15 million passengers per annum represents a sustainable form of development which would deliver economic benefits, improve connectivity and support the regional economy. Whilst

those benefits are acknowledged, they do not in themselves determine whether the proposal constitutes sustainable development.

9.2.3. As set out in Chapters 8.2 and 8.5 of this objection, significant concerns remain regarding the potential effects of the proposal upon the North Somerset and Mendip Bats SAC and associated functionally linked habitat. The objection has identified concerns regarding habitat loss, habitat degradation, lighting impacts, ecological connectivity and the extent to which reliance is placed upon future mitigation and compensation measures.

9.2.4. In light of those concerns, it has not been demonstrated beyond reasonable scientific doubt that adverse effects upon the integrity of the SAC can be excluded. The precautionary approach required by the Habitats Regulations and established case law therefore remains engaged.

9.2.5. Paragraph 195 of the NPPF states that the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site, either alone or in combination with other plans or projects, unless an Appropriate Assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site. In this case, the need for Appropriate Assessment is itself a clear indication that paragraph 195 is engaged. For the reasons set out in Chapters 8.2 and 8.5, it has not been demonstrated beyond reasonable scientific doubt that adverse effects on the integrity of the North Somerset and Mendip Bats SAC can be excluded.

9.2.6. The proposal also engages a number of the policies and assets identified within Footnote 7 of the NPPF, including an internationally protected habitats site and Green Belt land. Consequently, the proposal falls to be considered within the context of paragraph 11(d)(i) of the NPPF, which recognises that the presumption in favour of sustainable development may be displaced where policies protecting such assets provide a clear reason for refusing the development proposed.

9.2.7. In this case, the concerns identified regarding the North Somerset and Mendip Bats SAC, together with the significant Green Belt impacts arising from the proposal, constitute matters of substantial importance in determining whether the proposal can properly be regarded as sustainable development.

9.2.8. The significance of this issue extends beyond ecology alone. The proposal would also result in further development within the Green Belt, additional traffic generation, increased noise exposure, climate change impacts, landscape and

tranquillity effects, lighting impacts and the continuing urbanisation of the rural environment surrounding the Airport. These impacts are not isolated considerations but form part of the overall assessment of whether the proposal represents sustainable development.

9.2.9. Particular concern arises from the continued expansion of airport-related parking provision and supporting infrastructure. The proposal would facilitate further growth in passenger numbers whilst remaining heavily reliant upon private car travel. As identified within the transport evidence, there is a significant risk that additional parking provision and associated infrastructure could reinforce car-based travel patterns and reduce the incentive to deliver the transformational modal shift upon which the Applicant's sustainability case depends.

9.2.10. The proposal must also be considered in the context of successive phases of airport expansion. The current application follows the recently approved increase to 12 mppa and seeks a further increase to 15 mppa. The cumulative environmental consequences of that growth, including impacts upon ecological interests, transport infrastructure, climate objectives, landscape character and local communities, further call into question whether continued expansion can properly be regarded as sustainable development.

9.2.11. Whilst the proposal is capable of delivering economic and connectivity benefits, those benefits must be balanced against the environmental constraints affecting the site and the statutory protections afforded to internationally important ecological interests. Sustainable development cannot be achieved simply through economic growth where significant uncertainty remains regarding compliance with the Habitats Regulations and where substantial environmental harms would arise.

9.2.12. Taking all relevant matters into account, the proposal does not constitute sustainable development when assessed against the Development Plan, the NPPF and the wider objectives of environmental protection. The proposal gives rise to significant conflict with policies relating to internationally protected habitats, Green Belt protection, sustainable transport, climate change and environmental quality. The concerns identified regarding the North Somerset and Mendip Bats SAC, the application of paragraph 195 of the NPPF and the protections afforded by Footnote 7 are of particular significance and attract very substantial weight against the proposal within the overall planning balance.

9.3. CLAIMED BENEFITS OF THE PROPOSAL

9.3.1. The Airport plays an important role within the regional economy and the application is supported by evidence which identifies economic benefits associated with continued airport growth. These include employment opportunities, expenditure within the local economy, business connectivity, tourism expenditure and wider economic activity associated with airport operations.

9.3.2. The proposal would also contribute towards the Government's objective of making best use of existing airport infrastructure and would increase passenger capacity within an established airport location. Improved connectivity and increased route opportunities are capable of attracting weight as material considerations in favour of the development.

9.3.3. It is acknowledged that Bristol Airport already makes an important contribution to the economy of the South West and that further growth may generate additional economic activity and employment opportunities.

9.3.4. However, as identified within Appendix 4, the economic benefits claimed by the Applicant should not automatically be assumed to represent net economic gains. The economic evidence submitted on behalf of the Objector raises legitimate questions regarding aspects of the Applicant's methodology and highlights the importance of considering economic benefits alongside the environmental, social and climate-related costs associated with continued airport expansion.

9.3.5. The economic and connectivity benefits of the proposal are therefore capable of attracting weight in favour of the development. However, those benefits must be assessed alongside the significant environmental and planning harms identified throughout this objection.

9.4. SIGNIFICANT HARMS ARISING FROM THE PROPOSAL

9.4.1. Notwithstanding the benefits identified above, the proposal would give rise to a range of significant environmental and planning harms which attract substantial weight in the planning balance. These harms are considered in detail throughout Chapter 8 of this objection and are summarised below.

Biodiversity and Internationally Protected Habitats

9.4.2. The most significant concern relates to the potential effects of the proposal upon the North Somerset and Mendip Bats SAC and associated functionally linked habitat. As set out in Chapter 8.2 and Chapter 8.5, significant uncertainty remains regarding habitat loss, habitat degradation, lighting impacts and the effectiveness of proposed mitigation measures.

9.4.3. The objection has identified concerns regarding the adequacy of the ecological assessment, the reliance upon mitigation and compensation measures, and the extent to which the Applicant has demonstrated beyond reasonable scientific doubt that adverse effects upon the integrity of the SAC can be excluded. Given the international importance of the designated site and the statutory protections afforded to it, these concerns attract very substantial weight in the planning balance.

Green Belt

9.4.4. The proposal would result in further development within the Bristol–Bath Green Belt, including airport infrastructure, operational development and parking-related development extending into areas of open countryside. As assessed against Chapter 13 of the NPPF, the proposal would result in harm to openness, contribute towards urbanisation and conflict with the fundamental aim of Green Belt policy.

9.4.5. Whilst the Applicant seeks to rely upon Grey Belt and Very Special Circumstances arguments, the objection concludes that those arguments have not been adequately justified. Harm to the Green Belt attracts substantial weight against the proposal.

Transport and Surface Access

9.4.6. The proposal relies upon achieving ambitious modal shift targets whilst simultaneously facilitating continued growth in passenger numbers and associated travel demand. Concerns have been identified regarding the realism of the proposed transport strategy, the continued reliance upon private car travel and the implications of additional parking provision.

9.4.7. The independent transport review contained within Appendix 3 identifies concerns regarding key assumptions underpinning the Applicant's case and raises

questions regarding the long-term deliverability of the proposed surface access strategy. These concerns attract moderate to substantial weight against the proposal.

Noise, Amenity and Health

9.4.8. Increased passenger numbers, aircraft activity and night-time operations would inevitably increase the extent to which local communities are exposed to aircraft noise and associated disturbance. The independent noise review contained within Appendix 5 raises concerns regarding aspects of the Applicant's assessment and identifies potential impacts upon residential amenity and quality of life.

9.4.9. These impacts are closely linked to wider considerations relating to health, wellbeing and living conditions and attract moderate weight against the proposal.

Landscape, Tranquillity and Felton Common

9.4.10. The proposal would result in further urbanisation of the rural environment surrounding the Airport through the introduction of additional infrastructure, lighting, operational development and associated activity. Harm has been identified in relation to landscape character, tranquillity and the setting of the Mendip Hills National Landscape.

9.4.11. Particular concerns arise in relation to Felton Common, where the proposal would affect a valued area of common land through the introduction of approach lighting infrastructure and associated airport development. The combined ecological, recreational, landscape and amenity impacts affecting Felton Common attract substantial weight against the proposal.

9.4.12. Separate weight should also be attached to the implications for Felton Common as registered common land. Beyond the environmental impacts already identified, the proposal would require the permanent loss of part of the Common together with the extinguishment of public and commoners' rights, matters which engage separate statutory protections and wider public interest considerations. The Applicant has not demonstrated that these issues have been satisfactorily resolved or that equivalent replacement land has been secured. These matters therefore represent an additional planning harm weighing against the grant of planning permission.

Climate Change

9.4.13. The proposal would facilitate further growth in aviation activity and associated greenhouse gas emissions at a time when significant uncertainty remains regarding the delivery of effective aviation decarbonisation measures. Whilst national policy supports making best use of existing airport infrastructure, that support is contingent upon aviation growth remaining compatible with wider climate objectives.

9.4.14. The objection has identified concerns regarding the extent to which continued airport expansion can be reconciled with national carbon reduction commitments and net zero objectives. These concerns attract moderate to substantial weight against the proposal.

9.4.15. The weight to be attached to the climate impacts of the proposal is further increased by the deficiencies identified within the Environmental Statement. As discussed in Section 8, the assessment fails to present a complete picture of the proposal's greenhouse gas impacts, including the omission or inadequate assessment of well-to-tank emissions, non-CO_2 aviation effects and cumulative emissions arising from airport expansion elsewhere. It also relies upon assumptions within the Jet Zero Strategy that are increasingly recognised as uncertain. Consequently, the Council cannot be satisfied that the full climate consequences of the proposal have been properly assessed, reducing confidence in the Applicant's overall environmental case and attracting additional weight against the development.

Cumulative Impacts

9.4.16. The proposal must be considered not only in terms of its individual environmental effects but also in the context of the cumulative consequences of successive phases of airport expansion. As set out in Chapter 8.16, the proposal represents a further phase of growth beyond the approved 12 mppa position and forms part of a wider pattern of continuing airport expansion.

9.4.17. The cumulative impacts arising from increased aircraft activity, traffic generation, noise, lighting, ecological effects, climate impacts, Green Belt encroachment and loss of tranquillity are materially greater than would be suggested by consideration of individual topics in isolation. These cumulative effects attract substantial weight against the proposal.

9.4.18. Taken together, these harms demonstrate that the proposal would result in unacceptable impacts upon internationally protected habitats, the Green Belt, landscape character, tranquillity, transport networks, climate objectives and local communities. The cumulative weight of these harms is substantial and weighs heavily against the grant of planning permission.

9.5. **Overall Planning Balance**

9.5.1. The economic and connectivity benefits associated with Bristol Airport are acknowledged and attract weight in favour of the proposal. The Airport plays an important role within the regional economy and there is no dispute that airport operations support employment, tourism, inward investment and business connectivity across the South West.

9.5.2. The proposal would also contribute towards the Government's objective of making best use of existing airport infrastructure and would increase passenger capacity from an established airport location. These are material considerations which weigh in favour of the development.

9.5.3. However, the planning balance cannot be determined solely by reference to economic benefits or passenger demand. The application must be assessed against the Development Plan, the Habitats Regulations, the National Planning Policy Framework and all other material considerations.

9.5.4. The most significant issue arising from the proposal relates to the North Somerset and Mendip Bats SAC and associated functionally linked habitat. As set out in Chapters 8.2 and 8.5, significant uncertainty remains regarding habitat loss, habitat degradation, lighting impacts, ecological connectivity and the effectiveness of proposed mitigation measures. On the evidence currently before the Council, it has not been demonstrated beyond reasonable scientific doubt that adverse effects upon the integrity of the SAC can be excluded.

9.5.5. Paragraph 195 of the NPPF is therefore directly engaged. In these circumstances, the presumption in favour of sustainable development does not apply. The proposal also engages the protections identified within Footnote 7 of the NPPF, including internationally protected habitats and Green Belt land. Paragraph 11(d)(i) is therefore relevant and the application of policies protecting those assets provides a strong reason for refusing the development proposed.

9.5.6. The significance of these matters extends beyond ecology alone. The proposal would result in further development within the Green Belt, causing harm to openness and contributing towards the continued urbanisation of the countryside. The justification advanced in relation to Grey Belt and Very Special Circumstances does not outweigh the identified harm and conflict with Green Belt policy.

9.5.7. Further concern arises from the limited consideration of alternative approaches capable of reducing environmental harm. As set out in Chapter 8.14, the application has not adequately demonstrated that less harmful alternatives have been fully explored, particularly in relation to airport parking provision. The continued expansion of surface parking areas within the Silver Zone results in significant Green Belt, landscape, lighting and transport impacts, yet the potential for additional decked or multi-storey parking provision within the existing operational airport area has not been robustly assessed. This undermines the Applicant's contention that the extent of Green Belt development proposed is necessary.

9.5.8. Similar concerns arise in relation to transport and sustainability. The application relies upon ambitious modal shift assumptions whilst simultaneously facilitating continued growth in passenger numbers and substantial additional parking provision. The evidence before the Council does not provide sufficient confidence that the proposed transport strategy can achieve the level of behavioural change upon which the Applicant's sustainability case depends. Indeed, the continued expansion of airport-related parking infrastructure risks reinforcing private car dependency and reducing the incentive to deliver the transformational modal shift that is required.

9.5.9. Concerns also arise in relation to climate change. The case for expansion relies heavily upon future improvements in aircraft technology, sustainable aviation fuels and wider sectoral decarbonisation measures. Whilst such measures may contribute towards emissions reductions, significant uncertainty remains regarding their timing, availability, affordability and effectiveness. The information submitted does not satisfactorily demonstrate that the proposed level of growth can be reconciled with the environmental objectives relied upon by the Applicant.

9.5.10. Particular weight should be afforded to the impacts arising at Felton Common. The proposal would introduce airport infrastructure and approach lighting into an area of valued common land, giving rise to ecological, landscape, recreational and amenity impacts. Felton Common performs an important function for local

communities and contributes to the rural setting of the Airport. The proposal would fundamentally alter the character of this area and represents one of the clearest examples of the cumulative consequences of continued airport expansion.

9.5.11. The proposal would result in increased aircraft activity, including additional night-time operations, giving rise to further noise impacts upon surrounding communities. The independent noise evidence contained within Appendix 5 raises concerns regarding aspects of the Applicant's assessment and identifies potential impacts upon residential amenity, health and wellbeing. These impacts attract additional weight against the proposal.

9.5.12. The proposal would also result in harm to landscape character, tranquillity and the rural setting of the Airport. As set out in Chapter 8.4, continued airport expansion would contribute towards the urbanisation of the surrounding countryside and adversely affect the qualities which underpin the setting of the Mendip Hills National Landscape. These impacts carry further weight against the proposal.

9.5.13. The effects upon local communities extend beyond noise and landscape considerations alone. Increased activity, lighting, traffic movements and operational development would collectively affect residential amenity, health and wellbeing and further diminish the environmental quality of the surrounding area.

9.5.14. Particular weight must also be attached to the cumulative effects of the development. The current application represents a further phase of airport expansion beyond the recently approved 12 mppa position and seeks to facilitate growth to 15 mppa through additional infrastructure, parking provision and operational development. Whilst the Environmental Statement contains cumulative assessments within individual technical chapters, it does not provide a robust assessment of the overall cumulative consequences of successive phases of airport expansion when considered in the round. This is despite North Somerset Council specifically identifying cumulative impacts as a key issue during the EIA Scoping process. In addition, significant shortcomings remain in the assessment of climate impacts, including the treatment of greenhouse gas emissions, reliance upon uncertain decarbonisation assumptions and the failure to adequately assess the cumulative climate consequences of airport expansion. The application also leaves unresolved important issues relating to the statutory protection, proposed acquisition and use of registered common land at Felton Common. Consequently, the overall significance of the environmental effects arising from the proposal has not been fully assessed or presented as a single planning judgement.

9.5.15. The proposal must therefore be assessed against a background of unresolved ecological concerns, substantial Green Belt harm, uncertainty regarding the deliverability of the transport strategy, significant climate change impacts, impacts upon registered common land, landscape character, tranquillity and amenity, together with the cumulative consequences of continuing airport expansion. These are not peripheral matters. They are fundamental considerations which go to the heart of whether the proposal represents sustainable development.

9.5.16. Taking all relevant matters into account, the proposal is not sustainable development when assessed against the Development Plan and the NPPF as a whole. The proposal conflicts with the environmental objective of sustainable development, engages the protections identified within Footnote 7 of the NPPF and gives rise to significant harm to internationally protected habitats, the Green Belt, transport sustainability, climate objectives, landscape character, public amenity and local communities.

9.5.17. Even if moderate positive weight is attributed to the economic, employment and connectivity benefits advanced by the Applicant, those benefits do not outweigh the very substantial harms identified throughout this objection. The planning balance weighs decisively against the proposal and planning permission should therefore be refused.

9.5.18. Whilst the planning balance is ultimately a matter of planning judgement, the principal benefits and harms identified throughout this objection can be summarised as set out in Table 9.1 below:

Matter	**Weight in Planning Balance**
BENEFITS	
Economic benefits and employment generation	Moderate Weight
Business connectivity and accessibility	Moderate Weight
Tourism expenditure and support for the regional economy	Moderate Weight
Making best use of existing airport infrastructure	Moderate Weight
HARMS	
North Somerset and Mendip Bats SAC, Habitats Regulations and Paragraph 195 of the NPPF	Substantial Weight

Matter	Weight in Planning Balance
Proposal does not constitute sustainable development when assessed against the Development Plan and the NPPF as a whole	Substantial Weight
Green Belt harm and conflict with Green Belt policy	Substantial Weight
Impacts upon Felton Common	Substantial Weight
Cumulative impacts arising from successive phases of airport expansion	Substantial Weight
Transport and surface access impacts	Substantial Weight
Climate change impacts	Substantial Weight
Landscape, tranquillity and impacts upon the setting of the Mendip Hills National Landscape	Substantial Weight
Noise, amenity, health and wellbeing impacts	Substantial Weight

Overall Conclusion

9.5.19. Taking all relevant matters into account, the proposal would result in unacceptable harm to internationally protected habitats, the Green Belt, Felton Common, landscape character, tranquillity, residential amenity, transport sustainability and climate objectives. The Applicant has not demonstrated compliance with the Habitats Regulations or paragraph 195 of the NPPF, has not justified the extent of Green Belt development proposed, has not shown that less harmful alternatives have been fully explored and has not satisfactorily addressed the cumulative consequences of successive phases of airport expansion. The proposal does not constitute sustainable development when assessed against the Development Plan and the NPPF as a whole. The harms arising from the proposal significantly outweigh its benefits and planning permission should therefore be refused.

10. PRINCIPAL REASONS WHY PERMISSION SHOULD BE REFUSED

10.1.1. The principal reasons why planning permission should be refused are summarised below. These reasons draw together the conclusions reached throughout this objection and identify the matters which, individually and collectively, justify refusal of the application.

Reason for Refusal 1

10.1.2. The proposal does not constitute sustainable development when assessed against the Development Plan and the National Planning Policy Framework as a whole. The proposal engages paragraph 195, Footnote 7 and paragraph 11(d)(i) of the NPPF and gives rise to substantial harm to internationally protected habitats and Green Belt land. The application of policies in the Framework which protect areas and assets of particular importance provides a strong reason for refusing the development proposed. The harms arising from the proposal significantly outweigh the benefits advanced by the Applicant. The proposal is therefore contrary to paragraphs 11(d)(i) and 195 of the NPPF, Policies CS4, CS6 and CS23 of the North Somerset Core Strategy, and Policies DM8, DM12 and DM50 of the Sites and Policies Plan Part 1.

Reason for Refusal 2

10.1.3. The Applicant has failed to demonstrate beyond reasonable scientific doubt that the proposal would not adversely affect the integrity of the North Somerset and Mendip Bats Special Area of Conservation, either alone or in combination with other plans and projects. Significant uncertainty remains regarding the loss and degradation of functionally linked habitat, ecological connectivity, lighting impacts and the effectiveness, timing and long-term deliverability of proposed mitigation, compensation and habitat creation measures. The proposal therefore fails to satisfy the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended) and paragraph 195 of the NPPF, and is contrary to Policies CS4 of the North Somerset Core Strategy and Policy DM8 of the Sites and Policies Plan Part 1.

Reason for Refusal 3

10.1.4. The proposal would constitute inappropriate development within the Bristol and Bath Green Belt. Paragraph 153 of the National Planning Policy Framework states that inappropriate development is, by definition, harmful to the Green Belt and

should not be approved except in very special circumstances. The development would result in substantial additional harm to the openness of the Green Belt through the extension and intensification of airport-related development onto currently undeveloped land, including land at Cook's Farm, Felton Common and the Silver Zone, and would contribute to the continued urbanisation of the countryside and encroachment into open rural land. The Applicant has failed to demonstrate that the land affected by the proposal meets the definition of Grey Belt contained within the National Planning Policy Framework and has failed to demonstrate the existence of very special circumstances. In particular, it has not been shown that the potential harm to the Green Belt, and any other harm resulting from the proposal, would be clearly outweighed by other considerations. Furthermore, insufficient consideration has been given to less harmful alternatives capable of reducing Green Belt impacts, including the provision of additional decked or multi-storey parking within the existing operational airport area. The proposal is therefore contrary to paragraphs 142, 143, 153, 154, 155 and 156 of the National Planning Policy Framework, Policies CS6 and CS23 of the North Somerset Core Strategy and Policy DM12 and DM50 of the Sites and Policies Plan Part 1.

Reason for Refusal 4

10.1.5. The proposal would result in significant harm to landscape character, tranquillity, dark skies and the rural character of the area surrounding Bristol Airport. The introduction of additional airport infrastructure, operational activity, aircraft movements, lighting and associated development would further urbanise the countryside and adversely affect the setting of the Mendip Hills National Landscape. The proposal would erode the key qualities which contribute to the distinctiveness, scenic quality, tranquillity and environmental value of the surrounding landscape. Furthermore, the proposal would not further the purposes of the Mendip Hills National Landscape and would conflict with the statutory duty under Section 245 of the Levelling-up and Regeneration Act 2023 requiring decision-makers to seek to further the purpose of conserving and enhancing the natural beauty of National Landscapes. The proposal would also fail to accord with paragraph 189 of the NPPF which requires great weight to be given to conserving and enhancing landscape and scenic beauty. The proposal is therefore contrary to paragraphs 135, 189 and 198 of the National Planning Policy Framework, Section 245 of the Levelling-up and Regeneration Act 2023, Policies CS5 and

CS23 of the North Somerset Core Strategy and Policies DM10, DM11 and DM50 of the Sites and Policies Plan Part 1.

Reason for Refusal 5

10.1.6. The proposal would result in significant adverse effects upon residential amenity, health, wellbeing and environmental quality through increased aircraft activity, lower aircraft approaches, noise, lighting, air pollution, ultrafine particle emissions and the loss of tranquillity experienced by surrounding communities. The scale of growth proposed would intensify the effects of airport operations upon nearby residents and has not been demonstrated to avoid or adequately mitigate the resulting impacts on health, quality of life and community wellbeing. The proposal is therefore contrary to paragraphs 96, 135 and 198 of the National Planning Policy Framework, Policies CS3 and CS23 of the North Somerset Core Strategy and Policies DM32 and DM50 of the Sites and Policies Plan Part 1.

Reason for Refusal 6

10.1.7. The proposal would result in significant harm to Felton Common through the introduction of airport infrastructure, approach lighting and associated operational development. In addition to ecological, recreational, amenity and wellbeing impacts, the proposal would affect an important area of protected common land and Local Nature Reserve and would result in the permanent loss of common land for airport purposes. The application has failed to demonstrate that these impacts are justified, that suitable replacement land can be secured, or that the recreational, environmental and public value of the Common would be maintained. The proposal would fundamentally alter the character and function of Felton Common as an area of publicly accessible open land and would diminish its value for recreation, biodiversity and community wellbeing. The proposal is therefore contrary to paragraphs 104 and 135 of the National Planning Policy Framework, Policies CS5 and CS23 of the North Somerset Core Strategy and Policies DM10, DM11 and DM50 of the Sites and Policies Plan Part 1.

Reason for Refusal 7

10.1.8. The proposal relies upon ambitious public transport and modal shift assumptions whilst facilitating continued growth in passenger numbers, aircraft movements and airport parking provision. The information submitted does not demonstrate that the proposed surface access strategy is realistic, deliverable or capable of achieving

the level of behavioural change upon which the Applicant's sustainability case depends. Significant uncertainty remains regarding the deliverability of the proposed modal share targets, the effectiveness of the proposed mitigation measures and the extent to which the proposed level of growth can be accommodated without increasing reliance upon private car travel. The proposal would therefore reinforce car-dependent travel patterns and undermine the achievement of a genuinely sustainable transport strategy. Furthermore, the proposal would result in increased aviation and surface transport emissions and relies heavily upon future technological change, Sustainable Aviation Fuel and other measures whose effectiveness, availability and timing remain uncertain. The proposal is therefore contrary to paragraphs 115 and 116 of the National Planning Policy Framework, Policies CS1, CS3, CS10 and CS23 of the North Somerset Core Strategy and Policies DM24 and DM50 of the Sites and Policies Plan Part 1.

Reason for Refusal 8

10.1.9. The cumulative environmental consequences of successive phases of airport expansion have not been satisfactorily addressed. The proposal must be considered in the context of growth from 10 million passengers per annum to 12 million passengers per annum and now to 15 million passengers per annum. When assessed in accordance with the principles of the Environmental Impact Assessment Regulations, the ecological impacts, Green Belt harm, transport impacts, noise, lighting, climate change effects, landscape impacts, loss of tranquillity and effects on local communities would result in significant adverse cumulative environmental effects. The proposal is therefore contrary to the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 relating to the assessment of cumulative and interrelated environmental effects, conflicts with the environmental objective of sustainable development and the National Planning Policy Framework when read as a whole, and is contrary to Policies CS1, CS3, CS4, CS5, CS6, CS10 and CS23 of the North Somerset Core Strategy and Policies DM8, DM9, DM10, DM11, DM12, DM24 and DM50 of the Sites and Policies Plan Part 1.

11. APPENDICES

Appendix 1 – Save Felton Common Biodiversity Impacts Report

26/P/0686/OU2

HYBRID APPLICATION FOR THE EXPANSION OF BRISTOL AIRPORT

BIODIVERSITY IMPACTS ON FELTON COMMON

1 INTRODUCTION

This report has been prepared on behalf of Winford Parish Council by Rupert Higgins BSc (Hons) MCIEEM. I have worked in the Bristol region as an ecologist for 40 years, over 35 of these as a consultant. I have worked on a wide variety of contracts, including major infrastructure projects such as road schemes and power station construction as well as a wide range of smaller projects. My professional involvement with Felton Common began in 2014, when I began a series of ecological surveys and management plans for Winford Council, although I have been familiar with the site for much longer. I have extensive experience of species identification and habitat evaluation – away from my professional work I am County Bird Recorder for Avon, joint Vice-county Vascular Plant Recorder for West Gloucestershire and co-author of books and publications dealing with vascular plants, bryophytes, birds and a range of invertebrate groups in the region.

This report deals solely with impacts on the biodiversity of Felton Common arising from this proposal. Felton Common is designated as a Site of Nature Conservation Importance (SNCI) and is of high importance for biodiversity. Impacts on the site therefore have to be considered under Policy CS4 of the North Somerset Core Strategy, which includes the following provisions:

"*3.70 Policy CS4 recognises the importance of locations supporting priority habitats, and also networks of habitats, designated or not, ancient woodlands and veteran trees. The policy seeks to protect and enhance biodiversity as a whole but particularly at those valuable locations, and locations where development occurs. The policy is consistent with the aims of South West Nature Map - A Planner's Guide by Biodiversity South West (February 2007), which refers to Strategic Nature Areas that represent the best areas to maintain and expand wildlife habitats through their management, restoration and/or re-creation.*

3.71 Development proposals will be carefully assessed to ensure protection and enhancement of biodiversity, including retention and incorporation of important features, using conditions and or planning obligations to mitigate any potentially adverse impacts.

3.72 The council will have close regard to its duty under the Natural Environment and Rural Communities (NERC) Act, to have regard to the purpose of conserving biodiversity in exercising its functions, so far as is consistent with the proper exercising

of those functions. This includes the need to consider habitats and species of principal importance in England as set out in section 41 of the NERC Act.

3.73 Planning applications which have the potential to impact on biodiversity will need to be accompanied by ecological surveys which incorporate a biodiversity impact assessment, describing the biodiversity interest of the site, and the nature and extent of any impact of the proposed development. They should outline any mitigation measures and the steps to be taken to retain, incorporate, protect, enhance and where appropriate manage the biodiversity interest, as part of the proposals."

The need to fully consider impacts on sites with non-statutory designations and on wider biodiversity was emphasised in the consultation response from Natural England.

2 SUMMARY

I demonstrate below that the evaluation of the potential impacts associated with the proposal are based on a consideration of the overall biodiversity value of Felton Common and survey of the areas of the Common that would be affected by the proposals that are both significantly incomplete, leading to an inadequate assessment of potential impacts on the Common.

- The failure to give potential impacts on the Common the attention that they deserve is highlighted by a number of omissions within the Environmental Statement (ES), including:
- Failure to acknowledge that the Common supports Priority Species and a Priority Habitat listed in Section 41 of the NERC Act.
- A vegetation survey at a time of year acknowledged to be sub-optimal, despite a data-gathering period that encompassed two full survey seasons.
- An incomplete assessment of the vegetation and bird and invertebrate populations present within the part of the Common that falls within application site and within the areas of the Common that would undergo indirect impacts.
- A failure to address whether Lowland Dry Acidic Grassland, a Section 41 Priority Habitat Type, is present within the application site.
- A failure to fully consider indirect impacts on the biodiversity interest of the Common.

The failure to fully consider the biodiversity interest of Felton Common, both within and surrounding the application site, means that potential impacts have been given inadequate weight, dismissed or not considered within the ES. These omissions result in the ES failing in its primary aim, of giving the local planning authority sufficient information to come to a fully informed decision.

3 BASELINE CONDITIONS

3.1 Introduction

3.1.1 Vegetation

Felton Common supports biodiversity resources that are important in a North Somerset context. In particular, it is the only area of lowland dry acidic grassland (listed in Section 41 of the Natural Environment and Rural Communities Act 2016 as a Priority Habitat) that remains in North Somerset and is mapped as such by Natural England. The only other areas mapped as this habitat type in the former County of Avon are at Rodway Hill and Siston Common, on the eastern edge of Bristol. Felton Common supports a wide range of plant species that are characteristic of this habitat type and are therefore rare in North Somerset and in surrounding areas. It also supports smaller area of lowland calcareous grassland, mixed scrub and bluebell- and bracken-dominated areas. It is designated as a SNCI in recognition of this interest; it is also designated as a Local Nature Reserve (LNR). This is a statutory designation that recognises a site's importance and requires that is should be managed to promote its nature conservation and amenity interests; both features would be damaged by this proposal.

The part of the Common within the application site supports seven vascular plant species that are strongly indicative of lowland dry acidic grassland, together with a further 13 species and a moss species that are characteristic of the habitat, together with another three species that are associated with species-rich grasslands as a whole. Some of these species, such as pill sedge, slender St John's wort, bitter vetch and heath milkwort, are rare in North Somerset as a whole. These plants are included in the species lists at Appendix 2 of this report.

3.1.2 Fauna

The Common is an important site for birds, and supports locally important populations of Section 41 Priority Species including skylark, linnet and yellowhammer. There has been a limited amount of invertebrate survey on the Common, but species of interest that have been recorded here include the click beetle *Ctenicera cuprea*, which is otherwise rare in lowland England (a distribution map is included as Appendix 1). The presence of this species, detected from a very limited amount of survey work by myself, highlights the unusual nature of the habitat present on the Common and its importance as a stepping stone between comparable habitats on Dartmoor and in Wales.

3.1.2 Fungi

Fungi have also been subject to very little survey work on the Common, but brief surveys by myself in the autumn of 2025 recorded 15 species of waxcap, meaning that the Common is of high importance for grassland fungi. This is a group of

organisms for which Britain is of international significance, and one of the species found here, pink waxcap, is listed by the International Union for the Conservation of Nature (IUCN) as threatened.

3.2 Treatment in ES

3.2.1 General

Although the ES acknowledges that Felton Common is designated as a SNCI and that one of the key features of the SNCI is its species-rich grassland, an area of which will be directly affected, its description of the habitats that would be affected directly or indirectly, is restricted to a brief section in an appendix and is inadequate (see Appendix 2 of this report below). This means that a meaningful assessment of the scale of impact on the Common has not been carried out.

3.2.2 Survey Limitations

The incomplete assessment of the Common within the ES is in part because the only survey of the area by the applicants was carried out late in the survey season, as acknowledged at 3.2.2 of the ES:

“Felton common was surveyed at the end of September 2025, the site had recently been cut. As a result some species could have been missed, both due to the time of year and from recent management activities. However, species were still flowering and the survey was competent in vegetive plant identification.”

There is no justification for delaying the survey until a time of year that is acknowledged to be sub-optimal, since 5.4.4 of chapter 5 states that “a comprehensive suite of ecological surveys…were undertaken between March 2024 and October 2025…” There was therefore an opportunity to survey the Common over two full survey seasons. Carrying out a survey after a grassland has been cut severely limits the ability of even a competent surveyor to provide a comprehensive species list and evaluation; this failing was not acknowledged in the ES.

3.2.3 Overall assessment of the Common

The descriptive elements of the ES are entirely lacking of any assessment of the SNCI: there is a single sentence at 5.6.20 that completely fails to adequately describe or assess the biodiversity value of the part of the Common that lies within the application site. No consideration of the value of the Common as a whole is made.

Table 5.6 (page 49 of the ES) omits any mention of the Common: this is a key omission as the Common is mapped by Natural England (a government agency) as a Priority Habitat and potential impacts on these habitats are a material consideration of the planning process. Table 5.2 (page 30 of the ES) fails to include lowland dry acidic grassland within the list of Priority Habitats that fall within the study area and are scoped into consideration within the ES. The presence of this Priority Habitat type on the Common is mapped by Natural England and it should not have been scoped out.

This omission is part of a pattern of under-stating, either deliberately or not, the biodiversity value of the Common.

3.2.4 Lowland Dry Acidic Grassland

The survey information summarised in Appendix 2 of this report shows that much of the area of the Common that falls within the application site consists of lowland dry acidic grassland (the exception being the relatively small areas around the footpaths). It is dominated by a mixture of red fescue and common bent with associated species including heath bedstraw, tormentil, pignut and bitter vetch. The applicant's failure to acknowledge this means that potential impacts on a Priority Habitat are not properly assessed.

Paragraph 5.6.4 of the ES states that "The current status of the Priority Habitats within the Study Area is unknown (there is no information available on their condition. Therefore, on a precautionary principle basis, these habitats are assumed to be in a 'poor' ecological condition." It is difficult to see how downplaying the ecological value of important areas by arbitrarily according them poor status accords with the precautionary principle: it would appear to do the opposite, by automatically reducing the significance of potential impacts. The Common is, in fact, not in poor condition, as could have been ascertained by a proper survey.

The ES fails to recognise that the part of the Common supports plant species of interest as mentioned at 3.1.1 above and listed at Appendix 2 of this report.

3.2.5 Birds

Felton Common is of widely known importance for birds. It supports locally important populations of two Section 41 species – skylark and linnet, which are Red-listed as a species of High Conservation Concern and a small population of a further Section 41 species - yellowhammer. It also supports breeding populations of other species of conservation concern, including bullfinch, dunnock, song thrush and willow warbler and is a key feeding habitat for other species, including kestrel, house sparrow and starling, that nest nearby. Inadequate attention is paid to direct and indirect impacts on these populations within the ES.

Appendix 5.7 of the ES describes the bird surveys carried out by the applicant. It appears that a very limited amount of survey work was carried out on the Common, despite its known importance for birds. At 4.1.8 it is stated that skylark, a Red-listed species, was recorded only within the airport fence. This is surprising, since skylark is constantly visible and audible over the part of the Common that would be affected. During 2026, the Amber-listed whitethroat was also holding territory and almost certainly breeding within the part of the Common that falls within the application site and the Red-listed starling and Amber-listed linnet and kestrel were recorded as non-breeding species (other parts of the Common have a locally important breeding population of linnet).

3.2.6 Invertebrates

Table 5.7 has a row considering “Terrestrial invertebrate assemblage”, which concludes that any assemblage of importance is associated with the calcareous grassland (on the A38 cutting) only. Felton Common is known to be of importance for invertebrates: this is set out in the management plan, which was apparently consulted, and should have been clear had the data provided by the Local Records Centre been properly assessed.

3.2.6 Fungi

There is no consideration of the value of the Common for fungi, and therefore potential direct and indirect impacts on this important feature of interest are not assessed.

3.2.7 Overall Assessment of Felton Common

At 5.3.15 it is stated that the application site consists of “low-intrinsic value, botanically-poor habitats) ...” This is demonstrably not the case when it comes to Felton Common. The dismissal of this interest means that there has been no assessment of several potentially significant impacts.

At 5.6.6 there is a summary of the Somerset State of Nature Report. This report, the Somerset Biodiversity Action Plan and any consideration by Somerset Wildlife Trust do not cover North Somerset. They cover Somerset within its 1974-1996 boundaries. Reports and policies issued by Avon Wildlife Trust, Bristol Regional Environmental Records Centre and West of England Combined Authority should have been used. This mistake reveals a lack of a serious attempt to engage with biodiversity trends and issues relating to the application site.

At 5.6.20 of the ES Felton Common is described as being “used almost exclusively for recreational purposes”. This ignores the significant effort made by Winford Parish Council, supported by Natural England, to conserve and enhance the Common’s biodiversity interest. Ongoing monitoring has shown this effort to have been highly successful in restoring, and improving the condition of, Priority Habitats on the site. It should be noted that use for recreational purposes is not necessarily incompatible with management for biodiversity interest.

3 IMPACTS

3.1 Introduction

Table 5.6 of the ES categorises the habitats affected by the proposals. It appears to ignore the grassland within Felton Common, which is apparently assessed as being of “less than local importance”. This is clearly not the case. The table states that its importance and the scale of any impacts were therefore not assessed further. This approach overlooks the fact that the area is mapped as a Priority Habitat (the only example of this Habitat Type in North Somerset) and that it supports a good example

of this habitat type. Inadequate assessment of the scale of potential impacts inevitably leads on from this significant omission.

A commitment to apply the precautionary principle has been made at 5.5.17 and 5.5.18 of the ES; the failure to fully describe or assess impacts on the Common shows that this is not the case.

3.2 Direct Impacts

3.2.1 Introduction

At 5.8.24 the ES states “Given the temporary and largely reversible nature of these effects….These temporary effects are not predicted to affect the continued ability to deliver the objectives of the Felton Common Management Plan.” The effects on the Common would not be merely temporary: installation of the lights, associated fencing and other infrastructure will cause permanent land loss. There is no attempt to assess the impact of these measures, either quantitatively or qualitatively. The ES needs to consider impacts beyond the “ability to deliver the objectives of the management plan” in terms of habitat loss.

Some direct impacts are inadequately described. There is, for instance, a passing reference to the need to install a track across the Common to facilitate access to the lights, but the location and extent of this track are neither mapped nor quantified. It is inevitable, however, that construction of the track will lead to further loss of a Priority Habitat. The extent of fencing around the lights is also poorly defined. Since the grassland within fences will not be accessible for management it will, in the medium and long terms, be lost. Without this information it is impossible to fully assess impacts on this important site.

3.2.2 Vegetation and Priority Habitat

The installation of lights across part of the Common will lead to the loss of an area of a Priority Habitat – defined both by field survey and Natural England mapping – and this has not been addressed within the ES.

At 5.9.85 the direct loss of habitat within Felton Common is assessed as being around 0.1% of the total area. Using this figure as a basis for the assessment of the scale of impact is disingenuous, however, as much of the Common does not support acidic grassland, although it is of nature conservation value for other reasons. There are large areas of lowland calcareous grassland at the southern end of the Common and much of the eastern part of the site consists of scrub, which is bordered by a large area that is dominated by bluebell and bracken. Acidic grassland occupies approximately 16,000 m^2 of the Common (the boundaries between the different habitat types are difficult to define exactly), so the proportion of this priority habitat type that would be directly affected must, at a minimum be 3%, with indirect impacts extending over a wider area. It is unclear whether the 500m^2 quoted in the ES includes the area that will be occupied by the access track, which will involve further loss of grassland.

Due to unspecified activity during the construction phase additional long term effects may be inevitable.

At 5.9.87 of the ES there is an unrealistic assertion that grassland diversity can be increased. This is informed by an incomplete survey, which underrates the diversity of the existing grassland. Since the presence of a Priority Habitat on and around the application site is not recognised in the ES, there is no worthwhile assessment of the impacts of excavation through this habitat and feasibility of restoration once works are complete. Other neutral grassland, which the ES states to be present, can be restored fairly effectively. Restoration of the lowland dry acidic grassland that is actually present, which depends on a particular soil structure and on very low nutrient levels, is far more problematic. It is unlikely that the grassland within the fence will be appropriately managed, and this means that its interest will decline rather than increase. These impacts are not addressed in the ES.

The creation of a reinforced grass mesh track will fundamentally alter the nature of the grassland and have serious effects on groups such as fungi. The effects associated with its installation are not considered.

The grassland has been assessed as other neutral grassland within the applicant's Biodiversity Net Gain calculations. Most of the area should be assessed as acidic grassland, which results in a higher score within the Metric. The Metric should also include any areas of grassland that will be lost as a result of construction of the access track.

3.2.3 Fauna

Parts of at least two territories of skylark, a Section 41 Priority Species, will also be lost. This again has not been addressed within the ES.

The Common is known to be of interest for invertebrates, and impacts on this group have not been assessed.

3.2.4 Fungi

The main area of the Common that is of interest for fungi is to the north of the application site, but one species of waxcap was recorded within the site. The fruiting bodies of pink waxcap that were observed in November 2025 were approximately 20 metres from the application site. Since fruiting by fungi is sporadic and unpredictable, it is entirely possible that mycorrhiza of this globally threatened species, and indeed other species of interest, extend into the application site and will be directly affected. This potential impact needs to be considered.

3.3 Indirect Impacts

3.3.1 Introduction

Since the ES fails to recognise the biodiversity interest of the Common, the scale of indirect impacts across the whole of the site, including on Section 41 Priority Habitat and Species, is inadequately addressed.

The consideration of indirect impacts on Felton Common is extremely limited. There is no attempt to consider the impact of effects such as disruption to management activities, increased noise, disturbance and habitat damage arising from maintenance, air pollution and light spill on features of interest such as breeding bird and invertebrate populations.

At 5.3.15 of the ES the need to consider impacts on the Common's invertebrate populations is scoped out: "*invertebrates associated with habitats other than calcareous grassland: The potential for the Application Site to support notable terrestrial invertebrate species assemblages in habitats (other than the calcareous grassland associated with the A38 cutting as highlighted in Appendix 5.6) is low (unlikely, not proven), given the presence of low-intrinsic value, botanically-poor habitats (of less than Local importance)*." This statement implies that the Common is of less than local importance, which is clearly not the case – limited survey work has shown that species of importance are present. The dismissal of any potential invertebrate interest on the Common is partly contradicted at 5.8.36 of the ES, but this section contains no serious attempt to assess impacts on invertebrates. Invertebrates are potentially vulnerable to effects such as light spill, pollution and changes to nutrient levels and these impacts have not been addressed.

3.3.2 Nitrate Pollution

At 5.9.27 there is an acknowledgment that nitrate levels on Felton Common would increase. The discussion of the impact arising from this affect is inadequate, since it fails to acknowledge the presence of a Priority Habitat that depends on soils with a very low nutrient status. Site management has been very successful in improving the condition of this habitat, largely by hay mowing, which serves to reduce nutrient levels. Any increase in nitrate levels has the potential to affect the condition, and potentially the extent, of a Priority Habitat and this impact is not properly addressed.

At 5.9.94 it is stated that habitats on Felton Common are nutrient-enriched. The applicant had access to the Management Plan for the Common, which demonstrates that this is not the case. Surveys carried out in 2019 and 2026 (of the whole Common, not just the application site) have recorded 55 species of vascular plant and 17 species of moss that are dependent on low nutrient soils, as listed at Appendix 3 of this report. A total of 16 of the vascular plants present are listed as threatened in the Great Britain Red List. This assemblage of plants (and associated fungi) that are characteristic of low nutrient soils shows the statement that the Common is nutrient-enriched is incorrect, as does its mapping by Natural England as lowland dry acidic grassland.

The assessment of increased nitrate enrichment of the Common is therefore invalid, as it fails to take account of the true baseline.

The reference to “actively managed habitats” at 5.9.94 of the ES is puzzling. It implies that managed habitats cannot be sensitive, whereas the reverse is true: the habitats on Felton Common are managed to protect and enhance their biodiversity value and are particularly sensitive to nitrate deposition.

Paragraph 5.9.95 of the ES acknowledges that there will be botanical composition change on the Common: this represents a significant adverse impact on one of the Priority Habitats and one of the key features for which the SNCI is designated. Once the Common’s actual status is recognised it is clear that the impact will exceed the ES assessment of Not Significant.

The potential impact of increased nitrate levels on the important assemblage of waxcap fungi, which occur within and close to the application site, is not considered. This group of organisms is known to be highly sensitive to nutrient enrichment, a key reason for their high level of threat. Diverse populations of these species are clearly vulnerable to the increased nitrate levels that would arise from this proposal.

3.3.3 Other Pollution

Field surveys carried out in spring 2026 suggested that there are other forms of pollution affecting the Common’s vegetation. It was noted, particularly in May 2026, that plants under the flight path were suffering from die-back. It has not yet been possible to demonstrate a causal link between the die-back and aircraft. However, symptoms were most severe at the western end of the application site, where aircraft are at their lowest, and declined with distance away from the flight path. No similar die-back was observed at a range of other sites visited around the same time. When the site was visited in June few signs of die-back were evident, but yellow rattle, one of the species worst affected, was absent from the worst affected areas, suggesting that plants may have been killed.

Details of this effect are described at Appendix 5 of this report.

3.3.4 Impacts on Birds

Indirect impacts on birds have not been considered in the ES. The Common supports populations of several Section 41 bird species, but it is skylark that is most likely to be adversely affected. Apart from the direct impact arising from loss of breeding territory, skylarks would be affected by: diversion of recreational pressure from the edge towards the centre of the Common; the ability of predators, particularly crows, to use fencing and lights as look out perches to locate nests; from vegetation change; and from increased noise. The last two factors may also affect other Priority Species such as linnet. Adverse impacts on invertebrate populations would also affect species that feed on or over the Common: these include starling, swallow and house martin.

3.3.5 Recreational Impacts

At 5.9.87 of the ES there is an assertion that recreational pressure has reduced the diversity of the grassland within the application site. This effect is in reality evident across a small proportion of the application site only, on and adjacent to the main footpaths. Installation of the lights will divert this recreational pressure to other parts of the Common and this effect on new areas of grassland should have been considered.

3.3.6 Lighting

The consideration of lighting impacts at 5.9.89 and 5.9.90 is extremely limited. It does not consider the possibility that there might be important assemblages of, for example, invertebrates, in the vicinity of the lights. It also assumes that the remainder of the Common had excess carrying capacity for species that would be excluded from the vicinity of the lights, without providing any supporting evidence.

3.3.7 Disruption to Habitat Management

Habitat management is an important factor in maintaining and enhancing the Common's biodiversity interest; in particular the lowland dry acidic grassland would deteriorate and eventually disappear without management. The imposition of lighting and associated infrastructure across the Common would make implementation of an appropriate management regime more difficult. The main management technique employed is hay mowing. Tractors would no longer be able to make a clear run across the Common as they can at present and the impact of vehicles having to turn in the centre of the site should have been assessed. It is inevitable that sections of grassland adjacent to the fencing would not be mown and would rapidly deteriorate in quality; this impact has not been assessed.

APPENDIX 1 NATIONAL BIODIVERSITY NETWORK DISTRIBUTION MAP FOR *Ctenicera cuprea*



The isolation of the Felton Common population can clearly be seen on this map. (The species is widespread in northern England and in Scotland.)





Two colour morphs of the beetle occur at Felton Common

APPENDIX 2 SURVEYS OF APPLICATION AREA

The ES describes, in an appendix, the part of Felton Common that is within the application site as follows:

“4.1.25 The section of Felton Common that is located within the Application Site was surveyed in September 2025. The grassland in this area was classified as other neutral grassland in good condition, the wider Felton Common site is a habitat mosaic which includes stands of bracken and lowland acidic grassland but these habitats were not present within the Application Site.

4.1.26 The grassland was fairly diverse with over 10 species per meter squared, common bent (A) red fescue (F) cock’s foot (F) were the most common grasses with Yorkshire fog and false oat grass both occurring occasionally through the sward. Forbs included meadow buttercup (F), common vetch (O), bulbous buttercup (O), tufted vetch *Vicia cracca* (R), cowslip *Primula veris* (R) and ladies bedstraw *Galium verum* (R). Scattered scrub occurred occasionally across the common.

4.1.27 Around footpaths there were small localized areas where species diversity was lower with higher abundances of perennial rye grass (A), white clover (O) and creeping buttercup (O).”

Surveys of the same area carried out by Wessex Ecological Consultancy recorded the following species:

Species list for area directly affected by lightning proposal (Wessex Ecological Consultancy, October 2025 to June 2026)

			Listed as present by applicant
Grasses			
Agrostis capillaris	Common Bent*	F	Yes
Agrostis stolonifera	Creeping Bent	R	No
Anthoxanthum odoratum	Sweet Vernal Grass*	O	No
Arrhenatherum elatius	False oat-grass	R	Yes
Cynosurus cristatus	Crested Dog's-tail	O	Yes
Dactylis glomerata	Cocksfoot	R	Yes
Festuca ovina	Sheep's Fescue*	RLF	No
Festuca rubra	Red Fescue*	F	Yes
Holcus lanatus	Yorkshire Fog	O	Yes
Lolium perenne	Perennial Rye-grass	R	Yes
Poa annua	Annual Meadow-grass	R	No
Poa pratensis	Smooth Meadow-grass	R	No
Schedonorus pratensis	Meadow Fescue	R	No
Forbs			
Carex pilulifera	Pill Sedge**	R	No
Cerastium fontanum	Common Mouse-ear	R	No
Cirsium palustre	Marsh Thistle	R	No
Cirsium vulgare	Spear Thistle	R	No
Conopodium majus	Pignut*	O	No
Crepis vesicaria	Beaked Hawksbeard	R	No
Dactylorhiza fuchsia	Common Spotted Orchid	R	No
Galium saxatile	Heath Bedstraw**	OLF	No
Hyacinthoides non-scripta	Bluebell*	RLF	No
Hypericum pulchrum	Slender St John's Wort**	RLF	No
Hypochaeris radicata	Common Catsear*	O	No
Jacobaea vulgaris	Common Ragwort	R	No
Lathyrus linifolius	Bitter Vetch**	R	No
Lotus corniculatus	Common Bird's-foot Trefoil*	OLF	No
Luzula campestris	Field Woodrush*	R	No
Plantago lanceolata	Ribwort Plantain	R	No
Plantago major	Great Plantain	R	No
Polygala serpyllifolia	Heath Milkwort**	R	No
Potentilla erecta	Tormentil**	O	No
Primula veris	Cowslip	R	Yes
Pteridium aquilinum	Bracken*	RLF	No
Ranunculus acris	Meadow Buttercup	R	Yes
Ranunculus bulbosus	Bulbous Buttercup	R	Yes
Ranunculus repens	Creeping Buttercup	R	Yes
Rhinanthus minor	Yellow Rattle	RLF	No

Rumex acetosa	Common Sorrel*	R	No
Rumex acetosella	Sheep's Sorrel**	R	No
Rumex crispus	Curled Dock	R	No
Taraxacum vulgare agg	Dandelion	R	No
Trifolium dubium	Lesser Trefoil	R	No
Trifolium pratense	Red Clover	R	No
Trifolium repens	White Clover	R	Yes
Ulex gallii	Western Gorse*	R	No
Veronica chamaedrys	Germander Speedwell	R	No
Vicia sativa ssp nigra	Common Vetch*	R	Yes
Vicia sativa ssp segetalis	Common Vetch	R	
Viola riviniana	Common Dog Violet	R	No

** Species indicative of lowland dry acidic grassland (the majority of sites where they occur locally are examples of this habitat type)
*Species characteristic of lowland dry acidic grassland (they are usually found in this habitat types, but may be equally or more frequent in other habitat types).

Other species associated with lowland dry acidic grassland, notably heath grass (*Danthonia decumbens*) and heath spotted orchid (*Dactylorhiza maculata*), were recorded just outside the application area but well within the zone of influence that will be affected by the proposal.

In addition, the applicant recorded tufted vetch and lady's bedstraw, which were not found in 2026. I suspect that the latter is a misidentification of heath bedstraw.

It is acknowledged that the list provided by the applicant does not pretend to include every species that they recorded, but it would be usual to include species of high ecological significance within a partial list. It is therefore reasonable to assume that most of the additional species recorded in 2026 were not recorded by the applicant, and that there assessment of the site's biodiversity value was based on substantially incomplete information and is inadequate.

The Wessex Ecological Consultancy surveys also recorded the following taxa other than vascular plants within the application footprint.

Mosses
Rhytidiadelphus squarrosus*
Kindbergia praelonga
Pseudoscleropodium purum*

Fungi
Gliophorus irrigatus Slimy waxcap

Birds (breeding)
Skylark
Whitethroat

Birds (non-breeding)
Carrion Crow
Goldfinch
Jackdaw
Kestrel
Linnet
Starling

Invertebrates
Glyphipteryx fuscovirdella Moth*

Felton Common is mapped by Natural England, as shown on the Magic website, as lowland dry acidic grassland, which is a Priority Habitat listed in Section 41 of the NERC Act. It is the only area mapped as this habitat type in North Somerset and the largest in the former County of Avon (other areas are at Rodway Hill and Siston Common).

The UK Habitats Classification describes dry acidic grassland as follows:

“Characterised by range of plant species such as Heath Bedstraw *Galium saxatile*, Sheep’s Fescue *Festuca ovina*, Common Bent *Agrostis capillaris*, Sheep’s Sorrel *Rumex acetosella*, Sand Sedge *Carex arenaria*, Wavy Hair-grass *Deschampsia flexuosa*, Bristle Bent *Agrostis curtisii* and Tormentil *Potentilla erecta*….Acid grassland can have a high cover of bryophytes…”

The ES describes the grassland within the application site as other neutral grassland. The UK Habitats Classification definition of neutral grassland includes the following:

“Neutral grassland communities have few diagnostic indicator species but lack strong calcicoles or calcifuges characteristic of base-rich and acid soils respectively.”

The grassland within the application site, away from the small areas of trampling, supports a range of calcifuge plants and should have been classified as acidid grassland.

APPENDIX 4 PLANT SPECIES DEPENDENT ON NUTRIENT-POOR SOILS RECORDED ON FELTON COMMON

Common Name	Scientific Name	Status
Agrimony	Agrimonia euaptoria	
Velvet Bent	Agrostis vinealis	
Silver Hair-grass	Aira caryophyllea	Red List
Downy Oat-grass	Avenula pubescens	
Betony	Betonica officinalis	Red List
Quaking Grass	Briza media	Red List
Upright Brome	Bromopsis erecta	
Ling	Calluna vulgaris	Red List
Harebell	Campanula rotundifolia	Red List
Spring Sedge	Carex caryophyllea	Red List
Glaucous Sedge	Carex flacca	
Pill Sedge	Carex pilulifera	
Common Knapweed	Centaurea nigra	
Small Mouse-ear	Cerastium semidecandrum	Red List
Wooly Thistle	Cirsium eriophophorum	
Pignut	Conopodium majus	
Common Spotted Orchid	Dactylorhiza fuchsii	
Heath Spotted Orchid	Dactylorhiza maculata	
Southern Marsh Orchid	Dactylorhiza praetermissa	
Heath Grass	Danthonia decumbens	Red List
Wavy Hair-grass	Deschampsia flexuosa	
Sheep's Fescue	Festuca ovina	
Heath Bedstraw	Galium saxatile	
Lady's Bedstraw	Galium verum	
Slender St. John's-wort	Hypericum pulchrum	
Hoary ragwort	Jacobaea erucifolia	
Crested Hair-grass	Koeleria macrantha	Red List
Bitter Vetchling	Lathyrus linifolius	Red List
Meadow Vetchling	Lathyrus pratensis	
Rough Hawkbit	Leontodon hispidus	
Ox-eye Daisy	Leucanthemum vulgare	
Fairy Flax / Purging Flax	Linum catharticum	
Common Bird's-foot-trefoil	Lotus corniculatus	
Large Bird's-foot-trefoil	Lotus pedunculatus	

Field Wood-rush	Luzula campestris	
Heath woodrush	Luzula multiflora	
Musk Mallow	Malva moschata	
Twayblade	Neottia ovata	Red List
Corky-fruited Water-dropwort	Oenanthe pimpinelloides	
Burnet Saxifrage	Pimpinella saxifraga	Red List
Heath Milkwort	Polygala serpyllifolia	
Tormentil	Potentilla erecta	
Salad Burnet	Poterium sanguisorba	Red List
Cowslip	Primula veris	
Yellow-rattle	Rhinanthus minor	
Sheep's Sorrel	Rumex acetosella	Red List
Meadow Fescue	Schedonorus pratensis	Red List
Corn spurrey	Spergula arvensis	Red List
Lesser Stitchwort	Stellaria graminea	
Purple-bracted Dandelion	Taraxacum brachyglossum	
Least Trefoil	Trifolium micranthum	
Yellow Oat-grass	Trisetum flavescens	
Bilberry	Vaccinium myrtilis	
Tufted Vetch	Vicia cracca	
Archidium alternifolium		
Brachythecium albicans		
Bryum pseudotriquetrum		
Campylopus flexuosus		
Campylopus pyriformis		
Dicranella heteromalla		
Dicranella rufescens		
Homalothecium lutescens		
Hypnum jutlandicum		
Pleuridium acuminatum		
Pleurozium schreberi		
Pogonatum aloides		
Polytrichum juniperum		
Pseudoscleropodium purum		
Rhytidiadelphus squarrosus		
Trichodon cylindricus		
Weissia controversa		

Photographs taken within the application site



Heath milkwort, yellow rattle and bluebell.



Common Spotted Orchid



Upright St John's wort



Bitter Vetch

Appendix 5 Plant mortality arising from pollution

During the survey carried out on 11th May 2026, unusual damage to several plant species was noted. The damage was most severe and most frequent at the western end of the planning application area, directly under the flight path and in the area where planes are at their lowest altitude as they pass over the common. A selection of damaged plants is shown on the photographs below. All had leaves and shoots with dark discoloration and shoots were shriveled and distorted; all or parts of shoots and leaves were dead in many cases, and entire plants were dead in a few. The most severely affected plants were yellow rattle (*Rhinanthus minor*), ribwort plantain (*Plantago lanceolata*) and bracken (*Pteridium aquilinum*) and damage was also noted to other plants, including bluebell (*Hyacinthoides non-scriptus*), common bird's-foot trefoil (*Lotus corniculatus*) and bitter-vetch (*Lathyrus linifolius*).

The damage is highly unusual – I have not seen anything comparable in four decades of plant surveying. I considered other possible causes. The damage was not consistent with attack by any pathogen or pest, and internet searches have failed to find any disease, fungus or invertebrate causing similar damages. The fact that the damage was noted in a taxonomically diverse range of plants makes attack by a pathogen unlikely. Frost damage was considered as another possible cause. In previous years (but not in 2026) I have seen this causing die-back of bracken in particular. However, I have not observed such damage elsewhere and frost damage typically causes wilting of shoot tips but not the darkened areas seen here.

A further indication that the damage was caused by aircraft was the distribution of damaged plants. They were most frequent under the flight path, particularly where aircraft are at their lowest (and the smell of kerosene was obvious and unpleasant) but damaged plants were seen elsewhere on the common, although not in the northernmost areas. I had not observed damage of this kind at other sites I visited prior to 11th May (including Clifton and Durdham Downs in Bristol, Inglestone Common and Yarley Meadows in South Gloucestershire and Priddy Mineries in Somerset). I made a particular effort to look for similar damage in the ten days after 11th May, at sites including Black Down in the Mendips, Chew Valley Lake and Inglestone Common, and found none.

The distribution of the damage, both across Felton Common and in the wider area, suggests strongly that aviation fuel is responsible for the effect observed.



Photograph 1: Several blackened and wizened shoots of yellow rattle can be seen in this photograph, taken directly under the flightpath. The pale tips to bluebell leaves are consistent with normal seasonal die-back, but elsewhere blackening to bluebell was noted.



Photograph 2: A severely damaged and possibly dead plant of yellow rattle, again directly under the flight path.



Photograph 3: Taken approximately 300m south of the flight path shows lesser, but still obvious, damage to yellow rattle.



Photograph 4, taken approximately 20m south of the flight path, shows blackened leaves of bitter-vetch (a species listed as Vulnerable on the GB Red List of Vascular Plants)





Photographs 5 and 6 show damage to plants of ribwort plantain

Appendix 2 – BNG and Veteran Tree Report by Bristol Tree Forum for the Parish Councils Airport Association (PCAA)

BTF Consolidated Comments - 06 May 2026

26/P/0686/OU2|Hybrid planning application (full and outline elements) with Environmental Statement for the expansion of Bristol Airport to enable a throughput of 15 million passengers per annum …| Bristol Airport North Side Road Felton Wrington BS48 3DY

Preliminary comments

There are a number of inconsistencies between the Biodiversity Net Gain evidence as set out in the Statutory Metric Calculation (SMC)[1] and habitat data set out in Appendix 5.1: Ecological Desk Study of Volume III Environmental Statement Supporting Appendices – Part 2A – Chapter 5: Biodiversity (Appendix 5.1).[2]

In addition, the arboricultural evidence, as set out in Appendix 5.9: Trees of Volume III Environmental Statement Supporting Appendices – Part 2K – Chapter 5: Biodiversity (Appendix 5.9),[3] does not align with this evidence.

We note that the three surveys at Annex A of Appendix 5.9: Trees do not fully comply with the requirements of BS5837:2012.[4] Each lacks these mandatory elements:

- Surveyor details — the name and qualifications of the arboriculturists conducting the surveys are either missing or redacted.
- The survey dates for two surveys are missing.
- The WSP Arboricultural Impact Assessment, based on a field survey undertaken on June 3 and 4, 2024, is now out of date.
- The number of trees in some tree groups is missing.
- Data relating to crown spread are missing.
- Data relating to first significant branch heights are missing.
- Data relating to branch direction are missing.
- Data relating to estimated remaining contribution, in years (<10, 10+, 20+, 40+) are missing.
- No soil assessments exist.

This fails to comply with the LPA's planning requirements for tree surveys in planning applications.[5]

We also note that the applicant has failed to provide the survey data set out in Annex A: Tree Schedule of Appendix 5.9, in a machine-readable format such as .csv or .xlsx. We have requested the data in this form but our request has been declined, so we are obliged to analyse this data as best we can.

These issues need to be resolved before this application can be decided.

[1] BIODIVERSITY_NET_GAIN_METRIC_CALCULATION_TOOL-3587220.
[2] ES_VOL_III_-_APPENDICES_-_5.1__5.2__5.3-3580485.
[3] ES_VOL_III_-_APPENDIX_-_5.9_PART_1-3580497 & ES_VOL_III_-_APPENDIX_-_5.9_PART_2-3580498.
[4] https://n-somerset.gov.uk/sites/default/files/2020-02/BS%205837-2012.pdf.
[5] https://n-somerset.gov.uk/my-services/planning-building-control/planning-applications/application-guidance/supporting-documents/plans-tests-reports/tree-survey-tree-protection-plan.

BTF Consolidated Comments – 06 May 2026

Baseline area habitat

Excluding the Individual trees habitat parcels, 24 baseline habitat parcels[6] are recorded in the SMC, covering just over 235 hectares (ha):[7]

Ref	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition
1	Grassland	Lowland calcareous grassland	0.973933679	High	Good
2	Grassland	Lowland calcareous grassland	0.430593844	High	Moderate
3	Grassland	Lowland calcareous grassland	1.574188245	High	Poor
4	Grassland	Other neutral grassland	2.9860581	Medium	Poor
5	Grassland	Other neutral grassland	18.0954474	Medium	Good
6	Grassland	Other neutral grassland	4.312396944	Medium	Moderate
7	Grassland	Modified grassland	4.556240411	Low	Good
8	Grassland	Modified grassland	2.624397157	Low	Moderate
9	Grassland	Modified grassland	89.71351677	Low	Poor
10	Heathland and shrub	Bramble scrub	0.150895003	Medium	Condition Assessment N/A
11	Heathland and shrub	Mixed scrub	0.035403213	Medium	Good
12	Heathland and shrub	Mixed scrub	0.772069633	Medium	Moderate

[6] A habitat parcel is a linked area of habitat of the same distinctiveness, condition and strategic significance.
[7] The redline area is recorded as 235.05 ha.

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Ref	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition
13	Heathland and shrub	Mixed scrub	1.0355706	Medium	Poor
14	Lakes	Ornamental lake or pond	0.002620528	Low	Poor
15	Lakes	Ornamental lake or pond	0.016841921	Low	Moderate
16	Sparsely vegetated land	Inland rock outcrop and scree habitats	0.030129446	High	Good
17	Urban	Developed land; sealed surface	102.3437264	V. Low	N/A - Other
18	Urban	Artificial unvegetated, unsealed surface	0.150155018	V. Low	N/A - Other
19	Urban	Vegetated garden	0.329543561	Low	Condition Assessment N/A
20	Urban	Vacant or derelict land	0.674313808	Low	Moderate
21	Urban	Vacant or derelict land	0.078661659	Low	Poor
22	Woodland and forest	Other woodland; broadleaved	1.197865394	Medium	Moderate
23	Woodland and forest	Other woodland; broadleaved	2.210426086	Medium	Poor
24	Woodland and forest	Other woodland; mixed	0.752181859	Medium	Moderate

The habitat parcels identified in Appendix 5.1 are:

- Grassland (Low Distinctiveness) – 23 parcels.

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- Grassland – non-acid grassland types (medium, high and very high distinctiveness) – 33 parcels.
- Pond – 3 parcels.
- Scrub – 10 parcels.
- Urban – 4 parcels.
  - Open mosaic habitat on previously developed land.
  - Bioswale and SuDS.
  - Intense green roofs.
  - Biodiverse green roofs.[8]
- Woodland – 17 parcels.
- Sparsely vegetated land – 1 parcel.

However, it is impossible to integrate the SMC information with the habitat parcel condition assessment data in Appendix 5.1. This is because the Appendix 5.1 data:

1. does not give the size of each habitat parcel
2. uses UKHAB definitions, which are not then converted to their equivalent BNG habitat categories in the SMC
3. uses parcel reference codes that are not cross-referenced to their equivalent BNG habitat categories in the SMC
4. fails to show the locations of each of these habitat parcels on the UKHABs Baseline Classification Survey at Appendix 5.1
5. fails to explain why some of the habitats identified in Appendix 5.1 are not listed in the SMC.

Baseline Individual trees habitat

The SMC records three individual trees habitat parcels totalling 1.3848 ha:

Ref	Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition
25	Individual trees	Urban tree	0.9934	Medium	Good
26	Individual trees	Urban tree	0.0489	Medium	Moderate
27	Individual trees	Urban tree	0.3425	Medium	Good

The Appendix 5.1 condition assessment data for this habitat records 200 Individual trees (urban and rural) habitat parcels. However, it is impossible to integrate this information with SMC habitat parcel data, because this data:

1. does not give the size of each habitat parcel
2. uses parcel reference codes that are not cross-referenced to the three habitat parcel listed in the SMC
3. fails to show the locations of these habitat parcels on the UKHABs Baseline Classification Survey at Appendix 5.1.

The arboricultural evidence set out in Appendix 5.9 records 277 Individual and 72 tree groups on site. We calculate that this baseline habitat covers at least 21.6762 ha. However, this is

[8] Many of these are BNG habitats, yet are omitted from the SMC.

subject to the count of trees in each tree group being provided. When we know this, we will then be able to undertake a more accurate calculation of the correct area of this habitat.

The table below summarises our interim analysis of the Individual trees habitat listed in appendix 5.9, based on the inadequate arboricultural evidence currently available:

BNG Category	No. of Trees	Trees Removed	% Removed	Baseline Habitat (ha)	Habitat Removed (ha)	Habitat Retained (ha)	% Removed
Small	666	176	26.4%	2.7076	0.7166	1.9910	26.5%
Medium	827	181	21.9%	13.4685	2.9478	10.5207	21.9%
Large	102	7	6.9%	3.7376	0.2565	3.4811	6.9%
V. Large	23	3	13.0%	1.7584	0.2294	1.5290	13.0%
Totals	**1618**	**367**	**22.7%**	**21.6721**	**4.1503**	**17.5218**	**19.2%**
Veteran Trees[9]							
Medium	3	1	33.3%	0.0489	0.0163	0.0326	33.3%
Large	7	1	14.3%	0.2565	0.0366	0.4309	14.3%
V. Large	12	3	25.0%	0.9174	0.2294	0.6681	25.0%
Totals	**22**	**5**		**1.2228**	**0.2823**	**1.1316**	**23.1%**

However, none of this information has been integrated with either the SMC or Appendix 5.1, so it is impossible to reconcile these disparate sets of data.

We have already pointed out that the arboricultural surveys annexed to Appendix 5.9 are non-compliant (see above).

Baseline hedgerow habitat

There are ten onsite hedgerow habitat parcels listed in the SMC, comprising four hedgerow habitats totalling 9.93 kilometres (km):

Hedge number	Habitat type	Length (km)	Distinctiveness	Condition
1	Native hedgerow	0.636	Low	Good
2	Native hedgerow	0.494	Low	Moderate

[9] The evidence suggests that tree 9, listed in Appendix 5.9, a *Malus domestica*, is also a veteran tree.[9] We have also included the three veteran trees listed in Appendix 5.9 - which the applicant proposes will be translocated - as removed because, even if translocation were viable, these trees would be very unlikely to survive.

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Hedge number	Habitat type	Length (km)	Distinctiveness	Condition
3	Species-rich native hedgerow	4.35	Medium	Good
4	Species-rich native hedgerow	1.99	Medium	Moderate
5	Native hedgerow	0.113	Low	Good
6	Native hedgerow	0.971	Low	Moderate
7	Native hedgerow	0.172	Low	Poor
8	Non-native and ornamental hedgerow	0.143	V. Low	Poor
9	Line of trees	0.518	Low	Moderate
10	Line of trees	0.547	Low	Poor

However, Appendix 5.1 lists 71 hedgerow parcels comprising nine distinct habitats:

No.	Hedgerow habitat
1	Native hedgerow – 14 parcels.
2	Native hedgerow - associated with bank or ditch – 1 parcel.
3	Native hedgerow with trees – 5 parcels.
4	Non-native and ornamental hedgerow – 2 parcels.
5	Species-rich native hedgerow – 24 parcels.
6	Species-rich native hedgerow - associated with bank or ditch – 2 parcels.
7	Species-rich native hedgerow with trees – 11 parcels.
8	Species-rich native hedgerow with trees - associated with bank or ditch – 6 parcels.
9	Line of trees – 6 parcels

It is impossible to integrate this information with SMC habitat parcel data because this data:

1. does not give the size of each habitat parcel
2. uses parcel reference codes that are not cross-referenced to the 10 habitat parcels listed in the SMC

3. fails to explain why some of the hedgerow habitats listed in Appendix 5.1 are omitted from the SMC.

The applicant's proposal to relocate three veteran trees

Section 6 of Appendix 5.9: Trees of Volume III Environmental Statement Supporting Appendices – Part 2K – Chapter 5: Biodiversity (Appendix 5.9)[10] sets out proposals for the translocation of two veteran Ash trees, tree numbers 70 and 80, and a veteran Sycamore, tree number 45. All form part of an ancient hedgerow on the south-eastern boundary of Cook's Farm with the existing airport. This is an important hedge that shows growth forms consistent with historic hedge laying.[11] [12]

In planning terms, relocating a veteran tree is better than simply felling it, but it is highly likely to deteriorate and die. Chances of a successful relocation relate directly to the time taken for root preparation, with two full growing seasons being recommended. One growing season is better than nothing, but less than this and the chances of success are minimal. A veteran tree's health and structure are typically fragile, so that, even with the recommended root preparation, survival is unlikely. The loss of such trees is therefore a reasonable assumption for planning decision-making purposes.

The importance of veteran trees

A veteran tree is a tree that, regardless of its actual age, shows significant signs of maturity, decay and environmental damage, making it a vitally important habitat for biodiversity. Key features include large cavities, rot, deadwood and fungal growth.

A useful way to create succession habitat is to 'veteranise' a tree. However, the missing component of a natural veteran is fungal decay, an essential ingredient for the highest value habitat afforded by veteran trees. Specialist invertebrates need fungal decay, without which a tree provides habitat spaces only. Despite setting up the conditions for decay to establish, it will take two or three decades for a veteranised tree to become something approaching a true veteran.

The proposed translocation process

1. **Pre-translocation management** — the trees will first be managed to reduce their current size through pollarding and coppicing before being moved.

   No proposals are made to reduce the trees' roots. As a result, if the trees are translocated without root reduction, they will die.

2. **Method of translocation** — following the size reduction works, a large tree spade will be used to translocate the three trees to the northern perimeter area of this part of the proposed development.
3. **Aftercare** — sensitive aftercare will be required following translocation to maximise the likelihood of success, though Appendix 5.1acknowledges there is some risk of failure with this specialist exercise.

The relocation of veteran trees faces severe challenges due to their extreme age, size,

[10] ES_VOL_III_-_APPENDIX_-_5.9_PART_1-3580497 & ES_VOL_III_-_APPENDIX_-_5.9_PART_2-3580498.
[11] The Hedgerows Regulations 1997 - https://www.legislation.gov.uk/uksi/1997/1160/contents.
[12] Nearly all the hedgerows on Cook's Farm, including this one, have been in existence since at least the 1840s, when the tithe maps were prepared – see https://maps.bristol.gov.uk/kyp/?edition=nsom.

compromised physiology, and ecological value, making survival rates low and often impractical compared to younger specimens. Because of this acknowledged risk of failure, a package of compensation measures will be implemented regardless, comprising planting and stewardship of 10 new future veteran trees on Bristol Airport land, together with the 'veteranisation' of 10 existing Category B trees within land owned by Bristol Airport. We assume that this land will be on site, but this needs to be clarified and the candidate trees identified.

The challenges of moving veteran trees

For all the reasons listed below, veteran tree translocation is rarely viable; literature emphasises in-situ conservation over risky moves, with no high-success case studies for true veterans (centuries-old).

Biological and physiological challenges[13, 14]

- **Root system limitations**: Veteran trees have extensive but often damaged or decaying root systems. Both Ash and Sycamore have a heart root system — a combination of lateral and oblique roots radiating outward and downward.
- **Transplant shock**: Reduced root-to-canopy ratio causes water/nutrient imbalance, leading to wilting, dieback and stunted growth, exacerbated by age-related inefficiencies in transpiration and sugar translocation.
- **Species-specific tolerance**: Tap-rooted species (oaks, walnuts) suffer higher mortality; street-grown trees may adapt better due to shallow roots, but veterans rarely do.
- **Age-related decline**: Multiple stressors (drought, pests, decay) reduce resilience; hollows, cavities, and epicormic growth indicate vulnerability to further disruption.

Logistical and technical challenges[15]

- **Size and weight**: Trees weighing tons require cranes, specialised equipment and route planning for transport; root balls must be massive but risk cracking.
- **Root damage**: Digging inevitably severs fine roots critical for post-move recovery; improper ball size leads to failure.
- **Timing constraints**: Best during dormancy, but veterans' irregular cycles and urban settings limit windows; summer moves amplify desiccation.

Environmental and site challenges

- **Soil and climate mismatch**: New sites rarely replicate decades-old soil chemistry, drainage or microclimate, causing adaptation stress (sunburn, windthrow).
- **Post-move stressors**: Vibration during transport, physical wounds, and altered light/wind exposure compound shock.

Management and conservation challenges[16]

[13] https://www.charteredforesters.org/wp-content/uploads/2016/11/TPBEII-Paper-Pryor-01.pdf.
[14] https://www.ancienttreeforum.org.uk/wp-content/uploads/2016/11/Guidance-on-managing-ancient-and-other-veteran-trees.pdf.
[15] https://www.coloradotreespade.com/blogs/post/common-mistakes-to-avoid-during-tree-relocation.
[16] https://ancienttreeforum.co.uk/wp-content/uploads/2015/03/Veteran-Trees-A-Guide-to-Risk-and-Responsibility.pdf.

- **Ecological irreplaceability**: Veteran trees host unique biodiversity (fungi, invertebrates); relocation rarely preserves this, and UK guidance prioritises in-situ retention or nearby repositioning of hulks - large, standing dead trees, or the massive, ruined remains of formerly large trees.
- **Low success justification**: Survival drops with height/age; experts recommend avoidance unless critical, favouring cabling/bracing.

Physiological challenges

A well-established area of tree biology examines why veteran trees have lower physiological resilience than younger trees. Here is a detailed breakdown:

Cellular ageing and meristematic decline

- Trees do not age uniformly like animals, but their meristematic tissue (the actively dividing cells responsible for growth and repair) becomes progressively less vigorous over time.
- The cambium layer — responsible for producing new wood and bark — thins and slows in older trees, meaning wounds heal far more slowly and incompletely.
- Cell division rates decline, reducing the tree's capacity to produce new vascular tissue to replace damaged or diseased sections.

Hydraulic failure

- As trees grow taller and older, water must travel greater distances from roots to canopy, increasing hydraulic resistance.
- Veteran trees are more prone to cavitation — the formation of air bubbles in the xylem (water-conducting vessels) — which blocks water transport and cannot easily be reversed.
- Long-term drought, disease, and physical damage cause embolisms to accumulate in the vascular system, permanently reducing hydraulic efficiency.

Accumulated physiological stress

- Over centuries, veteran trees absorb repeated stresses — drought, storm damage, disease, pest attack, pollution — each leaving permanent physiological scars.
- Unlike younger trees, veterans have exhausted much of their compensatory capacity; there is little physiological 'reserve' left to draw upon when a major new stress (such as relocation) is imposed.
- Oxidative stress accumulates over time as reactive oxygen species build up faster than the tree's antioxidant systems can neutralise them.

Declining photosynthetic efficiency

- Older leaves and needles show reduced photosynthetic rates due to structural changes in chloroplasts and declining enzyme activity (particularly RuBisCO[17]).
- The ratio of respiring tissue to photosynthesising tissue shifts unfavourably with age — a large veteran has an enormous volume of living bark, cambium, and roots to maintain relative to its leaf area.

[17] Ribulose-1,5-bisphosphate carboxylase/oxygenase.

- This means the carbon budget of a veteran tree is far tighter, leaving less energy available for stress response and recovery.

Mycorrhizal network dependency

- Young trees can establish new mycorrhizal associations relatively quickly in different soils. By contrast, veteran trees have become deeply dependent on highly specialised, localised fungal networks built over centuries.
- These networks are not just nutrient pathways — they also provide disease resistance signals and drought buffering; their loss is catastrophic for an aged tree with no alternative uptake strategies.

Hormonal and chemical signalling decline

- The production of key growth hormones (auxins, cytokinins, gibberellins) declines with age, slowing wound response, root regeneration and adaptive growth.
- Defence chemistry — the production of tannins, resins and other antimicrobial compounds — becomes less efficient, leaving veteran trees more susceptible to fungal pathogens and wood decay organisms that exploit relocation wounds.

Structural commitment

- Much of a veteran tree's internal wood is heartwood — biologically dead but structurally essential; it cannot be repaired or replaced if damaged during relocation.
- The proportion of functional sapwood (the living, active vascular layer) relative to total stem volume shrinks with age, meaning that less active tissue is available to sustain the tree through stress.

In essence, a veteran tree's low resilience is the cumulative result of centuries of biological trade-offs — prioritising longevity and structural investment over adaptability — leaving very little physiological flexibility to cope with the acute trauma of relocation.

The law

Paragraph 193(c) of the National Planning Policy Framework December 2024 (NPPF) states:

> *Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.*[18]

The footnote 70 to NPPF 193(c), states:

> *For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.*

This is a two-limbed test which must be assessed separately and sequentially. A 'compensation strategy' — however robust (which in this case, it is not) — cannot itself constitute or contribute

[18] https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf.

to the *wholly exceptional reasons* justification required by NPPF 193(c).[19]

As this application only relates to a proposal to increase the capacity of existing national infrastructure, it is not so *significant* as to fall within the sort of *wholly exceptional circumstances* envisaged by footnote 70.

North Somerset Council Core Strategy January 2017

The applicant's proposals are also contrary to the North Somerset County Council Local plan; both adopted and proposed.

Core policy CS4: Nature conservation states:

> *The biodiversity of North Somerset will be maintained and enhanced by: …*
>
> *3) seeking to protect, connect and enhance important habitats, particularly designated sites, ancient woodlands and veteran trees; …*
>
> ***How and where the policy will be delivered***
>
> *3.60 Policy CS4 recognises the importance of locations supporting priority habitats, and also networks of habitats, designated or not, ancient woodlands and veteran trees. The policy seeks to protect and enhance biodiversity as a whole but particularly at those valuable locations, and locations where development occurs. The policy is consistent with the aims of South West Nature Map – A Planner's Guide by Biodiversity South West (February 2007), which refers to Strategic Nature Areas that represent the best areas to maintain and expand wildlife habitats through their management, restoration and/or re-creation.*[20]

This is echoed in the as-yet-to-be-adopted draft 2041 Local Plan, at Policy DP37.[21]

[19] *Juden v The London Borough of Tower Hamlets and others [2021] EWHC 1368 (Admin)* https://www.bailii.org/ew/cases/EWHC/Admin/2021/1368.html.

[20] https://n-somerset.gov.uk/sites/default/files/2022-06/A1%20-%20North%20Somerset%20core%20strategy.pdf.

[21] https://n-somerset.gov.uk/sites/default/files/2025-10/Local%20Plan%202041%20-%20pre%20submission%20plan.pdf.

Appendix 3 – Bristol Airport Action Network (BAAN) Transport Report

Review of Proposal to expand Bristol Airport

1. Introduction

I have been commissioned by local community group Bristol Airport Action Network [BAAN] to undertake a review of the Transport and Surface Access [TSA] report, as part of the Environmental Statement, and its associated appendices: Transport Assessment [TA] and Parking Strategy [PS]. These have been submitted by Bristol Airport Limited [BAL] in support of its application to expand the airport to 15mppa [ref: 26/P/0686/OU2]. The TSA has been produced by consultants WSP. The TA and PS have been prepared by consultants Stantec.

This review will focus on methodology including the assumptions made in the TSA, TA and PS and proposed transport mitigation measures for the expanded airport.

2. Transport Planning Experience

I have 40 years experience of transport planning including extensive knowledge and understanding of development planning. I have critically reviewed transport assessments at pre-app and application stage for major developments including negotiating with developers' consultants on Section 278 agreements and Section 106 obligations. I have a strong understanding of transport and traffic models and analysis of their results. More widely I have extensive transport policy and strategy background including a wide range of policy documents and business case preparation.

I have an MSc in Transport Planning and I am a member of the Transport Planning Society. I am also on two Policy Panels for the TPS: on Active Travel and Micromobility and on Public Transport.

3. Policy Background

3.1 NCS Local Plan 2041 pre-submission plan

The Local Plan policy LP12 Bristol Airport, which was submitted to the Planning Inspectorate on 22 May 2026, includes the following:

"Appropriate surface access improvements including major public transport infrastructure and services and support to develop a mass transit link, as well as long distance regional coach services integrating with transport interchanges and long stay parking provisions are provided in step with development to mitigate the adverse impact of airport traffic on local communities and the highway network and facilitate a sustained modal shift to public transport;

Proposals are accompanied by a surface access strategy with identified funding and trigger points;

Improvements are made where necessary to the local highway network serving the airport including junction capacity, highway safety, footways and cycleways to mitigate the adverse impacts of airport operations"

Included in the justification of the policy is the following:

"In accordance with Government policy, all proposals for airport development must be accompanied by clear surface access proposals that demonstrate how the airport will ensure easy and reliable access for passengers, increase the use of public transport by passengers and staff and minimise congestion and other local impacts. Bristol Airport will be expected to define and deliver a low carbon, accessible, integrated, and reliable transport network, for both staff and passengers to access the airport when they need to and support the delivery of infrastructure that prioritises lower emission vehicles. The airport is also expected to limit the increase in demand for additional car parking provision, by increasing public transport mode share and reducing the proportion of car journeys that result in the need for parking at the airport. Integration with the existing rapid transit network and creating a new mass transit link directly to the airport are key elements towards achieving net zero by 2050. Any future off-site park and ride provision must accord with Policy DP20: Airport Parking."

4. Summary of current transport pattern by airport passengers

4.1 Table 1 below shows the current mode share from the main source of airport passengers

Table 1 Current mode share [TA excludes Wales][1]

O/D	Private car	Car drop	Car hire	Taxi	Bus/coach	Rail
City of Bristol	21.6%	29.3%	1.1%	28.1%	19.5%	0.4%
Gloucestershire	44.1%	27.8%	0.7%	13.3%	8.7%	5.3%
Devon	56.3%	13.3%	1.4%	4.1%	21.9%	2.9%

4.2 96% of passengers are from south west England or Wales[2]. Of the 77.4% from south west England 27.6% are from City of Bristol[3]. Passengers from the City of Bristol therefore form 36% of all passengers using the airport.

4.3 Overall, the current mode share, using 2024 data, is as follows:[4]

	Public transport	Taxi	Private car/car hire	Car drop-off
Baseline 2024	17.6%	13.9%	43.5%	24.0%

[1] TA Figure 5.2
[2] TA Table 5.2
[3] TA Table 5.3
[4] TA Table 8.8

5. Assessment of Methodology

5.1 Traffic Counts and Traffic Modelling

5.1.1 Extensive traffic counts were undertaken in September 2024 which is assumed by the applicant to be the busiest month in terms of car parking with high levels of passenger use and outside school holiday periods when traffic levels are generally lower[5]. However, no traffic counts were undertaken in the areas to the east of the airport[6]. This means a full assessment of the impact of the development could not be properly assessed in these areas by the traffic modelling as no base traffic flows have been generated.

5.1.2 The TSA details the environmental impact of the proposed development based on the Institute of Sustainability and Environmental Professionals [ISEP] guidelines which has two rules: 1] include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles (HGVs) will increase by more than 30%); and 2] include highway links of high sensitivity where traffic flows have increased by 10% or more[7]. The environmental impact is assessed on a number of criteria: severance, pedestrian delay and amenity, fear and intimidation and driver/passenger delay and road safety. The TSA details the nine highway links in the agreed study area[8]. These are listed in Appendix 1. In summary none of the identified links in the study area meet the threshold in the rules identified above. However, the assessment is on the basis of a change in traffic flows over a 24-hour period [Average Annual Daily Traffic (AADT) flow] rather than the changes in traffic flows at the more critical time of day. The TA identifies[9] peak traffic flows as AM peak [08.00 – 09.00], PM peak [17.00 – 18.00] and Airport peak [13.00 – 14.00]. It is considered more appropriate to evaluate the impact under the two rules for these peak periods.

5.1.3 The baseline to assess the impact of the proposed airport expansion is estimated at current traffic flows [as per September 2024 traffic counts] but with current airport traffic removed from the traffic model. An Interim Assessment has been undertaken for 2029 [Reference case] which has included committed developments from North Somerset Council [NSC]'s Local Plan. The future Core Case 2038 assessment has future committed developments included for the intervening period 2029 to 2038 but with no airport related traffic included[10]. However, the assessment of the airport generated traffic is only assessed on the potential increase associated with the permitted 12mppa development and not against the current baseline model[11] with the projected increase in mode share by public transport [PT] under the permitted 12mppa scheme taken as a base with future assessments for 2012 permitted scheme and proposed 15mppa development assessed against this

[5] TSA para 8.4.3
[6] TA Tables 7.1 and 7.2
[7] TSA para 8.3.2
[8] TSA Table 8.4
[9] TA para 7.4.5
[10] TSA paras 8.5.4/5 and TA Section 8
[11] TA paras 8.3.5/6

assumption[12]. Moreover, graphic 8.1 in the TSA assumes a 2.5% growth in PT share for 12mppa permitted development [to 20.1%] and an increase of 5% in public transport mode share to 26% for the proposed expansion to 15mppa although the potential increase in mode share by PT is actually 5.9% rather than 5% shown in the graphic[13]. The issues for consideration around these assumed increases in PT share are discussed later. The transport assessment is therefore on the basis of the increase in airport passenger use from the permitted 12mppa to the proposed 15mppa. In my view this is potentially an underestimate of the impact the expanded airport to 15mppa could have on the local and wider road network and public transport services.

5.1.4 For clarification the identified proposed traffic flows for each of these links should be included in the TSA albeit with the caveat detailed above on the assessment of future traffic flows arising from the expansion to 15mppa. Similarly, the TSA should include an assessment of the impact of the proposed development at junctions within the study area as delays on heavily trafficked roads are at junctions rather than on links although this is included in the TA.

5.1.5 The TA includes extensive details of the traffic modelling undertaken using the assumption of an increase in mode share by public transport to 26% by 2038[14]. 10 junctions have been assessed for their residual traffic impacts[15] [the list of junctions that were tested is in Appendix 2]. Most of the junctions would operate within acceptable parameters as modelled, taking into account expected traffic flows arising from the expanded airport. However, the A38/Barrow Lane junction is likely to have extensive queueing in the PM peak on A38 going southbound even after the proposed mitigation measures have been delivered with a theoretical queue length of 68 vehicles[16]. In reality general traffic would divert to seek alternative routes rather than queue although bus services to the airport which cannot divert are potentially likely to suffer significant delay on the approached to this junction. NSC introduced bus lanes at A38/Barrow Street [B3130] junction as part of its Bus Service Improvement Plan [BSIP][17]. However, current traffic queues are too long to allow buses to access the bus lanes in a single phase of the traffic lights thus reducing their value. The TA is proposing a mitigation measure [extension of the A38 [E] right turn lane to 44m to allow 7 vehicles to store in this lane]. However, this junction would still have substantial queueing and delay on A38 and on Barrow Street in all time periods even after the proposed mitigation has been introduced[18]. It is suggested that the length of the existing bus lane is extended to mitigate this and provide much better bus priority and assist bus service speed

[12] TA para 4.2.1
[13] TA para 4.2.2
[14] TA Section 11
[15] TA para 11.1.1
[16] TA Table 11.8
[17] TA para 11.5.4
[18] TA Table 11.10

and reliability. NSC is also introducing bus lanes at the A38/Colliters Way junction[19] on A38 as part of the BSIP scheme. Even with the proposed mitigation scheme to remove a circulatory bus lane to a general traffic lane[20] queueing is still expected on all arms of the junction leading to delays to general traffic as well as buses[21].

5.2 Road Safety

5.2.1 A Personal Injury Collision review was undertaken for an area agreed with NSC covering the last 5 years. The area covered is shown in Appendix 3. The area covered is predominantly to the north and west of the A38/Airport and only as far as Winford to the east/south. Four areas were examined in detail as there were clusters of road collisions[22]: Backwell Village (West Town Road & Farleigh Road); Gurney Roundabout (A370/ A4174); Lime Kiln Roundabout (A38/ A4174) and A38/ Barrow Lane/ Hobbs Lane. The consultants conclude there are no safety concerns from an analysis of the collisions at these locations[23]. As noted above in para 5.1.2, road safety is one of the criteria to be assessed as part of the Environmental Statement and consideration should include "the number of new trips from the Proposed Development travelling through the link/junction and potential for these to exacerbate the number or severity of collisions"[24]. However, there is no explicit consideration within the TA of the impact on road safety of the increased volume of traffic on links and junctions within the study area around the airport.

5.3 Construction Traffic

5.3.1 The TA includes an assessment of expected HGV traffic for the peak construction year which is assumed to be 2029[25]. A number of junctions have been tested where it is anticipated there would be an increase in HGV traffic arising from the development[26]. The modelling shows that Barrow Lane arm with the A38 junction would be over capacity in AM and PM peaks exacerbating current queues on Barrow Lane. Similarly for the Barrow Street junction with A38 this junction would be over capacity in all time periods and arms of the junction adding to existing queueing especially from Barrow Street. Even if the mitigation measures at this junction [as described in para. 5.1.5] were developed earlier there is likely to be a period when queueing is increased due to construction traffic.

[19] TA para 11.6.1
[20] TA para 11.6.8
[21] TA Table 11.12
[22] TA para 7.6.11
[23] TA para 7.6.13
[24] TSA para 8.5.38
[25] TA para 12.1.7
[26] TA para 12.1.11

5.4 Staff Travel

5.4.1 Currently 74.4% of employees drive alone to work with a further 19.9% by public transport[27]. Employees work shift patterns and the number of employees varies throughout the year[28] with 58% assumed to be present on site[29]. The number of employees is forecast to grow with airport expansion[30]:

2024 [10.6mppa]	5,560 employees
12mppa	5,944
15mppa	6,434

The traffic modelling assumes that the current mode share is the same in the 12mppa permitted development scenario and proposed 15mppa[31].

The traffic modelling includes predicted employee mode share and included within the overall traffic impact assessment and associated highway modelling.

5.5 Parking Strategy

5.5.1 Current on-site passenger parking provision is 20,261 [2025 figures] including the Multi-storey Car Park 2 [MSCP2] and Public Transport Interchange [PTI]. The consented development allows for 22,300 [MSCP3] which will replace some of the existing surface parking. The proposal is to expand long stay by 1,200 spaces. Following completion of MSCP2 the total MSCP capacity is forecasted to provide 6,132 spaces. Construction of MSCP3, as part of the monitor and manage workstream, is expected to commence in late 2026 with forecast opening in 2027/8. Under the proposed 15mppa expansion passenger car parking provision is 26,600 an increase of 4,300 over the consented 12mppa development [22,300][32] or a 19% increase in capacity.

5.5.2 The estimated demand for on-site parking is on the basis of a mode share by public transport of 26%[33]. However, as discussed below, it is by no means certain that this mode share of 26% by public transport could be met by 2038.

5.5.3 The assessment of parking demand estimates a demand for off-site parking of 5,490 spaces for 15mppa development[34]. Three sites have been identified by BAL to support delivery of that: site 28 – land north west of Bristol Airport; site 27 – land south of Bristol Airport and site 26 – land south west of Bristol Airport. However, only sites 27 and 26 are in

[27] TA Table 5.8
[28] TA para 5.7.1
[29] TA Figure 8.1
[30] TA Table 8.17
[31] TA para 8.12.1
[32] PS Table 6.3
[33] PS Table 4.2
[34] PS Table 6.4

the ownership of BAL and all are in Green Belt. Separate planning applications would be necessary with no certainty of delivery.

5.5.4 There is a risk that on-site parking demand could be greater than estimated, potentially leading to more off-site parking particularly on unauthorised sites [sites without planning permission] in the area around the airport. This is clearly an existing issue[35]. BAL have included the funding of two Council Planning Enforcement officers to seek to manage this issue as part of a Section 106 obligation[36]. Moreover, additional unauthorised off-site parking could add to the estimated traffic generated by the proposed development.

6. Mitigation measures

6.1 Highway network

6.1.1 In the planning permissions granted for 10mppa and 12mppa flows only limited off-site highway improvement or capacity enhancements were required [see Appendix 4 for full list of transport and access measures]. The A38 is the main road access to the airport and is predominantly a single carriageway road. It is designated as part of Major Road Network [MRN] by National Highways. There are proposals to deliver enhancements to the road in North Somerset [and further afield] but most of these proposals are to enhance pedestrian and cyclist safety and accessibility around the airport and on its approaches although the proposal does include a northbound bus lane between the Northern and Southern airport accesses[37]. [Full details of proposed MRN measures are in Appendix 5]. The TSA states construction could commence autumn 2026[38].

6.1.2 Full details of the proposed highway improvements as part of a Section 106 obligation are in Appendix 6.

6.2 Public Transport

6.2.1 Mode share of 17.6% was agreed by NSC for 10mppa with an assumed increase of 2.5% for permitted 12mppa to 20.1%. CAA data commissioned by the applicant provides information on passenger mode of travel to/from airport and their location. This relates to 2024[39]. However, the new Public Transport Interchange [PTI] and second multi-storey car park [MSCP2] was operational only in summer 2025[40] and therefore the impact of this construction on passenger travel mode to the airport is not reflected in CAA sourced 2024 data. Permitted 12mppa development includes only two frequency enhancements [A1 and A3] and new service A2 which is primarily aimed at airport staff. New longer distance coach service at infrequent intervals [National Express route 100] is also in operation plus U2

[35] PS paras 2.4.2/3
[36] TSA Table 8.20
[37] TSA para 8.6.78
[38] TSA para 8.6.75
[39] TSA Table 8.3
[40] TSA para 8.6.4

service which joins two University of Bristol campuses and hence is more aimed at students rather than airport passengers. Numerically it is assumed that 3.9m passengers will access the airport by PT in 2038 against 1.9m in 2024[41]. Appendix 7 summarises the proposed increases in public transport services.

6.2.2 There are no direct rail services serving the airport. Nailsea and Backwell station is nearest at about 4.5km but the station is inaccessible and therefore not marketed a suitable for passengers with heavy luggage or mobility difficulties with the new bus service A2 via the station primarily serving airport staff. It cannot therefore offer an alternative option for passengers to access the airport by public transport.

6.2.3 Table 2 below shows current, permitted development and forecast of the main origin and destination of passengers[42]:

O/D	Current	12mppa	Passengers per day	15mppa	Passengers per day
City of Bristol	27.6%	28.2%	11,521	28.5%	14,555
Wales	18.6%	18.6%	7,588	18.0%	9,157
Gloucestershire	10.3%	10.5%	4,306	10.5%	5,366
Devon	10%	9.9%	4,061	9.9%	5,045
North Somerset	7.3%	6.4%	2,627	6.5%	3,289
Bath and NE Somerset	5.7%	5.9%	2,406	5.9%	3,009
Wiltshire	5.2%	5.5%	2,270	5.6%	2,881

6.2.4 In summary the proportion from each of the main O/D is predicted to be broadly unchanged but an additional 3,000 passengers per day are predicted to be to/from Bristol. The only committed bus capacity enhancement [between 12mppa and 15mppa] is on route A4 from Bath which only goes through south Bristol in the City of Bristol area. Data in the TA[43] indicate a theoretical capacity of bus services to enable the estimated mode share by PT by 2038. However, there is no guarantee that such capacity would be used by passengers and airport staff to access the expanded airport. Moreover, the capacity of the new buses on route A1 is 65 spaces but with only 22 seats on the lower deck due to the extensive space allocated for luggage. It is considered unlikely that extensive use of the upper deck by passengers with heavy or bulky luggage or with mobility difficulties would occur thereby

[41] TA para 4.2.3
[42] TA Tables 5.3 and 8.7
[43] TA Section 9.3

reducing effective capacity of these bus services. The focus on increasing use of routes A1 and A3 is on fare policies rather than increasing frequencies [44] to reduce taxis and drop off[45].

6.2.5 Moreover, it is assumed in the TA that public transport would be used by 26% of passengers to access the airport[46]. In the TSA report there are references to Section 106 obligations[47] relating to potential new express bus services to outer Bristol areas; potential new coach services; potential integration with rail such as at Bristol Parkway and use of existing P&R locations for linking new airport bus and coach services as well as potentially new park and ride sites. The TA states the public transport improvements have been tested[48] but no details have been provided on routeing, capacity and exactly how these improvements would lead to an increase in public transport mode share to 26%[49]. Moreover, none of these are commitments and for new P+R sites these would be subject to separate planning applications for which there are no certainty of delivery and lack any information on the potential frequency/capacity of any bus service enhancements arising from existing and potential P+R sites. I consider that it is relevant that the Planning Inspectorate in its consideration of the appeal against NSC's refusal of planning permission for expansion to 12mppa considered an increase of 5% mode share by public transport as "unrealistic" and "is a figure unsupported by analysis to show how it might be achieved". [See Appendix 8 Extract from Planning Appeal decision letter 2 February 2022].

6.2.6 The table below summarises the predicted changes in mode share for the main origins/destinations of passengers.

Table 3 The assumed PT share for the main origin/destination is as follows [derived from TA table 8.9]

O/D	Public transport		Taxi	Car	Car drop off
	12mppa	15mppa	% mode change from 12 mppa to 15mppa		
City of Bristol	21.0%	32.9%	-3.6%	-3.9%	-4.4%
Wales	18.2%	18.4%	0.0%	-0.3%	0.0%
Gloucestershire	15.4%	26.9%	-2.9%	-5.5%	-3.1%
Devon	25.8%	29.7%	-0.1%	-3.1%	-0.7%

6.2.7 NSC has sought commitments to the delivery of a Mass Transit [MT] scheme[50]. The segregated MT is being promoted by West of England Combined Authority [WECA] from the airport to Bristol city centre in its Joint Local Transport Plan 4 [JLTP4] covering the period 2020 to 2036. Options are being considered for bus, metrobus, tram, tram-train, mass

[44] TA para 4.2.7
[45] TA para 9.3.7
[46] TA Table 8.8 and draft Airport Surface Access Strategy (ASAS)
[47] TSA Table 8.20
[48] TA paras 8.9.1/2
[49] TA para 9.2.2
[50] NSC pre-application letter to BAL 20 March 2026

transit (fully segregated underground running) and heavy rail. However, scheme development is at a very early stage with no certainty that such a scheme could be delivered within the timescale for the proposed airport expansion to 15mppa by 2038 [JLTP4 estimate delivery between 10 and 20 years].

7. Summary

In my view the submitted Transport and Surface Access report including appendices on the Transport Assessment and Parking Strategy do not accurately assess the highway and public transport impacts of the proposed expansion of the airport to 15mppa for the following reasons:

Traffic Modelling

- the traffic modelling undertaken is based on the change from the permitted 12mppa development rather than on the basis of the change from the current usage of the airport which is approximately 10.6mppa. As traffic surveys were undertaken in September 2024 when passenger throughput for 2024 was This would lead to an underestimate of the impact of the additional traffic expected from the expansion of the airport to 15mppa by 2038.
- with the expected longer queues at some junctions on the A38 at peak times, as detailed in the traffic modelling, airport traffic is likely to divert to other roads in a wider area such as through local villages which are served by more minor roads. As no traffic flow counts were undertaken in the area to the east of the airport, the volume and impact of this additional traffic on these roads could not be properly assessed.

Public Transport

– the analysis in the Transport and Surface Access report and Transport Assessment is predicated on an increase in the proportion of passenger trips by public transport from the current 17.6% to 26% by 2038. There is no clear evidence that this increase in the mode share could be achieved by the proposed increase in public transport services through the permitted 12mppa development and the Section 106 obligations in the Transport and Surface Access report.

- it is assumed that the estimated proportion of passengers using public transport under the permitted development of 12mppa at 20.1% would be achieved and that the proportion by 2038 of 26% is on the basis of this forecast mode share. This is not considered a robust assessment of the likelihood of a 26% by public transport being achieved. The Parking Strategy is also based on this assumed mode share by public transport.

– a number of public transport improvements are listed in the Section 106 embedded mitigation measures but there is no certainty that these could be delivered by BAL. There are several references to “potential” increases in bus and coach services and expanded or new Park and Ride sites.

Road Safety

- the impact on road safety of additional traffic arising from the development is one of the criteria in the Environmental Statement. However, there is no explicit consideration within the Transport Assessment of the impact on road safety of the increased volume of traffic on links and junctions within the study area around the airport.

Environmental Statement

- it is considered more appropriate to assess the environmental impact of additional traffic during peak periods rather than over an average 24-hour period. Not doing so could lead to an under assessment of the environmental impact.

Malcolm Smith

Transport Consultant for Bristol Airport Action Network

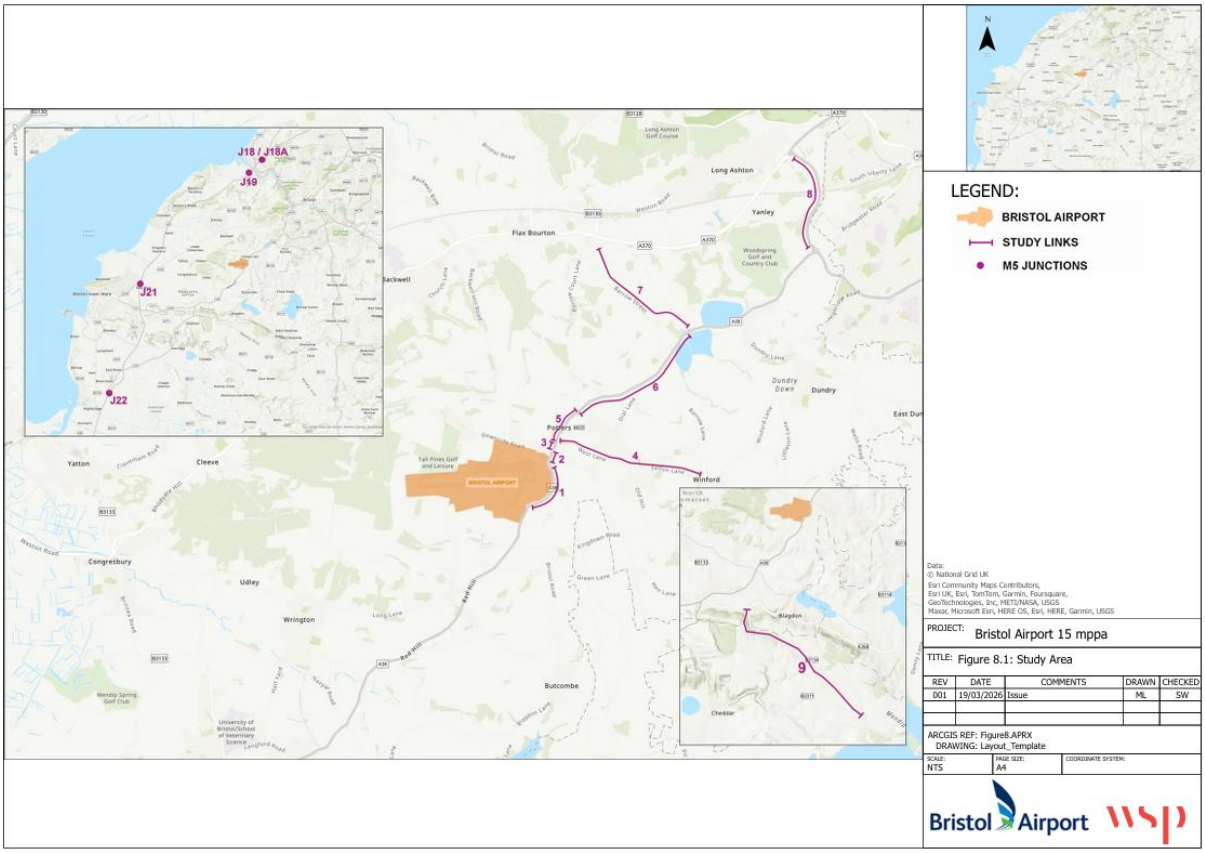
June 2026

Appendix 1

Study Area – Links

1 A38 between Airport Accesses
2 A38 between Northern Access and Downside Road
3 A38 between Downside Road and West Lane
4 West Lane/Felton Lane
5 A38 between West Lane and Quarry Access
6 A38 between Quarry Access and Barrow Street
7 Barrow Street
8 Colliters Way
9 B3134 Broad Road

These are shown in the figure below:



Appendix 2 Junctions assessed through traffic modelling

Junction 1a – A38 / Northside Road;

Junction 1b – A38 / Downside Road / West Lane;

Junction 2 – A38 / Silver Zone;

Junction 3 – A38 / Dinghurst Road;

Junction 4 – A38 / Barrow Lane;

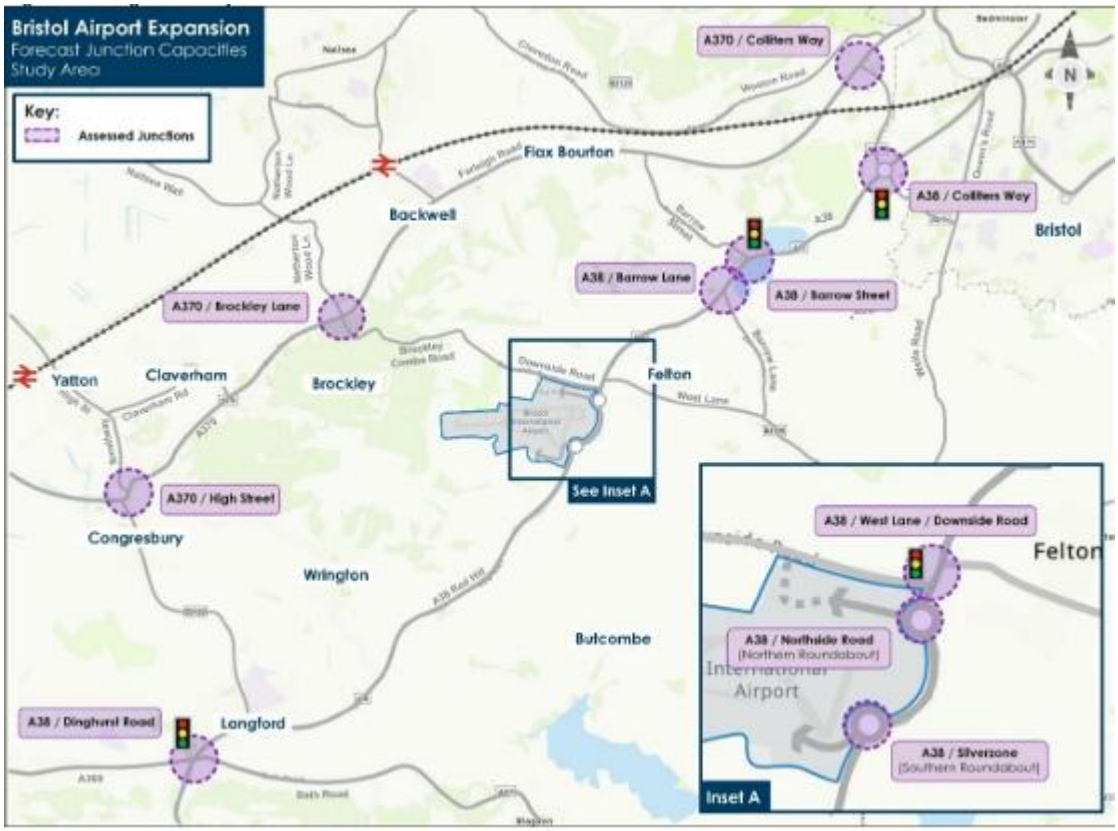
Junction 5 – A38 / Barrow Street;

Junction 6 – A38 / Colliters Way;

Junction 7 – A370 / Colliters Way;

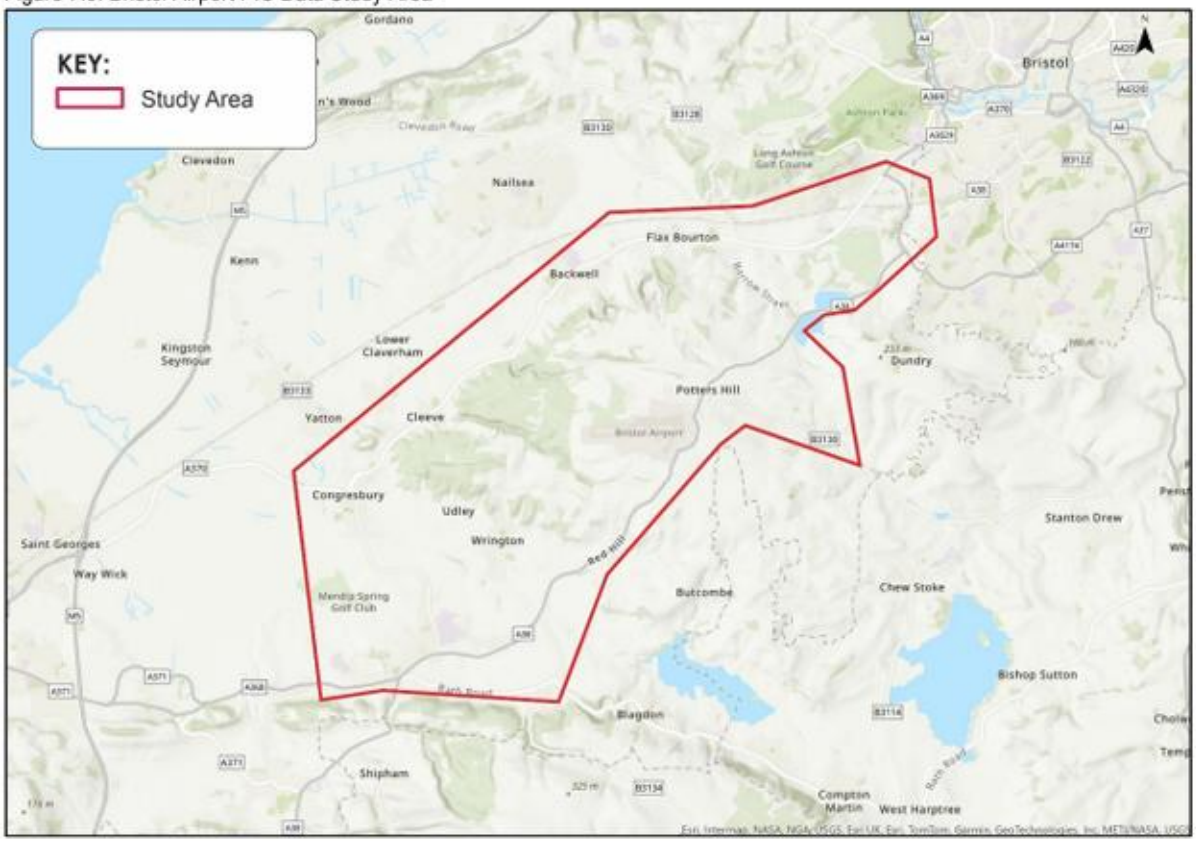
Junction 8 – A370 / Brockley Lane; and

Junction 9 – A370 / High Street.



Appendix 3 Personal Injury Collision study area

Figure 7.9: Bristol Airport PIC Data Study Area



Appendix 4 Transport and surface access

The list below details the transport and surface access measures which have been implemented or are required of the relevant planning permission [source TSA para 8.6.73]

10 mppa Permission:

• delivery of MSCP2 and PTI (operational as of July 2025);

12 mppa Permission:

• increase in passenger throughput to 12 mppa, and associated increases in passenger movements;

• employee and operational trip generation (commenced);

• enhancement to the internal road system including gyratory road with internal surface car parking and layout changes (commenced but under separate permitted development or as part of ongoing maintenance or reconfigurations works);

• reinstatement of the Long Stay car park on north side, with pedestrian / cycle route between the A38 and MSCP2 / PTI;

• relocation of Meet & Greet vehicle storage to southside;

• expansion of Staff Car Park;

• relocation and Expansion of the free Waiting Zone in southside.

• improvements to the A38 and its junctions with Downside Road and West Lane (detailed design commenced as part of MRN scheme);

• construction of a consented MSCP3 to the north-west of the terminal building providing 2,150 spaces with an overall net increase of approximately 1,600 spaces, subject to detailed design (to be commenced); and

• permanent use of the Cogloop2 parking area in Silver Zone.

Appendix 5 A38 improvements to be delivered through MRN scheme [source TSA paras 8.6.78 and 11.1.7]

North Somerset:

- the A38 junction with Downside Road would be upgraded with staged toucan crossings on both the A38 and Downside Road. This provides a safe pedestrian route from the Airport Tavern, where certain bus services stop and provide access to Bristol Airport;
- the A38 junction with West Lane will be signalised
- West Lane junction to Silver Zone roundabout improvements providing improved pedestrian and cycling facilities, with carriageway widening and provision of a designated northbound bus lane between the Southern Access Junction and Northern Access Junction to reduce traffic congestion ensuring more reliable journey times for all users including public transport;
- Barrow Street junction safety scheme including improved bus accessibility to bus layby;
- Barrow Lane/Hobbs Lane to Dial Lane active travel scheme providing cycle lane and improved pedestrian facilities together with road safety improvements;
- Langford area active travel providing cycle lane and improved shared footway facilities; and
- Sidcot Lane to Hillyfields junction active travel providing cycle lane and improved shared pedestrian facilities.

Appendix 6 Embedded mitigation measures

The table below identifies the proposed mitigation measures in relation to highway and public transport improvements to be delivered through S106 obligation [source TSA Table 8.20]

Improved public transport services - Enhanced existing Airport bus service frequency: A4 bus service frequency increasing from hourly to half hourly - Pricing strategies for groups/families on buses - Potential new express services to Outer Bristol Areas: North West Bristol – Avonmouth, Henbury and Westbury-on-Trym North Bristol/South Gloucestershire - Patchway, Lockleaze and Bradley Stoke East Bristol/South Gloucestershire - Mangotsfield, Emersons Green and Cadbury Heath - Coach service improvements including potential new services and frequency increases to existing destinations - Further rail integration into bus services e.g. Bristol Parkway - Potential P&R integration with Airport bus and coach services: • Newbridge P&R, Bath • Brislington P&R, Bristol • Honiton Road P&R, Exeter • Taunton Gateway P&R, Taunton • Arle Court Transport Hub, Cheltenham • Other sites as new bus and routes are brought forward, or new P&R sites are constructed - Annual programme of marketing of public transport services
Highway Improvements - Northern Access Junction (interim scheme) partial signalisation - Northern Access Junction (full scheme) signalisation, localised widening, toucan crossing and public transport enhancements - Southern Access Junction – enlargement to provide a dumbbell roundabout - New bus lanes between the Northern and Southern Access Junctions, open to cyclists - Improved walking and cycling route between Northern and Southern Access Junctions - A38/Barrow Lane Junction – signalisation, banning left turn from Barrow Lane and new controlled toucan crossing - A38/Barrow Street Junction – lengthening right turn filter lane - A38/Colliters Way Junction (Lime Kiln Roundabout) – conversion of circulatory bus lane (circa 10m) to general traffic lane

Appendix 7 Proposed public transport service enhancements

The table below shows the change in public transport services in relation to the permitted 12mppa and for proposed 15mppa compared to current provision under 10mppa [derived from TA Table 2.1 and TSA Table 8.20]

Bus/coach services	Status	Peak frequency 10mppa	Peak frequency 12mppa	Peak frequency 15mppa
A1 Bristol flyer [Bristol Bus Station – Bristol City Centre – Bristol Temple Meads – Bedminster – Bristol Airport]	Enhanced April 2025	12 minutes	7.5 minutes	7.5 minutes
A3 Weston Airport Flyer (Weston-super-Mare – Worle – Congresbury – Cleeve – Bristol Airport)	Enhanced April 2025	60 minutes	30 minutes	30 minutes
A4 Air Decker Bath (Bath – Saltford – Keynsham – South Bristol – Bristol Airport)	In operation	60 minutes	60 minutes	30 minutes
216 National Express (Cardiff Coach Station – Newport – Bristol Airport)	In operation	120 minutes	120 minutes	120 minutes
South West Falcon (Plymouth – Exeter – Taunton – Bristol Airport)	In operation	60 minutes	60 minutes	60 minutes
Flixbus (Swansea – Bridgend – Cardiff – Newport – Bristol Airport	In operation	120 minutes	120 minutes	120 minutes
100 National Express (Birmingham – Cheltenham – Gloucester – Bristol Airport	In operation	-	120 minutes	120 minutes

A2 (Bristol Airport – Backwell – Nailsea – Clevedon – Portishead)	In operation	-	60 minutes	60 minutes
U2 (Bristol Bus Station – Clifton Triangle – Bristol Airport – Sandford – Banwell – Weston-super-Mare)	In operation	-	60 minutes	60 minutes

Appendix 8 Extract from Planning Appeal decision letter 2 February 2022

Public transport mode share

356. BAL has carried out an assessment of the likely effects of the public transport enhancements. Table 6.6 summarises the overall impact of the measures and indicates that a 2.9% PTMS [Public Transport Modal Share] increase is achievable provided all the measures were as effective as assumed. However, given the slower rate of growth in recent years, it is not unreasonable to assume that not all of the service improvements will deliver the desired level of modal shift. Consequently, the Panel consider that a PTMS increase of 2.5% is an ambitious but realistic target.

357. By contrast the 5% increase or 26.8% PTMS target advocated by NSC while no doubt ambitious, is considered unrealistic. It is a figure unsupported by analysis to show how it might be achieved. It is important to recognise that a target of 2.5% is not a ceiling, and it might well be the case that measures that sit outside the ASAS (such as the delivery of the public transport interchange (PTI)), might result in some additional uplift. However, that possibility does not justify NSC's 5% target.

Appendix 4 – Economic Impact Report on the Proposed Expansion of Bristol Airport by the New Economics Foundation for the PCAA

NEW ECONOMICS FOUNDATION

The economic impact of an expanded Bristol Airport

Report | Dr Alex Chapman | June 2026

Executive summary

The New Economics Foundation, commissioned by the Parish Councils Airport Association, reviewed the economic case for expanding Bristol Airport. Our key findings were as follows:

- **The scheme could worsen an already worrying decline in south-west tourism.** The region depends on domestic visitors, who spent £8.7bn in the south-west in 2024 against £1.5bn from international tourists. Domestic overnight tourism has been declining rapidly since before the pandemic, and faster than any other region in the UK. As a result the south-west has lost its title as Brits' favourite domestic summer holiday destination. Cheaper flying accelerates the diversion of domestic spending to overseas. The Applicant's projection of the scheme's tax impact – a net loss of £16m per year – implies they think that around £200m a year (net) will be diverted out of the domestic economy by the expansion. This is enough to cost 1,000–2,000 jobs in sectors like retail, leisure and hospitality.
- **Yet outbound tourism is scoped out.** Around 75% of passengers at Bristol are flying overseas for leisure – the single largest effect of the scheme – yet the Applicant excludes it, relying on 2013 government commentary built on data now fifteen years old and a misreading of earlier applications. This flies in the face of policy, and a bank of recent evidence, including reports associated with the aviation industry itself, showing the detrimental impact air transport growth can have on domestic spending. At an airport where outbound travel is three passengers in four, it is plainly a relevant consideration and should be fully assessed.
- **The employment claim does not hold.** The 1,370 jobs attributed to the scheme are net only of displacement between airports, not of jobs lost elsewhere. On the Applicant's own numbers at least as many jobs may be lost as created, with losses falling on deprived coastal and rural areas and gains accruing to higher-income parts of the country. The net effect on UK employment is negative and regressive.
- **The GDP case is unsound.** Both of the Applicant's methods – a bottom-up estimate from a 2013 study and York Aviation's top-down model – rest on correlations that cannot show air travel causes growth, and both double-count benefits counted elsewhere. An alternative approach, drawn from research the airports industry itself commissioned, points the other way: a reduction in West of England GDP per capita of around 0.65%, or roughly –£300m.
- **The climate appraisal is skewed.** The Applicant adopts the government's recommended method, then modifies it in a manner that, overall, flatters the scheme – arriving-flight

emissions excluded, carbon costs left out of the core cost-benefit analysis, and no non-CO2 sensitivity test. All additional emissions carry an economic cost, whether or not they fall within a carbon budget, and the law requires them to be assessed wherever they occur.

- **Corrected, the cost-benefit equation turns negative.** Correctly including and specifying the carbon costs in line with government guidance turns the core net present value from the +£0.26bn the Applicant reports to -£0.24bn. Business productivity cannot be included as a sensitivity test, as the Applicant has, because it double counts impacts already measured in the core assessment. Every other sensitivity test produces a deeply negative result. Treated to a robust assessment the proposed scheme is not in the economic interest of the region or the country.
- **Evidence from the Heathrow 3rd runway DfT impact assessment supports NEF's approach.** The DfT include carbon costs as a core component of their cost-benefit analysis, but exclude wider business productivity/GDP-style impacts. Their assessment concludes that the Heathrow scheme has a deeply negative net present value to society, aligning with NEF's findings here.

1. Introduction

1.1. The New Economics Foundation (NEF) was commissioned by the Parish Councils Airport Association (PCAA) to conduct a review of the economic impact of the proposed expansion of Bristol Airport. Our review focuses primarily on the issues of tourism impacts, GDP impacts, and the economic dimensions of the scheme's climate impact.

1.2. The New Economics Foundation is a charitable think tank with a mission to build a new economy that works for people and the planet. We have contributed evidence on the economic impact of a range of UK airport expansion schemes. This evidence has been provided both independently and under commission from community groups and councils.

1.3. Most recently, NEF contributed evidence to the Planning Inspectorate's assessments of the proposed expansions of Luton and Gatwick airports. Ultimately, the Inspectorate recommended refusal of expansion in both cases. The government subsequently went against the Inspectorate's advice in granting development consent orders (DCO). At the time of writing, both decisions were being challenged in the courts.

1.4. This review focuses primarily on analysis presented in the Applicant's Socio-Economic Impact Assessment (SEIA), and their demand forecasts. These documents are then synthesised in Chapter 11 of the Environmental Statement (ES).

2. Tourism impacts

Context: South-west tourism in crisis

2.1. Tourism and hospitality are important contributors to the economy of south-west England. The south-west receives most of its tourism spending from Brits' domestic travel rather than from international visitors. In 2024 domestic travellers spent £4.5bn on overnight trips to the south-west and £4.2bn on day trips for a total of £8.7bn.[1] In contrast, in 2024, international visitors were estimated to have brought around £1.5bn into the region.[2]

2.2. Domestic overnight tourism in the south-west has been falling rapidly. Between 2022 and 2025 the sector shed around one-third of its trips and a quarter of its spending. While, to some extent, this trend may have been influenced by the 'return to normal' after the pandemic, the simultaneous rise of international air travel and decline of domestic tourism is instructive. The trend points towards 'substitution' between the two areas of spending.

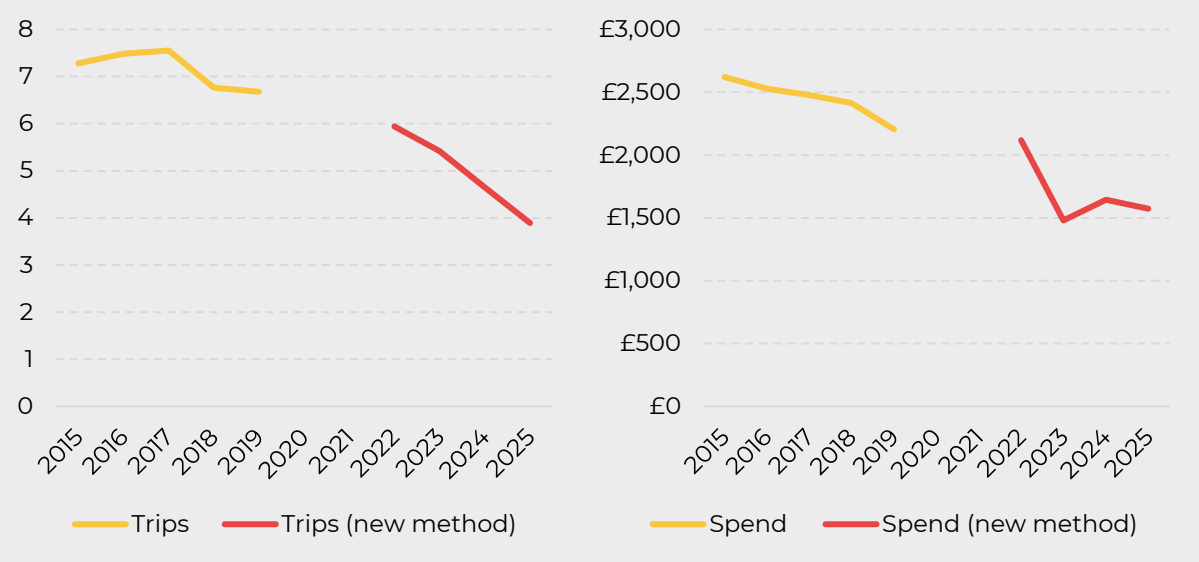
2.3. Concerningly, domestic overnight tourism in the south-west also appeared to be in decline prior to the pandemic with 8% of trips and 16% of spend lost between 2015 and 2019 (Figure 1). This suggests it is not only the recent disruption (energy price crises etc.) and policy changes (such as to employer national insurance, the minimum wage etc.) that have been contributing to the decline.

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[1] VisitBritain, GBTS Day Visits 2024, Great Britain annual tables and GB Tourist 2024 report, domestic overnight trips

[2] ONS Estimates of overseas residents' visits, spending and nights

Figure 1: Domestic overnight trips to the south-west (left, millions) and domestic overnight trip spending (2025 prices) in the south-west (right, millions)



Source: NEF analysis of VisitBritain Great Britain Tourism Survey. While a survey methodology change was implemented during the pandemic era a VisitBritain report published in June 2026 confirmed that pre/post pandemic decline is likely robust.

2.4. Relative changes between regions are also informative. In **Figure 2** we can see that in 2025 the south-west lost its crown as Brits' favourite summer holiday destination, slipping to fourth in the rankings. NEF analysis suggests that the south-west has lost out as rural, seaside and small town holidays have been diverted to overseas travel, while city breaks (notably London and Manchester) have been more resilient.[3] This has seen London displace the south-west as recipient of the most domestic overnight trips and spending.

[3] Chapman, A. (2026) The disappearance of the Great British holiday. New Economics Foundation

Figure 2: Market share of UK regions in domestic summer holiday (Jul-Sep) overnight trips in 2015 compared to 2025



Source: NEF analysis of data provided by VisitBritain from the Great Britain Tourism Survey

The decision to "scope out" outbound tourism

2.5. The airport has submitted a large amount of analysis on the economic impact of its proposed expansion. Remarkably, despite this, the airport fails to meaningfully assess the largest impact of the proposed scheme: its impact on outbound leisure flying. Around 75% of the passengers flying from Bristol Airport are UK residents flying overseas on leisure, the second highest of any UK airport behind East Midlands.

2.6. Inbound tourism features heavily in BAL's economic submissions, despite contributing just 8.5% of the airport's passengers in 2024.

2.7. To "scope out" the primary impact of the scheme, as the Applicant has done (explained by the Applicant at para 11.3.11 of the ES), is to abandon best practice appraisal.

2.8. The justification used by the Applicant to exclude consideration of outbound tourism has two core strands: (a) to rely on comments in the Aviation Policy Framework (APF) and (b) to rely on the treatment of the issue in previous applications. Below we address each respectively:

(a) The APF was published in 2013 and consulted on in 2012. As a result, consultees only had data available to them up to 2011. The government arrived at the conclusions in the APF based on data which is now 15 years old, and which focused on the national picture, not individual airports. Since then the world has changed dramatically, and new economic trends have emerged (financial crises, wars, pandemic, Brexit, the decline of business air travel, growth of the travel deficit etc.). Critically, the domestic tourism economy of the south-west has spent most of the intervening period in steady

decline (Figure 1). Limited weight should be given to government commentary made on out-dated trends. In any case, the APF does not state that the economic impacts of outbound travel should be ignored.

If dated government commentary is to be considered relevant, then the Government Tourism Policy of 2011 should also be taken into account. The policy takes a different view on the outbound tourism issue; it explicitly set out that: *"over time, our goal should be to persuade more of us to holiday at home. In measurable terms we should increase the proportion of UK residents who holiday in the UK to match those who holiday abroad each year"* (p.16). Expansion of Bristol Airport is directly at odds with this aim. Not only that, but the policy identifies that successfully persuading more Brits to holiday in the UK would create *"£1.3bn more spend and 26,000 new jobs"*.

The Making Best Use of Existing Runways policy (2018) is also instructive; it clearly states [emphasis added]: *"We therefore consider that any proposals should be judged by the relevant planning authority, taking careful account of* ***all relevant considerations****, particularly economic and environmental impacts and proposed mitigations." (p.9).* Clearly, at an airport in which 75% of the passenger traffic is outbound tourists, outbound tourism impacts are a 'relevant' consideration falling in-scope of the impact assessment.

(b) As regards previous applications, decision makers should take each application on its merits and consider the latest available evidence. We will go on to set out strong recent evidence pointing towards a potentially significant economic harm arising from outbound tourism. Moreover, the Inspectors dealing with the Bristol appeal did not "scope out" outbound tourism; they, in fact, specifically recognised that *"there may well be some negative economic effects arising from an increase in outbound tourism"* (2021 Appeal Decision p. 75) and this *"should be weighed against the social benefits of foreign travel"*. Decision makers must weigh up these impacts once again to be able to determine their significance. To do so, good quality impact assessment is required. No such assessment has been provided. We have found no evidence in the other two references provided by the Applicant (Planning Inspector decision letters on Gatwick and Luton) that the Planning Inspectors did in fact "scope out" outbound tourism in their final decisions on either airport.

2.9. The balance between outbound and inbound tourism, and the material negative economic impacts of outbound tourism are critical to appraising this scheme. A 2018 report provided to the DfT by Peak Economics – written by two leading UK transport economists – set out the following question as one of three "key diagnostic tests" of the economic impact of a regional airport:
"Is it likely to generate net positive tourism to the region (i.e. the increase in tourism to the region more than compensates for any increase in outbound tourism)?"[4]

[4] Peak Economics (2018) Wider Economic Impacts of Regional Air Connectivity. Report to the Department for Transport.

A key diagnostic test should not be scoped-out.

How economic harms from outbound tourism arise

2.10. In real terms, UK household income[5] and expenditure[6] levels have shown minimal change in the past 20 years. In this context, an increase in spending in one sector or region will usually be met by a reduction in spending in another. The principal impact of expansion at Bristol Airport is to make flying cheaper. This means encouraging UK households to spend more of their annual budget on flying, and on overseas tourism, and less in other sectors of the economy.

2.11. As far back as 2006 research from an economist working, at the time, for the Civil Aviation Authority showed that outbound international travel is a substitute for domestic leisure and hospitality spending.[7] As recently as 2025 the UK's Tourism Alliance (of which Bristol Airport is indirectly a member via the Airport Operators Association) suggested that *"for every 1% increase in the cost of travelling overseas… the UK's domestic tourism earnings increase by 0.8%"* (p.13).[8] This clearly suggests that expansion of Bristol Airport, which would reduce the cost of travelling overseas, would reduce the UK's domestic tourism earnings.

2.12. ACI Europe, of which Bristol Airport is again a member, published an economic impact assessment in 2024 which explicitly recognised this relationship, stating: *"…higher tourism activity, resulting in increased passenger numbers, prompts travelers from northwestern Europe to allocate more spending on goods and services within southern European regions rather than within their own local economy."* (p.26). Moreover, this report provided quantified evidence on this relationship which we discuss below.

2.13. Oxford Economics – whose analysis the Applicant has elsewhere relied upon – also recognised this relationship as recently as May 2026. They explained why, in their view, the UK domestic tourism industry would continue to underperform over the next five years [emphasis added]: *"Domestic overnight stays in paid accommodation are forecast to grow more slowly, at an average annual rate of 1.3% over the same period, reaching 287 million nights. This more modest growth reflects* ***the increasing attractiveness of overseas travel, supported in part by relatively affordable airfares, which has made international trips more competitive relative to domestic stays.***" (p.15)[9]

2.14. Moreover, in their report, which assessed the potential impact of a visitor levy on the UK's domestic tourism industry, Oxford Economics clearly demonstrate that it is possible to quantitatively estimate impacts of this sort. There is no excuse for the Applicant not to have made such an assessment.

2.15. The final stakeholder that appears to think that a loss to domestic spending is likely to occur from this expansion is the Applicant themselves. Table 8.1 of the Socio-

[5] ONS (2025) The effects of taxes and benefits on household income, disposable income estimate. Financial Year Ending 2024. Table 1. Office for National Statistics.
[6] ONS (2025) Family spending workbook 1: detailed expenditure and trends. Adjusted for CPI inflation by NEF.
[7] Njegovan, N. (2006) Elasticities of demand for leisure air travel: A system modelling approach. Journal of Air Transport Management, 12:33-39
[8] Tourism Alliance (2025) UK Tourism Facts and Figures 2025.
[9] Oxford Economics (2026) Tourism Levy Impact in England. Report prepared for UK Hospitality.

Economic Impact Assessment (SEIA) presents the Applicant's estimate that the proposed scheme will lead to a tax *loss* of £400m NPV (60-years) to the UK public sector. This loss occurs because, in the Applicant's view, the total spending captured, or moved, by the scheme will be taxed *less* than it would be in the absence of the scheme. This is logical. A large amount of spending will move overseas, out of reach of UK tax authorities. We can back-calculate from the Applicant's figure and estimate how much spending they think will be shifted to lower-tax locations.

2.16. First we must unpack the net present value. Doing so reveals that the Applicant thinks the scheme will lose the tax payer around £16m per year on average over the 60-year period. To get to this figure, we estimate that, very approximately, £200m per year, on average, of spending must be diverted from other industries into aviation and travel abroad. To get there, we make the conservative assumption that the tax generated by the scheme is equal to 1.5 million passengers paying the reduced rate of APD each year (the short-haul, economy class charge, of £15). This tells us how much tax will be raised by the scheme. Then, by applying the DfT TAG estimate of the economy-wide indirect tax rate (19%), we can deduce that there must be around £200m of spending displaced from other industries and therefore generating tax losses.

2.17. For clarity, this represents a form of displacement, but not the form quantified by the Applicant in section 6. The displacement the Applicant describes relates to travellers changing their airport of departure/arrival, not displacement from other sectors of the economy.

2.18. The displacement we are describing here, worth £200m per year, would be sufficient to move 1,000-2,000 jobs overseas. Jobs in domestic sectors such as retail and hospitality are most likely to lose out.

3. Employment impacts

3.1. The Applicant has presented employment impacts of the scheme. These are described in Table 6.2 as net impacts after considering displacement.

3.2. It is vital to note that these estimates are only net impacts after considering displacement from other airports. They are not net impacts after considering displacement from non-aviation industries. These estimates take no account of the lost jobs and spending that will certainly occur in other parts of the economy, particularly domestic tourism and hospitality. As such, these estimates are of relatively limited value when it comes to assessing the overall social impact of the scheme.

3.3. The Applicant has presented, in Table 6.2., the potential creation of 1,370 jobs at the UK level as a result of this scheme. As we have shown above, even the Applicant's own analysis actually contains the implicit assumption that 1,000-2,000 jobs could be lost elsewhere in the economy.

3.4. While the Applicant has set out that some of the jobs they expect to be created (around 10% of the jobs they claim to create in the West of England) will be created for high deprivation areas of Weston-super-Mare and South Bristol, the large majority of the jobs the scheme will create will go to residents of high-income, low deprivation parts of the UK. The jobs that will be lost in the domestic tourism industry are likely to be

concentrated in deprived areas of Britain and the south-west (potentially including Weston-super-Mare as a seaside destination).

3.5. Overall, our view is that the scheme has a negative overall impact on UK employment, and a negative impact on the equity and distribution of employment opportunity.

4. GDP and productivity impacts

4.1. The Applicant takes two approaches to quantifying GDP and productivity impacts. These are described as 'bottom-up' and 'top-down'. The results of the bottom-up approach are presented under the label 'business productivity' in Table 6.2 alongside employment impacts and inbound tourism impacts.

4.2. Both approaches are riddled with methodological flaws, data issues, and double counting. Neither is even remotely close to being useful for decision making.

The problem with the bottom-up approach

4.3. The bottom-up approach relies on a relationship established in a 2013 Oxford Economics paper.[10] The paper uses input data spanning 1980-2010. Over this period aviation had a radically different relationship with the economy compared with today. Business-purpose air passengers were growing rapidly. By contrast, between 2006 and 2024 business passenger growth stalled completely and the 'business aviation intensity' of GDP switched from growing intensity to falling. The Oxford relationship pre-dates the widespread adoption of online remote working/meeting behaviours in business. It is not appropriate for application to a single airport expansion in 2026.

4.4. The methodology used by Oxford Economics is deeply flawed, and not up to modern standards of statistical analysis. Their approach does not adequately deal with the issue of causality. It describes a correlation between air transport and productivity, not causation running *from* air transport *to* productivity. This means it is not fit for use in the current application.

4.5. The relationship Oxford Economics present uses net national/regional business travel growth as its input. The Applicant has not set out how much they expect net business travel to grow as a result of the expansion. As such we cannot scrutinise their assumptions. Our baseline assumption should be that business travel will see very limited growth as a result of the expansion. This is because business passengers have high ability and willingness to pay for travel (they are inelastic). As such, they are likely to continue flying even in a capacity-constrained environment.

4.6. Finally, even if we accepted the relationship were appropriate to apply here, there is likely double counting of impacts described in the 'inbound tourism' category of the bottom-up assessment. The 0.5%-per-10% elasticity is a reduced-form regression of economy-wide productivity on a connectivity metric. The Oxford Economics paper is explicit that the channels generating that productivity gain include trade, **tourism**, inward investment, and the flow of people and ideas – tourism is named as one of the

[10] Oxford Economics (2013) Impacts on the UK economy through the provision of international connectivity. Oxford Economics

spillover channels the residual is supposed to be picking up. The Oxford Economics elasticity is a *catch-all* coefficient. It doesn't decompose productivity into 'the bit from business efficiency' versus 'the bit from tourism receipts'. Whatever historical association inbound visitor activity had with business travel over the 1980–2010 period is baked into that 0.5%. So when the Applicant applies the full elasticity to get £87m of "business productivity" GVA, and then adds a separately-built £63m inbound tourism expenditure figure (Table 6.2) they are, at least partly, double counting the same impact.

The problem with York Aviation's top-down approach

4.7. York Aviation have incorrectly specified their methodology in the top-down approach. The central problem this creates again lies in the causality issue. Their analysis cannot tell us whether airports make regions prosperous, or whether prosperous regions simply have large airports. These two stories produce identical patterns in the data: wealthy, well-connected areas generate lots of air travel, and so areas with busy airports will tend to look wealthy and well-connected regardless of whether the airport is the cause.

4.8. York Aviation's model finds a strong statistical relationship between air demand and employment and productivity across UK local authorities. The problem is that correlation is entirely consistent with causality running in either direction, or with both being driven by some third factor like population density or proximity to major cities. The direction of causality is not something the model discovers: it is assumed from the outset. By treating economic outcomes as the thing to be explained, and air demand as the explanatory variable, the model is constructed to answer only one question – how much does air demand drive prosperity? The model never considers that the relationship might run the other way. The statistical results then confirm what the model was designed to find.

4.9. York Aviation present their two-stage regression structure as a solution to this problem. But their misapplication of an approach by an academic author (Percoco) means they do not, in fact, resolve this issue. Percoco's original identification strategy rested on a specific feature of the Italian context: airport locations were determined largely by postwar political decisions rather than by economic conditions, creating genuinely historical and partly arbitrary variation in which provinces got airports. It was that feature – not the two-stage structure itself – that gave Percoco's model any claim to separating cause from effect. A genuine solution requires an 'instrument' - some source of variation in airport size driven entirely by factors unrelated to regional prosperity. This allows the researcher to isolate the causal effect of airports on the economy independently of the reverse feedback. York Aviation have no such instrument. Their accessibility variable is built from current passenger numbers, which are themselves a product of how prosperous the surrounding region already is. The two-stage structure therefore does not resolve the endogeneity problem – it reintroduces prosperity-driven variation through a prediction equation and carries it forward into the second stage as though it were causal evidence.

4.10. The consequence is that the model's headline elasticities – suggesting that a given increase in air passengers produces a measurable increase in regional employment and productivity – cannot be interpreted as causal parameters. They are correlational estimates produced by a procedure that assumed the answer before it began. This

matters particularly for the Bristol application, because the peer-reviewed literature tells a different story when causality is tested properly. Pot and Koster's panel study of 274 European regions,[11] which uses time-series methods that can distinguish which variable moves first, finds that for airports of Bristol's type and regional context the dominant causal direction is the opposite of what York Aviation assume: prosperity generates air demand, not the other way round. The economic benefits York Aviation attribute to Bristol's expansion may therefore largely reflect the region's existing prosperity rather than any independent effect of the airport.

4.11. Pot and Koster (2022) further suggest that the higher a region's GDP-per capita, and the higher its pre-existing levels of connectivity, the lower the beneficial effect on GDP-per capita arising from additional connectivity. NEF worked with Felix Pot, author of the above academic study, to further his analysis. The NEF research shows that regions of Europe, typically found in northern and western Europe, including the UK, that have tourism spending deficits, low or no growth in business air travel demand, and highly developed aviation networks, show very limited evidence of positive GDP impacts from further air connectivity growth. Across southern England, including the Gloucestershire, Wiltshire and Bristol/Bath area which Bristol Airport sits in, NEF's research suggests there is a very low chance of finding a positive causal relationship running from air transport connectivity to GDP-per capita in the historical data.

An alternative top-down approach

4.12. A 2024 study by SEO Amsterdam Economics, commissioned by ACI EUROPE[12] – the airports industry body of which Bristol is a member – provides an alternative basis for interrogating the economic case for Bristol Airport's expansion. Whilst the study's headline findings are broadly favourable to aviation growth across Europe, its own econometric results present a more challenging picture for expansion proposals at mature, leisure-dominated airports in north-western Europe.

4.13. Using a two-stage least squares specification designed to correct for the bi-directional relationship between aviation demand and economic activity, the study first estimates that a 10% increase in direct connectivity, within a regional catchment, is associated with a 0.47% *increase* in GDP per capita. In a second test, the study then estimates that a 10% increase in passenger numbers is associated with a 0.65% *decrease* in GDP per capita.

4.14. At first glance, the two elasticities in the SEO study appear contradictory: the direct connectivity specification produces a positive effect on GDP per capita, while the passenger specification produces a negative one. However, these results are not necessarily in conflict. As two-stage least squares estimations, each coefficient identifies a Local Average Treatment Effect – the causal effect for the specific subset of regions where the relevant instrument drives meaningful variation in the endogenous variable.

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[11] Pot, F. & Koster, S. (2022) Small airports: Runways to regional economic growth? Journal of Transport Geography, 98, 103262

[12] SEO Amsterdam (2024) The economic and social impacts of European airports and air connectivity. SEO Amsterdam for ACI Europe.

4.15. The connectivity elasticity is identified from regions experiencing exogenously driven changes in flight supply, which in the SEO dataset is concentrated in Eastern and Southern European airports expanding from a lower base during the study period. The passenger elasticity, by contrast, is identified from regions where demand-side growth in passenger volumes is the relevant source of variation – a profile that more closely matches mature, leisure-dominated north-western European airports such as Bristol, where supply-side connectivity growth has been constrained and incremental passenger growth is driven primarily by outbound leisure demand.

4.16. The authors' own interpretation of this finding is instructive: they suggest the negative coefficient likely reflects the tendency of travellers from north-western Europe to allocate spending in southern European destinations rather than locally. This is a leakage dynamic – and it is structurally characteristic of Bristol Airport, whose top destinations by passenger volume are overwhelmingly leisure routes to southern Europe and the Atlantic islands.

4.17. We can apply the SEO elasticity to the Bristol case to provide an indicative GDP impact estimate. To do so we must first establish the correct passenger denominator. The SEO model aggregates passengers across all airports within a 150km radius of a region's centre, rather than treating a single airport in isolation. As Heathrow and Gatwick fall outside this radius, Bristol Airport remains, theoretically, the primary airport serving the catchment. The proposed growth of 3 million passengers in 2038 at Bristol would therefore represent an increase of approximately 20% in total catchment passengers. However, Heathrow and Gatwick are widely used by residents of the region, particularly in the long-haul market, and they are relatively accessible. Bristol's total market share within the south-west and south Wales catchment is only 43.5% (as per York Aviation forecasts p.14). A more conservative approach would be to treat the London airports as inside the catchment. This leads to a forecast catchment passenger increase of around 10%.

4.18. Applying the SEO elasticity to this adjusted figure suggests that expansion could be associated with a reduction in West of England GDP per capita of approximately 0.65%, equivalent to a net GDP impact of around -£300 million for the regional economy. The 95% confidence interval around this estimate runs from negligible to approximately -£600 million. This estimate should be treated as illustrative rather than definitive but nonetheless highlights an issue at the heart of the analysis presented by the Applicant.

5. The economic cost of additional emissions

5.1. The damages delivered as a result of the climate changes driven by human greenhouse gas emissions are rapidly increasing. The Climate Change Committee (CCC) estimates climate change damages in the UK today at 0-2% of GDP. These costs were illustrated over the late May bank holiday 2026, when record-breaking heat caused travel chaos on rail, road and at airports. By 2050, damages could rise to 1-5% of GDP (£60-£260bn). If

society fails to adequately curtail emissions, and temperatures rise above 3 degrees, damages could reach 4-10% of GDP by 2100.[13]

5.2. All additional emissions worsen this problem regardless of whether they are inside or outside the scope of any government carbon budget. Additional emissions that fall within an allowable range under the government carbon budgets still bring economic costs. The carbon budgets do not represent a 'free pass' to emit up to a set limit.

5.3. The principal purpose of EIA is to assess impacts, wherever they occur. Paragraph 93 of the Finch judgement of the Supreme Court is absolutely clear on this point:

"It is worth emphasising that the EIA Directive does not impose any geographical limit on the scope of the environmental effects of a project which must be identified, described and assessed when an EIA is required. In principle, all likely significant effects of the project must be assessed, irrespective of where (or when) those effects will be generated or felt."

5.4. This is distinct from the task of assessing compliance with carbon budgets – which remains important but on its own insufficient.

5.5. One method of accounting for the impact of additional greenhouse gas emissions is through valuation. An approach to this is set out in the Department for Transport's (DfT) Transport Analysis Guidance (TAG) aviation chapter.[14] Government is absolutely clear that it considers this guidance to be *"best practice"* and it would assess *"any"* aviation intervention against this benchmark (para 1.1.5), i.e. the guidance is not only applicable to publicly funded interventions. Moreover, the DfT expect the guidance to be *"useful to other appraisal practitioners considering the impacts from non-government aviation interventions"* (para 1.1.3). The TAG-based assessment should therefore be given significant weight by planning decision makers. But, as explained by the DfT, it should also be considered alongside the *"strategic, commercial, financial and management case"* (para 1.1.4).

5.6. The Applicant has recognised the importance of presenting a TAG-informed assessment. Unfortunately, the TAG method has been modified by the Applicant introducing flaws that are ultimately highly advantageous to the scheme's cost-benefit analysis.

5.7. The Applicant proposes that the scheme's cost of carbon is -£1.09bn NPV over 60 years. As the Applicant has not explained their methodology fully it is difficult to understand how this figure was arrived at. However, our analysis, and our attempts to back-calculate their figure, suggest it has the following flaws:

5.7.1. **The Applicant has not used the adjusted carbon values prescribed by government guidance.** Best appraisal practice (as set out in TAG) suggests that analysts start their costings from the carbon value, as set out by government. This was £316 per tonne in 2025, rising to £460 by 2050. Analysts should then deduct from this value any contributions made by the airlines to their carbon costs through carbon taxation and trading schemes. For a flight to a destination covered by the Emissions Trading System (ETS) this means an 'adjusted' cost of carbon of £270 in

[13] CCC (2026) A well-adapted UK: The fourth independent assessment of UK climate risk. Climate Change Committee
[14] DfT (2025) TAG Unit A5.2: Aviation Appraisal. Department for Transport.

2025. A similar adjustment can also be made for flights covered by the CORSIA offsetting scheme. The resulting carbon values should be used in modelling. The Applicant appears not to have applied this adjustment. On its own, this means a slight *overestimation* of the scheme's carbon cost.

5.7.2. **The Applicant has incorrectly excluded emissions from arriving flights**. Best appraisal practice (as set out in TAG) suggests that schemes must capture arriving flight emissions. This is clearly set out in TAG at paragraph 11 of Unit A5.2. This means the Applicant has significantly underestimated the scheme's carbon cost.

5.7.3. **The Applicant has incorrectly excluded carbon costs from the core cost-benefit analysis.** Carbon costs are a core part of a scheme's cost-benefit analysis. The Applicant justifies their choice to exclude carbon costs from two angles. First, because of a supposed risk of double counting against airline operating costs. This risk can be mitigated simply by following the TAG best practice guidance and using adjusted carbon values, as set out above. Second, because of the potential for displacement. This does not make sense. The Applicant has already calculated displacement. Indeed the claimed "surface access time impacts", which are in the core cost-benefit analysis, rely entirely on displacement. Displacement can be estimated. It is not clear what estimate of displacement has been used to calculate the surface access time impacts – it may be that the static estimate shown on page 48 of the SEIA, and applied to the 2038 time slice, has been assumed to apply across the full 60-year appraisal period. This would be a flawed assumption. Given air passenger numbers are expected to grow rapidly across the world, Europe, and the UK, the long-term assumption should be limited displacement of air traffic. As set out in TAG, displacement can be considered as a sensitivity test.

5.7.4. **Non-CO2 impacts should be included in the CBA sensitivity test.** The only component of the scheme's climate impact that might legitimately be included outside the core CBA is the scheme's non-CO2 climate impact. TAG guidance suggests that a quantitative assessment of such impacts can be made as a sensitivity test. Given that it is relatively straightforward to perform this test, the numbers should be presented.

5.8. NEF has conducted its own greenhouse gas costing, using the Applicant's emissions forecasts; our estimates are included in the corrected CBA tables presented below.

6. The scheme cost-benefit analysis

6.1. The cost-benefit analysis presented by the Applicant is not only flawed in its consideration of carbon costs. The Applicant has presented 'business productivity benefits' as an 'additional element' below the CBA. But this impact has no place in this assessment. As we have shown above, both of the Applicant's approaches to assessing productivity impacts are deeply flawed. But in addition, business productivity impacts are already considered across three impact lines in the assessment: passenger surplus (which includes business passenger surplus), surface access time savings (which accrue to business travellers), and imperfect competition benefits (which accrue to businesses). Indeed, benefits to the business segment of the market, in York Aviation's specification,

likely deliver a very significant chunk of the total benefits. To include them again under 'business productivity benefits' is clear double counting.

6.2. Looking back at the last expansion application, in 2018 and 2020, York Aviation's analysis did not include business productivity in their cost-benefit analysis.

6.3. We have updated the CBA to align with best practice below. As per TAG guidance we have added carbon costs to the core CBA, adjusted them downwards to prevent double-counting against airline carbon prices, and adjusted them upwards to account for inbound emissions. The net present value of the core scheme is now negative.

6.4. As regards sensitivity tests, we have removed business productivity impacts: the method used to calculate them is flawed, and in any case, they double-count benefits already present in the core CBA. As per TAG guidance we have added sensitivity tests assuming high displacement, non-CO2 impacts, and high carbon prices. Our optimistic sensitivity assumes a low non-CO2 multiplier and high displacement; our pessimistic sensitivity assumes high non-CO2, and high carbon costs. Both produce negative net present value estimates.

Table 1: Corrected scheme cost-benefit analysis in £bn of net present value (60-years)

	Applicant Estimates	Corrected CBA
Benefits		
Passenger Surplus	£2.60	£2.60
Imperfect Competition Benefits	£0.08	£0.08
Surface Access Time Impacts	£1.71	£1.71
Total benefit	**£4.39**	**£4.39**
Costs		
Producer Surplus	-£2.19	-£2.19
Public Accounts	-£0.40	-£0.40
Noise Impacts	-£0.01	-£0.01
Air Quality Impacts	-£0.11	-£0.11
Construction Costs	-£0.33	-£0.33
Carbon Costs	-£1.09	-£1.59
Total cost	**-£4.13**	**-£4.63**
Core NPV	**£0.26**	**-£0.24**
Sensitivity tests		
Business Productivity Benefits	£4.02	
Carbon cost with high (50%) displacement		-£1.02
Non-CO2 impacts (1.7x multiplier)		-£1.57
High carbon price, high non-CO2 (3.0x)		-£7.70
Optimistic sensitivity NPV (low non-CO2, high displacement)	**£4.28**	**-£0.79**
Pessimistic sensitivity NPV (high non-CO2, high carbon cost)		**-£7.94**

7. The Heathrow 3rd runway scheme

7.1. Shortly before completion of this report, the government published the draft Heathrow Expansion National Policy Statement for consultation. This was accompanied by the release of a tranche of impact assessment documents. We would encourage decision makers to review these documents as they contain some insights relevant to the Bristol case.

7.2. Here we summarise a few brief matters arising from the Heathrow Expansion Appraisal Report:

7.2.1. The DfT appraisal confirms that carbon costs are a core component of the cost-benefit analysis.

7.2.2. The DfT appraisal confirms that GDP/productivity style analysis should not be included in the cost-benefit analysis, and should be treated entirely separately.

7.2.3. The DfT appraisal confirms that a deeply negative net present value from a robust airport expansion cost-benefit analysis is a credible outcome. Heathrow's 3rd runway is associated with an NPV of -£23bn to -£63bn (see page 46).

7.2.4. The DfT appraisal puts the UK GDP impact of the proposed 3rd runway at £2.6bn per year (p.55). This is five times larger than the impact claimed by York Aviation of £509m (SEIA p. 52). Yet the figure is produced for an expansion proposal that is 15 times larger (45mppa). The Heathrow project involves higher revenue, longer-haul flights, and has a split close to 50%/50% when it comes to inbound and outbound travellers. All of this points again towards the York Aviation estimate being a very significant overestimate.

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Appendix 5 – Noise Report by the Aviation Environment Foundation for the PCAA

AEF report for the Parish Councils Airport Association (PCAA) on the aircraft noise implications of Bristol Airport's planning application (26/P/0686/OU2) to enable a throughput of 15 million passengers per annum

Introduction

1. Aviation Environment Federation (AEF) is a national UK NGO that focuses on reducing aviation's environmental impact, particularly in terms of climate change, noise and air pollution. Internationally, we are a leading representative of the NGO group ICSA (the International Coalition for Sustainable Aviation) which has observer status to the UN's International Civil Aviation Organisation (ICAO). AEF is an active participant in ICAO's environmental work programme, and we lead its work on maintaining the carbon emissions calculator tool. In the UK we sit on the Government's Jet Zero Taskforce and its Expert Group, the airspace modernisation stakeholder engagement group (SEG), and the Airspace and Noise Engagement Group (ANEG). We are members of the advisory boards of the industry's Sustainable Aviation initiative, Google's Travel impact Model, and Airports Council International's airport carbon accreditation scheme. Our membership comprises local community and amenity groups living under flight paths and around the UK's airports.

2. PCAA is an AEF member and requested advice on understanding and assessing the noise implications of Bristol Airport's proposal to vary the restriction on air transport movements (ATMs) from 85,990 movements per annum to 99,931 ATMs, increasing passenger capacity from 12 million passengers per annum (mppa) to 15 mppa. As part of the application, the airport is seeking to increase the maximum number of ATMs per 12-month period between the hours of 23:30 to 06:00 hours from 4,000 ATMs to 4,974 ATMs. No changes are sought to the number of permitted flights allowed in the shoulder periods (defined as 23:00 to 23:30 hours and 06:00 to 07:00 hours).

3. AEF has reviewed the air and ground noise considerations only, as assessed and presented in the Environmental Statement (this report does not address road or construction noise).

Overview

4. From an aircraft noise perspective, the central issues are the increase in annual movements, including during the nighttime, the introduction of larger, heavier aircraft and displacement of the current landing and take-off thresholds that could potentially mean aircraft overflying properties and noise sensitive developments at lower altitudes at the eastern end of the runway[1]. The primary means of assessing the noise impacts of the application in the Environmental Statement (ES) is Leq, a metric that averages sound energy over various time periods and/or with additional weightings. Due to its logarithmic scale, the Leq metric is not particularly sensitive to changes in the number of movements: for example, a doubling of movements with a similar noise profile will only generate a 3dbA change in the Leq value. As the application proposes a 16.2% increase in ATMs it is unlikely that the Leq values will show any significant deviation with the future baseline. However, a common sense approach suggests that local residents will experience a greater degree of intrusion from more flying. For this reason, the supplementary metrics provided in the ES, focused on single events or the number of single events above a given noise threshold, should be given weight in understanding the noise impact.

5. During the public consultation period for this application, the Government and the Civil Aviation Authority released new evidence on attitudes towards aircraft noise in the UK. This is detailed below but in summary, the ANAS (2026) study updates the SoNA (2014) study which is used in the ES to underpin the data calculations for LOAEL and SOAEL, and to calculate the percentage of people likely to be highly annoyed and sleep deprived as shown in tables 7.45 and 7.46 of the ES Chapter I Volume 7. The results of ANAS (2026) show that people are more highly annoyed at lower levels of aircraft noise than previously assumed. The scale of the change since 2014 is notable and if these new thresholds were applied to the Bristol assessment, would produce significantly larger impacts. As an illustration, the recently published draft Heathrow Expansion National Policy Statement (HENPS) included results for exposure to the lower thresholds identified in ANAS as a sensitivity test in the Appraisal of Sustainability[2]. The results showed that for the current baseline for

[1] In November 2025, Bristol Airport consulted on changes to the runway approach lighting https://www.bristolairport.co.uk/lighting-consultation/ This document acknowledged 'the movement of the landing threshold has the potential to increase noise experienced by local residents as aircraft landing would be slightly lower as they descend over the villages and communities to the east of the Airport, including Winford. Aircraft arriving from the east would be around 12.5 metres lower in the sky than they are at present."

[2] https://assets.publishing.service.gov.uk/media/6a33cbd20bea238415c9a217/draft-henps-aos-noise-annex.pdf

operations, "the area affected in 2024 increases nearly fivefold, from 232 km^2 at 51 dB LAeq,16h to 1,110 km² at 43 dB LAeq,16h".

6. While the applicant cannot be criticised for using the evidence available at the time of the ES (SoNA,2014), the publication of the new evidence during the consultation period, and before NSC has reached its decision, means it should be a material consideration in determining this application. As referenced above, the Appraisal of Sustainability accompanying the Government's draft HENPS includes testing at lower noise assessment levels:

   "5.13 The findings of the Aviation Noise Attitudes Survey (ANAS) and Aviation Night Noise Effects (ANNE) study indicate that individuals are more annoyed by aviation noise at lower levels of exposure than previous evidence indicated.

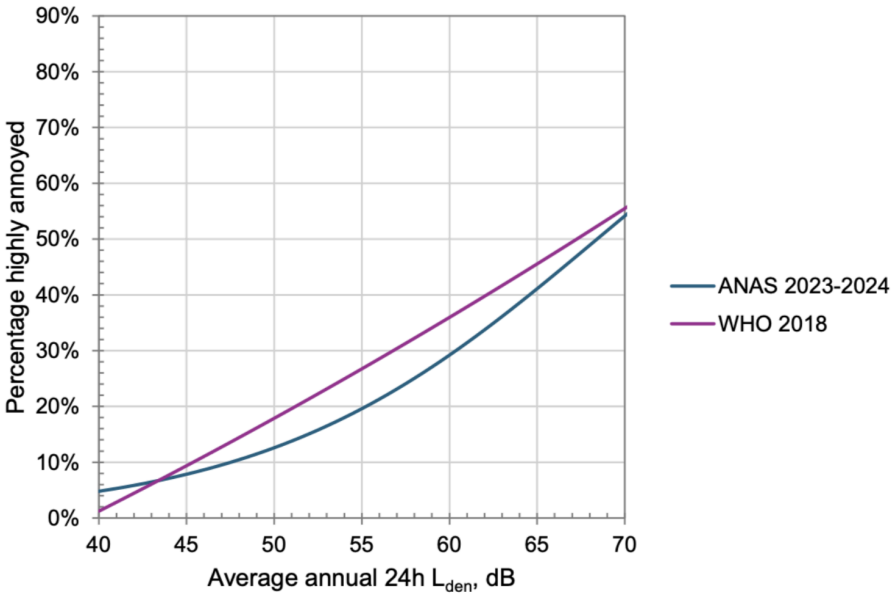
   5.14 World Health Organisation guidance introduces the concept of setting the adverse effects threshold where 10% of people are highly annoyed. On this basis, findings from ANAS suggest that adverse effects could be measured at 43 dB LAeq,16h, while evidence from ANNE indicates a threshold of 43 dB LAeq,8h. Previous evidence informing current Government policy sets exposure levels at a higher level of 51 dB LAeq,16h and 45 LAeq,8h and results presented so far in this report have been to these levels.

   5.15 Although the Government aviation noise policy has yet to be reviewed in light of the newly published evidence, modelling has been undertaken at these levels as a sensitivity test to demonstrate the potential effects of lowering the assessment thresholds."

7. The results of ANAS show a reasonable correlation with the World Health Organisation's Environmental Noise Guidelines for the European Region (2019)[3] as shown in the graph below:

[3] https://iris.who.int/server/api/core/bitstreams/f53c45ba-11d3-4502-a424-c1cf49f5a053/content

Figure 54 Comparison of ANAS 2023-2024 (HA_N Q6) with WHO 2018



(Source: ANAS, CAA, 2026)

8. To avoid adverse health effects from aircraft noise, the WHO recommends keeping average noise exposure below 45 L_{DEN} (see illustration below.

WHO Environmental Noise Guidelines Aircraft Noise Recommendations

Aircraft noise

Recommendation	Strength
For average noise exposure, the GDG strongly recommends reducing noise levels produced by aircraft below **45 dB** L_{den}, as aircraft noise above this level is associated with adverse health effects.	Strong
For night noise exposure, the GDG strongly recommends reducing noise levels produced by aircraft during night time below **40 dB** L_{night}, as night-time aircraft noise above this level is associated with adverse effects on sleep.	Strong
To reduce health effects, the GDG strongly recommends that policy-makers implement suitable measures to reduce noise exposure from aircraft in the population exposed to levels above the guideline values for average and night noise exposure. For specific interventions the GDG recommends implementing suitable changes in infrastructure.	Strong

(Source: WHO, 2019)

9. The ES for this application does provide alternative figures for the calculation of 'percentage highly annoyed' using the World Health Organisation guidelines, but in

our opinion the new evidence presented in the ANAS and ANNE studies suggests that this sensitivity analysis is not sufficient: the lower thresholds identified in ANAS and ANNE should also be reflected in the calculations of the Lowest Observed Adverse Effect Level (LOAEL) and Significant Observed Adverse Effect Level (SOAEL). Para 2.22 of DEFRA's Noise Policy Statement for England (2010)[4] provides flexibility when selecting values:

"It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available."

10. WHO (2019) also supports the use of locally-derived exposure-response evidence (while Bristol Airport was not one of the airports included in the ANAS study, it was included in ANNE):

    "*.. data and exposure-response curves derived in a local context should be applied whenever possible to assess the specific function between noise and annoyance in a given situation.*"

11. Updating the noise contour results in the ES would affect the data provided for impacted areas, population and the noise-sensitive buildings contained within. Given the significantly lower thresholds identified in ANAS (2026), the applicant should be requested to provide an update to the air noise assessment and share the data prior to any decision on the application.

Policy context and new evidence

12. Current Government policy is set out in several documents including the Aviation Policy Framework (2013)[5], Flightpath to the Future (2022)[6], and the Air Navigation

4 https://assets.publishing.service.gov.uk/media/5a7956e0ed915d0422067947/pb13750-noise-policy.pdf

5 https://assets.publishing.service.gov.uk/media/5a7aa94b40f0b66eab99bc3e/aviation-policy-framework.pdf

6 https://www.gov.uk/government/publications/flightpath-to-the-future-a-strategic-framework-for-the-aviation-sector

Guidance (2017)[7]. To provide clarity, in 2023 the Government published a note on the Overarching Aviation Noise Policy[8]. The note states:

"The government's overall policy on aviation noise is to balance the economic and consumer benefits of aviation against their social and health implications in line with the International Civil Aviation Organisation's Balanced Approach to Aircraft Noise Management. This should take into account the local and national context of both passenger and freight operations, and recognise the additional health impacts of night flights.

The impact of aviation noise must be mitigated as much as is practicable and realistic to do so, limiting, and where possible reducing, the total adverse impacts on health and quality of life from aviation noise."

13. It should be noted that the Government recently consulted[9] on updates to the Air Navigation Guidance 2017 and new guidance is expected to be published before the end of July 2026.

14. The evidence base underpinning policy, as referenced by the applicant in the Environmental Statement (ES), is the SoNA study 2014. However, as noted in the previous section, since publication of the ES, the Government and the Civil Aviation Authority have released two major studies in June 2026 which update the evidence on public attitudes.

15. The Aviation Noise Attitudes Survey (ANAS) study[10] was conducted around ten UK airports and aimed, in simple terms, to identify what proportion of a population exposed to specific levels of aviation noise, is 'highly annoyed' by it. It also investigated how annoyance to aviation noise varied across personal, social and environmental contextual factors and explored associations between noise exposure and health and wellbeing. The study found that the noise level corresponding to 10% of the population being highly annoyed has fallen from 54 dB $LAe_{q,16h}$ (identified by SoNA) to 43 dB $LA_{eq,16h.}$ This is a significant change compared to SoNA (see the figure below comparing the two studies).

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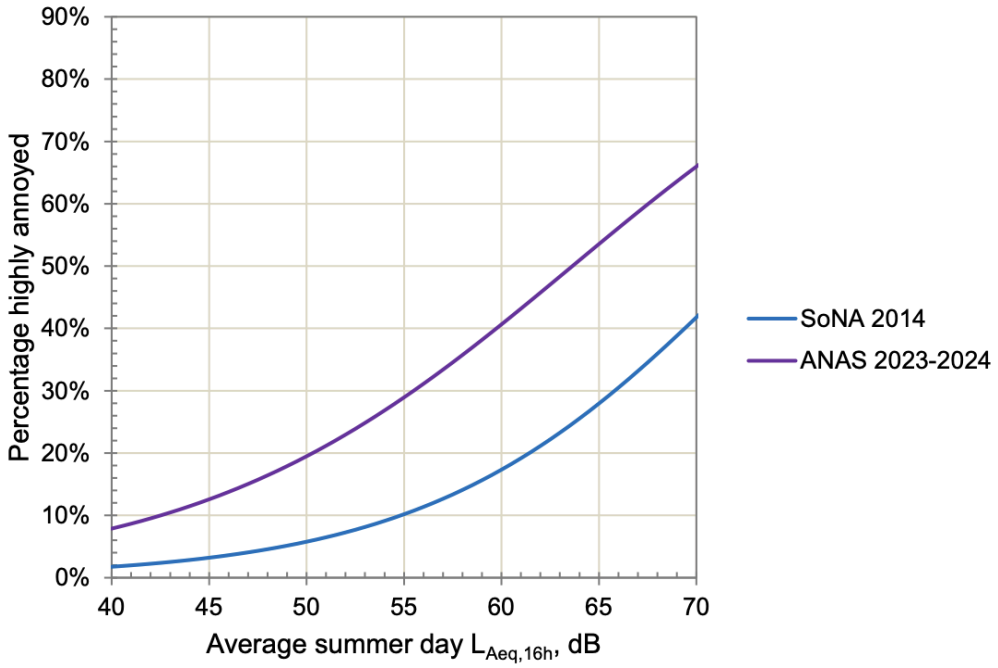
[7] https://www.gov.uk/government/publications/uk-air-navigation-guidance-2017

[8] https://www.gov.uk/government/publications/aviation-noise-policy-statement/overarching-aviation-noise-policy

[9] https://www.gov.uk/government/consultations/changes-to-the-air-navigation-directions-and-air-navigation-guidance

[10] https://www.caa.co.uk/environmental-sustainability/aviation-noise-attitudes-survey/

Figure 52 Comparison of the ANAS 2023-2024 exposure-response function to SoNA 2014 based on attitudes during the last three months, HA_N (Q8), Wave 1



(Source: ANAS, CAA, 2026)

16. The Aviation Night Noise Effects (ANNE) study[11], examined the relationship between aviation noise on sleep disturbance and annoyance, and how this varies by different times of the night. ANNE study found similar results to ANAS, with nighttime aircraft noise causing 10% of people to be highly annoyed at 43dB $LA_{eq,8h}$ and highly sleep disturbed at 44 dB $LA_{eq,8h}$.

17. In addition to ANAS and ANNE, there is a growing body of evidence evidencing the relationship between aircraft noise, especially at night, and public health. Aircraft noise has been linked with a wide range of health impacts, including effects on cardiovascular health, sleep, annoyance, psychological health and cognitive development. The presence of unwanted noise is thought to trigger stress responses that lead to inflammation and other associated physiological effects—an effect that is exaggerated in response to night-time aircraft noise.

18. The following are examples of recent research articles that have specifically focused on aircraft night noise and health:

- **Saucy *et al.*** 2021. Results indicated that exposure to nighttime aircraft noise can be a trigger for acute cardiovascular mortality within two hours.

[11] https://www.gov.uk/government/publications/aviation-night-noise-effects-anne-study

- **Itzkowitz *et al.*** 2023. Found that there may be a short-term association between previous day aircraft noise in the night and late evening and cardiovascular hospitalisations and deaths. High noise variability at night may also be associated with higher risk.
- **Schubert *et al.*** 2023. Suggested lowering the threshold value for nightly aircraft noise exposure levels to 35 dB based on levels of sleep disturbance around Leipzig Airport.[8] In updating the evidence that supported the WHO guidelines, **Smith *et al.*** (2022) also suggest that people exposed to high levels of aircraft noise may be at a greater risk of sleep disturbance than determined previously.
- **Gong *et al.*** 2024. Exposure to higher levels of nighttime aircraft noise led to higher levels of sleep disturbance, including higher levels of movement during rest and disruption to sleep-wake cycles.
- **Peters *et al.*** 2025. Found that higher nighttime aircraft noise exposure is associated with higher risk of hypertension.
- **Topriceanu *et al*.** 2025. Findings suggested that higher aircraft noise exposure, especially at night, is associated with worse heart structure and function.

Other methodology and presentation issues

19. We were unable to find any visual illustration of the flight paths in the provided documentation although Para 1.4.14 of the ES Vol III Chapter 7 Appendices states that "Approaching aircraft are generally lined up with the extended centreline of the runway within the Study Area. Consequently, the approach routes have been modelled as straight in line with the runway. No dispersion has been assumed for arrival routes as there is very little variation once they are lined up with the runway." Para 1.4.15, addressing departing aircraft, states that the existing Standard Instrument Departure routes, as published, have been used. It should be noted that the UK is currently undergoing a process of airspace modernisation which could see changes at all UK airports going forward, including at Bristol Airport.

20. Table 7.7 of the ES Volume I Chapter 7 provides the assessment criteria:

Table 7.6: Noise Potential Impact Ratings – Permanent Change in Noise Level, Outdoors

Change in noise level (dB)	Potential impact classification
0 to 1	Negligible
1 to 3	Minor
3 to 6	Moderate
6 to 9	Substantial
> 9	Very substantial

As already noted, LAeq is not sensitive to changes in the number of noise events, so achieving a 3dB LAeq change would require a doubling of noise events (of similar sound energy). In terms of the experience of those overflown, a doubling of noise events is significant and should not be rated as 'low'. Similarly a change of nearly 6 dBA LAeq is equivalent to a further doubling, so a three fold increase on the original number of noise events or sound energy experienced, and yet this is labelled only as 'moderate'. In our opinion, the ratings underestimate the likely impact and significance of an increase in operations.

21. Chapter 7 of the ES Volume 1 displays results for 51 dB LAeq, 63 dB LAeq and 69 LAeq, with 51 dB and 63 dB representing the LOAEL and SOAEL respectively. The large interval gaps makes it difficult for the public to readily find information on how they may be impacted, although it is noted that the ES Volume III Chapter 7 Appendices do provide contour plots and information at 3 dB LAeq intervals. Given that the information in the Appendices is not fully replicated in the tables in the main ES, it is difficult to interpret some issues such as the proposed mitigation in Table 7.18 of the ES Volume I Chapter 7 that suggests 57 LAeq (16 hour) as the defining noise contour by area.

22. Para 7.6.14 of ES Volume I Chapter 7 sets out the approach to ground noise using LAeq 16 hour day and 8 hour night metrics. Ground noise embraces several sources, from engine run ups and taxiing, to engine maintenance. In most cases, these may be audible for short periods of time from any given location in the area of the airport, although it is possible that extended apron running or maintenance could last for longer continuous periods. Hourly LAeq values would be helpful in assessing the impact of these concentrated noise periods.

Noise Impact Results

23. Aircraft movements at Bristol Airport are currently dominated by types such as the Airbus A319, A320, and A320neo, the Boeing B737-800 and B-737 MAX 8, and the ATR72. If the airport is successful in its application, it plans to introduce larger aircraft in the future, including the Boeing 787 and the Airbus A350 and A321neo. Aircraft have to meet noise certification standards set out in UK Regulations which, in turn, are derived from the Recommended Standards and Practices of the International Civil Aviation Organisation (ICAO). The ICAO SARP currently requires new aeroplane types submitted for certification on or after 31 December 2017, and on or after 31 December 2020 for aircraft less than 55 tonnes in mass, to meet the Chapter 14 standard. On 27 March 2026, ICAO adopted a new standard (Chapter 16) that is more stringent than Chapter 14 by six decibels for large aircraft types, and two decibels for

smaller ones. This new noise standard is applicable to new aircraft type designs from 2029.

24. While ICAO standards ensure that certification limits become progressively more stringent over time, they do permit heavier aircraft to make proportionally more noise, using a limit line rather than a single value as shown in the graph below. This means that while a heavier aircraft will be less noisy when compared to its predecessors with a similar weight, it can still be noisier than older, lighter aircraft.

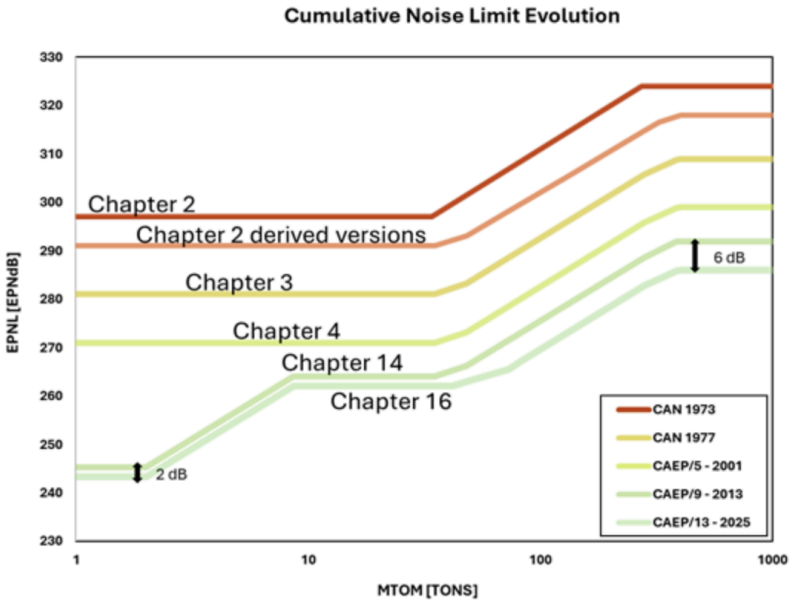


Figure 2. The progression of the ICAO Noise Standards for aeroplanes

(Source: ICAO, 2026[12])

25. Comparing the noise certificates of the new aircraft types forecast to use an extended runway with those that typically make up today's fleet at Bristol Airport can be a useful indicator. The noise certificates (held in the NoisedB[13] database administered by France) use the EPNdB metric (Effective Perceived Noise Level) measured at three locations: Approach (2km from runway touchdown), Flyover (6.5km along the centre line after take-off) and Lateral (a sideline measurement taken at maximum take-off thrust). For each aircraft type there are multiple noise certificates depending on different engines and modifications. The noise certificates for the Airbus A319, A320, A320neo, A321neo and A350, the Boeing B737-800, B-737 MAX 8 and Boeing 787 are shown in the table below (where possible, the noise certificate selected correlates to the aircraft type codes used in the Applicant's modelling although multiple variants can produce differing results):

[12] https://www.icao.int/environmental-protection/reduction-noise-source
[13] https://noisedb.stac.aviation-civile.gouv.fr/

Representative noise certificates for aircraft types using Bristol Airport now and with an extended runway

Aircraft	EPNdB		
	Approach	Lateral	Flyover
A319-131	94.2	91.5	80.2
A320-211	96.1	94	84
A320-270N	92.3	86.5	78.3
B7378MAX	94.2	88.5	82.6
New aircraft types with extended runway			
A321-270N	94.6	87.5	85.7
A350-941	96.4	91.6	84.7
B7878R	95.6	91.3	86.3

(Source: NoisedB)

26. From the table it can be seen that while the proposed heavier aircraft types permitted by an extended runway have broadly comparable noise levels on approach, they are generally louder on take-off (flyover).

27. In addition to heavier aircraft, communities will experience arrivals at a lower altitude. The extended runway will result in a 12.5 metre decrease in altitude for aircraft overflying communities to the east. The noise impact of this change is estimated by the airport to be around 1.5dB in the worst case. However, community reaction to this change may additionally be influenced by 'non-acoustic' factors[14] [15]. Non-acoustic factors cover a range of issues including trust in the airport operator, intrusion, and safety fears, all of which may be exacerbated by operational changes.

28. Without prejudice to the view of this report that suggests that the noise data in the ES should be updated to include the ANAS and ANNE findings, the current ES still indicates results that 'are assessed as potentially significant, before allowing for additional mitigation (para 7.9.24). This includes changes to LAeq, compared to the

[14] https://www.icao.int/sites/default/files/sp-files/environmental-protection/Documents/ScientificUnderstanding/ICAO-CAEP12-White-Paper-on-non-acoustic-factors-in-community-annoyance.pdf

[15] https://andersonacoustics.co.uk/news/aviation-noise-management-research-post-covid-part-3-non-acoustic-factors/

future baseline, of +2.0 in 2038 for both day and night in some locations. And in relation to SOAEL, para 7.6.13 notes that "*One of the sixteen locations, Felton Street (AN16), is at or above the SOAEL of 63 dB LAeq,16h for daytime noise, with six locations above the night-time SOAEL of 55 dB LAeq,8h.*"

29. With regard to ground noise, para 7.9.32, notes that areas to the east of the Application Site will see an increase in noise due to the runway extension meaning that taxiing aircraft will be closer: School Lane sees an increase of around 6 dB LAeq. (and at night the increase will be 4.9 dB LAeq 8 hour as it will not benefit from the proposed apron wall). This significantly increases the chances of awakenings and the prevention of sleep.

30. The supplementary metrics provided in the ES, notably in tables 7.49 and 7.50, show population exposure to numbers of noise events. The results show winners and losers. The population currently exposed to a low frequency of noise events (for example, those experiencing 5-10 overflights a day) above 65dBA during the day and 60 dBA at night in 2024 is expected to reduce by 2038. The population experiencing between 20 and 50 noise events above these thresholds remains broadly similar between 2024 and 2038, but there is a significant increase in the number of people - almost 3,000 - who will experience between 100 and 200 noise events daily compared to 2024. Even at the lower levels, communities have a reasonable expectation that noise will steadily improve with time, but growth and heavier aircraft are eroding many of the likely benefits.

Table 7.49: Summer Daytime N65 Population Results

Contour value (N65)	2024	2029 Future Baseline	2029 with Proposed Development	2038 Future Baseline	2038 with Proposed Development
5	32,814	20,583	20,436	15,457	16,339
10	17,972	17,141	16,884	14,407	15,109
20	14,659	13,820	13,893	12,639	13,252
50	9,882	9,482	9,483	8,484	9,668
100	1,667	3,438	3,588	1,869	4,631
200	0	3	4	0	65

Table 7.50: Summer Night-Time N60 Population Results

Contour value (N60)	2024	2029 Future Baseline	2029 with Proposed Development	2038 Future Baseline	2038 with Proposed Development
5	73,360	51,992	52,442	28,028	59,084
10	41,234	18,446	18,426	17,730	19,749
20	4,156	9,819	9,828	9,531	12,162
50	0	0	0	0	125

31. The ES identifies that the likely impact on tranquility is considered to be 'moderate'. Areas such as national parks and designated Areas of Outstanding Natural Beauty are especially valued for their tranquil environment: studies have shown that "noise pollution detracts from the enjoyment of the visitor experience, and that we place a high value on naturally quiet, pristine settings"[16].

Mitigation

32. Section 7.7 sets out the 'embedded mitigation' including nigh quota rules. Given the number of dispensations in the past, it is suggested that dispensations should count towards the night flight limit and shoulder period limit. Given this may affect scheduling, the quota could either leave headroom (equivalent to say 10% of the quota) to allow for dispensations, or the number of dispensations, including late arrivals, should be deducted from the following quota period.

Conclusion

33. Given the timing of the publication of the Government and Civil Aviation authority reports on attitudes to aircraft noise at day and night, the Applicant should be requested to update the ES noise impact assessment to take into account the findings of ANAS and ANNE. It is notable that the Appraisal of Sustainability for the Government's draft Heathrow Expansion National Policy Statement provides this analysis alongside the use of existing exposure thresholds "*to demonstrate the potential effects of lowering the assessment thresholds."*

34. Based on a review of aircraft type noise certificates for the most common types of aircraft using the airport today and those heavier types that may potentially use the airport with an extended runway, the evidence suggests that the new larger aircraft types will be louder on take-off. The impact of these new types may be further compounded by the reduction in altitude of approaching aircraft at the eastern end of the runway.

35. The averaged noise exposure levels with an extended runway show significant increases in some locations, but the supplementary metrics reveal the extent of the impact: 4,631 people will experience more than 100 noise events a day in 2038 above 65 dBA (in 2024, it was 1,667). 65 people will experience more than 200 events a day. For the night period, 12,162 people will experience more than 20 noise events a night above 60 dBA (in 2024, it was 4,156). The ES shows that 125 people

[16] https://www.sciencedirect.com/science/article/abs/pii/S0272494413000212

will experience more than 50 noise events a night which is likely to have a significant impact on sleep.

36. Combined with localised ground noise problems and an acknowledged ‘moderate’ impact on tranquillity, our conclusion is that the proposed project, if permitted, will result in a significant deterioration of the noise environment for many people in the vicinity of the airport and under its flight paths.

AEF, June 2026

Appendix 6 – BAAN Ultrafine Particles (UFP) Report by Dr Peter Knapp

Expert report prepared for Bristol Airport proposed expansion

Planning reference number 26/P/0686/OU2

Executive summary

This report challenges the adequacy of the air quality assessment provided in the application for expanding Bristol airport in *ES Vol 1 Chapter 6 on Air Quality and Odour*.

The central finding is that the Applicant's report relies on outdated scientific consensus (from 2013) to dismiss the health risks of **Ultrafine Particles (UFPs)**. Current scientific literature (since 2013) establishes a clear link between long-term UFP exposure and increased mortality from cardiovascular disease, respiratory disease, and lung cancer.

The Applicant's assessment focuses exclusively on PM2.5 (mass-based measurement), which fails to detect the vast majority of particles emitted by aircraft turbines. UFPs are significantly more toxic due to their ability to penetrate deep into lung tissue and enter the bloodstream. By ignoring UFPs, the Environmental Statement underestimates the public health impact of the expansion on local residents.

- This report is prepared by me (Dr Peter Knapp) under the instructions of Bristol Airport Action Network (BAAN). I believe the statements made in it are scientifically accurate.
- It is prepared in response to The ES Vol 1 Chapter 6 on Air Quality and Odour.

Expert credentials

I hold a PhD in Aerosol Science from Imperial College, completed in April 2024, with a research group who focuses on air pollution around airports and contrail formation. I affirm that the scientific statements in this report are accurate and, to the best of my ability, reflect the current state of ultrafine particles around airports.

PM2.5 measurements are insufficient

The Applicant's report states that is it '*entirely appropriate that the focus of the assessment of particulate matter should be on impacts of the Proposed Development in relation to the 2040 target for PM2.5*'. This essentially says that we should ignore the contribution of ultrafine particles, and I disagree with this statement for the reasons below.

Particles are created in two ways from aeroplane turbines: (i) directly from aeroplane turbines (known as non-volatile particles, nvPM); and (ii) formed from gases that combine into particles after leaving the turbines (known as volatile particles, vPM). Importantly, volatile particles may make up 90% of the particles from turbine engines and specifically not included in regulated emissions rates.

When these particles are 2.5 microns or smaller, they are known as PM2.5, which are measured typically in micrograms per cm^3. This is a 'mass' measurement, which is cheap and easy to measure and has been regularly used to measure particle pollution around airports since 1993.

However, most of the particles are smaller than 0.1 microns and they can't be detected using this cheap technology. Known as PM0.1 or 'ultrafine particles' (UFPs) they are much more toxic as they can penetrate further into the lungs and directly into our tissues

(https://doi.org/10.1016/j.gsf.2021.101147
with emissions from lower thrust settings, i.e. during takeoff and landing, causing high UFP generation around airports.

UFPs are so small that their mass is too low to register using the cheap PM2.5 mass measurements and therefore 'number concentrations' or 'particle counts' is much more meaningful than a mass measurement when measuring UFPs. This is discussed in this paper https://doi.org/10.1016/j.envint.2023.107888 '*UFPs make a negligible contribution to the PM mass in the ambient air, but they contribute dominantly to the particle number count (PNC) (Harrison et al., 2000, HEI, 2013). Thus, the concentration of UFPs is mainly expressed and quantified by number concentration (particles/cm^3)*'.

But, due to the costly expense of measuring number concentrations, UFPs have not been measured regularly and therefore underreported in the literature. Only two studies of long-term exposure to UFP and mortality has been published to date (Ostro et al., 2015, Pond et al., 2022), where the 2022 paper found associations between UFP exposure and all-cause, cardio-pulmonary and cancer mortality.

Understated effect of UFPs

A 2023 study of 10.8 million adults (https://doi.org/10.1016/j.envint.2023.107960) found a significant association between annual average UFP exposure and natural mortality; with highest correlations to cardiovascular disease (CVD), respiratory disease, and lung cancer. Their conclusion was that 'Long-term UFP exposure was associated with natural and lung cancer mortality among adults independently from other regulated air pollutants', i.e. UFPs was shown to cause lung cancer deaths.

A 2023 paper measured the background level of UFPs near the heavily polluted Marylebone Road in London road at around 4000 #/cm^3 (https://doi.org/10.1016/j.envint.2023.107888), whereas this 2025 paper (https://www.nature.com/articles/s41612-025-01095-9) measured UFPs at over 1,000,000 #/cm^3 at a distance of 200m from an airport runway every time a plane takes off or comes in to land. This shows UFP number concentrations are over **250 times greater near airports than near busy roads**.

However, the Bristol airport report (The ES Vol 1 Chapter 6 on Air Quality and Odour) mentions UFPs only once and uses an outdated report from 2013 to dismiss their importance:

Ultrafine particles (UFP) - There are no ambient air quality standards pertaining specifically to UFP in the UK. In a recent review of UFP in the UK, the Air Quality Expert Group (AQEG) cited research by the Health Effects Institute that the current evidence base did not convincingly support the suggestion that UFPs alone can account in substantial ways for the adverse effects that have been associated with ambient pollutants such as PM2.5. It is, therefore, entirely appropriate that the focus of the assessment of particulate matter should be on impacts of the Proposed Development in relation to the 2040 target for PM2.5. This is consistent with recent assessments for the expansion of Luton Airport and Gatwick Airport and accepted by the Secretary of State within the decisions to approve these applications;

Their argument rests on the following claim:

> *"The current evidence base did not convincingly support the suggestion that UFPs alone can account in substantial ways for the adverse effects..."*

This quote references a 2013 Health Effects Institute report, cited in a 2018 AQEG review. This reasoning is scientifically obsolete for the following reasons:

There have been many papers and much progress made on UFPs since 2013. Below is a graph from PubMed showing the number of papers in medical research that have included the phrase 'ultrafine particles', which demonstrates the large increase in publications. At the date of writing (15-Jun 2026), 46,736 papers on ultrafine particles were published before 2013, and 63,891 papers have been published since 2013. This shows that the report has ignored 58% of the research on ultrafine particles that is available.

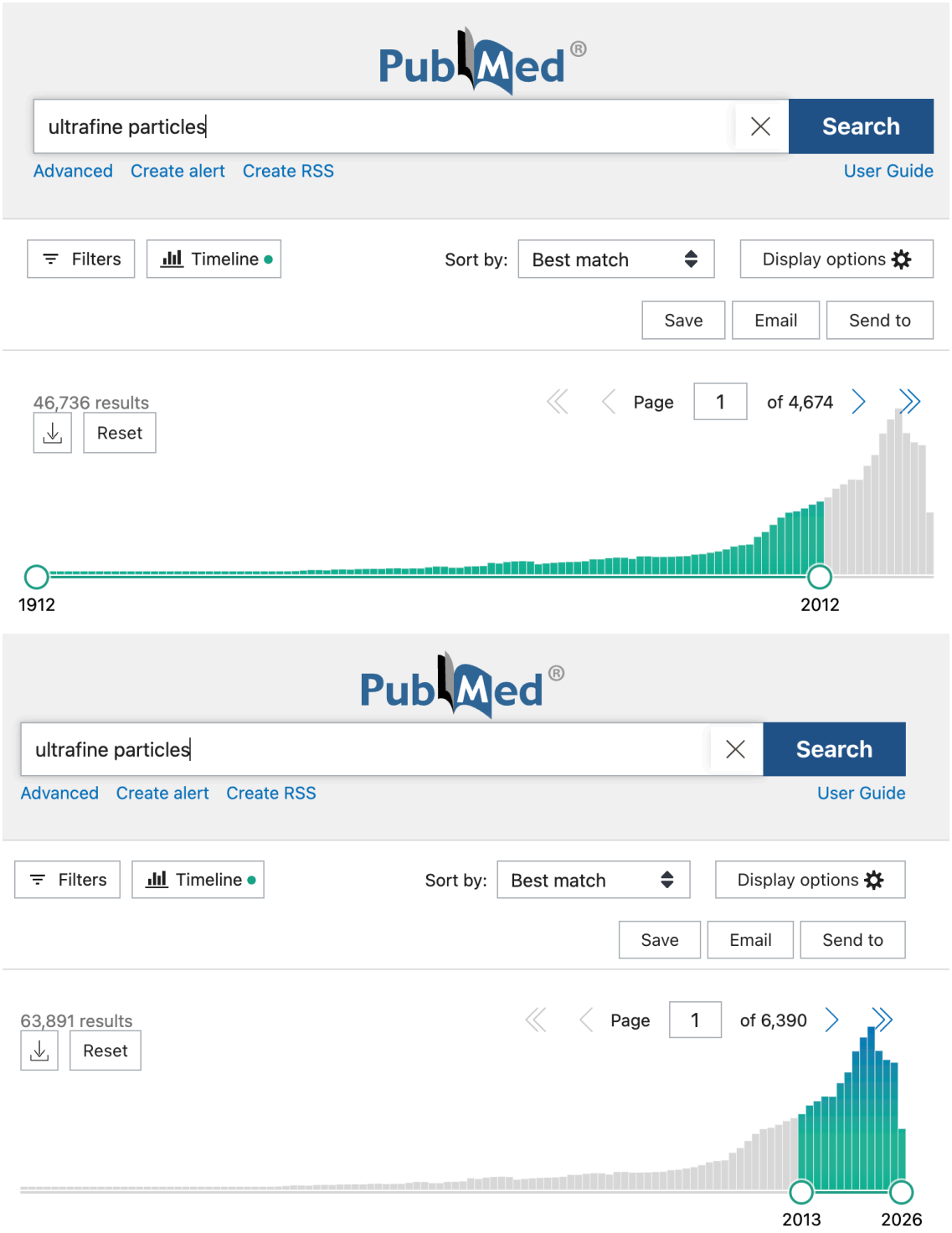


Fig 1: *A graph of the academic phrase usage of 'ultrafine particles' over time, from PubMed*

2. *Contradicts recent reviews*

   Their source of the phrase '*the current evidence base did not convincingly support the suggestion that UFPs alone can account in substantial ways for the adverse effects*' contradicts a 2026 systematic review paper https://pmc.ncbi.nlm.nih.gov/articles/PMC12873655/ stating "***Ultrafine particles (≤100 nm diameter) may have a higher toxicity than larger particles*** *but are still not regulated nor part of routine air pollution monitoring. So far, health effects of long-term exposure to ambient ultrafine particles are not well understood, owing to a lack of exposure data and epidemiological studies*" and "***The evidence base on long-term health effects of ultrafine particles has increased substantially in the past decade****, while the overall evidence for independent effects of long-term ultrafine particle exposure remains inadequate to low. More studies are needed to draw firm conclusions about the independent adverse effects of long-term ultrafine particles on various health end-points, with a special focus on the influence of co-pollutant adjustment.*"

3. *Contradicts Heathrow's response to UFPs*

   Heathrow Airport recently signed a heads of terms agreement with one of the London councils (Hillingdon) that requires testing of UFPs before any development starts. In the Hillingdon Planning Committee of Dec 2025, Ian Thynne, the Head of Environmental Specialists at the London Borough of Hillingdon, "*acknowledged residents' concerns regarding ultrafine particles (UFPs) and confirmed that the impact had been recognised*" and that "*officers acknowledged the challenge, explaining that while conventional pollutants were addressed through standard measures and action plans, UFPs lacked scientific and policy benchmarks*". This would be relevant to any airport expansion plans, and it establishes that a **UK planning authority has now formally accepted that UFPs are a legitimate and conditional planning matter**, and that it directly undermines the argument from Bristol Airport that UFPs are outside the scope of what a Health Impact Assessment or planning condition can address.

4. *Failure to align with WHO guidelines*

   Due to the difficulty and cost of measuring UFPs, there are no government limits or guidelines on their concentrations. This 2022 paper (https://pubs.acs.org/doi/full/10.1021/acs.est.1c04706) writes: '*While current United States (US) standards limit PM ambient concentrations and emissions, they do not regulate explicitly ultrafine particles (UFP ≤ 100 nm in diameter). There is a growing body of evidence suggesting UFP may play a bigger role inflicting adverse health impacts than has been recognized, and in this perspective, we highlight effects on the brain, particularly of young individuals. UFP penetrate the body through nasal/olfactory, respiratory, gastrointestinal, placenta, and brain–blood barriers, translocating in the bloodstream and reaching the glymphatic and central nervous systems.*'

   To provide some guidance, the World Health Organization (WHO) published guidelines for global air quality in September 2021 (https://apps.who.int/iris/bitstream/handle/10665/345329/9789240034228-eng.pdf) which includes a "good practice" statement about UFP exposure levels. "High" levels of UFP constitute concentrations above 10,000 #/cm^3 for a 24 h average, or above 20,000 #/cm^3 for an hourly mean.

Evidence of UFPs near airports

There are many studies that show that high numbers of very small particles dominate the environment around airports, and conclusively point to aircraft as the dominant source of these particles:

- Hu et al (2009) - https://doi.org/10.1021%2Fes900975
- Zhu et al (2011) - https://doi.org/10.1016%2Fj.atmosenv.2011.08.062
- Stacey (2019) - https://doi.org/10.1016%2Fj.atmosenv.2018.10.041
- Stacey et al (2020) - https://doi.org/10.1016%2Fj.atmosenv.2019.117148
- Stacey et al (2021) - https://doi.org/10.1016%2Fj.atmosenv.2021.118226

This 2023 paper https://www.nature.com/articles/s41612-023-00477-1 says "*Very high concentrations of ultrafine particles (UFP) were measured at Heathrow Airport London. Exposure to UFP is strongly linked to adverse health effects and guidance for exposure limits has recently been provided by the World Health Organization*" and "*Measured UFP concentrations within the airport boundary (and therefore not accessible to the general public) exceed the WHO guidance, indicating that UFP concentrations outside of the airport boundary could also be of concern. Assessing population exposure close to airports will be of increasing importance in future.*"

As mentioned earlier, the 2025 paper titled 'Aircraft emissions of ultrafine particles characterized by real-world near runway measurements' around Amsterdam Airport Schiphol recorded peaks of UFPs over 1,000,000 #/cm^3, which is **over 50 times the hourly WHO guideline**: https://www.nature.com/articles/s41612-025-01095-9

Government data from Horley near Gatwick measured 18,900 #/cm^3 annual average of UFPs in 2025, which is nearly double the 24-hour WHO classification of 'high' exposure to UFPs. Some periods were over 270,000 #/cm^3, which is **over 13 times the hourly WHO guideline**. Gatwick is the only UK airport with such data, and this has been operational for only a year or so:

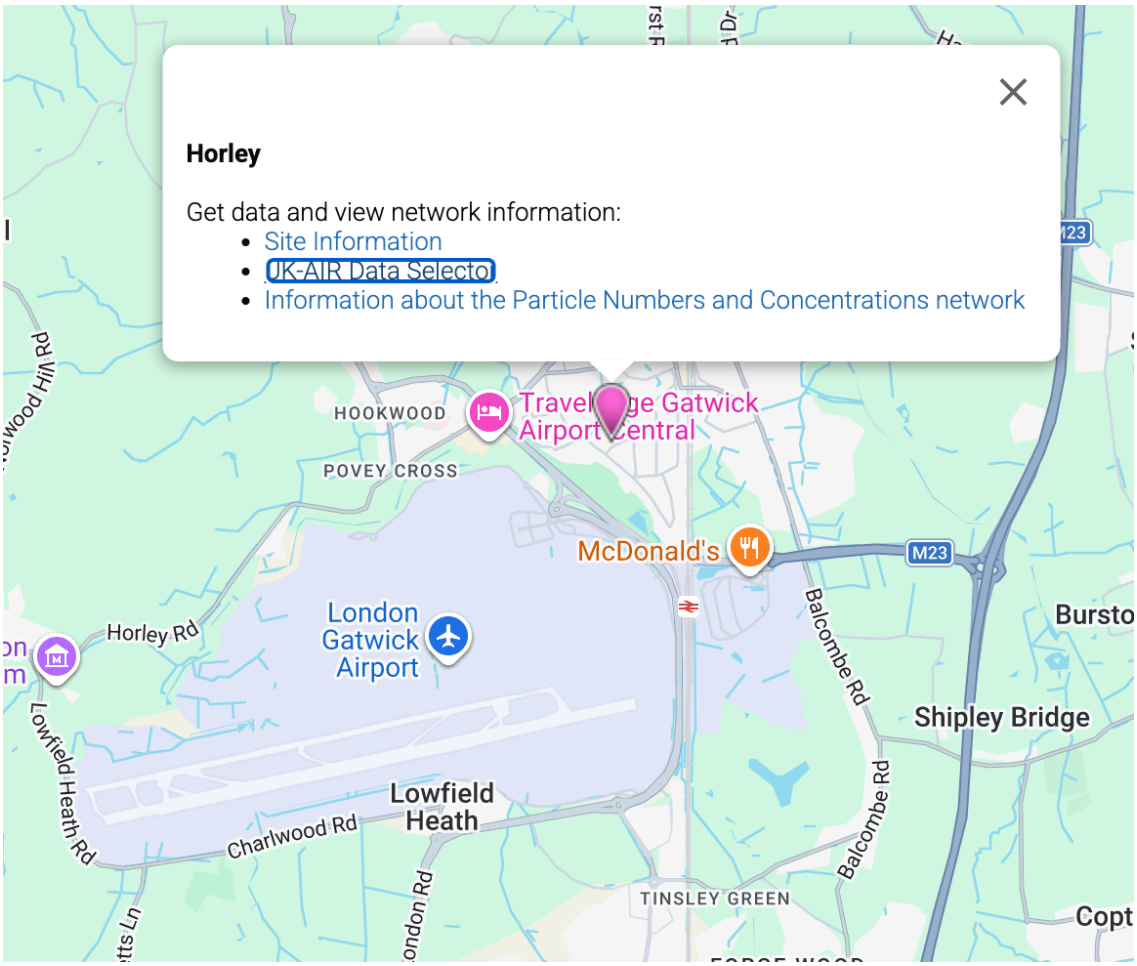


Fig 2: *The location of the UFP monitor near London Gatwick airport, the only UFP monitor near UK airports.*

To find Gatwick particle number concentrations requires a fairly convoluted process that is not easy for the public to access:

https://uk-air.defra.gov.uk/data/data_selector_service?q=9337501#mid

1. Select data type: measured data
2. Select date range: last year
3. Selected monitoring sites: Horley
4. Select pollutants: Pollutant name: total number concentration (SMPS)
5. Select output: data to screen or to email
6. Get data

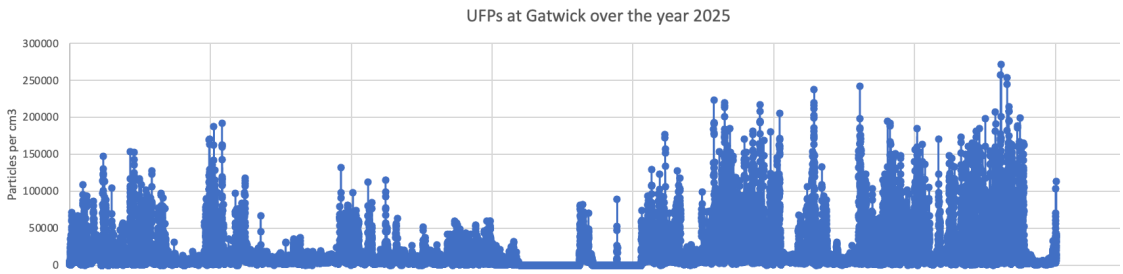


Fig 3: *A graph showing the counts of UFPs near Gatwick from 01-Jan 2025 to 31-Dec 2025.*

A 2014 paper measured UFPs over 75,000 #/cm^3 8 km downwind from LAX airport, which is 3.75 times over the WHO guideline. This was 4 to 5 times greater than when the wind was not

blowing from the airport. However, these
just 10% of the particles generated by aeroplane turbines as mentioned earlier, so the total number of UFPs may have been 750,000 #/cm^3: https://pubs.acs.org/doi/10.1021/es5001566.

Wind direction is a good indicator of UFP sources. A 2019 paper showed a site in Marylebone in central London saw an increase in particles when the wind blew from Heathrow airport, which was 22 km away: https://acp.copernicus.org/articles/19/39/2019/. This shows UFPs travel great distances.

Conclusion

The Environmental Statement for the Bristol Airport expansion is scientifically inadequate because it:

1. **Relies on Obsolete Science:** It dismisses UFPs based on a 2013 report, ignoring over 60,000 subsequent publications that establish clear health risks.
2. **Uses Insufficient Metrics:** By focusing solely on PM2.5 mass, it fails to measure the primary pollutant of concern (UFPs) generated by aircraft turbines.
3. **Underestimates Health Risks:** It ignores the established link between UFP exposure and increased mortality from lung cancer and cardiovascular disease.
4. **Ignores International Standards:** It does not assess compliance with WHO "good practice" guidelines for UFPs, which are already being exceeded at other UK airports.

Recommendation: The expansion application should not be approved based on an air quality assessment that excludes the most toxic and prevalent form of aircraft pollution. A robust assessment must include UFP number concentrations, model their dispersion into local residential areas, and evaluate health impacts against current WHO guidelines.

Appendix 7 – Mitigation measures, Planning Conditions and Planning Obligations

Further Information Required, Recommended Planning Conditions and Planning Obligations

1.1 Without prejudice to the objection set out within this Statement, and should planning permission nevertheless be granted, the following matters should either be addressed prior to determination, secured by planning condition, or secured through a binding Section 106 Agreement.

Further Information Required Prior to Determination

Noise

1.2 Noise monitoring should be undertaken during the busiest operational period of the year, particularly between 16 June and 15 September, rather than relying primarily on surveys undertaken during quieter winter periods.

1.3 Updated aircraft noise modelling should be undertaken having regard to the latest ANAS and ANNE research published by the Civil Aviation Authority and Government, in order to assess community annoyance and sleep disturbance using the most up-to-date evidence rather than relying solely upon the earlier SoNA evidence base.

Biodiversity

1.4 The final Biodiversity Net Gain Strategy should be prepared, published and made available for independent review prior to determination of the application.

1.5 Further assessment should be undertaken of the cumulative effects arising from the recent conversion of grazing land to arable use on Cleeve Hill Road and Wrington Hill and the interaction of those changes with the loss of functionally linked habitat associated with the Airport proposals.

1.6 Due to the substantial loss of land currently supporting Greater and Lesser Horseshoe Bats, it should be demonstrated prior to determination that sufficient replacement habitat can be secured and brought into positive management before development commences, in accordance with the North Somerset and Mendip Bats Special Area of Conservation Guidance.

Health

1.7 A standalone Health Impact Assessment should be prepared addressing the matters

identified within Chapter 12 and the concerns raised within this objection.

Transport and Surface Access

1.8 An updated and fully evidenced Airport Surface Access Strategy should be published prior to determination.

1.9 Annual modal share targets and associated enforcement mechanisms should be clearly identified prior to determination.

Green Belt and Car Parking Alternatives

1.10 The applicant should demonstrate why future parking demand cannot be accommodated through a single-deck or multi-deck extension to the existing Silver Zone parking area rather than expansion onto additional Green Belt land at Cooks Farm.

1.11 The intensification of existing developed airport land would represent a less harmful alternative in Green Belt, landscape, biodiversity, climate change and visual impact terms and should therefore be fully assessed before any planning permission is granted.

Climate Change

1.12 Full worst-case sensitivity testing should be undertaken using assumptions including:

- 0% Sustainable Aviation Fuel uptake;
- frozen 2026 electric vehicle market penetration;
- reduced public transport modal share assumptions;
- inclusion of inbound flight emissions.

1.13 Residual carbon emissions arising from the development should be monetised using the latest Government carbon values and incorporated into the overall economic assessment and planning balance.

1.14 A cumulative aviation emissions assessment should be undertaken taking account of growth proposals at Heathrow, Gatwick, Luton and Stansted.

1.15 Independent review of the aviation emissions modelling should be undertaken by an appropriately qualified external body, academic institution or equivalent expert panel.

Safety

1.16 Prior to commencement of development, a detailed assessment shall be undertaken of the implications of larger aircraft operating from the extended runway and descending at lower altitudes over Felton Common, including risks to recreational users, equestrians and other users of the Common. In addition, no Heavy Goods Vehicles associated with the development shall access the Airport via Brockley Combe Road or Downside except in emergency circumstances.

Recommended Planning Conditions

Airport Operations and Noise

1.17 All aircraft movements occurring during the defined night period shall count towards the annual night movement limit irrespective of their scheduled arrival time.

1.18 No more than ten aircraft movements shall occur within the evening shoulder period between 23:00 and 23:30 hours on any calendar day.

1.19 Only modern, quieter aircraft meeting the Airport's highest applicable noise performance standards shall be permitted to operate during the evening shoulder period.

1.20 No more than nineteen aircraft movements (arrivals and departures combined) shall occur between 23:30 and 06:00 hours on any night.

1.21 A continuous night-time respite period shall be secured between 01:30 and 06:00 hours during which no scheduled aircraft movements shall ordinarily take place, except in cases of emergency or where required for reasons of aviation safety.

1.22 Any new scheduled passenger or freight route shall utilise modern low-noise and low-emission aircraft in accordance with an approved Fleet Compliance Statement, which shall be implemented and maintained for the lifetime of the route.

1.23 Any permanent substitution of aircraft serving an approved route shall be notified to the Local Planning Authority and shall continue to meet the approved noise and emissions performance standards set out within the Fleet Compliance Statement.

1.24 Additional acoustic bunding and other appropriate noise attenuation measures shall be provided around the eastern and western apron areas, including measures designed to reduce operational ground noise affecting Felton Common and Goblin Combe.

Biodiversity, Landscaping and Lighting

1.25 No development shall commence until all approved off-site ecological mitigation land required to support horseshoe bat populations has been secured and made available for habitat management.

1.26 A detailed landscape implementation and management scheme shall be approved for Cooks Farm, Felton Common, the Staff Car Park and all other affected areas, including implementation timescales and replacement planting requirements.

1.27 All approved landscaping shall be implemented in accordance with an agreed programme and maintained thereafter. Any failures shall be replaced within the next available planting season.

1.28 All strategic landscape planting associated with Cooks Farm, Felton Common and the Staff Car Park shall be implemented in accordance with an agreed phasing programme linked to the delivery of the development. Where planting fails or is delayed, replacement planting shall be undertaken within the first available planting season and appropriate enforcement mechanisms shall apply.

1.29 No external lighting shall be installed other than in accordance with an approved Airport Lighting Strategy demonstrating protection of dark skies, horseshoe bat habitat, Felton Common and surrounding residential areas.

1.30 Prior to first occupation of the development, a Residential Light Mitigation Scheme shall be submitted for approval identifying properties significantly affected by operational lighting and aircraft lighting. The scheme shall include measures, where appropriate, such as blackout blinds or curtains and any other reasonable mitigation necessary to minimise night-time light intrusion.

Transport and Highways

1.31 No vehicular access shall be provided between the Cooks Farm site and Brockley Combe Road (B3130) or Downside.

1.32 No road connection shall be constructed between Cooks Farm and Brockley Combe Road (B3130) or Downside to facilitate future airport growth.

1.33 No HGVs associated with airport operations shall access the Airport via Brockley Combe Road or Downside other than in emergency circumstances.

Green Belt and Car Parking

1.34 No airport-related passenger parking shall be provided within the Cooks Farm site.

1.35 Prior to the commencement of development involving additional airport parking, a comprehensive parking strategy shall be approved demonstrating how the maximum practicable proportion of future parking demand will be accommodated through decked or multi-level parking within existing operational areas before any additional Green Belt land is brought into operational use.

Climate Change

1.36 Annual monitoring reports shall be submitted detailing construction carbon emissions, operational carbon emissions, modal share performance and progress against climate commitments.

1.37 Prior to first use of the development, a detailed Electric Vehicle Incentive Strategy shall be approved and implemented, including consideration of free EV drop-off and pick-up facilities and reduced parking charges for electric vehicles.

Recommended Section 106 Obligations

Transport and Surface Access

1.38 Provision of a dedicated airport parking enforcement officer for the duration of the approved growth period, extending until at least 2038 under the Core Case or 2043 under the Slower Growth Scenario.

1.39 Financial contributions towards delivery of the Bristol Airport Mass Transit scheme.

1.40 Financial contributions towards all highway improvements required as a direct consequence of growth to 15 million passengers per annum.

1.41 Delivery of a fuel pipeline, or equivalent infrastructure resulting in a substantial reduction in airport-related fuel tanker movements, within an agreed timescale.

1.42 Funding and support for the implementation of an Article 4 Direction, or other appropriate planning control mechanism, to manage the proliferation of unauthorised airport-related parking uses within surrounding villages

Modal Share and Traffic Management

1.43 Binding modal share targets with annual monitoring, review mechanisms and enforceable sanctions in the event of non-compliance.

1.44 If agreed public transport modal share targets are not achieved for two consecutive monitoring periods, enforceable measures shall be triggered including restrictions on passenger throughput, reductions in annual aircraft movement limits, reduction in passenger numbers and/or other measures sufficient to reduce airport-related traffic generation.

1.45 The Parish considers this to be a more effective enforcement mechanism than the removal of airport parking spaces, which risks displacing parking into surrounding communities.

Biodiversity

1.46 Long-term management, monitoring and funding of all off-site ecological mitigation land for the lifetime of the development.

1.47 Long-term management and monitoring of Biodiversity Net Gain habitat creation and enhancement areas.

1.48 Provision for independently funded ecological monitoring, reporting and review for the duration of all ecological mitigation and compensation measures.

Climate Change

1.49 The Emissions and Climate Change Action Plan (ECCAP) shall be secured through the Section 106 Agreement with monitoring, reporting, review and enforcement mechanisms.

1.50 A mechanism should be explored whereby failure to achieve agreed carbon reduction targets results in the implementation of a passenger carbon levy or equivalent financial contribution towards carbon reduction measures.

1.51 Annual reporting shall demonstrate compliance with agreed climate change commitments and identify remedial actions where targets are not achieved.

Community Mitigation

1.52 An Airport Environmental Amenity Fund of not less than £300,000 per annum for a minimum period of ten years to support communities affected by airport operations and expansion.

1.53 The Fund should be available to parishes and community organisations affected by airport operations, environmental impacts, traffic, noise, landscape harm and loss of local amenity.

Ultrafine Particle Monitoring and Action Plan

1.54 The Section 106 Agreement should require the preparation and implementation of an Ultrafine Particle (UFP) Monitoring and Action Plan. This should include the installation and ongoing operation of UFP monitoring equipment at agreed locations around the Airport and nearby communities, regular public reporting of monitoring results, periodic review of monitoring methodology in line with emerging scientific evidence, and the preparation of mitigation or action measures where monitoring identifies potentially significant airport-related UFP concentrations. The obligation should remain in force for the lifetime of the development and be subject to regular review and updating in consultation with North Somerset Council.

Community Fund

1.55 Airport Environmental Amenity Fund - the existing Airport Environmental Amenity Fund shall be increased to not less than £300,000 per annum for a minimum period of 10 years, with annual indexation, to support environmental enhancement, community wellbeing, health initiatives and mitigation projects within communities affected by airport expansion.