

Planning Application 18/P/5118/OUT

Applicant: Bristol Airport (majority owned by Ontario Teachers' Pension Plan, Canada)

Submission to North Somerset District Council

by the Parish Councils Airport Association

Appendices

List of Appendices

No	Title	Page
1	<u>PCAA response to Your Airport: Your Views Nov 2017</u>	2
2	<u>PCAA response to Your Airport: Your Views May 2018</u>	9
3	<u>Notes of meeting with NSC to discuss Bristol South West Economic Link 10th August 2017</u>	16
4	<u>PCAA response to draft Noise Action Plan 2019 - 2024</u>	21
5	<u>BA Financial Performance 1997 – 2016</u>	31
5.1	<u>PCAA report March 2018</u>	31
5.2	<u>Meeting with BA 27 June 2018</u>	38
5.3	<u>Letter from Janis Kong 25 July 2018</u>	41
5.4	<u>Letter to Janis Kong 29 October 2018 - amended version 12 November 2018</u>	43
6	<u>Background noise letters</u>	47
7	<u>Aviation Carbon Emission figures from Campaign against Climate Change.</u>	48
8	<u>Compensation and the Treasury Green Book</u>	51
9	<u>Pilot Comment</u>	55

Document 2 of 2 – for main response see separate document

1 February 2019

Appendix 1 - PCAA response to Your Airport: Your Views Nov 2017

‘Your airport: Your views’ Preparing a new master plan: Public Consultation

Response by the Parish Councils Airport Association (PCAA)

Comments:

Questions answered below are laid out in the format requested in your feedback consultation (after our executive summary and comments on the planning process).

Executive summary:

The PCAA have found it impossible to respond to the consultation due to the lack of information provided because, as you can imagine, parishes have the utmost concern for people and the natural environment. It is our belief that the scale of development proposed can not be mitigated. Our comments are as follows:

The airport consultation document states that more details will be given. **The PCAA reserve the right to make an informed comment and comparison of the impacts of the scenarios when detailed information is given by the airport in order that our decision-making process is based on evidence.**

The PCAA believe that due to the airport’s location, it is spatially constrained. **An option in the Master Plan, that must be considered, is that Bristol Airport has reached its natural growth limits.** Please note that the airport was capped at 10 mppa for this very reason: lack of surface access infrastructure. The airport will be aware that no infrastructure improvements are deliverable, even if desirable, until between 2025 and 2035 which will compete for deliverability with the housing developments proposed in the Joint Spatial Strategy.

This consultation completely ignores the local community and its right to know the impacts of the proposed development (in its various phases) compared to the present level of activity at 8 mppa. No negative impacts have been given. The obvious starting point should be that **the proposed expansion of 150% carries the threat of a 150% expansion in noise, night and day, light pollution, road traffic, parking on greenbelt land and aviation greenhouse gas emissions.** Of course it might not be quite as bad this, if more passengers come by public transport but nothing is certain. No doubt there will be some improvements to noisy aircraft but by referring to a 75 per cent reduction of noise over the last 50 years shows how weak the airport’s case is - any gains in quietness or carbon reductions are outpaced by an increase in aircraft movements. Many civil aircraft have a 25 year operating life so little room for improvement in ground and air noise is expected in the next two decades in fact we shall see a deterioration in well-being for residents. Our concerns range from surface access, ground and air noise, air pollution, loss of biodiversity, climate change, landscape and visual impact and uncertainty over whether the airport can really deliver the economic benefits to the region it is proposing without damaging the local and global environment. A detailed analysis of all our concerns is expected in the Master Plan.

This consultation makes no mention at all of night flights which are the subject of serious public concern. We look forward to a clear statement that there is no intention whatever of increasing night flights, indeed that their number will be progressively reduced

Bristol Airport is framing the discourse of expansion under five pillars with three scenarios on which to comment, but has failed to give any meaningful detail. **The PCAA reserve the right to comment at the Master Plan stage on these scenarios once a detailed set of analysis on passenger forecasts, air transport movements, traffic flows, environmental concerns (including the greenbelt and loss of biodiversity) have been given and of course impacts on settlements close by.** A full detailed economic report should also be included with a break down of economic benefits. For instance what type of employment is the airport hoping to attract as a strategic employment location?

As no announcement has been made on the mass transit proposals it is extremely difficult to give an informed comment on these development plans without knowing the impact of the mass transit on communities and the environment. The PCAA view this exercise as being premature and will comment when details are made available.

Planning Process:

The PCAA request that the Bristol Airport Master Plan confirms which planning route is to be taken – as a Nationally Significant Infrastructure Project (NSIP) or via a planning application to North Somerset Council.

It is our understanding that, to date, the UK government has not made a National Policy Statement (NPS) on aviation. The revised draft ‘Airport National Policy Statement: new runway capacity infrastructure at airports in the South East England’ is only subject for approval sometime in 2018. There is no NPS for regional airports. NPS have to have parliamentary approval. Our understanding suggests that if growth is to be increased by at least 10 mppa under the Planning Act, 2008, it can then be considered as under a NSIP (Nationally Significant Infrastructure Project).

The Town & Country Planning Act 2017 requires reasonable alternatives to be given for the proposed development and that these are assessed. The PCAA request that an assessment is made of the demand for flights from Bristol if Cardiff and Exeter airports serve more fully the demand from their own regions, given that they do not have the space constraints experienced at Bristol Airport. If these airports expand they will create growth in jobs and the economy, reducing the figures claimed by Bristol Airport (related to these other regions) and weakening the justification for expansion at Bristol (see page 21). This will give the whole of the South West and South Wales a more balanced economy.

It is very disappointing that the Part 1 (Strategic) Economic Impact Assessment of Bristol Airport Final Report mid-January 2017 was not made available for the full consultation which commenced early December. This report has only been placed recently on your website, thus the PCAA will comment at the next consultation. The PCAA also note that this has not been made available for the West of England Joint Spatial Strategy.

Response to Questions:

1. Do you have any comments on our pillars?

It is important to remember that Bristol is essentially a leisure airport taking passengers from the UK to spend their holidays abroad. Currently business usage is under 17% (nationally it is only 19%). Heathrow is the main business airport for the UK and will remain so due to frequency and flexibility of long haul flights.

Pillar 1: A World leading Airport:

Bristol Airport is already a leading airport, it has 120 destinations including three European hubs which enable residents and business travellers to go anywhere in the world. It already has enormous capacity to increase business usage without any further expansion at all. If the airport expands, the quality of life and well-being of residents in the Chew Valley and surrounding villages will deteriorate. There will be more noise night and day, light pollution, traffic on our roads and car parking on greenbelt land. Aviation's carbon emissions will increase. House prices will devalue. **Can the airport state why they think residents would want more expansion when they receive all the negative impacts?**

Pillar 2: Employment & supporting economic growth:

Bristol Airport is already a successful airport and plays a modest part in the regional economy but it is quite false to pretend that the airport is a *major driver* of the South West economy. Our main concern is deliverability of the economic benefits to the region as proposed by the airport. Until we view a full economic report we are unable to comment.

Pillar 3: At the heart of an integrated transport network:

Why has an integrated transport network not been delivered, as promised under the planning consent of 2011, to allow expansion to 10 mppa? Please answer this question in the Master Plan. Conditions to the planning consent stated that there would be an *'erection of 2 multi-storey car parks of four and five storeys north of the terminal building providing 3850 spaces and a transport interchange for buses and taxis with a pedestrian bridge link'*. **These conditions should be honoured before any further planning application is considered.** A three storey multi-storey car park with just 1,000 car parking spaces is not the same as what was proposed above.

The PCAA believe there will be continued delay in the provision of the integrated transport network as there is considerable financial uncertainty surrounding the airport, as shown in their accounts. The airport is currently unprofitable at the current level of operation after financing costs to construct the airport are taken into account. The consolidated accounts show a net loss for 2016 of £36M, and an accumulated loss of £262M. Of the total revenue of £90M in 2016, £34M was aeronautical income, £27M car park revenue and £26M concession revenue.

The PCAA question the deliverability, even by 2035, of the integrated network system, mass transit proposal and dualling of the A38 as suggested by these proposals for 20 mppa.

No multi-storey car parks are included in the scenarios given. The PCAA requests that multi-storey car parks are constructed rather than more land acquisition for low cost parking on green belt land.

Pillar 4: A sustainable approach:

Where the airport says (p. 24) "We pride ourselves on being a considerate neighbour and limiting our effect on the environment. That's why we are aiming to be a carbon neutral airport by 2030" and refers its Airport Carbon Accreditation award, it is important to realise that it is ONLY referring to carbon emissions *within the airport boundary*. The major objection to the expansion of aviation is the large impact on global warming of *aircraft in flight*. Aviation has a major and increasing impact on climate change as was acknowledged by the government's *Draft Aviation Policy Framework* document. **This serious problem is passed over in silence in the airport's consultation document.** Significant constraints on growth are essential for the U.K. to stand a realistic chance of achieving its greenhouse gas reduction targets for 2050.

Bristol Airport is the largest carbon polluter in North Somerset and is continuing to grow its carbon footprint whilst all other industries need to reduce their emissions to fit within the UK's legally agreed carbon budget.

Although an agreement has been reached on a global carbon offsetting and reduction scheme for international aviation, it is an offsetting scheme rather than a reduction scheme and subject to controversy. It doesn't even start until 2020.

Can you explain how international and domestic emissions will fit the UK carbon budget for 2050 and the assumptions you have made?

It is exceedingly disappointing that this consultation has failed to mention any impacts on communities and the environment and how this development will minimise the adverse activities of airport operations. Our concerns range from surface access, ground and air noise, air pollution, loss of biodiversity, climate change, landscape and visual impact.

Question 2. What aspects of the airport experience would you like our future plans to focus on?

The PCAA would like residents to be able to:

- sleep at night without being disturbed by aircraft noise; WHO night noise limits should be formally incorporated into any agreement to allow expansion
- open their windows and enjoy periods of tranquillity in their gardens.
- walk on Felton Common and in woods such as Goblin Combe without being disturbed by aircraft noise.
- stop cars being parked outside their houses and on Felton Common waiting to pick up passengers.
- see dark skies rather than an illuminated landscape.
- cycle along the A38 and Brockley Combe in safety.
- stop their local roads turned into rat runs for airport usage.

Question 3. How important is a successful airport to the regional economy?

This question misses the point. The PCAA believe Bristol Airport is already a successful airport contributing modestly to the regional economy. It already has enormous capacity to increase business usage without any further expansion at all. The critical point is do we want a **larger** airport? The PCAA **do not** want more expansion due to the negative impacts on communities and the local and global environment.

Question 4. How could access to Bristol Airport be improved?

Before any road improvements are made Bristol Airport should construct an integrated transport network as promised under the planning consent of 2011 to allow expansion to 10 mppa to be completed.

Until detailed analysis is given on traffic flows on the suggested scenarios the PCAA is unable to give an informed comment.

Question 5. How might we use emerging technology to reduce our impact on the local communities and environment?

There *may* be benefits from ‘emerging technology’, but effects are notoriously difficult to anticipate. Any expansion proposal should be made on the basis of impacts presently known.

The PCAA do not see aircraft in the next decade becoming significantly quieter. All current aircraft are still noisy but just less noisy than they were decades ago. The PCAA believe that with the increased frequency of aircraft movements any benefits from quieter aircrafts are lost.

Question 6. Is there a case for increased public and private investment in and around the airport?

Private investment from Bristol Airport has failed to deliver an integrated transport network as promised under the planning consent of 2011. Bristol Airport should invest here first ***without aid from public funding***. With public services so much in need of public investment, further subsidies for an ***already highly subsidised industry*** should be ruled out.

The PCAA would like to see all costs of new road infrastructure and the proposed mass transit scheme put into the Master Plan. Due to austerity measures communities may prefer to support public funding for the health, education, housing and social care sectors rather than a private company such as Bristol Airport.

The PCAA question whether the proposed mass transit will benefit the wider public other than those using Bristol Airport.

Question 7. Which Scenario best reflects our five pillars and why?

The current planning approval layout of 2011 shows a transport interchange. The PCAA expect this to be delivered before development consent for any new scenario is given.

The PCAA believe that in order to make an informed comment on the scenarios traffic, noise assessment and environmental assessments must be carried out and the results fully published. There are, for example, considerable differences in land acquisition (using greenbelt land on each occasion). If these assessments are to be objective and if their findings are to command respect, they should be at the airport's expense, but commissioned and carried out *independently* of Bristol airport. This might be done by using a university department which could be shown to have no commitments to the aviation and similar industries. The for-profit environmental consultants employed by Bristol airport in connection with the previous master plan (2006) destroyed any credibility in their objectivity by uncritically supporting the airport in its public relations propaganda exercises, even to the extent of providing personnel to man stalls at public "consultations".

Question 8. What information would you like to see presented at the next more detailed consultation stage?

It is essential, at the Master Plan stage, that Bristol Airport confirms the planning route it has chosen (via North Somerset Council or via the national route for infrastructure projects) in order that residents and communities have ample opportunity to comment fully. It is for this reason that the PCAA expect the Master Plan to have more detail and frank explanation of the widely acknowledged negative impacts of this development than did the Master Plan of 2005 - 2030. Our major concerns revolve round the social impacts on residents as well as environmental concerns from surface access, ground and air noise, air pollution, climate change, loss of biodiversity, landscape and visual impact. Bristol Airport is required to show how residents will be affected by this development.

As stated above, the PCAA will provide detailed comments on the scenarios once more information is available and therefore request that the information is provided in a format that includes a comparison of the scenarios. For instance:

- The amount of land use required for A, B and C.
- Forecasts
- Infrastructure proposals
- Safeguarding and land property requirements
- People and the natural environment
- Proposals to minimise and mitigate adverse effects

More specifically, the information provided should include the following which will, at the next stage, be examined in full; all three scenarios should be included alongside the scenario for no further growth:

- Assumptions made on forecasting and growth rates
- Assumptions taken with regard to Brexit post 2019
- Air transport movement capacity of the runway without any capped restrictions
- Air transport movement capacity of the runway capped at 20 mppa
- Air transport movement capacity of the runway capped at 20 mppa with current night time restrictions such as the night noise quota point system
- Air transport movement capacity of the runway capped at 20 mppa without night time restrictions such as the night noise quota point system
- Airspace changes required and any new flight paths
- Aircraft stands required for this development

- A commitment to a reduction in night time flying
- A comparison should be given of the ground and air noise impacts of the Scenarios.
- A commitment that the Airport is not going to become a depot for cargo flights
- Hours of respite from ground and air noise each day for residents
- Conditions to minimise impact on residents and the environment
- Detailed analysis of the employment to be provided
- Ground noise assessments for all scenarios should be made accessible, including aircraft taxiing, revving of engines before take-off, engine and braking noise on landing (including the use of reverse thrust). Use of APU's and GPU's, vehicular movement
- Car parking and noise from the integrated transport network with the proposed mass transit for all scenarios will be significant and should be assessed.
- Local roads should be subject to detailed assessment of traffic roads in a ten-mile radius.

Proposals to minimise and mitigate adverse effects:

The PCAA request that the Master Plan includes an up to date list of the existing conditions. It should show the ones that have been implemented and discharged as well as those not been fulfilled such as the integrated transport network system.

The PCAA wishes to see in the Master Plan a proposed set of new conditions which would be applied, if future planning consent is given to 20 mppa.

Appendix 2 - PCAA response to Your Airport: Your Views May 2018

PCAA response to Master Plan Consultation – Stage II Development Proposals and Options May 2018

The PCAA met on 16 May and decided that the consultation put forward was extremely confusing for the public as it includes proposals to raise capacity to 12 million passengers a year (mppa) whilst also proposing growth to 20 mppa. The website surrounding the consultation is difficult to navigate. It is extremely disappointing that the consultation documents don't address issues put forward in our initial response which concern the impacts of airport expansion on residents and the environment. The PCAA met again on 28 June and agreed this response.

Bristol Airport suggested to the public three scenarios. In this consultation, the airport has avoided showing the impacts of each scenario and has put forward to the public a 'Pick and Mix' approach of all scenarios to 2040. Development to 12 mppa is mainly based on scenario A with some of B and beyond 12 mppa there is extensive use of scenarios B and C.

Section 1 - Growth to 2040:

It is impossible to make an informed comment on the timescale to 2040.

Firstly, experience has shown the PCAA that it is a complete waste of time detailing our concerns on issues surrounding further growth as the last Master Plan was not reflected in the subsequent planning application. Also, due to permitted development rights at airports, changes to planning applications are made constantly and with little or no scrutiny. For example, permitted development rights have allowed an additional aircraft stand over the number agreed in the planning consent and the change of location of the administration block which is now larger in size than consented and on the South side of the airport in green belt. This indicates that although Bristol Airport might write fine words it carries out the actions it wants rather than what was approved.

Secondly, climate change is now such a serious issue that aviation may have to be limited in future. As Bristol Airport knows, aviation is one of the fastest growing sources of emissions and we know that emissions at altitude are a lot more damaging to the climate than at ground level. We also know that technological advances may not be brought forward in the timeframe and 89 organisations worldwide have called on the UN's International Civil Aviation Agency (ICAO) to stop plans for aviation biofuels and carbon offsets. This is in part due to use of palm oil which leads to increased deforestation. Carbon offsetting, proposed by Bristol Airport, is not a pathway to reduced emissions. Approval of Heathrow Airport 3rd runway will also impact on future expansion at Bristol Airport. Lord Deben and Baroness Brown of Cambridge, from the Committee on Climate Change, reminded the Government that it has a legally binding commitment to reduce greenhouse gas emissions under the Climate Act. Their letter is dated 14 June 2018 on the Airports National Policy Statement which can be viewed at <https://www.theccc.org.uk/publication/ccc-writes-to-chris-grayling-about-airports-national-policy-statement/> It can no longer be argued that Bristol Airport's carbon emissions are a minuscule amount as the cumulative impact, with other airports expanding in the UK and elsewhere and with other developments, will take us beyond 1.5 degrees which is what expected under the Paris Agreement.

Thirdly, if the airport wishes for comment on these proposals, more information is required such as airspace changes. This may impact on additional parishes which are completely unaware that their communities may be affected by ground and air noise.

Fourthly, the PCAA do not believe that public funding for infrastructure is possible due to Brexit and continued austerity within the UK. Bristol Airport's accounts indicate that they are unable to contribute substantial sums to new infrastructure but will use available finance to fund infrastructure on site to allow for growth. This will leave local communities suffering from increased traffic with little or no infrastructure improvements.

Consultation point design options:

Question A: The entrance gateway:

There is no doubt that the Airport gateway will further urbanise the landscape surrounding the airport. It is impossible to comment until this information is made available in the Master Plan and the impacts on parishes and their residents understood.

Today, 85% of all passengers travel to and from the airport by car. Bristol Airport's aim is to deliver '*a substantial increase in the proportion of journeys made by bus and coach*' towards 2030 (on page 22). There is currently debate on whether the Bath bus will still run in future. So the PCAA question what Bristol Airport mean by 'substantial' and highlight that car travel will increase carbon emissions until cars go electric expected in the UK in 2040. Within the Surface Access Charter on page 23 it states '*a long-term shift towards more sustainable modes of transport to and from the airport by the mid-2030's*'. So, which is it? Is it for 2030 or mid 2030's possibly as late as 2035! A condition should be set to deliver at least 50% of all passengers by 2030 by public transport. There is only a 'possible introduction' of a mass transit towards 2040. There is no doubt that local residents and communities are going to carry the burden of increased congestion on local lanes, roads across the North Somerset and BANES and the A38 and A370. This is contrary to the West of England Joint Spatial Plan and North Somerset Core Strategy which advocates that there should be no loss of well-being but an increase in quality of life for residents.

The public transport interchange was promised under the planning consent of 2011. There should be no increase in passenger numbers beyond 10 mppa until this is constructed and in operation and, as stated on p27 of the consultation document, until the second multi-storey car park is built. The public transport interchange should not just be for delivery of passengers to and from the airport but, as the title suggests, for the general public. Parking should be provided for residents from the Chew Valley at prices equivalent to those at local rail stations of Yatton and Nailsea to allow people easy access to other locations as well as Bristol. The drop-off zone to access the public transport interchange should be free. Local people will suffer from so many of the impacts of airport growth, they must have the opportunity to benefit in some small way.

Question B: The airport's boundary and public areas:

It appears from the consultation document that the boundary changes to enhance the natural habitat and mitigate the visual impact are to be outlined in the Draft Master Plan later this year. Thus the PCAA cannot comment but it also appears that this is aimed at the long-term, for growth beyond 12 mppa.

The PCAA objects in the strongest possible terms to any further airport operational and related land being released from the green belt designation. The PCAA do not believe that there is sound evidence and exceptional circumstances for land to be released on an overall basis. Our preference is for underground car parks to save any further development on green fields as numbers move towards 20 mppa. Following this approach at 12 mppa would take away the need for additional surface car parking, proposed as an extension to the Silver Zone Car Park, to be located immediately south of the existing car parking areas on the land known as 'Cogloop'. The new Administration Block has been relocated to the South side in green belt using permitted development rights regardless of views of parishes and Bristol Airport has made it known that it is seeking through the local plan process to have all operational and related land released from the green belt designation. If a new Administration Block can be built in the green belt as an operational need under permitted development regulations so can a multi storey car park. It is extremely disingenuous to state in its consultation material that *'other options included further multi storey car parking on the North and South sides of the airport, but these would likely result in significant landscape and visual impacts'*. Bristol Airport want the cheap option of low-cost car parking and they adjust the argument to their own benefit regardless of further detrimental impacts to the environment. The land available to the South side is environmentally constrained due to the Greater and Lesser Horseshoe Bat. Low cost car parking is no longer acceptable as it increases urban sprawl through lighting, compromises the openness of the greenbelt and impacts on biodiversity. The continual avoidance of constructing underground or multi storey car parks reveals the argument that the airport is financially unable or unwilling to do so, preferring the cheaper option of low cost parking on open land.

Parking offsite is a major problem for parishes and is growing. There needs to be a coherent off-site car parking strategy, avoiding green belt land, which allows licensed independent operators to compete with Bristol Airport. Bristol Airport should not have a near-monopoly on car parking.

Green infrastructure towards 2040 will be used to mitigate the loss of green belt and fields but it cannot protect and enhance the environment when development is on such a large scale. Green infrastructure can not compensate the land-take of piecemeal development of Bristol Airport with new roads and road improvements and the building of a mass transit through greenbelt. The State of Nature Report 2016 reveals more than 53% of UK species studied have declined and there is little evidence that the rate of loss is slowing down. Further development of green fields on this scale can only accelerate this rate of loss. If any land is to be taken out of green belt, compensation land should be provided.

Question C: The airside platform extension to the airport's aviation infrastructure:

The PCAA believe, and we stress, that the airside platform will have **severe** impacts on parishes and residents surrounding the airport. The fact that the platform would sit above the land, with a varied topography and with a range of heights between 9 and 18 metres is going to allow ground and air noise to travel far greater distances and have highly significant visual impacts. We cannot see how this noise can be mitigated by acoustic fences of either 3 or 5 m height and the visual impact be hidden from view.

Note that the planning application of 2011 ignored the impacts of ground noise on residents which can be heard from the airport now on an everyday basis. At 8 mppa there is little respite from noise. The PCAA believe that from 10 mppa there will be no respite from noise every day and in the summer months no respite from noise at night. This means that that between 2000 and 2021, when

10 mppa is expected, the environment for residents will have changed from one in which there was respite from airport noise to none. Obviously, this results in poorer wellbeing and a loss of quality of life. This is also confirmed in the Master Plan 2006 – 2030 from the Bristol Airport: *'interpretation of the noise contours prepared for 9 mppa is that growth beyond to 2030 will be associated with an increase number of people adversely affected by noise'*. This was found to be on houses bordering Felton Common but the emphasis has shifted from development expected on the South side to one that is now on the North side. The PCAA stress again that this development will have severe impacts on parishes and residents to the North and south west of the airport.

Heathrow airport, if the third runway is approved, has made provision for respite through continued runway alteration and the expectation of a six-and-a-half-hour ban on scheduled night flights. Current proposals of expansion beyond 10 mppa at Bristol take away any respite from air and ground noise during the day and night as, between 10 mppa and 12 mppa, night time flights will increase due to the change in the planning condition in which both the summer and winter quota have been added together. Currently at Bristol Airport there can be in summer months as many as 22 flights per night which is nearly one every fifteen minutes. Data will be provided on this issue at the time of the planning application. The PCAA demand that respite is given, and it is made a condition so that people can plan events around noise free times. Bristol Airport should move towards a night time ban commencing with a night movement restriction per night of 14. These air transport movements should finish before 2 am allowing four hours of uninterrupted sleep. Note that Bristol Airport recognises there is low ambient noise level surrounding the airport as it is situated in a rural location and that the dominant noise at night is aircraft movements. Residents surrounding Bristol Airport should be treated equally with the same rights of those residents at Heathrow. The World Health Organisation recommendations should be adopted for night hours of 23.00 – 07.00 hrs.

Due to a transformative change in the environment from 10 mppa, the PCAA demand that all households are compensated from within the 54 dBL contour for the loss of tranquillity either through the Land Compensation Act or the payment of council tax for each household on an annual basis to North Somerset Council or the applicable council in Banes. If, for example, a home near the airport was sold in 2021 for £300,000 which, it is agreed by chartered surveyors, would have been worth £350,000 had it not been for the further expansion of the airport to 12 mppa, then the seller has suffered a £50,000 loss. Bristol Airport should make good that loss. Houses are already blighted. Heathrow Airport has committed to pay 125% market value plus taxes and reasonable costs for all those who receive compulsory purchase orders on their property. Bristol Airport should do the same. There has to be an understanding by Bristol Airport that further growth is adversely changing the environment in which many people live surrounding the airport. The airport should be constrained due to its location and its contribution to an increase in carbon emissions.

In summary:

Further expansion makes it impossible to maintain the current quality of life for residents surrounding the airport. It is impossible to reduce noise impacts on residents as there will be a considerable increase in air transport movements leaving no respite during the day and night. We strongly argue that protection for designated sites for nature and conservation will only be weakened with the removal of green belt protection as the airport is very close to many SSSI sites. The rural landscape will disappear as will the tranquillity of the area and dark skies at night. There will be increased congestion on the road network.

Section 2 - Towards 12 million passengers a year:

Again, it is disappointing that none of the questions have been answered where we have requested more information on the impacts of development on residents and the environment. Growth towards 12 mppa is part of growth towards 20 mppa in 2040 and the cumulative impacts of this growth should be considered at this stage. Thus, as stated above, compensation is relevant to households from 10 mppa. A more detailed response will be given when information is fully disclosed at the time of the planning application expected autumn 2018. The PCAA believe that this application will be premature. The examination in public for the Joint Spatial Plan will only be commencing, the NSC Local Plan is to be consulted and the Bristol South West Economic Link and the WECA A38 Corridor Study is published sometime next year.

Q2: What comments do you have on our plans for increasing the airport's capacity from ten to twelve mppa?

Surface access:

A sustainable transport hub has to include the wider public and allow for car parking for the wider public to access other areas and should not just be for passengers to and from the airport. The PCAA point out that the reason why growth at Bristol Airport was limited to 10 mppa was due to the road infrastructure. It is the only airport of its size without a rail link and no easy motorway access. Its topography naturally constrains the airport and the PCAA believe that the airport have not adequate funds to provide their fair share of infrastructure improvements and residents quality of life will therefore suffer. Congestion at the A370 entrance to Bristol and the South Bristol Link will only worsen.

Airside development:

The PCAA will object to further increase of aircraft stands beyond those already granted consent to 10 mppa of 33 with an additional one granted under permitted development. 33 aircraft stands will easily allow growth to 12 mppa. At the time of planning application 09/P/1020/OT2 the PCAA pointed out that the aircraft stands granted consent brought passenger numbers above 10 mppa

Car parking:

Please see comments above including those on green infrastructure. It is unacceptable to continue to use green belt land and green fields for low cost car parking. It is unacceptable for Bristol Airport to use the argument '*other options include further multi storey car parking on the northern and southern sides of the airport, but these would likely result in significant landscape and visual impacts*' when under permitted development regulations they are to construct a new administration block which is above 4 m and over 200m³ in the green belt against wishes of the parishes and contrary to the planning consent of 10 mppa. The PCAA demand that underground parking is provided or further multi storey car parks are constructed.

Noise:

A full explanation of additional increase in air transport movements is required including general aviation and helicopters.

New aircraft such as the Airbus A320 neo and Boeing 737 MAX are quieter on take-off and landing but are still noisy in the mid 70 dbL plus category. The PCAA want to know how many of these

aircrafts will be in situ at Bristol Airport from 10 mppa at 2021 and will they be carrying out each of the four rotations per day? It currently can take up to ten years for a fleet of aircraft to be replaced. If the airport is to expand Bristol Airport has a responsibility to ensure that only the quieter types such as the Airbus 320 neo and Boeing 737 MAX are in use.

Compensation will be necessary beyond 10 mppa and an indication of respite periods. The PCAA demand that respite is given and it is made a condition so that people can plan events around noise free times. Bristol Airport should move towards a night time ban commencing with a night movement restriction per night of 14. These air transport movements should finish before 2 am allowing four hours of uninterrupted sleep.

Note that Bristol Airport recognises there is low ambient noise level surrounding the airport as it is situated in a rural location and that the dominant noise at night is aircraft movements.

Air Quality, Climate Change and Sustainable Growth Strategy:

The PCAA believe that development and activity related to 12 mppa will affect emissions to air including greenhouse gas emissions not 'may' as suggested in the consultation. It is highly unlikely that public transport to 12 mppa will be significantly different to that of 10 mppa which is 85% of passengers accessing the airport by car. Air transport movements are obviously going to increase.

The increase in aircraft and vehicle movements has a potential to change vegetation composition due to elevated NOx deposition impacting on the North Somerset and Mendips SAC and neighbouring SSSI's and affect biodiversity.

An increase in greenhouse emissions is incompatible with Climate Change Act 2008 and recommendations made by the Committee on Climate Change.

Public Safety Zones:

The PCAA request a detailed explanation on how public safety zone areas will be impacted on by all growth scenarios but particularly to 12 mppa and the implications for Felton Common.

Q3: Highways improvements to the A38; public transport access to the airport; improvements considered for 12 mppa:

Any improvements should be put in situ before growth beyond 10 mppa is allowed.

Bristol Airport must fund the improvements to the A38 at Downside Road and West Lane as it is directly related to a private developer and not related to housing and other development.

As stated previously the PCAA believe there will gridlock at the key entrances to Bristol from the A370 and A38 and impacts to local residents of local roads becoming rat runs.

Q4: Comments on how we should manage the effects of our proposals on the environment and local communities?

There is little mitigation shown on how to address the effects of more air and ground noise, increased congestion on all surrounding roads, increased lighting, loss of green belt and green fields. The only way to manage the impacts on communities and the environment is to accept that due to the location of the airport and climate change the airport is constrained and should work within the

10mppa limit. With imagination, destinations can be changed, which they often are, to accommodate new routes for business and leisure opportunities. Ultimately, if expansion occurs, a massive compensation package to residents is required.

Q5: What opportunities are there to enhance the local area through our proposals for 12 mppa?

This is an odd question as impacts are immense on communities and the environment due to transformative change from a rural area to one that is more urbanised, which is noisy, polluting, which destroys the greenbelt and green fields and is even bad for the economy. The mass transit, if delivered, and the dualling of the A38 will add to the transformative change to the area. The PCAA is going to respond in detail on the economy at the planning application stage. Few improvements can be made to resolve the issue of lack of tranquillity and the ability to sleep at night.

Improvements to consider:

Legalised car parking sites outside the greenbelt should be allowed to make the car parking market competitive allowing communities to receive some of the car parking benefits.

Far more buses should be operated even if these have to be subsidised through villages.

The improvements to the A38 at Downside Road and West Lane must take into account cyclists. Other cycling routes cannot be considered a sustainable option when Brockley Combe is a popular cycle route and used by many.

Litter is a major problem particularly with cars waiting in surrounding lay-bys. Although Bristol Airport has expanded litter collection to streets immediately adjacent to the airport, this facility needs to be extended along the main highway routes and Brockley Combe.

Light spill is a major concern from the airport and the LED system used is particularly harmful to bats as it is white light. Different forms of lighting should be explored which are efficient but less intrusive.

Wildlife and biodiversity will be severely compromised with further expansion and green infrastructure which will be suggested at the next stage cannot compensate the development of green fields and greenbelt land.

Appendix 3 - Notes of PCAA meeting with NSC to discuss Bristol South West Economic Link 10th August 2017

Bristol South West Economic Link

Meeting between representatives of the Parish Councils Airport Association and North Somerset Council – 10th August 2017.

Hilary Burn (HB) and Heather Montague (HM) met with David Carter (DC), North Somerset's Director of Development and Environment, and Colin Medus (CM), Head of Highways and Transport on Thursday 10th August 2017, 10am, at the Town Hall, Weston-Super-Mare. The meeting was at the request of the PCAA and was on issues surrounding the BSWEL (Bristol South West Economic Link) report.

DC introduced himself and Colin, explaining that Colin was also involved with economic development.

DC asked for confirmation on how HB and HM interfaced with airport issues. HB replied that she sits on the Airport Consultative Committee, is Chair of Cleve Parish Council and Chair of the Parish Councils Airport Association which represents 18 parishes. HM replied that she was joint vice chair for the PCAA and a Chew Magna Parish Councillor.

DC began by saying he had 'complicated issues to explain', and he understood how things might seem 'from the position of a person in the street'. DC said that the person in the street might not understand that the council has a mandate to do certain things - statutory duties and responsibilities to politicians - a legal duty to look after the economic well-being of the area - working with local businesses and employers. 'It's difficult for people to understand where responsibilities start and where they stop'.

HB asked if DC's role involved a conflict of interest - economic needs v residents' environment.

DC replied that the planners make the decisions independently, and HB asked whether the planners were pseudo-independent, and asked where the evidence base was to justify development of the airport and surrounding areas.

HB asked DC to consider the conflict of interest - in particular the detrimental effect on the environment.

DC replied that rules of planning would be followed, evidence would be considered, and the general public consulted.

'It's important not to conflate things'. And to look after Economic Well Being of the area.

DC said there were two main issues - economic and transport - and HB pointed out that the environment was important.

CM said 'a Chinese Wall arrangement needs to operate', and the 'right and proper process' must be followed observing the necessary 'requirements'. 'There may be things the promoting team might not like, but they have to 'do their job'. Applications are judged by local and national policies. It's normal and common practice to 'forward plan and make assumptions' -

this 'doesn't suggest or predetermine any outcome'; it's just that we've got to think about the future.”

DC - we can't ignore our statutory duty to plan for future employment and housing

HB - there is an assumption that economic growth will be good - where is the evidence?

DC - The airport provides employment, and so the master plan needs to anticipate an increase in landside employment; there is a strategic need for employers to plan for this; independently we need to consider what is likely to happen if the airport does expand.

HB - at the strategic level the Climate Act needs to be considered. The West of England Joint Spatial Plan (JSP) assumes future growth of airport.

DC Don't conflate single issue with airport

HB Government is currently reviewing airport policy with a call for evidence to which the PCAA will respond.

DC - 'it's complicated'

HB - "The Department of Transport aviation forecasted in 2013 that by 2050 the throughput at Bristol Airport will be 10-20 million passengers per annum

DC - So the surface transport access and Bristol South West Economic Link, JSP, Joint Transport Strategy, corridor links, problems on the roads etc are all being looked at for future growth.

HB - what will be the timing of reports (eg BSWEL) and consultations?

DC - JSP consultation would be between November and January

HB - will there be an evidence base going with it?
- when will the public have access to information?

CM - public will only be able to access high level info when it's ready
There will be an interim process - JSP JTS will progress to the highest level of planning which needs to be fleshed out to go to consultation
The council only commissioned a consultant 3-4 weeks ago for the BSWEL report
West of England level will have specific proposals, whilst the NSC Joint Local Transport Plan will probably be targeted more locally, but we don't know when the consultation period will be.

DC - drew three squares, a circle and a rectangle on the flip chart and said this was the strategic nature as he saw it

With regards to the JSP and housing growth - the plan is available

With regards to economic growth - the consultation period will be after Christmas

CM said that existing problems and the growth planned would mean all modes and all options would be considered

'As detailed plans start to emerge we will work towards consultation'.

DC - stages of consultation will include JSP strategy, BSWEL, local plan level, and include issue of transport congestion alleviation

CM - councils are agents of the Government. We will consider the Green Belt, the Flood Plain and the A38 corridor

DC - we aren't proposing anything, we're looking at issues

HB - transport issues need to consider this: the dual carriageway impact will be massive

DC - with regards to road based options we haven't made a decision about dual carriageways - included in consideration is economic deprivation of South Bristol

HB - commented on need for residents to voice their concerns

DC - we can come and see your members

HB - commented on how NS deals with the airport; it took from 2005-2011 to get consent to go up to 10 million limited due to surface transport issues.

Conditions are not being met by the airport eg multi-storey car park

CM - economic viability became the issue

HB - the airport aren't paying corporation tax just business rates.

Their financial accounts show debt. This can be part of the reason for not building the multi-storey car park. This leads to financial uncertainty for funding from the airport for new infrastructures.

Rail link of a cost of £200m to Luton airport was mentioned

HB - who will pay for the transport links?

CM - any transport package would aim to secure funding from the airport, housing development and government. Prioritise order

DC - I have a lot of sympathy for your concerns - re: multi-storey and Cogloop land - but with economic viability issues; we can't influence this

HB - conditions for the airport under the current planning consent are very loose. The community had asked to be involved in the writing of the conditions.

DC - with parking and other conditions, economic issues take over

HB - lots of conditions have been overturned - it's a very unfair situation

CM - privately we would agree

NPPF – no longer considers congestion as a legitimate reason to refuse planning permission. The capping of 10 mppa was because of the road network.

HB - could Robert Sinclair as business representative for transport on the West of England be replaced with a bus, rail or port representative? NSC Chief Executive chose Robert Sinclair from the airport without consideration of the other sectors within transport.

DC - write to the LEP Chair Steve West; the council no longer have the power to influence this. Port representative = David Brown

HB - there should be no expansion beyond 10 million passengers without a planning application which you could refuse

DC - Yes, as it stands, but we would consider:

Transport

Economic

Noise

Environmental issues

They would have mitigation for transport

CM - it's much harder now to refuse planning applications

DC - Another planning application will come in - the master plan is for 20 million - there will be substantial transport mitigation

HB - what about the night noise quota?

DC - with night noise etc it will depend on the evidence at the time - we are officers - we can't make false reassurances

CM - it will depend on national policy - it's a hard message - principle comparing Heathrow and Bristol and going to appeal - a permissive regime is in place

DC - morally we don't disagree; we have a duty to manage conflicts of all parties including our duty to large employers such as the airport

HB questioned council officers' expertise to weigh up conflicts and options - including option of no expansion

North Somerset won't be the decision maker

DC - Nationally Significant Infrastructure Projects NSIP will be involved for

> 2km of new railway

Secretary of State could call it in

HB - how can we achieve a fair hearing?

DC - NSIP and Planning Act 2008

HB - environmental issues to save and contain the countryside are important; we need to avoid environmental changes

CM - at the right stage of BESWEL you'll be part of it

HB - the economic issues appear to take priority

DC - economic growth is a priority - there is a 90% deficit with the GDP
Get at the national government - it's not the fault of the local council
There are issues locally that we have no power over.

Appendix 4 - PCAA response to draft Noise Action Plan 2019 - 2024

PCAA response to the Proposed Bristol Airport Draft Noise Action Plan 2019 – 2024

The Parish Councils Airport Association (PCAA) is a body consisting of representatives of 21 parish councils which are concerned about the impact, or future impact, of the activities of Bristol Airport (BA). 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. Noise remains a constant concern to PCAA members throughout both North Somerset and Bath and N.E. Somerset districts. We welcome the opportunity to comment on the *draft BA Noise Action Plan 2019–2024*.

The PCAA's comments in respect of the sections in the document are shown below:

Section 4: Airport Use

This section neglects to provide information on the average number of flights per day in the summer and winter of 2017 and yearly air transport movements (atm's). In 2012 there were a 190 flights per day in the summer which equates to over 12 an hour within a 16-hour day and in the winter there were 140 flights per day which equates to almost 9 an hour. (Ref: Noise Action Plan 2013 -2018).

No comparison of flight numbers is given for anticipated future growth although the document covers the period from 2019 to 2024. A level of 10mppa is expected as soon as 2021 with a flight expected approximately every three minutes in a 16-hr day. There is no mention of the peak periods within a day. For instance, 06.00 – 08.00 hrs is near capacity. Peak for arrivals is 11.00 – 13.00 hrs and departures 12.00 – 14.00 and again there is peak in the early evening period for both arrivals and departures. Our concern is that as the frequency of flights increases, the few quiet periods are taken away as flights will spill over into the only periods with little airborne noise.

This document limits itself only to a possible expansion from the present (ca. 8 mppa) to 10 mppa (section 2). It is candid in making clear the owners' aspirations to seek permission to expand to 12 mppa and onward to 20 mppa. Certainly, growth of the airport, if granted consent, will be beyond 10 mppa and the implications of this should be considered within this document. It is important that the local community realises that noise nuisance will be massively greater should these aspirations ultimately be allowed. The PCAA believes that from 10 mppa there will be a transformative change to the noise in environment in which there will be no respite from noise during the day and potentially further disturbance from noise at night and it is for this reason that atm's must be provided hourly. It is disappointing that this document has not referred to the PCAA response to 'Your Airport: Your Views' consultation in which you asked the question '*What information would you like to see presented at the next more detailed consultation stage?*.' We consider that this is a detailed consultation and covering the period of the Master Plan as growth to 12 mppa is phase 1 of growth to 20 mppa. In our response to 'Your Airport: Your Views' we requested information on hours of respite from ground and air noise each day for residents, the number of flights predicted per hour and ground noise assessments, including aircraft taxiing, revving of engines before take-off, engine and braking noise on landing (including the use of reverse thrust). It is disappointing that little of this information has been given.

Section 5: Regulations, Guidance and Reports

Although the Noise Policy Statement for England (2010), the National Planning Policy Framework 2012 and the Aviation Policy Statement 2013 recognise that noise gives rise to significant adverse impacts on health and quality of life, there has been no discussion of these impacts in this document. There is growing bank of evidence on health-related illness due to noise disturbance, particularly at night. A Green Paper is expected this autumn following the 'Beyond the Horizon' consultation of April 2018 in which the Government is expected to state how environmental issues such as noise will be resolved in the future. The Government stresses that it leaves the issue of noise and the mitigation of noise as a local matter to be considered by the Local Authority, North Somerset Council (NSC). The airport and NSC should both commit to implementing any new, recommended safeguards at the earliest opportunity and this should be identified in this plan.

North Somerset Council sets the conditions on noise. Current conditions are ineffective at resolving the issues surrounding an increase of air transport movements for 10 mppa and beyond. Conditions are set to stop the adverse impacts of airport activities on residents but too often, as the airport reaches the limit of these conditions, they are then removed or subject to change. For example, application 17/P/1273/F 'Proposed use of on-board auxiliary power units between 06:00 and 23:00 hours in aircraft on stands nos. 34 to 37'. A further, worrying example is the potential revision of planning condition 38 concerning the number of take-off and landings between the hours of 23.30 and 06.00 which were limited in the summer season to 3000 and, in the winter, 1000. Bristol Airport expresses a need to join the summer and winter movements together as an annual limit allowing more aircraft movements in the summer period because the winter flights fall below the limit - in 2017 there were 2,991 summer air transport movements against the limit of 3,000 and x in winter (limit 1000). Combining the two limits will allow the airport to increase summer movements during a time of the year when residents spend more time outside and wish to sleep with the window open.

Planning condition 39 limits the take-off and landings in the shoulder periods (part of the officially-defined night period) of 06.00 – 07.00 and 23.00 – 23.30 and sets a limit of 10,500 in any calendar year which equates to one approximately every three minutes (19 per hour). In 2016 there was an average of 12.4 movements per hour in 06.00 – 07.00 slot so considerable growth is already available to the airport. The PCAA argues that this condition, like most conditions, were set in the interests of Bristol Airport rather than residents surrounding the airport as this level of airport activity is clearly not conducive to sleep. Conditions need to be set which have noticeable benefits to the community. Geneva airport has no night flights and the airports within Germany are more strictly controlled.

Section 6: Noise Management Framework

It is worth pointing out that the BA Master Plan 2006 – 2030 states *'that growth beyond 9 mppa will be associated with an increase in the number of people adversely affected by noise. Houses bordering Felton Common may suffer a higher level of noise by 2030 might need voluntary house purchase'*. The Master Plan then goes on to state *'with the emphasis on development expected to shift to the south side , it would be reasonable to assume that the noise climate in the Lulsgate and Downside area would not deteriorate post 9 mppa'*. It is obvious that the noise climate post 9 mppa is to deteriorate and residents are to be affected, perhaps as early as 2019. We question why development is now to the North side and believe that there will be severe impacts from ground and air noise for communities surrounding the airport. There has been no mention in this consultation of

why development beyond 10 mppa is to be on the North side and no consideration of the noise impacts this will produce.

To date the Eastern Apron is not operational and impacts from the use of these aircraft stands have been neglected in this document. These stands will take growth beyond 9 mppa and, as suggested in the 2006 Master Plan, this will have severe noise implications for residents close to Downside, Felton Common and beyond such as Dundry, Felton and Winford. In addition to air transport movements it is anticipated that ground noise will increase from both the Western and Eastern Apron from the running of engines, taxiing to the runway and waiting for take-off. The PCAA note that this document is informed by the most recent strategic noise maps which were prepared in 2017 but reflect the noise climate in 2016. Since 2016 the air transport movements have increased by 3 per cent. This document assesses the noise climate of the past, not the present or the future which is what parishes wish to know and they should at least be provided with provisional information for the period up to 2024 in order to make an informed comment.

Section 6.1: Ground Noise/Background Noise

Ground noise and background noise is on the increase. This can be seen from complaints of background noise, when there is an easterly wind, from communities in the south west since the development of the western apron. There are days in which communities impacted by easterly winds have no respite from noise as there is ground noise alongside arrivals occurring almost continually. The eastern apron will be developed to accommodate growth to 10 mppa and the PCAA expect that ground noise/background noise will worsen not only for residents close by, at Lulsgate and Downside, but also in Felton, Winford and Dundry. The removal of the administration building to the south side will also add to the deterioration of noise as the acoustic fence will be less effective in protecting residents from the adverse impacts of noise.

The Operations Monitoring Report 2017 on p18 states *'as noted in section 11 there was no specific complaint about ground noise in 2017'* but the PCAA would argue that background noise complaints were many and growing and that there was an increase from 2016 to 2017. A definition needs to be given of what is considered background noise and what is considered ground noise. In our view the running of engines, taxiing and noise from Auxiliary Power Units etc should be considered as background noise as well as ground noise. This point needs clarification.

Ground noise, when finally measured, should take account of inverse temperature gradients and downwinds as these can heavily affect the noise residents will hear in reality.

6.2: Airborne Noise

The PCAA has strong reservations on the use of noise envelopes as this will concentrate the noise over the same residents and allows no dispersal of noise. No account of the air transport movements has been provided. The Operations Monitoring report 2017 shows, from the noise monitor at Congresbury, that the noise climate has deteriorated in several months by over 3dB(A). We also note that the area of the 57dB(A) Leq 16 hr noise contour for summer months is growing even though it remains within the limit of the permitted noise envelope of 12.42 sq km. The area predicted for 2018 is 10.9 sq km whilst in 2015 it was predicted to be 9.6 sq km.

6.2.3: Helicopters

There is little attention given to improving the noise environment from movements of helicopters other than Downside Road being protected from flights below 500 ft above ground level. The PCAA requests that this is widened to all areas outside the airport boundary.

6.2.4: Encouraging the use of quieter planes

From discussions held on quieter planes within the Bristol Airport Consultative Committee in July 2018, it is apparent that Bristol Airport is powerless to incentivise the introduction of new planes such as the A320 neo and the Boeing 737 Max. It is the decision of the airline when new aircraft are introduced. Bristol Airport states that most aircraft are using the latest technology to reduce noise and are modern aircraft. This is reflected in that no noise penalties have been served on airlines at Bristol Airport. Secondly, limits set for penalties such as the day time noise limit of 90 dB(A) and the 85 dB(A) night noise limit for departing aircraft are out dated for modern aircraft and the limit should be lowered. Any increase in frequency of air transport movements negates any saving to the noise climate from quieter aircraft. Thus the PCAA are not confident that modern technology will reduce the noise climate in the next decade.

6.2.5: Night Flying

The recent BA Operations Monitoring Report on the Noise Quota system showed that for 2012 the night air transport movements **were at their lowest since 1997/1998**. This shows it is feasible for Bristol Airport to operate avoiding the hours of 11.30 pm – 6.00 am. In 2013 the PCAA requested that Bristol Airport work towards *lowering the number of flights at night further and steadily reducing the night flight quota points, moving towards a ban on night time flying*. Unfortunately since 2012 there has been a **considerable increase, with summer night flights up by over 60%. The summer quota count usage has increased by almost the same proportion showing that the aircraft are (on average) no less noisy**. This appears to show that the airport's aspirations expressed in the previous Noise Action Plan to **"reduce the effects of noise from airborne aircraft" have not been successful in this respect**.

The PCAA also made the modest and reasonable suggestion that the airport recognise the WHO Night Noise Guidelines for Europe: we are disappointed that the new *Draft Noise Action Plan* makes no mention whatever of the World Health Organisation's important work in this area.

6.3: Measures to mitigate the effects of aircraft noise/manage and reduce the effects of noise from airborne aircraft.

The controversy over representing aircraft noise.

Increasing evidence has been published in recent years showing the adverse effects on human health and well-being of aircraft noise by day and especially night. Consequently, for a document which is supposed to set out plans to reduce the noise nuisance caused by aircraft, there are some important weaknesses. These relate to

- the noise criteria used,
- the use of modelling, untested by independent measurement,
- absence of any attempt to test the conclusions reached.

Noise criteria

Only average noise levels (equivalent continuous sound levels L_{Aeq}) are considered here. It is well known that such average noise levels alone are inadequate as criteria to judge damaging effects of aircraft noise. Large numbers of seriously intrusive aircraft

can pass over before the L_{Aeq} levels discussed in the consultation document are reached. Such supplementary noise indicators as L_{Amax} , and SEL, are seen by the European Union Noise Directive as particularly appropriate for use at night, in relatively quiet areas and for passing aircraft. A similar approach is supported by the World Health Organisation and the British Government's ANASE study and Policy Planning Guidance PPG24. Together with L_{Aeq} contours these should be *independently* measured and reported so as to help give a more complete picture of how noise is changing over time. Measurements reported should be sufficiently comprehensive to enable progress to be judged against WHO criteria.

Noise levels

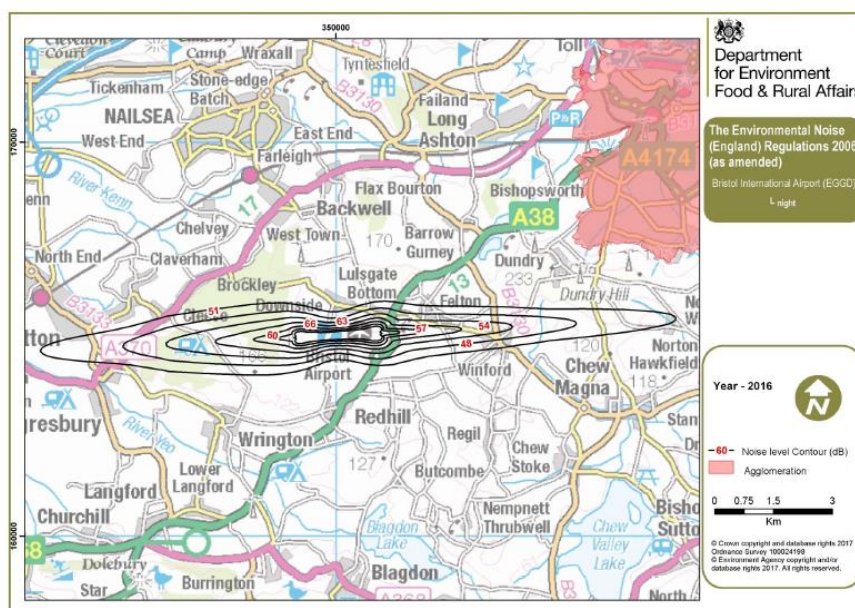
The WHO recommends that: "For the primary prevention of subclinical adverse health effects related to night noise in the population, it is recommended that the population should not be exposed to night noise levels greater than 40 dB of $L_{night,outside}$ during the part of the night when most people are in bed. The low adverse effect level of night noise, 40 dB $L_{night,outside}$, can be considered a health-based limit value of the night noise guidelines necessary to protect the public, including most of the vulnerable groups such as children, the chronically ill and the elderly, from the adverse health effects of night noise." The airport's consultation document does not even consider L_{night} levels below 48dB.

Lack of independence

Computer-generated noise maps are given separately in a "Data pack":

R3_Airport_Datapak_2017_Bristol International_EGGD_V3.pdf

These only acknowledge problems close to the airport concentrated within areas which approximate to an ellipse of high eccentricity, with long axis roughly east-west. and short axis north-south. For example the figure below shows L_{night} contours for 44, 48, 51, 57, 60, 63 & 66 dB(A).



It is essential to remember that L_{night} is defined as

"the L_{Aeq} over the period 2300 to 0700 local time"

Thus it is the **average sound level over an 8 hour period**. As WHO pointed out many disruptive episodes between quiet times can be "hidden" in a modest-looking value of L_{night} . They will give very much lower dB values than **readings** of single event levels or of L_{max} . Moreover, they are averaged over the **whole year**: noisy July and August are diluted by quiet January and February, as if being woken several times a night during the summer could be compensated by the assurance that 6 months later uninterrupted sleep might be expected!

On this basis the actual disruption of night noise can be hidden by publishing reassuring-looking tables like the "Table 5", taken from the Data Pack.

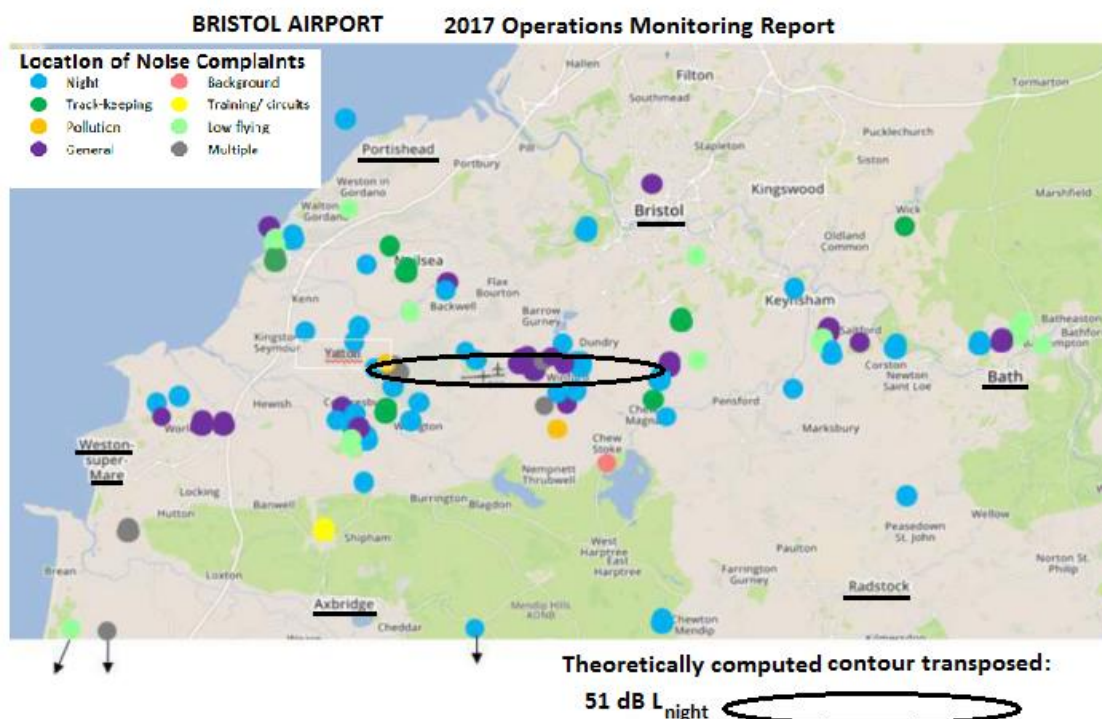
Table 5: Estimated total number of people and dwellings above various noise levels, L_{night}

Noise Level (dB)	Number of Dwellings	Number of People
≥ 48	1,050	2,300
≥ 51	550	1200
≥ 54	250	500
≥ 57	<50	<100
≥ 60	<50	<100
≥ 63	0	0
≥ 66	0	0

The conclusions the airport draws from such tables and contour maps are incredible to many who reside in the wide area subject to intrusive aircraft noise. To its credit Bristol Airport has published information which gives a more realistic indication of the actual noise pollution. In contrast the 2017 *Operations Monitoring Report* gives a map showing that noise complaints, including night noise complaints, came from a wide geographical area overflowed by Bristol aircraft. This is reproduced below with a (slightly simplified) 51dB L_{night} contour (from the Data Pack) pasted into it.

This stark contrast between "theory" (computer-generated contours) and "practice" (human response to the actual phenomenon) highlight the "important weaknesses" in the airport's *Draft Noise Action Plan 2019 – 2024* relating to

- the noise criteria used,
- the use of modelling, untested by independent measurement,
- absence of any attempt to test the conclusions reached.



The experience of the PCAA is that most local residents are reluctant to use the airport's "noise complaints" service for a variety of reasons, "it's a bother", "I'd much rather try to get back to sleep than to log the time and flight details of the aircraft which has now flown away", "no notice is taken of complaints", The noise complaints recorded in the airport's *Operations Monitoring Reports* must reflect a small fraction of the "noise annoyance events" experienced by residents over a large area under the flight paths.

The claim that 'No notice is taken of complaints' should be investigated further. The PCAA acknowledge that complaints are reported to the Bristol Airport Consultative Committee - it is at this point they are noted but no action is taken. For instance, the early departing flights between 04.00 and 06.00 hrs caused a spike of night noise complaints and they were discussed at the Committee in 2016. There was recognition that there was a noise problem but, after discussion with airlines, no action was taken. This reflects that monitoring noise complaints has no beneficial effect without action which in this case would require operational change. It also suggests that the airport is only, at best, managing noise not reducing noise.

The PCAA are thus extremely nervous at the implications for night flying of the airport's recently-revealed aspirations to increase in size to 12 mppa and on to 20 mppa. The Noise Action Plan should be working towards a total ban on night flights by a steady reduction in the quota for night noise points and night flight movements. At the Airport Consultative Committee July 2018, it was indicated that the use of quieter planes at night would be incentivised with a change in the quota system. The present quota system allows room for substantial growth in night flights. The only effective limit on night flights is currently the movement limit of 4,000 which is split between 3,000 movement in the

summer and 1,000 in the winter. The PCAA will object to any change in night time planning conditions which allows more flights at night, particularly in the summer when residents like to sleep with their windows open. As the consultation document says:

"This is the main purpose of an airport's Noise Action Plan, to effectively plan, manage and where possible reduce the adverse effects of aviation noise associated to our operations."

From the statement above and the contents of this document the airport is only at best planning the effects of noise and certainly not reducing it.

Noise Insulation Grants

Although the noise insulation grant is welcome it does not compensate for the loss of tranquillity in the use of one's garden, enjoyment of the local area and being able to sleep at night with the window open.

The noise insulation grant is £5,000 funding for 63dB and £2,500 for 60 dB and 57dB which is a tiny amount to pay a household for a substantial damage to their noise environment. In many cases it is simply insufficient funding for noise insulation with the householder having to pay a substantial amount of the costs.

The onset of community annoyance of noise extends beyond the 57 LAeq and funding for insulation should be widened.

Section 8: Action Plan

Actions to manage and reduce the effects of noise from aircraft on the ground:

The use of the word 'review' is ever-present within this section but it does not actually state the planned reduction in noise levels from these actions.

1.2 The PCAA would like to see the aircraft stand allocation published in order to comment and help prevent ground noise impacting on residents.

There is no mention of one of the consequences of the airport now being 'partially level 3 slot co-ordinated' for the summer season which is a cluster of flights arriving in the shoulder period between 23.00 - 23.30 hrs. This bunching of arrivals obviously has an impact on residents' ability to sleep.

There should also be monitoring and reporting of the number of flights delayed from the planned day-time arrivals into the shoulder period and into the night movement limit period after 23.30 hrs.

1.3 The PCAA welcomes electric vehicles on site and would like to see a timetable of all vehicles being electric to ensure progress continues.

1.4 It is disappointing that a feasibility study for the further installation of fixed electrical ground power (FEGP) will not be completed before December 2020. There is no fast action here to reduce the noise climate from mobile ground power units (MGPU).

1.5 It is disappointing that only in 2019 is a review being undertaken of the BA Ground Noise Management Strategy when there are so many complaints on background noise. Mapping of ground noise needs to be carried out and mitigation for residents considered at the earliest opportunity.

Actions to manage and reduce the effects of noise from airborne aircraft:

2.1. Page 38 says *"Still no Chapter 3 high aircraft are currently operating at Bristol Airport. In addition, the Bristol Airport Fees and Charges also include a 200% surcharge for aircraft not meeting Chapter 3, and those operating at night."* This is shaded green indicating that the airport is satisfied with what it has done to "incentivise airlines to use the **most modern and quiet aircraft**".

There appears to be no published information about numbers of aircraft of different noise classifications using Bristol. Such information is available for other airports. We suggest that too unexacting a target has been set by Bristol where "a surcharge is applied to 'Chapter 3 high' aircraft". We urge that differential surcharges favouring quieter aircraft should be set on other noise classifications such as Chapter 3 base, Chapter 4 high, Chapter 4 base, Chapter 4 minus, as is done at other airports.

This would be a more serious attempt to "incentivise airlines to use the **most modern and quiet aircraft**" such as the new A320e and Boeing 737Max

2.4. An explanation needs to be given of *'a goal of 50% reduction in perceived external noise by 2020 based on new aircraft relative to equivalent aircraft of 2000'*. Unless frequency of increased air transport movements is included it will be meaningless. Residents hear an event not a perceived noise.

2.5 Is an interesting point highlighted in green which means that the action is completed? The PCAA question whether this system is working as there was an incident in May 2015 when a flight arriving from Glasgow made serious errors on the arrival route. Although requests were made to the Airport Consultative Committee on what action had been taken, no fines or penalties were given. It is our view that Bristol Airport will not fine or penalise an airline as it is not in their commercial interest to do so.

2.6 This section is the first and only time the word 'respite' is used in this document. *'We will begin looking at alternative flight paths for respite purposes with a view for implementation by 2026/27'*. First of all the PCAA would like a definition of respite from Bristol Airport. To the PCAA it means a period of relief from noise each day. Secondly, this statement is an acknowledgement that there has been a change in the noise environment from one where there is respite to one where there is none. There is a suggestion that from 2027 respite may be considered for residents. The PCAA request that this is brought forward to when residents are receiving a flight approximately every three minutes, at 10 mppa. An explanation is required of whether respite is for all residents situated close to the airport such as the parishes of Brockley, Cleeve, Congresbury, Dundry, Felton, Winford and Wrington or is it just for parishes on the outer edge of the flight paths such as Timsbury, Pensford, Kingston Seymour etc?

2.7 The PCAA are extremely wary of any change to the quota point system unless it is considerably reduced. In answer to a query raised by a member of the Airport Consultative Committee on the new A320 neo, this aircraft could be classified as exempt from night noise quota count under the civil aviation authority categorisation. This is because it may fall below the threshold of the current noise level bands. The only thing that will then hold back another noise event at night (even if slightly quieter than other aircraft) is the night movement limit. The night movement limit must be retained at the current limit of 3000 movements in the summer and 1000 in winter or, preferably, each season's limit should be reduced moving towards a goal for residents of a night time ban. Night time flying during summer 2012/13 was at an all-time low but in 2017 it was at an all-time high for the summer season with 2,991 movements. The consultation document has omitted this piece of information.

The airport's publication 'Your Airport' issue 16 claims that the A320neo aircraft has a reduced noise footprint of 50% on take-off and landing. This figure is hard for the public to understand and can be misleading as sound is measured in decibels (using a logarithmic scale). The noise contours are all reported in decibel levels and this should be used when claiming reductions in noise footprint. As stated above, the WHO recommend a max of 40dB $L_{night,outside}$ although the airport's consultation document does not even consider L_{night} levels below 48dB. For the claim concerning the A320neo to be understandable, the noise figures need to be compared with other aircraft in dB and compared with the WHO recommended maximum levels.

2.11 The PCAA are acutely aware that potential changes to airspace in 2026/27 may bring new communities under flight paths and thus subject to noise. If this comment is correct these communities should be made aware now so as to be able to respond to the draft Master Consultation. The PCAA have strong reservations on the use of noise envelopes as this will further concentrate the noise over the same residents and allows no dispersal of noise.

Measures to mitigate the effects of aircraft noise:

3.1 The PCAA disagree that the noise climate has not altered significantly. This statement reflects a lack of concern for residents under the flight paths. As previously stated, the area of the 57 dB(A) Leq 16 hr noise contour for the summer is growing, the summer night time limit is very nearly full at 2,991 out of a 3,000 movement limit. Flights on average are roughly every five minutes which is anticipated to become every 3 minutes at 10 mppa. Complaints have risen on noise and background noise from the area and some parishes, during periods of Easterly winds, have background noise all day alongside a continuous stream of arrivals.

3.4 The new action of allowing two opportunities per annum to apply for funding for noise insulation instead once per annum is not adequate. Residents should be able to apply for funding whenever. Funding of noise insulation should cover the whole cost of noise insulation with no requirement for the homeowner to contribute to something that is caused entirely by the airport.

4.1 The PCAA welcome improvements to the tracker system. This document does not comment on the telephone noise complaint line available to residents. The PCAA wishes a commitment in this Noise Action Plan to the retention of this service.

Appendix 5 - BA Financial Performance 1997 – 2016

5.1 ANALYSIS OF BRISTOL AIRPORT FINANCIAL PERFORMANCE 1997 – 2016

Prepared for Parish Councils Airport Association – March 2018

History

Lulsgate was originally an RAF station built in the early part of the war, and never reached full operational status, but was used for training purposes and closed in 1946. The airfield then became the home of the Bristol gliding club, and for a short while a motor racing circuit was based there before it moved to Castle Combe. Whitchurch Airport which was built in 1930 was the main civil airport that remained open during the war operating routes to the British Empire and neutral countries by the newly formed BOAC. The airport, however, was constrained by the proximity of nearby housing estates, and was closed when Lulsgate became Bristol's municipal airport after it was purchased by Bristol Corporation for £55,000. In the following years, various facilities were added and the runway extended. The airport remained under the ownership of Bristol Corporation until 1997, but as it was in public ownership, the operating company was limited in its powers to raise finance for expansion.

In the early 1990's, the market for package holidays was developing quickly, and it was clear that Lulsgate could be used as a base airport for this trade. In the early 1990's, a decision has to be made whether Filton or Lulsgate would be the airport of choice for this expanding market, but despite a public enquiry which came out in favour of Filton, the then Conservative government elected to develop Lulsgate, even though Filton was better placed for infrastructure and development potential in the longer term. Whichever way you look at this, it was a poor decision, and subsequent removal of the runway at Filton is destroying a major national asset, and no doubt ultimately will herald the end of Bristol's long association with aircraft industry when the current wing construction contracts with Airbus end, to the detriment of employment and prosperity in the West of England.

Bristol Airport today handles about 8 million passengers per annum, of which more than 80% is to holiday destinations. The main business traffic is to Schiphol and Frankfurt.

Introduction

Bristol Airport has gained a reputation for being a successful and profitable airport. This paper examines whether this reputation is justified, and then assesses whether Bristol Airport's further airport expansion plans deserve support in the context of additional calls on the public purse and the inevitable decline in the quality of life for those affected by expansion.

This data source for this analysis are the audited accounts of the operating company (Bristol Airport Ltd) and the consolidated accounts as the UK Holding company, variously South West Airports Ltd, or since 2014 Bristol Airports No 3 Ltd. All public documents held at Companies House can now be downloaded free from the internet, permitting greater public scrutiny of the financial affairs of UK companies.

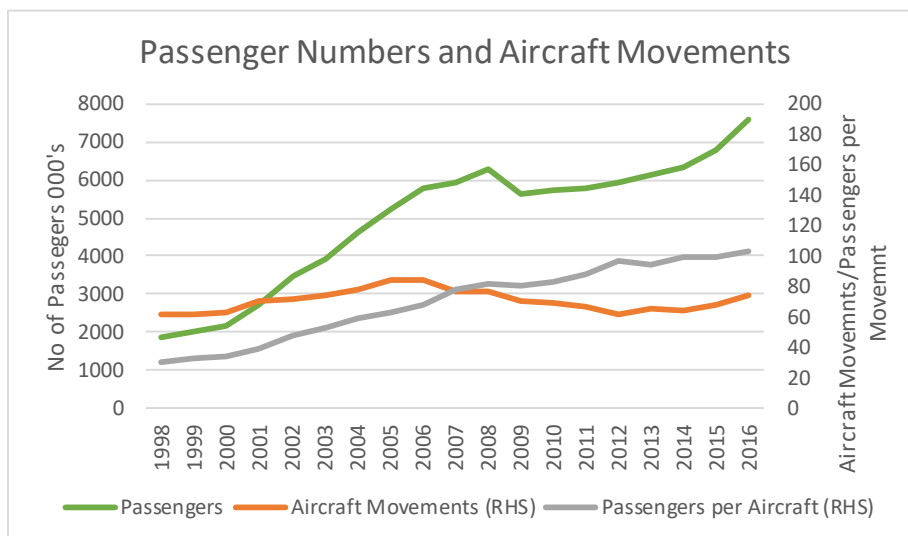
Annual data has been collated on two Excel spreadsheets, one for Bristol Airport Ltd, the operating company, and second the consolidated operation which brings in the debt incurred in building the airport and financing the acquisition by the respective owners against a timeline of major events that have affected the airport in terms of corporate ownership and planning approvals. The starting point for the data analysis is 1997, which is the year that Bristol Council sold 50% of the airport to First Group, prior to the first major expansion of the airport.

The succeeding part of this analysis is divided into three parts. Section A looks at the performance of the Operating company, whilst section B looks at the consolidated picture of the holding company and the operating company from a financial perspective. Section C looks at the implications for the continued operation of the Airport and potential expansion.

Section A - Operational Performance by Bristol Airport Ltd

The two graphs below set out the salient operational statistics since 1998, with Graph 1 showing the key numbers of passengers and aircraft movements, and the number of passengers in each aircraft movement. Graph 2 sets out an overview of the financial numbers showing revenue and operating profit.

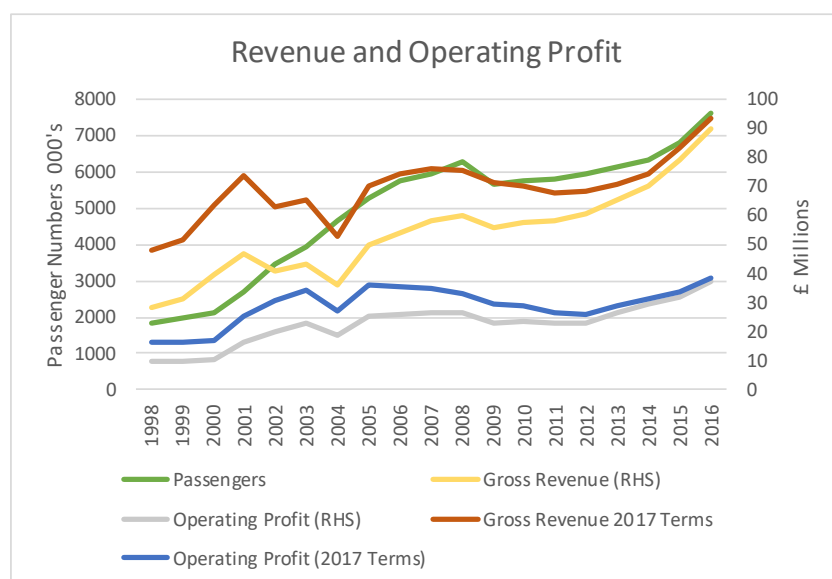
Graph 1



The graph shows the sharp rise in passengers which occurred as a consequence of the first expansion in 1997 onwards, when the First Group became the operators. Numbers peaked in 2008, but then fell back and it wasn't until about 2014 that numbers of passengers recovered to those of 2008. There has been significant growth in the last two to three years.

Interestingly, aircraft movements have fallen since 2006, reaching a low point in 2012. The numbers of passengers per aircraft movement has steadily increased from 20 in 1997 to 103 in 2016

Graph 2



The trend in revenue did not follow the increasing passenger numbers in the early years, as can be seen from the brown line trending at a lower rate than the increase in passenger numbers shown in green in Graph 2. A peak in revenue was achieved in 2001, and in real terms this has not been matched until 2014/5. A similar pattern is evident in operating profit.

The reasons for this perhaps underwhelming performance is that it would seem that the airlines have been successful in restricting the landing fees payable to airport operators. This is a consequence of the fierce competition between the airports to attract the main airlines to be an operational hub. Table 2 shows a set of statistics at five yearly intervals from 2001 to 2016. This graph shows that the aeronautical margin earned by Bristol Airport has declined from £128/movement in 2001 to a loss of £52.5 per aircraft in 2012. Unfortunately, Bristol Airport stopped publishing these numbers in the annual report in 2013, and I have requested from BA that these numbers are provided to us as required by statute.

Revenue from Car Parks and Concessions was 62% of the total revenue in 2016, compared with 56% in 2001, 53% in 2006, and 59% in 2011.

Another reason for the poor performance was fallout from the General Financial Crisis in 2008/9, which reduced incomes and held back demand for holidays.

The statistics shows that the total gross revenue received expressed as revenue per passenger has declined from £9.5 in 2001, to £5.0 in 2011 and 2016.

Overview Financial Statistics (Table 1)

Over the twenty years of operation, Bristol Airport has generated £421 Million in operating profit (£21 Million per annum) and has spent £259 Million on Capital Expenditure. The company has passed £288 Million (\$14.4 Million per annum) to the holding company to cover financing activities and returns to the shareholders, which is to be discussed further in Section B. Of this amount, £102 Million (£5M per annum) is a benefit from receiving tax losses from the holding company for no consideration (which in the absence of debt interest would have been paid as corporation tax).

Table 1 Selected Financial Statistics

	2001	2006	2011	2016	TOTAL
	£M	£M	£M	£M	£M
5 Year Operating Profit	38.1	112.6	122.2	147.8	420.7
5 year Depreciation	15.7	17.7	43.0	50.7	127.1
5 Year Capital Expenditure	54.2	51.4	60.1	94.1	259.8
5 Year Operating Cash Flow	-0.4	78.9	105.1	104.4	288.0
Tax relief surrendered for no consideration	3.7	30.7	37.9	29.9	102.2
5 Year Capital Expenditure	54.2	51.4	60.1	94.1	259.8

Table 2 Bristol Airport Operating Statistics

(all financial numbers in £ millions)

			Planning Permission to 10mty Passengers	
BRISTOL AIRPORTS LTD	2001	2006	2011	2016
Passenger Numbers	2694	5758	5781	7611
5 year Growth % per annum	+14%	+16.5%	0.0%	+5.7%
Aircraft Movements	69,854	84,583	66,179	73,536
5 year Growth % per annum	+4.1%	+3.9%	-4.3%	+2.1%
Revenue				
Aeronautical	20.3	25.3	24.1	34.4
Other/ Car Park	26.4	28.9	34.3	30.1
Concessions				25.4
Turnover	46.7	54.0	58.4	89.9
5 year Growth % per annum	+15%	+3%	+1.5%	+9%
<i>2017 Terms</i>				
Aeronautical	31.9	34.8	27.9	35.6
Other/ Car Park	41.5	39.8	39.7	57.5
Total 2017 Terms	73.4	74.3	67.7	93.1
5 year Growth % per annum	12.5%	+3%	-2%	+6.7%
Employees - Operational		170	177	215
Employees - Administration		47	36	42
Total	220	217	205	257
Staff Costs	-7	-8.2	-9.1	-13.2
Depreciation	-2.6	-5.7	-9.8	-12.1
Other Operating Charges	-20.8	-14.3	-16.4	-27.6
Total Costs	-30.5	-28.2	-35.4	-52.9
Cost Growth per annum		-1.5%	+4.5%	+8.4%
Operating profit	16.2	25.8	22.9	37.0
Aeronautical	5.7	5.70	-3.0	

<i>Other</i>	<i>10.5</i>	<i>20.1</i>	<i>25.9</i>	
2017 Terms	25.5	35.5	26.5	38.3
Operating Profit per passenger	6.0	4.5	4.0	4.9
Gross Aeronautical Revenue £ per aircraft	290.6	299.1	364.3	467.8
Aeronautical Revenue per aircraft 2017 terms	457.0	411.5	422.0	484.5
Aeronautical Margin per aircraft	81.6	67.4	-45.3	n/a
Aeronautical Margin per aircraft 2017 terms	128.3	92.7	-52.5	n/a

Section B Consolidated Accounts

This section addresses the how the respective owners have financed the acquisition and construction of the airport, and the implications of their actions. Figures quoted for the consideration have been taken from newspaper articles published at the time.

Major Ownership Changes

51% Controlling Interest acquired by First Group 4th December 1997 £41M

January 2001, 100% Purchased by Tidefast Ltd (Consortium Lead by Macquarie bank, comprising the Bank, Ontario Pension Fund and Ferrovial) for £198M (First Sale Proceeds £137M)

Macquarie Bank buys Ferrovial 50% Stake for £209M Jan 20th 2007

Ontario Pension Fund increases its interest to 49% of Bristol Airport in 2009 (consideration not known)

(2011 Planning Permission granted to 10mty Passengers)

Macquarie Bank sells 50% Stake for £250M to Ontario Pension Fund (9th Dec 2014)

Late 2017 Ontario Pension scheme announces sale of 40% to Australian Pension Schemes

The purchase by First Group of a 51% interest in the Share Capital of Bristol Airports for £41M was a reasonable price based on the subsequent performance of Bristol Airports. First Group exited from the airport sector at the end of 2000, making a substantial return on their investment, as did Bristol Council. First Group had provided loan finance of £36 million to finance expansion which will have been part of the £137M consideration quoted. The Macquarie Bank consortium effectively paid £236 Million for 100% of the assets of Bristol Airport.

In 2007, Macquarie Bank bought out the Spanish Ferrovial Companies interest, valuing the company at around £418 Million. Through financial engineering, the bank sought to put the entire purchase consideration into loan capital. The purpose was presumably to ensure that corporation tax was minimised, and interest payments to be received by Ontario Pension Scheme (presumably the ultimate target for Macquarie Banks wheeling and dealing) would be received gross without deduction of income tax. Effectively, through these machinations, the British Government has lost any stakeholder interest in the economic well-being of the Bristol Airport operation.

Table 3 below sets out the consequence in stark form. The table shows that due to the finance charges on the loans, increasing losses are being incurred, well in excess of the profits earned from operations. By the end of 2016, accumulated losses have reached £172 Million, and shareholder's funds just total £11.8M. Debt stands at £700M, of which £301M is owed to the banks. Since 2001, the UK Government has not received one penny of corporation tax from operations.

Table 3 Extracts from the Consolidated Financial Statements

		Macquarrie Bank buys Ferrovial 50% Stake for £209M Jan 20 2007		Macquarrie Bank sells 50% Stake for £250M to Ontario Pension Fund (9 Dec 2014)		
SOUTH WEST AIRPORTS LTD (SWAL) BRISTOL AIRPORT No 3 LTD	2001	2006	2007	2014	2015	2016
Operating Company Operating Profit	16.2	25.9	27.3	29.2	28.9	32.6
Adjustments to depreciation	0.0	-0.1	-3.1	-7.4	-17.5	-16.1
Consolidated Operating profit	16.2	25.8	24.2	21.8	11.4	16.5
Finance Costs	0.1	-0.8	-0.9	-1.0	-1.1	-0.6
<i>Interest Costs Bank Loans</i>			-22.2	-9.2	-14.0	-9.6
<i>Interest Costs shareholder Loans</i>			-7.2	-29.6	-32.7	-32.9
Consolidated Profit/ (loss) before tax	16.3	25.0	-6.1	-18.0	-36.4	-26.6
Tax	-0.1	0.9	1.4	0.5	7.2	-0.2
Consolidated Profit/(Loss) For Year	16.2	25.9	-4.7	-17.5	-29.2	-26.8
Other gains /losses				-2.5	3.0	-5.2
Pension (net of deferred tax)		0.3	2.6	-2.0	0.3	-4.7
Deferred Tax Adjustment				-64.9		
Total Profit/loss	16.2	26.2	-2.1	-86.9	-25.9	-36.7
Share Capital		50.0	50.0	58.5	59.1	59.1
Merger Reserve		67.1	67.1	125.5	125.5	125.5
Profit and Loss		-4.1	-6.2	-44.3	-142.0	-172.8
<i>check closing shareholder funds</i>	<i>27.1</i>	<i>112.9</i>	<i>110.8</i>	<i>139.7</i>	<i>42.6</i>	<i>11.8</i>
BALANCE SHEET						
Intangible Assets		358.9	358.9	288.5	274.0	262.4
Tangible Assets	62.4	191.1	201.1	451.7	460.6	473.0
Debtors	5.2	10.2	7.3	11.3	9.4	9.5
Creditors	-6.1	-12	-11.9	-19.4	-26.4	-34.8
Gross Assets	61.5	548.2	555.4	732.1	717.6	710.1
Interest Accrued, not paid				-38.6	-63.5	-81.5
Group Companies	-34.4	-68.1	-71.6	-310	-310	-310
Cash at bank	8.5	4.7	5.3	7.3	16.1	54.3
Provisions for Liabilities and Charges	-6.3	-4.9	10	-3.6	-51.6	-60.1
Bank Loans	-2.2	-367	-388.3	-247.0	-266.0	-301.0
Net Assets	27.1	112.9	110.8	140.2	42.6	11.8

The original owners (Bristol Corporation, First Group, Macquarie Bank, and Ferrovial) have made substantial capital gains from these transactions. Whether the gains made by Macquarie Bank and Ferrovial have resulted in tax payments to the UK government is less clear.

But there are questions whether financial structure that has been superimposed on the operating company as a result of these transactions is in the public interest. The 100% debt financing (part bank debt, part shareholder loan) is very risky and can result in financial loss and bankruptcy if operating performance cannot support the level of debt, and this is what has happened here.

Even if all the shareholder debt is refinanced as equity, there must be some doubt whether earnings from operations are sufficient to service and repay the debt of £301M.

Quite possibly, the recently sale by the Ontario Pension Fund of a minority stake to two Australian Pension schemes might prompt a restructuring of the finances, but at the date of writing this report no announcements have been made.

Section C Conclusion

Bristol Airport is operating in a very competitive market. Because of this, it has difficulty in achieving adequate margins.

In the recent “Your Airport”, Bristol Airport sought to set out a vision for the airport development. It states it wishes to become a hub airport, and then goes on to ask in a questionnaire whether public funds should be made available to finance the necessary infrastructure. The analysis in this report shows that it is highly questionable whether the poor record of stewardship of the operating asset should result in the granting of any further public funds to support the operation.

The deficiency in the “your Airport” document is that alternative scenarios are not presented. There seems to be an obsession that bigger is somehow better. From the West of England’s economic perspective, the present limit of 10M passengers per annum would seem to give plenty of scope to achieve more business destinations, and perhaps curtailing some the marginal holiday traffic to earn better margins, which can divert to other airports.

There are better projects that are deserving of public finance. For example, the provision of a high speed direct rail access from the South West into Heathrow would open up far more business opportunities than anything that could conceivably be achieved from Lulsgate. Very few passengers (less than 6%) fly from Bristol Airport from the North of the city.

In terms of regional Airport development, a better solution for the West of England is probably to develop the airport at Cardiff, given that considerable public funds are to be spent upgrading the motorway to Cardiff and South Wales, and the bridges are now free. About 12% of Bristol Airport passengers come from South Wales, which is likely to reduce now that Emirates are flying out of Cardiff. The resulting Cardiff hub would have good access to aircraft servicing facilities in the area, whereas Lulsgate has none.

Finally, expansion of Bristol Airport will adversely impact on the many houses that are now being planned in the Avon Valley (an ultimate irony given the John Selwyn Gummer fiasco in 1994/5), and the World Heritage site of Bath will become forevermore impacted by aircraft flying over it.

If one studies the figures closely, the expansion to 10 million passengers has not contributed significantly to the economy of the West of England in terms of additional employment. It is hard to see how further expansion will change this picture.

At the very least, any expansion should be deferred until such time as the holding company financial position is made secure, and the company is put into a position to contribute to the public purse.

By which time, there is likely to be more clarity as to whether further capacity at Lulsgate is really required.

5.2 Meeting with BA 27 June 2018

Parish Councils Airport Association

Notes of meeting held at Bristol Airport on 27th June 2018

Present:

For Bristol airport:

Janis Kong (JK) – Chairman, James Gore (JG) – Head of Government and Stakeholder Relations, Simon Earles (SE) – Planning and Sustainability Director, James Shearman (JS) - Head of Sustainability

For PCAA:

Hilary Burn (HB) – Chair, Christopher Willows (CW) – Vice Chair,
Judith Hoskin (JH) – Secretary

PCAA Analysis of Bristol Airport Financial Performance 1997 – 2016

Janis Kong said that she had seen the report about Bristol Airport's finances which had been prepared by Christopher Willows on behalf of the PCAA and asked him to run through it.

CW began by explaining that he had had a long career as a senior accountant and expert in Strategic Production Planning for a global mining company. He was therefore well versed in assessing company accounts and the underlying story they were telling.

Using publicly available information, CW had carried out an in-depth review of the accounts of the operating company (currently Bristol Airport no 3) and its holding company, starting from the date at which the airport was sold by Bristol City Council in 1997 and ending in 2016. He said that he was aware that the favoured methodology was to push debt into the holding company to take advantage of tax breaks for the benefit of shareholders.

CW said that in his opinion financial backers had not understood that the airport's profits would be squeezed by offering beneficial terms to attract airlines. The airport appeared to be operating at a loss and revenue had declined in real terms when adjusted for inflation. The airlines have a similar problem, having to offer cheaper flights to attract more passengers. The effect of expansion is that airlines and airport were having to continually offer better terms to attract passengers lower down the economic scale. This would mean declining returns for investors who had already not received an economic return.

An important competitor, Cardiff Airport was publicly owned and might attract public subsidy. He thought that Bristol Airport was probably an expensive airport to run given that

it had to run a bus system to take passengers to aeroplanes and was unlikely to attract investment to build permanent infrastructure to replace this.

An additional factor was that Heathrow Airport had now been given permission to build a third runway. The previous CEO of BA, Robert Sinclair, had said publicly that the greatest threat to expansion of Bristol Airport was expansion at Heathrow. CW said that the best thing for business users in the south west would be to divert the rail line to London via Heathrow which would always offer a much more diverse range of destinations.

Hilary Burn said that she could not see how, given their finances, Bristol Airport could hope to contribute their fair share to the cost of infrastructure needed to service an expanded airport. Plans for a mass-transit link were far in the future and 'dualling' of the A38, even if it were feasible, would only encourage more cars which benefitted the airport via parking charges.

CW said that he was disturbed that the accounts showed no payment of Corporation Tax and that the company takes advantage of the fact that interest can be paid gross to pension funds. Non-payment of tax was very much a current political issue and it was not fair to ask the community to fund infrastructure if the company was not paying tax. The accounts showed that accumulated losses at the holding company level were over £200m, and his strong recommendation was that they should refinance the company so that it was demonstrably and transparently profitable as claimed.

Finally, CW said that he was not sure that the annual accounts complied with accounting standards. He suggested that BA discuss this with their auditors.

In reply Janis Kong and James Gore said that the company was making money and in 2017 and 2018 had paid not only Corporation Tax under an agreement with HMRC but business rates and National Insurance. CW replied that all businesses paid rates and National Insurance was a cost of employment and not a tax on profits. CW also pointed out that he was aware that the operating company had paid tax in 2016 and 2017 because group relief claim was reduced. However, the consolidated accounts did not show a tax charge. Janis Kong said she would discuss this with the auditors/accountants.

JK said that the Ontario Teachers' Pension fund were adamant that businesses they had invested in should be profitable and pay for their own development. Everybody involved was comfortable about the way the airport operates.

CW said he was pleased to hear that but that shareholders might decide to move their shareholding elsewhere.

JK and JG said that they had listened to the comments and would reply in writing.

Other matters

Parking

HB asked why it had taken so long to complete the multi-storey car park, instead expanding into Green Belt 'Cogloop' land. JK explained that, excluding events like 9/11, demand for air travel generally increases in a straight line, whereas development of facilities is stepped. The trick is to keep the two as much in step as possible and completing the MSCP would until

recently have meant over-capacity in car parking. Low cost car parking also reduces the demand for unauthorised off-site parking which is not popular with residents.

SE made the point that the airport went through due process to develop the 'Cogloop' car park.

HB said that if the airport truly wanted to have a good relationship with residents they should not keep taking Green Belt land but instead provide more multi-storey parking. At present they were still asking for 5.1 hectares of Green Belt land near to bat habitat. (Information made available in scoping report for the proposed new development to 12 mppa)

Infrastructure

HB said that it was very difficult to comments on BA plans without full information particularly on transport links.

SE said that NSC were planning to run a consultation on the BSWEL study into strategic transport improvements – possibly in conjunction with the consultation on the Local Plan which was expected in the autumn. The report would be going to the executive committee meeting soon. The study had looked at highway improvements, mass transit systems, public transport but no decision had been made. The decision would be up to NSC.

HB said that the likelihood was that the airport would get permission to expand to 12mppa without any decision being made on infrastructure, with all the disadvantages that this would bring to local residents.

Noise

HB would like to see restriction on night flights rather than a transfer of the winter quota to the summer which would result in even more disturbance. Flights came in intermittently and were heard against a very low level of ambient noise. Compensation for noise was not adequate, particularly for period properties, and did not address the problem of disturbance when outside and no possibility of opening windows at night. Noise directly from the airport was also a problem and would increase, particularly if the proposed aircraft platform was built.

There would come a point where the airport would need to compensate residents for a decrease in value of properties near the airport.

Communication

SE and JG said that they were very happy to engage with parishes and would like to know which parishes were members of the PCAA so that they could talk to them.

5.3 Letter from Janis Kong 25 July 2018



Bristol Airport, Bristol, BS48 3DY
T: 0871 334 4444 F: 0871 334 4449
www.bristolairport.co.uk

BY EMAIL

25th July 2018

Mr Christopher Willows
PCAA

Dear Christopher

Thank you for meeting with us to discuss your concerns about the financial performance of Bristol Airport.

I hope you found the meeting useful in addressing the key points raised in your detailed analysis. As promised, here is written confirmation of the facts in each case:

Financial structure and viability

Bristol Airport's financial structure is very typical for infrastructure assets such as airports. Relatively predictable long-term returns mean that financial institutions are willing to lend to such businesses at low interest rates. It is therefore preferable in many instances for asset owners to borrow to fund growth rather than use their own capital (which could be more costly). Hence, a profitable business can have a reasonably high level of debt. In Bristol Airport's case, a significant proportion of this debt is provided by our majority shareholder. This structure provides an efficient way for the Airport to provide returns to its shareholders as interest rather than dividends.

The Airport's profitability – as measured by earnings before interest, tax, depreciation and amortisation (EBITDA) – has grown strongly in recent years. Contemplating growth beyond 10 million passengers per annum is a sign of the Airport's financial health.

Payment of Tax

The Bristol Airport Group paid Corporation Tax (CT) of £4m in 2017, and we are forecasting to make CT payments of £4.8m in 2018. In addition, we employ around 350 staff, and paid Employer National Insurance Contributions (NIC) of over £1m in 2017. We paid Business Rates of over £3m last year, and also make payments on the VAT-able parts of our business (most notably, Car Parking, where we paid over £6m in VAT in 2017). The airport's activity also supports many business partners, both on-site and off-site, and these businesses will all be making their own CT, NIC, Business Rates, and VAT payments to the UK Exchequer."

Compliance with accounting standards

Bristol Airport's accounts are audited by a global firm of reputable auditors and are therefore subject to detailed review, which includes additional partner review because of the fact that the group has quoted debt.

As I made clear in the meeting, I can firmly reassure you that the financial health of Bristol Airport is robust and that we make a not insignificant contribution to the public purse, and will continue to do so.



Aside from financial matters, it was helpful to hear your colleagues' views on the impact of airport operations and how these might be mitigated in future. We will give these suggestions serious consideration as we continue to formulate plans for the future development of Bristol Airport.

We remain committed to engaging with local parishes and my team look forward to presenting to your meeting on 27th September.

Yours sincerely

Janis Kong
Chairman and Interim CEO

5.4 Letter to Janis Kong 29 October 2018 - amended version 12th November 2018

Parish Councils Airport Association

Chair: Hilary Burn, Goblin Combe, Cleve, Bristol, BS49 4PQ

Tel: 01934 838599, email: hilaryburn@live.co.uk

Secretary: Judith Hoskin, Cross Cottage, East Dundry Lane, Dundry, Bristol, BS41 8NH

Tel: 0117 9642804, email: judithhoskin@live.co.uk

12th November 2018

Janis Kong,
Chairman, Bristol Airport PLC,
Bristol Airport,
Bristol,
BS48 3DY

cc Mr David Lees – Chief Executive

Dear Janis

Thank you for your letter of 25 July 2017 confirming the facts in each case. I am responding on behalf of the Association. The letter below is our opinion from reading your published accounts.

The numbers in the study we presented were extracted from the published accounts up to 31st December 2016 and did not include 2017, which was not available on the Companies House Beta Service until late May 2018. The substantial tax payment of £4.0M in 2017 was not therefore included in the analysis.

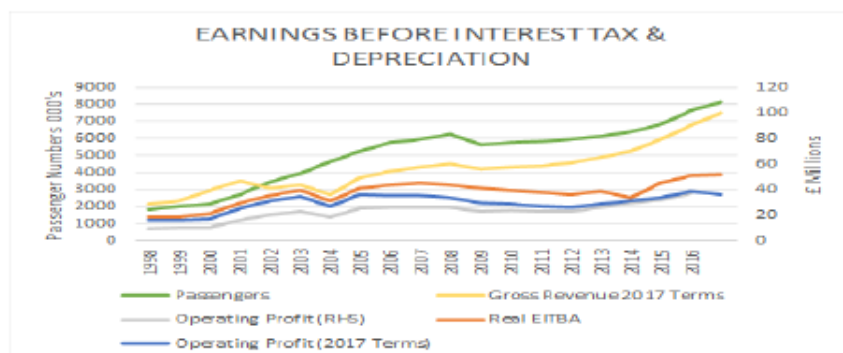
I would point out that all Company Accounts are public documents, on which third parties may place reliance. In this regard, there has been a material change in the basis of taxation through an agreement with HMRC, and as there is no mention of this in the notes to the accounts, it would not be something that any reviewer could reasonably be expected to pick up on.

Financial Structure and viability

It is entirely appropriate that banks lend to infrastructure projects such as airports, and as you point out, the interest rates they charge are a function of the security of the asset, which includes the likely variability in return. In 2017, the average interest rate on the Bristol Airport Number 3 bank loans was 3.38% which demonstrates your point. The average interest rate on the shareholder loans in 2017 was 10.61%, which is the root cause of the problem as it is a rate that is well beyond that which is appropriate for a low return infrastructure project. The terms and priorities attached to these bank loans are not disclosed, but the rates applicable to the banks could only be achievable if the banks have priority as to capital and interest over the shareholder loans. The inter-company financing with high interest rates was presumably designed to provide a tax-efficient method of passing profits to shareholders. However, the lack of profitability and the high level of debt has meant that limits on the deductibility of inter-company interest for tax purposes have been breached. The relevant legislation is known as Thin Capitalisation, which applies to cross border holdings where the debt:equity ratio is more than 100%. The Inland Revenue Manual refers to the erosion of the UK tax base and this practice of tax evasion as "Transfer Pricing".

EBITDA has improved recently, but you will see from the graph below that EBITDA is only marginally above the level achieved in 2007 in 2017 terms, despite expenditure of £267M in capital expenditure in the ten years to the end of 2016. Profits actually declined in 2017, despite the increase in passenger

numbers. The use of the word "strong" which you have used may well reflect good physical activity, but is surely an overstatement in terms of financial outcomes, depending as it does, where the starting point is.



The purpose of historical analysis such as this is to use it as a guide for future performance.

Below is a table which looks at the cash generation over the last ten years, on the basis that the operation was financed wholly by equity, and then looks at the impact of the interest overlay. The second column looks at more recent performance.

	SUMMARY OF TEN YEAR CASH FLOW 2008 - 2017	SUMMARY OF FIVE YEAR CASH FLOW 2013 - 2017
	£M	£M
Operating Profit of Bristol Airport	274	158
Add depreciation	102	57
Change in working Capital	11	12
Taxation (adding back group relief surrendered for nil)	-72	-38
Capital expenditure	-168	-115
Adjusted Net Cash Flow (100% Equity Basis)	147	74
Interest Costs Bank Loans	-155	-54
Interest Costs shareholder Loans	-212	-174
Interest Accrued, but not paid	85	85
Taxation Credit on interest deduction	67	33
Cash Flow after interest	-68	-35

On a traditional equity valuation basis, the adjusted net cash flow on a 100% equity basis for the ten-year period has a discounted value at 8% real of just £114M. Taxation paid would have been £72M. As it is, during this period tax relief on interest has meant that just £5M has actually been paid. Looking forward, because the HMRC is disallowing much of the inter-company interest as a deduction, the taxation credit for interest deduction will be lower than historically been the case until the equity base is restored.

The thrust of my argument presented in the meeting (which you have not referred to) is that in assessing the future economics of any further expansion, the central assumptions should be that marginal revenue per incremental passenger will decline. Over a ten-year period, the graph shows that the rise in revenue is less steep than the rise in passengers. Over the recent five-year period, the reverse is true. The graph does

illustrate that for either period EIBTA has risen less sharply than passengers, demonstrating that unit operating costs have risen in the period. These numbers suggest that expanding Bristol Airport in the market that it operates in, is highly unlikely to add value if these factors are replicated, given the substantial capital required to be spent both at the airport itself and the capital cost access infrastructure required on roads and public transport. The analysis shows that past expansions have not generated the returns that were expected. This is by far the most important understanding that comes from the analysis. To date, your expansions have been relatively cheap compared with expenditure incurred at other airports. This undoubtedly will not be the case in the future if the airport itself has to bear a substantial proportion of the infrastructure costs.

Drawing breath for a few years might allow the capital that has already been invested to yield a return, and allow debt to be repaid.

My recommendation to you in the meeting was that the owners should consider refinancing the company to make the accounting transparent. It is hard to believe that anyone within or outside the organisation can make sense or understand the financial statements as they are, and now that a deal has been done with HMRC, the need for shareholder loans has on the face of it, fallen away. This would be an opportunity to address and resolve the issue of whether the high and inflated carrying values are sustainable under Accounting Standards.

Value of Bristol Airport

The highly competitive nature of your industry seemingly makes earnings of normal returns difficult to achieve. The evidence of losses in the consolidated accounts suggests that the investment by the owners has not proved to yield attractive returns to the Pension Fund. Furthermore, Heathrow expansion will offer better alternatives for state infrastructure investment, for example in rail transport links from the West of England, than equivalent investment in Bristol Airport because the spectrum of destinations is so much greater.

Meeting of Bristol Airport with the Airport Association

A meeting of representatives from Bristol Airport management met with the Association on the 27th September to discuss the expansion project. Many of the issues raised were unrelated to expansion, for example night flying, car parking (both short term and longer term) in villages close to the airport which suggests that, even without expansion, there are issues that need to be addressed before further expansion can or should be contemplated. There is a fundamental issue as to which regulations the airport should comply. Currently the regulations applied are those of an airport situated in a rural area. Given that the expansion of residential housing in the West of England Spatial Plan will be in many areas affected by the airport, and also considering the substantial size that airport has reached, it would seem appropriate that a more rigorous regulatory framework should apply, which would have implications for the capital required.

Conclusion

The PCAA believes that Bristol Airport has to be considerably more transparent about the financial benefit of expansion than it has in the past. The noise and pollution caused by badly sited airports is a real problem generally. We believe that expansion beyond 10 million passengers per annum is a step too far. Our view is that because of environmental and social costs, the economic benefit of **expansion** has to be **substantial, sustainable and substantiated** to all stakeholders before it can be approved.

The Association does not believe that the airport in the past has done enough in terms of contribution to the West of England economy to justify substantial state investment at this point. In particular, the

imbalances between foreign visitors visiting the West of England and UK passengers visiting abroad, and the lack of business destinations offered, are a real concern on economic grounds. The Association would advocate making expansion contingent on improving these ratios, implying a change in mix, rather than merely expansion of the existing model.

An ill-considered expansion carries the risk that the airport loses the support of residents after spending the capital, which will lead to significantly curtailed operations possibly leading to closure. This is the fate of all previous airports at Bristol.

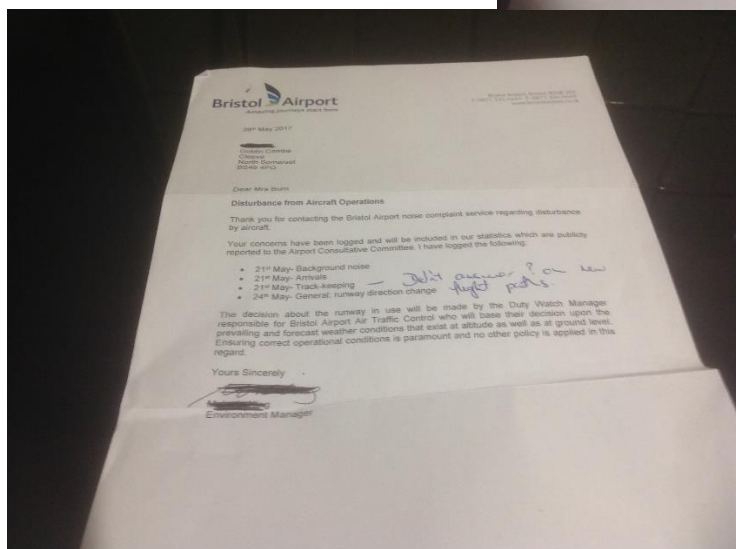
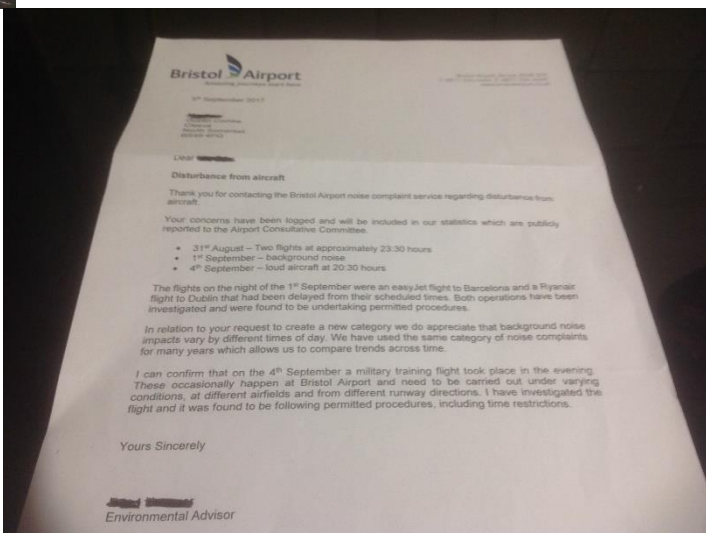
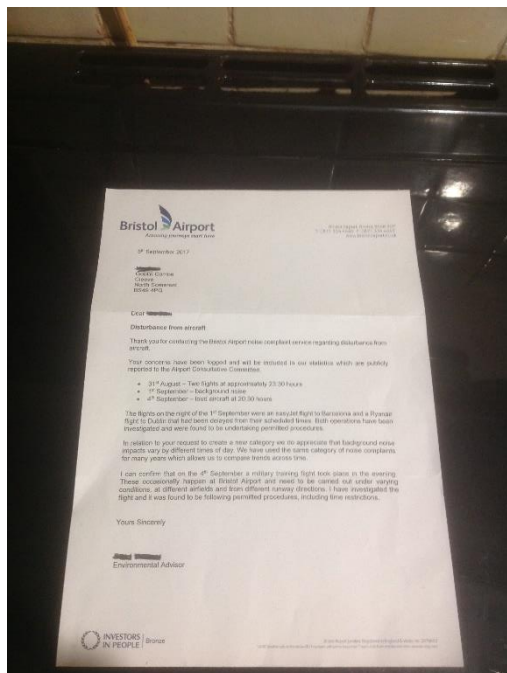
Yours sincerely

Christopher Willows

Vice Chair, Parish Councils Airport Association

Copy to Dave Lees CEO Bristol Airport

Appendix 6 - Background noise letters



Appendix 7 - Aviation Carbon Emission figures from Campaign against Climate Change. (From Objection to planning application 18/P/5118/OUT)

The Campaign against Climate Change urges North Somerset Council to reject the planning application for the proposed airport expansion on the grounds of unacceptable climate change impact. The environmental statement (Chapter 17) describes the carbon emissions from the project as 'not significant'. However, this is misleading.

The proposals state that Bristol Airport's operational carbon emissions would reach 1,568ktCO₂/year in 2026. This is significantly greater than the 1,211ktCO₂ from all other transport, homes, and industry in North Somerset local authority in 2016.¹

It should be noted that some figures have been widely circulated that slightly underestimate the increase in CO₂ from the planned development. The figures submitted in the environmental statement actually predict a 73% increase in aviation emissions and a 66% increase in the overall operational emissions of the airport compared to 2017. This is explained in more detail below.

The policy context with relation to climate change is also set out.

Increased emissions from expansion at Bristol Airport

The figures submitted in support of the planning application give the emissions for the 'project' as being those additional to the increase to 10 million passengers for year, which is taken as a given and used as the 'future baseline' for comparison.

If compared against 2017 figures instead, the proposed increase is more striking: to 1568ktCO₂/yr overall emissions, which is a 66% increase on current levels. Aviation emissions represent 1290kt of this, a 73% increase on current levels.

Table 1 – figures for emissions drawn from tables 17.3 and 17.9 of the environmental impact statement.

	2017 (8mppa)	2026 (10mppa) 'future baseline'	2026 (12mppa)	increase from 8- 10mppa	increase from 10- 12mppa
Non-aviation emissions	198.31	230.14	277.85	31.83	47.71
Cruise domestic	44.25	42.8	48.53	-1.45	3.73
LTO domestic	18.83	18.39	17.53	-2.44	1.14
Domestic flights	63.08	59.19	64.06	-3.89	4.87
Cruise international	588.36	988.9	1075.01	402.54	86.11
LTO cycle international	97.33	135.79	151.38	38.46	15.59
International flights	683.69	1124.69	1226.39	441	101.7
Total aviation	746.77	1183.88	1290.45	437.11	106.57
Total emissions	945.08	1414.01	1568.31	468.93	154.3
Aircraft movements	76,199	86,973	97,393	10,774	10,420

It is noticeable that the airport claim that while going from 8 to 10 million passengers a year would involve a significant increase in emissions from international flights of 441ktCO₂/year (and an overall emissions increase of 469kt), the increase from 10 million to 12 million would involve only an additional 102kt from international flights and therefore an overall emissions increase of just 154ktCO₂/year.

We would recommend that North Somerset Council look more carefully why this assumption has been made. If it is not justifiable, then there are two alternative scenarios which are immediately obvious:

1. The extra carbon emissions from international flights are similar when going from 8-10mppa as when increasing from 10-12mppa. The first, higher figure, 441ktCO₂ is reasonably accurate. That would increase the estimate for total emissions in 2026 to 1908ktCO₂/year, almost exactly double the current level (see table 2 at the end of this document).

2. The extra carbon emissions from international flights are similar when going from 8-10mppa as when

increasing from 10-12mppa. The increase in carbon emissions for the 'future baseline' from international flights (going from 8-10mppa) has been overestimated and that from the increase from 10-12mppa ('the project') has been underestimated. If the two were averaged out, the figure for total emissions in 2028 could stay the same, at 1568kt/yr, but the additional emissions resulting from the increase from 10 to 12mppa would not be 154ktCO₂/yr but 324ktCO₂/yr (see table 3 at the end of this document).

There is one more factor that should be taken into account in all consideration of aviation's climate impact.

Flying not only emits CO₂, but by emitting other gases and particles at altitude and forming contrails, there is an additional contribution to global warming that may be even more significant than the CO₂ emitted.¹ Because these 'non-CO₂ effects' are variable and hard to calculate exactly, they are almost always ignored in planning and policy decisions, meaning that the climate impact of aviation is significantly underestimated. However, the government's own guidelines for company reporting of CO₂ emissions suggests, as an approximation, multiplying aviation emissions by 1.9.

Bristol Airport's own figures break down aviation emissions into 'cruise' and 'landing and take off'. If the former were multiplied by 1.9, that would take the airport's current total annual emissions up to the equivalent of 1,500ktCO₂, and at 12 million passengers the equivalent of 2,500ktCO₂ - more than double the total CO₂ from all other transport, homes, and industry in North Somerset.

There is a very large margin of error in calculating these non-CO₂ effects so we are not suggesting these figures should not be taken as accurate. But it should be noted that the assumption that the 'non-CO₂ effects' can be ignored and treated as zero is an even less credible basis for policy-making. The existence of this additional climate impact makes policies which allow aviation to grow while seeking to cut emissions elsewhere even more dangerous.

National context: UK climate action at risk from uncontrolled aviation emissions

The Environmental Statement for this planning application states in chapter 17, *"There is uncertainty regarding UK GHG policy in the aviation sector."* This is entirely correct. National government has continued to dodge the question of how rising emissions from continued aviation expansion can be compatible with urgent action to tackle climate change. The most basic analysis makes it clear that the two cannot be reconciled. In this situation, it would be logical for local government to work on the basis of facts, rather than government indecision.

The UK is on course to miss its legally binding climate change targets in the coming decades. Of particular relevance is the failure to curb aviation emissions.

While all other sectors are expected to reduce their emissions under the Climate Change Act to cut our emissions by 80% by 2050, international aviation and shipping were not included in this. The Committee on Climate Change took the view that these emissions should not be ignored altogether as they posed as great a risk as any other (and might in future be included). They have calculated the UK's overall carbon budgets to leave headroom for aviation emissions, and recommended these should be capped to no more than 37.5MtCO₂ by 2050, a very generous allowance compared to other sectors.

The government appears to have effectively abandoned the 37.5Mt cap, giving the go ahead to expansion at Heathrow, which would make it impossible. The third runway at Heathrow is currently subject to legal challenge. Whether it is built or not, expanding regional airports is also a threat to our climate targets.

The latest science, as set out in the recent IPCC report on keeping emissions within 1.5C and our commitments under the Paris climate deal, mean that we need to reduce emissions even more radically than legislated for in the Climate Change Act. The likelihood of devastating global consequences from exceeding 1.5C warming have recently led Bristol council and others around the country to set targets to go 'net zero' by 2030.

Excluding the aviation industry from this would make meaningful carbon reduction in line with the Paris agreement impossible, and is clearly unfair to other sectors of the economy.

The impacts of climate change are being felt right now in many places around the world: food shortages, increased poverty and increased severity of heatwaves, drought, hurricanes and wildfires. In the UK, we will be affected both indirectly (through stresses on global food production and increased conflict) and directly through impacts on our own agriculture, weather extremes, etc. Somerset, in particular Weston-super-Mare, has been identified as one of the most vulnerable locations for increased coastal flooding due to sea level

rise.ⁱⁱ

The government claim that aviation emissions will be dealt with by the aviation industry's new carbon offsetting scheme, CORSIA. This does not hold up to scrutiny, since this scheme in particular has very weak regulations to ensure carbon offsets are genuine (sustainability criteria for biofuels have been dropped, for example, and some fossil fuels have been declared to count as 'green'). The Committee on Climate Change, the UK's independent experts on reducing our emissions, have stated that offsetting cannot be a long term solution to aviation emissions and that we should be pursuing genuine emissions reductions by managing aviation demand.

Tables below relate to 'scenarios' with alternative emissions, explained above.

Table 2 (figures which differ from original figures in Table 1 above highlighted)

	2017 (8mppa)	2026 (10mppa) 'future baseline'	2026 (12mppa)	increase from 8- 10mppa	increase from 10- 12mppa
Non-aviation emissions	198.31	230.14	277.85	31.83	47.71
Domestic flights	63.08	59.19	64.06	-3.89	4.87
International flights	683.69	1124.69	1565.69	441	441
Total aviation	746.77	1183.88	1629.75	437.11	445.87
Total emissions	945.08	1414.01	1907.6	468.93	493.58

Table 3 (figures which differ from original figures in Table 1 above highlighted)

	2017 (8mppa)	2026 (10mppa) 'future baseline'	2026 (12mppa)	increase from 8- 10mppa	increase from 10- 12mppa
Non-aviation emissions	198.31	230.14	277.85	31.83	47.71
Domestic flights	63.08	59.19	64.06	-3.89	4.87
International flights	683.69	955.04	1228.39	271.35	271.35
Total aviation	746.77	1014.23	1290.45	267.46	276.22
Total emissions	945.08	1244.37	1568.31	299.29	323.93

Claire James
Campaigns Coordinator
Campaign against Climate Change
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London
N1 9DX

i <http://naei.beis.gov.uk/laco2app/>

ii <https://www.carbonbrief.org/explainer-challenge-tackling-aviations-non-co2-emissions>

iii <https://www.theccc.org.uk/wp-content/uploads/2015/10/CCRA-Future-Flooding-Main-Report-Final-08Oct2015.pdf>

Appendix 8 - Compensation and the Treasury Green Book

The Treasury Green Book contains estimates of monetary values to support the assessment of the effects of environmental noise. These are provided for day-time disturbance and night-time disturbance. The levels increase depending on the noise impact, starting at 45dB. The DfT and WHO suggest that the 'Observed Adverse Effect Level' for daytime noise occurs at 51dB for daytime and 45dB for night time. This opinion is understood by the airport (Draft Noise Action Plan, section 5, page 20). However, in their compensation scheme the airport recognises no disturbance until 57dB is reached for daytime noise (LAeq.16).

The Green Book figures can be used to identify the monetary values associated with the noise pollution experienced by a householder close to the airport.

- The Green Book tables indicate that the monetary value associated with a house experiencing 57dB (day) and 52dB (night) would be £754.48 pa. This uses the onset of noise nuisance at 51dB (day) and 45dB (night).
- The number of households suffering noise impacts of 57dB and above (LAeq.16h) was 500 in 2006 and 300 in 2011 and 450 in 2017 (Table 5, Draft Noise Action Plan 2009-24).
- If we take the lowest figure, 300, we can see that the monetary impact on households is a total of $300 \times £754.48 = £226\text{k pa}$. For 2017 this figure would be £339k pa.
- This is an under-estimate as houses with higher noise impact would be impacted to a higher monetary level.
- Also, households experiencing noise nuisance between 51dB and 57dB have not been included although DfT and WHO guidelines recognise that they are adversely impacted.
- The airport confirms that 328 households have received insulation grants since 2000.
- If we assume they all received the full grant (which is unlikely) then the airport will have funded $328 \times £5000 = £1,640,000$
- In addition, since 2014 the airport has contributed annual sums of £100k to the Airport Environmental Improvement Fund. Part of this has been used to fund the insulation grants, in fact £200k has been used to insulate 70 properties since 2014 (Draft Noise Action Plan)
- At a generous estimate and since the compensation scheme was launched in 2000, the airport has contributed $£1,640,000 + 5 \times £100,000 - £200,000 = £1,940,000$ towards mitigating the impact of noise on local residents
- If the Green Book figures are used, the monetary value of these noise impacts over this period is at least $£226,000 \times 18 = £4,068,000$, at a very conservative estimate
- The Green Book figure is more than double the value of the airport's scheme.

The purpose of this analysis is to demonstrate to the airport and to NSC a way in which some externalities can be assessed in monetary terms and to request NSC to negotiate a much-improved scheme for local residents if the application is granted.

GREEN BOOK

Economic valuation tools

Tools have been developed which convert changes in noise exposure to estimated monetary values, to support the assessment of the effects of environmental noise. The central estimates of values for road, rail and aircraft exposure are presented in Table 1 and Table 2. A range of sensitivities are available around these values from the Noise Modelling Tool.

The tables show an estimated value that corresponds to a change in the noise level. These values may not be suitable to use if:

- a decision is likely to have a substantial effect on noise
- the change in noise levels is going to affect the outcome of a decision

In these cases, a more detailed assessment may be justified.

Table 1: Total road, rail and aircraft noise marginal values, £ per household per dB change, Central Values, 2014 prices

Change in noise metric by decibel (dBA) (daytime noise metric)		Total Road (including sleep disturbance)	Total Rail (excluding sleep disturbance)	Total Aircraft (excluding sleep disturbance)
45.0	46.0	£11.28	£3.90	£15.61
46.0	47.0	£11.23	£3.95	£17.72
47.0	48.0	£11.31	£4.11	£19.82
48.0	49.0	£11.52	£4.40	£21.90
49.0	50.0	£18.41	£4.80	£23.96
50.0	51.0	£18.89	£12.46	£38.71
51.0	52.0	£19.49	£13.13	£40.80
52.0	53.0	£20.23	£13.91	£42.88
53.0	54.0	£21.09	£14.81	£44.94
54.0	55.0	£47.78	£15.84	£46.98
55.0	56.0	£51.22	£16.98	£49.01
56.0	57.0	£54.79	£18.24	£51.02
57.0	58.0	£58.49	£19.62	£53.02
58.0	59.0	£63.86	£22.68	£56.56
59.0	60.0	£69.33	£25.82	£60.05
60.0	61.0	£74.69	£28.85	£63.29
61.0	62.0	£80.21	£32.03	£66.54
62.0	63.0	£85.90	£35.37	£69.83
63.0	64.0	£91.75	£38.87	£73.14
64.0	65.0	£97.78	£42.53	£76.47
65.0	66.0	£103.96	£46.34	£79.82
66.0	67.0	£110.32	£50.32	£83.21
67.0	68.0	£116.85	£54.46	£86.61
68.0	69.0	£123.54	£58.76	£90.04
69.0	70.0	£130.39	£63.22	£93.50
70.0	71.0	£137.42	£67.83	£96.98
71.0	72.0	£144.61	£72.61	£100.48
72.0	73.0	£151.97	£77.54	£104.01

73.0	74.0	£159.49	£82.64	£107.57
74.0	75.0	£167.18	£87.89	£111.15
75.0	76.0	£175.04	£93.31	£114.75
76.0	77.0	£183.07	£95.22	£116.66
77.0	78.0	£188.93	£97.17	£118.62
78.0	79.0	£190.93	£99.16	£120.61
79.0	80.0	£192.96	£101.20	£122.64
80.0	81.0	£195.03	£103.27	£124.71

Notes:

- There are no relationships available between the different noise indicators for rail and aircraft noise. If detailed data are not available for the specific indicator of interest, the available results for the daytime indicator can be used as an approximation for the other required indicator (e.g. assume Lden = LAeq,16h). This type of approach cannot be used for night noise.
- Sleep disturbance has been excluded for rail and aircraft but include not applicable for rail and aircraft. Sleep disturbance is presented separately in Table 2 against Lnight.

Table 2: Sleep disturbance night time noise marginal values £ per household per dB change, Central Values, 2014 prices

Change in Lnight noise metric by decibel dB(A)		Road	Rail	Aircraft
45	46	£29.20	£13.59	£37.93
46	47	£32.07	£15.06	£40.79
47	48	£34.94	£16.52	£43.65
48	49	£37.81	£17.99	£46.52
49	50	£40.68	£19.46	£49.38
50	51	£43.55	£20.92	£52.24
51	52	£46.42	£22.39	£55.11
52	53	£49.29	£23.86	£57.97
53	54	£52.17	£25.32	£60.83
54	55	£55.04	£26.79	£63.70
55	56	£57.91	£28.25	£66.56
56	57	£60.78	£29.72	£69.42
57	58	£63.65	£31.19	£72.29
58	59	£66.52	£32.65	£75.15
59	60	£69.39	£34.12	£78.01
60	61	£72.26	£35.59	£80.88
61	62	£75.13	£37.05	£83.74
62	63	£78.00	£38.52	£86.60
63	64	£80.88	£39.99	£89.47
64	65	£83.75	£41.45	£92.33
65	66	£86.62	£42.92	£95.19
66	67	£86.62	£42.92	£95.19
67	68	£86.62	£42.92	£95.19
68	69	£86.62	£42.92	£95.19
69	70	£86.62	£42.92	£95.19
70	71	£86.62	£42.92	£95.19
71	72	£86.62	£42.92	£95.19
72	73	£86.62	£42.92	£95.19
73	74	£86.62	£42.92	£95.19

74	75	£86.62	£42.92	£95.19
75	76	£86.62	£42.92	£95.19
76	77	£86.62	£42.92	£95.19
77	78	£86.62	£42.92	£95.19
78	79	£86.62	£42.92	£95.19
79	80	£86.62	£42.92	£95.19
80	81	£86.62	£42.92	£95.19

Appendix 9: Pilot Comment from North Somerset Council Website

As a Pilot and frequent user of Bristol Airport it is with great regret that I submit an objection to this planning application.

The air transport industry has experienced tremendous growth in recent years with air travel in particular increasing in demand. As I rely on this industry for my career by default, I am a supporter of airport and air travel expansion. However, in the case of Bristol Airport the development plan has been so ill conceived that I cannot in good conscience support the proposed development. I have read many of the reports submitted already and note that several other Pilots have objected most notably due to the poor parking provisions and lack of consideration from the airport to its staff. I think these objections alone should send alarm bells ringing to both the planning officer and local community.

Firstly, with regards to parking I believe the current parking provision to be completely inadequate. The airport has shown complete contempt for its staff with current arrangements, the most recent development being the removal of the North side staff car park in order to development of more aircraft parking stands. The new staff car park is a re designated area in the corner of the silver zone car park. The key issue is that this move displaces hundreds of spaces from the most popular low-cost parking option available to the public. This in turn will most likely force more vehicles in to the illegal offsite car parks or nearby local streets. The cynic in me would almost be led to think this is underhand tactic devised to justify the expansion of the now oversubscribed silver zone car park in to the neighbouring green belt.

This has already had a huge impact on time limited staff such as airline crew who are now forced to make a longer journey to work coupled by a daily return shuttle bus journey back to the north side of the airport. This eats substantially in to their regulated rest time and in turn will potentially lead to an increase in fatigue and reduction in safety margins. Staff should be able to park much closer to their place of work as stated by the airport itself in previous development plans! The placement of the Staff car park south of the airport also now requires additional Diesel shuttle buses to run a constant service back and forth to the main terminal at 10-minute intervals 24 hours a day 7 days a week. This is even more harmful to the environment and unnecessarily increases staff movements around the site in addition to traffic on the A38.

With regard to the multi storey staff car parks located opposite the terminal building (North side), these are currently planned to only be used for premium parking which has so far this year been undersubscribed by hundreds of spaces, this is before additional levels are added to the current car park and in advance of the construction of the further multi story car parks. I feel strongly that expansion into the green belt for additional silver zone parking should not be allowed until the use of ALL north side multi story car parks are fully optimised, for instance 1 floor of the multi-story car park would accommodate ALL airline employees working at Bristol Airport and free up more space for cheaper and higher demand block parking in the silver zone. Additionally, the original arguments used to grant permission for the development of the multi-story car park are contradictory to those for the expansion of the silver zone car park. Bristol Airport had previously stated that premium parking was in high demand. I find it very strange considering the majority of flights to/from the airport are with low cost airlines. So, if correct passengers are likely to want to pay more for parking than they would for their flights. If the airport is unwilling to consider parking optimisation then I feel they should be made to optimise use of the

silver zone site and build further multi storey car parks there for low cost parking before being allowed to expand further into the green belt. This intrusion would only seek to allow the airport to benefit financially from unnecessary green belt destruction.

The planning application and development plan fails to explain and demonstrate how the airspace surrounding the airport will be able to deal with this increase traffic flow as a result of increased throughput of passengers. Whilst I understand this is not required by the planning application it is an issue in which the public should be aware whilst considering this application. Unfortunately, the airspace is already very congested leading to holding (circling) or extended/delayed routings on arrival for spacing separation from other aircraft. This in turn results in more/prolonged noise, increased fuel burn and emissions as aircraft are flying for longer than necessary, this doesn't benefit anyone.

The current runway is fairly short and challenging for pilots however there is no known long-term solution to this. Expansion of the runway is almost impossible without a serious amount of capital investment in a Madeira style extension on stilts. Many larger airports such as Gatwick and Heathrow have high speed runway/taxiway exits. These are essentially like a motorway slip road they come off at an approximately 30-degree angle and allow planes to vacate the runway at high speed in order to clear the runway more rapidly and allow other aircraft to land behind them sooner. By doing this they can reduce the separation of aircraft on the approach. Regrettably, Bristol does not have this feature (it is unlikely it can be incorporated) therefore aircraft will have to continue to (as they currently do) slow down to taxiing speed and make a 90 degree turn off at the end of the runway. This means aircraft will need to maintain the current separation standard between one another on the approach therefore any increase in number of flights will just be stretched out further throughout the day and night.

To make matters worse during low visibility procedures (generally fog and low cloud base) which are a common occurrence due to the airfield topography this separation needs to be increased further. This often leads to approach delays and holding and adding additional aircraft to this flow will just put further strain on an already congested airspace and air traffic control structure. This flow rate can be managed and predicted if conditions are known in advance and will often result in SLOTS (departure delays) at point of departure in order to 'stagger' arrival times, however with more aircraft this means potentially more delays and stretching of that flying programme (with delays) well in to the night time hours increasing noise for many of the surrounding communities.

With regards to the economic arguments. Whilst I agree that increasing future air travel will have a net benefit on the UK economy, I feel the airport is overstating the economic benefit to the immediate local economy. Many of the airport users come from a very wide catchment area and tend to be transitory very few contribute to the local economy other than for their physiological needs.

The current roads infrastructure is completely inadequate. Bristol Airport is the largest airport in the country by passenger numbers that is not served by the rail network, motorway junction or both. The current plans make no consideration to the amount of additional traffic this will generate and the amount of additional congestion this will cause on the already unfit for purpose A38. There are already many road traffic accidents which I feel will be exacerbated. This is particularly more hazardous during the low visibility conditions that often affect the area. It must be noted that current passenger throughput is just over 8 million passengers per annum and increase to 12 million

passengers would mean a 50% increase on current traffic levels.

There are many further important issues surrounding this application however these have already been addressed in other responses. In summary I feel most strongly that the interests of a Canadian teachers pension fund should not be put before those of our local environment, communities and people.

Until such a time as the Bristol Airport can produce a sustainable plan that mitigates against the issues raised I cannot in good conscience support this application.