The Economic Impact of Bristol International Airport

A report for the Parish Councils Airport Association

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October 2005
Eco-Logica Ltd, Lancaster

Campaign to Protect Rural England

Friends of the Earth Bristol

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Summary

Aviation is reputedly claimed to be an industry of critical importance to the national economy, which supports hundreds of thousands of jobs. The industry claims that additional jobs can be created through the expansion of airports and these claims have been accepted by central government in its national consultation on the future development of air transport.

This report takes as a very different view. Aviation is a small part of the national and regional economy and the claims made in support of job creation are not supported by the evidence. The claims that are made for the role of aviation in encouraging inward investment to the region and to the UK are not supported by the data which show a much higher outflow of funds from the UK than funds coming into the country. Revenue generated through tourism reveals a similar story. The aviation industry upholds the idea that tourism provides an economic gain to the UK economy despite the fact that those tourists leaving the UK spend far more abroad than tourists entering the country. Tourism is in effect a net drain on the country's resources.

The air transport industry also alleges that their activities generate and sustain large numbers of jobs in other sectors of the economy. This claim is based on a flawed methodology (the multiplier effect) which routinely double counts jobs in other sectors and has no place in a rigorous evaluation of the economic benefits of aviation.

The environmental consequences that can be attributed to the aviation industry are well documented. This report provides detailed evidence that in addition to the undesirable environmental consequences, aviation is very poor value for money. The debate about the future of aviation would be a much more open and transparent debate if economic realities were factored in and economic assertions factored out.

1. Introduction

1.1 Aviation is a significant part of the lives of many people in South West England. It provides a large number of opportunities for holidays abroad, it provides jobs and it supports the activities of businesses whose need for efficient international passenger and freight air services are well met by Bristol International Airport, which currently employs around 2,000 people. Many other companies and industries rely to some degree on the movement of people and freight that provides opportunities for full participation in an increasingly globalised economy. Aviation is a fact of life and it is here to stay. Despite the clarity of this fact, we are concerned with the economic value of the aviation industry, how much it actually contributes to the economy of South West England and how this contribution could be improved with a reduction in harmful environmental consequences.

1.2 The South West region has an employed population of 2.4 million. Throughout the period 2000 to 2004, the SW consistently had one of the largest proportions of working age people in employment of all UK regions *(Regional Competitiveness and State of the Regions, April 2005)*. The main sources of employment in the South West are; Distribution, hotels and restaurants (27%), Public administration, education and health (27%), Banking, finance & insurance related industries 17%) and Manufacturing (12%). Reflecting both national and international trends, employment is concentrated largely in the public sector and is service based.

1.3 In evaluating the importance of air transport and services to the economy of South West England it is important to isolate the economic factors contributing to an overall assessment. These include:

- the economic importance of aviation in terms of job employment generation (i.e. direct employment)
- the economic importance of aviation as an activity that supports other activities (e.g. good quality air services supporting the international transport needs of other economic sectors and buying goods and services from other sectors of the economy. This is normally described as indirect employment).
  In this report we are not only concerned with employment as a measure of economic impact but also look at inward investment and its links with aviation
- the special role of tourism and the relationship between the revenue lost from outbound air passengers' expenditure abroad and inbound air passengers' expenditure within the South West region

1.4 In this report we will look at the argument made in general for the positive economic impact of aviation and for the growth of this sector of the economy. This will cover the first two points above. We will look at the evidence in the South West for the "flights means jobs" argument and we will look at the tourist industry and evaluate the evidence that points to tourism as a net drain on the UK and South West economy.

1.5 In this report we have carried out an assessment of the draft master plan for BIA. This can be found in Appendix 1. Our main findings from this assessment are:

- BIA is a very small player in the economy of the SW and whilst any employment generation is to be welcomed there is no economic or public policy justification for prioritisng airport expansion over, for example, investment in renewable energy, eco-efficient buildings and innovative manufacturing using environmental technology
- The expansion of aviation is fuelled by significant levels of public subsidy (about £10 billion pa in the UK) and by the taxpayer picking up significant additional infrastructure costs (e.g. road building to facilitate improved access to airports)
- The future of BIA will be dominated by low cost airlines and tourism. This is a non-sustainable economic activity, its economic spin-off is small and its ability to cut wages, cut costs and relocate is very large
- The freight potential of BIA as a supply-chain tool and support for export-based industry has largely been ignored

- There is a low level of business use of BIA and this will continue as low cost airline activity grows with tourism as the foundation of the business model

- The airport generates about 30% of the traffic on the A38 and contributes significantly to congestion. The negative economic impact of congestion has not been factored into any of the discussion about the role of BIA in the local and regional economy

- The airport is embarking on a car-oriented development with unconstrained growth in car parking for both passengers and staff. This is contrary to government policy and is related to the business model underpinning much UK airport development where car parking revenue is the major driver of development and future profits

- There is no attempt in the master plan or any other documentation to adopt a realistic and transparent economic perspective based on the large deficit in tourism spending (tourist leaving the UK spend far more money abroad than in-bound tourist spend in the UK), the large deficit in FDI (UK companies and financial institutions invest far more abroad than non-UK institution invest in the UK)

- There is no attempt in the master plan or any other documentation to build in the realities of the aviation industry. It is an industry suffering from large increases in fuel costs and it is constantly seeking to reduce costs through cutting labour. Redundancies, geographical re-positioning and wage cuts are already happening and will happen more in the future. It is perverse to omit these realities from an economic assessment.

2. Airport expansion and enhanced employment opportunities

2.1 The Aviation White Paper published by the Government in December 2003, sets out its conclusions for the expansion of UK airports over the next thirty-year period. The Aviation White Paper (ATWP) is based on the generally accepted premise that airports act as significant "engines of the local economy" and offer the promise of large numbers of newly created jobs within a region should expansion go ahead. With particular reference to the South West, the White Paper states that there is significant potential for growth at airports in the region and that this will generate substantial economic benefits. Bristol International Airport is identified as having the main potential for growth and access to air travel is particularly important to business in the West Country where the economy is dominated by the finance, aerospace, IT, tourism and communications industries.

2.2 This is the main emphasis of the Bristol International Airport consultation Draft Master Plan 2005 to 2030, published in October 2005. The consultation document is characterised by a complete and uncritical acceptance of the economic importance of direct, indirect and induced employment that can be anticipated from the future growth of aviation. Whilst any direct jobs in the Bristol vicinity are welcomed, particularly in the deprived wards where unemployment statistics are high, this report will demonstrate that there is no justification for the uncritical acceptance of job creation arguments.

2.3 Claims for job creation have been challenged at each of the public inquiries and at some length at the Heathrow Terminal 5 inquiry. This challenge has been taken up in reports on the industry (Whitelegg, 2001, IPPR 2003) and by the Royal Commission on Environmental Pollution (2002)

"One study estimates that the aviation industry directly provides jobs for over 180,000 people in the UK and contributes some £10.2 billion to the gross domestic product. In addition the DTI draws attention to the trade in goods, industrial developments and economic services that air transport facilitates. This trade creates wealth, which the DTI believes, could be used for global as well as national development. The extent to which these benefits, in practice, improve global conditions is difficult to ascertain. How much this would be compromised if the growth in aviation were curtailed would depend on the ways in which this was done and the quality of the alternative transport and communication methods available. In any case the resources displaced by restrictions on air transport would find other uses in due course, probably with similar or only slightly lower market values and much less damaging environmentally".

Source: paragraph 2.13, RCEP (2002)

According to up to date information provided through the annual business enquiry office for national statistics, the total number of jobs that depend directly upon the aviation industry is estimated at around 200,000. This employment figure includes all those activities supporting the air transport industry. The same source estimate that the figure for indirect employment generated through airport related activities and revenue is three times the number of direct jobs, i.e. 600,000. The aviation industry accounts for approximately 1% of Gross domestic product, which was equivalent to £1bn in the year 2004.

2.4 The Royal Commission's views are very important indeed. The organisation is thoroughly independent, consists of some of the UK's leading scientists and reports directly to Parliament. The Commission's view is that there is considerable uncertainty around the simple assertion of economic benefits from aviation. There is even more uncertainty around the ways in which an economy can change and adapt to new circumstances (less flying) and there is no reason to believe that restrictions on air travel would damage the UK economy in any way at all. The potential to meet business demand or a proportion of business demand by other means (e.g. teleconferencing and high speed trains) raises the possibility that business needs can be met at a lower cost, with higher levels of productivity of staff and with the surplus from these lower costs being used more efficiently in R&D or other directly wealth generating activities. The economic advantages of a shift away from physical travel and towards teleconferencing have been discussed and quantified in Regus (2000). We return to some of these themes in our conclusions.

2.5 The debate surrounding the economic impact of aviation has been enriched by the publication of two very different reports.

1. *The Contribution of the Aviation Industry to the UK Economy* was prepared by Oxford Economic Forecasting (OEF) for a consortium of the UK's major airport operators and airlines and DETR.
2. *Transport and the Economy* was prepared by the Standing Advisory Committee on Trunk Road Assessment (SACTRA) for DETR. Although SACTRA's general remit deals with road transport, this report addresses the impact of all transport modes.

2.6 The OEF Report

2.6.1 OEF argue that there are important functional links between economic growth and aviation. These are derived from:

- The contribution aviation makes in its own right in terms of employment, production, exports, value added, investment and Exchequer contributions
- The impact aviation has on the performance of other industries as a facilitator of economic growth and rising productivity.

2.6.2 The report produces quantitative estimates of the negative economic effects of restricting air travel, including the claim that restricting passenger growth to 3.5% per annum rather than the predicted 4% would reduce UK GDP by 2.5% by 2015. They estimate that over the last 10 years the impact of aviation growth in the UK economy has been to increase output in the whole economy by about £550 million per year. Their general conclusion is that there are significant economic implications of restricting the growth of aviation. They state that the environmental effects of air travel have an economic cost, but their terms of reference explicitly exclude these from their analysis.

2.7 The SACTRA Report

2.7.1 The SACTRA report was commissioned in 1996 "to consider the effects on the performance of the economy which might be caused by transport projects and policies, including new infrastructure, changing prices, demand measures and measures to reduce traffic". The origins of the report lie in the debate about roads and the economy but its relevance is far wider than roads: "Our terms of reference go beyond the specific questions of trunk road schemes and, therefore, the Committee has aimed at a general approach which treats even-handedly all types of transport investment or policy initiative, for all modes".

2.7.2 There is a statistical correlation between increased traffic flows and economic growth, but this does not necessarily mean that there is a causal link whereby improved transport facilities necessarily lead to more economic activity. The increased levels of travel could be a consequence of economic growth rather than the other way round. The SACTRA report concludes that although there are theoretical reasons why improved transport infrastructure could lead to more economic activity, the empirical evidence for this is weak. In particular, they conclude that in a mature economy with well-developed transport systems such as the UK, any contribution to economic growth from improved transport is likely to be modest (para 12, p.17).

2.7.3 The report also concludes that it is not possible to give a complete and unbiased estimate of the economic impact of transport without an assessment of environmental costs, which the OEF Report does not do because of its terms of reference.

2.7.4 Finally, the report makes the point that transport improvements connect different locations and areas, and that the benefits do not necessarily accrue evenly (para 40, p.22). There may be losers as well as winners as a result of more competitive areas gaining improved access to weaker areas. Improved access could thus in some cases lead to loss of employment at particular locations. This applies at all scales from local through regional to national and international, and to all transport modes.

2.8 Evaluation

2.8.1 Both these reports raise issues that are central to any discussion of the economic impact of aviation. The following points are relevant:

- The terms of reference for the OEF Report explicitly exclude consideration of environmental costs. The Report therefore presents an incomplete analysis and it is not possible to conclude whether or not the economic benefits of new investment are greater or smaller than the economic disbenefits associated with environmental damage. This introduces a significant element of uncertainty into the discussion, as the economic benefits themselves may not be as large as is claimed.

- The OEF use their own forecasting model of the economy and input data from the UK National Accounts and other sources. Some of these data are estimates of the required variables (such as the indirect employment caused by aviation, see Appendix) and moreover the methodology used makes assumptions about the nature of the links between aviation and the economy which the SACTRA Report reveals to be complex and themselves context dependent and geographically variable. The use of these data and assumptions in a model of the national economy is therefore dubious.

- Even within their own narrow terms of reference OEF conclude (as do SACTRA) that the economic effects of aviation do not benefit everyone everywhere to the same extent. This is particularly significant with respect to tourism. Much of the growth of air travel has been generated by tourism. During the 12 month period ending August 2005, visits overseas by UK residents rose by 4% from 62.8 to 65.6 million. Much of the growth of air travel has been generated by tourism.

  In 2004, UK residents on visits overseas spent £30 billion whereas overseas visitors to the UK spent £13 billion, giving a deficit of £17 billion. If air travel were not to grow as fast as predicted it is possible that the net economic effect in terms of spending and employment on the UK economy would be positive. If we compare more recent figures for expenditure for the period June to August 2005, UK residents on overseas visits spent £7.8 billion, whereas visitors to the UK from overseas spent £3.5 billion, giving a deficit over a three-monthly period of £4.3 billion. Air travel and tourism acting in concert take resources out of the UK and the southwest and as a result damage the economy.

- The aviation industry is heavily subsidised (van de Pol 1998) and given the high level of labour productivity in the industry it can be strongly argued that jobs could be created more cost effectively in other ways. Jacobs (1996) quotes estimates of job creation numbers and costs from energy conservation, investment in public transport and recycling. The cost per job created is much lower than the figure for creating jobs through investment in new airport capacity. Meeting predicted demand by expanding infrastructure (e.g. at Bristol Airport) would absorb large amounts of resources, which could arguably be better used in other ways.

Removal of the subsidies and investment of the resources gained in more sustainable employment would have both economic and environmental advantages. Examples of subsidy in the European Union include 17.5 billion Euros per annum because there is no taxation on aviation fuel, 6.5 billion Euros because tickets are zero rated for VAT purposes and direct subsidies such as 3.4 billion Euros to Air France in 1994 and 2.11 billion Euros to Olympic Airways in the same year (Whitelegg, 2001).

- The theoretical justification made by OER for the links between aviation and economic growth is weak. It is claimed for example that excellent air services are a key factor in foreign direct investment (FDI) decisions and that the UK leads Europe in terms of FDI at least partly because of excellent accessibility by air. No convincing evidence has been produced to justify this claim. Good air services are necessary but any incremental enhancement from an already high level is unlikely to make a significant difference compared with other advantages that the UK offers such as language and financial incentives (Airports Policy Consortium 1999). There is a further weakness in the FDI argument, which relates to regional airports. Regions are in competition for FDI. New airports are being promoted in almost every region of the UK specifically on the assumption that they will bring more FDI. The consequences of this are that more airports and regional development agencies are pursuing the total available FDI. This inevitable leads to diminishing returns. The airport capacity is then used by tourists and package holidays. Liverpool airport has long used regional development arguments to support its expansion and its biggest user is now EasyJet providing very low cost tourist flights. The regional development arguments in Liverpool have increased the demand for air travel in a way that does not bring any FDI benefits. This is being repeated in Bristol.

- Measuring or predicting the impact on local employment of transport investments is still a very inexact science. This was one of the main conclusions of the SACTRA report (1999) on transport and the economy. In aviation the situation is even more complicated than that described by SACTRA because of the variability in choice of multiplier e.g. very different multipliers have been used for Manchester Runway 2 and Heathrow Terminal 5 without explanation.

2.8.2 Taking these arguments into consideration, the bullish claims made in the OEF Report lack credibility. Moreover, given the negative economic effects of the environmental impact of aviation (for example defensive health expenditures) and the large resource take that would be required to cope with predicted levels of air travel, it is by no means clear that unrestricted growth of air travel would benefit the economy. It is more probable that a restriction of air travel would have beneficial economic effects in addition to environmental and quality of life gains. These would include the following:

- Reduced defensive health expenditures as a result of reduced pollution. These are estimated to be around £20 billion pa for road transport alone (Maddison et al 1996). a more efficient allocation of resources, especially if subsidies to aviation are reduced

- Reduced congestion, labour market inflation and housing market inflation at and near major airports

- Scaling down and reallocation of the annual £9.2 billion subsidy from the taxpayer to aviation (Sewill, 2003).

3. The problem with job creation arguments

3.1 Large scale development projects frequently create jobs within a given area. The difficulty that arises in any quantification of job creation estimates is the degree of accuracy that can be obtained in the calculation. Such calculations often depend upon other inventions and expenditures such as; housing, schools, grants, roads, and derelict contaminated land clearance, in order to make them 'work'. Total project costs (e.g. the cost of expanding BIA facilities to 2015 with a view to handling 9mppa) will not capture the total costs of creating jobs and cannot redeem the external public costs (e.g. more traffic congestion, pollution, noise, and health problems). Projects leading to job creation will inevitably lead to public and private expenditure that could arguably be invested in alternative and more 'efficient' job creation schemes than the one that has been chosen.

The issue arising from the debate surrounding direct job creation capacity through aviation is not that this capacity doesn't exist. It does, and some direct jobs will be created through it. The problem is that there is no clear public policy ranking and prioritisation process in place in order to evaluate the relative performance of different ways of creating jobs. When set against a range of alternative strategies for creating jobs, this represents a departure from "best value" thinking and methodology to blindly accept the assumption that regional airport expansion is "best value".

3.2 A problem also arises in the arithmetic surrounding these assertions.

A study of 16 airports that included Manchester and Liverpool (DTZ Pieda Consulting, 1999) concluded that the ratio of direct employment (on and off airport) ranged from 521 to 2550 passengers per full time equivalent employee with an average of 1160. Put more simply this means that (very approximately) every 1000 passengers "create" 1 full time job and every million additional passengers creates 1000 jobs. The problem with the arithmetic is that averages are misleading. Individual circumstances, the balance of scheduled versus charter flights, the importance of low cost airlines and the preferences of airlines and others for creating jobs well away from the region (e.g. British Airways engine maintenance in Cardiff and software support in Bangalore, India) all make these numbers very unreliable indeed.

3.3 BIA forecast significant growth in employment in line with development plans and with special reference to the wider economic impacts this will have on the region as a whole. In order to calculate future employment generated by the Airport, a distinction is made between direct, indirect and induced employment:

Direct employment: employment generated by activities on site at the airport. These include the airlines, shops and other concessions, catering, ground engineering and handling, air traffic control and car parking facilities.

Indirect employment: employment generated through activities off-site by organisations and companies supplying goods and services to the Airport. These jobs may be locally based or more remote from the Airport, depending upon the nature of the supply chain

Induced employment: employment generated through spending habits of salaried employees both in direct and indirect activities. This category is likely to provide jobs at regional level.

3.4 In the case of both indirect and induced it is common practice to use "employment" multipliers to produce an estimate of how many jobs fall into these categories. These multipliers in their turn come from other studies and consultancy projects and are rarely, if ever, validated through a rigorous "reality check".

The BIA in their DMP consultation document calculates indirect and induced employment figures. These are estimated using a generic multiplier of 0.3 as a means to calculate additional jobs associated with direct airport employment. Therefore, the 2,285 (full time equivalent) direct jobs currently held at the airport produce 685 indirect and 891 induced jobs. Based on this estimate, BIA calculates the total impact of the Airport in terms of employment to be circa 3,860 full time equivalent jobs in the region or sub-region of the airport facilities.

Table I: Direct, indirect and induced employment at BIA (2005 – 2030)

Year	Direct jobs	Indirect jobs	Induced jobs
2005	2,285	685	891
2015	3,650	1,095 – 1,140	1,423 – 1,482
2030	5,200	1,560 – 1,710	2,028 – 2,223

Source: BIA figures and own future estimates

The percentage growth in employment forecast at BIA to 2015 and 2030 greatly exceeds the rates of change in employment forecast for the sub-region and region. The percentage growth in direct employment is estimated between 60% and 66%, whilst the figures projected for 2015 for *all* direct and indirect employment associated with BIA are between 74 -80%. This compares with nation-wide figures for the period to 2016 of 35% growth in England and Wales, 19% in the SW and only 8% in the West of England sub-region.

3.5 With no validation processes available and in the absence of empirical checks on these multipliers, very little reliance can be placed on these estimates.

3.6 A further difficulty arises with multipliers and their relationship to indirect and induced employment figures. In regional and sub-regional economics these estimates are not constrained by actual employment numbers in different sectors of the economy. Put very crudely, it is perfectly possible and reasonable for every large employer in the region starting with Bristol University and progressing through all local authorities, NHS employers, Wrigley's, Hewlett Packard, Aerospace Engineering or other employers in the region and carry out the same multiplier calculation. The results of this exercise would produce an indirect/induced job total greater than the total employed population in the South West. Put clearly, multiplier calculations are seriously flawed because they involve massive double counting, no back-checking or validation and no constraints that mean the final total must not be greater than "X" where X is an actual employment figure. They are unreliable guides to the economic impacts of any sector of the economy and should be discarded in discussions around aviation.

3.7 A further problem with job creation and indirect employment creation arguments is that airlines and airports operate in a very cost-cutting competitive environment and will seek any opportunity to reduce labour costs as part of a streamlining and profit-taking strategy. Aviation is a volatile industry and any jobs created can also be lost in the next wave of cost cutting. A recent article about employment in aviation raised the specific issue of new technology:

The part of the ground staff that most concerns unions is check-in staff, of which the T&G has 3,000 in its membership. BA is introducing advanced check-in systems, along with self-service facilities, at terminals, which will reduce staff numbers. 'There is new technology coming to Terminal Five and we have real concerns about the numbers: there is going to be quite a substantial lowering. We think it could easily go down by a third.

And

Unions accept the need to alter old-fashioned working practices and understand that there are likely to be cuts among the workforce; senior BA managers estimate a reduction of between 10 and 15 per cent. 'They will need to change,' says a union official. 'But I have no feel for the numbers on jobs.'

Source: Observer, October 9th 2005
http://www.guardian.co.uk/ba/story/0,,1587989,00.html

3.8 Volatility in the aviation industry ranges across major cost-cutting exercises, reductions in pay and relocation strategies. Examples of all three are given in Appendix 2 and illustrate the fragile nature of claims that extra jobs created in Bristol can be relied on to stay there or generate a regional income multiplier effect.

3.9 Interestingly the view of senior people in the airline industry is that aviation is fundamentally a "bad business":

With the parents of United Airlines and US Airways already reorganising, four of the six legacy carriers - those that existed before deregulation in 1978 - are now in bankruptcy. Former industry executives conclude that flying is a fundamentally bad business. 'For a variety of reasons, including very intense competition, which limits any one carrier's pricing power, the airline industry has consistently failed to earn adequate profits; cumulatively, the industry has lost money since its inception,' said Robert Crandall, former head of American Airlines, last week.

Source: Observer, 18th September 2005
http://www.guardian.co.uk/airlines/story/0,1371,1572555,00.html

3.10 None of the calculations of job creation and multiplier effects at Bristol airport take into account the consequences of pay cuts and redundancies. Nor do they take into account the fundamental unsustainability of aviation, which cannot sustain low fares against a background of high, and increasingly high fuel prices and against a background of new forms of taxation on flying to deal with greenhouse gases and climate change. Then growth of aviation is an artificial bubble based on cheap oil and high subsidy and both are coming to an end. This is the worst time imaginable to invest in airport expansion:

"We face a difficult 24 months because of the unprecedented cost of fuel, which we believe will stay at historic high levels," Qantas chief Geoff Dixon said. Mr. Dixon confirmed Qantas would axe some of its 38,000 employees to bring its costs in line with oil prices."

Source: Guardian 19th August 2005
http://www.guardian.co.uk/airlines/story/0,1371,1552310,00.html

4. Airports and road congestion

4.1 Traffic congestion damages local, regional and national economies. UK national transport policy is entrenched in the acceptance of this economic damage and the importance of reducing congestion levels (10 Year Transport Plan). One frequently used estimate quotes an economic loss of £15 billion pa from traffic congestion. Maddison et al (1996) put the annual costs of traffic congestion at £20 billion.

4.2 According to the RASCO study, airport traffic would account for 30% of total traffic on the A38 in 2015, leading to congestion levels of 40% by the year 2030. Despite preliminary studies by BIA indicating that traffic levels at 9mppa will remain below the theoretical capacity of the A38, such levels of congestion would result in constrained access to the airport. BIA claims that on this basis, it is unlikely such constraints can be overcome without improvements to the road infrastructure. It follows therefore that aviation is responsible for a proportion of the economic damage identified in national transport policy documents and in Maddison et al (1996). This is a debit item in an audit of the costs and benefits of aviation and it has not been factored into any of the discussion of the economic impact of aviation. Furthermore, it will damage the economy of the South West region directly through economic losses associated with delay (time valuations) and indirectly through the loss of inward investment. Creating significant levels of traffic congestion through an expansion of Bristol airport will inevitably damage the regional and sub-regional economy as car drivers gaining access to the airport for cheap holidays abroad delay time sensitive business trips and logistic services.

5. The role of tourism. UK tourism deficit v. aviation

5.1 Aviation is predominantly a tourism industry. The number of passengers at UK airports more than trebled between 1980 and 2003, from 50 million to 177 million. Visits abroad by UK residents rose by 4% in the year during the 12 months ending August 2005, from 62.8 million to 65.6 million. In the same 12-month period, visits by overseas residents to the UK rose by 10%, from 26.9 million to 29.7 million.

5.2 Expansion schemes in aviation are usually justified through arguments in support of the leading edge, competitive and globalised context of the regional markets involved. However, it is important to recognise that over half of the use of airports particularly in the case of BIA, have nothing to do with this sector of the economy. Business trips currently account for 24% of all trips by air nationally and account for 20% of passengers at Bristol International airport. This compares to 80% of passengers who travel for leisure purposes.

In 2004, BIA handled a total of 4.6m passengers. 1.16 million passengers flew to UK destinations (25%) and 0.8 million (17%) flew to the key holiday destinations of Alicante, Malaga, Palma and Faro. In addition, approximately 0.5 (12%) million flew to Dublin and Amsterdam.

5.3 Visitors who leave the UK spend more in net terms than those who arrive in the country. In terms of expenditure, tourism is a net drain on the financial resources of the UK. The balance of payments deficit in aviation tourism in 2004 was approximately £17 billion. If we take the latest figures into account, the net deficit for the month of August in 2005 was £765 million.

Table II: Tourism Deficit in the UK. Balance of payments deficit in aviation tourism for the year 2004

Year	UK resident expenditure overseas (£ billion)	Overseas visitor expenditure in UK (£ billion)	Deficit (£ billion)
2004	30,284	13,048	17,236

Source: www. Statistics.gov.uk/STATBASE - Visits and Spending by UK residents abroad and overseas residents in the UK monthly series derived from the International Passenger Survey (IPS)

Despite recent increased visits from overseas residents, this deficit in expenditure accounts for a significant outflow of resources from the UK economy. *Nationally, the tourist deficit is £31 billion over a four-year period (Freedom to Fly – the economic case).*

5.4 The expansion of tourism aimed at overseas visitors cannot be regarded as an economic gain to the UK or to the South West region. According to government office statistics for the South West, overseas tourists to the region account for a mere 8% of all visitors. This compares to the estimated figure for overseas leisure passengers arriving in the UK through the BIA terminal, which at 6% (in addition to 2.6% inbound foreign business passengers), account for a small proportion of inbound tourism and does not equate to the loss of revenue generated by the 80% figure for outbound leisure passengers with international destinations.

5.5 The expansion of the market for overseas holidays and weekend breaks cannot be regarded as an economic gain for the UK or for the South West region. Of the total of 4.6m passengers handled at BIA in 2004, 15% of passengers used scheduled flights, 28% charter and a remaining 57% used low cost providers such as Easyjet and Ryanair. Bristol now offers a wide range of international services, many of which are flights with clear "holiday" destinations. This coupled with the competitive prices offered through the low cost "no frills" providers, has brought international destinations closer to the consumer. Overseas holidays represent a gain for the individuals taking a holiday but only in the same way as a trip to Bath, the Jurassic Coast in Dorset or a trip to Stonehenge or Avebury. Whereas trips made within a region or within the UK will generate revenue directly into the UK tourist sector, trips made abroad predominantly will not.

6. Inward investment and export markets

6.1 The presence of international air services has been linked to wider economic gains from the support this provides to business exports, supply chain procurement and access to overseas markets. The BIA Draft Master Plan identifies both of these considerations as having clear economic gains (Para. 6.9 pg 35 DMP). This is a very one-sided analysis of the situation.

6.2 Within the wider economic impact study of the BIA DMP, priority sectors within the South West which are to reap substantial benefits through increased air services are identified. According to BIA, future growth of five industries within the region is heavily reliant upon assessing world markets both for their customer and product base, and their export markets. These industries are as follows: Manufacturing, ICT and Creative industries, Environmental Technology and Biotechnology.

6.3 Through wider economic analyses of transport investments (SACTRA, 1999), it becomes apparent that increased opportunities for interaction and increased accessibility delivered through the construction of a new road or a new air service can work in both directions. Increased opportunities to reach export markets have a direct equivalence to increased opportunities for overseas businesses to penetrate the UK market. The result of this bi-lateral access to markets is that overseas businesses have the opportunity to displace local or regional suppliers in terms of market share. This phenomenon is ignored in the economic considerations provided in the BIA Draft Master Plan. This is surprising given its prominence in SACTRA (1999):

"Studies in economic geography confirm that there is a no guarantee that transport improvements will benefit the local or regional economy at only one end of the route – roads operate in two directions, and in some circumstances the benefits will accrue to other competing regions".

Source: Para 40, pg. 22, SACTRA, 1999

6.4 In addition to these wider considerations, the arguments outlined in the DMP in support of expansion show certain contradictions. If the export activity of a region is related to the economic growth of the region then surely BIA should cater for increased freight capacity at the Airport. Within the DMP no mention is made with reference to expansion processes for cargo shipping. BIA intends to "improve the strategic communications to support business needs" but no new flight routes are offered to support this claim up to 2015.

6.5 Data for the UK as a whole show that the amounts of money invested by UK companies abroad is higher than that invested by overseas businesses in the UK. If there is a link between the enhanced accessibility provided by international air services (as the aviation industry and the consultation document claim) then it works to the disadvantage of the UK and supports a net outflow of resources. Put very simply potential jobs in the UK are sacrificed for the benefits of investing abroad. Whilst we would not wish to claim that this job loss and net outflow of funds should be «laid at the door» of aviation we also wish to question the logic of the opposite assertion from the industry itself. Inward investment cannot be claimed as a benefit of airports or aviation. If it is claimed then equal weight has to be given to the debit side of the balance sheet. The balance sheet shows a substantial net deficit ($313 billion over a 5 year period). This is £190 billion over 5 years or approximately £38 billion each year. This is shown below:

Table III: Inward Investment and Outward Investment in the UK, 1997-2001

	Inward Investment (billion $)	Outward Investment (billion $)	Deficit (billion $)
1997	33	62	-29
1998	74	123	-49
1999	88	201	-113
2000	117	254	-137
2001	54	39	15
	366	679	-313

Source: United Nations Conference on Trade and Development (UNCTAD), World Investment 2002, Transnational Corporations and Export Competitiveness (September 2002), quoted in "It's the Economy, Stupid", HACAN, 2003

6.6 This net deficit has a direct equivalence in job losses. If we accept that the cost of creating a job in the UK is approximately £23,000 (National Audit Office, 1999) then this outflow represents a job loss of 1.65 million each year for 5 years (£38 billion divided by £23,000). Taking the SW contribution to GDP as approximately 9% of the UK total (Office of National Statistics, 2001) a rough approximation of the annual job loss to south west England as a result of investment abroad is 104850. This job loss is facilitated by the development of air services and the aviation industry.

7. Conclusions

7.1 There is no economic case for expanding BIA. All the gains to local businesses, export-oriented growth, research, development and innovation can be handled within present capacity limits. The pressure to grow BIA has nothing to do with these virtuous improvements in business efficiency, logistics or inward investment. It has everything to do with the urge to earn higher profits from a large car parking business and the development of budget airline tourism.

7.2 The basic argument underpinning an economic rationale for expansion is fatally flawed. If airport expansion is constrained and fewer people fly then those people will still spend their money. They will spend it on other things and these other things will still feed the local economy and create jobs. The spending may even create more jobs than would be the case if the money were spent on flying. This rationale is very clearly explained by the Institute for Public Policy Research in London:

". future consumers spend their money elsewhere. In doing so they would support a different distribution of jobs and economic output. There is no automatic reason to assume that fewer jobs will exist in the economy if aviation grows slower than forecast. In fact there could be more jobs and more GDP, because no account is made of tax concessions (to aviation) that would cast doubt on the value added by growth in aviation and might mean that constraining the industry might actually increase national welfare and increasing accessibility between two countries or regions may sometimes benefit one at the expense of another" (IPPR (2003), page 22)

7.3 This report has not considered the enormous environmentally negative consequences of the growth of global, UK or SW aviation. The impact of aviation on climate change is now well understood (Stockholm Environment Institute, 2004) and is severe. Government has calculated that we should cost greenhouse gas emissions at £70-£100 per tonne. The impact of aviation on human health (e.g. through noise) and on traffic congestion is also large. Within this wider remit of environmental economics the costs and benefits of expanding Bristol airport point inexorably towards a very high negative balance.

7.4 If the objective of expanding BIA is to improve the economy of the SW and, by extension of UK PLC, then this has to be subjected to a very wide ranging process of option identification, option assessment, sustainability appraisal and best value analysis. All this is part and parcel of government policy and it has not been done. This process would reveal that there are far better ways of assisting the SW to accelerate the transition to a sustainable, secure and attractive economy. This economy would be resistant to the loss of investment (the Dyson effect, named after the founder who developed a successful UK business and then relocated to Singapore), it would be based on a high quality environment and on world best public transport that allows staff to access employment opportunities in a way currently denied to them by some of the worst public transport and highest fares in Europe.

7.5 The proposal to expand BIA is based on poor analysis, poor evaluation, inadequate economics and a naïve belief in the ability of one very heavily subsidised sector of the economy to deliver jobs.

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Appendix 1
Draft Master Plan Commentary

The following is a summary of the plans and claims made by BIA in its Draft Master Plan. Comments upon future plans for the expansion of Bristol International Airport and discussion of the wider economic issues involved can be found in the main body of this report.

1. Introduction

In 'The Future of Air Transport' White Paper published in December 2003, the government sets out a framework for the development of airport capacity in the UK. According to the paper, air traffic demand is projected to increase by a factor of 3 by 2030 and failure to deal with this increase could have serious economic consequences.

In respect of regional airports, the ATWP cites airport growth as providing the following benefits; supports the growth of regional economies, provides relief for congested airports, particularly in the South East, reduces the need for long distance travel to and from airports and gives passengers' greater choice.

The White Paper states that there is significant potential for growth at airports in the South West and that this will generate substantial economic benefits for the region. Bristol International airport is identified as having the main potential for growth in the South West. The White Paper allows for an increase in passenger numbers to 12mppa and a runway extension.

Within this framework, the government supports the development of BIA (subject to certain conditions) in order to meet the projected increase in passenger numbers of between 10 and 12 million per year.

The following summary and comments have been taken largely from the Bristol International Airport (BIA) Draft Master Plan, September 2005 and the study of the wider economic impacts undertaken as part of the draft master plan completion. The purpose of the Draft Master Plan is to outline BIA's plans for infrastructure development between the period 2005 and 2015, yet also taking into account development issues that might be faced and indicative proposals for development for the subsequent period 2016 to 2030.

2. BIA development objectives

The role of the BIA is to meet the needs for air travel within the SW as the main airport serving the region. Bristol International Airport (BIA) Master Plan claims that in developing air services it will meet the following objectives:

- Play a leading role in the economic development of the SW Region by providing increased scheduled services for business
- To provide increasing choice and opportunities for leisure travel by residents within the airport catchment area, reducing the need for passengers to make surface journeys to airports outside the region
- Act as a gateway for tourists visiting the SW and the UK in general; and
- To provide connecting services linking the Far South West to the BIA route network, providing both businesses and leisure travel opportunities and reducing the effects of peripherarilty.

Source: BIA draft Master Plan (pg16)

3. BIA in 2005

BIA is the tenth largest airport in the UK. The airport today serves a network of 37 non-stop international and domestic scheduled destinations with an additional 52 routes operated by charter airlines. The airport provides services through a mixture of scheduled, low cost "no frills" and charter airlines in order to provide competitive prices and services for both business and leisure passengers.

In 2004, BIA handled a total of 4.6m passengers, of which 15% of passengers used scheduled flights, 28% charter and a remaining 57% used low cost providers such as easyjet and Ryanair. Less than 4% of passengers have origins or destinations outside the SW region and travellers from outside the region such as those from Wales also use the airport.

Table I: General activity at BIA in 2004

Total no. of terminal passengers (arriving and departing)	4.6m
No. of passengers on scheduled services comprising:	3.3m
Domestic passengers	1.3m
International passengers	2.0m
No. of passengers on charter services	1.3m
Total no. of aircraft movements	77,956
Total number of air transport movements (ATM's) comprising:	56,079
Scheduled	46,524
Charter	9,555
Non-commercial aircraft movements, including	21,877
General aviation	21,444
No. of ATM's associated with Royal Mail Skynet service	1,377
No. of Tonnes of air cargo handled	7
No. of Tonnes of mail handled	5,050

Source: BIA data – Draft Master Plan

The general characteristics of BIA passenger traffic in 2004 are as follows:

- 20% of passengers using BIA were travelling for business purposes
- 80% of passengers were travelling for leisure purposes
- 6% of passengers were foreign leisure passengers
- 2.6% of passengers were foreign business passengers

BIA claims that the airport has a higher proportion of passengers flying for business purposes (20%) than many other airports in the UK, including Gatwick, Stanstead, Nottingham East Midlands and Cardiff.

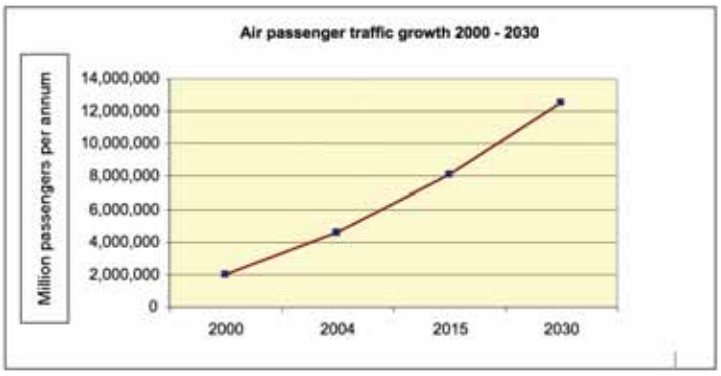
Analysis of the catchment area shows that in 2003, 45% of passengers came from the former county of Avon *(Source: CAA survey 2003/2004)*. This comprises 25% from Bristol, 7.4% from North Somerset, 7.3% from Bath and 5.5% from South Gloucestershire. Somerset and Devon accounted for 10% and 13% of passengers respectively.

4. BIA development forecasts

The general characteristics of the BIA passenger traffic can be seen in the following chart.

BIA has enjoyed significant growth over the last ten years, averaging 13.3% passenger growth per annum. The UK average growth rate for the same period stands at 5.9%. The number of passengers using the airport has doubled from under 2mppa in 2000 to 4.6mppa in 2004. The BIA Draft Master Plan predict forecasts of traffic growth of 8.1mppa by 2015 - a growth rate of 78% compared to 2004 figures - leading to 12.5mppa in 2030. This predicted growth rate is shown in the graph below.

Figure I: BIA estimated growth in passenger figures to 2030



The above predictions are based upon the growing traffic demand from the airport catchment area and estimations of their respective market share in airport passenger traffic. *(The areas considered as 'catchment' in the DMP are the following: SW – near SW, Far SW and Dorset, including parts of Wales and the Midlands).* The figures have also been reached by calculating average annual growth rate for the SW catchment area which has been estimated at 4.8% for the period up to 2015 and 4% thereon.

Average traffic growth for the airport is predicated at **6.3%** per annum for the period to 2015, when it is forecast to drop by the 2030 by a rate of **2.9%** per annum.

The majority of growth is predicted to take place in the low cost carrier sector with less growth in scheduled services. The route network is forecast to continue to be dominated by European short-haul destinations. A market for long haul destinations is forecast but in the period to 2030 the number of destinations that can be supported remains limited.

No forecasts have been prepared regarding freight traffic activity.

Table II. Bristol International Airport traffic forecasts ('000)

Traffic Type		2004	2010	2015	2020	2025	2030
Domestic	Existing routes		1,148	1,636	1,841	2,071	2,330
	New Routes	1,289	191	215	315	426	478
	Total		1,638	1,851	2,156	2,497	2,809
Short haul international scheduled	Point to point		3,275	4,047	4,658	5,403	6,231
	Connection to long haul		163	189	218	253	292
	Total	1,959	3,438	4,236	4,877	5,655	6,523
Long haul scheduled	Point to point		20	157	134	234	338
	Connection to long haul		181	226	283	354	443
	Total		200	383	417	588	781
Holiday Charter	Long Haul		156	178	232	303	396
	Short haul		1,263	1,428	1,589	1,768	1,968
	Total	1,284	1,419	1,606	1,821	2,072	2,364
Grand Total		**4,532**	**6,695**	**8,076**	**9,271**	**10,812**	**12,476**

Source: BIA DMP Para. 5.13 (pg. 31)

The BIA refers to the ATWP which identifies significant growth potential for the airports in the SW, maintaining that this growth will generate substantial economic benefits to the area. According to the ATWP and the RASCO Study, there is an estimated "leakage of 70% of passengers using airports in adjacent regions (one of the highest in the UK), and characterises the SW as having one of the lowest propensities to fly. The development of services and frequency of flights from the airport will enhance the number of SW passengers and significantly reduce the need to use airports outside the region. This is coupled with the need to reduce long distance surface journeys mainly undertaken by road and thus make better use of airport capacity.

5. Economic and social considerations

This section of the BIA Draft Master Plan begins by citing the Aviation White Paper assertions on airport development and their importance for both local and regional economies. According to the report, they attract business, generate employment and open up wider markets. In addition to these benefits, the ATWP states that there are likely to be considerable opportunities to attract inward investment and inbound business travel with specific reference to the SW.

For the following sections, comments have been drawn both from the DMP and from the Economic Impact Study commissioned (July 2005) as a part of the preparation of the Draft Master Plan and aimed at assessing the direct and indirect economic impacts of the BIA growth refers to the areas of employment, labour and skills, tourism and inward investment, competitiveness and regeneration.

5.1 Employment

Employees at Bristol airport are drawn from a wide catchment area, primarily from the West of England sub-region. The distribution of staff has been taken from employees travelling to Wrington Ward. This Ward includes workplaces other than BIA yet it is considered to be representative, as the airport constitutes the overwhelming employer in the area.

Table III. Residence place of staff in Wrington Ward

Area of residence	% of Workers
North Somerset	46.4
Bristol	18.7
South Gloucestershire	11.7
Bath and North East Somerset	4.6
Somerset	10.0
Wiltshire	1.9
Rest of South West	3.0
Outside South West	3.6

Source: Census 2001 (Wider Economic Impacts – 59)

Table III illustrates that the supply of labour is concentrated in North Somerset, largely due to easier access conditions to the Airport. BIA is within close proximity to two of the SW regions most deprived areas: South Bristol and Weston Super Mare. 5% of workers are drawn from the six South Bristol deprived wards and 10% from Weston Super Mare. The current and future work-force within the region has a range of skills and qualifications to service employment growth within the Airport's operations. Indeed, the low skills base in the deprived wards constitutes an opportunity for the Airport to fill the less-skilled posts.

Employees at BIA work out of 49 separate businesses which operate on the Airport site, including Bristol International Airport Ltd, the airport company. At the airport, employment is distributed across a wide range of jobs in the following categories: Airlines, Non-airline Ground services, Retail concessions, Airport authority, Transport & Parking, Catering & Cleaning, Security, Aerodrome leisure and helicopter services.

Average gross salaries within the on-site businesses range from £9,000 per annum to £55,000 per annum.

Recent employment figures at BIA have increased from 2,160 in 2003 to 2,577 in 2004. The number of employees working at the airport in April 2005 was 2,653. This figure equates to 2,285 full-time employed staff. Employment at BIA accounts for 0.45% of the employment in the West of England sub-region and 0.11% of all employment in the SW. Equally, all direct, indirect and induced employment associated with BIA accounts for the equivalent of 0.7% of employment in the West of England sub-region and 0.17% of all employment in the SW (Wider economic impacts – 5).

BIA forecast significant growth in employment in line with development plans and with special reference to the wider economic impacts this will have on the region as a whole. In order to calculate future employment generated by the Airport, a distinction is made between direct, indirect and induced employment:

Direct employment: employment generated by activities on site at the airport. These include the airlines, shops and other concessions, catering, ground engineering and handling, air traffic control and car parking facilities.

Indirect employment: employment generated through activities off-site by organisations and companies supplying goods and services to the Airport. These jobs may be locally based or more remote from the Airport, depending upon the nature of the supply chain

Induced employment: employment generated through spending habits of salaried employees both in direct and indirect activities. This category is likely to provide jobs at regional level.

The number of direct future employees has been calculated based on an assessment of the predicted passenger growth and the potential development deriving from it. It is estimated that employment figures will increase from between 3,650 and 3,800 jobs in 2005, and to between 5,200 and 5, 700 jobs by 2030.

Indirect and induced employment figures are estimated using a generic multiplier of 0.3 as a means to calculate additional jobs associated with direct airport employment. Therefore, the 2,285 (full time equivalent) direct jobs produce 685 indirect and 891 induced jobs. Based on this estimate, BIA calculates the total impact of the Airport in terms of employment to be circa 3,860 full time equivalent jobs.

Table IV: Direct, indirect and induced employment at BIA (2005 – 2030)

Year	Direct jobs	Indirect jobs	Induced jobs
2005	2,285	685	891
2015	3,650 – 3,800	1,095 – 1,140	1,423 – 1,482
2030	5,200 – 5,700	1,560 – 1,710	2,028 – 2,223

Source: BIA figures and own future estimates

The percentage growth in employment forecast at BIA to 2015 and 2030 greatly exceed the rates of change in employment forecast for the sub-region and region. The percentage growth in direct employment is estimated between 60% and 66%, whilst the figures projected for 2015 for *all* direct and indirect employment associated with BIA are between 74 -80%. This compares with nation-wide figures for the period to 2016 of 35% growth in England and Wales, 19% in the SW and only 8% in the West of England sub-region.

For the period to 2030, BIA is expected to grow 129-149% in direct employment and 139% - 156% in all direct and indirect employment.

According to the Wider Economic Impacts report, these forecasts confirm the importance of BIA as an employer in the region and sub-region as it is expected to double in its contribution to employment.

According to the draft report West of England Development Strategy, expansion activity at BIA has a wide-ranging impact on the local and regional economies: "It is estimated that the introduction of the direct flight to New York in the summer of 2005 will have a small but important impact on direct and indirect employment in the local economy contributing a further 62 jobs and supporting a total of over 450 jobs in the regional economy through the spending of inbound tourists". The report also cites the likelihood of securing inward investment to the region in the future as a result of direct flights to the USA, especially in sectors which are reliant on the use of air transport.

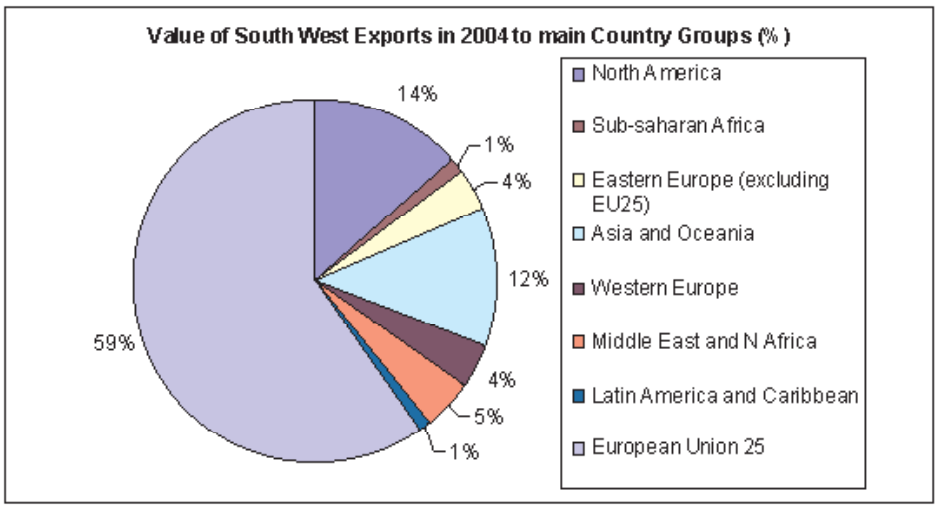
5.2 Exports in the South West

BIA argues that 'external communications' (i.e. airports) are particularly important since exporting capacity is critical to success. BIA claims that airports are critical; "they facilitate face to face communication, which has been supplemented not replaced by technological communication" (para. 6.9 pg 35 DMP).

Over £9.7bn of exports were attributable to South West businesses in 2004. Manufacturing is the key industry sector responsible for exports from the South West region and accounts for over 96% of the value of all exports and 85% of export traders in the SW.

The European Union's 25 countries account for 60% of all SW business exports and have a value of over £5.8bn. North America and Oceania/Asia represent two other groups of particular importance to the SW export economy with a value of £1.3bn and £1.2bn respectively.

Figure II: Exports and South West businesses



Source: Wider Economic Impacts (DMP) Appendix C, Para. 11

Forecasts for employment in the priority sectors within the SW export activity can be seen in table V on page 28. These priority sectors are predicted to experience an average growth rate of 4.4% over a 5 year period. Therefore, by the year 2026, these sectors are expected to provide up to 418,000 jobs. Although the food and drink and advanced engineering sectors are forecast to enter a period of decline, the remaining five sectors are expected to expand. Tourism and Leisure, ICT and Creative Industries are the largest providers of employment in the region. By the year 2026, they are expected to provide 79% of total employment in the regions priority sectors (320,000 jobs).

Supply chain procurement and customer access to markets are reliant on the quality of communications. For those businesses particularly reliant on exporting, access to markets in Europe are important for business development.

Table V: Employment forecasts for each of the priority sectors in the South West

Priority Sectors	2001	% of 2001	2011	2016	2021	2026	% of 2026	5 yearly average % change (2001-2006)
Food and Drink	85,400	26.17	60,000	55,000	55,000	55,000	13.2	-11.10%
Advanced Engineering including Aerospace	57,200	17.53	52,000	49,000	48,000	45,000	10.8	-5.40%
Marine Technologies	11,100	3.4	10,000	10,000	10,000	10,000	2.4	-2.20%
Tourism and Leisure	76,300	23.38	95,000	103,000	110,000	115,000	27.5	6.70%
ICT	66,600	20.41	82,800	100,800	116,800	132,800	31.8	10.10%
Creative Industries	51,100	15.66	55,000	60,000	65,000	70,000	16.8	5.40%
Environmental Technology	20,400	6.25	25,000	27,000	30,000	35,000	8.4	8.30%
Biotechnology	9,300	2.85	15,000	20,000	25,000	25,000	6	12.60%
All key sectors	326,300	100	340,300	364,800	394,800	417,800	100	4.40%

Source: Key and Emerging Sectors in the Knowledge Economy in The Knowledge-Driven Economy, Regional Economic Strategy and Regional Spatial Strategy in the South West of England, Report to the SW of England Regional Development Agency, February 2005. As taken from: Wider Economic Impacts - Interim Executive Summary, BIA Draft Master Plan (Para. 18)

With reference to location and potential benefits of BIA to businesses operating within these priority sectors, the following conclusions have been drawn in the Wider Economic Impacts report:

- Both ICT and creative industries are well represented in the sub-region of BIA and are equally reliant on assessing world markets for their products and customers

- Environmental Technology and Biotechnology sectors are both reliant on export markets for achieving growth and in turn demand more and better communications and air services to access overseas markets.

Source: Wider Economic Impact, BIA Draft Master Plan, Appendix C, (Para. 23/24)

5.3 Inward Investment in the South West

With reference to inward investment, competitiveness and regeneration, the arguments outlined in the Draft Master Plan are largely taken from the "Competitive European cities" report* (p35) and refer to the internal and external connectivity of cities as key characteristics to gaining economic competitiveness. According to the DMP, the most successful cities have "the physical and electronic infrastructure to move goods, services and people quickly and efficiently".

The South West business environment is characterised as comprising strong business clusters across all sectors using a combination of traditional and emerging technologies. There are currently over 1,200 international companies established and operating within the region, e.g. Hewlett Packard, Orange, Honda, Airbus, Wrigley's and JP Morgan Chase.

The SW has a good record of business start and survival and rates are significantly higher than the UK average. BIA currently contributes £1.3m per annum to North Somerset Council in rates and claims to be one of largest rate payers in the region. Rates are significantly higher in the region due to the following factors: businesses are served by a skilled workforce, access is available to some of the leading research universities, including Bristol, Bath, Exeter and Plymouth and the workforce is growing at a rate which exceeds the UK average.

In addition to the central governments' backing of inward investment strategies targeting all priority sectors in the region, promotion of business investment is tantamount to capitalising on internal strengths within a region. In the SW, the above mentioned consolidation of business clusters and quality of labour are factors which contribute to the SW as a strong base for business investment. These factors, coupled with good infrastructure and communications are the key to growth in exports and attracting inward investment.

The SW is the most popular region in the UK for relocation as it offers easy access to the UK and comprises Europe's key business centres and export markets.

5.4 BIA and business in the South West

As part of a wider study on the economic impact of the growth plans at BIA, a survey of private sector businesses within the priority sector was conducted in June 2005. Businesses were asked to rank frequency of use of regional and national airports, the importance of development plans to their businesses and the extent to which their businesses had been growing and are linked to export markets. The results of the survey are summarised below:

Table VI: Use of Airports by South West businesses

Frequency of use	Overall score 1=most frequently used	Rank
Bristol International airport	2.79	1
London Heathrow airport	3.40	2
London Gatwick airport	5.17	3
Exeter International airport	7.07	4
London Stanstead airport	7.24	5
Newquay airport	7.93	6
Bournemouth International airport	8.00	7
Plymouth City airport	8.10	8
London City airport	8.64	9

Source: Wider Economic Impacts, BIA Draft Master Plan, Appendix C (Para. 46)

BIA was ranked overall in the survey as the most frequently used airport, although, London Heathrow was ranked by 43% of businesses as most frequently used compared to BIA at 29%.

With reference to business turnover and exports, 50% of businesses reported that their turnover has risen over the past 3 years. Of those businesses involved in exports, these account for over 35% of turnover.

The majority of priority sector businesses see a close and important link between BIA growth plans and their current and future businesses, especially those reliant on export markets or those reliant on business clientele and tourist visitors travelling to the SW from European and international destinations.

The social impacts of air travel according to the BIA are as significant as the economic benefits. They define the social benefits as those derived from foreign leisure travel and tourism, citing that both inbound and outbound tourism will increase due to factors such as disposable income, exposure to remote locations through television and the internet and declining insularity.

Additional social factors which will increase demand for air travel from Bristol are noted below:

- Connecting communities to services, such as further education, with four universities within Bristol and Bath;
- Enabling remote and island communities to participate more fully in Europe, thus promoting social inclusion;
- Visiting friends and family both for European residents, within the UK and for ex-patriots living abroad;
- Cultural, sport and educational exchanges
- Facilitating access to SW attractions and events, such as The Glastonbury Festival, Cheltenham Festival and events at the Millennium Stadium.

Source: BIA Draft Master Plan, Para. 6.13 - Social considerations (pg 36)

6. Development requirements

BIA's approach to the development of the airport is not only based on providing facilities to meet the demand of increased air traffic in the SW, but also to meet these provisions through sustainable means, minimising impacts of the development on the affected communities.

6.1 Development requirements to 2015

The detailed DMP has been prepared on the basis of a passenger throughput of 9mppa. This forecast has been estimated to be reached by the year 2015. In order to handle passenger numbers of this calibre, the following facilities are to be developed within the expansion process:

- Passenger terminal
- Aircraft parking apron
- Car parking for passengers and staff
- Landside and airside ancillary areas
- Runway and taxiway

The current occupational boundary of the airport constitutes 176 acres of land. Expansion would require a further 24 acres of land situated to the south of the airport. BIA claims that this land-take is one of the lowest of any UK regional airport.

BIA forecasts of passenger growth figures call for the need to provide additional terminal building capacity. The terminal building is already operating at or near its capacity at peak periods, leading to a reduction in passenger service standards. At present BIA estimates that the building can continue to operate until 2009 when passenger numbers will exceed 6mppa. The regions travel needs will be significantly compromised should this development not occur. In addition to these factors, the terminal building has operational processing capacity (e.g. check-in facilities, security search, baggage reclaim) and safety limits on capacity. In an increasingly busy terminal, these constraints will have an adverse effect on airline punctuality, which in turn will deter airlines from introducing or expanding existing services.

Airlines operating out of BIA such as British airways and Easyjet among others, station their aircraft overnight in order to allow for early morning flights on the following day. By operating between three and four return flights in the core operating hours of 06.00 and 23.00, airline companies can maximise the use of their aircraft. BIA state that this activity creates peaks in the operating schedule which calls for demand for new facilities. BIA refers to the International Air Transport Association and the "World Scheduling Guidelines" (p40) in support of their argument; procedures for scheduling are set out in these guidelines and cite that the primary solution for airport congestion is capacity increase. BIA accepts that schedule adjustments and coordination to control growth of airport facilities in congestion conditions are feasible, yet only when all possibilities of developing the facilities of airports have been exhausted (as in the case of Heathrow where capacity is constrained). The case for developing the BIA on off-peak growth is limited as it would have the effect of capping demand to an estimated level of around 6 to 6.5 mppa. BIA therefore concludes that demand cannot be managed within peak scheduling and growth is the favoured option.

BIA estimates that in addition to the current provision of 12 stands, up to 30 more aircraft stands may be required to deal with a prediction of 9mppa.

6.2 Development requirements to 2030

The White Paper suggests that a runway extension will be needed in order to cope with demand beyond 8mppa. By the year 2030, BIA anticipates a passenger throughput of 12mppa. BIA recognises that its runway length may be a constraint on the range of long-haul destinations they can serve in the future. In order to deliver the capacity needed to handle the above passenger estimate, the construction of a second terminal and a runway extension of 400m are proposed. BIA state that unless the runway is extended, the majority of long-haul passengers will continue to fly from airports in the South East.

Potential new long-haul routes to be covered which are not currently served: Chicago, Toronto, Dubai, Washington, Florida, Caribbean, Kenya, Karachi, Bombay, Atlanta, and East Africa.

There is a limit to the land available at the existing terminal site, on the north side of the runway. The White paper suggests that this could deliver up to 8mppa, beyond which a second terminal would be required on the south side of the runway.

Transport and Parking

According to the RASCO study, airport traffic would account for 30% of total traffic on the A38 in 2015, leading to congestion levels of 40% by the year 2030. Despite preliminary studies by BIA indicating that traffic levels at 9mppa will remain below the theoretical capacity of the A38, such levels of congestion would result in constrained access to the airport. BIA claims that on this basis, it is unlikely such constraints can be overcome without improvements to the road infrastructure.

Car parking for passengers and staff

As employment and passenger numbers grow at the Airport, BIA has devised a provisional surface access strategy for the period 2006 to 2011 identifying the need to achieve a balanced solution for car parking which:

- Provides the best opportunities for passengers to use public transport;
- Maximises the use of existing airport land for car parking
- Minimises the impact of airport development on the green belt by concentrating airport land in one place;
- Minimises the visual impact of airport development.

The report targets achieving a 10% annual increase in the proportion of passengers using buses to get to the airport. Drop offs and pick ups have also been targeted as negative factors in the report as these generate twice as many trips to the airport compared with a car parked at the airport. BIA therefore discourages limiting the supply of car parking as this would have a more adverse effect on the environment through traffic congestion and deteriorating air quality. Limiting car parking would also encourage anti-social parking in the surrounding area by airport users. Employees at the Airport are expected to continue using their cars to access the airport and provision is made for 1,300 staff car parking places for the 9 mppa forecast.

Further to the above mentioned expansion process, BIA has also made provisions to locate an on-site airport hotel. Only two other airports handling more than 2 mppa do not provide an on-site hotel (Prestwick and Belfast City). Overnight provision is met by guest houses and hotels in the city centre, which currently operate at occupancy rates of 70%. Airport hotels largely operate at 75 – 80% occupancy rates, an indication say BIA of the demand for on-site hotels. Such a core, on-site facility is expected to provide for passengers and air crew staying overnight, delayed flights, business meetings and conferences in order to limit off site transportation needs. This will allow passengers with early morning flights to arrive the previous day using public transport, consistent with BIA objectives to promote sustainable transport to the airport.

Appendix 2
Redundancies, pay cuts and relocation in the aviation industry

Here are a sample of recent news stories that illustrate the volatile nature of the aviation industry and the insecure nature of the jobs it provides.

Manchester News – Wednesday, 13th February 2002

Airport fears as BA axes 5,800 jobs

BRITISH Airways staff at Manchester Airport were facing job losses today after the company announced plans to slash 5,800 posts.

The company has 1,500 staff based at the airport - including pilots, cabin crew, check-in staff and engineers - and at its call centre in Didsbury.

Those affected will be offered voluntary redundancy as BA launches a two-year streamlining programme.

Under the Future Size And Shape Review revealed today, eight routes will transfer from Gatwick to Heathrow, while BA plans to cut 10 as yet unnamed routes, five long-haul and five short-haul.

But plans to scrap routes will not affect Manchester.

BA - which hopes to save £650m by March 2004 - plans to move six 123-seat Boeing 737 jets out of its Manchester fleet and replace them with slightly smaller RJ100s.

Sixteen of the smaller jets are being moved out of Gatwick and will be shared between Manchester and Birmingham.

While the company is shedding 60 jobs on the Isle of Man, where Manx Airlines will become part of BA, staff at Manchester were relieved that no compulsory redundancies have yet been announced.

BA has previously said it will close its maintenance hangar at Manchester Airport with the loss of 120 jobs in March.

Today's news of job losses comes on top of an announcement by BA in September to axe 7,200 posts.

Pay cuts

In recent months BA staff have accepted pay cuts of up to five per cent to help the company, which lost £160m in the final quarter of 2001.

Roger Lyons, general secretary of the union AMICUS, which represents a large number of BA staff, said: ''We will explore all avenues in partnership with the company to get through this and help BA position itself to take advantage of better times when they arrive.''

BA chief executive Rod Eddington said: ''We must transform British Airways into a simpler, leaner, more focused airline so we can thrive and prosper in an increasingly competitive market.''

But he added: ''We will not become a no-frills airline nor will we launch one.''

- The number of people claiming unemployment benefit fell unexpectedly last month to its lowest level since last September, new figures showed today.

  Average earnings also showed a sharp fall, down by 0.8 per cent to 3.3pc in the year to December because of a huge drop in bonus payments by financial firms.

  But the government-preferred ILO unemployment total, which includes people not eligible for benefit, increased by 34,000 between October and December to 1,546,000.

Source: Manchester Online
http://www.manchesteronline.co.uk/news/s/13/13775_airport_fears_as_ba_axes_5800_jobs.html

11:47:31 AM

'BA to cut an extra £500m a year'

British Airways is to cut costs by a further £500m (€711m) a year, it was reported today.

The flag carrier, which has had to cancel flights in the last few days due to security concerns, plans to include the cuts in its revised business plan for the next two years, a report said.

The savings are likely to include job reductions on top of the 13,000 redundancies that BA has already announced.

However, the airline is hoping to agree a plan with staff and unions for achieving its cost reduction targets, rather than specifying a number of redundancies from the outset.

A BA spokesman declined to comment on the claims in the report in the Sunday Telegraph.

But he said of the possibility of job losses: "One thing the last few years in the airline business has taught people is that you can never rule anything out."

He said the airline would publish the business plan "in early 2004".

BA said in November that half-year pre-tax profits had fallen to £60m (€85m), against £310m (€441m) in the same period last year.

The group has been struggling with the impact on its business of the economic downturn, unofficial industrial action, competition from low cost airlines and continued security fears following the September 11 terrorist attacks in 2001.

It was forced to cancel its BA223 flight between Heathrow and Washington for two days in a row this week amid unspecified security concerns.

BA dropped out of the FTSE 100 Index in March after its share price crumbled to 86p in the run-up to the Iraq war.

But it re-entered the index last month following a quarterly review by the FTSE Equity Indices Committee.

The 13,000 redundancies and other cuts have helped BA to achieve cost savings of about £1.5bn (€2.1bn) since 2001.

Taking a further £500m (€711m) out of its cost base each year would reduce annual expenditure by 6%-7%, today's report said.

Source: http://archives.tcm.ie/breakingnews/2004/01/04/story128018.asp

Helen Carter – Thursday October 20, 2005. The Guardian

Flybe warns it may pull out of Liverpool airport

The budget airline Flybe is poised to pull out of Liverpool unless there is a sudden dramatic rise in business passengers.

The Exeter-based carrier will stop flying from John Lennon airport to Edinburgh at the end of this month, following its recent cancellation of the Liverpool-Glasgow service. The remaining four routes from the city are said to be under "urgent review".

Simon Lilley, head of marketing, warned that Flybe's services to Southampton, Exeter, Belfast and Jersey were at risk. "We are not happy with the performance of the remaining routes and they are all under urgent review," he said.

Source: Guardian, October 20th 2005
http://www.guardian.co.uk/airlines/story/0,1371,1596195,00.html

Sunday September 18, 2005. The Observer

US airlines face long haul back to solvency

Northwest and Delta have gone into Chapter 11 - and pension liabilities have played their part, reports Edward Helmore from New York

Last week's filings for Chapter 11 bankruptcy protection by both Delta Air Lines and Northwest Airlines, America's third and fourth largest air carriers, is putting renewed pressure on US legislators to allow the troubled airline industry years to sort out its potentially crippling pension-plan obligations.

Unlike the low-cost start-up carriers that have all but squeezed out the chances for profitability among the major airlines, the old US carriers are facing pension-debt repayment obligations they have little possibility of being able to meet.

Source: http://www.guardian.co.uk/airlines/story/0,1371,1572555,00.html

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