THE ECONOMIC IMPACT OF BUSINESS AVIATION AT FARNBOROUGH AIRPORT

Rushmoor Borough Council

May 2009

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Planning Design Economics

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FINAL REPORT

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Executive Summary

1. This Economic Impact Study of Business Aviation at Farnborough Airport has been commissioned by Rushmoor Borough Council to inform its Local Development Framework (LDF) Core Strategy and specifically to assist preparation of an Area Action Plan for the Airport. It will also support consideration of development at the Airport and options for its future.

2. Within this context, the study is to provide clear and robust evidence on the current and predicted economic effects of business aviation at Farnborough Airport, at local, sub-regional and national levels. It assesses the following types of economic impacts: direct, indirect and induced, catalytic economic impacts and wider community impacts.

3. Each of these impacts is considered for different levels of flight movements at the Airport, including its current level in 2009 (28,000 p.a.) and potential future increases in flight movements to 35,000, 50,000 and 60,000+ p.a. The study also considers the economic contribution of other activities based at or immediately adjoining the Airport site, including the Farnborough Air Show, Farnborough Aerospace Centre, the IQ Farnborough Business Park and Cody Technology Park.

The Business Aviation Sector

4. Business Aviation is a growth sector in both the UK and Europe, with faster growth than commercial aviation, reflecting a number of advantages it offers to businesses in terms of flexibility, convenience, time savings, privacy and security.

5. Farnborough Airport is the only dedicated Business Aviation airport in the UK and now has more Business Aviation movements than any other UK airport. It primarily serves the most economically buoyant area of the country to the west of London and parts of London itself and has achieved rapid growth in recent years. While other airports in the South East also provide Business Aviation services, many of these have constraints of various kinds that limit their ability to serve a wide area of the South East market and all operate other activities rather than just Business Aviation.

Economic Context

6. Local economic impacts have been assessed primarily for the Rushmoor, Hart and Surrey Heath area, where many of the impacts are concentrated, while consideration of the regional impacts will capture those economic effects which are spread more widely.

7. This sub-region has a relatively buoyant local economy forming part of the Blackwater Valley area west of London. It is part of a competitive and high performing area characterised by good connectivity, highly skilled residents and high economic growth. It has a high concentration of knowledge based firms and a strong business base comprising large multinationals as well as high value added small and medium sized enterprises.

8. Taken as a whole, the sub-region has a strong local economy which has outperformed regional averages, with reasonable employment growth, strong rates of new business formation, above average skill levels, very low unemployment and high average wages. It is strongly represented in the service sector and in knowledge based firms with a modest manufacturing base. It has also been reasonably successful in attracting inward investment in higher value growth sectors.

9. However, some parts of the area perform better than others, with Rushmoor experiencing higher unemployment and more modest job growth. While unemployment is still generally low, there is still demand for jobs in higher skilled occupations as well as unskilled work. Despite the sub-region's generally strong economic performance, this suggests that the Rushmoor area in particular would benefit from further employment growth in sectors that provide a range of local job opportunities including higher skilled work.

Employment Impacts

10. At the present time, the total number of jobs currently based at the Airport (1,100) and those based off-site or supported indirectly by it amounts to some 1,500 at the local level, and 1,860 within the South East/London region. On this basis, the Airport site is one of the largest employers in Rushmoor Borough, comparable in local job generation to major aerospace or ITC firms based in the area.

11. The Airport, together with the cluster of aerospace, defence and other businesses immediately adjoining it, currently accommodate almost 8,000 jobs. With indirect/induced effects, the total employment supported by this complex locally is estimated at almost 9,600 jobs and 12,000 in the region. This forms one of the largest employment centres in the North Hampshire/Surrey area.

12. Jobs based at the Airport tend to be predominantly full-time, with a high proportion of skilled occupations and with wage levels well above the regional average. Almost one quarter of these jobs are filled by residents of Rushmoor and almost half by residents of the wider local area including Rushmoor, Hart and Surrey Heath districts.

13. If air movements were to increase from about 25,500 to 50,000 p.a. the number of jobs supported within the local area could be expected to be between 1,900 – 2,090, both direct and indirect. This would be an increase of between 400-600 jobs over the current situation. At the regional level, total jobs for that level of movements would be 2,360 -2,600, an increase of between 500-740 jobs over the current levels of jobs related to the Airport in that area.

Labour Market Effects

14. These estimated levels of employment growth associated with increased movements at Farnborough Airport appear unlikely to produce significant strains on the local labour market and should help diversify local job opportunities in the area. The likely employment profile of the new jobs would compare fairly well with that of the sub-region where job skill levels are higher than average and jobs sought by local unemployed residents show above average demand for higher level jobs. At the same time, other

lower skilled Airport based jobs should meet some needs for lower skilled unemployed workers in Rushmoor.

15. The estimated increase of 400-600 in direct jobs at Farnborough Airport resulting from up to 50,000 movements annually appears quite modest amount compared with the growth of 6,500 jobs anticipated for the local area over the next 7 years or so, approximately 6-9% of all growth. This job increase would also be equivalent to between 11- 16% of current unemployment in the area. It would also help to diversify local employment opportunities and further support the local skills base in aviation related activities.

Investment

16. The development of the Airport since the early 2000s has brought almost £100 million of capital expenditure to the area, with a further £34 million committed. An increase in movements to 50,000 p.a. is likely to result in further investment of at least £12 million in the short term.

17. Current operations at the Airport are estimated to generate almost £26 million of income annually in the local economy, through spending of wages by Airport based staff, by expenditure with local supplier firms and through multiplier effects. As a proportion of its total spending, the local income generation of the Airport appears quite modest and the number of local firms that benefit directly from it is about 40. At the regional level, however, this income generation effect is greater, amounting to over £85 million annually.

18. Increased movements at the Airport have the potential to produce additional income generation. Growth to 50,000 movements p.a. is estimated to raise the income generated in the local economy up to £37 million, an increase of more than £11 million over the current situation. At the regional level, the increase would be in the order of £ 37 million.

Catalytic Effects

19. While there is limited direct evidence that the Airport has influenced inward investment decisions, the Airport and its convenient Business Aviation services appear to make the surrounding area a more attractive location in which to do business for larger firms with overseas interests. The Airport's use by major corporate firms within the South West and West London, and its strong growth on the back of such usage, also suggests the Airport is an important factor for larger businesses with overseas interests or relying heavily on convenient air travel.

20. Without necessarily being a decisive factor in past decisions on business locations, the Airport contributes strongly to enhancing the general image of the area, by giving it an easily identifiable focus, and adding an extra dimension to the area's range of business support services, helping distinguish it from competing areas. These factors are likely to influence future investment decisions on retention of firms or expansion of investment in the local area, particularly when such decisions are usually made by senior executives who are the more frequent users of Business Aviation services.

21. The Airport is also the focus for the cluster of aerospace and defence industries based around it, including BAe, the Aerospace Centre generally, QinetiQ and some aerospace firms at Farnborough Business Park. There is some use of the Airport by these companies and it is seen as providing an important focal point for, and enhancing the image of, the aerospace cluster in this location. By hosting the Farnborough International Airshow, which is an important focus for generating new export orders for the UK aerospace sector, the Airport contributes indirectly to UK exports, in which the aerospace sector generated orders worth £44bn in 2007. If Farnborough Airport did not exist, it is not clear where else in the UK that this event could be held and could result in a major loss of export opportunities to the UK economy and affect a sector in which the UK economy is very strong.

22. The presence of the Airport in the area provides some moderate benefits to the local community, particularly in providing a range of local job opportunities, supporting aerospace and engineering related job training courses at local institutions, working with local schools and supporting local community groups. It also contributes to general socio-economic objectives for Rushmoor.

23. Overall, from the evidence available, Farnborough Airport is a significant economic asset to the North Hampshire/Surrey area and to the South East/London region. It is a major local employer and a focus for aerospace employment of regional importance. In terms of direct and indirect expenditure effects, these are moderate at the local economy level, but important at a regional level. While the Airport's influence in attracting inward investment is less clear, it is clearly important to larger firms in the area with overseas interests, appears to enhance the image of the area as a successful and dynamic business location, gives it a clear focus as a centre for aerospace activity, aids its competitiveness and is likely to influence future investment decisions on retention or expansion of firms.

24. Allowing a near doubling of air movements to 50,000 p.a. or more would lead to moderate gains in local employment and income generation. The ability to operate more flights ought to allow more frequent and convenient air services and help consolidate the Airport's position as a leading Business Aviation airport and potentially attract new operators to base themselves at Farnborough. This in turn should generally enhance services available to businesses, which, in turn, might be expected to make the area more attractive in terms of attracting or retaining investment. If maintaining the current limits on movements prevented the Airport from accommodating the future level of demand and offering a good quality service to corporate users, this could give a generally negative message about Farnborough compared with other airports with fewer constraints, and may send out adverse signals to businesses which could affect decisions on expansion.

1.0 Introduction

1.1 This Economic Impact Study of Business Aviation at Farnborough Airport has been commissioned by Rushmoor Borough Council to inform its Local Development Framework (LDF) Core Strategy and specifically to assist preparation of an Area Action Plan for the Airport. It will also support consideration of development at the Airport and options for its future to assist preparation of an Area Action Plan for the Airport and surrounding sites.

1.2 Within this context, the study is to provide clear and robust evidence on the current and predicted economic effects of business aviation at Farnborough Airport, at local, sub-regional and national levels. Specifically, it assesses the following types of impacts:

(i) direct economic impacts;

(ii) indirect economic impacts;

(ii) induced economic impacts;

(iv) catalytic economic impacts;

(v) community impacts.

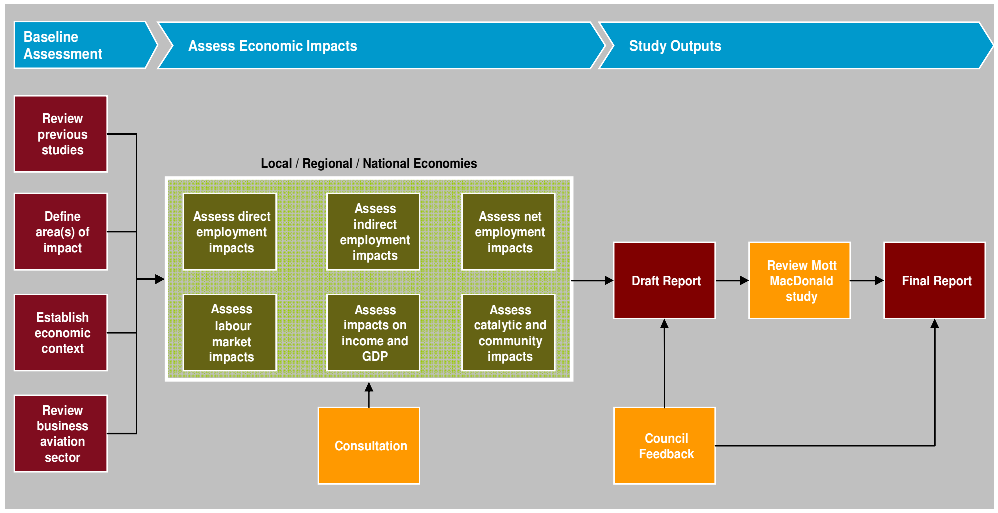
1.3 Each of these impacts is considered for different levels of flight movements at the Airport, including its current level in 2009 (28,000 p.a.) and potential future increases in flight movements to 35,000, 50,000 and 60,000+ p.a. The study also considers the economic contribution of other activities based at or immediately adjoining the Airport site, including the Farnborough Air Show, Farnborough Aerospace Centre, the IQ Farnborough Business Park and Cody Technology Park.

1.4 In addition, this study provides an independent and objective appraisal of a similar economic study being undertaken in parallel by Mott MacDonald on behalf of TAG Farnborough Airport Ltd, the owner and operator of Farnborough Airport.

1.5 The general approach of this study is broadly illustrated by Figure 1 and follows widely accepted approaches to economic impact assessment for airports. A key input was consultation with various organisations involved with or affected by the Airport including its owners, air service operators, key tenant firms, economic development and inward investment bodies, business groups and commercial property agents. Appendix 1 contains a list of such consultees.

1.6 The study also draws on previous research and economic studies on the business aviation sector, other business aviation airports, and on the local economy as well as relevant policy documents and published economic statistics. These documents are listed in the Reference Documents section of the Appendices.

Figure 1: Economic Impact Assessment Methodology



The report is structured as follows:

- **Farnborough Airport Activities** (Chapter 2) — Describes the airport, its facilities and operations, and other economic activities based there
- **The Business Aviation Sector** (Chapter 3) — A review of the UK business aviation sector, recent trends in it and the role of Farnborough Airport within this sector.
- **Economic Context** (Chapter 4) — An overview of current economic conditions in the local area around the Airport.
- **Existing Employment Impacts** (Chapter 5) — Assesses current job levels associated with the Airport and adjoining employment sites.
- **Potential Future Employment Impacts** (Chapter 6) — Assesses potential job levels associated with various future numbers of air movements at the Airport.
- **Labour Market Impacts** (Chapter 7) — Considers how future Airport related job growth will affect the local labour market.
- **Income & Expenditure Effects** (Chapter 8) — Estimates the Airport's impact in terms of income generation and contribution to GDP.
- **Catalytic & Other Economic Effects** (Chapter 9) — Examines wider economic effects of the Airport including on business investment decisions.
- **Community & Other Impacts** (Chapter 10) — Considers other non-quantifiable effects of the Airport on the local area.
- **Review Airport Economic Study** (Chapter 11) — Provides an independent and objective review of the parallel economic study undertaken for Farnborough Airport's owners
- **Conclusions** (Chapter 12) — Draws overall conclusions for the study.

2.0 Farnborough Airport Activities

2.1 This section describes the location and function of Farnborough Airport, its key aviation operational activities and infrastructure and other main economic activities based on the Airport site or immediately adjoining it.

2.2 Farnborough Airport is the UK's only dedicated Business Aviation airport and does not operate any scheduled passenger services, bulk freight services, leisure flying or inclusive tour charter flights. It lies in the North Hampshire Borough of Rushmoor, close to the Surrey/Hampshire boundary and some 55 km south west of central London. The Airport is owned and operated by TAG Farnborough Airport Ltd.

2.3 Located on the edge of the town of Farnborough, the Airport has good accessibility by road, lying close to Junctions 4 and 4a of the M3 motorway to the north, and the A31 to the south, while Farnborough station has frequent rail services to London Waterloo and Portsmouth.

2.4 The current Farnborough Airport site was the first operational airfield in the UK in the early 1900s. It was occupied by the Ministry of Defence (MOD) as an airfield and centre for aviation research until the early 1990s. Government recognition, in the late 1980s, that lack of Business Aviation capacity in the South East could have adverse impacts on the regional economy led to the site being earmarked as suitable for a Business Aviation airport. After the airfield site was declared surplus to Government requirements, planning permission was granted in 2000 for Business Aviation use on the operational area of the airfield, with an annual limit of 28,000 air movements. In 2008, permission was granted on appeal for an increase in weekend air movements, while total movements remained unchanged.

2.5 Other non-operational parts of the original MOD site were released in 1991 to form the British Aerospace Farnborough Aerospace Centre and for development by SEGRO as the IQ Farnborough Business Park, with other areas retained for occupation by Government bodies or defence related research activities (now QinetiQ). Since 1948, part of the Airport has also been home to the Farnborough International Airshow, an internationally renowned showpiece and marketing event for the aerospace and air defence industry.

2.6 The Airport's key infrastructure facilities include:

- a long runway (1,800 metres landing distance) with an Instrument Landing System (ILS) capable of serving all business aviation aircraft up to a Boeing Business Jet;
- a large, high quality, modern terminal building;

- an extensive area of aircraft parking and taxiing aprons;
- a number of large hangars (over 11,000 m^2), used for either aircraft storage or maintenance;
- a state-of-the art Air Traffic Control Tower, fire station, fuel depot, and 190 space car park;
- a 169 bedroom hotel, the Aviator, with leisure and conference facilities immediately adjoining the Airport site.

2.7 As an exclusively Business Aviation airport, Farnborough provides:

- a full handling service for Business Aviation aircraft;
- comprehensive engineering services for all types of Business Aviation aircraft using the Airport;
- air taxi services;
- Business Aviation aircraft charter and management services.

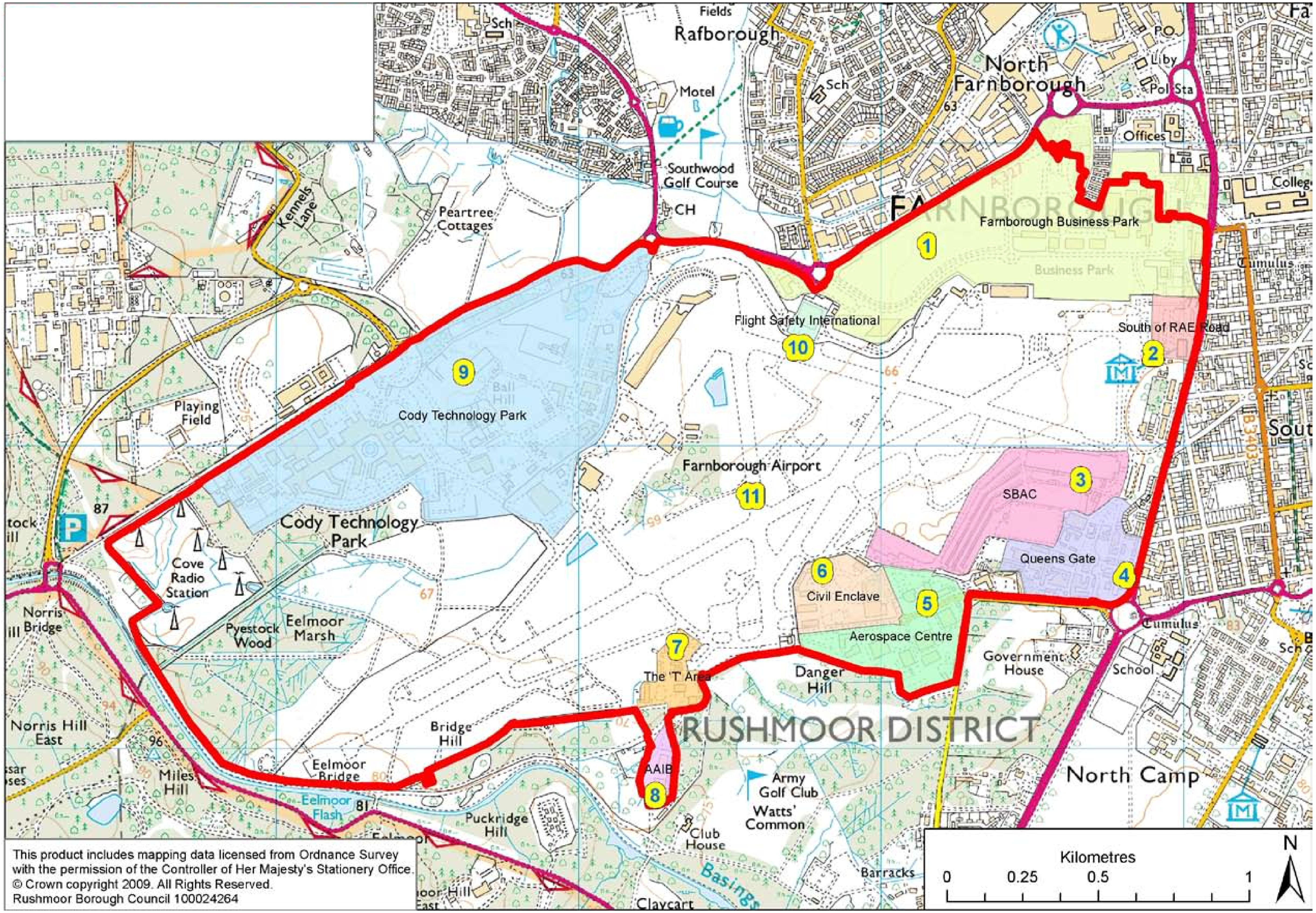
2.8 The Airport is currently restricted to a limit of 28,000 aircraft movements p.a. and reached approximately 25,500 movements in 2008.

2.9 Within the Airport site, TAG lets premises to over 50 tenant companies. These include aircraft operators, air taxi firms, manufacturers of Business Aviation aircraft and firms that manage, maintain and refurbish such aircraft. Customs and immigration facilities are based there but there are no retail activities or catering facilities for passengers on the Airport.

2.10 Part of the Airport site is let to Farnborough International, which runs the International Air Show on the Airport every two years, and operates offices and a conference centre and an events venue there. Another part is occupied by Flight Safety International, which operates a major flight simulator based training centre for pilots and flight attendants.

2.11 As shown on Plan 1, there are several major developments outside but immediately adjoining the Airport site:

- Cody Technology Park, largely occupied by defence equipment manufacturer QinetiQ and its contractors;
- the 51 ha IQ Farnborough Business Park, with permission for 155,000 m^2 of offices along with a hotel, leisure facilities and 478 residential units;
- the Farnborough Aerospace Centre, mainly occupied by British Aerospace (BAe) and other aerospace companies;
- commercial small scale office/industrial development and a DLVA driving test centre on the 7 ha former Civil Enclave site adjoining the Aerospace Centre;
- the Air Accident Investigation Branch, a Government body involved with examining wreckage and causes of aircraft accidents.



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Client	Rushmoor Borough Council
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3.0 The Business Aviation Sector

3.1 This section reviews the Business Aviation sector within the UK and overseas, its economic importance and representation in the UK, and the role that Farnborough Airport plays within this.

Characteristics of Business Aviation

3.2 Business Aviation can be defined as non-commercial movements of fixed wing aircraft of 2,730 kg or greater for conducting business operations, including corporate purposes or as sole-use charter or air taxi services.[1] This excludes helicopters and use of other aircraft for general aviation purposes such as training, recreation, commercial freight, scheduled passenger services and police work. It is an on-demand service giving the ability to fly at short notice to a customised itinerary rather than involving scheduled departures. It has three main components:

- corporate aviation, in which firms own and operate aircraft exclusively for company use; these are typically large companies and high value businesses; a growing trend is fractional ownership of aircraft, where companies reduce costs by owning a share of business aircraft only for specified time periods;

- specialist air-taxi operators, which hire their aircraft to individuals or companies, or on a whole aircraft charter basis, but do not offer scheduled services;

- owner-operated aircraft, often owned by wealthy individuals, flying for business purposes by the owner or a crew employed by the owner.

3.3 In this sector, there is a strong emphasis on maintaining high levels of privacy and security for Business Aviation users, which are often senior executives of major companies. Typically, corporate aircraft used do not have any markings to identify owners. Another key feature is minimal barriers and waiting times between passengers arriving and boarding aircraft, with no shops, duty free outlets or passenger catering facilities typically provided. Immigration procedures are often carried out by officers boarding the aircraft rather than any queuing by passengers at security desks.

National & European Context

3.4 The UK's Business Aviation sector is one of the largest in Europe. In 2007, it ranked just behind Germany in terms of its share (16.5%) of Europe's active Business Aviation fleet and its share of Business Aviation aircraft movements

[1] Combination of definitions used by the CAA and study of Business Aviation in the South East, Halcrow Fox for the UK Government, 1999

(18.4%). In addition, 11 UK airports are in the top 50 busiest European airports measured by Business Aviation departures in 2007.[2]

3.5 The UK Business Aviation industry is estimated to generate over 4.2bn Euros, representing just over 0.2% of the national economy. Almost 50,000 jobs are linked to the sector and these generate over 1.5bn Euros in wages and salaries.[2]

Commercial Advantages of Business Aviation

3.6 The main advantages of Business Aviation to business users in comparison with commercial aviation include:

- the flexibility and convenience of instantly accessible point-to-point air links that avoid the need for onward connections and reduce access times to and from airports;
- ability to cover several business locations in a given time, particularly on trips involving multiple destinations;
- ability to travel directly to areas not well served by commercial airlines;
- time savings to business users from avoiding congested major commercial passenger airports and taking off from small, less busy Business Aviation airports;
- cost savings compared to business or first class flights on commercial scheduled services, particularly when several business executives are travelling;
- ability to make more effective use of travelling time in a more private and comfortable environment, for example holding meetings, reading confidential documents and offering hospitality to clients;
- perceived safety advantages in terms of greater security for staff and high value goods, for example from terrorism, and concerns over lower air safety standards in some countries;
- being less susceptible to strikes and other disruption;
- projecting a positive corporate image, indicating a company to be progressive and concerned with efficiency and with high productivity.

[2] The Economic Impact of Business Aviation in Europe, PwC for the European Business Aviation Association, 2008.

Recent Trends

3.7 Business Aviation is a fast growing sector. Over the period 2001-2008, Business Aviation movements at all UK airports grew by 4.6% while all air movements have grown by only 2.6%. Between 2006-07, Business Aviation movements/day in the UK grew by 14.3%, well above the growth for all air movements in that period. This growth rate for UK Business Aviation was also above the European average of 10%.

3.8 The continuing growth of Business Aviation has been driven by factors such as:

- increasing congestion and delays at commercial airports, including tighter security controls;
- development of different forms of aircraft ownership which lower user costs for Business Aviation;
- introduction of lighter jets which allow access to Business Aviation for a wider range of customers.

3.9 However, Business Aviation faces increasing difficulty in operating from larger airports because of higher costs, increasing congestion and difficulty in obtaining landing slots. This is reflected in growing numbers of movements at smaller airports that specialise in these types of flights and falling proportions of Business Aviation movements at the busiest UK airports. For example, Business Aviation now accounts for only 0.8% of all departures at Gatwick, 4.5% of those at Stansted, 2.3% at Manchester and 0.6% at Heathrow.

3.10 There are some indications that Business Aviation has been affected by the current economic downturn, with movements at Farnborough down on the previous year and a 17% fall in Business Aviation movements at UK airports generally between the first quarters of 2008 and 2009.

3.11 The most recent Government forecasts of future growth in Business Aviation in the London area were made in 1999. These predicted an increase in Business Aircraft Movements between 2010 and 2030 varying between 0% (low growth) and 80% (high growth), with a mid range forecast of a 50% increase.[3]

The Role of Farnborough Airport

3.12 Within the UK, there are relatively few airports where there is significant Business Aviation activity. Most of these are in the South East of England and include Luton, Farnborough, London City, Stansted, Northolt and London Biggin Hill as well as some very small airfields. In the north of England and Scotland, there are no specifically Business Aviation airports and such flights typically use commercial airports or small General Aviation airfields.

[3] Business Aviation in the South East, Halcrow Fox for the UK Government, 1999

3.13 Luton, Farnborough, London City and London Biggin Hill are the only UK airports within the top 25 European airports in terms of their numbers of Business Aviation departures per day in 2007. However, among these, Farnborough Airport ranks at 8th, and as the only dedicated Business Aviation airport in the UK, had by far the highest proportion of its departures in 2007 related to Business Aviation. For comparison, the next highest, Luton and London Biggin Hill airports, have only 21-22% of departures related to Business Aviation.

3.14 Business Aviation movements at Farnborough Airport have grown from only 5,500 in 1993, to 11,100 in 1997, 16,200 in 2003 and over 25,500 in 2008. The 70% increase in movements between 2002-08 is an exceptionally high level of growth compared with the national picture and the sector generally (Table 3.1).

Airport	**2002**	**2008**	**% growth**
Farnborough movements (,000s)	15.0	25.5	70%
UK Business Aviation movements	139.2	191.9	39%
All UK air movements (million)	2.12	2.48	17%

Table 3.1: Farnborough Airport Business Aviation Movements, 2002-08 Source: CAA/ TAG

3.15 Farnborough Airport tends to serve corporate users across the South East/London region, although London is also served by London City, Northolt and Biggin Hill airports. Analysis of corporate users of Farnborough indicates a concentration of firms within north Hampshire, Surrey, West London and former Berkshire districts, such as Bracknell. This broadly corresponds to the economically very buoyant corridor west of London and around the M3 and M4 motorways.

3.16 Analysis of aircraft arrivals at Farnborough indicates that the vast majority of flights (57%) originate from within Europe (excluding the UK), followed by the UK (32.9%), with much smaller but still significant proportions from North America and the Caribbean (3.5%), and the Middle East (2.3%) (Table 3.2).

Region	**Total**	**% of total**
Africa	103	0.8
Europe (excluding UK)	7,206	57.0
Far East	38	0.3
Middle East	295	2.3
North America and Caribbean	445	3.5
South America	6	0.0
UK	4,163	32.9
Unknown (probably UK)	384	3.0
Total	**12,640**	**100.0**

Table 3.2: Farnborough Airport Aircraft Arrivals by Region of Origin, 2008 Source: TAG

Other Business Aviation Airports

3.17 It is also useful to consider Farnborough in comparison with other airports serving part of the Business Aviation market in the South East.

Airport	2008 Business Aviation movements	Share of SE Movements	% of all Movements 2001	% of all Movements 2008
Farnborough	25,500	27.0%	100%	100%
London Luton	25,130	26.6%	12.8	21.3%
Biggin Hill	13,970	14.8%	5.2%	22.5%
Stansted	8,772	9.3%	3.9%	4.5%
Northolt	7,000	7.4%	N/A	N/A
London City	6,475	6.8%	2.7%	6.9%
London Heathrow	2,908	3.1%	0.4%	0.6%
Southend	2,815	3.0%	2.7%	7.6%
London Gatwick	2,023	2.1%	0.9%	0.8%
Oxford *	~3,000	~3.2%	N/A	~7%
Total South East	94,593	100%	-	-

Table 3.3: SE Airports with most Business Aviation movements. Note: Business Aviation includes Business Aviation and air taxi movements. Source: CAA * based on press releases for Oxford Airport

3.18 **London Heathrow** is the UK's largest and busiest commercial airport and located in south west London only 25 km away from Farnborough. However, Business Aviation now forms less than 1% of its movements. This is understood to reflect difficulty in obtaining runway slots due to the intense use of the runways by larger, scheduled commercial aircraft and general discouragement of Business Aviation by the airport operator. Landing charges and costs of hangarage are much higher than at Farnborough. A broadly similar situation applies at **London Gatwick**, which is also further from London.

3.19 **London Luton Airport** has the largest number of Business Aviation movements after Farnborough, with no restrictions on operating hours, and has roughly a quarter of the South East market. However, Business Aviation forms only 21% of its aircraft movements and this proportion has also fallen in recent years. It has some drawbacks for Business Aviation. It is now a base for budget airlines, particularly Easyjet and Ryanair, which serve a quite different market segment, and with rapid growth in passenger numbers and growing congestion at peak times. Given its location 32 km north of London, it is clearly less accessible to the area west of London, while obtaining space for aircraft parking/storage is understood to be becoming more difficult.

3.20 While **London City Airport** in east London is very well placed to serve the financial centres in the City of London and Docklands, it is much less accessible to west London and areas further west. Business Aviation forms just 7% of this airport's movements but it has a constrained Docklands site that is relatively limited in terms of space and lies within a densely developed urban area. It also has a much shorter runway, has restricted operating hours and is closed for much of the weekend.

3.21 **London Biggin Hill** in south London has around 15% of the London Business Aviation market and some 23% of its movements are in this sector. However, unlike Farnborough, it does not exclusively handle Business Aviation and has significant General Aviation activities. Its runway length is shorter than Farnborough's and its road access to central London and the west of London somewhat constrained. This airport plans to increase its share of Business Aviation in future.

3.22 **Northolt** lies in west London and is an RAF airbase operated by the Ministry of Defence but also handles some Business Aviation activities, although with an annual limit of 7,000 civilian aircraft movements. It is also usually closed at weekends and has a shorter runway than Farnborough. In 2006, London City Airport extended its corporate aviation operations by opening the Northolt Jet Centre Premier Passenger Service, which London City Airport manages.

3.23 **Oxford** is a small General Aviation airport to the north of Oxford, close to the M40 but up to 2 hours travel time from central London. It handles a limited amount of Business Aviation activity (7% of movements or about 3,000 p.a.) with a greater focus on flight training, has no Instrument Landing System, and a much shorter runway than Farnborough. However, it has recently opened a Business Aviation terminal and plans to expand this activity based on the airport's lower operating costs.

Conclusions

3.24 Business Aviation is a growth sector in both the UK and Europe, with faster growth than commercial aviation, reflecting a number of advantages it offers to businesses in terms of flexibility, convenience, time savings, privacy and security.

3.25 Farnborough Airport is the only dedicated Business Aviation airport in the UK and now has more Business Aviation movements than any other UK airport. It primarily serves the most economically buoyant area of the country to the west of London and parts of London itself and has achieved rapid growth in recent years. While other airports in the South East also provide Business Aviation services, many of these have constraints of various kinds that limit their ability to serve a wide area of the South East market and all operate other activities rather than just Business Aviation.

4.0 Economic Context

4.1 This Chapter establishes the economic context within which any impacts of the Airport will take place. It defines the main areas of impact to be considered and reviews recent economic conditions and trends within the local area, comparing these with the South East region and the national economy.

Areas of Impact

4.2 The study is to examine the economic impacts of Farnborough Airport at local, regional and national levels. At the regional level, the South East region/London forms an appropriate area for consideration.

4.3 At the local level, the area in which the Airport's economic impacts are most strongly felt can be considered in different ways. In terms of the Airport's labour catchment area, this is focused on the districts of Rushmoor, Hart, Surrey Heath, in which about half of all Airport based employees live, while just over 75% live within Hampshire and Surrey as a whole.

4.4 Spending by the Airport operator appears to be spread over a wider area, with 23% of all supplier spending within Rushmoor, Hart and Surrey Heath.[4] It has not been possible to obtain more information on supplier spending by all Airport-based firms, but telephone discussions with a number of tenants suggest that only a modest share of their supplier spending is within these districts. Corporate users of the Airport appear to be located within a wider area, including west London, Surrey, Berkshire and north Hampshire.

4.5 On balance, local economic impacts have been assessed primarily for the Rushmoor, Hart and Surrey Heath area, where many of the impacts are concentrated, while consideration of the regional impacts will capture those economic effects which are spread more widely.

The Local Economy

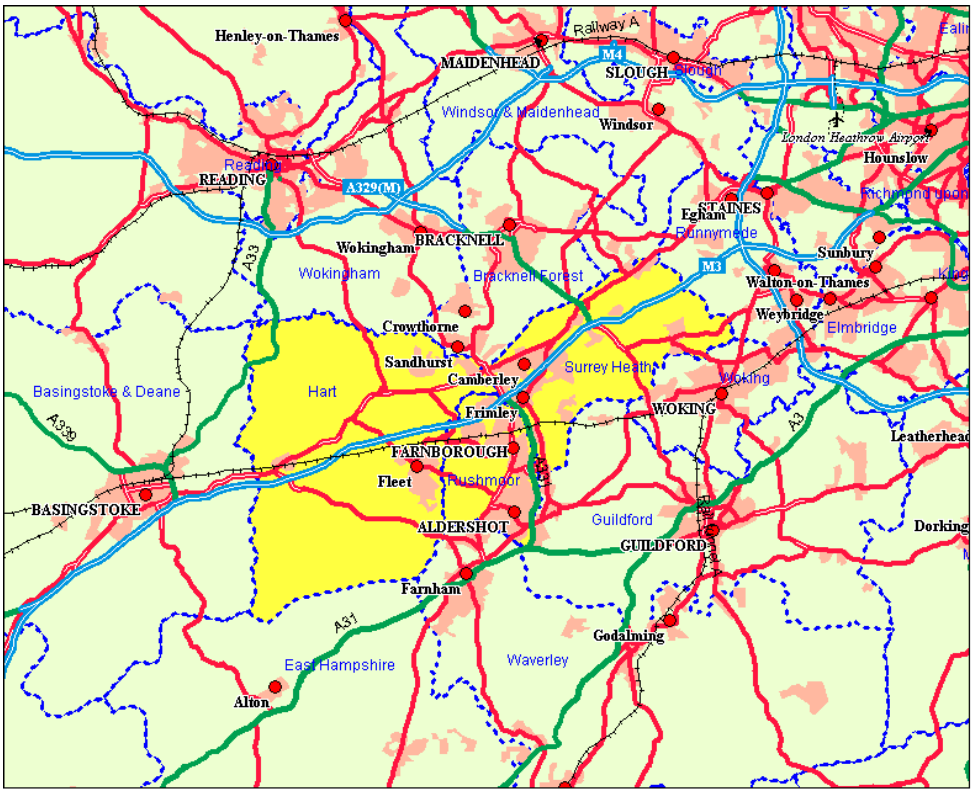
4.6 The sub-region formed by Surrey Heath, Hart and Rushmoor districts comprises a largely rural area with its main towns being Farnborough (population 57,000) and Aldershot (34,000) in Rushmoor district, Camberley (45,000) in Surrey Heath, along with Fleet (32,000) in Hart District.

4.7 This sub-region sits astride the M3 motorway linking it to London and the M25. Farnborough, Fleet and Aldershot have frequent direct train connections to London Waterloo and a journey time of between 35 and 55 minutes. The nearest airport with scheduled flights is London Heathrow, some 25 km to the north east via the M3 and M25. Farnborough and Fairoaks Airports provide more specialist aviation services within the area.

[4] aviation fuel, business rates and other items are excluded

Economic Activity

4.8 This sub-region has a relatively buoyant local economy forming part of the Blackwater Valley area west of London. Within the Regional Economic Strategy (RES), this area is defined as part of a competitive and high performing area characterised by good connectivity, highly skilled residents and high economic growth. It has a high concentration of knowledge based firms and a strong business base comprising large multinationals as well as high value added small and medium sized enterprises.



Plan 2: Sub-regional Context

4.9 The wider area served by Farnborough Airport is also described by the RES as one *"where a strong relationship with a World City sits alongside centres of economic vitality as strong as any in Europe, delivering much of the South East's 'world class' performance."* It is identified as one of Europe's fastest growing business locations where the emphasis should be on productivity-led growth, building on its best knowledge sector businesses and research centres.

4.10 The main centres of economic activity and employment in the sub-region include:

- the cluster of aerospace and defence firms around Farnborough Airport, including Farnborough Aerospace Park and Cody Technology Park;

- office based activities within Camberley, Farnborough and Fleet town centres;
- a range of business parks and industrial estates in and around the main towns, such as Farnborough Business Park, Frimley Business Park, Waterfront Business Park, Ancells Farm and Blackbushe;
- various industrial estates in the main towns e.g. Yorktown, St. George's, Admiralty Way, and Murrells Green.

This area also lies close to Basingstoke, the nearest larger economic centre.

4.11 The larger private sector employers in Rushmoor include higher technology, telecommunications and defence related firms, including Sodexho Defence Services, QinetiQ, BAe Systems, BT, CSC Computer Sciences, IBM, and Nokia. Elsewhere in the sub-region, the larger firms are also in knowledge based sectors, particularly Eli Lilley pharmaceuticals, Sun Microsystems, Siemens, Toshiba, financial firm Merrill Lynch, engineering firm Fluor and manufacturer S C Johnson.

Inward Investment

4.12 The sub-region has been of the South East's more attractive areas for foreign inward investment in recent years, particularly for IT, telecommunications and aerospace sectors. Over the last three years, an average of five firms annually were attracted to this area, 15 out of the 38 attracted to Hampshire as a whole, and mainly in software, telecommunications and electronics sectors.[5] Nearly one in three of all SEEDA assisted foreign direct investments in Hampshire is in the aerospace and defence sector. This reflects that area's long established clusters of aerospace and defence research activities, its pool of highly skilled workers, proximity to London and Heathrow Airport and being a generally attractive place to live.

Knowledge-based Industries

4.13 Knowledge-based industries are those sectors of the economy where value-added is derived from the intensity and accumulation of knowledge, often fostered through innovation and increasing use of technology. Firms within this sector tend to grow faster and have greater future potential than other sectors, and so are considered an important indicator of an economy's competitiveness and future growth prospects. This area generally has a much higher than average proportion of knowledge-based industries, but with Rushmoor closer to the regional average (Figure 4.2).[6]

[5] Based on data provided by SEEDA for 2006-09

[6] Based on definition adopted by the Organisation for Economic Co-operation and Development (OECD), includes high-tech manufacturing activities such as pharmaceuticals, computers and aerospace, and services such as telecommunications, financial intermediation, computing and research and development.

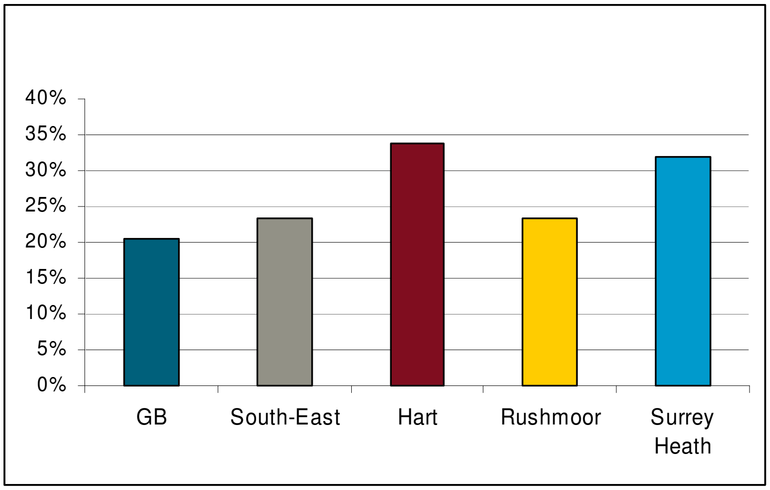


Figure 4.2: Proportion of Knowledge-based Businesses Source: UK Competitiveness Index 2008

Economic Trends

4.14 In 2007, the sub-region contained some 122,800 employee jobs, an increase of 5% since 1998. This was a lower growth rate than in the South East and Great Britain (both 9%), although Rushmoor had no job growth in that period.[7]

4.15 In employment terms, the sub-region's largest economic sector is financial and business services (34% of jobs), particularly the IT sector, which is significantly over-represented compared with the South East region. Distribution, hotels and restaurants forms the next largest sector (24%) with a similar proportion of employment to the regional average. In contrast, the proportion of employees in manufacturing (7%) is below the regional average (9%). Overall, this is a local economy with a strong emphasis on service sectors and much less on industrial activities.

4.16 Over the period 1998-2007, the sub-region's fastest growing sectors in job terms were 'other services' (+50%) and transport & communications (+36%), both of which grew much faster than regional and national rates. Banking, finance and insurance also underwent significant growth (+22%), although similar to the regional average. Manufacturing fell sharply (-42%), much worse than the regional decline (-28%). Distribution, hotel and catering jobs also fell (-4%) despite the national trend being one of modest growth.

[7] Based on Annual Business Inquiry, 2006

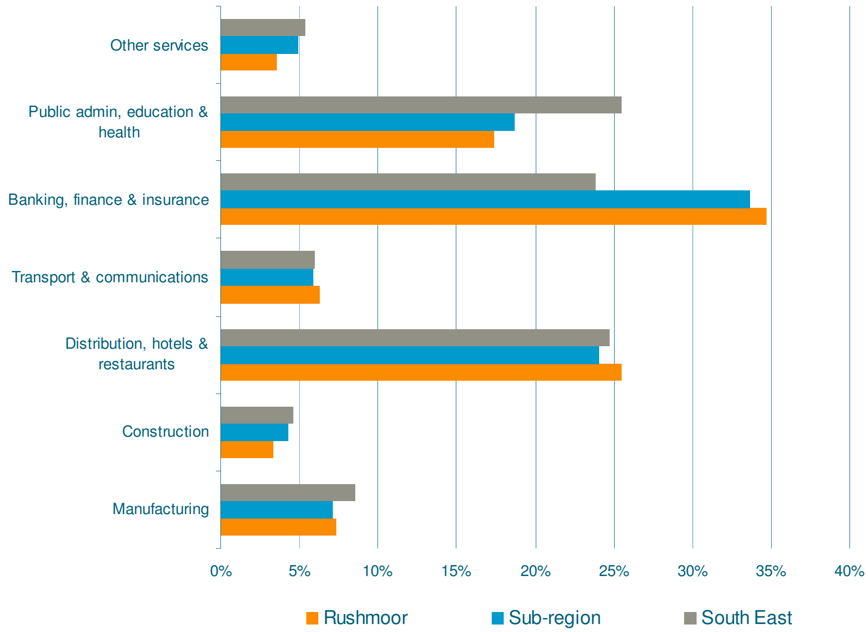


Figure 4.3: % of total employment by sector Source: Annual Business Inquiry

4.17 Between 1994 and 2008, the number of VAT registered firms in the sub-region grew by around 37%, above the regional growth rate (31%). With 56 VAT registrations per 10,000 population[8] in 2007, the area's recent rate of new business formation is also well above that of the South East region (48) and the UK (42) suggesting above average local entrepreneurial activity, although Rushmoor has been a more average performer.

4.18 With only 1.7% of its resident workforce out of work, the sub-region has low claimant unemployment compared with the South East region (2.4%) and nationally (3.4%) and below average rates have prevailed over the past decade (Figure 3). Long-term unemployment at 5% locally is also below the regional (7%) and national (8%) figures.[9] The wider ILO unemployment rate for the area (3.6%) – which includes those seeking work but not claiming benefits – is well above the claimant rate but still below the equivalent national and regional rates.[10] This suggests that local unemployment may be underestimated with some capacity for employment growth.

[8] Resident population over 16 years of age
[9] % of claimant unemployed who are out of work for over 12 months
[10] The International Labour Organisation (ILO) measure indicates total number unemployed and actively seeking work. The most recent published data is for the year to June 2008

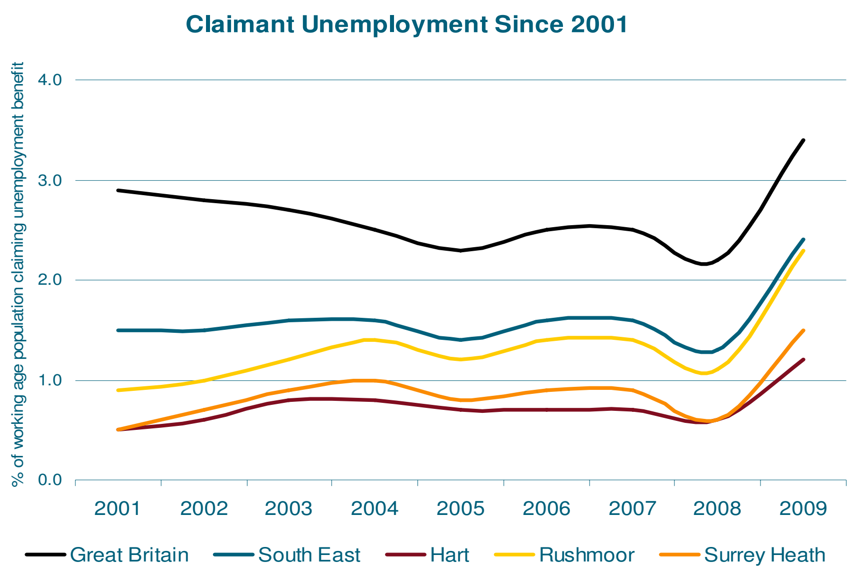


Figure 4.4: Claimant Unemployment since 2001 Source: NOMIS

4.19 In January 2009, there were 4.8 claimant unemployed workers for every notified job centre vacancy in the area. This was significantly lower than the ratios for the South East (8.6) and nationally (10.5). This indicates better prospects of unemployed residents obtaining work locally compared with other parts of the region but also limited spare capacity in local labour supply. There also appears limited scope to expand the indigenous local labour supply should employment demand grow in future since the local economic activity rate (87%) is already well above that of the South East (82%) and national rate (79%).

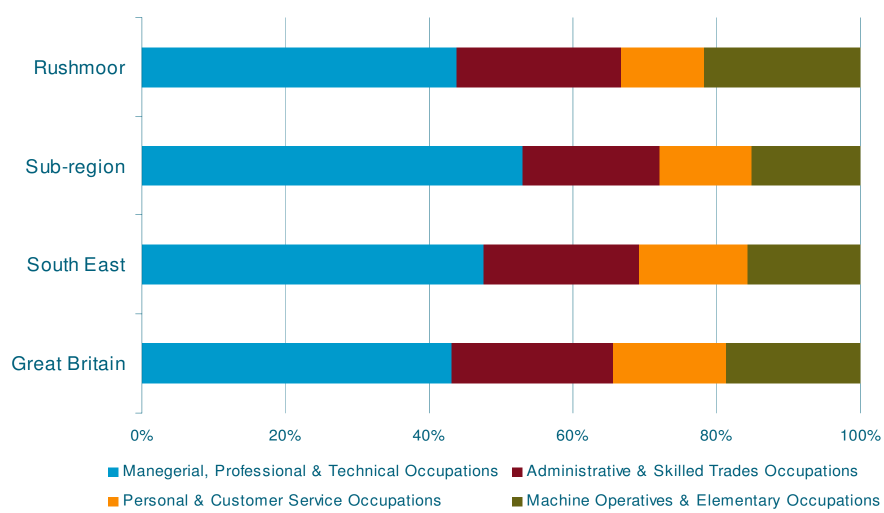


Figure 4.5: Occupational Structure of the Workforce Source: Annual Population Survey, June 2008

4.20 The sub-region's labour force has above average skill levels. It contains more highly skilled occupations and proportionally fewer lower skilled manual jobs than the South East region and Great Britain (Figure 4.5). The proportion of local residents with higher-level qualifications is also relatively high, with 32% of working-age residents having a degree or higher qualification, again above regional and national averages. However, this picture is less true for Rushmoor which, compared with the sub-region as a whole, has an above average share of lower-skilled workers, fewer higher skilled occupations, only 21% of residents with higher level qualifications, and relatively more with none.

4.21 While there are no universities within the sub-region, there are several further education colleges in and around it, including Farnborough College of Technology and Collingwood College in Camberley. These provide a range of vocational courses as well as applied science, technology and engineering courses.

4.22 Turning to the types of jobs required in the sub-region, the most sought occupations by claimant unemployed workers are for elementary / unskilled work (22%), administrative and secretarial work (15%), and managerial jobs (13%). Generally, demand for managerial and professional jobs (27%) here is much higher than the South East (19%) and national average (14%). At the same time, demand for lower skilled and manual industrial jobs is much lower locally than the regional average. Within the sub-region, the need for lower-skilled jobs by unemployed residents is particularly focussed in Rushmoor.

4.23 Local income levels are high. Reflecting the relatively higher-skilled local workforce, average wage levels for full-time workers locally are 23-25% above the national average, and 13-20% above the regional average. Wage levels are higher for workers based in the sub-region than for residents, suggesting a good supply of well-paid local jobs attracts workers from outside the area to fill many of these jobs. Rushmoor has a particular concentration of highly paid jobs, but lower average resident wages suggest many of its jobs are taken by in-commuters.

4.24 This area has very low levels of deprivation, although Rushmoor has some small pockets of concentrated deprivation in Aldershot.

Commuting

4.25 Overall, the sub-region has a small out-flow of some 5,700 residents, or 4% of its resident workforce. However, this masks significant in and out-commuting, with 38% of employed residents (52,000) travelling out of the area to work, mainly to Greater London and the nearby districts of Guildford, Bracknell Forest and Basingstoke & Deane. At the same time, approximately 47,100 residents of other districts commuted into jobs in the sub-region, predominantly from Guildford, Bracknell Forest and Waverley, and equivalent to 36% of all the area's workplace jobs.

Conclusions

4.26 Taken as a whole, the sub-region has a strong local economy which has outperformed regional averages, with reasonable employment growth, strong rates of new business formation, above average skill levels, very low unemployment and high average wages. It is strongly represented in the service sector and in knowledge based firms with a modest manufacturing base. It has also been reasonably successful in attracting inward investment in higher value growth sectors.

4.27 However, some parts of the area perform better than others, with Rushmoor experiencing higher unemployment and more modest job growth. While unemployment is still generally low, there is still demand for jobs in higher skilled occupations as well as unskilled work. Despite the sub-region's generally strong economic performance, this suggests that the Rushmoor area in particular would benefit from further employment growth in sectors that provide a range of local job opportunities, while the wider area around the Airport is one more able to accommodate more, higher skilled jobs.

5.0 Existing Employment at Farnborough Airport

5.1 This section examines current employment levels related to the operation of Farnborough Airport and includes direct employment (on and off the Airport) as well as indirect and induced jobs supported by the Airport in the surrounding area. Levels of jobs based on sites immediately adjoining the Airport are also identified.

Direct Employment

5.2 Direct airport employment relates to jobs in activities directly linked to Airport operations, both on the Airport site and close beside it. The direct on-airport activities typically include airport management, air traffic control, operators of corporate aircraft and air taxi services, aircraft maintenance, security and customs, and on-airport hotels, retailing and passenger facilities. Direct off-airport jobs are in activities such as nearby airport hotels, aircraft catering, taxi, chauffeur and bus services to the Airport.

On-Airport Jobs

5.3 Employment levels on the Airport have been estimated by TAG from various surveys of organisations based there. In 2005, there were an estimated 520 jobs on the Airport site. By 2008, this had increased to 1,084 direct full-time jobs based at the Airport and a further 64 part-time posts, giving a total employment level of 1,148.

5.4 Based on a more recent survey of tenant firms in early 2009, which had a 100% response rate, there were some 1,100 jobs based on the Airport itself.[11] Details of the survey approach were provided to this study and employment levels obtained from it were also validated by telephone calls to a sample of Airport-based firms.

5.5 Table 5.1 summarises employment trends at the Airport and the corresponding levels of air movements. This indicates that job levels on the Airport have grown proportionally much faster in recent years than the increase in movements.

	2005	2008	2009	Growth 2005-09 (%)
Farnborough air movements	18,800	26,000	25,500	36%
Direct Employment on Airport	520	1,148	1,104	112 %

Table 5.1: Farnborough Airport Direct Jobs and Movements, 2005-09 Source: TAG Farnborough

5.6 Table 5.2 below breaks down the 2009 Direct On-Airport job total by main activities. Firms involved in air operations, such as Business Aviation aircraft operators and air taxis, account for far the greatest share of jobs, almost half the

[11] excludes 120 jobs in the Aviation Hotel, which are counted under Direct off-site jobs and 5 jobs from a tenant which has left but includes 30 jobs related to the Farnborough Air Show

total, but with aircraft maintenance and airport management also important. Some 17% of jobs based on the Airport are in activities not directly related to the Business Aviation operations at the Airport, including a pilot and crew training centre and the Farnborough Air Show. No directly comparable breakdown is available for 2005.

Activity	**2008/09**	**%**
Air operators	524	47%
Aircraft maintenance/cleaning	95	9%
Airport management/catering	137	12%
Customs/immigration/fire/security	68	6%
Air Traffic control	36	3%
Aircraft manufacture/sales	44	4%
Freight	8	1%
Others (Air Show, flight training, catering etc)	192	17%
Total On-airport Jobs	1,104	100%

Table: 5.2 Farnborough Airport Direct On-airport Jobs by Activity: Source: TAG Farnborough

5.7 The overall quality of the jobs based on the Airport is high. Almost 90% of the jobs are full-time, compared with the national employment average of 70%, and 83% in the air transport sector generally. A further 6% of On-Airport jobs are part-time and the remainder temporary contract staff. A high proportion of these jobs are in higher skilled occupations, as shown in Table 5.3.

Job Title	**% of Jobs**
Management/professional - airport/airline specific	15%
Management/professional – general	14%
Passenger services sales and clerical staff	15%
Pilots	13%
Aircraft Maintenance	11%
ATC/Flight operations	7%
Customs, Immigration, Fire Staff, Police	5%
Apron ramp and drivers	4%
Catering cleaning and housekeeping	3%
IT	2%
Security	2%
Air cabin crew	<1%
Other	9%

Table 5.3: Farnborough Airport On-airport Jobs by Skill Level.

Source TAG Farnborough based on sample of under half of all Airport based staff

5.8 A high proportion of the jobs based on the Airport are also filled by residents of the local area. Some staff are required to live within 25 miles of the Airport for operational reasons. As Table 5.4 shows, almost half of Airport based workers live in Rushmoor, Hart or Surrey Heath districts, and a further 28% elsewhere in Hampshire and Surrey. Overall, some 75% of the Airport based jobs are filled by residents of these two Counties.

Place of Residence of Airport Employees	**% of Airport Jobs**
Rushmoor	24.7%
Hart	15.9%
Surrey Heath	6.2%
Guildford	4.2%
Rest of Hampshire	11.3%
Rest of Surrey	13.0%
Rest of South East/London	16.8
Other	7.9%

Table: 5.4: Residence of Airport based Workers. Source TAG Farnborough based on 40% sample survey, 2008

Direct Off Airport Jobs

5.9 The number of Direct off-airport jobs in hotels, catering, and surface transport services which serve the Airport was estimated from data provided by TAG and from a telephone survey of operators of these activities in the local area.

5.10 The main source of off-site jobs is the Aviator Hotel, largely accommodating air crew, which has some 120 jobs in total. Although only 20% of this hotel's trade is reportedly related to the Airport, this hotel is owned by the Airport's owner and would not exist without the Airport, while it would need a minimum staffing level to serve different levels of guests. On this basis all these hotel jobs are counted as Direct-off Airport. Some Airport tenant firms reported taking significant numbers of local hotel rooms for training staff. However, a survey of a sample of other hotels in the area indicated that only 2-3% of their business was related to the Airport, other than during the week of the Airshow. Following the opening of the Aviator Hotel, other local hotels reported very low levels of trade associated with the Airport. Even during the Air Show, these hotels were fully-staffed for the peak season and did not take on more staff for this event. On this basis, in total, no more than about 130 hotel jobs in the local area can be considered to be supported by the Airport.

5.11 Discussions with a number of local taxi firms and operators of chauffeur driven cars indicated that a relatively small proportion (below 5%) of their total trade is related to the Airport. This reflects that many Business Aviation passengers make use of their own company vehicles. Most of these local taxi/chauffeur firms had less than 10 drivers and the number of jobs supported by Airport activity has been estimated to be at most 10. There are no direct bus services serving the Airport that would support further jobs.

5.12 Catering activity for Business Aviation flights, which typically have only a few passengers, would not be expected to be large in scale. There are few catering firms in the local area, and the existing catering business on the Airport brings in prepared food from outside the area. On this basis, off-airport jobs in the catering sector are not considered to be significant.

5.13 In addition, the TAG survey indicated that some tenants based on the Airport had some staff based off-site, over 60 in total. These included a few freight delivery drivers, and pilots and consultants working on an on-call basis. On the basis that most of these staff do not appear to be working wholly at the Airport, their contribution is estimated at the equivalent of 15 jobs.

5.14 Taken together, these various sources produce a total of 155 Direct Off-Airport jobs, which is equivalent to about 14% of the Direct On-Airport jobs. This estimate for Direct Off-Airport employment is significantly higher than that in the 2005 OEF/Mott Macdonald Economic Study of the Airport, which estimated 90 off-site Airport jobs, mostly related to Airport tenant firms, but did not include the Aviator Hotel which was not open at that time.

Indirect/Induced Employment

5.15 This type of employment related to the Airport comprises:

- indirect jobs, which are supported by spending of companies based at the Airport on goods, supplies and services with firms in the surrounding area;
- induced employment, which comprises jobs supported, in local shops, services and other firms, by the spending of wages by employees of firms on the Airport and employees of local firms which supply goods to these Airport based companies.

5.16 Where detailed expenditure data is not available, these types of employment are normally estimated using employment multipliers derived from research on similar operations elsewhere, with adjustments to reflect the specific characteristics of the development, local economic and labour market conditions within the local area and the amount of spending retained locally.

Employment Multipliers Used Elsewhere

5.17 Employment multipliers are affected by the nature of the development being considered and the types of spending and wage levels associated with it, the scale of the area over which impacts are considered, economic conditions in that area, and the extent of spending leakage outside this area. Different multiplier values will clearly apply at local, regional and national levels.

5.18 As a general guide to the scale of employment multipliers which may be appropriate at Farnborough Airport, the English Partnerships approach to assessing the additional impact of projects was drawn upon. This contains no specific multipliers applying to airports, but indicates a composite multiplier for a local area (covering both indirect and induced impact) that ranges from 1.21 (retail development) to 1.29 (industrial development) and 1.38 (for recreation development). At a regional level, the guideline range varied between 1.38 and 1.56.[12]

5.19 In other economic studies of airports, a range of multiplier values has been considered at each spatial level, in some cases based on detailed analysis of spending patterns at the airport and the use of national input/output tables relating to the impacts of spending in different sectors of the economy.

5.20 At the local level, multipliers of 1.27 (Glasgow Airport), 1.28 (Stansted) and 1.3 (Birmingham Airport) have been derived from analysis of these airports' expenditure patterns. A 2006 study for Plymouth Airport, a small airport, derived an employment multiplier of 1.44 for the more than local Devon/Cornwall area.

5.21 At a regional level, studies on Glasgow Airport considered a multiplier of 1.77 appropriate for the Strathclyde Region while different studies in relation to Manchester Airport used figures of 1.5 or 1.6 for the North West region and 1.52 for Greater Manchester. Other studies for Birmingham (1.3), Cardiff (1.33), and Bristol Airports (1.46) derived slightly lower employment multipliers for regional impacts.

5.22 At the national level, a study on the economic contribution of the UK aviation industry, based on employment at airports, used a multiplier of 1.8.[13]

5.23 It could be argued that these multipliers relate to mainly larger commercial airports with different characteristics and economic effects to a small Business Aviation Airport. For London Biggin Hill, an airport with significant Business Aviation activity, the assumed employment multiplier at the local level was 1.2. For London City Airport, which also has significant Business Aviation activity, the employment multiplier of 1.3 applied to a large part of eastern London. This airport could be expected to have a high multiplier because of its location within London, a major service and manufacturing centre, where much airport-related spending should be retained.

5.24 For comparison, the 2005 OEF/Mott MacDonald study of Farnborough Airport used a total employment multiplier of 2.5 although this appears to relate to indirect and induced impacts at the national level. From the data provided in that study, the indirect employment multiplier value for Rushmoor alone appears to be equivalent to 1.9. This relatively high multiplier largely reflected high levels of supplier spending by tenant firms and may have included visitor spending effects of the Air Show.

[12] Additionality Guide, English Partnerships, 2004
[13] The Economic Contribution of the Aviation Industry in the UK, OEF, 2006

Indirect/Induced Employment at Farnborough Airport

5.25 Indirect employment related to Farnborough Airport will reflect the level of supplier spending by the Airport and its tenant firms in the local and regional economies. In general terms, the indirect multiplier for Farnborough might be expected to be less than for commercial passenger airports, which ought to have greater expenditure on flight catering and on goods for their retail function. At a local level, the Farnborough multiplier could also be expected to be relatively lower because this area contains no large service or manufacturing centres and there would be considerable spending leakage outside it.

5.26 A broad estimate of the level of supplier spending by TAG at Farnborough airport has been provided. In 2008, this amounted to £9.8 million,[14] of which 23% was spent within the local area, 66% within the South East/London region and the remainder elsewhere within the UK. Only limited data was available for other firms on the Airport. However, discussions with a number of Airport based tenant firms suggest that the amounts spent locally were relatively low, mainly on stationary, taxis, hotels. A significant amount of these aviation firms' spending is with specialist suppliers based outside the region or the UK. As a rough guide, if each £80,000 of supplier expenditure supported one job in the local economy, the TAG spending would be equivalent to almost 30 jobs in supplier firms. [15]

5.27 As induced employment reflects spending by Airport based workers and staff in firms supplying goods to the Airport, a high concentration of such staff living locally should contribute to a higher multiplier value. In this case, almost 50% of Airport jobs are filled by local residents and almost 100% within the region. However, no major service centres in the local area and proximity to the major service centre of Greater London is again likely to mean high spending leakage from the local economy although much spending should be retained within the South East/London regional area.

5.28 The above factors point to a relatively low combined employment multiplier for Farnborough Airport at the local level compared with the range found for other airports. On this basis, a multiplier of 1.2 is considered appropriate to estimate both indirect and induced employment for the relatively small labour catchment area. This multiplier was also compared with the number of jobs that could be expected from the estimated level of supplier expenditure locally to ensure the multiplier was of the correct order of magnitude.[16]

5.29 At the regional level, with a higher level of spending retained, the employment multiplier should be broadly comparable to those used at other commercial airports, there being no obvious factors to suggest a significantly higher value. A multiplier of 1.5 is therefore assumed to reflect regional job impacts. At the

[14] excluding fuel, overseas and capital expenditure
[15] Based on ratio of output to FTE jobs nationally, Blue Book National Accounts, 2008.
[16] assuming £80,000 of expenditure supports 1 FTE job, based on National Accounts 2006

national level, the 1.8 value used in a recent aviation study for the UK has been adopted.[17]

5.30 Applying these multipliers to the total direct jobs (converted to FTE jobs) results in further "spin-off" jobs in local services and other firms in the different areas, as shown in Table 5.5.

Category of Employment	Local Area	Region	National
Direct Airport Jobs (on/off airport)	1,260	1,260	1,260
Direct Airport Jobs (FTE)	1,180	1,180	1,180
Employment multiplier	1.2	1.5	1.8
Indirect/induced jobs	240	590	940
Total Airport related Jobs	1,500	1,850	2,200

Table 5.5: Total Employment at Farnborough Airport * numbers rounded

Visitor Impacts

5.31 While the Farnborough International Air Show is based on part of the Airport, it is not directly related to the Airport's Business Aviation activities and its main impacts are not related to expenditure with suppliers or wage spending. The most significant economic impacts appear to be the spending effects of visitors to the Air Show in the surrounding area, along with the indirect contribution to UK exports. For these reasons, the Air Show's employment impacts are considered separately from direct and indirect Airport impacts.

5.32 In 2008, there were over 285,000 visitors to the Air Show and their spending at the Air Show site and within 25 miles of it is estimated at £12.65 million.[18] However, in terms of impacts on employment, the effect of this visitor spending does not appear to be large. Although hotels, shops and catering facilities around the Airport experienced significant trade increases during the week of the Air Show, the hotels were already fully staffed as this was their peak season, and no other businesses reported taking on more staff for the week of the Air Show. No significant direct impact on local or regional employment has therefore been identified. It is likely that the increased visitor spending in the area will produce some multiplier effects but much of this will be outside the local area and the effect only lasts for one week every two years.

Employment on Adjoining Sites

5.33 A number of employment generating developments exist immediately beside the Airport, particularly the IQ Farnborough Business Park, the Cody Technology Park,

[17] The Economic Contribution of the Aviation Industry, OEF, 2007
[18] Data provided from Economic study by Farnborough International, 2009

the Aerospace Centre and the office/industrial development in the former Civil Enclave area. Current employment levels have been estimated for each of these sites.

5.34 Farnborough Business Park currently has 22,300 m^2 of built office space that is occupied and a further 19,500 m^2 under construction for a single new tenant. It has not been possible to undertake a survey of individual tenants and employment levels on this site were estimated by applying a typical job/floorspace ratio to existing occupied floorspace. This indicates in the order of 1,100 current jobs based there with a further 1,000 committed.

5.35 The Aerospace Centre contains 54,300 m^2 of floorspace over a number of buildings and is occupied by BAe and several other aerospace related firms such as Johnson Controls, Systems Union and Lockheed Martin Stasys. BAe alone has some 1,100 employees based on this site and, based on overall floorspace, total employment on the site is estimated at 1,800.

5.36 Cody Technology Park is occupied mainly by the defence research and manufacturing firm QinetiQ and several other related businesses and contractors. There are up to 3,500 employees currently based on this site.[19]

5.37 The former Civil Enclave area contains the Cirrus development of small office units (3,400 m^2) about one third of which is occupied, the fully occupied Nimbus industrial scheme (6,600 m^2), and planning permission for the Aeropark mixed use business space development (25,000 m^2), as well as a Driving Test Centre. Based on occupied floorspace, total current employment on this site is estimated at 300.

5.38 The Air Accident Investigation Bureau has in the order of 55 jobs based beside the Airport.

5.39 Drawing together these various adjoining sites, there are in the order of 6,750 jobs (with a further 1,000 committed) currently based on land immediately adjoining the Airport but not directly related to Business Aviation activity.

5.40 On this basis the Airport, along with the cluster of aerospace, defence related high technology activities and other uses immediately adjoining the Airport, is the focus for in the order of 8,000 jobs. This is a substantial employment centre, the largest within Rushmoor District and a major one within the wider north Hampshire/Surrey area.

Total Airport Related Employment

5.41 Based on the above analysis, the total number of jobs currently based at the Airport or supported by its spending amounts to some 1,500 at the local level, and 1,860 within the South East/London region.

[19] Based on discussions with QinetiQ in April 2009

5.42 With over 1,100 jobs based on the Airport, site, Farnborough Airport is one of the largest employment centres within Rushmoor, comparable in local job representation to major aerospace firms such as BAe and IT or telecommunications businesses such as Nokia and CSC.

5.43 If the cluster of aerospace, defence and other businesses immediately adjoining the Airport and located within former Royal Aircraft Engineering land is included, total jobs directly associated with this complex amount to almost 8,000. With indirect/induced effects, the total employment supported by this complex locally would be almost 9,600 jobs and 12,000 across the region.

6.0 Potential Future Employment

6.1 The potential levels of employment associated with the Airport's operations have also been assessed for different future scenarios where air transport movements increase to 35,000, 50,000 or more than 60,000 p.a. [20]

6.2 At the outset, it is import to emphasis that estimating direct employment for a Business Aviation airport is different from the process at most commercial airports, where there is a widely accepted relationship between job numbers and airport throughput, in terms or passenger numbers and/or air freight tonnage. Business Aviation typically carries very low passenger numbers and freight levels relative to the numbers of aircraft movements, and such relationships do not apply.

6.3 Future employment estimates under these potential growth scenarios were made separately for the main categories of Airport jobs – direct and indirect/induced employment.

Future Direct Airport Employment

6.4 Unlike larger commercial passenger or freight airports, there is no widely recognised quantitative relationship between employment at a Business Aviation airport and levels of activity there. To estimate future employment levels associated with increased movements, a number of different methods were therefore used.

Productivity Factors

6.5 As a first step, past trends on employment levels at the Airport relative to aircraft movements were examined. As noted in the previous section, jobs based at Farnborough Airport have clearly grown significantly over the last few years but by proportionately much more than the increase in movements.

6.6 At other larger commercial airports, it has normally been assumed that Direct on-site job levels will increase with passenger numbers or freight tonnage, but reduced by productivity gains averaging 2-3% p.a. However, this order of gain would not necessarily apply at a Business Aviation airport with very low passenger and freight throughputs.

6.7 In the 2005 OEF/Mott MacDonald Economic Study of the Airport, forecasts of future employment levels were made by assuming jobs would grow up to 2009 when 28,000 air movements p.a. would be achieved, but with each 1% increase in air movements accompanied by only a 0.45% increase in Airport based jobs.

[20] These potential levels of air movements were provided by Rushmoor Council purely for the purposes of estimating economic impacts under different growth situations and are not based on estimates of likely demand

This was to reflect increased productivity and was equivalent to a very high productivity improvement averaging about 14% p.a. over a four year period; it is not clear what the basis for this assumption was.

6.8 However, the future job forecast based on this assumption (850 FTE jobs) significantly underestimated the actual 2008/09 job figure at the Airport (approximately 1,050 FTE jobs). Jobs based on the Airport more than doubled between 2005-09 while air movements grew by only 36%. This may not be surprising as job growth in the early growth stage of a new facility can outstrip demand in order to reach minimum operating thresholds. For example, a certain minimum number of fire staff is required on the Airport to deal with up to 0.5 million movements but this number must be in place when air movements are only 25,000 p.a. Higher productivity gains are perhaps more likely at a later stage as increases in Airport activity take up any spare capacity within the minimum staffing levels.

6.9 It therefore does not appear unreasonable to assume that future employment growth at the Airport will be less than double even if movements doubled from current levels. Given the anticipated continuing growth of Business Aviation in the UK generally, and increasing constraints on it at many other airports, there will also be scope for job increases from businesses moving to Farnborough encouraged by increased availability of departure slots there. On this basis, the order of productivity gain suggested by the previous OEF study does not appear unreasonable although perhaps as a higher end estimate.

6.10 On this basis, if a productivity-based factor of 0.45% for each 1% increase in air movements were applied to future increases in movements, this would produce 1,580 Direct on-airport jobs for 50,000 movements, as shown in Table 6.1 below. This would be equivalent to an approximately 50% increase on current job levels on the Airport, or about 470 more jobs (450 FTE) than now. The job levels associated with 35,000 and 60,000+ air movements are also shown.

Future Air Movements	**25,500 (Current)**	**35,000**	**50,000**	**60,000+**
Direct On-airport Jobs	1,104	1,290	1,580	1,780+
Direct On-airport Jobs (FTE)	1,050	1,225	1,500	1,690

Table 6.1: Farnborough Airport Productivity Based Forecast of Direct On-Airport Jobs: Source NLP

Activity Based Estimate

6.11 An alternative approach is to consider the relationship between increases in air movements and jobs for different activities within the Airport. It is likely that some Airport based activities will need many more employees to handle more aircraft movements, while some such as Airport management may be much less affected, and others able to handle growth within current staffing levels.

6.12 To obtain a better picture of how job levels in different Airport based activities might change with increased air movements, discussions were held with the TAG airport management, aviation operators, aircraft maintenance and other firms based on the Airport.

6.13 **For flying activities**, such as air taxis and other Business Aviation aircraft operators, past research suggests a broad link between jobs and numbers of air movements, albeit within a wide range of 21 to 73 movements per employee.[21] Current data from Farnborough suggests about 50 movements per employee among air operators currently. However, discussions with these firms at Farnborough indicated that a doubling in air movements would not result in a similar increase in jobs. In most cases, an increase in movements would not lead to job growth directly but give greater certainty that additional air slots could be obtained and this may over time lead to expansion of an operator's aircraft fleet based at Farnborough, perhaps one or two more based aircraft with about five more jobs associated with each aircraft.

6.14 Some smaller operators envisaged no increase in aircraft or jobs at Farnborough if movements were to grow, either because they had only one or two aircraft and did not plan to increase their fleet, or because they based aircraft elsewhere even if operating from Farnborough and would maintain that position to some extent, for cost or other reasons.

6.15 It is possible that these operator responses may be influenced to some extent by the current economic recession and be unduly pessimistic. However, it is worth noting that strong growth in staff levels was reported by these operators over the last five years, when air movements grew by only 36%. It is also likely that, with an increased number of slots available, a few more operators would come to the Airport, possibly relocating from more constrained airports, in addition to any modest growth by operators already based at Farnborough. At the same time, several of the air operators also operate from other, often lower cost, airports and may well continue to focus future growth elsewhere. At present, employment in air operations at Farnborough amounts to just over 520 jobs. Reflecting the above factors and the discussions with operators, an estimate has been made that a doubling of movements could result in job growth among operators of in the order of 50%.

6.16 **For aircraft maintenance**, which also includes aircraft cleaning, there will be some relationship between job numbers and the number of Business Aviation aircraft based at or using the Airport. This is based on an air safety requirement for 2,500 person-hours of maintenance per aircraft annually which requires 1.5 person years of work.[21] Cleaning of aircraft also takes place at Farnborough Airport and this activity should increase with more movements. However, not all aircraft using Farnborough will necessarily be maintained there; indeed discussions with maintenance firms indicated only a few types of aircraft can actually be maintained there and that many aircraft will be maintained at airports

[21] Economic Impact of Business Aviation in the South East, Halcrow for DfT, 1999

elsewhere. Limited hangar space at the Airport may also be a constraint on growth.

6.17 From discussions with several aircraft maintenance firms at Farnborough, even a doubling of air movements at the Airport would not produce a large increase in jobs based there, for the reasons given above. Overall, the likely job increase was estimated in the order of 25%. If this factor were applied, a rise to 50,000 movements p.a. would see the current 95 or so jobs in this activity growing to about 120.

6.18 **For airport management and related functions**, the Airport will require a certain minimum threshold of employees that will not necessarily change greatly with increases in air movements. From discussions with TAG, a staffing increase in the order of 10% of the current 132 management staff would be needed for an approximate doubling of movements, or 12 more jobs.

6.19 **For activities such as air traffic control, fire, security, immigration etc,** discussions with the relevant organisations suggested no change in fire staff or security staff numbers if movements doubled as current staffing levels are capable of handling many more movements. For immigration activities, the current job levels are already significant and it is considered that more movements with few passengers per aircraft would not necessarily require more staff given the relatively small number of passengers per movement. However, about 25% more traffic control staff than currently would be needed. Overall, the current 104 jobs in this category could grow by about 10%.

6.20 **Other Activities:** A number of other businesses based on the Airport site indicated no increase in their employee levels would result from more air movements. These were activities such as crew training, medical service providers and IT providers. This does not mean that these activities would not grow for other reasons such as a general increase in aviation activity regionally or nationally. The pilot/crew training facility, for example, could grow in job terms if more crew are needed for more movements at Farnborough but not all this training would necessarily take place at Farnborough, and some job growth could occur without any more movements at Farnborough. Most of the crew trained are based overseas. Other activities such as IT saw no reason for more staff because of increased movements. Catering activity could increase if more movements led to the dining facility opening at weekends. Food preparation for in-flight catering is currently sourced off-site, although increased movements could justify an operation being established on-site, which would generate some limited additional employment. Overall, an increase to 50,000 movements p.a. is anticipated to give rise to no more than a 10% job increase in this sector.

6.21 **For aircraft manufacturers**, with a mainly sales function at the Airport, no increase in staff was anticipated with more movements.

6.22 **Air Freight** activity at the Airport is small and mainly handles small amounts of high value goods. While more movements would potentially offer more scope to increase activity, the current operator did not anticipate any significant job growth in that event.

6.23 Taking all these factors together, the total future employment at the Airport as a result of a near doubling in current movements to 50,000 p.a. was estimated as shown in Table 6.2. This indicates an overall job increase of almost 30%, significantly less than the 50% gain based on productivity gains alone. The net employment gain on the Airport would be about 325 jobs.

Future Air Movements	**% Job Increase**	**Jobs at 25,500 Movements**	**Jobs at 50,000 Movements**
Air operators	50%	524	790
Aircraft maintenance	25%	95	120
Airport management/catering	10%	137	150
Customs/immigration/fire/security	5%	68	70
Air Traffic control	25%	36	45
Aircraft manufacture/sales	0%	44	44
Freight	10%	8	8
Others (Air Show, flight training, IT etc)	10%	183	200
Total	~30%	1,104	1,440

Table 6.2: Farnborough Airport Activity Based Estimate of Future Jobs. * numbers rounded

6.24 Using a similar approach, job increases related to increases to 35,000 and 60,000+ movements p.a. were estimated. For 35,000 movements, it appears unlikely that there would be significant job change compared with the current position. At this level, it appears less likely that existing operators will be encouraged to base more aircraft at the Airport, or that maintenance activity will require more employees. Similarly, Airport management levels appear unlikely to change and there would not be need for many more, if any, air traffic or security staff etc. It is possible that there will be some limited growth as some operators move from more constrained airports. While this scenario would involve a 37% increase in air movements increase over current levels, the related employment increase is estimated at about 100 more jobs, a 9% increase. This would result in a total of approximately 1,200 jobs.

6.25 For 60,000 or more movements, the scope for job increases beyond that for the 50,000 movements p.a. level would depend on how many movements above 50,000 were allowed. At around 60,000 p.a., it is difficult to see that associated employment levels would be much more than for 50,000 movements. The factors affecting jobs in operators, aircraft maintenance, airport management and air traffic control/security would not have changed significantly. As before, there could always be a small amount of additional growth as some tenant companies relocate from other airports and possibly a few activities growing as a result of general change in business activity. On this basis, at around 60,000 movements p.a., the job level on the Airport is estimated at no more than 5% more than for 50,000 movements. This would mean approximately 1,500 jobs.

6.26 If movements were to rise to substantially more than 60,000 p.a, say 80,000 p.a., then it is likely that there would be significant increases in operator activity and higher thresholds may be reached for airport management, air traffic control and security functions. Some increase in maintenance job levels could also occur but this may be limited by hangar space available. As this level is likely to be achieved much further in the future, if it were to be allowed, it is more difficult to estimate the scale of job growth associated with it. As a broad order of magnitude, a 25% job increase over the 50,000 movements p.a. could be possible and this would equate to some 1,800 jobs.

6.27 Table 6.3 summarises on-airport jobs under each of these movement levels.

Future Air Movements (p.a.)	25,500 (Current)	35,000	50,000	60,000 +
Direct On-airport Jobs	1,104	1,200	1,440	1,500
Direct On-airport Jobs (FTE)	1,050	1,140	1,350	1,425

Table: 6.3: Farnborough Airport Activity Based Estimate of Future Jobs Source NLP

Job Levels at Other Airports

6.28 Another approach to estimating future job levels would be to examine employment levels at other Business Aviation airports. However, there are no other dedicated Business Aviation airports in the UK. London Biggin Hill is the most comparable small commercial airport with significant Business Aviation movements, but Business Aviation movements form only 25% of its total activity, about 15,000 p.a., and it has also a significant General Aviation function. This airport currently has in the order of 800 jobs based on the airport itself.[22] Its lower level of Business Aviation movements and high level of other activities do not therefore provide much guide to future job levels at Farnborough.

Range of Job Estimates

6.29 Drawing together the above analysis, different approaches to estimating future employment levels produce significantly different results. There is clearly uncertainty about future growth levels in a time of economic recession and the extent to which changes in movements will attract further activity to the Airport.

6.30 It therefore appears appropriate to estimate future job levels as a range, with the productivity gains approach forming the higher end of that range and the activity based approach forming the lower end. The higher end estimate would make greater allowance for the Airport attracting operators and other tenant firms from elsewhere, the lower end figure perhaps reflecting more organic growth by current

[22] Based on discussions with London Biggin Hill Airport in April 2009

firms. On this basis, future job levels on the Airport for different levels of movements are indicated in Table 6.4 below. It can be seen that the range of estimates is not particularly wide.

Future Air Movements p.a.	**35,000**	**50,000**	**60,000+**
Direct On-Airport Jobs	1,200-1,290	1,440- 1,580	1,500–1,700+
Direct On-Airport Jobs (FTE)	1,080- 1,225	1,350- 1,500	1,420- 1,690

Table 6.4: Estimated range of Direct On-Airport jobs Source NLP

Direct-Off-Airport Jobs

6.31 Any scope for job growth in Direct Off-airport jobs as a result of increased movements has been considered for the different categories of activities involved.

6.32 Increased movements should mean some additional activity for taxis and chauffeur driven cars. However, even if current job levels in this activity related to the Airport were to double, the total amount will still be small, perhaps 20 jobs, or 10 more than now.

6.33 For hotels, more air movements should mean more passengers and staff on the Airport site and potentially an increase in use of nearby hotels. This may not necessarily mean a significant increase in jobs as the number of passengers would still be relatively small and could probably be handled within existing hotel staffing levels in many cases. In the Aviator Hotel, for example, 20% of trade is related to the Airport; even if this level doubled the hotel staff level may only increase marginally. A 10% increase in the current 130 hotel jobs related to the Airport has been assumed as a maximum case.

6.34 For catering, the amount of off-site related jobs is minimal at present. If movements doubled, it is possible that more catering supplies could be sourced locally. Even so, the numbers of passengers to be catered for would be relatively low and no more than 10 more jobs has been estimated for this sector.

6.35 Overall, with 50,000 movements p.a., total direct off-airport jobs are estimated to increase from 155 to 190, a fairly modest change.

6.36 For the 35,000 and 60,000+ air movement scenarios, it becomes difficult to make detailed estimates for each activity and Direct off-airport for these jobs were estimated on a pro-rata basis related to the level of Direct on-airport jobs for each level of movements. This produced 160 jobs for 35,000 movements and 200 jobs for 60,000+ movements.

Job Displacement

6.37 It is important to consider whether the increase in Airport based jobs estimated above will be additional to the area or, to some extent, the result of existing jobs being transferred to the Airport from other local or regional based firms or airports. This is known as job displacement.

6.38 As there no other dedicated Business Aviation airports within the local area or the South East region, any such displacement appears unlikely to be significant. It is possible that growth of Business Aviation movements, and the associated jobs, at Farnborough, could result in some reduction in jobs at other airports which currently handle some Business Aviation flights, such as Biggin Hill or Heathrow. However, Business Aviation has declined in the past at some of these airports due to pressures from other aviation activities and the Business Aviation market in the South East is anticipated to grow overall in future. On this basis, no job displacement is expected within the local area around Farnborough, and no significant displacement within the South East region.

6.39 Deadweight effects, any job growth that would occur anyway at the Airport even with no increase in air movements, were also considered. Again, this was not considered a significant factor for Farnborough Airport as increases in aviation activity appear to be the main factor driving job growth, with very limited, if any, increase in employment there likely if air movements hold at current levels.

6.40 On this basis, the estimated increase in employment at Farnborough from the different levels of air movement growth would be expected to be all additional jobs within the local area and region.

Indirect/Induced Employment

6.41 As with current employment supported by the Airport, any increase in air movements and direct airport employment can be expected to increase indirect and induced employment in the surrounding area.

6.42 Future indirect employment should be affected by increased spending linked to increases in aviation activity and has been estimated using the same multiplier value used in the previous section. Future induced employment will be partly influenced by future levels of employment on the Airport and it is therefore reasonable to estimate this also with a multiplier applied to direct Airport jobs.

6.43 No reason was identified to use a different multiplier from that applied to existing jobs. Within a low unemployment area, additional spending is less likely to translate into additional staff so that a relatively low local employment multiplier remains appropriate.

6.44 Applying the relevant employment multipliers to the estimated direct jobs (in FTE jobs) arising from each scenario of future air movements results in further "spin-off" jobs in services and other firms in the different areas of impact. Tables 6.5 to 6.6 summarise the results at local, regional and national levels for the lower end job estimates. Similarly, estimates were made for jobs at regional and national level.

Future Air Movements	Current	35,000	50,000	60,000+
Total Direct Jobs (on & off airport)	1,260	1,360 – 1,450	1,620 –1,770	1,700 – 1,980
Total Direct Jobs (FTE)	1,180	1,280 - 1,370	1,510 -1,680	1,600 – 1,890
Employment multiplier	1.2	1.2	1.2	1.2
Indirect/induced Jobs	240	260-275	300-330	320-380

Table 6.5: Indirect/Induced Jobs in the Local Area Source NLP

Future Air Movements	Current	35,000	50,000	60,000+
Total Direct Jobs (on & off airport)	1,260	1,360 –1,450	1,620 –1,770	1,700 – 1,980
Total Direct Jobs (FTE)	1,180	1,280 - 1,370	1,510– 1,680	1,600 – 1,890
Employment multiplier	1.5	1.5	1.5	1.5
Indirect/induced Jobs	590	640 - 690	760-840	790 - 940

Table 6.6: Indirect/Induced Jobs in the SE/London Region Source NLP

Employment on Adjoining Sites

6.45 It is not anticipated that employment levels on sites immediately adjoining the Airport will change significantly as a direct result of increased movements at the Airport, given that these activities appear to have a limited direct relationship with the Airport

6.46 There are likely to be job changes in these areas for other reasons. For example, further office development and take-up of existing space at Farnborough Business Park should increase job levels there, while further office development is also likely on the former Civil Enclave site. There is no indication from consultation with commercial property agents or developers that the Airport’s growth will be a significant factor affecting such take-up.

6.47 Similarly, while Cody Technology Park and the Aerospace Centre may generally benefit from a growing Airport beside them, there is no clear indication that such Airport growth will directly lead to increased employment on these sites.

Total Employment Effects of Increased Movements

6.48 Drawing together the above analysis, total job levels related to different levels of air movements at Farnborough can be expressed as follows, at different spatial levels.

Future Air Movements p.a.	Current	35,000	50,000	60,000+
Jobs in Local Area	1,500	1,620–1,730	1,900 -2,090	2,000– 2,340
Jobs in Region	1,850	2,000- 2,140	2,360 -2,600	2,480- 2,900
Jobs in UK	2,220	2,380 – 2,550	2,880- 3,100	2,960- 3,460

Table 6.7: Total Airport Operations related Jobs Source NLP

6.49 Overall, within the local area, an increase in movements to 50,000 p.a. could be expected to support between 1,900 – 2,090 jobs in total, directly and indirectly. This would be an increase of between 400 - 590 jobs on the current situation.

6.50 To put this level of job increase into context, it would amount to between 6-9% of the job growth of 6,300 achieved in the sub-region over the last nine years, and is substantial compared to Rushmoor district's almost zero job growth in that period. It would also be equivalent to 11-16% of current unemployment in the sub-region.

6.51 At the regional level, total jobs for 50,000 movements p.a. would be 2,360 - 2,600, an increase of between 500-750 jobs over the current levels of jobs related to the Airport in that area.

7.0 Impacts on the Labour Market

7.1 The potential employment growth associated with increased air movements at the Airport needs to be considered in the context of local labour supply in the area, the need for more jobs and any wider effects on the labour market and current skill levels within it.

7.2 As noted in Section 3, the local area where the Airport's economic influence is strongest in job terms comprises Rushmoor, Hart and Surrey Heath districts. Unemployment rates in this area are very low compared to national and regional averages. Even during a severe economic recession, the total number of claimant unemployed residents is only 3,750 although it is possible that this underestimates the position as not all unemployed workers claim benefits. The area also has a relatively tight labour market, with less than five unemployed workers for each notified vacancy, while the scope to increase local labour supply is limited by already very high economic activity rates. It could be argued that this area has a less strong need for jobs than others. However, within this general picture, there are pockets of higher unemployment and deprivation, particularly in Rushmoor where the Airport is located, and unemployment levels are already rising due to recession.

7.3 With fairly limited housing growth planned for this area, labour supply is not anticipated to increase significantly in future. Based on ONS population forecasts, a small fall in working age economically active residents in the sub-region could occur between 2009-16.

7.4 In contrast, forecasts of employment growth in the three main districts suggest significant job growth up to 2016, by 6,500 jobs in total, particularly in sectors such as business services and transport, along with more modest growth in communications.[23] Comparing demand and supply of labour in the area from these sources suggests that the local labour market will probably become tighter in future following recovery from recession. However, in and out-commuting flows are already high in this area and this is likely to continue to support future job growth.

7.5 The potential numbers of additional jobs associated with growth at Farnborough Airport have been considered in this context. As noted in the previous section, the increase in direct jobs at Farnborough Airport resulting from up to 50,000 movements annually would be in the range 350-500. This appears a modest amount compared with all anticipated growth in employment for the local area, approximately 5-7%. It would also equate to between 10- 13% of current employment in the area.

[23] Experian Business strategies job forecasts for the 3 districts in early 2009.

7.6 Even with a relatively low unemployment local economy, it would not appear that this fairly modest amount of job growth should put undue pressures on the local job market. Indeed, it should provide job opportunities locally to help offset what are likely to be rising unemployment levels and job shedding in other sectors as a result of the current recession. Given this is an area where out-commuting levels have generally been high, some of these new jobs could be filled by in-commuters although for airport based jobs there are often preferences for using locally based labour. Even if in the unlikely worst case that all these new jobs were filled by in-commuters, this would amount to only about 1% of current levels of in-commuting to the area. There would also be scope for increased, well paid jobs available at the Airport to draw on local residents currently out-commuting to jobs elsewhere.

7.7 The breakdown of occupation categories/skill levels of workers based on the Airport is shown in Table 5.3 and indicates a relatively highly skilled workforce, although a reasonable range of occupation types at different skill levels. This employment profile compares fairly well with that of the sub-region where job skill levels are higher than average and jobs sought by local unemployed residents show above average demand for higher level jobs. At the same time, other lower skilled Airport based jobs should meet some needs for lower skilled unemployed workers in Rushmoor.

7.8 Overall, the estimated levels of employment growth associated with increased movements at Farnborough Airport appear unlikely to produce significant strains on the local labour market and should help diversify local job opportunities in the area. This conclusion would apply to all three growth scenarios considered.

8.0 Income and Expenditure Impacts

8.1 This section considers the amount of expenditure and income which the Airport generates within the local and regional economies, and how this might change if the number of air movements were permitted to increase.

Current Situation

8.2 The main areas of current expenditure are likely to include capital investment, spending by Airport based firms with supplier firms and wage spending of Airport based staff, as well as the indirect or spin-off effects of such spending. There will also be some local expenditure by visitors to the Farnborough Airshow.

Capital Investment

8.3 The initial investment and further capital expenditure by TAG Farnborough in creating the new Business Aviation airport over the period 2001-2008 amounted to £97.9 million. This has been a substantial level of investment in the area.

8.4 Further investment in an improved apron area (£12 million) and additional hangar space (£22 million) has already been committed by TAG and planning permission obtained, although the latter is currently on hold due to prevailing economic conditions.

Supplier Spending

8.5 In 2008, TAG companies at Farnborough Airport spent £61.9 million on goods and services.[24] However, after excluding capital and overseas expenditure, spending on aviation fuel and business rates, as well as wage costs which are considered separately below, total supplier spending was £9.8 million. Of this, some 23% (£2.3 million) was spent locally with supplier firms in Hart, Rushmoor and Surrey Heath. Within the South East and London, TAG spent £6.5 million (66% of the total), with a further £3.3 million spent elsewhere in the UK.

8.6 The Airport's expenditure in the local economy covers a range of different types of businesses. These range from local taxis and chauffeur car services, to hotels, legal firms, IT businesses, office equipment and stationery suppliers, car dealers and vehicle maintenance firms. Over 40 supplier firms within Rushmoor, Hart and Surrey Heath benefited from the Airport's spending, which was in addition to TAG's spending with other Airport tenant companies.

8.7 There is also spending by tenant companies based within the Airport site. It has not been possible to obtain a comprehensive picture of the amounts of such spending. This was not available from the Airport's own 2008 survey and a telephone survey for this study was only able to obtain partial and more

[24] Data provided by TAG Farnborough in May 2009

qualitative responses, with only a few firms able to estimate the amount they spent. The general picture gained, however, was that Airport tenants' spending with local suppliers is quite limited in amount and in some cases negligible. This expenditure was reported as mainly relating to items such as stationery and office supplies, cleaning services, use of local hotels, legal firms, use of local taxi and chauffeur car companies and, for a few operators, contracts with local catering companies. The proportion of their total supplier expenditure spent in the local area appeared likely to be somewhat less than the 23% achieved by TAG.

8.8 A broad estimate of total supplier spending by tenant companies at the Airport was made by scaling up the average supplier spend per employee obtained from a sample of companies surveyed. On this basis, it is estimated that total supplier spending by both the Airport and its tenants currently amounts to about £50 million p.a. Assuming 23% of TAG's spending, and 20% of that of tenant firms, takes place locally, this would suggest that supplier spending in the local area by all Airport based firms amounts to about £10.4 million. At the regional level, a similar process provides an estimate of £33 million of such spending.

Wage Spending

8.9 Since almost half of Airport based workers live locally, a significant share of the wage spending of workers based on the Airport and within its tenant companies could be expected to take place in the local economy. In 2008, the total wage bill of TAG companies at Farnborough was £20.8 million.[25] This relates to gross wage costs including National Insurance and pension contributions.

8.10 For tenant companies, it has only been possible to obtain limited information on wages. A sample of tenants based on the Airport indicated a gross average annual wage of about £38,500 per employee. If this average is scaled up for all tenant companies and added to those of TAG, this suggests total wage spending associated with the Airport is nearly £52 million p.a. If the wage spending of employees of Direct Off-airport firms is added, assuming the average regional wage per worker, the total rises to just over £54 million.

8.11 This implies that workers based at Farnborough Airport earn an average of over £47,000 in gross terms. This is significantly higher than the annual gross earnings of £26,000 for all employees in the South East, indicating the high value nature of many jobs at the Airport.[26] In addition, gross wage costs per employee across the firms surveyed at the Airport ranged from £11,000 (a cleaning company) to £80,000 (a charter operator), indicating a range of job opportunities at different levels.

8.12 Not all of these wages will be spent within the local area or region. It is assumed that the 47% of Airport based employees who live in the local area will be more likely to spend their wages within it. Out of net income after deduction of taxes

[25] TAG Farnborough Airport, TAG Aviation and TAG Engineering
[26] Annual Survey of Hours and Earnings, 2008

etc,[27] national statistics suggest that approximately 70% of wage spending takes place locally, with perhaps 85% spent within the region.[28] Applying these factors to estimated net wages indicates that wage spending by Airport based workers in the local area could amount to just over £11 million, and within the region, a similar process indicates £33 million.

Multiplier Effects

8.13 As with employment, income multipliers are normally used to estimate the extent of additional "spin-off" income generated in the local and wider economies as a result of supplier expenditure and wage spending from those based at the Airport.

8.14 As noted above, discussions with a number of Airport-based tenant firms suggest that the amounts spent locally were relatively low, mainly on stationary, taxis, hotels, and some catering companies, which would have only limited further supply chain effects. A significant amount of supplier spending by Airport tenants with more specialist suppliers based outside the region implies potentially high leakage of supplier expenditure, and this is clearly the case with the TAG spending also.

8.15 For wage spending, the combination of the Airport's relatively small local labour catchment area, the lack of major service centres in the local area and proximity to the major service centre of Greater London is again likely to mean high spending leakage from the local economy although much spending should be retained within the South East/London regional area.

8.16 Taking account of the above factors, relatively conservative income multipliers of 0.2 for the local level and 0.5 at regional level have been assumed. These are consistent with the employment multipliers used in Chapter 5.

Type of Expenditure	**Local Area**	**Region**
Supplier spending *	£10.4 M	£ 33 M
Wage spending *	£ 11.2 M	£24 M
Income multiplier	0.2	0.5
Indirect/induced income	£4.3 M	£28.5 M
Total income generated	£25.9 M	£85.5 M

Table 8.1: Current Airport Related Expenditure and Income.

* Note: totals rounded Source: TAG/NLP analysis

8.17 Overall, this indicates that the operation of the Airport and its tenants generate, directly and indirectly, some £25.9 million of income annually in the local economy, and £85.5 million annually in the regional economy.

[27] Assumed at 65% of gross wages
[28] Based on Family Expenditure Survey

Visitor Spending

8.18 While the Farnborough International Air Show is based on part of the Airport, it is not directly related to the Airport's Business Aviation activities and its main impacts are not related to expenditure with suppliers or wage spending. The most significant economic impacts appear to be the spending effects of visitors to the Air Show in the surrounding area, along with the indirect contribution of visitors to UK exports. For these reasons, the Air Show's impacts are considered separately from direct and indirect Airport impacts.

8.19 In 2008, the spending of visitors at the Air Show site and within 25 miles of it was estimated at £12.65 million.[29] Local hotels, shops and catering facilities around the Airport reportedly experienced significant trade increases during the week of the Air Show. It is likely that the increased visitor spending in the area produced some multiplier effects but much of this will be outside the local area and the effect only lasts for one week every two years.

Business Rates

8.20 In 2008, the Airport paid £0.95 million in business rates to Government. A proportion of this amount will eventually be recycled back into the local economy.

Impact of Increased Air Movements

8.21 The likely expenditure effects of increased air movements in future can be assessed in a similar way to that for the current situation.

8.22 In terms of capital expenditure, in the event of an increase to 50,000 movements p.a. being permitted, TAG has indicated that further capital investment of £12 million would be spent on replacement or refurbishment of a number of existing maintenance sheds on the Airport. Further investment could also occur if increased movements gave rise to a need for more hangar space.

8.23 It is also possible to estimate how supplier and wage spending would increase in parallel with increases in Direct on-airport employment supported by different levels of air movements. To give a broad order of magnitude of impact, the current estimate of supplier spending was scaled up in line with the forecast future job levels in Chapter 6, as shown in Table 8.2. This indicates potential to increase supplier related expenditure from £10.4 to as much as £14.8 million in the local area if total aircraft movements were permitted to increase to 50,000 annually.

[29] Economic study by Farnborough International, 2009

Future Air Movements p.a.	Current	35,000	50,000	60,000 +
Direct On-airport Jobs	1,104	1,200-1,290	1,425-1,580	1,500–1,780
Local Supplier spending (23%) (£million)	£ 10.4	£11.3–£ 12.1	£13.4 -£14.8	£14.1 –£ 16.7
Regional Supplier spending (66%) (£million)	£ 33.0	£36.1- £38.9	£42.9- £47.6	£45.2 – £53.6

Table 8.2: Supplier Spending Estimates based on Future Job Numbers. Source: TAG/NLP analysis

8.24 Adopting the same approach for wage spending, this suggests that up to £4.9 million in additional wage spending (£16 million in total) could be generated in the local area if annual movements increased to 50,000 p.a. (Table 8.3).

Future Air Movements p.a.	Current	35,000	50,000	60,000 +
Direct On-airport Jobs	1,104	1,200 -1,290	1,425- 1,580	1,500–1,780
Local wage spending (£million)	£ 11.2	£12.2- £ 13.1	£14.4– £16.0	£ 15.2 -£ 18.0
Regional wage spending (£million)	£ 24.0	£26.1- £ 28.0	£30.9 - £ 34.3	£ 32.6 - £ 38.5

Table 8.3: Wage Spending Estimates based on Future Job Numbers. Source: TAG/NLP analysis

8.25 This increased supplier and wage spending will again generate additional income in the local area through multiplier effects. Using the same income multipliers as before, up to £6.2 million of additional income could be generated locally for 50,000 movements per annum, giving a total income generation related to Airport growth of up to £37 million (Table 8.4). Tin the maximum case, this would be just over £11 million more than the current situation.

Future Air Movements	Current	35,000	50,000	60,000 +
Local expenditure	£21.6	£23.5 - £25.2	£27.8 -£30.8	£29.3 -£34.7
Income multiplier	0.2	0.2	0.2	0.2
Additional Income generated (£million)	£4.3	£4.7 - £ 5.0	£5.6 -£ 6.2	£5.9 - £ 6.9
Total Income Generation	£25.9	£28.2- £ 30.2	£33.4–£37.0	£35.2 - £41.6

Table 8.4: Local Airport Related Expenditure and Income. * Note: totals rounded Source: NLP

8.26 The same process at the regional level produces the results shown in Table 8.5, with an increase in income generation of £37.4 million if movements reach 50,000 p.a.

Future Air Movements	**Current**	**35,000**	**50,000**	**60,000 +**
Regional expenditure	£57.0	£62.2 -66.9	£73.8–81.9	£77.8 - 92.1
Income multiplier	0.5	0.5	0.5	0.5
Additional Income generated (£million)	£28.5	£31.1 - 33.5	£36.9 - £ 41.0	£38.9 - 46.0
Total Income Generation	£85.5	£93.3- 100.4	£110.7-122.9	£116.7- 138.1

Table 8.5: Regional Airport Related Expenditure and Income. Note: totals rounded Source: NLP

Gross Value Added

8.27 The economic value of the Airport to the local and regional economies can also be measured by the amount of Gross Value Added (GVA) it contributes. GVA provides a measure of the overall effect of a project on the value of goods and services produced in the economy and is equivalent to wages/salaries + profits + taxes. The Airport's contribution can estimated by applying average GVA values per employee for the UK aviation sector and for the UK economy as a whole to the different categories of future employment estimated for the Airport.

8.28 At 2007 prices, GVA per employee in the aviation sector is estimated at £70,000 nationally, and £40,000 per job for all sectors.[30] If these figures are respectively applied to Direct On-airport jobs, and the combined Direct Off-airport and induced/indirect jobs, this produces the amounts of GVA shown in Table 8.6 below. This indicates that the Airport current contributes £93 million to GVA to the local economy and an increase to 50,000 movements p.a. would result in an increase in this contribution of between £25.9 – 33.4 million.

Future Air Movements p.a.	**Current**	**35,000**	**50,000**	**60,000 +**
GVA (£million)	£93	£100.7- 103.7	£118.9 -126.4	£125.2 - 142.0

Table 8.6: Estimated Contribution of Farnborough Airport Growth to GVA. Source: NLP

Conclusions

8.29 Current operations at the Airport are estimated to generate some £25.8 million of income annually in the local economy, through spending of wages by Airport based staff, by expenditure with local supplier firms and through multiplier effects. These expenditure effects are considered to provide only a moderate level of impact locally, with a high proportion of Airport based expenditure leaking out of the sub-region and a significant element outside the region.

8.30 At the regional level, this income generation amounts to £85.5 million annually. This is a reasonably high level of impact.

[30] Based on National Accounts 2008 (Blue Book) with 2004 data updated to 2007 using index of GVA for UK as a whole

8.31 Increased movements at the Airport have the potential to produce additional income generation. An increase to 50,000 movements p.a. is estimated to increase the income generated in the local economy up to £37 million, just over £11 million more (42%) than the current situation. At the regional level, the increase would be in the order of £37 million in the maximum case, 43% more than currently.

9.0 Catalytic and Other Economic Effects

9.1 Catalytic impacts relate to the wider role of airports in attracting investment and businesses to an area, where the latter have no direct economic linkages with the airport but may utilise its air services or gain some other competitive advantage from a location near the airport.

9.2 Typical economic impacts of an airport in this regard include:

- influencing locational decisions by inward investing or relocating companies from outside the area, particularly overseas based firms that need good air links with headquarters or bases in other countries;
- helping retain established companies in the local area or region, particularly firms for which convenient access to air services are important, for example to enable quick travel to export markets or overseas suppliers;
- influencing decisions by established firms on whether to expand operations in the local area, or at other sites;
- supporting the competitiveness of the local/regional economy by providing rapid and good quality air services for both passengers and freight;
- facilitating export growth, or more competitive sourcing of components, by providing easy and quick links to key markets, customers and suppliers, for either executives or goods;
- helping put a local area on the international business map and enhancing its image as a well connected location; and
- in some cases, simply providing a prestigious, easily identifiable location which firms want to be located beside or associated with.

9.3 These kinds of impacts are very difficult to quantify since investment decisions by businesses reflect a combination of different factors, among which proximity to airports can be important but usually not the most important. This is illustrated by Table 9.1 below, which indicates the importance of different factors to different economic sectors.

Location factor*	Sector			
	Offices	**Manufacturing**	**Distribution**	**Services**
Proximity to markets	-	19%	30%	40%
Presence of major customers	8%	18%	35%	13%
Financial assistance	-	19%	25%	7%
Cost of land / premises	31%	11%	10%	20%
Quality of road / rail services	46%	15%	35%	27%
Overall attractiveness of area	39%	6%	-	13%
Proximity to major airport	23%	6%	25%	7%
Available Skilled Labour	-	11%	20%	27%
Supporting services	5%	-	-	20%
Available sites	-	17%	-	-
Proximity to Port	-	6%	-	-

Table 9.1: Critical Location Factors for Mobile Investment by Business Sector

Source: NEI / Ernst & Young, 1993. Note: based on proportion of firms surveyed citing each factor as critical to their choice of location in a region. Note: - means no responses on that factor; * not all factors are listed where not relevant to this study.

9.4 To assess the extent of influence which an individual airport has in attracting businesses to the area around it, it is usually necessary to consult with businesses, particularly more recent inward investors, which utilise the airport. However, in the case of Farnborough Airport, it has not been possible to do this. This reflects the nature of the Airport and its corporate users, which insist on privacy and confidentiality regarding their Business Aviation movements. Loss of this confidentiality could lead to companies moving their Business Aviation activity elsewhere. For these reasons, the Airport was not able to provide details of its users. Discussions with TAG also indicated that, if contacted, these companies would not be willing to discuss their movements or the role of the Airport in supporting their business activities. It was therefore agreed with Rushmoor Council that no contact would be attempted with corporate users of the Airport.

Research on Investment Attraction of Airports

9.5 In this situation, evaluation of the catalytic impacts of Farnborough Airport has had to rely partly on experience at other airports and on general research on the catalytic impacts of other commercial airports. While the economic importance of London Heathrow to overseas based firms in the corridor west of London is well documented, a number of studies have also confirmed a relatively high level of attraction of investment to areas near smaller regional airports:

- in a 1992 survey of foreign owned companies in the West Midlands, 13% identified air transport as a significant factor in their location decision; at that time, the region's main airport Birmingham International handled some 3.6 million passengers annually;

- in a 1994 survey by Manchester Airport of 77 foreign based firms in the North West region, 26% attributed the airport as an important factor in their decision to locate in the region;

- evidence to the Manchester Airport Second Runway Inquiry in 1994 confirmed that the Airport was a major consideration in organisations, including Siemens, Fisons Pharmaceuticals and Hewlett Packard, locating in the area;

- a 1995 survey of foreign owned companies in the North East region found 23% of firms identifying the air services of Newcastle Airport (2.3 mppa) as a key factor in coming to the region;

- 20% of companies choosing to locate near Lyon Satolas airport (4 mppa) in France cited the airport as the most important factor in their decision.[31]

- a survey in 1994 of multinational companies across Europe asked firms to rank a range of factors in terms of their influence on corporate location and showed that international air transport links were one of the most important factors, coming equal top out of 19 factors. [32]

9.6 For some types of firms, locating near to a good airport is clearly essential. According to the South East England Development Agency, "*the air link is a vital component for those exact industries we are trying to attract … the knowledge-based, high value-added industries, such as biotech/pharmaceuticals, ICT, high tech engineering, business and financial services. As well as being global companies, the high-value goods produced in these industries tend to be exported by air rather than by road*." An example is NetGenics UK Ltd, a life sciences company whose managing director told London First that "*London was the optimal choice for us since the road, rail and air transport systems around London provide us with the shortest journey times to potential customer sites in both the UK and Europe. London is probably the most internationally accessible city in the world for business travel*."

9.7 While many of these impacts are related to air services on business routes at commercial airports, there is much less research on the role of Business Aviation specifically, partly because it is difficult to disentangle the effects of this sector from other activities at commercial airports. However, a 1997 study for London City Airport, which has a significant Business Aviation element, surveyed 73 recently established firms in the City of London and the Docklands area of East

[31] Airports as job Generators, Airports International, August 1994.
[32] EC City Futures study, Henley Centre 1994

London. This included financial bodies, software companies, publishers and governmental bodies. [33]

9.8 From this survey, over 48% of respondents considered London City Airport to have been an important/very important factor in their decision to locate in the area. 11% of responding firms indicated they would definitely not have located in the area had a convenient international airport not existed, and a further 24% said they may not have done so. 41% of firms cited the airport as the third most important in their location decision, after availability of premises and proximity to the City of London. Importantly, 87% of responding firms actually used the airport, and 38% used it frequently, much more the proportion which came to the area because of it. This suggests the benefits of an airport often become more apparent to businesses once they locate near it, and may influence their retention, and future expansion plans, in an area.

9.9 It is important to emphasise from this research that it is the quality and frequency of air services offered and the range of business destinations served that are the key factors influencing business location decisions. Airports with a greater focus on leisure flights or with limited connections to business centres were much less influential.

Investment Attraction of Other Business Aviation Airports

9.10 The role of Business Aviation airports in Europe in attracting or stimulating investment has been examined in a study of the Economic Impact of Business Aviation through a series of case studies.[34] The findings are summarised below.

9.11 At **Milan Linate Airport**, 23% of departures are for Business Aviation. The study noted that, "*Although Business Aviation promotes high end tourism in northern Italy, its primary purpose is the facilitation of business deals. … Expansion of the sector could also stand to benefit the local business aviation operating and maintenance companies. However it was conceded that the local economy is not dependent on business aviation given that the Milan region is an economic area with global weight, business aviation cannot claim a pivotal role in its economic development*."

9.12 At **Zurich Kloten airport**, 12% of departures are for Business Aviation and on its economic role, the study noted "*…it is unlikely that Kloten and its business aviation capacity are important drivers of the region's economic success. However, it contributes to the ease of doing business in the area, as reflected in the recent decisions by companies like eBay, Google and Kraft Foods to move their European headquarters to the Zurich area. Convenient transport links play a part in selecting a location for an office*."

[33] Economic Impacts associated with Further Growth in Air Services at London City Airport, Nathaniel Lichfield and Partners for London City Airport, 1997.
[34] The Economic Impact of Business Aviation in Europe, PWC Economics for EEBA, 2008

9.13 At **Rotterdam Airport,** with 60% of departures for Business Aviation, the local economic impacts were indicated as *"….by setting a high standard for customer service, business aviation has a significant, albeit indirect, impact on the entirety of the airport's business. It also provides an 'invaluable economic boost to the region, according to a Rotterdam representative."*

9.14 At **Frankfurt Egelsbach Airport**, Business Aviation makes up 7% of all movements. The study noted this airport's investment effects as follows: "*Airport representatives suggested that business aviation traffic has already generated a significant amount of investment in the Frankfurt region, both directly and indirectly. Apart from the development of air traffic, business aviation is generating investment in the hospitality and leisure sector. Furthermore, it is estimated that the majority of inbound business aviation traffic is related to establishing or furthering economic activity in the region. An important driver of business aviation traffic into Frankfurt is business people's attendance at various trade fairs*."

9.15 **Geneva Cointrin** airport has 32% of movements made up by Business Aviation traffic. Business Aviation here reportedly *"…benefits the region by bringing private banking clients, corporate executives and potential investors. It also facilitates high-end tourism, especially from Russia and the Middle East. This includes the growing medical tourism market. A Conitrin representative said that business aviation does not necessarily benefit the airport but rather the region: 'It is necessary for the area'*."

9.16 Business aviation in Munich is mainly served by **Allgau Airport**, which has half of its movements formed by this sector, although Oberpfaffenhoffen airport also handles a small amount of services. The study reported that "*Business aviation services at Munich Airport are used primarily by air taxi companies by corporations, particularly insurance companies and automobile manufacturers like BMW, VW and Daimler. … Airport representatives at Allgau and Oberpfaffenhoffen report that the regional economy benefits from business aviation because it provides local businesses with easy access to eastern Europe, where many of them have operations, while often avoiding the congested Munich Airport. The ability to connect quickly and conveniently to any production location in Europe is particularly important to the Munich region. This is because it is a leading global engineering and high tech region*."

9.17 The study also included **London City Airport**, where Business Aviation made up 15% of movements. On its economic benefits, it was noted that "*Airport representatives claim that London City is part of the reason behind the success of Canary Wharf. Although people do not come to London solely on account of business aviation, it does make doing business there easier. In purely economic terms, according to one of the executives at the airport, 'two people in a Citation can be more valuable than a hundred people on a Boeing'*."

9.18 The study also examined several other European airports (e.g. in Madrid, Paris and Amsterdam) with business aviation services but did not identify any significant economic or investment attraction arising from them.

9.19 These case studies did not appear to identify any substantial effect of Business Aviation in attracting investment to the area around them and in most cases, the economic impact seemed to more of a perception of benefits to businesses rather than any hard evidence that business location decisions had been influenced by the airport. In many cases, the cities that the Business Aviation airports serve also have a large commercial airport so that it may be difficult to isolate their individual impacts. However, despite this, there appeared to a general view that Business Aviation had brought wider investment benefits to the areas served.

Investment Related to Farnborough Airport

9.20 In relation to Farnborough Airport specifically, evidence of wider attraction effects has had to rely on discussions with property agents, developers of business space, economic development and inward investment bodies and anecdotal evidence regarding a few companies known to utilise the Airport.

9.21 Discussions with the developers of the 50 ha IQ Farnborough Business Park beside the Airport suggested the Business Aviation services there had played a very limited role in attracting firms to the Park. This Park caters primarily for office-based firms, with 50 occupiers mainly in IT and media sectors and very few aerospace firms. Development commenced in 2000 and the site is now 40% developed, with 29,000 m^2 built and a further 19,000 m^2 under construction. However, take up of space has reportedly been slow.

9.22 The developers suggested that the Airport had not been a significant factor in the development of the business park nor in the decisions of most of its tenants to locate there. For the great majority of occupiers, the key factors were the availability of good quality sites with planning permission or readily available premises, while easy access to a fast rail line to London at Farnborough was more important to them than Business Aviation services. Proximity to the Airport and its convenient business air services are certainly highlighted in the Business Park's marketing but so also are easy access to Heathrow and Gatwick, the M4 and M25, and the 37 minute journey time to London by train. While the developers envisaged the Airport might give the Business Park a unique selling point and distinguish it from others, it is not obvious this has happened to any significant extent. While a few tenants are international businesses and may use the Airport, it was indicated not to have been a deciding factor in any of them locating on the Business Park.

9.23 Similarly, discussions with commercial property agents active in the area around the Airport suggested that neither the Airport nor its Business Aviation services have been a significant factor influencing demand for industrial or office property. It is not a factor that appears in enquiries for premises in the area. This may be because the Airport is now an accepted element of infrastructure in the area, as is Heathrow and good rail services. However, the high quality of investment at the Airport was felt to enhance the general image and profile of the area as a business location.

9.24 From consultation with the inward investment arm of SEEDA, Farnborough Airport is viewed as providing an important and high-profile focus for aviation activities in the South East region, as well as being well-placed to serve technology businesses based in the M3/M4 corridor area. The number of inward investments attracted to the local area is higher than its share based on size, and many of these are overseas based firms. Despite this, no examples could be provided of companies locating in Farnborough or the wider area specifically to make use of Business Aviation services at the Airport. This may be because air services are only one of a number of factors being considered and the general infrastructure of an area is often known before enquiries to SEEDA are made. At a more general level, the Airport is recognised by SEEDA as an important part of the region's business infrastructure, which helps to provide a competitive advantage over other parts of Europe competing for investment.

9.25 Consultation with the North Hampshire Chamber of Commerce indicated the Airport was regarded as an important asset by businesses in the area and one which had improved the general image of the area as a business location. Its more convenient and more quickly accessed business air services were regarded as important for senior business executives as a way of avoiding congested Heathrow. However, again no examples of businesses in the area using it were identified, nor of the locational decisions of any specific businesses being influenced by it. Overall, perceptions of the Airport's importance to business were reported as highly positive but there was little hard evidence to demonstrate its effects.

9.26 As noted earlier, it has not been possible to identify or survey corporate users of the airport. However, it is understood from other sources that several firms located nearby do use the Airport. BAe Systems has a twice-daily shuttle flight to its base at Warton Aerodrome in Lancashire, but BAe was based at its site before Business Aviation operations commenced at Farnborough. Agusta Westland, an aerospace firm based on the business park, is also reported to have a twice weekly flight to its headquarters in Milan, from Farnborough to Malpensa airport.

9.27 A number of businesses in the Berkshire, Surrey, Hampshire and West London areas are understood to utilise Farnborough for Business Aviation and these represent a range of sectors, including many in higher value/higher growth areas (Appendix 3). Given the costs of owning aircraft, these are likely to be mainly larger firms and more likely to be ones with significant operations overseas. Since Farnborough only commenced Business Aviation activities in 2001, it is likely that many of these firms will have been based in the area before then.

9.28 On the basis of the limited direct evidence and the secondary information available, a conclusion could be drawn that the Business Aviation facilities at Farnborough are not obviously a strong factor in attracting business investment to the local area and region. While not helped by the lack of any information from corporate users of the Airport, given the ample evidence on the investment attraction role of business related air services at airports generally, it would be surprising if this conclusion were true. Such a view would also be contradicted by the fact that Farnborough Airport has grown strongly on the basis of many major South East based businesses using its Business Aviation services. Even if many of these firms were located in the area before the Airport opened, and have the alternative of using services at Heathrow, the Airport's importance may be gauged by considering the effect if it were no longer available to such firms. This could affect decisions on whether the business expands within the area or elsewhere, or whether it stays in the area when wider reviews are made of the firm's operations. Such decisions tend to be made by senior executives, which are typically the main users of Business Aviation services.

9.29 A study of the economic effects of Business Aviation in the UK in the late 1990s concluded that that if access to Business Aviation become impossible for the companies using it, which are relatively few in number, which have a culture of corporate aviation or for which Business Aviation is an integral party of their operations, they may question whether it is sensible to retain office locations that can no longer be effectively serviced. It also concluded that lack of convenient provision for Business Aviation would result in considerable risks of changes in corporate activity, to the detriment of the UK and South East economies. [21]

9.30 In addition to such investment attraction or retention effects, it also appears clear that the Airport and its convenient air services do make the surrounding area a more attractive location in which to do business for larger firms with overseas interests. Without being a decisive factor in location decisions, the Airport also appears to contribute strongly to enhancing the general image of the area, by giving it an easily identifiable focus, and adds an extra dimension to the area's range of business support services, helping distinguish it from other areas.

9.31 Overall, while these effects cannot be quantified and the picture is less than clear in some respects, it would be reasonable to conclude that Farnborough Airport makes a significant contribution to the general business attractiveness of the area that it serves. It also contributes to the general connectivity of the South East region, linking it to major business destinations across Europe and further afield, which is an important element of competitiveness.

Impact of Increased Air Movements

9.32 In the context of the above discussion on current impacts, it is not clear that increased movements at the Airport would necessarily have substantial economic effects. The ability to operate more flights ought to allow more frequent and convenient air services and help consolidate the Airport's position as a leading Business Aviation airport and potentially attract new operators to base themselves at Farnborough. This in turn should generally enhance services available to businesses, which, in turn, might be expected to make the area more attractive in terms of attracting or retaining investment, but it is hard to assess the scale of this effect.

9.33 It may be more useful to consider the effect if the Airport were capped at its current limit of movements. When this limit was reached, this could send out a signal that the Airport was effectively unable to accommodate further business and give a generally negative message about Farnborough compared with other airports with fewer constraints. This may send out adverse signals to businesses which could affect decisions on expansion. All this, however, is somewhat speculative and will depend on whether the Airport is able to accommodate the future level of demand and continue to offer a good service to corporate users. If constraints on air movements meant it did not, this would be more likely to affect business retention.

9.34 With the current limit on numbers of air movements remaining, it is also likely that the Airport would attract less future investment in infrastructure improvements than it would otherwise have done. This again could give a picture of a stagnating facility rather than a dynamic growing airport serving an economically buoyant area.

9.35 While very difficult to form a clear view, it would be fair to conclude that significantly increased movements would be likely to provide some wider benefits to the area that would modestly enhance its attractions to business investment.

Visitor Impacts

9.36 While the Farnborough International Air Show is based on part of the Airport, it is not directly related to the Airport's Business Aviation activities and its main impacts are not related to expenditure with suppliers or wage spending. The most significant economic impacts appear to be the spending effects of visitors to the Air Show in the surrounding area, along with the indirect contribution to UK exports. For these reasons, the Air Show's impacts are considered separately from direct and indirect Airport impacts.

9.37 In 2008, there were over 285,000 visitors to the Air Show, almost 133,000 of which were trade visitors, the remainder the general public. The spending of these visitors, along with exhibitors, journalists and media, within the Air Show site and within 25 miles of it is estimated at £12.65 million, slightly more than half the overall amount spent.[35] While no more detailed breakdown is available, a reasonable estimate might be that approximately half this £12.65 million (£6.3 million) was spent with the local area formed by Rushmoor, Hart and Surrey Heath. Within the South East/London regional area, an estimated £23.4 million was spent.

9.38 In terms of impacts on employment, the effect of this visitor spending does not appear to be large. A survey of hotels, shops and catering facilities in the area around the Airport found that 90% experienced a trade increase during the week of the Air Show, varying between 5% for larger supermarkets, about 20% for hotels and 80% for small cafes.[36] However, the hotels were already fully staffed as this was their peak season, and no other businesses reported taking on more

[35] Economic study by Farnborough International, 2009
[36] Survey by Farnborough International of 26 hotels and other businesses within 20 miles of the Airport

staff for the week of the Air Show. Some hotels were reportedly able to benefit by increasing their rates for the week.

9.39 Despite limited direct impact on jobs, the amount of visitor expenditure should create some multiplier effects in the local and regional economy as this spending creates further expenditure on food, drink and services with other businesses. By applying an income multiplier of 0.2 at the local level, further spending of £1.3 million and indirect/induced employment of 16 jobs could be supported locally. At the regional level, some £11.7 million of additional expenditure could result, equivalent to 145 indirect/induced jobs.

9.40 Overall, therefore, the visitor impacts of the Air Show appear to result in a sizable amount of expenditure into the local economy in the order of £7.6 million, albeit only over a one week period every two years.

Other Economic Effects

9.41 In addition, as host to the Farnborough Airshow, the Airport makes a significant contribution to UK exports of aircraft. The Farnborough International Airshow is the world's leading event for marketing and sales of aircraft and the most prestigious event of its kind. In 2008, the Air Show attracted 70 delegations from 38 counties, which visited 151 companies resulting in a total of over 600 company meetings. During the 2008 Air Show, new orders worth £44.4 billion (for 480 aircraft and equipment systems) were announced. At the event, the Secretary of State for Business, described the Air Show as "….*a marvellous showcase for British success in the aerospace and defence sectors…. that has given a further boost to this UK manufacturing success story*." Discussions with the Farnborough Aerospace Consortium (FAC) highlighted that Farnborough (along with the Paris Air Show held in alternate years) is the pre-eminent international event for the aerospace industry, which draws on Farnborough's long-standing association with aviation.

9.42 The Farnborough Airshow therefore provides an important focus for generating new export orders for the UK aerospace sector. While the amount this contributes to UK exports cannot be accurately assessed, as a comparison the UK aerospace sector as a whole generated new orders worth £44 billion in 2007.[37]

9.43 If Farnborough Airport did not exist, it is not clear where else in the UK this event could be held. Both the Air Show organisers and FAC consider it unlikely that other UK airports could provide the combination of operational facilities able to accommodate larger aircraft and advanced air traffic control systems, with exhibition facilities on-site and without the congestion of larger commercial airports. Without Farnborough Airport, it may be that the focus of such marketing would move overseas, with other similar air shows now being held elsewhere, for example Bahrain and Dubai. While it is not possible to quantify the impact of

[37] UK Trade and Investment

this, it would be likely to result in a major loss of export opportunities to the UK economy and affect a sector in which the UK economy is very strong.

9.44 In addition, as noted earlier, the Business Aviation sector in the UK generates over €4.2 billion and has almost 50,000 jobs linked to it. Much of this quantifiable impact derives from its links to the aircraft manufacturing sector, in which Hawker Beechcraft and Bombardier are leading UK manufacturers of components for business aviation aircraft, and make airframes for the business aviation industry globally.[38] The UK is also a leading European market in terms of operations and aircraft maintenance. As the UK's only dedicated Business Aviation airport and now with most Business Aviation movements, Farnborough can be considered to contribute indirectly to supporting the UK's aircraft manufacturing and maintenance sectors.

9.45 The Airport is also the focus for the cluster of aerospace and defence industries based around it, including BAe, the Aerospace Centre generally, QinetiQ and some aerospace firms at Farnborough Business Park. While this partly reflects historical factors including the former RAE facility being based here, there is some use of the Airport by these companies and it is seen as providing an important focal point and enhancing the image of the aerospace cluster in this location.

Conclusions

9.46 On the basis of the above analysis, Farnborough Airport makes a significant contribution to the general business attractiveness of the area that it serves and is likely to influence corporate decisions on inward investment or retention, without being a decisive factor in them. The effect of significantly increased movements should not be overstated but would be likely to provide some wider benefits to the area that would modestly enhance its attractions to business investment.

9.47 If constraints in air movements were to lead to pressure on departure slots, this could potentially affect business retention in the area to some extent and detract from current perceptions of an economically buoyant area served by a dynamic growing airport.

9.48 The Airport is also an important focal point for the aerospace sector within the South East, both in terms of research and marketing, and is likely to enhance the image of the aerospace cluster in this location.

[38] The Economic Impact of Business Aviation in Europe, PWC Economics for EEBA, 2008

10.0 Community & Other Impacts

10.1 This section considers a number of wider community and other effects of Farnborough Airport that are distinct from the issues considered in preceding chapters. Much of the information in this section was provided by the Airport.

Local Employment Opportunities

10.2 As noted earlier, the Airport provides a range of job opportunities at different wage and skill levels. For many of the firms based at the Airport it is advantage, in some cases a requirement, for staff to live locally. It is also understood that TAG operates a policy of recruiting staff locally where possible. For significant numbers of the Airport based jobs, aerospace and engineering related skills are relevant and this builds on workforce skills in this sector that are already available the local area. It can be argued that the presence of the Airport, and its potential growth, provides a wider range of job types accessible to the local community than would otherwise be available in an area with a focus on service sector and higher technology jobs.

Local Community Involvement

10.3 The Airport engages with the local community on a range of airport-related issues through the Farnborough Aerodrome Consultative Committee (FACC), an independent body established by TAG and Rushmoor Borough Council. Membership of the FACC includes public agencies, residents' associations and Airport users, with meetings held three times per year.

10.4 A sub-group known as the Noise Working Group has been established to help address noise issues related to the Airport. The current Quiet Flying Programme noise mitigation initiative was developed by this group, which includes representatives from the Farnborough Airport Residents' Association, the Mytchett, Frimley Green and Deepcut Society, and the Fleet and Church Crookham Civic Society.

Education and Training

10.5 Farnborough Airport helps fund 12 engineering apprenticeships at Farnborough College of Technology in association with GAMA Aviation and Premier Aviation. The apprenticeships will lead to the award of an International Air Transport Association Licence in Aircraft Maintenance as well as UK NVQs and Farnborough College's own technical certificate qualification. Students completing these apprenticeships will join the three sponsoring companies for a 42 month work/study apprenticeship in aircraft maintenance.

10.6 In 2008 the Airport established the Farnborough Flying Scholarship to fund three post-17 year old students to undertake 30 hours of basic flying instruction. These scholarships are delivered through the Air League Educational Trust and are available to students at Farnborough College of Technology, Farnborough Sixth Form College and Yateley Sixth Form College.

10.7 Discussions with Farnborough College of Technology indicate that the Airport is important in supporting the range of aviation-related and engineering courses it provides, which include aircraft maintenance engineering, aeronautical engineering and avionics. These courses help to maintain the skills base for the wider aviation and aerospace sector located in the area.

10.8 The Airport also offers a number of summer work experience placements to post GCSE students at local schools. In addition, the Airport hosts occasional school visits to the Airport for study tours.

10.9 It is also understood that Farnborough is currently being considered amongst a number of UK airports as a potential location to establish a national aerospace academy in conjunction with the specialist academic engineering faculty. The presence of an operational airport with on-site maintenance and engineering operations, and the long tradition of aviation-related research, would suggest Farnborough has some benefits for developing links with higher education institutions.

Other Community Activities

10.10 The Airport is also understood to support a number of local charities, community groups, and events. These include contributions to Henry Tyndale School (special needs) and Phyllis Tuckwell Hospice, as well as hosting the Farnborough Scouts Centenary Anniversary overnight camp at the Airport and supporting the Farnborough Spitfire Taekwondo Academy, Farnborough North Football Club, *"Rushmoor in Bloom"* and *"Picnic to Music in the Park"*.

Contribution to Local Economic Objectives

10.11 The Rushmoor Economic Development Strategy 2006-2011 establishes a number of priority outcomes to encourage local economic growth. The presence of Farnborough Airport contributes to meeting some these objectives (Table 10.1).

10.12 On this basis, the presence of the Airport provides some moderate socio-economic benefits to the local residential and business community. This study did not seek to assess any wider environmental or traffic related impacts on the local community.

Economic Development Objective	Impact of Farnborough Airport
Maintaining the attractiveness of Rushmoor as a key business location	Farnborough Airport provides a dedicated Business Aviation facility, increasing the communications links with Europe and other parts of the UK which may be important for some firms seeking an alternative to larger commercial airports. The Airport also helps raise the profile of Rushmoor as a business location.
Promoting a culture of corporate responsibility by involving businesses in protecting the environment and supporting the local community	Through the FACC, the Airport supports efforts to reduce the environmental impacts of its operations, for example the Quiet Flying Programme, and ensures a level of consultation with the local community.
Helping people to fulfil their potential and promoting learning opportunities	The Airport is an important in maintaining skills in aviation-related activities both directly and through tenant companies, as well as its support of education and training opportunities.

Table: 10.1: Farnborough Airport contribution to Local Economic Objectives.

Source: Rushmoor Economic Development Strategy, 2006-2011

Impact of Increased Movements

10.13 It appears likely that the Airport's contribution to these objectives would be enhanced to some extent if the number of air movements were to be increased. This would, for example, result in greater local employment opportunities, provide increased availability of Business Aviation services for local businesses, and potentially more scope for sponsored apprenticeships at Farnborough College. Such benefits would also have to be weighed against other effects of the Airport on the local community, such as environmental impacts.

11.0 Conclusions

11.1 The following conclusions can be drawn on the current economic effects of Farnborough Airport on the surrounding area and the likely economic impacts of increased air movements there.

11.2 At the present time, the total number of jobs currently based at the Airport (1,100) and those based off-site or supported indirectly by it amounts to some 1,500 at the local level, and 1,860 within the South East/London region. On this basis, the Airport site is one of the largest employers in Rushmoor Borough, comparable in local job generation to major aerospace or ITC firms based in the area.

11.3 The Airport, together with the cluster of aerospace, defence and other businesses immediately adjoining it, currently accommodates almost 8,000 jobs. With indirect/induced effects, the total employment supported by this complex locally is estimated at almost 9,600 jobs and 12,000 in the region. This forms one of the largest employment centres in the North Hampshire/Surrey area.

11.4 Jobs based at the Airport tend to be predominantly full-time, with a high proportion of skilled occupations and with wage levels well above the regional average. Almost one quarter of these jobs are filled by residents of Rushmoor and almost half by residents of the wider local area including Rushmoor, Hart and Surrey Heath districts.

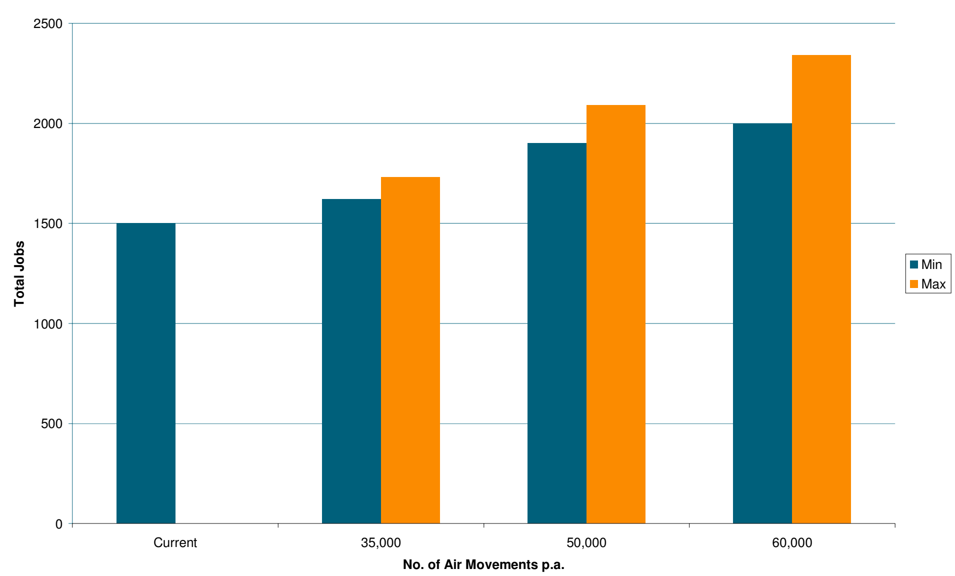


Figure 11.1: Local Job Impact from Different Nos. of Air Movements

11.5 If air movements were to increase from the current 25,500 to 50,000 p.a., the number of jobs supported within the local area could be expected to be between 1,900 – 2,090, both direct and indirect. This would be an increase of between 400-600 jobs over the current situation (Figure 11.1). At the regional level, total jobs for that level of movements would be 2,360 -2,600, an increase of between 500-740 jobs over the current levels of jobs related to the Airport in that area.

11.6 These estimated levels of employment growth associated with increased movements at Farnborough Airport appear unlikely to produce significant strains on the local labour market and should help diversify local job opportunities in the area. The likely employment profile of the new jobs would compare fairly well with that of the sub-region where job skill levels are higher than average and jobs sought by local unemployed residents show above average demand for higher level jobs. At the same time, other lower skilled Airport based jobs should meet some needs for lower skilled unemployed workers in Rushmoor.

11.7 The estimated increase of 400-600 in direct jobs at Farnborough Airport resulting from up to 50,000 movements p.a. annually appears quite a modest amount compared with the growth of 6,500 jobs anticipated for the local area over the next 7 years or so, and equivalent to approximately 6-9% of all job growth. This job increase would equate to between 11- 16% of current unemployment in the area. It would also help to diversify local employment opportunities and further support the local skills base in aviation related activities.

11.8 The development of the Airport since the early 2000s has brought almost £100 million of capital expenditure to the area, with a further £34 million committed. An increased in movements to 50,000 p.a. is likely to result in further investment of at least £12 million in the short term.

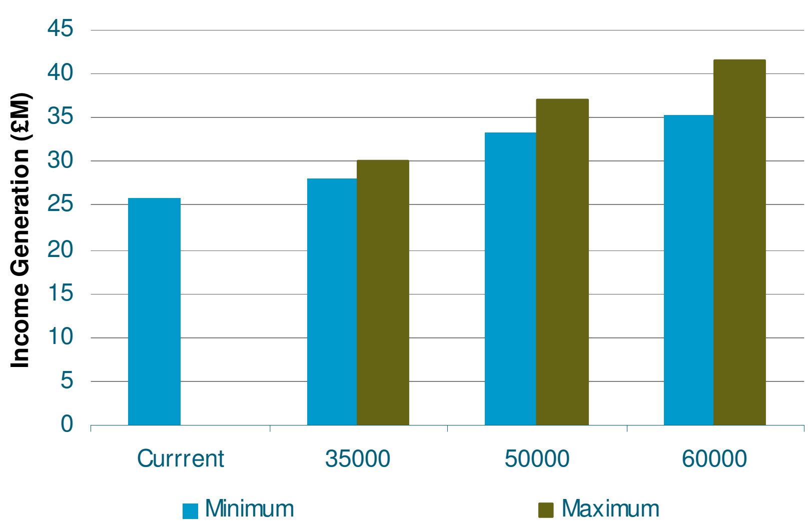


Figure 11.2: Local Income Generation from Different Nos. of Air Movements

11.9 Current operations at the Airport are estimated to generate some £25.8 million of income annually in the local economy, through spending of wages by Airport based staff, by expenditure with local supplier firms and through multiplier effects. As a proportion of its total spending, the local income generation of the Airport appears quite modest and the number of local firms that appear to benefit directly from it is about 40. At the regional level, however, this income generation effect is greater, amounting to over £85 million annually.

11.10 Increased movements at the Airport have the potential to produce additional income generation. Growth to 50,000 movements p.a. is estimated to raise the income generated in the local economy up to £37 million, an increase of more than £11 million over the current situation (Figure 11.2). At the regional level, the increase would be in the order of £ 37 million.

11.11 Figure 11.3 overleaf summarises the current level of quantifiable impacts along with the effect on increased movements to 50,000 p.a.

11.12 While there is extensive experience that good quality business air services have helped attract firms to other airports, there is limited direct evidence that Farnborough Airport has influenced inward investment decisions in the area around it. Nevertheless, the Airport and its convenient Business Aviation services appear to make the surrounding area a more attractive location in which to do business for larger firms with overseas interests. The Airport's use by major corporate firms within the South West and West London, and its strong growth on the back of such usage, also suggests the Airport is an important factor for larger businesses with overseas interests and/or relying heavily on convenient air travel.

11.13 Without necessarily being a decisive factor in past decisions on business locations, the Airport contributes strongly to enhancing the general image of the area, by giving it an easily identifiable focus, and adding an extra dimension to the area's range of business support services, helping distinguish it from competing areas. These factors are likely to influence future investment decisions on retention of firms or expansion of investment in the local area, particularly when such decisions are usually made by senior executives who are the more frequent users of Business Aviation services.

11.14 The Airport is also the focus for the cluster of aerospace and defence industries based around it, including BAe, the Aerospace Centre generally, QinetiQ and some aerospace firms at Farnborough Business Park. There is some use of the Airport by these companies and it is seen as providing an important focal point for, and enhancing the image of, the aerospace cluster in this location. By hosting the Farnborough International Airshow, which is an important focus for generating new export orders for the UK aerospace sector, the Airport contributes indirectly to UK exports, in which the aerospace sector generated orders worth £44 billion in 2007. If Farnborough Airport did not exist, it is not clear where else in the UK that this event could be held and could result in a major loss of export opportunities to the UK economy and affect a sector in which the UK economy is very strong.

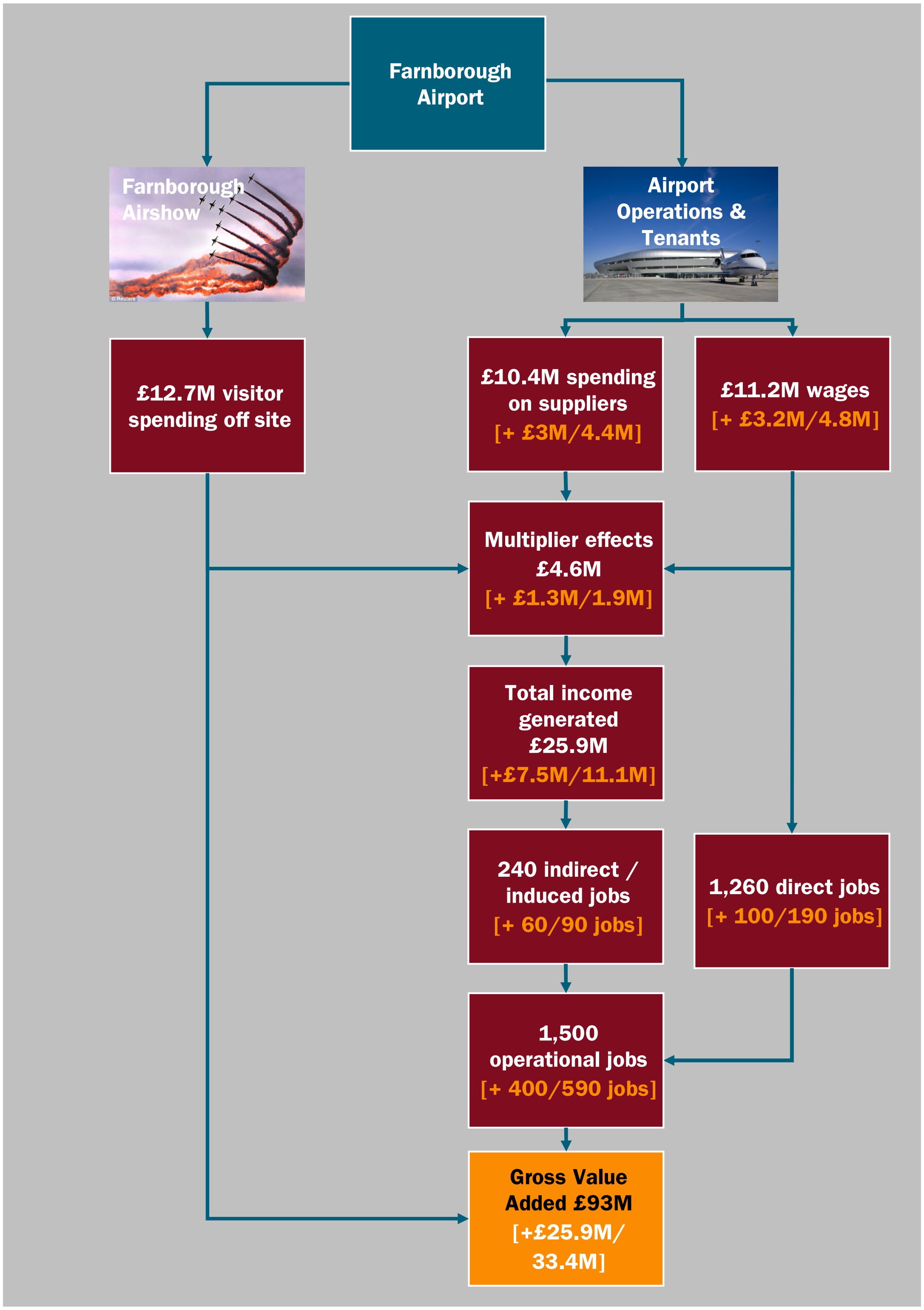


Figure 11.3: Current Local Expenditure, Income and Employment Impacts of Farnborough Airport [with potential increase at 50,000 movements p.a.]

11.15 The presence of the Airport in the area also provides some moderate benefits to the local community, particularly in providing a range of local job opportunities, supporting aerospace and engineering related job training courses at local institutions, working with local schools and supporting local community groups. It also contributes to general socio-economic objectives for Rushmoor.

11.16 Overall, from the evidence available, Farnborough Airport is a significant economic asset to the North Hampshire/Surrey area and to the South East/London region. It is a major local employer and a focus for aerospace employment of regional importance. In terms of direct and indirect expenditure effects, these are moderate at the local economy level, but important at a regional level. While the Airport's influence in attracting inward investment is less clear, it is clearly important to larger firms in the area with overseas interests, appears to enhance the image of the area as a successful and dynamic business location, gives it a clear focus as a centre for aerospace activity, aids its competitiveness and is likely to influence future investment decisions on retention or expansion of firms.

11.17 Allowing a near doubling of air movements to 50,000 p.a. or more would lead to moderate gains in local employment and income generation. The ability to operate more flights ought to allow more frequent and convenient air services and help consolidate the Airport's position as a leading Business Aviation airport and potentially attract new operators to base themselves at Farnborough. This in turn should generally enhance services available to businesses, which, in turn, might be expected to make the area more attractive in terms of attracting or retaining investment. If maintaining the current limits on movements prevented the Airport from accommodating the future level of demand and offering a good quality service to corporate users, this could give a generally negative message about Farnborough compared with other airports with fewer constraints, and may send out adverse signals to businesses which could affect decisions on expansion.

Appendices

Appendix 1: Reference Documents

1. Business Aviation, A Report by the Department of Transport & the Department of Trade & Industry, October 1995.

2. Business Aviation in the South East, Demand & Capacity, Halcrow Fox for DETR, 1999.

3. Business Aviation in the South East, Part 2: The Economic Impact of Business Aviation, Halcrow Fox for DETR, 1999

4. Evidence to the Appeal Inquiry on proposals to increase weekend movements at Farnborough Airport, 2007.

5. Economic Study of Farnborough Airport, Mott MacDonald & Oxford Economic Forecasting for TAG Farnborough Airport Ltd., Nov 2005.

6. The Economic Impact of Business Aviation in Europe, PwC for the European Business Aviation Association, 2008.

7. More to the Point: Business Aviation in Europe in 2007, Eurocontrol, 2008.

8. The State of the Economy – Update Report, Roger Tym & Partners for Rushmoor Borough Council, April 2008.

9. London City Airport Master Plan, 2006.

10. London Biggin Hill Airport Master Plan, 2005.

11. The Economic Contribution of the Aviation Industry in the UK, OEF, October 2006

12. Why Business Aviation? British Business & General Aviation Association.

13. CAA Airport Statistics, 2008.

14. Bristol International Airport Economic Impact Study, R. Tym & Partners, October 2005.

15. Economic Impact Study, Cardiff Airport, York Consulting, 1997

16. Economic Impact Study, Birmingham International Airport, York Consulting, 2005.

17. Economic Impact Study, London Biggin Hill Airport, Nathaniel Lichfield and Partners Ltd, 1996

18. Economic Impact of Further Growth in Air Services at London City Airport, Nathaniel Lichfield and Partners Ltd, 1993.

19. Economic Impact Study, Newcastle International Airport, Nathaniel Lichfield and Partners Ltd, 1995.

20. Economic Impact Assessment of Plymouth Airport, KPMG/English Partnerships, 1997.

Appendix 2: Organisations Consulted

1. TAG Farnborough Limited
2. Farnborough International Ltd.
3. Hampshire County Council Economic Development
4. North Hampshire Chamber of Commerce
5. SEGRO
6. SEEDA
7. Hollis & Hockley & other commercial agents
8. Gama Group
9. Flight international Ltd.
10. Ambassador Cars
11. Farnborough Chauffeur Cars
12. Avialogistics
13. Farnborough College of Technology
14. Initial Cleaning
15. Farnborough Aircraft Interiors
16. Medaire Europe
17. TAG Engineering
18. TAG Charter
19. TAG Airport Management
20. TAK Aviation
21. Excellence Aviation
22. Executive Air Charter
23. Manhattan Jet Charter
24. Vistajets
25. Starflight
26. Corporate Jet Management
27. Heathrow Weekend Freight
28. Avijet
29. NATS
30. Absolute Taste
31. Airops (IT)
32. RJA Security
33. Fire Service
34. QinetiQ
35. Air Accident Investigation Branch
36. Cessna
37. Bombardier
38. London Biggin Hill Airport
39. Aviator Hotel
40. Alexandra Hotel
41. Lismoyne Hotel
42. Melford House Hotel
43. Oaktree Guest House
44. Village Hotel
45. Acer Executive Cars
46. A2B Taxis
47. Woodford Chauffeur Cars
48. TGG Aviation
49. Farnborough Aerospace Consortium
50. London First (no response)

Appendix 3: Location of Corporate Users of Farnborough Airport

Company Location	**Sector**
Ascot	Retail
Basingstoke	Telecoms
Basingstoke	Pharmaceuticals
Basingstoke	Manufacturing
Bracknell	Oil and Gas
Bracknell	Manufacturing
Bracknell	IT
Bracknell	IT
Bracknell	IT
Camberley	IT
Chertsey	Food and Drink
Egham	Manufacturing
Farnborough	Aggregates and Facilities Management
Farnborough	Aerospace
Farnborough	Property Investment
Farnborough	Telecoms
Farnborough	IT
Fleet	IT
Frimley	IT
Frimley/Camberley	Pharmaceuticals
Guildford	Advanced Engineering
Hook	Telecoms
Isleworth	Manufacturing
Maidenhead	Telecoms
Newbury	Telecoms
Reading	Construction
Slough	Food and Drink
Uxbridge	Pharmaceuticals
Weybridge	Electricals

Source: Weekend Flights Inquiry, Evidence of Louise Congdon, York Aviation, 2007

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