

**APPENDIX 1**

**THE ECONOMIC IMPACT OF  
GLOUCESTERSHIRE AIRPORT 2008**

**UNIVERSITY OF GLOUCESTERSHIRE  
BUSINESS SCHOOL**

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## EXECUTIVE SUMMARY

This report updates an earlier investigation (2002) made into the contribution of Gloucestershire Airport to the local economy. The original report was published in 2003. This report follows closely the methods used in the earlier survey and the structure of that report, to make comparison easier. Where appropriate, observations from the prior report have been retained. This report, like the earlier one, is concerned solely with the Airport's economic impacts.

The first part of this report identifies companies who are based within the vicinity of Gloucestershire Airport. Ninety-eight companies were identified, employing 3,600+ people.

The second part of this report reviews previous studies of the effects of airports on local economies and identifies direct, indirect and induced effects. The current market position of Gloucestershire Airport suggests that there has been some uplift in higher-value added activities since the previous report. The relatively low value-added activities which previously predominated resulted in a multiplier effect of somewhere below the national average of 1.3. This multiplier effect has been raised to 1.3, because of the additional impact of scheduled passenger services, business aviation and the substantial increase in air traffic control training.

The third part of this study involved asking a number of key informants about the contribution that Gloucestershire Airport makes to their organization in particular, and their attitudes towards the contribution that it made to the Cheltenham and Gloucester economy general. In order to develop meaningful responses, informants were presented with three hypothetical scenarios for development, ranging from complete closure to modest improvement. The previous study used the focus of 'expansion.' Expansion is a loose but contentious concept, with a number of meanings. In this study, 'improvement' was linked to runway extension and the installation of an instrument landing system.

The main findings of this update study are:

- 340 jobs, a large proportion of which are highly skilled, are directly linked to aviation operations at the airport;
- Employment in the vicinity of the airport accounts for a further 3600+ jobs which are not *operationally* linked to the airport;
- The airport cluster (sectoral & locational) contributes an estimated maximum of £212m. GVA p.a. to the local economy. The airport itself generates £18m. The cluster represents about 1.9% of the GVA of the Gloucestershire economy, which is about the same as its percentage of the workforce;
- Of the three development scenarios presented to respondents, there was little support for closing the airport and redeveloping the land for commercial and/or residential use. The economic benefits – largely of a capital nature - that might result from adding to the development land stock of the area were seen as difficult to realize;
- Leaving the airport to operate 'as is' was not seen as particularly beneficial;
- The airport's current development plan was seen as realistic and the vision of the current management was seen as a strength;
- There was support for the further modest improvement of the airport, but problems of providing viable passenger services against competition from other regional airports was recognized;
- There was some evidence of the airport being significant in securing inward investment decisions, or for securing inward tourism.

This study recommends that Gloucester City Council works with airport management to identify key improvements in the facility that permit changing the mix of usage to yield more positive economic impact, supported by further growth in the employment cluster.

## INTRODUCTION AND TERMS OF REFERENCE

Gloucestershire Airport is located mid way between Cheltenham and Gloucester, and is owned jointly by Cheltenham Borough Council and Gloucester City Council. The airport itself lies within Tewkesbury Borough. The main uses of the airport are flight training, private flying, scheduled passenger services and air traffic control training.

Gloucester City Council commissioned this update study. It is one of a number of studies conducted on the airport and its operations. Other papers to appear since the work originally commissioned (2002) by Cheltenham Borough Council include The Present and Future Role of Gloucestershire Airport (2004) and Progress on Recommended Actions 2004 to 2007, by C. Farrell at Gloucestershire First.

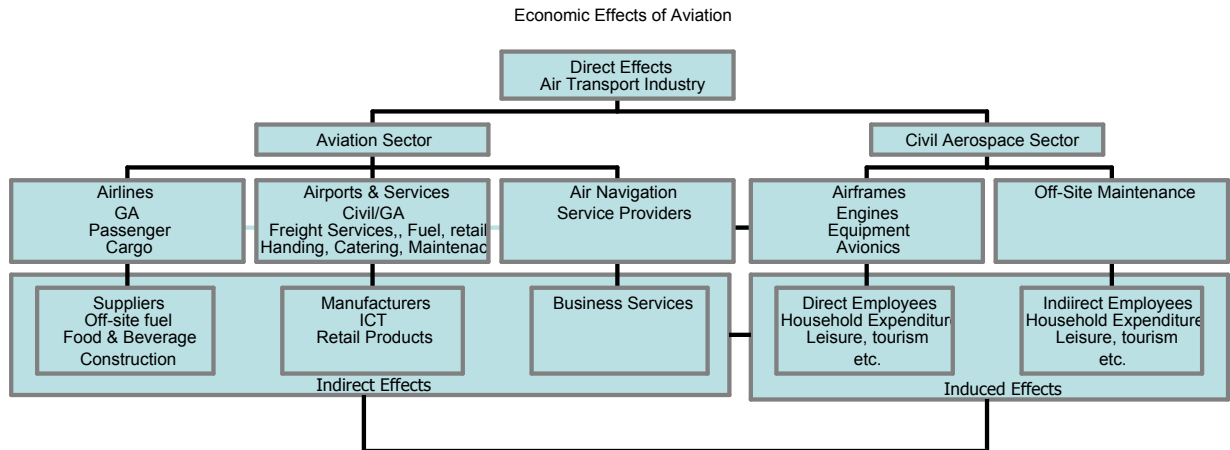
The role of an airport in supporting the local economy is uncertain. It is acknowledged that the presence of the airport contributes to the local economy in three main ways: direct, indirect and induced effects. The classification of economic effects into these three categories – direct, indirect, and induced is common in studies related to airports. This approach is strongly associated with Oxford Economics (formerly Oxford Economic Forecasting), but has been criticized by CE Delft (another consulting organization) as “not [being] valid indicators of its [the aviation sector’s] importance to the economy.”

1. Direct effects, resulting from the aviation and civil aerospace sectors. In the aviation sector, Gloucestershire Airport itself contributes, along with the aviation-related services. The Airport provides general aviation services including training facilities for pilots, a number of scheduled flights and facilities for the emergency services and the military. The civil aerospace sector is represented, in terms of manufacturing, maintenance and construction. For instance, GE Aviation has a propeller-manufacturing (Dowty Propellers) unit at the airport, and Messier-Dowty is a major employer in the landing gear business.
2. Indirect effects are found through the activities of those organizations that supply direct producers. The Airport provides on-site office and manufacturing accommodation for a number of organizations. Meteor Business Park also provides office accommodation for a number of non-aviation businesses.
3. Induced effects relate to spending by employees of firms in the first two categories.

A fourth category – catalytic effects – is said to result from benefits associated with the aviation sector – for example, direct foreign investment resulting from increased accessibility.

Oxford Economics provide a definition of the air transport industry that takes in both aviation and civil aerospace activities. There is considerable overlap between the two, particularly in the service, maintenance and after-market areas in relation to aircraft. By grouping sectors in this way there is implicit recognition of a cluster effect. Other studies have coupled the cluster effect with a strong locational emphasis. This type of geographic/industry cluster is used as the frame of reference in this up-date study.

There is occasionally a lack of clarity as to which elements of activity are included in discussion, as reports sometimes use ‘aviation’ and ‘air transport’ interchangeably.



Source: Adapted from ATAG, 2005

This study is specifically concerned with the *economic* impacts of Gloucestershire Airport. It adopts an informal economic cluster approach, treating Gloucestershire Airport as the heart of an aviation-related cluster. Direct, indirect and induced effects are considered in relation to businesses based in, or close to, the airport. This categorization is not precise.

The Council appointed the University of Gloucestershire Business School to undertake research that informs decision about the role of Gloucestershire Airport.

The specific aims of this study are to:

1. Provide a summary of current facilities and employment in the vicinity of the Airport;
2. Quantify as far as possible the economic impact of Gloucestershire Airport using direct, indirect and induced effects within a cluster approach;
3. Assess the current market position of Gloucestershire Airport in the context of the UK aviation market and what the future trends and opportunities are;
4. Supply qualitative information from interviews with a number of organizations to ascertain local perceptions of the economic benefits of the Airport.

The recent White Paper "The Future of Air Transport" (2003) forms the basis of strategy for air transport to 2033. (Note that 'Air Transport' here is in the sense of 'aviation.')

The document identifies a number of possible strategies for airport development for the period to 2020. Chapter 10 covers regional airport policy for South West England. The document makes little reference to Gloucestershire Airport, but 'fully supports' the continuation of its role in business aviation.

The prior, related, consultation document for the South West also lacked clear emphasis. The South West regional document concentrated on only 5 airports - Bristol, Exeter, Bournemouth, Plymouth and Newquay. Gloucestershire Airport is only briefly mentioned in the regional document and it is quite clear that no scenario is presented which sees Gloucestershire Airport becoming a 'major' regional passenger airport. The subsequent up-date document maintains this position, though it should be noted that categorization as 'major' or 'minor' is purely definitional. Size data analysis does not provide support for the distinction.

Staff from the University of Gloucestershire - Professor Barry Davies of the Business School, Collette Coll and James Garrod of the Centre for Enterprise and Innovation – conducted the study. We particularly wish to acknowledge the help received from those informants who provided valuable insights into their organizations' use of Gloucestershire Airport.

## THE CURRENT MARKET POSITION OF GLOUCESTERSHIRE AIRPORT

Gloucestershire Airport is a relatively small airport that currently caters mainly for flight training and private flying, with an increasing number of scheduled passengers. The major South West regional airport is Bristol, but passengers may travel out of region, particularly via Heathrow and Birmingham. Cheltenham Borough Council and Gloucester City Council own the Airport jointly, although it is located within Tewkesbury Borough. The Airport has currently employs 48 people. Airports may be categorized by the nature of their services:

- Category 1: Comprehensive international hub airports (e.g. London Heathrow)
- Category 2: Predominantly passenger transport airports with a mix of international/European/domestic and charter operations (e.g. Birmingham)
- Category 3: Small airports with few passenger transport operations, but mainly corporate/charter/freight/flying instruction (e.g. Gloucestershire Airport)
- Category 4: Small facilities which do not have facilities to cater for passenger transport movements or larger corporate aircraft, but focus on private flying.

There are 60 airports included in Civil Aviation Authority (CAA) summary data for size of airports. This CAA traffic data for UK airports shows (statistically) only two groups: the very large and the rest. The data *appear* to suggest otherwise, but this is not supported by analysis of this size data. Though it looks as if there are sub-groups, analysis finds only the two clusters. To sort airports further would require additional data on, for example, runway length, ILS systems and proximity to alternative services. This may produce further groupings.

Comparison of total terminal passengers between 2002 and 2007 shows 38 airports having a measurable percentage (>0.1%) of traffic. Nine airports' share of traffic fell in this period, as a proportion; five of the nine are larger airports (Heathrow, Gatwick, Manchester, Birmingham, Glasgow). This suggests that as total volumes rise, air passenger 'traffic' becomes more broadly dispersed. Of the 22 airports whose share rose, only three are larger (Stansted, Luton, Edinburgh). Their particular locations (London, Central Belt) suggest displacement between spatially related provision.

Gloucestershire Airport had 5,000 terminal passengers in 2007. During the year to date (September 2008), a total of 20,000 passengers using scheduled services were recorded. This number places Gloucestershire in the same bracket as Kent International or Wick.

**Table 1: A comparison of airport terminal passengers for selected airports, 2002 & 2007**

<i>Airport</i>	<i>Terminal Passengers (000's) 2002</i>	<i>Terminal Passengers (000's) 2007</i>
Norwich	424	699
City of Derry	199	428
Blackpool	70	558
Dundee	45	65
Doncaster-Sheffield*	29	1,074
Cambridge	1	2
Southend	5	49
Shoreham	-	8
Gloucestershire	-	5

Source: CAA, Size of UK Airports, 2007

\* Changed situation

Table 1 shows, for comparison purposes, airports that may be considered reasonably similar to Gloucestershire in terms of their geographical position relative to regional airports and their proximity to local passenger attraction / generation areas.

Despite the low but rising number of terminal passengers, the Airport is nevertheless busy when measured by aircraft movements. Around 80,000 movements have been recorded annually for the last ten years. The main market volume for Gloucestershire Airport is currently in flight training and this is reflected in an analysis of aircraft movements. Private flying did increase and demand for hanger space for private aircraft has outstripped supply. There are now 150 aircraft in total based at the Airport. Twelve corporate jets are among that number at the Airport, including planes operated by Group 4 Securicor (with connections near Broadway) and George Davies/Per Una (with connections to Moreton-in-Marsh). Recent security concerns with scheduled air passenger services has led to a growth in the corporate air charter market.

The Airport has previously handled freight traffic, largely for one organization, but as tonnage has grown operations have relocated to a larger airport with extended hours.

Table 2 below shows movements and passenger numbers at the Airport over the last three calendar years and twelve months to date.

**Table 2: Aircraft movements and airport terminal passengers for Gloucestershire Airport, 2005 to 2007 & year to date**

Movement type	TOTAL NUMBER OF FLIGHTS			
	2005	2006	2007	Year to Sep. 2008
Air transport charter	13	4	5	17
Air transport schedule	0	0	450	1513
Air taxi	309	321	386	402
Air transport positioning	401	572	636	562
Business aviation	274	449	797	923
Local commercial	1975	1781	1383	1333
Training/demonstration	10908	11581	13498	11697
Other non-commercial	532	665	533	595
Private	14120	15104	13594	12839
Charity	120	209	336	445
Clubs and schools	53684	52367	46507	46159
Official	2	5	6	1
Military	442	396	417	317
<b>TOTAL Movements</b>	<b>82780</b>	<b>83454</b>	<b>78548</b>	<b>76803</b>
<b>TOTAL Passengers</b>	<b>2368</b>	<b>2392</b>	<b>6835</b>	<b>20025</b>

Source: Airport operating statistics

Passenger growth rates are subject to a number of factors, not least those related to pricing and general economic conditions. Fuel costs (& surcharges), environmental concerns and consumer confidence will also impact on growth. The extension of the route network and increasing density of flights would lead to further increases in passenger traffic. Such growth may be moderated by the more general economic and consumer climate. So, even though passenger flights are among the most valuable for the Airport in terms of revenue generation, the ability to grow passenger numbers in the near term is highly dependent on the prevailing economic climate.

#### **Movement Types**

**Aircraft movement:** An aircraft take-off or landing at an airport. For airport traffic purposes one arrival and one departure are counted as two movements.

**Commercial Movements:** Air transport movements are landings or take-offs of aircraft engaged on the transport of passengers, cargo or mail on commercial terms. All scheduled movements, including those operated empty, loaded charter and air taxi movements are included. *Air taxi movement:* is a movement by an aircraft of less than 15 tonnes MTWA operating on a non-scheduled service. These are predominantly sole-use charter operations. *Empty positioning*

*movements*: are movements by aircraft moving into position for scheduled or charter transport flights or returning to base after such flights, including empty Air Taxi Movements. *Local movements* are commercial flights undertaken for press, survey, agricultural and fisheries flying, or public entertainment purposes.

***Non-commercial Movements***: *Test and training movements* are movements for the purpose of testing aircraft or for training flying crew or ground personnel. Also included in this category are demonstration flights by makers or sellers of aircraft and aviation equipment. Touch and go operations are counted as two movements. *Other non-commercial movements* are non-revenue earning movements by air transport operators or manufacturers for the sole purpose of moving their own personnel or stores from one place to another, for delivery, refuelling or maintenance of empty aircraft and air transport flights forced to return to base by bad weather, engine failure or other causes. *Private movements* are movements for purely non-commercial purposes by private owners or other private aircraft operators, excluding aero-clubs movements. *Aero-club movements* are movements operated by aero-club members for instruction or pleasure. Touch and go operations are counted as two movements. *Official movements* are movements for official purposes (excluding Air transport Movements) by British or foreign civil Government Departments. *Military movements* are movements exclusively for military purposes using military aircraft. *Business aviation movements* are non-commercial movements operated on aircraft of 2730kgs MTWA or greater.

(The classification of movement types has changed since the initial report, so the data are no longer directly comparable.)

As the data show, the Airport is extending its activities into the higher value-added areas, while the number of movements declines. Scheduled flights and business aviation are the most significant categories here. The rise in positioning movements suggests that there is demand for landings (whilst loaded) at the airfield that cannot presently be met, but that could be accommodated to commercial advantage. Positioning chiefly occurs when, having earlier landed with passengers elsewhere, an aircraft flies in to provide a more convenient location for laden departure.

## **ANALYSIS OF CURRENT ACTIVITIES in the GLOUCESTERSHIRE AIRPORT CLUSTER**

First, the scale, scope and nature of the business activities of companies located at or near the Airport was identified. An audit was undertaken of all companies based in the vicinity of the Airport, defined in terms of the Airport itself, Staverton and Bamfurlong. Companies were considered in relation to the notional 'air transport industry' cluster. This included both aviation and civil aerospace sectors. Such a cluster includes companies in related businesses who may not necessarily interact with all other members of the cluster. Companies from non-air transport industries were added for locational reasons.

Information about companies located in the vicinity of the Airport was obtained from:

- Dunn & Bradstreet Business Register, 2008
- A business database compiled by the University of Gloucestershire Centre for Enterprise and Innovation
- Further information for clarification was obtained from companies' websites, Yellow Pages, and yell.com
- An on-the-ground audit of the area to confirm listings and identify companies not elsewhere listed
- Key informants in businesses within the Airport economic cluster were asked to comment on the validity of the data obtained from published sources.

The results of the audit of firms in the vicinity of the Airport are shown in appendices. These show:



- Names, business category and estimated number of employees for companies directly and indirectly involved in aviation and civil aerospace activities (Appendix A) and located in the Airport's vicinity;
- Names, business category and estimated number of employees for companies who, although located in the vicinity of the Airport, have no operational connections with the Airport (Appendix B).

In allocating companies to one of these categories, evidence was gathered from the web, companies' publicity material, newspaper cuttings, information provided by the Airport management, and finally where doubt still existed, by contacting the companies concerned directly.

A further attempt was made to identify Cheltenham and Gloucester based companies who may be operationally linked to the Airport, but not located in the Airport's immediate vicinity. A number of business directories were consulted and while a number of companies in the Cheltenham area are related to the air transport industry (e.g. GE Aviation at Bishops Cleeve), none were *operationally* linked to Gloucestershire Airport today. (This is one point at which the 'air transport industry cluster' and 'economic effects models' in relation to the Airport diverge.) Similarly, consideration of companies in Gloucester did not reveal any significant aviation-related businesses that linked operationally to the airport. The activities of organizations that may be present but *not* operationally linked have not been included in this analysis. The search was not broadened to other parts of the county, as the distance effects were seen as militating against further cluster connections.

#### **COMPANIES WITH *OPERATIONAL* LINKAGES TO THE AIRPORT (Direct Effects)**

Twenty-two employers were identified in the vicinity of Gloucestershire Airport that employed staff in activities that are operationally linked to the Airport. Their activities overlap in their scope and many companies based at the Airport are involved in more than one activity. The firms are drawn from both the aviation and civil aerospace sectors within the air transport industry.

The aviation firms tend to be related to aero clubs and schools, while the aerospace firms are in the maintenance and service arena. Aero clubs, schools and flight training account for the bulk of flying at the Airport, so the predominance of these firms is to be expected. Scheduled passenger transport activity is growing significantly from a low base, as is business aviation. Services to support these activities are becoming more evident, though the Airport company itself provides the ground services required by the scheduled flights.

Generally speaking, business aviation and scheduled services add most value for the Airport. This is because of larger fuel purchases, higher landing fees and similar charges. Airports typically have a tendency to develop by migrating away from activities at the lower end of the value-added chain, in favour of those that yield higher value. This pattern is discernible in Gloucestershire, as higher value added activities increase in volume

In addition to the activities described above, the operation of the Airport itself provides a *location* for further economic activity. Airport management has surveyed employers actually located on the airfield. According to their data, around 40 firms employ 550 people, almost all of whom work in 'aviation related businesses.' We were not able to confirm this figure on the basis of our investigations, but believe it to be well within the range of probability. The basis for classification used differs from ours.

Based on data and estimates for each company listed in Appendix A, the number of people employed in activities directly related to the operation of the Airport is, we believe, conservatively estimated at about 340 FTE. (This does not include those in *other* aviation-related businesses located on the airfield that would be in management's figures).

Most aviation related companies at the Airport are small businesses, with typically around 15 employees. The size distribution of companies (measured in terms of employment size) with operational linkages to the Airport is shown in Table 3.

During the course of this study it became apparent that a large proportion of the jobs in such firms are highly skilled with salaries above the national average. It was noted, for example, that the average salary for an initial flying instructor is about £30,000 and for a senior aircraft engineer is £50,000 - £65,000 (Prospects, May 2008). Similarly, air traffic controllers are at the upper end of typical earnings at around £50k.

### **COMPANIES BASED IN THE VICINITY OF THE AIRPORT, BUT WITH NO OPERATIONAL LINKAGES TO THE AIRPORT**

The *pattern* here has not changed significantly since the initial report. The *numbers* in employment have shifted significantly. The site of the Airport and its immediate vicinity provides much employment that is not related directly or indirectly to the activities of the Airport today. Many jobs may that appear to be linked to the Airport are present for purely historical reasons. This is an example of the persistence of economic cluster effects that depend on social relationships.

Companies now continue in business quite independently of the existence of the Airport. The largest employers in the vicinity are the companies within the SAFRAN group (Snecma, Messier, Sagem). The firm, originally Dowty's, initially gained technical and economic advantage by locating its manufacturing activities close to the Airport. However, today, the company is part of a large international manufacturing and services company under the Messier-Dowty and Messier names. The company makes no use of the operational facilities of the Airport for passenger and freight movement, or for testing components (the company does have a test facility, but this is not operationally linked to the Airport).

Companies based in the vicinity of the Airport, including food distribution, metal fabrication, publishing and transport support services, represent a diverse range of industry sectors. Full details of business classifications are shown in Appendix B.

The size of companies that fall into the non-operationally linked category tends to be larger than for those that are operationally linked to the Airport. The largest company, Messier-Dowty, employs 1,000+ people at its sites within the vicinity of the Airport. The size distribution of companies is shown in Table 3.

The number of companies based in the vicinity of the Airport but which were not operationally linked to the Airport was counted at 76. Employment data was not obtainable for fourteen, but each of these is believed to be a micro-business. The total number of people employed by those 62 companies for whom data were available is 3,600+. This is significantly greater than the number employed by companies who are operationally linked to the Airport. It is also significantly greater than previous estimates.

Jobs in these unlinked companies probably represent a similar skill level to those found in companies that are operationally linked to the Airport. Unlike many out-of-town industrial sites, the companies located here comprise relatively few low value-added distribution and assembly businesses. Typical of the skills employed by these companies are precision engineers, electrical engineers and software designers.

**Table 3: Size distribution of businesses based in the vicinity of Gloucestershire Airport**

<i>Employee Size Band</i>	<i>Direct Link</i>	<i>Airport cluster - other</i>
1 - 10	14	25
11-25	6	14
26-50	1	7
51-100	-	8
101-250	1	7
251-500	-	0
501+	-	1

Source: Audit of employment sites, 2008

Note: An attempt has been made to classify companies according to their number of *full-time equivalent* employees.

## IMPACT OF AVIATION ON LOCAL ECONOMIES

“The aviation industry makes a significant contribution to employment and investment in the UK economy. It is itself a substantial employer, providing around 200,000 jobs directly and many more indirectly. The industry also contributes around £11 billion directly to the economy (approximately 1 per cent of UK economic activity).” [The Future of Air Transport Progress Report, DfT, Dec. 2006.] The number of jobs is useful in assessing the contribution of an industry to a local area. [OEF, 2006, p.89]. OEF data in the 2006 study suggest a per capita GDP contribution of around £61,290.

However, “GDP includes the taxes and subsidies levied on goods and services in calculating their value. It is more difficult to ascertain the level of taxes and subsidies at a sub-national level, so Gross Value Added (which excludes taxes and subsidies on goods and services) is used as an alternative to estimate the value and growth of economies at a regional and sub-regional level.” [The Economy of Gloucestershire 2008, GLMIU].

Using GVA data at the aggregate level shows a general GVA/employee in Gloucestershire of around £54k. This may roughly be estimated to be around £62k. in GDP terms. The aviation and civil aerospace sectors are higher in value added than some other sectors per employee (distribution, for instance), so the national figure of £61k. used by OEF may be appropriate.

There have been a number of attempts to estimate the multiplier effect of jobs in the aviation sector. The multiplier refers to the total addition to income resulting from initial expenditure within a sector. Previous studies have estimated the multipliers of Heathrow and Manchester Airports to be 0.75 and 1.83 respectively in 1998, a larger part of this difference being attributable to construction work that was underway at the time of the study. York Consulting has estimated that, in the case of Manchester Airport, the long-term multiplier effect is 1.38, after removing the cyclical effects of construction.

In its analysis of regional airports, Oxford Economic Forecasting used a multiplier of 1.31. This was calculated by reference to official UK input-output tables, which identify the supply chain for air transport separately. Air transport includes both aviation and civil aerospace.

This multiplier is a fairly crude average that varies between airports, and for any airport is likely to vary over time depending upon construction projects and growth patterns. The mix of activities at an airport will also influence the multiplier, with higher than average multiplier effects being achieved by larger airports catering for air passenger traffic, rather than small-scale leisure and flight training.

The indirect employment multiplier of for the Gloucestershire cluster in air transportation is likely to be around this illustrative level of 1.3. It should also be noted that indirect jobs might occur in a region which is different from that where the primary employment occurs. In this way, many spare parts purchased by companies based at Gloucestershire Airport will lead to indirect employment in other regions of the country, and even other areas of the world.

However, it is likely that the indirect multiplier effects of aviation are strong in Cheltenham, where two major aerospace groups (Messier-Dowty and GE Aviation) have manufacturing and service facilities. Although these factories may account for a significant amount of indirect employment at a national level, very few of the jobs at these companies are directly generated by the presence of Gloucestershire Airport. In Gloucester, there are no equivalent large operations related to the aviation sector; this would reduce the indirect effects in the city.

A further impact on regional economies occurs through *induced employment*. This occurs through the spending by aviation sector employees on goods and services. Oxford Economic Forecasting's Macroeconomic Model of the UK estimated that the amount of induced employment resulting from this spending was 25% of all the direct and indirect jobs in the industry. The regional distribution of this induced employment is largely dependent upon the region where an

employee lives, which may be different to their place of work, but also includes expenditure in other regions in the form of holidays etc. Regional variation in induced employment is much less marked than for direct and indirect employment, ranging from 0.6% of all employment in the South East to 0.3% in the South West.

It was estimated earlier that Gloucestershire Airport accounts for about 340 employees directly employed in the aviation industry as defined here. This can be compared with total employment in Gloucestershire (ca. 209,000 FTE) to give a figure of less than 0.16% employed directly in aviation operations. Gloucester accounts for 25% of county employment. With a multiplier of 1.3, then a further 50+ jobs are likely to be indirectly associated with the Airport in Gloucester.

An attempt was made to estimate the contribution to local GVA made by Gloucestershire Airport. Official data are not available at a regional level for air transport services, but are only available for the much more aggregate category of transport and communication services. It has not been possible to calculate regional differences in GVA per employee, but it is quite likely that the figure for Gloucestershire will be a little lower than the national average and we estimate at £54k above.

On the basis of this figure, the total GVA resulting to the local economy from the operation of Gloucestershire Airport is about £18.36m. (£54k multiplied by the employment estimate of 340 people). Because Gloucestershire Airport forms a significant part of both the Cheltenham and the Gloucester economies, the GVA can be apportioned equally at £9.18 to Cheltenham and £9.18m to Gloucester. This figure is likely to over-estimate the contribution to the both economies, as some of the total will benefit the Tewkesbury Borough economy (where the airport is actually based). It was also noted that the total GVA estimate was made on favourable assumptions, so the figure of £9.18m. should be regarded as a maximum likely figure for the City.

The most optimistic estimate of the multiplier effects of indirect employment at Gloucestershire Airport (assuming a multiplier rate of 1.3) would add a further £5.58m. GVA to the local economy. It should be emphasised again that these figures are quite crude estimates of GVA, based on interpolation of national and regional averages, rather than detailed local study of inputs and outputs in the local economy.

The move to GVA as a basis for consideration of local economies at the NUTS3 (county) level makes comparisons with prior data problematic, without extensive recalculation. However, there is now a large employment base associated with the airport either through proximity and/or direct linkage. This suggests substantial economic effects today. We believe that the contribution to economic activity associated with the airport has increased substantially since the previous report.

## **ECONOMIC IMPACTS OF FUTURE DEVELOPMENT OPTIONS**

The final part of this study involved asking a sample of key stakeholders in the local economy for their attitudes about the economic impacts of Gloucestershire Airport. The aim was to conduct a very small-scale qualitative analysis of attitudes, rather than a comprehensive and widespread quantitative analysis. Opinions were sought from representatives of the following organisations:

Airport based companies (3); Major local employers (2); Local exporting SMEs (2) Economic Development/Local authority (2) Private aviators (2) and the Airport's management (2)

Semi-structured interviews, either face-to-face or by telephone, were conducted with wherever possible/appropriate with the Chief Executive Officer, or other responsible person. Interviewees provided comments on their organisation's attitude towards and usage of the airport. Interviews lasted between 30 minutes and two hours.

Although the interviews were essentially unstructured, they were tailored to meet the circumstances of each informant. Initially, respondents were asked about the extent to which their organisation actually used the airport (e.g. for incoming / outgoing passenger movement; freight handling; use of corporate jets). Informants were then asked a question about their perceptions of

the activities of the airport. This was asked in order to gauge the extent of any mismatch between perception of the airport's capabilities and its actual capabilities.

Some detailed interviews revolved around asking informants for their attitudes towards three possible scenarios for development of the airport. These interviews were used where the scenarios could be explained and were unlikely to occasion alarm. The use of scenarios provided a benchmark against which informants could note levels of likely impacts on their own organisation, as well as their thoughts on the impacts on the remainder of the local economy. The three scenarios are described below:

### **1. Close airport and redevelop the land with a mixture of commercial and residential properties**

One extreme possibility to consider is the complete closure of Gloucestershire Airport as an operational airport and to use the land freed up to provide additional space for commercial and residential development. There would appear to be many strong arguments to support this scenario. The report "Cheltenham - its economy, its future" prepared by the Gloucestershire Labour Market Information Unit has identified the lack of available commercial development land as a barrier to economic development. Continuing pressure on house prices within Cheltenham partly reflects a local excess of demand for housing relative to supply.

This scenario does of course raise issues of preserving the green belt between Cheltenham and Gloucester. It was emphasised to informants that this scenario does not represent a proposal that is actively being considered, or one that was feasible on planning and environmental grounds. It was merely presented as a benchmark against which alternative economic impacts of the site could be assessed.

### **2. Maintain existing operation, without proceeding with some improvement activities**

This scenario broadly speaking maintains the existing pattern of activities at the airport, with modest organic growth. The main features of this scenario are:

- Support for further growth of general aviation, especially higher value corporate aircraft
- Building of new hangarage to support growth in general aviation
- Continuation of existing main runway condition
- Maintain small-scale domestic / European short haul scheduled passenger services.
- Retention and development of market share of flight training which forms a reliable, if low margin, source of income

This scenario would not substantially improve the ability of the airport to contribute to the local economy.

### **3. Develop potential of the airport by undertaking runway improvement works and installing ILS**

- Undertake Runway Safety Project
- Install ILS
- Build new hangarage to support growth in general and business aviation
- Improve access road to the airport
- Grow small-scale domestic / European short haul scheduled passenger services.

- Migrate operations to lower intensity, higher value arenas with scheduled services and business aviation.

The third case would imply implementing current management plans for the airport. This involves moderate changes to accommodate runway improvements and the access 'funnel.' Major development of Gloucestershire Airport as a regional airport has not been identified as an option in the recent Government documentation. It is however, appropriate to consider growth that may be technically feasible without causing undue disruption to the local social and physical infrastructure. The economic feasibility of the plan rests on the migration strategy to higher-added value operations, which may not, in the current economic environment, continue at the same pace as recently.

It would be technically feasible to extend the airport runway from its current length of 1300 metres to 1500 metres without causing major local disruption. This would allow medium sized passenger transport aircraft to land with the required margin of safety. It would allow the operation of short take off and landing aircraft such as the BAe 146, J31 and Atr-42 aircraft that typically carry up to about 70 passengers.

The type of passenger transport business that could be made possible by such development would be relatively profitable for the airport to pursue. A variety of income would accrue from passenger handling fees, sales to passengers (e.g. shops / cafés) and higher levels of aircraft servicing (refuelling, catering, cleaning etc). There would be a wider range of indirect and induced benefits to firms in the Cheltenham area.

This scenario would provide additional economic benefits for employers in Gloucestershire, direct, indirect and induced. It might also help reduce economic leakage from the county.

## **EVALUATION OF ECONOMIC IMPACTS OF ALTERNATIVE DEVELOPMENT SCENARIOS**

Informants were asked to comment on the economic impacts of the three scenarios as they affected

### **1. Closure of airport and redevelopment of land**

There was no change in reaction to this scenario from the initial study

The possible economic benefits of this option were described to informants, but the option attracted very few favourable comments about possible economic benefits to the local economy in general or to companies in particular. None of the informants supported the idea of closing the airport. Even where informants recognized that the airport was currently generating very few benefits for the local economy, there was a feeling that closure and redevelopment of the airport was an irreversible decision. Some noted that while the demand for new residential and commercial premises could be accommodated relatively easily at a number of locations, given relaxation of planning constraints, the possibility of developing a new airport close to Cheltenham was practically non-existent. One informant commented that the potential usage of the site was likely to favour warehousing and distribution, which would not provide many high value-added jobs.

For companies within the airport and in its immediate vicinity, further commercial and residential development posed a number of problems, without major road traffic improvements. Development might have the direct consequence of infrastructure improvement, allowing faster access to the A40 and M5, but potentially affecting business' current operations.

Overall, the dominant view of informants was that this scenario represented a lost opportunity for the development of the local economy. Valuable skilled operational jobs at the airport may be displaced and replaced with lower skill jobs in distribution industries.

### **2. Maintain existing operation, without proceeding with some improvement activities**

This option was also not favourably viewed, in general. It was seen as perpetuating a situation beyond its point of business viability, at least as far as airport operations were concerned. Respondents were not able to establish (except at the level of the self-evident) links between airport operations and business growth more generally within the cluster.

Local authority ownership, coupled with a certain sense of rivalry, was seen as restricting effective business management of the airport. This was compounded by the responsibility for planning resting with a third authority. Among those most familiar with the operations of the airport, there was support for management and its development plan.

No respondents who were not operationally associated with the airport reported that the airport had provided any economic benefit to their company directly. Only one had used the airport to transport its employees or visitors.

It was notable that the largest aviation related employer in the vicinity of the airport - Messier-Dowty had only slight linkages to the airport. While the airport may have been the original reason for the company locating at Staverton, the continued operation of the airport provided no economic benefit to the company. The company's main need for passenger movement involved moving employees between its operations at Staverton and those located south of Paris. Staff tended to travel to Paris from Birmingham, Bristol or Heathrow airports. If a service were provided from Gloucestershire to Paris, usage would hinge on convenience and pricing.

None of the informants had used Gloucestershire Airport to bring in overseas investors/ customers / suppliers by corporate jet. Some informants were aware of a number of occasions where this had occurred in connection with local business. One example quoted was the acquisition of a local firm by an American corporation, who flew senior staff into the Airport from the USA.

None of the informants considered that the presence of Gloucestershire Airport, per se, would make major differences to overseas investors' decisions to invest in the local economy. The proximity of the airport was seen at best, as a swing factor at the margin. It was also true that no respondents outside the Airport knew the number of business jets based there.

It remains broadly true that "In all of the reported [business jet] cases, the benefit to the *Cheltenham* economy did not appear to extend beyond the direct and indirect effects of expenditure on aviation services at the airport." However, the value of this activity to the airport was increasingly recognized, as was the relatively local area to which business aviation related.

The Airport plays only a small role in inward tourism. The Airport provided a hub for specialist charter flights and business aviation (from Ireland) in connection with horse racing and rugby events. The introduction of scheduled services at the airport was welcomed, but it was felt they probably represented a displacement of activity from airports previously used, rather than new traffic generation (though more general aviation studies would not support this view – new routes do generate new traffic.)

Evidence was found of a number of other indirect impacts of airport activities on the local economy. Flight and air traffic control training are amongst the most significant activities at the airport. A number of trainees are from outside the area/country, and they require bed and breakfast or hotel accommodation. The numbers and duration are now substantial – considerably more than previously reported. In addition to direct expenditure with suppliers, the trainees themselves would have caused induced expenditure in the form of their expenditure in bars, shops and restaurants etc.

### **3. Develop potential of the airport by undertaking runway improvement works and installing ILS**

This was the most favoured option, with no respondent ranking it last. There was general agreement that development of the airport to allow wider ranges of scheduled and business aviation services would be a "good thing". All informants agreed that it would be beneficial to their

organizations if there were a wider choice of scheduled services direct from Gloucestershire Airport, subject to the usual constraints of destinations, convenience and cost.

Three of the reasons found in the prior study were repeated in this up-date:

- The airport is unlikely in the short to medium term to offer the variety of destinations available from nearby airports.
- Frequency of service would almost certainly be low from Gloucestershire, giving less flexibility in travel arrangements. The consequences of flight cancellations would be greater.
- As larger and more cost-effective aircraft would not be able to land at Gloucestershire Airport– even after the runway safety project - fares would be more expensive than from Birmingham and Bristol airports, particularly by the low cost operators.

No anxiety about the size of aircraft that would be used was expressed during this exercise.

## **SUMMARY AND RECOMMENDATIONS**

This up-date study has been necessarily brief but provides some indication of the impact of Gloucestershire Airport on the local economy. The key points emerging are summarized below:

About 340 jobs are directly related to the operation of Gloucestershire Airport. These contribute £18.36m to the local economy in GVA.

These jobs tend to be highly skilled and highly paid.

The number of jobs in the vicinity of the Airport which are not directly linked to the operation of the airfield (3,600+) is ten times those that are directly associated with operations. This number is considerably more than those discovered previously.

The airport cluster jobs, in total, contribute an estimated £212m. GVA to the local economy.

The multiplier effects of indirect jobs generated by the *airport* are likely to be about the typical level of 1.3 found in previous studies, because of the increasing value-added activities at the airport. This supports, we estimate, a further 50 jobs in Gloucester.

Business aviation and scheduled passenger flights are increasingly important at the Airport. They bring more added value than the activities that they are displacing.

Many companies continue their attachment to the airport for (only) historical reasons (though these must not be completely discounted as a factor in locational decision making).

The presence of Gloucestershire Airport appears to have minor, positive effects on inward investment and tourism.

There is little enthusiasm for closing the airport and using the land for residential and commercial development.

There was broad support for the development currently planned. The availability of (additional) scheduled services from Gloucestershire Airport was viewed positively. However, respondents foresaw problems in the business viability of low frequency scheduled services using higher-cost small aircraft (though the load factors experienced with current operations suggest otherwise).

The following recommendations are based on the findings of this study:



This study recommends that Gloucester City Council works with airport management to identify key improvements in the facility that permit changing the mix of usage to yield more positive economic impact, supported by further growth in the employment cluster.

The current management of the Airport has the respect of key stakeholders in the airport. Cheltenham Borough Council and Gloucester City Council should work closely with the airport management in moving forward with planned improvement to the economic benefit of the local community.

As neighbouring airports become increasingly congested, additional opportunities are likely to arise for Gloucestershire Airport. The owners and management should proactively seek to exploit the suitable opportunities that this presents.

The City Council should seek to ensure that the employment and other benefits associated with the airport cluster provide opportunities for as wide a range of community members as appropriate.

## Appendix A

### 2008 Update

#### Listing of Companies Based in the Vicinity of Gloucestershire Airport, Who Have Operational Linkages with The Airport.

Company Name	Contact Number (01452)	Business Classification	Address 1	Address 2	Post Code	Size Band
Aeros	857419	Flying school/Taxi & Charter	Building SE16 Hanger SE4	Gloucestershire Airport	GL51 6SP	2
	17 employees. Believed to be the same company as Aeros Engineering although separate D&B listings with different employee numbers stated.					
Aeros Engineering Ltd	714525	Aircraft Engineering	Building SE16 Hanger SE4	Gloucestershire Airport	GL51 6SP	2
	11 employees at Gloucestershire Airport facility. D&B States 9.					
Astac	715630	Flight Controller Training	Airport	Staverton	GL51 6SP	2
	17 Employees					
Aviator Cafe	714442	Café and Bar	Airport	Staverton	GL51 6SP	1
	7 Employees					
B Walker		Leaseholder of airport buildings	Airport	Staverton	GL51 6SP	0
	Barry Walker owns a number of hangers and building leases on airport site. No employees.					
Bond Air Services	856007	Helicopter Operator	Airport	Staverton	GL51 6SP	4
	68 Staff					
Cotswold Aero Club/Cotswold Aviation Services	713924/ 857066	Flying School	Aviation House, Airport	Staverton	GL51 6SP	1
	3 Employees					
Eurojet Aviation Ltd (Engineering Division)	713456	Manufacture of other transport equipment	SE13 Gloucestershire Airport	Staverton	GL51 6SP	2
	11 employees					
European Skytime	714500	Charter Flight Company	Terminal Building, Airport	Staverton	GL51 6SP	1
	<10 Employees					

### Listing of Companies contd.

Executive Aviation Services	857006	Charter Flight Company	Terminal Building, Airport	Staverton	GL51 6SP	1
	10 employees stated. D&B states 15.					
Flight Partner	856222	Flight Training	Airport	Staverton	GL51 6SP	1
	3 Employees					
Gloucestershire Airport Ltd	857700	Airport Operators	Airport	Staverton	GL51 6SP	3
	35 Employees. D&B states 75					
Helicopter Maintenance	857083	Helicopter Maintenance	SE34	Staverton		1
	6 Employees					
Heliflight UK Ltd	714555	Flying School/ Helicopter Charter	SE 36 Airport	Staverton	GL51 6SP	1
	When asked if they had between 1-10 employees they responded no, but have told us we "could put down 1-10."					
John Jones Aircraft Interiors (Gloucestershire)	855855	Maintenance	Airport	Staverton	GL51 6SP	1
	1 Employee					
Jet Engine Test Centre	714471	Maintenance	Airport	Staverton	GL51 6SP	1
	5 employees					
Medical/Police/Specialist Aviation Services	859999/ 857999	Contract Services	Airport	Staverton	GL51 6SP	4
	All three are the same company, 65 employees. D&B states 70.					
Patriot Aviation		Helicopter Flying School	Airport	Staverton	GL51 6SP	1
	1 Employee.					
RGV Aviation Ltd	855501	Maintenance	Hanger SE40,	Staverton	GL51 6SP	2
	Nearer 25 employees D&B says 17					
Rise Helicopters (Aviation)	857083	Helicopter Flights and Maintenance	Hanger SE34	Staverton	GL51 6SP	2
	15 Employees					

**Listing of Companies contd.**

Severn Aviation	716860	Flight Training	Airport	Staverton	GL51 6SP	1
	2 Employees					
Staverton Flying School	712388	Flying School	Airport	Staverton	GL51 6SP	1
	3 Full Time 3 Part Time Employees					
Tiger Airways	714164/ 854141	Vintage Flights/Flying School	Hanger SE35 office, SE47 maintenance hanger	Staverton	GL51 6SP	1
	<10 Employees					
Transair Pilot Shop	856749	Retail Shop	Airport	Staverton	GL51 6SP	1
	2 Employees					

**Key to Employee Size bands:**

Size Band	Employees
1	1-10
2	11-25
3	26-50
4	51-100
5	101-250
6	251-500
7	501+

**Appendix B  
2008 Update**

**Table 1.**

**Listing of Companies Based in the Vicinity of Gloucestershire Airport, Who Do Not Have Operational Linkages With The Airport from Original Report in 2003**

<b>Company Name</b>	<b>Contact Number (01452)</b>	<b>Business Classification</b>	<b>Address 1</b>	<b>Address 2</b>	<b>Post Code</b>	<b>Size Band</b>
Actemium	713222	Instrumentation Control and Switchgear	Meteor Business Park	CHELTENHAM	GL2 9QL	2
Formerly Twyver Instrumentation Control and Switchgear/Twyver Limited. 25 Employees listed on D&B 21 confirmed by phone.						
Bodycote (Cheltenham) Ltd	714440	Construction, civil engineering, demolition	Britannia House	Staverton Technology Park	GL51 6TQ	2
25 Employees						
Britannia Construction Ltd (Civil Engineering)	859880	Manufacturer of other non-metallic mineral products.	Unit 10 Bamfurlong Industrial Park	Staverton	GL51 6SX	5
214 Employees						
Cheltenham Laminating Co Ltd	713098	Manufacturer of Fabricated metal products	Airport	Staverton	GL51 6SP	4
80 Employees, D&B says 90.						
Cheltenham Patterns (1983) Ltd	713270	Computer and related activities	Unit C2 Staverton Technology Park	Staverton	GL51 6TQ	1
8 employees						
Continental Ltd	0800 542443 3	Other Wholesale	Unit B3-4 Astwoods Business Centre	Gloucester Road	GL51 0TF	1
6 Employees						
Cotswold Welding Supplies Ltd	855507	Transport support services and travel agents	Export House	Airport	GL51 6SP	1
6 Employees						

**Table 1 Listing of Companies: No Operational Linkages contd.**

Goodrem Nicholson		Windows, doors and conservatories	Staverton Technology Park	Staverton	GL51 6TQ	3
	50 Employees					
High Tech Windows Ltd	0800 452525	Sign writers	Airport	Staverton	GL51 6SP	4
	73 Employees					
Image Design	712000	Manufacturer of Fabricated metal products	Unit 7 Bamfurlong Industrial Estate	Staverton	GL51 6SX	1
	Not on D&B Was a large company on old study (employee category 5) but obviously was a mistake. 4 employees					
Independent Tool Consultants Ltd T/A Intoco	712519	Manufacturer of rubber and plastic productions	Unit C Staverton Connection	Gloucester Road	GL51 OTF	3
	46 Employees					
Injection Mouldings Ltd	854077	Wholesale of other mach. in industry	Unit B1 The Astwood Business Centre	Gloucester Road	GL51 OTF	2
	20 Employees					
Lynceus	856040	Training Company	Airport	Staverton	GL51 6SP	1
	2.5 Employees					
Messier-Dowty International Ltd	712424	Design and Manufacture of Landing gear	Cheltenham Road East	Gloucester	GL2 9QH	1
	0 Employees. On old study as 1 company. Now listed as 3 Separate in D&B					
Messier-Dowty Ltd	712424	Global support for landing and braking systems	Cheltenham Road East	Gloucester	GL2 9QL	7
	1200 Employees On old study as 1 company. Now listed as 3 Separate in D&B					
Messier-Services Ltd	713111	Design and Manufacture of Landing gear	Pennant Court	Staverton Technology Park	GL51 6TL	5
	195 Employees On old study as 1 company. Now listed as 3 Separate in D&B					
Pennant International Group	714914	Construction, civil eng, demolition.	Pennant Court	Staverton Technology Park	GL51 6TD	4
	80 Employees, Old study listed as Pennant International Ltd, D&B has 4 listings for it.					
Pennant Information Service Ltd	714914	Construction, civil engineering, demolition.	Pennant Court	Staverton Technology Park	GL51 6TL	4
	77 Employees					
Pennant Software Services Ltd	714914	Construction, civil engineering, demolition.	Pennant Court	Staverton Technology Park	GL51 6TL	5
	156 Employees					

**Table 1 Listing of Companies: No Operational Linkages contd.**

Pennant Training Systems Ltd	714914	Construction, civil engineering, demolition.	Bamfurlong Industrial Park	Staverton	GL51 6SX	4
	60 Employees					
Senior Steel Construction Ltd	712843	Manufacturer of Fabricated metal products	Unit 23-24 Bamfurlong industrial Park	Staverton	GL51 6SX	2
	18 Employees					
Stace-Yates Ltd	713722	Manufacture of other transport equipment.	Bamfurlong industrial Park	Staverton	GL51 6SX	1
	8 Employees					
Stanmar Company	712802	Transport Company	The Coach Depot	Pheasant Lane	GL51 0TE	3
	40 Employees					
Swanbrook Transport	712386	Building Supplies		Cheltenham Road East		3
	36 Employees					
Staverton Building Suppliers	712108	Automotive Repair Services	Unit 14 Bamfurlong Industrial park	Staverton		1
	8 Employees					
Staverton Commercial Servicing	714610	Manufacturer of Fabricated metal products	Bamfurlong Industrial Park	Staverton	GL51 6SX	1
	10 Employees					
TTI Group	712023	Metal Heat Treatment	Bamfurlong Industrial Park	Staverton	GL51 6SX	2
	24 Employees					

**Key to Employee Size bands:**

Size Band	Employees
1	1-10
2	11-25
3	26-50
4	51-100
5	101-250
6	251-500
7	501+

**Appendix B  
2008 Update**

**Table 2.**

**Companies Based in the Vicinity of Gloucestershire Airport, Who Do Not Have Operational Linkages With The Airport Gathered from Site Visits, Not Previously Reported**

<b>Company Name</b>	<b>Contact Number (01452)</b>	<b>Business Classification</b>	<b>Address 1</b>	<b>Address 2</b>	<b>Post Code</b>	<b>Emp Range</b>
A1 – Mailing Services	857771	Direct Mail Advertising Services	Staverton Technology Park	Staverton	GL51 6TQ	1
	7 Employees					
A&E Fire Equipment Limited	712021	Fire Appliance Distributors and Installers	Bamfurlong Industrial Park	Staverton	GL51 6SX	2
	20 Employees					
AGD Group Limited	854212	Holding Company	White Lion House	Staverton	GL51 0SS	3
	39 Employees					
AV Corp	715000	US Aircraft Registration	Airport	Staverton	GL51 6SP	1
	<10 Employees					
CPM Enterprises	855796	Office Support Services	Airport	Staverton	GL51 6SP	1
	<10 Employees					
Creed Catering	857555	Food Wholesalers	Staverton Technology Park	Staverton	GL51 6TQ	5
	137 Employees					
Creed Property Holdings Limited	857555	Food Brokers	Staverton Technology Park	Staverton	GL51 6TQ	5
	153 Employees					
Central Cladding Systems Limited	856252	Industrial Roofing Contractors	Staverton Technology Park	Staverton	GL51 6TQ	2
	23 Employees					
Clarkson Evans	530336	Electrical Work Contractors	Meteor Business Park	Staverton	GL2 9QL	5
	113 Employees					
Compressor Systems	859944	Compressor Systems	Meteor Business Park	Staverton	GL2 9QL	1
	4 Employees					



**Table 2 contd. Update List: Companies, No Operational Linkage**

Cotswold Motor Caravans Ltd	857131	Camper and Travel Trailer Dealers	Meteor Business Park	Staverton	GL2 9QL	1
	8 Employees					
Dicon Safety Products (Europe) Ltd	n/a	Wholesalers of Electronic Parts and Equipments	Meteor Business Park	Staverton	GL2 9QL	2
	17 Employees					
Dowty Propellers	716000	Aircraft Services	Anson Business Park	Staverton	GL2 9QN	6
	270 Employees					
Firfax Systems	717800	Electronic Systems	Meteor Business Park	Staverton	GL2 9QL	1
	4 Employees					
Fosteco	857800	Cables controls accessory's	Meteor Business Park	Staverton	GL2 9QL	1
	4 Employees					
Freedom Motor Homes	714424	Motorhomes	Meteor Business Park	Staverton	GL2 9QL	1
	7 Employees					
Future Advanced Manufacture Ltd (Formerly Universal Tool)	712597	Guided Missile and Space Vehicle Manufacturers	Bamfurlong Industrial Park	Staverton	GL51 6SX	3
	41 Employees					
Global Granite	05601 150182	Domestic Granite Products	Ashville Business Park	Commerce Road	GL51	1
	2 Employees					
Gloucestershire Media (Distribution Centre)	424442	Newspaper Printers and Publishers	Staverton Technology Park	Staverton	GL51 6TQ	1
	4 Employees					
Great Western Ambulance Service	753030	Staverton Ambulance Station	Ashville Business Park	Staverton	GI2 9QJ	5
	120 Employees					
Harmsworth Printing	540500	Newspaper Printers	Staverton Technology Park	Staverton	GL51 6TQ	4
	100 Employees					
Jon Walker (Cheltenham)	854444	Wholesaler of Food and Drink	Bamfurlong Industrial Park	Staverton	GL51 6SX	2
	(Formerly Arcadia Trading Co Ltd) 11 Employees					
Mercedes Benz OF Cheltenham & Gloucester	854700	Car Dealer	Ashville Business Park	Commerce Road	GI2 9QJ	4
	60 Employees					
Mitsubishi Motors	715870	Car Dealer	Meteor Business Park	Staverton	GL51	2
	20 Employees					
Montpellier Marble Limited	714800	Domestic Marble Wholesalers	Staverton Technology Park	Staverton	GL51 6TQ	1
	6 Employees					
Motaquip	856888	Motor Parts Dealer	Meteor Business Park	Staverton	GL2 9QL	1
	4 Employees					

**Table 2 contd. Update List: Companies, No Operational Linkage**

Plastim Ltd	857733	Manufacturers and Wholesalers of Plastic Products	Ashville Business Park	Commerce Road	GL2 9QJ	1
	9 Employees					
Robert Hall Business Equipment Ltd	858100	Business Machine & Electronic Equipment Rental Services	Ashville Business Park	Commerce Road	GL2 9QJ	2
	25 Employees					
St John's Ambulance	858220	Volunteer Medical Care	Ashville Business Park	Commerce Road	GL2 9QJ	2
	17 Employees					
Saint Gobain - Abrasives	858700	Abrasive Materials	Anson Business Park	Staverton	GL2 9QU	4
	63 Employees					
Sandling Fireworks	855915	Firework Distributor	Airport	Staverton	GL51 6SP	1
	4 Full Time 20 Part Time Employees FTE Approx. 6 Employees					
Shrinktek Polymers International Limited	714900	Heat Shrinkable Tubing Manufacturers	Staverton Technology Park	Staverton	GL51 0TF	2
	17 Employees					
Sorven	712275	Aircraft Broker	Airport	Staverton	GL51 6SP	1
	<10 Employees					
Stanmar Company	712802	Aircraft Component Manufacturers	Bamfurlong Industrial Park	Staverton	GL51 6SX	3
	40 Employees					
Stratstone	715700	Motor Dealerships	Ashville Business Park	Commerce Road	GI2 9QJ	2
	22 Employees					
Ultra Electronics Precision Air Systems	714382	Precision Air Systems	Anson Business Park	Staverton	GL2 9QU	4
	60 Employees					
Vacances Franco Britanniques Ltd (VFB) Holidays	240355	Tour operators	Anson Business Park	Staverton	GL2 9WA	3
	50 Employees					
Webnetisum Continental	855558	Web Design and Development	Staverton Technology Park	Staverton	GL51 6TQ	1
	10 Employees					
Wilksh	08701	Aircraft Engines	Airport	Staverton	GL51 6SP	1
	709670	6 Employees				

**Key to Employee Size bands:**

Size Band	Employees
1	1-10
2	11-25
3	26-50
4	51-100
5	101-250
6	251-500
7	501+

**Appendix C  
2008 Update**

**Table 1.  
2003 Study Appendix A&B Companies: No longer Identifiable as being  
located in airport vicinity 2008**

<b>Company Name</b>	<b>Contact Number (01452)</b>	<b>Business Classification</b>	<b>Address 1</b>	<b>Address 2</b>	<b>Post Code</b>	<b>Emp Range</b>
Ashton Air Services	712749					n/a
No line, permanent engaged tone. Not on D&B. Not on Yell. Not found on site.						
Autoroute	???		Airport	Staverton	GL51 6SP	n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						
Aviator Flying Club	???					n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						
Cox Commercial Insurance	???					n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						
Di-Al Extrusion Tools	???		Metor Business Park			n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						
Fairfax Aviation Ltd	???		Airport	Staverton		n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						
Fire Advisory Services	???					n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						
Frost Engineering	714691	Manufacturer of Fabricated metal products.	Cotswold View	Gloucester Road	GL51 0SS	n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						
Global C N C Ltd	856650	Manufacturer of Basic Metals	Bamfurlong Industrial Park	Staverton		n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						
Gloucester and Cheltenham School of Flying	???					n/a
No contact details found. Not on D&B. Not on Yell. Not found on site.						

**Table 1 contd.**

**2003 Study Appendix A&B Companies: No longer identifiable as being located in airport vicinity 2008**

Greenfinch Design Consultants	???					n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					
J G Harmer	???					n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					
Klentec Ltd	550030	Design Manufacture of Landing gear	Cheltenham Road East	Gloucester	GL2 9QH	n/a
	Not on D&B. Listed Astwood Business centre, Gloucester Rd. Do not appear to be on site.					
Knight Exek	???	Charter				n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					
Megair Ltd	???	Aviation Co.				n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					
Orchard & Ind Ltd (Orchard Press)	???					n/a
	No contact details found. In D&B but not on Yell. Not found on site.					
RSH Airwear Ltd	???					n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					
Sir William Halcrow & Partners Ltd	393939	Technical Consultancy	Bamfurlong Lane	Staverton	GL51 6ST	n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					
Software Analyst Services Ltd	???					n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					
The Print Works (Gloucester) Ltd	???					n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					
Williams of Cheltenham	???					n/a
	No contact details found. Not on D&B. Not on Yell. Not found on site.					

**Appendix C  
Table 2.**

**Known Gone-aways of companies listed in 2003 Report.**

<b>Company Name</b>	<b>Contact Number (01452)</b>	<b>Business Classification</b>	<b>Address 1</b>	<b>Address 2</b>	<b>Post Code</b>	<b>Emp Range</b>
Aeroscope	01608 650103	Flight Charter				n/a
No longer at premises, moved two years ago.						
Burman Aviation	859791					n/a
Stopped Trading 5 years ago. Gloucestershire Flying School Answered.						
E S Lambert	714164					n/a
Ceased Trading. E S Lambert now works for Tiger Airways who were not on previous study.						
Larscott	681007	Manufacturer of Fabricated metal products	Unit 2A	Bamfurlong Industrial Estate	GL51 6SX	n/a
Not on D&B. Relocated to Knightsbridge Cheltenham.						
William Bradshaw (Plant Hire Contractors)	01684 275908					n/a
Relocated to Tewkesbury						

**Appendix C  
Table 3.**

**Known Unknowns - Businesses located on site visits 2008, but no details obtained**

Company Name	Contact Number (01452)	Business Classification	Address 1	Address 2	Post Code	Emp Range
1Car1.com	0870 8012288		Staverton Technology Park	Staverton	GL51 6T?	
Bank of Scotland Public Sector Leasing	???		Ashville Business Park	Commerce Road	GL51	
CE Lewis Fabrications	???		Bamfurlong Industrial Park	Staverton		
City of Bristol College	714765	Engineering Base on Airport	Airport	Staverton	GL51 6SP	
DB Partners Ltd	???		Bamfurlong Industrial Park	Staverton		
Forest	???		Meteor Business Park	Staverton	GL51	
H-Media	???		Aerotech Park	Staverton		
Independent Abrasive Ltd	???		Unit A3 Aerotech Park	Staverton		
New Nordic	???		Aerotech Park	Staverton		
Severn Trent	???		Meteor Business Park	Staverton	GL51	
Sevenside Waste	???		Bamfurlong Industrial Park	Staverton		
Sky Park Steve Williams	859120	???	Airport	Staverton	GL51 6SP	
Virgin Media	???		Staverton Technology Park	Staverton	GL51 6T?	
Westflight/Aero GB	855900		Airport	Staverton	GL51 6SP	

**Appendix C  
Table 4.**

**Companies Listed on 2003 Report Appendix B, but unconnected with  
Airport Economic Impact.**

<b>Company Name</b>	<b>Contact Number (01452)</b>	<b>Business Classification</b>	<b>Address 1</b>	<b>Address 2</b>	<b>Post Code</b>	<b>Emp Range</b>
Hazelwoods	01242 680000	Auditing and Tax Consultants	Staverton Court	Staverton	GL51 0UX	n/a
Located Away from Airport and Totally Unrelated with Airport Activity. Error from 2003 Report.						

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