



BAA Southampton 

Southampton Airport Master Plan

November 2006



Foreword

I am delighted to introduce Southampton Airport's master plan, which is our vision of how this model regional airport may develop over the coming years. The Southampton Airport master plan has been produced in response to the Government's 2003 White Paper, *'The Future of Air Transport'*. The White Paper sets out a clear policy framework for the development of UK airports. This long-term vision marks an important commitment by the Government in planning for future generations.

The publication of Southampton Airport's master plan follows a constructive programme of public consultation, during which we engaged with many people and organisations across Hampshire. We listened to the wide-ranging views as to how our local airport should develop to support the regional economy and communities.

In the outline master plan, we put forward our strategy for the future of Southampton Airport up to 2030. Our aim is to enable Southampton Airport to meet the growing demand for regional air travel, and to continue to play a key role in the economic prosperity of Hampshire and surrounding areas in a responsible way. Whilst growing, we aim to maintain our focus on delivering excellent customer service.

Southampton Airport provides many benefits to the local region, which can be measured in social and economic terms. Currently, over 1,200 people work at Southampton Airport in a range of jobs and the airport's economic contribution is over £86 million per year. As the airport continues to grow it is estimated that by 2030 around 4,000 people will be employed as a result of airport activities, with the airport contributing around £260 million per year to the local economy.

In the public consultation a number of benefits were identified, including: employment, economic contribution, ease of access to major European and UK cities, plus excellent transport links by road and rail. There was also feedback about the possibility of developing a multi-modal transport hub at Southampton Airport in the future.

We also listened to the feedback about negative impacts associated with airports, such as aircraft noise and air quality and broader issues such as global warming. Southampton Airport will support growth in air travel, but in a responsible manner with due consideration for our neighbours and the environment in which we all live and work.

BAA, the owner of Southampton Airport, is lobbying hard in Europe for the aviation industry to be included in the EU Emissions Trading Scheme, which will allow aviation's greenhouse gas emissions to be effectively and responsibly addressed.

It is our role to work with the Government, the airlines and our local communities to maximise the positive benefits, such as investment and jobs, whilst working to mitigate the negative impacts such as aircraft noise.

Our approach to running the airport responsibly extends far beyond its physical boundary. We take pride in working with a broad spectrum of stakeholders to promote this thriving region as a place for international business and growing tourism.

During 2005, around 1.84 million passengers used Southampton Airport, with flights to over 40 destinations in mainland Europe, the Channel Islands and the UK. Passenger numbers are forecast to increase to around 3 million passengers a year by 2015, and 6 million in 2030. This equates to around 2% of the capacity forecast for airport's in the South East of England in 2030. This growth is likely to come from the strength of the airport's catchment area, the popularity of its fast track nature, and the development of new routes, particularly to business cities in Europe.

Southampton Airport is widely acknowledged as an award winning regional airport and this master plan sets out options on how we aim to maintain this position in the future. It is important to stress that the master plan has been produced at the request of the Government, as a way of informing future national, regional and local strategies. It does not form part of the formal planning application process. Planning approval for future developments will be required in accordance with legislation, through applying to Eastleigh Borough Council, as our local planning authority.

We aim to update this master plan every five years to ensure it remains appropriate to the region that Southampton Airport proudly serves.



Chris Butler

Chris Butler
Managing Director
Southampton Airport
November 2006

This master plan has been produced following a public consultation during 2005. It will be reviewed every five years in line with Government advice. If you have any queries about the content of this document, or wish to discuss any aspect of the airport's future development, please contact:

Planning and Development Department
Southampton Airport
Southampton
SO18 2NL

Email: southampton_masterplan@baa.com

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Executive Summary

In its 96-year history, Southampton Airport has grown from a small, municipal airport to an internationally recognised, model regional airport serving business and leisure passengers alike.

Since its purchase by BAA in 1990, the airport has undergone a complete redevelopment, which has resulted in the attraction of many new airline customers, offering routes that link central Southern England with increasing numbers of UK, Channel Islands and mainland European destinations.

Since the redevelopment in 1994, passenger numbers have risen from 471,287 per year to 1.84 million per year in 2005, and market demand continues to be strong with new routes being added on a regular basis.

Southampton Airport intends to build on its success, and provide further valuable air links to and from this region, providing convenient flights for business, leisure and inbound tourism traffic.

A study by the GeoData Institute at the University of Southampton in 2004 identified that the value of the financial benefit of Southampton Airport to the region was £86 million. There are currently around 1,200 people employed at the airport.

Southampton Airport will remain the fast track quality airport serving Southern England, and an important gateway for the local region. The airport supports the growing commercial, leisure and cultural success of the region, and brings an increasing choice of European destinations closer to the region, for both business and leisure. Southampton Airport aims to maintain its reputation as the "personal airport" and future development will focus on the quality of the passenger experience, as well as enhancing the capacity of airport facilities.

This focus on quality and passenger experience has been reflected in a number of awards such as, "Top Regional Airport in Europe" from the European Regions Airline Association. In addition a survey of 30,000 readers of the Daily Telegraph voted Southampton Airport one of the top 3 airports in the world, alongside Singapore and Dubai.

In planning for the future, Southampton Airport willingly accepts its role within the local community and is committed to long-term engagement with its neighbours, to ensure that it remains a trusted partner in the region.

In order for Southampton Airport to serve the region well in the future, it must continue to provide efficient, fast track facilities. This master plan represents a blueprint for

the airport of the future. It is ideally placed to play a key role in helping the regeneration of urban South Hampshire, which is an area seeking a higher than average economic growth over the next 20 years.

The plan looks at the development of the airport in two distinct time frames, as outlined in the Government White Paper: between today and 2015, and beyond that to 2030. The first section of the plan shows how the airport is likely to grow up to 2015, and sets out how it will accommodate the increasing demand for air travel by developing within its current boundaries. It details how the terminal building will be able to cater for the forecast increase in passengers from 1.84 million per year in 2005 to around 3 million in 2015. It also describes how the taxiways serving the existing runway and aircraft parking positions could be developed to accommodate additional aircraft movements (take-offs and landings).

The second element of the plan looks at how, and where, the airport may grow between 2015 and 2030, which is the upper limit of the timescale set by the Government in its master plan guidelines.

Between 2015 and 2030 the plan is less detailed because of the difficulty in predicting exactly how air traffic is likely to grow over this period. Passenger numbers are forecast to reach 6 million per year in 2030, but it must be stressed that regional airports are more susceptible to market changes than major international hub airports.

This master plan also describes Southampton Airport's Surface Access Strategy, and deals with the important issue of sustainable development and responsible growth, together with policies to manage the environmental impacts, particularly in relation to noise.

The master plan has been produced following a thorough public consultation in 2005. A summary of the responses received is shown in Chapter 10, and gives details of where further information can be located in this document.

The main points arising from the master plan are:

Passenger forecasts 2005 - 2015

- Passenger numbers are expected to grow from 1.84 million in 2005 to 3.05 million per year by 2015
- Passenger aircraft movements (the anticipated number of landings and take-offs) are expected to increase from 43,900 in 2005 to around 62,000 per year in 2015
- Passenger numbers are forecast to increase at a greater rate than aircraft movements, due to the gradual increase in passenger aircraft size over the next 10 years.

Executive Summary

Airport developments 2005 - 2015

- Development between 2005 and 2015 can be accommodated on land presently owned or operated by Southampton Airport
- In the terminal building more check-in facilities will be needed to meet passenger demand and maintain the fast track benefits of the airport
- New aircraft parking stands will be required for commercial aircraft, increasing from 13 in 2005 to 18 by 2015. Some of these may be located in an area of land based to the east of the runway
- New taxiways will be provided to link the new aircraft parking stands to the existing runway
- Peak airport car parking demand in 2005 was 2,575 spaces and this will need to increase to 4,025 spaces by 2015 taking into account the increased usage of public transport to access the airport (These forecasts assume extra car parking capacity being provided for rail passengers at Southampton Airport Parkway Station in the future)
- For the purposes of this plan it has been assumed that the Chickenhall Lane Link Road will be built between 2010 - 2015
- There will also be potential for some commercial activity in the North East Zone, along with aircraft parking stands and car parking
- Drawing Number 3 towards the back of the document, shows a possible layout of the airport in 2015.

Passenger forecasts 2015 - 2030

- Passenger numbers are expected to grow from 3.05 million in 2015 to 6 million a year in 2030
- Passenger aircraft movements are expected to increase from 62,000 in 2015 to 96,300 in 2030.

Airport developments 2015 - 2030

Development between 2015 and 2030 can also be accommodated on land currently owned or operated by Southampton Airport. There are two scenarios for terminal expansion:

- Scenario 1 involves expanding the current terminal through the development and reconfiguration of existing facilities and further expansion of the area to the east of the runway
- Scenario 2 involves building a second terminal in the North East Zone. A decision as to which scenario will be progressed does not need to be made for several years and Southampton Airport will continue to evaluate the most appropriate way of meeting future demand
- Drawing Numbers 4 and 5 show the possible layouts of the airport in 2030.

The environment and the local community

- The public consultation identified noise, air quality, climate change and surface access as the four key environmental themes to be addressed as the airport

expands. The plans for managing each of these issues are outlined in this master plan. A range of other issues were also brought up in the public consultation and these are described in Chapter 10

- Southampton Airport operates under strict environmental controls, including the banning of scheduled night flights. There are no plans to change this in the future
- It is anticipated that aircraft engine technology will continue to make progress in reducing aircraft noise and emissions. An example of this is the replacement of the older British Aerospace 146 aircraft with the new quieter Embraer 195 aircraft by Flybe, anticipated to start operating from Southampton in early 2007. The new Embraer 195 aircraft will use 20% less fuel, and create up to 35% less noise than the BAe146 aircraft they are due to replace
- BAA is lobbying hard in Europe for the aviation industry to be included in the EU Emissions Trading Scheme, which will allow aviation's greenhouse gas emissions to be effectively and responsibly addressed.

Next steps

The Government has made it clear that the principal aim of the master plan is to inform and be informed by the regional and local planning process.

Southampton Airport's master plan is its vision for the future

It is important to stress that the master plan has been produced at the request of the Government in response to the aviation White Paper in 2003. Planning approval for future developments will be required in the standard way, through applying to Eastleigh Borough Council, as the airport's local planning authority. This master plan does not constitute a request for planning approval, but is the airport's current vision for the future. As the airport develops over the next 25 years, planning applications will be accompanied by the necessary supporting documentation and appropriate environmental studies.

Review after 5 years

The final master plan will be reviewed every five years to ensure that it remains relevant and appropriate given changing circumstances.

1 Introduction

Background to the master plan

1.1 'The Future of Air Transport' White Paper

1.1.1 Three years ago, the Government published 'The Future of Air Transport' White Paper, setting out the strategic framework for UK air transport for the next 30 years.

1.1.2 The vision of the White Paper is clear - "to deal with the pressures caused by the increasing need to travel whilst at the same time meeting our commitment to protect the environment in which we live".

1.1.3 The White Paper asks most airport operators, including BAA, to produce master plans to incorporate the Government's conclusions regarding the future development of airports to 2015 in some detail, but indicative plans only are expected for the period between 2015 - 2030. It views master plans as the key tool through which airport operators should explain how they propose to take forward the strategic policy framework for their airport as set out in the White Paper.

1.1.4 Making best use of existing runways

The White Paper has a key objective of making the best use of existing runways. "Our starting point is that we must make best use of our existing airport capacity" ('The Future of Air Transport'). This master plan explains how Southampton Airport aims to make best use of its existing capacity using its single runway within its own boundaries. There are no plans for a second runway at Southampton Airport.

1.1.5 White Paper references to Southampton Airport

The Government's White Paper states the following about Southampton Airport:

"There was recognition in the consultation of the valuable role of Southampton as a regional airport and support for some growth to allow it to cater for local demand. Currently Southampton services continental hubs and a range of other destinations. The airport operator doubts that the airport could reach the capacity of 7 million passengers per year suggested in the consultation document and believes that, within its current boundary, the airport would more likely grow to a capacity of 2-2.5 million passengers per year." At that time the boundary of land owned by Southampton Airport was considerably less than it is in 2006.

1.1.6 It is important to note that since the White Paper consultation took place, Southampton Airport has

purchased an area of land adjoining the airport. This is referred to in this document as the "North East Zone". This has allowed Southampton Airport to consider growth plans up to 6 million passengers per year, which are more closely aligned to the Government's original forecasts.

1.1.7 This master plan explains how Southampton Airport can play a key role in providing additional capacity in the South East of England, with increased use of its existing runway. It also explains how Southampton Airport may develop future capacity, whilst addressing the local impacts of growth.

1.1.8 This master plan has been produced following a period of public consultation on the outline master plan, published in July 2005. Many of the issues raised during the public consultation have been covered in this master plan in the relevant chapters. The feedback was broad in range and the focus in this document has been on the main themes that came out of the public consultation rather than on specific individual comments.

1.1.9 This master plan recognises that, as stated in the White Paper, there needs to be a balance between the benefits of air travel and its environmental impacts.

1.1.10 The White Paper itself does not authorise any particular development, but sets out policies to inform and guide the consideration of planning issues. Development proposals will need to be considered through the planning system in the normal way.

1.2 Master plan key objectives

1.2.1 The key objectives of the master plan are as follows:

- To set out the forecasts for air traffic growth over the next 24 years
- To clearly identify how land currently owned by Southampton Airport may be developed in the future to handle the forecast growth in passenger numbers
- To outline how the airport plans to manage the impacts of its growth upon the environment and local community
- To set out the approximate timescales for the additional capacity requirements
- To inform other major planning decisions in this region.

1.2.2 The master plan includes information about: the economic benefits of aviation, the statutory and regulatory context in which it has been developed, information about the airport today, outline proposals for 2015 and 2030, surface access, environmental impacts and feedback received during the public consultation.

2 The social and economic benefits of aviation

2.1 Introduction

2.1.1 The aviation industry plays a vital role in the economy of the UK and in supporting the regions. Airports have two major economic impacts. Firstly, their activities generate income and employment. Secondly, airports are a facilitator for other types of activity within the regional and national economy, including international trade and tourism.

2.1.2 UK air travel has increased five-fold over the last 30 years, and the aviation industry has a major impact on the UK economy, with a direct value-added contribution to the Gross Domestic Product (GDP) estimated at around £14 billion per year. Aviation has a substantial economic catalytic impact, boosting economic growth through its influence on business location and investment decisions.

2.1.3 The key roles that air services play in the UK economy are, as follows:

- supporting the UK's position as one of the leading global economies
- facilitating the growth of the UK tourism sector
- providing accessibility to all areas of the UK and beyond
- offering opportunities for travel for UK residents
- providing employment and prosperity for the region in which they operate.

2.1.4 Southampton is ideally situated at the cross roads of the east/west and north/south strategic economic corridors of South Hampshire. However, the coastal regions around Southampton and Portsmouth are currently under performing in economic terms and these areas have been identified for future growth potential. Southampton Airport is ideally located at the cross roads of business activity in central Southern England, at the junction of the M27 and M3 corridors.

2.1.5 The ongoing economic evolution towards more high tech and knowledge-based sectors, as seen in the Hampshire region, will further increase the reliance on air services in the future. These sectors will operate increasingly in the global market, where rapid access to clients, suppliers, partners and markets will be vital.

2.1.6 The universities of Southampton have a global reach, and the proximity of Southampton Airport is an important factor that helps the universities to maintain a competitive edge in research and consultancy markets. This in turn acts as a magnet for talented individuals and knowledge based industries to locate and grow in the locality. If these universities are to continue to attract top researchers and overseas students, the air service infrastructure must be in place.

2.1.7 Southampton Airport is also ideally placed to play a supporting role in the 2012 London Olympics. It provides easy access to central London by rail, and is well positioned to support the water sports and training camps based on the South Coast.

2.2 Economic Impact Study on Southampton Airport

2.2.1 In November 2004, Southampton Airport commissioned an Economic Impact Study to understand the economic role and impact of the airport on the local economy. The airport appointed the GeoData Institute at the University of Southampton to undertake this study. The findings of the study were reviewed in April 2005 to take into account the latest forecast data contained within the master plan proposals.

2.2.2 Income generation

The financial impact of the airport on the regional economy was estimated by the Geodata Institute to be over £86 million per year in 2004, rising to around £140 million in 2015, and £260 million in 2030.

2.3 Employment

2.3.1 In 2004 the number of people employed directly at the airport was 1,004. This accounted for 37% of employment in the transport and communications sector within the Eastleigh area, a sector formerly dominated by activities associated with the railways. In 2005, the number of people working at Southampton Airport was 1,200 and this is continuing to rise in 2006.

2.3.2 There are 4 types of employment as follows:

- **Direct:** employment directly related to the operation of the airport (e.g. airport operators, airlines, handling agents and control authorities)
- **Indirect:** employment resulting from the local chain of suppliers to firms directly involved in the airport operation (e.g. utilities, construction and food)
- **Induced:** employment arising locally through the personal expenditure of those employed either directly or indirectly (e.g. retailing, restaurants and entertainment)
- **Catalytic:** employment created by opportunities for influencing business location decisions and attracting inbound tourism, both business and leisure, to the region. The exact contribution of the airport is difficult to determine as it is not solely generated by the airport, but requires other factors to be in place to capitalise on such potential. (e.g. inward investors, exporting companies and visitor attractions and conferences)

2.3.3 Table 1 summarises current and forecast levels for the first three categories of airport related employment:

2 The social and economic benefits of aviation

Table 1: Employment forecasts to 2030

Year	Direct	Indirect	Induced	Total
2004	1,004	251	301	1,556
2015	1,541	385	462	2,388
2030	2,586	647	776	4,009

2.3.4 Direct employment of people based at the airport is forecast to grow by 53% between 2004 and 2015 and by around 158% between 2004 and 2030. It is not considered that such growth levels will generate adverse impacts on either the local labour market or housing allocations set out in adopted and emerging local authority development plans.

2.3.5 In general, airport job opportunities outlined in the forecasts bring continuing benefits to the economy in a wide area around the airport - they provide variety in the job market, and support the jobs of other people (the indirect and induced employment categories). An airport, while vulnerable to some job losses in times of recession, is also a very dependable contributor to employment opportunities in its local economy because most jobs are tied to the airport's site, rather than being capable of relocation elsewhere. Southampton Airport is ideally placed to service the commercial activities of the region particularly in the high knowledge/high value added sectors which are known to be intensive users of aviation services.

2.3.6 Experience at other airports suggests that airport employees sometimes change roles but this tends to be within and between airport companies as skill levels improve. This means that many airport staff remain employed for a longer period of time than is the case in some other industries. Although the air transport industry has been subject to some economic down turns due to international events, the low cost sector has shown consistent growth. Overall the airport provides a stable source of employment.

2.3.7 The airport generates a wide range of jobs from pilots, air traffic controllers, engineers, handling agents, accountants, catering staff, security personnel, fire crew, retail and customer service agents.

2.3.8 Southampton Airport has a recruitment strategy which aims to attract staff from the Eastleigh and Southampton areas. This is because there are particularly good public transport links to these areas, and currently around 75% of Southampton Airport (BAA) staff live in Southampton or Eastleigh. If staff are not available in these areas recruitment is targeted at locations further afield with good public transport links.

2.3.9 Southampton Airport initiated an Airport Employers Forum in 2006 aimed at providing a coordinated and focused approach to the local labour market. This is

designed to enhance the recruitment process and raise awareness of local trends and issues, skills shortages, local initiatives and airport developments which may have an impact on employment.

2.4 Supply chain and local suppliers

2.4.1 Local contractors were used for 73.5 % of the total project portfolio value during 2005/06. This means that a total of £5 million was spent with local contractors on project related expenditure during 2005/06, bringing jobs and wealth to the region.

2.5 Inbound tourism

2.5.1 Tourism, retail and leisure provide over 153,000 jobs in Hampshire, accounting for just over 21 % of all employment. Tourism, retail and leisure are seen as key areas of the local economy, and Southampton Airport plays an important role in facilitating this. Tourism is worth £717 million to the Hampshire economy. Overseas visitors to Hampshire represent 12% of trips, and contribute £172.08 million of overall expenditure, which is a much greater spend per head than domestic tourists. Hampshire possesses a wide variety of permanent visitor attractions, heritage sites and leisure facilities, and there are increasing numbers of inbound tourists arriving in the region via Southampton Airport. The region also hosts many regular special events including the Southampton Boat Show and the Cowes Yacht Regatta where visitors arrive by aircraft from around the world.

2.5.2 Southampton Airport is working with a number of organisations to promote this region for inbound tourism. These organisations include Eastleigh Borough Council, Southampton City Council, Hampshire County Council, Winchester City Council, Portsmouth City Council and Tourism South East.

2.5.3 The airport is also growing in popularity as the easiest way for the increasing numbers of passengers to join cruise ships based in Southampton. Negotiations are taking place with the cruise ship operators to consider the best way of providing fast track services for passengers between the airport and the cruise port. The airport has also recently developed a "left luggage" facility for cruise passengers so that they can enjoy some leisure time in this region before or after their cruise. This naturally increases opportunities for many businesses to receive additional income from cruise ship tourists during their extended stay in the area.

2.6 Links with education

2.6.1 Southampton Airport works with a number of local sixth form colleges providing support with a range of initiatives such as careers fairs, interview skills training, work experience placements, as well as workshops and presentations facilitated by staff.

2 The social and economic benefits of aviation

2.6.2 The airport also works in partnership with Solent Skill Quest, an organisation which brings education and business together, to provide learning opportunities for students in the local area as well as educational tours for teachers.

2.6.3 Southampton Airport has a strategic partnership with Bitterne Park School, in Southampton, providing support with work experience placements, enterprise days, mentoring, school governors, Curriculum Vitae and careers advice.

2.6.4 The airport has also developed a second strategic partnership with Quilley School of Engineering, in Eastleigh, a local school with specialist engineering status. This has benefits for both the school and the airport as traditionally it has been difficult to recruit staff with suitable engineering skills.

2.7 Social benefits

2.7.1 Social progress associated with Southampton Airport is not limited to the benefits realised by air travellers. The airport is an integral part of the infrastructure of South East England and in many ways influences the lives, and the livelihoods, of people living in the area. Its influence on social progress is closely associated with employment and wealth creation. For its neighbours, Southampton Airport's biggest benefit is the jobs it creates.

2.7.2 Another important benefit that Southampton Airport brings to society is the opportunity it offers to many people to satisfy their need or desire to travel. It opens the local area and the UK to inbound visitors, and enables UK residents to travel to Europe and more distant destinations, for business and leisure, as well as being important for journeys within the UK.

2.8 Southampton Airport's involvement in the community

2.8.1 Southampton Airport places great emphasis on making a positive contribution to the local community. Staff at all levels of the business are encouraged to get involved in community life, for example through volunteering, or by holding positions as school governors and charity trustees. There is a dedicated Community Relations team to coordinate the airport's support for local projects, using money from the BAA Communities Trust. It is also Southampton Airport's policy to contribute staff time, resources and expertise to community projects, in addition to providing financial support.

2.8.2 For further information about Southampton Airport's Community Involvement Policy, and examples of projects supported in 2005, see Appendices II and III.

2.8.3 Southampton Airport's charitable funding is sourced from the BAA Communities Trust. The trust was established ten years ago, with the aim of supporting local communities around BAA's airports. In 2005, the BAA Communities Trust donated over £25,000 to projects and charities located in the area surrounding Southampton Airport.

3 The framework of regulation and legislation

3.1 Introduction

3.1.1 The Government's role in the aviation industry is one of principal enabler and regulator. To enable future airport development, the Government exerts its influence through its own transport policy and through the national, regional, and local planning systems. To regulate existing airport activities, the Government uses primary legislation.

3.1.2 There are functional and legal limits to Southampton Airport's activities as an airport owner and operator. By way of example, responsibility for airspace policy and air traffic control respectively lies with the UK Government and National Air Traffic Services (NATS). This chapter outlines the principal controls and influences of relevance to the airport's operation and development.

3.2 UK airports policy

3.2.1 *The Future of Air Transport* White Paper is the principal policy document with which the plans for Southampton Airport need to align. The White Paper sets out a strategic framework for the development of airport capacity in the UK over the period to 2030, against the background of wider developments in air transport.

3.2.2 Government airports policy will need to be reflected within the emerging new hierarchy of planning policy documents at regional and local level. Referring to airport master plans, the White Paper stated that:

"The appropriate planning and transport bodies will need to take these into account, along with the policies set out in this White Paper, in their guidance, strategies and decisions, together with the need to protect any land required for future airport expansion and to provide the necessary airspace".

3.2.3 Southampton Airport will closely scrutinise any policy documents relevant to the airport published by regional bodies, local authorities and other agencies. The airport will seek to ensure that the policies respect, and make reasonable provision for its interests and those of its suppliers and users, consistent with national policy.

3.3 Regional planning guidance

3.3.1 Under the Planning and Compulsory Purchase Act 2004, non statutory Regional Planning Guidance (RPG) will be replaced by a Regional Spatial Strategy (RSS) forming part of the statutory development plan framework. The South East England Regional Assembly (SEERA) has responsibility for preparing the Regional Spatial Strategy (RSS). The Spatial Strategy, known as the South East Plan was submitted to the Government in March 2006, and provides a framework for the region for the next 20 years

to the year 2026. A period of public consultation has been undertaken, and an 'examination in public' stage will commence in November 2006 under the direction of an independent panel of inspectors. It is anticipated that this will be concluded by March 2007, and the panel will report to the Deputy Prime Minister in 2007. The final plan will be subsequently issued and then formally adopted as the Regional Spatial Plan.

3.3.2 The policy framework for the South East Plan will contain policies at both regional and sub regional level. In respect of the region's airports the proposed policy (T10) states:

"Relevant regional strategies, Local Development Documents and Local Transport Plans should include policies and proposals that:

- i) Support the development of Gatwick and Heathrow Airports within currently agreed levels of growth
- ii) Encourage Southampton Airport to sustain and enhance its role as an airport of regional significance
- iii) Support an enhanced role for Kent International Airport as an airport of regional significance.

Priority should be given in the Airport Surface Access Strategies for each Airport to achieve:

- i) A reduction in the environmental impact of surface access
- ii) A higher modal share in favour of public transport."

3.3.3 The draft strategy for the Hampshire / Southampton sub-region, states that:

- "The presence of Southampton Airport helps to underpin the economic health of the area and is one of the main generators of economic growth ..."
- "A key issue is ... diversification of the sub-regional economy to reduce reliance on Southampton Airport as the dominant economic factor."

3.3.4 Sub-regional policies need to support the continued operation and function of Southampton Airport as an international business airport and transport interchange, subject to continued environmental safeguards and measures to continue to increase the proportion of public transport use to the airport.

3.3.5 The text of Policy T10 reiterates the substance of the current Regional Transport Strategy (2004, paragraph 1.35) which states that:

"Southampton Airport serves an important role as a business airport for central Southern England, and has experienced very substantial passenger growth from low

3 The framework of regulation and legislation

cost leisure operations. The airport's location adjacent to the Southampton to Waterloo rail corridor, and close proximity to the M27 and M3 motorways ensures a high level of accessibility that is reflected in part by the station's use as a parkway. Priority should be given to implementing measures that will improve access to the airport and its railway station. The accessibility of this regional hub should be taken into consideration in future spatial development proposals, although development pressures in the surrounding area will need careful management in order to ensure that the airport can continue to make an effective contribution to both the local and regional economy."

3.4 Local authority policies

3.4.1 The Eastleigh Borough Local Plan 2001- 2011 was formally adopted in May 2006. As part of the review process in formulating this plan Southampton Airport achieved an agreed position with the local council regarding the Southampton Airport Spatial Policy area which is reflected in the final plan as follows; "Southampton Airport provides important transport connections and is one factor in the success of the South Hampshire economy. The airport's operations also need to be controlled in respect of amenity of local residents; surface transport implications; and the strategic gap. Within the existing Airport boundary some airport related development has permitted development rights under the GPDO¹."

3.4.2 An agreed position was also reached in regard to the future use of the land known as the Northern Business Park, which is referred to as the North East Zone within the master plan. This land which is owned by Southampton Airport can be developed within a number of conditions as outlined in the local plan, however up to a maximum of 4 hectares can be developed for airport related development.

3.5 Development control

3.5.1 Airport development is subject to the normal processes of development control, as set out in Town and Country Planning Legislation, Circulars and Guidance. In common with owners of other property, Southampton Airport is entitled to undertake various forms of permitted development at the airport¹, subject to the prior submission of a consultation (rather than a planning application) to the local planning authority. The entitlement does not include:

- Development on non-operational land
- Non-operational buildings (those unrelated to the movement or maintenance of aircraft, or the embarking, disembarking, loading, discharge or transport of passengers, livestock or goods)
- Development falling within the scope of the Environmental Assessment Regulations
- The construction or extension of a runway
- A passenger terminal with a floor space greater than 500m², or the extension of the existing terminal beyond

15% of the original terminal floorspace.

3.5.2 In cases where development does not qualify as permitted development it is necessary for Southampton Airport to apply for and obtain planning permission from Eastleigh Borough Council, in accordance with legislation, before development can proceed.

3.6 Airport design criteria

3.6.1 As a signatory to the 1944 Chicago Convention, the UK is required to operate its airports in accordance with internationally agreed criteria. In the UK, responsibility for ensuring this takes place is given to the Civil Aviation Authority (CAA). Airports operate in accordance with the terms of a licence issued by the CAA and, to obtain and retain that licence, they need to satisfy and continually adhere to the CAA's exacting safety-related standards.

Those affecting the design of airports are finely detailed in a CAA publication, CAP168, and are subject to revision in the light of ongoing monitoring and review, including international cooperation to consider developments such as the introduction of new aircraft.

3.6.2 The development of Southampton Airport's facilities will be in accordance with the CAA's requirements - indeed some development may be an obligatory response to the introduction of new or revised standards. While it is not appropriate for this plan to explain the standards in fine detail, it is noteworthy that they cover such matters as:

- The layout, separation and widths of runways and taxiways
- Aircraft stand sizes and apron layouts
- Airport fire service facilities
- The height and design of buildings and structures.

3.7 Airport security

3.7.1 Airport security requirements are the subject of regulatory control by the Department for Transport (DfT). This can have a defining influence on the need for development, as well as on the form and characteristics of facilities at Southampton Airport. For example, the airport is required by the DfT to segregate departing and arriving international air passengers in the airside areas.

3.8 Airport health and safety

3.8.1 Health and safety at the airport is regulated by a number of enforcing authorities including the CAA, Health and Safety Executive, Eastleigh Borough Council and Hampshire Fire and Rescue Services.

¹ The Town and Country Planning (General Permitted Development) Order 1995, Article 2 and Schedule 2 pt 18.

3 The framework of regulation and legislation

3.9 Aerodrome safeguarding

3.9.1 An aerodrome as defined by the Civil Aviation Authority is, "Any area of land or water designed, equipped, set apart or commonly used for affording facilities for the landing and departure of aircraft..."² Aerodrome safeguarding is the important process by which Southampton Airport protects the aerodrome from the intrusion of obstacles, such as buildings or telephone masts.

3.9.2 The dimensions of Southampton Airport's aerodrome dictate the maximum acceptable heights for nearby buildings and other structures. These potential obstacles, which could also include temporary structure such as cranes, need to be managed to ensure the ongoing safe operation of aircraft visiting Southampton Airport.

3.9.3 Safeguarding of Aerodromes³ is a process of consultation between local planning authorities and airport operators. The process is intended to:

- Ensure that an airport's operation is not inhibited by developments, buildings or structures which might infringe the aerodrome's obstacle limitation surfaces
- Protect visual flight paths, for instance by ensuring that runway approach lighting is not obscured by development, and that lights elsewhere cannot be a cause of confusion
- Protect the accuracy of radar and other electronic aids to air navigation, for example by opposing wind farm developments where turbine blades could generate an intermittent return on air traffic controllers' radar screens
- Reduce the hazard from bird strikes to aircraft, associated with land uses such as waste disposal, sewage treatment and areas of water.

3.9.4 Local planning authorities are issued with safeguarding maps which enable them to identify those planning applications on which Southampton Airport must be consulted. As a consequence of this consultation process Southampton Airport may object to the proposal, not object, or not object subject to the application of appropriate conditions.

3.10 Public Safety Zones

3.10.1 The risk of air accidents occurring within, and in close proximity to, airports has long been the subject of Government policy, through the clear definition of Public Safety Zones (PSZs) which extend backwards from a runway's landing threshold. PSZs are the means by which airport operators identify areas where the risk of an aircraft accident, while extremely low, may be such as to merit some restrictions on the use of land.

3.10.2 The current PSZs were calculated on 2015 forecasts made in 1999 and formally adopted in 2002. They were defined following thorough Government studies of the risk

of death or injury to people on the ground in the event of an aircraft accident on take-off or landing at the UK's busiest airports. The basic policy objective is that there should be no increase in the number of people living, working or congregating in PSZs and that, over time, the number should be reduced as far as circumstances allow.

3.10.3 In addition, the Secretary of State has asked that all occupied residential properties and commercial and industrial properties occupied as normal all-day workplaces, within an area of greater risk, are emptied. The area is defined in the 1 in 10,000 contour. There are no such properties in the Southampton Airport contour.

3.10.4 It is the responsibility of the local authority to ensure that the directions given by Government relating to PSZ's are fully adhered to.

3.11 Environmental regulation

3.11.1 Southampton Airport operates within the context of a variety of nationally applicable policies and standards relating to the environment. These are described in detail in Chapter 9 of this plan.

3.12 Economic regulation

3.12.1 The Airports Act 1986 established the framework for private ownership of airports and provides specific controls on the use and operation of airports.

3.12.2 Airlines are required to pay for the air traffic control services for the airspace through which they fly. This service is provided at Southampton by National Air Traffic Services (NATS). There is also a Government tax, Air Passenger Duty, which is levied and paid directly to the UK Treasury.

² Definition taken from CAA CAP 168

³ The Town and Country Planning (Safeguarding Aerodromes, Technical Sites and Military Explosives.)

4 Today's airport – Southampton in 2006

4.1 Introduction

4.1.1 This chapter describes Southampton Airport as it is today. It outlines the characteristics of the airport, the scale of its activities and its facilities as they currently stand.



Figure 1: Aerial photograph of Southampton Airport.

4.2 Background

4.2.1 The story of Southampton Airport spans 96 years of aviation history, including active roles in both world wars. BAA acquired the site in 1990 and has invested more than £80 million to create the model regional airport that it is today.

4.3 Role and characteristics of Southampton Airport

4.3.1 Southampton Airport is the fast track airport serving Southern England. It has modern facilities, excellent road and rail links, and is situated within a densely populated catchment area. Over 3 million people live within one hour of Southampton Airport.

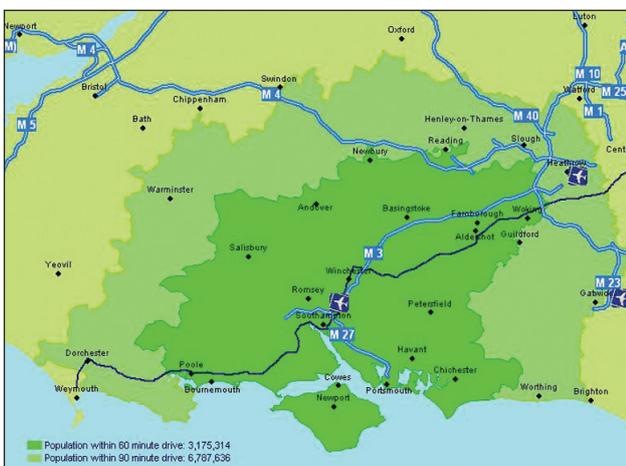


Figure 2: Southampton Airport catchment area map

4.3.2 Origin of Southampton Airport passengers

78% of Southampton Airport passengers are outbound, whilst 22% are inbound. Table 2 shows the place of origin for outbound passengers from Southampton Airport, with the vast majority coming from across the Hampshire region.

Table 2: Outbound passengers - 2005

Place of origin	Percentage
South Hampshire	44%
Isle of Wight	2%
Rest of Hampshire	27%
Dorset	12%
Wiltshire	4%
Berkshire	2%
Rest of South East	6%
Rest of South West	2%
Other	1%

Source: Retail Profile Survey by BAA Market Research

4.3.3 The airport is particularly popular with passengers because of its ease of access, the fast track nature of its operation and its friendly and personal service.

4.3.4 Southampton Airport has been designed specifically as a regional airport, providing short haul air links to mainland Europe, large UK cities, and the Channel Islands. It is anticipated that these destinations will remain dominant, although aircraft engine technology developments may mean that the airlines can fly to destinations further afield in the future, including North Africa, Eastern Europe, Cyprus and Scandinavian countries.

4.4 Destinations

4.4.1 Southampton Airport currently has 13 airline and tour operator customers, who between them fly to 48 different destinations in 13 countries across Europe. The destinations, frequency of flights and operators are shown in Table 3 overleaf:

4 Today's airport – Southampton in 2006

Table 3: Destinations from Southampton Airport 2006/07

Destination	Operator
Aberdeen	Eastern Airways
Alderney	Aurigny Air Services
Alicante	Flybe
Amsterdam	ScotAirways
	Flybe
Angers	Flybe
Avignon	Flybe
Belfast City	Flybe
Bergerac	Flybe
Berne	Flybe
Bordeaux	Flybe
Brest	Flybe
Brussels	Eastern Airways
Cherbourg	Flybe
Cork	Aer Arann
Corsica	Holiday Options
Dublin	Flybe
Dusseldorf	Flybe
Edinburgh	BA Connect
	Flybe
Faro	Flybe
Galway	Flybe
Glasgow	Flybe
Guernsey	Flybe
Hanover	Flybe
Inverness	Eastern Airways
Isle of Man	Eastern Airways
Isles of Scilly	Skybus
Jersey	Flybe
La Rochelle	Flybe
Leeds	Eastern Airways
	Flybe
Limoges	Flybe
Liverpool	Flybe
Majorca	Flybe
	Thomson
Malaga	Flybe
Manchester	BA Connect
	Flybe
Murcia	Flybe
Newcastle	Eastern Airways
	Flybe
Nice	Flybe
Paris	Air France
Perpignan	Flybe
Rennes	Flybe
Salzburg	Flybe/Inghams
Sardinia	Holiday Options
Varna (Bulgaria)	Balkan Holidays
Chambery	Flybe
Geneva	Flybe/Inghams
Innsbruck	Inghams
Verona	Inghams

*Destinations as at October 2006. Some flights are seasonal.

4.4.2 The 15 most popular destinations for passengers travelling from Southampton Airport in 2005 were (in order of popularity): Edinburgh, Glasgow, Manchester, Jersey, Guernsey, Belfast City, Dublin, Newcastle, Paris, Leeds Bradford, Alicante, Malaga, Bergerac, Murcia and Amsterdam. There remains considerable potential for future growth of existing routes.

4.5 New route opportunities

4.5.1 Although there is a good network of European destinations on offer currently, there is substantial potential for new routes in the future. Destinations for which there is particular demand include: Frankfurt, Munich, Milan, Barcelona, Madrid, Zurich, Copenhagen, Stockholm and Prague.

4.6 Passenger profile

4.6.1 In 2005, Southampton Airport handled 1.84 million passengers. Figure 3 shows the growth in air passengers at Southampton Airport since the redevelopment in 1994.

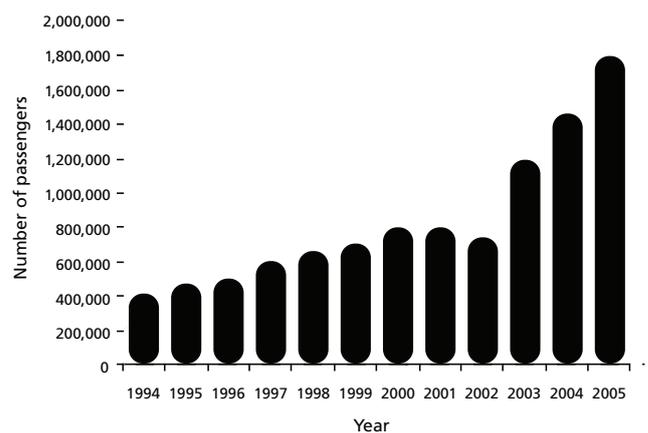


Figure 3: Passengers numbers using Southampton Airport

4.6.2 The most popular reasons for using Southampton Airport are business, leisure and visiting friends and relatives, as shown in Figure 4.

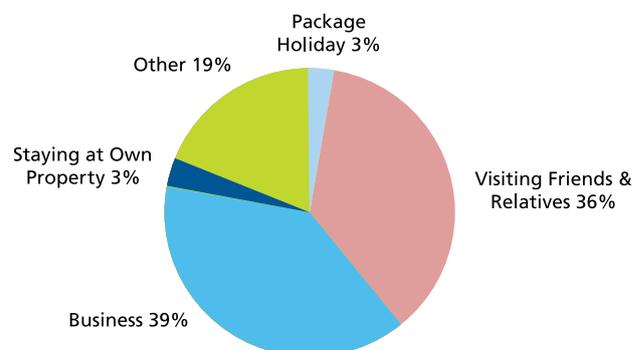


Figure 4: Reason for using Southampton Airport in 2005/06.

4 Today's airport – Southampton in 2006

4.7 Airspace

4.7.1 The airspace serving Southampton Airport is managed by National Air Traffic Services (NATS). Landings and take-offs are controlled using established procedures from the air traffic control tower which is located to the north of the terminal building.

4.8 Safety and security

4.8.1 Southampton Airport is subject to stringent regulations regarding aircraft safety, which are set and monitored by the Civil Aviation Authority (CAA). Health & Safety and Security Training is mandatory for all staff working at Southampton Airport.

4.9 Airfield facilities

4.9.1 The airfield constitutes a significant proportion of the land within the airport boundary. It comprises the airport's runway, the taxiways and the extensive grass areas surrounding these facilities. The airport's fire training area is also included within the airfield, as are a variety of navigational and landing aids.

4.9.2 Southampton Airport has one runway which is 1,723 metres in length, and which is capable of handling aircraft up to the size of a Boeing 757. The runway was originally laid down in the 1960s and was re-surfaced in 1999. The runway is equipped with an Instrument Landing System (ILS) for aircraft approaches from the north in poor visibility.

4.9.3 For the purposes of this master plan, Southampton Airport's apron area is an area where aircraft are parked, allowing for the embarkation and disembarkation of passengers or the loading and unloading of cargo and include any associated aircraft stand taxiways.

4.9.4 The airport has 14 passenger aircraft parking stands in total. However only specific stands can accommodate the weight of larger aircraft types, such as a Boeing 757. The majority of the 14 stands have a height restriction due to the proximity of the runway.

4.10 Passenger terminal facilities

4.10.1 The terminal zone covers an area of approximately 1.4 hectares and includes the terminal building and parking areas for some airside vehicles and equipment. It also includes a variety of adjacent buildings, notably:

- Offices
- Air/cabin crew reporting facilities
- Baggage handling
- Accommodation for aircraft services staff.

4.10.2 The current terminal building was opened in 1994, having been designed by the architect Michael Manser. Facilities include check-in, security, airside departure lounges and gate areas, domestic and international

baggage reclaim, immigration, customs, shops and catering outlets. There has been some recent internal reconfiguration and a study of the area's capacity has suggested that the current building could, with some changes, handle up to 3 million passengers per year.

4.10.3 In early 2005, approximately a third of the terminal building's upper floor area was redeveloped, replacing office facilities and the viewing gallery with a new balcony-level departure lounge extension. In the early part of 2006, a fast track security channel called 'Business Express' was opened, accompanied by separate hand baggage screening facilities.

4.10.4 Other passenger facilities include a Bureau de Change, car hire, private hire vehicles, wireless internet access, hotel reservation service and a passenger information area.

4.11 Assistance for passengers with special needs

4.11.1 Southampton Airport was designed with special needs passengers in mind. This helps the higher than average number of passengers using the airport who fly in from the Channel Islands for medical treatment in the Hampshire hospitals.

4.11.2 Facilities that have been designed to be compliant with the Disability Discrimination Act (DDA) include accessible toilets, reserved seating areas, a dedicated payphone, check-in desk and an information desk. Vehicles used by the private hire vehicle company based at Southampton Airport are DDA compliant. Clearly signed blue badge parking is available in the short and long stay car parks in positions most convenient to the terminal building.

4.11.3 Southampton Airport has recently been given a "Gold Award" by Eastleigh Borough Council for very high standards of facilities and customer service designed for people with special needs.

4.12 Cargo

4.12.1 Southampton Airport's cargo throughput predominantly consists of courier and express deliveries. Other cargo types include supplies for ships berthed at local ports. The majority of cargo movements to and from the airport are via the hold of passenger aircraft, with occasional freight-only flights. As the airport is closed at night, it is not used by specific air freight customers who tend to operate overnight.

4.12.2 OceanAir Cargo

OceanAir Cargo is a cargo handling agent used to courier goods and air freight across Europe. In 2005, OceanAir Cargo handled 600 tonnes of cargo at Southampton Airport, including both imports and exports.

4 Today's airport – Southampton in 2006

4.13 Executive aircraft

4.13.1 Corporate Jet Services Ltd.

Corporate Jet Services Ltd, trading as Club328, is an executive jet charter company. Jet Engineering Technical Support Ltd (JETS), maintains Club328 aircraft as well as third party aircraft.

4.13.2 Signature Flight Support

Signature Flight Support is an executive aircraft handling agent.

4.14 Aircraft maintenance

4.14.1 Aircraft maintenance consists of minor, on-stand maintenance for commercial aircraft and some in-hangar maintenance for general aviation.

4.15 Ancillary facilities

4.15.1 A range of ancillary services and facilities are required at all airports to support the aviation business. There are details of some of the more important ancillary facilities below.

4.15.2 Airport fire station

Southampton Airport has its own fire service staff and is situated near the base of the control tower. There is a fire training ground on the airfield, where specialist aircraft fire training regularly takes place.

4.15.3 Fuel farm

There is a fuel farm operated by Exxon Mobil at Southampton Airport. Fuel is delivered by tanker to the fuel farm and then by bowser (fuel tanker) to the aircraft.

4.15.4 In-flight catering

In-flight catering services are provided by City Net Catering in a dedicated preparation unit.

4.15.5 Hotels

There is one hotel located close to Southampton Airport, which is the Premier Travel Inn. This is situated on land adjacent to Southampton Airport but independently owned and operated. The Premier Travel Inn currently offers 121 rooms and 110 car parking spaces.

4.15.6 Landscaping

The airport's current landholding includes some areas of landscaping, the two key areas being along the eastern boundary of the airport and landside within the developed areas of the airport.

4.16 Car parking

4.16.1 There are three car parking areas within the airport boundary. The short stay public car park is located in front of the terminal building in a three-level structure. Long stay car parking is provided at surface level in the north west of the airfield and staff car parking is provided at surface level

in the south west of the airfield. Table 4 shows the number of parking spaces by type, followed by Figure 5 illustrating the car park locations and close proximity to the transport infrastructure.

Table 4: Number of car parking spaces by type in 2006

Car Park	Number of Spaces
Short stay car park	1,245
Long stay car park (including overflow)	1,244
Staff car park	287

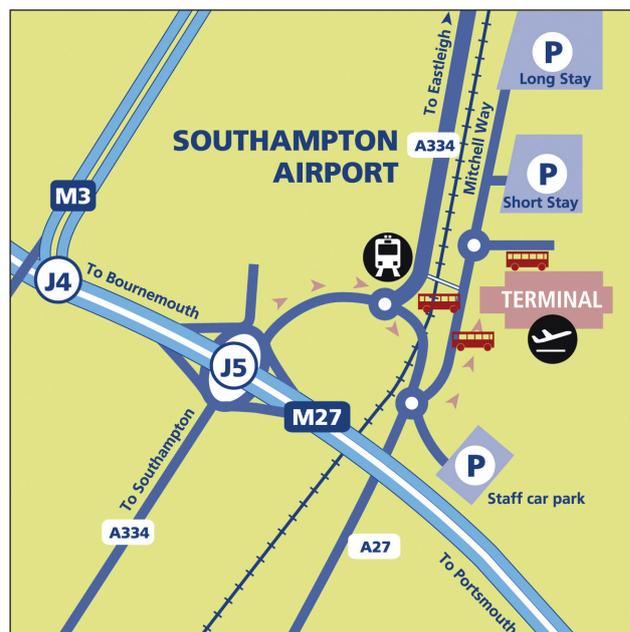


Figure 5: Map of Southampton Airport car parking facilities and access to the local transport infrastructure.

4.17 Car rental

4.17.1 The airport currently provides facilities for 4 car rental companies comprising desk facilities within the terminal, and a total of 120 car parking spaces on an area adjacent to the short term car park.

4.18 Public transport

4.18.1 Southampton Airport is extremely well connected by rail and bus. Full details of these facilities are included in Chapter 8 on Surface Access.

5 Passenger demand – the forecasts

2005 - 2030

5.1 Introduction

5.1.1 This chapter considers forecasts for aircraft movements and air passengers at Southampton Airport. Employment forecasts are contained in Chapter 2, while later in Chapter 5 there are forecasts specific to particular facilities, including aircraft stands and airport related car parking.

5.1.2 Forecast methodology

To forecast aggregate passenger demand BAA uses an econometric framework to establish the relationship between growth in demand for air travel, key economic drivers and other important factors that influence demand. These include growth in UK and World Gross Domestic Product (GDP), the prospects for international trade, future trends in air fares, the degree of market maturity, the effects of rail competition, of telecommunications competition and of the development of air services in the regions.

5.1.3 The econometric framework segments future passenger demand by geographical market, country of residence (whether UK or non-UK), and travel purpose (business/leisure, transfer/non-transfer). Informed by historic relationships and expectations about future trends, BAA takes a view on the sensitivity of each passenger segment to changes in the main factors influencing demand for air travel over the forecasting period.

5.1.4 Combining BAA's view on the future trends of these key influencing factors with its judgement on the relationship between each of them and the growth in demand for air travel in each market segment, BAA produces a projection of potential passenger demand.

5.1.5 Impact of external factors

An important area of judgement is the expected course of oil prices. Organisation for Economic Cooperation and Development (OECD) statistics demonstrate a substantial increase in oil prices between 1998 (an average over the year of \$13 per barrel) to 2005 (an average of \$55). Looking forward BAA has assumed oil prices slightly lower (in today's prices) than the current high levels for the next decade or so, followed by a period of further moderate increase.

5.1.6 In the preparation of our traffic projections BAA consults forecasts produced by various research agencies and trade bodies. As well as forecasts of economic variables such as those described in 5.1.2, there are specific air traffic forecasts published by government agencies such as the Department for Transport, and also by aircraft manufacturers such as Airbus and Boeing. These sources

can be useful when considering specific factors that can affect the future growth of air traffic.

5.1.7 An example of such a factor is the potential extension of the EU Emissions Trading Scheme to cover aviation. BAA strongly supports this, and is embarking on a study to assess the possible effect of such a step on traffic forecasts. However, in the interim, an indication of the potential impact on traffic volumes created by the introduction of such schemes is provided in the 2003 White Paper. The Government suggested that a notional 100% tax on aviation fuel might have the effect of reducing demand by 10%. However, the exact size of any impact of traffic volumes will depend on the nature and scope of the policy tools introduced.

5.1.8 Interpretation of the forecasts

In the case of Southampton, there are significant opportunities to gain further share of the traffic demand generated within its own catchment area, with the pace and pattern of growth to some extent dependent on the strategy of the airlines operating at the airport.

5.1.9 Forecasts consequently need to be interpreted with a degree of caution. There may be individual years when the general upward trend in passenger numbers could be halted, or perhaps reversed as a result of airline changes. However, the overall lack of available airport capacity in the South East should quickly drive a return to growth, albeit with a possible change in its characteristics.

5.1.10 Past experience demonstrates the significant changes that can occur from year to year. For example, during the late 1990s growth at Southampton Airport was static, followed by a decline in passenger numbers after September 11th 2001. The airport's return to growth was driven by an influx of low cost services, primarily operated by the airline Flybe. This shows the way in which the mix of airlines and air services can undergo significant and unforeseen change.

5.2 Southampton Airport passengers

2005 - 2015 assumptions

5.2.1 In addition to the factors already outlined, the forecasts of growth in passenger numbers at Southampton Airport reflect the following assumptions:

- a) The annual number of air journeys generated by the Southampton Airport catchment area increases from around 7 million in 2004 to around 10 million in 2015. The main catchment area for Southampton Airport is the region within 1 hour's journey time to the airport i.e. all of Hampshire and parts of Dorset, Wiltshire, West Sussex and Surrey

5 Passenger demand – the forecasts 2005 - 2030

- b) A continuous increase in the proportion of passengers generated by this catchment area choosing to fly from/to Southampton Airport rather than other South East airports. Although unable to cater for long-haul operations, Southampton is well positioned to attract additional short-haul flights. It is forecast that, in 2015 around 75% of passengers generated by the Southampton catchment area will be travelling on short-haul services, meaning that approximately 7.5 million air journeys could potentially be made through the airport in that year. However, we would expect Southampton to attract only around 40% of this total customer base, meaning a projected throughput of approximately 3m passengers in 2015
- c) The continuing development of the low cost sector. At Southampton this will initially be most prevalent in the domestic market, as ongoing increases in the number of affordable high-frequency services continue to stimulate demand
- d) Growth in international traffic at Southampton Airport as the runways at Heathrow and Gatwick both reach their full capacity. The increase is expected to be generated both by incumbent carriers and new entrants.

5.2.2 Passenger numbers

As a result of the growth rate of international traffic overtaking that of UK traffic by the end of the forecast period, in overall terms it is expected that the percentage share of UK and Channel Islands passengers will decrease slightly from around 66% in 2005 to 64% in 2015 (where UK refers to services to/from the UK mainland, Northern Ireland and Isle of Man). As such, the forecast of passenger throughput in 2015, contrasted with the actual level in 2005, is as shown in Table 5:

Table 5: Passenger numbers 2005 - 2015

	2005	2015	Average annual growth rate
UK Passengers	0.91m	1.60m	5.8%
Channel Islands Passengers	0.31m	0.34m	0.7%
International Passengers	0.62m	1.11m	6.1%
Total	1.84m	3.05m	5.2%

5.2.3 Southampton Airport is expected to continue to be the starting or finishing point for most of the users of air journeys, rather than being a specialist "hub" airport.

5.3 Aircraft movements 2005 - 2015

5.3.1 On the whole, the capacity of an airport's runway and the size and range of aircraft using it is the most significant constraint on the ultimate scale of flight operations at an airport.

5.3.2 In 2005, the airport handled around 58,000 aircraft movements, utilising around 35% of the theoretical annual runway capacity. On this basis there is ample runway capacity to meet foreseeable future demand, within existing permitted opening hours.

5.3.3 Aircraft movements fall into different categories, and the prospects for growth in each of these different categories must be taken into consideration in forecasts. All commercial passenger and cargo flights are referred to as Air Transport Movements (ATM's). Non commercial operations such as general aviation flights, are referred to as Non-ATM's.

5.3.4 It is expected that by 2015, the total number of aircraft movements at Southampton will be around 74,000 per annum, of which 62,000 will be ATMs. The forecast of overall runway use in 2015 is shown in Table 6, alongside the breakdown of aircraft movements recorded in 2005:

Table 6: Aircraft movements 2005 - 2015

	2005	2015	Average growth rate per annum
ATMs	43,900	62,000	3.5%
Non-ATMs	14,100	11,800	-1.8%
Total	58,000	73,800	2.4%

5.3.5 Over the ten-year period to 2015 it is forecast that there will be an upward trend in the average passenger capacity of aircraft, although regional aircraft types will continue to be predominant. During this timescale the average aircraft size for scheduled services at the airport is expected to increase from around 60 seats in 2004 to around 75 seats in 2015. This forecast of aircraft type mix is critical to the plans for future stand provision.

5.3.6 In conjunction with the upward trend in average aircraft size there is a prospect of increased load factors (the percentage of seats occupied on a flight) on services at Southampton. This is demonstrated by recent changes at the airport where load factors on many routes have been driven upwards by reductions in fares due to airline competition.

5.4 Southampton Airport passenger and aircraft movements forecasts 2015 - 2030

5.4.1 It is difficult to prepare detailed forecasts of activity at Southampton Airport in 2030. However, from the Government White Paper it is apparent that the unconstrained demand for air travel to/from the South East's airports in 2030 will, at 300 million passengers per year, exceed the scale of capacity provision that the Government considers to be acceptable. With one new runway at Stansted, another at Heathrow, a substantial

5 Passenger demand – the forecasts 2005 - 2030

addition to Luton's capacity and maximum use of Gatwick, the four main airports will only be able to accommodate around 275 million passengers per year, assuming that planning applications and permissions deliver capacity in line with the Government's expectations.

5.4.2 It is therefore reasonable to conclude that the predicted mismatch of supply and demand in the South East will generate new opportunities for air traffic development at Southampton, despite the developments at other airports. This is the primary reasoning behind the growth forecasts for 2030, which are shown in Table 7 alongside the equivalent figures recorded for 2005:

Table 7: Passenger numbers 2005 - 2030

	2005	2030	Average growth per annum
UK Passengers	0.91m	2.70m	4.4%
Channel Islands Passengers	0.31m	0.39m	0.9%
International Passengers	0.62m	2.91m	6.4%
Total	1.84m	6.00m	4.8%

Table 8: Air transport movements 2005 - 2030

	2005	2030	Average growth per annum
ATMs	43,900	96,300	3.2%
Non-ATMs	14,100	11,000	-1.0%
Total	58,000	107,300	2.5%

5.4.3 Table 8 shows that total air transport movements are forecast to almost double between 2005 and 2030. However, Table 7 shows a greater than threefold increase in the number of passengers using Southampton Airport over the same period. As noted above, passenger levels are expected to grow at a faster rate than annual aircraft movements due to the gradual introduction of larger aircraft types and a general increase in load factors on services operated by those aircraft. This is illustrated through Flybe's use of the Embraer 195 in replacement of the BAe146 aircraft which has 118 seats, 21 more seats than the aircraft it replaces.

5.4.4 Passenger numbers are forecast to grow at an average of 4.8% per year between 2005 and 2030. Aircraft movements are forecast to grow at a slower rate, with an average of 2.5% increase per year to 2030.

5.4.5 It is expected that there will be a reduction in the number of general aviation, air taxi and other non air transport movements, as the airport focuses on providing scheduled passenger flights to serve the region.

5.5 Commercial aircraft parking stands 2005 - 2030

5.5.1 Table 9 summarises the forecast aircraft stand demand associated with the assumptions outlined up to 2030.

Table 9: Commercial aircraft parking stands 2005 - 2030

Year	Passengers per annum	No. of Stands
2005	1.84m	12
2010	2.40m	15
2015	3.05m	18
2030	6.00m	26

5.6 Cargo

5.6.1 Southampton Airport currently handles a limited amount of air cargo, and it is assumed that this will continue to be the case up to 2015 and beyond. As the airport is closed at night, the facilities are not ideal for air freighter traffic which often favour night time operations. However, small amounts of cargo are carried in the hold of the passenger aircraft that operate from the airport and on occasional freight only flights. Cargo demand can be difficult to predict and it is possible that demand could increase. Our future plans will remain flexible to cater for some growth in the longer term.

5.7 Car parking

5.7.1 Table 10 shows the forecasts of airport-related passenger car park space demand at Southampton, for both short stay and long stay facilities, plus staff car parking. The forecasts have been prepared using the assumption that new car parking capacity will be provided at Southampton Airport Parkway Station, and will therefore reduce the number of rail passengers who currently use the airport car parks for their rail journeys.

Table 10: Peak passenger car park space demand 2005 - 2030 by category

Year	Passengers per annum	Long-Stay Car Park	Short-Stay Car Park	Staff Car Park	Total
2005	1.84m	1100	1050	425	2575
2010	2.40m	1450	1350	450	3250
2015	3.05m	1800	1700	525	4025
2030	6.00m	3100	3300	850	7250

5.7.2 Forecasts of the required scale of car parking provision will be subject to ongoing review to reflect any material changes in air passenger characteristics, and to incorporate any changes in modal share that may arise from public transport developments and flexibility of use.

5.7.3 The forecasts have been produced taking into account the Surface Access Strategy for the airport, which has targets up to 2011, to encourage passengers and staff to travel to the airport by public transport. Further details are in Chapter 8 on surface access.

6 Land use in 2015

6.1 Introduction

6.1.1 It is predicted that by 2015, Southampton Airport will be handling around 3 million passengers per year. This section of the master plan details the developments that will be required to cope with the scale of growth for all aspects of the airport's operation up to 2015 and this is illustrated in Drawing Number 3. Within this timescale, it is considered that airport development can be accommodated on land currently owned or in the control of BAA. Planning approval for future developments will be required in accordance with legislation, through applying to Eastleigh Borough Council, as the airports local planning authority.

6.1.2 Any development will take place incrementally, to ensure as far as possible that additional capacity closely matches passenger demand. It must be emphasised that if traffic grows at a faster rate than is currently predicted, then it may be necessary to advance some of the expansion plans. Similarly, any slow-down in growth would be reflected in development of new facilities at a later stage. The exact nature and timing of the developments outlined in this section will, where appropriate, be subject to detailed environmental and financial evaluation.

6.1.3 The completion date for the new public road linking Junction 5 of the M27 to the south east of Eastleigh via the airport is not yet known. In the outline master plan it was assumed this would be delivered by 2010, however there is still a level of uncertainty around the timing of this new road. The new road, which is known as the Chickenhall Lane Link Road, may be required to fully realise the potential of the North East Zone and allow development to take place on land adjacent the route of the proposed road, owned by other parties.

6.2 Air traffic control/airspace

6.2.1 In preparing this plan, an assumption has been made that the capacity of the airspace surrounding the airport, and the airspace across England and the UK generally, will grow to accommodate the forecast growth in traffic.

6.3 Runway and taxiway system

6.3.1 It is anticipated that, in the period to 2015 and beyond, the runway will be used in the same way as it is now with no additional length.

6.3.2 A new taxiway may be provided to link the runway with new stands if they were constructed in the North East Zone.

6.3.3 Changes to CAA regulations require all licensed aerodromes to review the adequacy of Runway End Safety

Areas (RESA). This work is being progressed and full details are not yet available. However, a lengthened RESA adjacent to the M27 is one option under consideration. This would require a starter extension to be introduced at the Northern End of the runway to maintain the existing declared distances. Other options may also be considered.

6.4 Aircraft aprons

6.4.1 As mentioned in Chapter 5, forecast demand is for 18 commercial aircraft parking stands in 2015. This is an increase of six stands from 2005. The stand development strategy in the period to 2015 is to continue developing the western apron incrementally, before moving east of the runway.

6.5 Passenger terminal facilities

6.5.1 It is envisaged that Southampton Airport will continue to be served by a single passenger terminal, up to 2015.

6.5.2 Additional check-in facilities will be required alongside an extension to the hold baggage screening system. These can be accommodated within a small extension to the existing terminal. New check-in technologies, such as self-service kiosks and home printed boarding cards, will be promoted to optimise and enhance the check-in product, whilst maintaining the fast track nature of the airport.

6.5.3 It is envisaged that additional capacity will be required for the domestic reclaim facility. This capacity could be provided either by extending the existing carousel, by utilising the international reclaim belts, or even by providing an additional carousel. The final solution is still to be defined.

6.5.4 In addition, there will be an ongoing programme of refurbishment and renewal of existing facilities, to ensure that Southampton Airport can respond to changes in technology, airline needs, passenger expectations and commercial developments as appropriate.

6.6 Car parking

6.6.1 To meet the overall increase in car parking demand, additional spaces may be provided in the North East Zone. This area is more suited to long stay car parking and the car park pricing structure will be used to balance supply and demand for short stay and long stay spaces. In the shorter term, options are being considered for extending the existing short stay car park, and maximising suitable space on the western side. The forecast numbers of peak car parking spaces demand are shown in Table 10, Chapter 5.

6 Land use in 2015

6.7 Cargo

6.7.1 While specific cargo flights do not feature heavily at Southampton Airport, it is envisaged that the current practice of passenger aircraft hold cargo will continue. Due to the difficulty of predicting cargo demand in this time frame, an area east of the runway has been identified for the future. In the shorter term the cargo operation will continue to operate from its current location on the west side of the runway.

6.8 Aircraft maintenance

6.8.1 It is envisaged that the current maintenance facilities will be sufficient in size and location up to 2015.

6.9 Ancillary facilities

6.9.1 As the number of air passengers increases, the demand for land to accommodate extended support services will also increase. Where possible, the sites of existing facilities will be further developed to provide this extra capacity. Where site constraints exist, or the site is required for other uses, then facilities may need to be relocated east of the runway.

6.10 Landscaping

6.10.1 As the airport develops, appropriate landscaping provisions will be made to maintain the existing high standards. The landscaping, however, will not compromise aircraft safety through the attraction of birds to the airfield. On the eastern side of the airfield, Southampton Airport will endeavour to provide a minimum of a 30 metre landscaped buffer between the airport and the Itchen Valley Country Park, which will aim to develop and maintain habitats in this designated Site of Special Scientific Interest (SSSI) and reduce any potential visual impacts.

6.11 North East Zone

6.11.1 In addition to the stands, apron and car parking described, the North East Zone will also be available for commercial activities. These activities are assumed to be of such a nature that future development is consistent with airport development options.

6.11.2 The 2001 - 2011 Eastleigh Borough Council Local Plan Review, originally indicated that up to 4 hectares of the total 22 hectares in the North East Zone would be used for airport related use. The size of this area was agreed with Eastleigh Borough Council before the outline master plan was produced, which showed a greater area being outlined for airport related development. The outline master plan identified 12.5 hectares for this purpose, however the density of employment for airport related activities is believed to equal or exceed the original forecasts in the Local Plan Review. This is because of the type of employment at the airport, which is open 7 days per week, with two employment shifts per day.

7 Land use in 2030

7.1 Introduction

7.1.1 For the period between 2015 and 2030 the Government's White Paper has stated that only indicative land use plans are required at this time.

7.1.2 Accordingly, this section of the outline master plan provides an overview of the future development of the airport between 2015 and 2030, given the information available at present. It outlines a development strategy which would allow growth to 6 million passengers per year.

7.1.3 Given the uncertainty of forecasting the volume of traffic so far into the future, Southampton Airport is currently considering two sets of indicative land use plans as part of its vision. One for a scenario where the existing terminal will be extended (scenario 1), and another where a new terminal will be constructed in the North East Zone (scenario 2). A decision as to which final plan will be progressed does not need to be made for several years.

7.1.4 Drawing Number 4, shows the proposed land use for scenario 1 and Drawing Number 5 shows the proposed land use for scenario 2. Both scenarios can be accommodated within land currently under the control of BAA.

7.2 Scenario 1 (Drawing Number 4)

7.2.1 Under scenario 1, the existing terminal site would be extended to accommodate the increased passenger numbers. This would result in the current multi-story car park undergoing significant reconfiguration to allow for a terminal extension. This would allow for incremental growth in terminal facilities.

7.2.2 In this master plan, the area of the airport encompassing aircraft stands and associated taxiways is known as the 'apron area', which would be split between locations to the east and the west of the runway. At least 14 stands would be on the west of the runway, some of which could be linked to the terminal via a walkway, and 12 may be on the east to which passengers could be coached. The operational and financial implications of servicing the eastern remote stands for arriving and departing passengers would need to be considered in detail.

7.2.3 The new short stay car park would be further away from the runway than the existing car park, and could therefore have an additional floor which would enable it to have a similar capacity to the existing car park. The bulk of long stay spaces would be provided east of the runway, including areas within the North East Zone.

7.2.4 As full potential is made of the western apron area for aircraft parking, the existing aircraft maintenance would move to the eastern side of the runway.

7.2.5 Due to the constrained nature of the western facilities under this scenario, all other ancillary facilities would be located in the North East Zone.

7.2.6 The remaining land in the North East Zone would be available for commercial development by either Southampton Airport or a third party.

7.3 Scenario 2 (Drawing Number 5)

7.3.1 Under Scenario 2, the existing terminal would remain at its current size, and would handle approximately 3 million passengers per year. A new terminal, along with its associated facilities would be built in the North East Zone. This terminal in 2030 would be built to accommodate approximately 3 million passengers per year but would be capable of being extended should the need arise beyond these time scales.

7.3.2 A new terminal development would include facilities such as short stay car parking, offices and hotels.

7.3.3 As the new terminal would be further away from the railway station, a shuttle bus service would be provided to ensure that the use of public transport is maximised.

7.3.4 Maintenance and ancillary facilities may remain in their current location, but an area of land in the North East Zone has been safeguarded to meet increasing demand and changing requirements.

8 Surface access

8.1 Introduction

8.1.1 The scale of aviation activity at Southampton Airport has a direct bearing on the demand for road and rail travel to and from the airport. Air passengers, people meeting and greeting passengers and staff account for the vast majority of these journeys.

8.1.2 Southampton Airport recognise the importance of monitoring, planning for and managing this demand and the prominence that this issue has been given within UK Government. The importance of surface access to airports was recognised in the July 1998 Government White Paper, 'A New Deal for Transport', which required UK airports such as Southampton to set up an Airport Transport Forum and to produce a Surface Access Strategy. Guidance on both was published in July 1999, and included the following forum objectives:

- To draw up and agree challenging short and long term targets for increasing the proportion of journeys to the airport made by public transport
- To devise a strategy for achieving those targets, drawing on best practice available
- To oversee the implementation of the strategy.

8.1.3 In addition to Government guidance, the draft South East Plan provides guidance on surface access. Policy T 9 in the South East Plan on airports, makes specific reference to the importance of surface access, highlighting that:

"Priority should be given in the airport Surface Access Strategies for each airport to achieve:

- 1) A reduction in the environmental impact of surface access
- 2) A higher modal share in favour of public transport."

8.1.4 Policy T6 of the draft South East Plan, slightly modifying that added to RPG9 in July 2004, requires that relevant regional strategies, local development documents and Local Transport Plans should include policies and proposals that support the development of Southampton Airport within agreed levels of growth, and should take account of airport operator master plans produced in accordance with 'The Future of Air Transport' White Paper. It also expressly states that airport surface access strategies should set out ways of achieving a modal shift in favour of public transport.

8.1.5 Southampton Airport's Surface Access Strategy was published in June 2000, as required by the Government, and is currently being reviewed and updated, for the period 2006 - 2011. The updated Surface Access Strategy will be

published and available in late 2006.

8.1.6 The purpose of Southampton Airport's Air Transport Forum, is to encourage more passengers to use public transport for journeys to and from the airport. This involves working with public transport providers and influencers, as follows:

- Southampton Airport (Chair)
- Aviance Ground Handling
- Eastleigh Borough Council
- First Hampshire Bus
- Hampshire County Council
- Hampshire Economic Partnership
- Highways Agency
- Meteor
- Mott MacDonald
- National Express
- Red Funnel Group
- Solent Blue Line
- South East England Regional Assembly (SEERA)
- South West Trains
- Southampton and Fareham Chamber of Commerce and Industry
- Southampton City Council
- Sustrans
- Uni-link Buses (Minerva Accord)
- University of Southampton
- Virgin Trains
- Others by Invitation

8.2 Existing surface access infrastructure

8.2.1 Southampton Airport is ideally situated at Junction 5 of the M27 which links to the M3, allowing easy road access from the north, east and west. The airport also has excellent rail links, with a dedicated railway station, Southampton Airport Parkway, just 99 steps from train-to-plane.

8.2.2 The ways in which passengers accessed Southampton Airport during 2005 are shown in Table 11:

Table 11: Modes of surface transport for passengers in 2005

Mode of Surface Transport	Percentage of Total
Private Car / Car Rental	67.9%
Taxi	20.3%
Rail	10.1%
Bus / Coach	0.9%
Other	0.8%
Total	100%

The number of passengers choosing private car or car rental in 2005 was 67.9%. Looking more closely at car journeys, a substantial proportion of passengers (38.8%) are 'dropped off' by private car, which is then driven away by friends or family. Each 'drop off' at the airport and subsequent collection equates to 4 car journeys. It is clear therefore that targeting these passengers with the aim of promoting alternative modes of public transport is a key factor. It also highlights that there is a need to adequately balance car parking provision to discourage extra users adopting the 'drop off' approach.

8.2.3 Origin of departing passengers

Southampton Airport retains a dominant local passenger base. Figure 6 shows the home postcode of departing passengers in the period April 04 to March 06. 69% of passengers live in the Southampton, Portsmouth and Bournemouth postal areas. Passengers resident in the 5 postcode areas bordering the Solent conurbation group add a further 22%, leaving 9% originating from a diverse scattering of 39 other UK postcode areas.

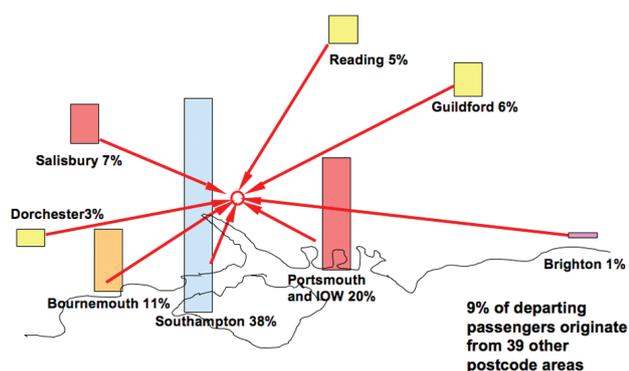


Figure 6. Home postcode areas of outbound departing passengers

This data on origination of outbound departing passengers helps to inform the Surface Access Strategy.

8.3 Future surface access infrastructure

8.3.1 Southampton Airport has developed a Surface Access Strategy for 2006 -2011, which continues to promote the excellent public transport links. The Surface Access Strategy proposes the modal split targets for 2011 as detailed in Table 12:

Table 12: Southampton Airport's Surface Access Strategy targets for transport mode share between 2006 - 2011.

Transport Mode	Target Mode % 2006 to 2011	Measures to Deliver Improvement
Private and hired car	58.5%	Airport car parking and charges carefully balanced
Taxi	22%	Demand-responsive travel, shared taxi utilisation
Rail	15%	Rail Working Group. Promote Southampton Central 5 trains per hour and link service to ferry terminal and city centre. Improve passenger access to quality information on rail travel options, frequency and cost
Bus / coach	3.5%	Bus Working Group & quality partnerships, facilitate transport interchange. Encourage medium distance coach services especially towards Portsmouth conurbation. Passenger access to quality information on bus and coach travel options, frequency and cost
Other	1%	Encourage improved cycle and pedestrian routes

8.3.2 Good surface access will be important to the future ability of Southampton Airport to grow, enabling passengers to access the airport efficiently and reliably. New surface access initiatives should be coordinated to ensure that their development does not compromise the accessibility and operation of the airport. To this end, new surface access initiatives should be considered as part of a fully integrated transport system.

8.3.3 Due to the range of transport options available at Southampton Airport, and its proximity to motorways and the railway, there is potential for Southampton Airport to become a multi-modal transport hub. This may mean that the airport becomes a more important transport interchange for the region in the future. Some of the proposed initiatives are outlined in the following paragraphs.

8.4 Terminal and airport facilities

8.4.1 Southampton Airport intends to work with flight and onward travel operators to coordinate the availability

8 Surface access

of travel option information. This will be available both during the booking process and in the airport terminal, to encourage more use of public transport at either end of the journey. An information point supplied by Hampshire County Council Traveline Service has already been installed in the terminal building for this purpose. BAA aims to source a further information point to be placed in a prominent position within the terminal. The promotion of public transport will be improved by new signage and information within the main terminal along with increased promotion on the airport website,

➔ www.southamptonairport.com.

8.4.2 BAA will continue to work with the local councils to improve the facilities for walking and cycling including the development of new cycle lanes in the vicinity of the airport, making it easier and safer for cyclists to travel to the airport. Development of a new and more accessible footbridge over the railway line will also enable easier access by cycle and foot passenger.

8.5 Rail

8.5.1 The proximity of Southampton Airport Parkway railway station to the airport means that Southampton has one of the best train-to-plane connections in Europe. There are three trains per hour to London Waterloo, with the fastest journey time taking just over an hour. Trains serve Southampton Airport Parkway on weekdays from 05.00 to 01.00 the following morning. There are five trains per hour linking the airport with Southampton Central station, which takes seven minutes. Other locations served from Southampton Airport Parkway include Winchester, Poole, Bournemouth, Basingstoke, Oxford and Birmingham. There are also local, direct links to nearby railway stations at Millbrook, St Denys, Swaythling, Eastleigh, Chandlers Ford and Romsey.

8.5.2 The current South West Trains (SWT) franchise is terminating in February 2007. The Department for Transport has announced that the existing Franchisee, Stagecoach South Western Trains Limited (Stagecoach Group plc), has been awarded the contract to run the service from 04 February 2007. The franchise specification indicates that service improvements will be delivered by the new franchise from the December 2007 timetable change. Virgin Trains also operate services from this station.

8.5.3 Southampton Airport will engage with Stagecoach to improve rail services. A new Rail Working Group will be implemented with a number of objectives such as improving access to Parkway Station, promoting the service to travellers, looking at the possibility of promotional fares and integrating rail/air travel opportunities to best effect.

8.6 Bus

8.6.1 There are 2 main bus services from the airport. The most frequent being the Uni-Link U1 which runs from the airport via the university to central Southampton with 4 buses an hour, the first of which arrives at the airport at 0550 and the last of which departs at 2350. The Uni-Link U1 bus service also provides links to the Isle of Wight and Hythe ferries as well as the docks. First Bus operate an hourly service between the airport and the city centre routing via Chartwell Green and Bitterne. There are also links to the National Express coach station in Southampton, with onward connections throughout the country.

8.6.2 There are now enough passengers to support medium distance bus/coach operations particularly in the Bournemouth/Southampton/Portsmouth corridor. Southampton Airport will be working with transport operators to encourage additional routes linking the airport to the Portsmouth conurbation in order to take the opportunity to fill the current gap in the railway network on this route of travel. It is clear that this is an important route as 20% of the passengers originate from the Portsmouth postcode area.

8.6.3 BAA intend to work closely with all bus service operators to encourage a bus working group to improve services and seek to negotiate a framework for a Bus Quality Partnership. The promotion of onward travel destinations such as the Uni-Link Service to Dock Gate 4 for travel on cruises will also be improved.

8.7 Taxis

8.7.1 BAA intends to work with the taxi concession contractor to seek improved vehicle utilisation by coordinating outbound payload trips with a return passenger pick-up. BAA will work with stakeholders to trial "demand-responsive" technology in the area of taxi operations. These trials will be evaluated along with emerging technology to review the effectiveness of such systems. This should offer the option of taxi sharing at a lower price during advanced booking to reduce empty vehicle movements.

8.8 Staff travel

8.8.1 The Southampton Airport Staff Travel Plan promotes a range of transport initiatives including car sharing, cycling, and the use of public transport. The car sharing scheme provides a service that brings together staff that live in close proximity to each other. Cycling is encouraged through free bicycle maintenance and accessories, showering facilities for staff and recently upgraded undercover bicycle storage. Interest free loans are provided for BAA staff who wish to purchase bikes, and/or bus and train passes. The awareness of these single-occupancy car alternatives are promoted with themed days and new initiatives.

8.9 Chickenhall Lane Link Road development

8.9.1 As outlined in Chapter 6 the timeframe for development of this road is uncertain, however it would provide much needed respite to the existing congested access to Eastleigh and allow development to take place on land adjacent to the route owned by other parties. This road scheme may also help to realise the potential of the North East Zone. Southampton Airport will work with the scheme promoters to investigate how the scheme could be made to deliver benefits for the airport, and general employment growth in the area. The Airport is also keen to work with all parties to realise shorter term improvements to junction 5 of the M27 to improve congestion to the Eastleigh area.

9 Environmental impacts

9.1 Introduction

9.1.1 Sustainable development and responsible growth

Southampton Airport is and will continue to be managed and developed in the context of the Government's strategy for sustainable development. In 1999 the Government published '*A better Quality of Life*', which identified four objectives for sustainable development:

- Social progress which recognises the needs of everyone
- Effective protection of the environment
- Prudent use of natural resources
- Maintenance of high and stable levels of economic growth and employment.

9.1.2 The Government published a new strategy, '*Securing the Future*', on 7 March 2005, to which Southampton Airport has given thorough consideration while finalising this plan. The new strategy's 'purpose' shows how the Government will evolve its sustainable development policy - developing the earlier strategy, not departing from it. Five guiding principles are to form the basis of policy in the UK:

- Living within environmental limits
- Ensuring a strong, healthy and just society
- Achieving a sustainable economy
- Promoting good governance
- Using sound science responsibly.

9.1.3 The new strategy also specifies four priority areas for action:

- Sustainable consumption and production
- Climate change and energy
- Natural resource protection and environmental enhancement
- Sustainable communities.

9.1.4 More information on BAA's, and Southampton Airport's sustainable development programme is available at www.southamptonairport.com/corporate-responsibility.

9.1.5 There is clearly a balance to be struck in weighing up the social and economic benefits to the UK and its communities and the environmental impacts of aviation. While there are real environmental issues which require a clear response, such as the Earth's capacity to handle greenhouse gases, it is also necessary to recognise economic and social costs and benefits.

9.1.6 Southampton Airport will always work hard to maintain effective working relationships with a wide range of stakeholders, including local communities, passengers, airlines, staff and control authorities, in a way which

promotes the social and economic benefits and which seeks, wherever possible, to minimise the disbenefits.

9.2 Southampton Airport and the environment

9.2.1 There are a number of environmental issues that are particularly important to Southampton Airport and its neighbours, including noise, air quality and climate change. This chapter looks at these topics and others in detail and explains Southampton Airport's strategies for managing its impacts in these areas.

9.3 Flying Controls Agreement

9.3.1 Southampton Airport operates under a strict Flying Controls Agreement which encompasses a range of measures to safeguard the local community, including: night time closure, runway length and alignment, types of aircraft, flying training, helicopter operations, ground running of aircraft engines, aircraft vortices, the preferred routing of aircraft and air quality. This formed part of the planning agreement between Southampton Airport and Eastleigh Borough Council, which became effective on 1st January 1993. The Flying Controls Agreement is summarised in Appendix IV and references are made to it throughout this chapter.

9.3.2 Southampton Airport's compliance with the Flying Controls Agreement is met, and in many cases exceeded. It is monitored by Eastleigh Borough Council and the Southampton Airport Consultative Committee on a regular basis.

9.3.3 Southampton Airport Consultative Committee

The Southampton Airport Consultative Committee consists of a range of local stakeholders including: local councillors and officers, residents associations, disability groups and industry bodies.

The main aims of the Consultative Committee are:

- to enable aerodrome operators, communities in the vicinity of the aerodrome, local authorities, local business representatives, aerodrome users and other interested parties to exchange information and ideas
- to allow the concerns of interested parties to be raised and taken into account by the aerodrome operators, with a genuine desire on all sides to resolve any issues that may emerge
- to complement the legal framework within which the aerodrome operates.

9.3.4 The Technical Working Group

The Technical Working Group is a sub-committee of the Southampton Airport Consultative Committee. This sub-committee includes representatives from Eastleigh Borough

Council, Southampton City Council, Winchester City Council, the Consultative Committee, as well as airlines, National Air Traffic Services (NATS) and Southampton Airport. The group provides consultation on issues such as the Noise Preferred Routeing Trials from their design, to monitoring of the feedback.

9.4 Specific environmental issues

9.4.1 This chapter looks at the following important environmental subjects in more detail:

- Noise
- Air quality
- Reducing energy consumption
- Climate change
- Vortices
- Waste management and recycling
- Water quality
- Biodiversity and landscaping
- Sustainability at Southampton
- Construction and development.

9.5 Noise

9.5.1 For some people living under flight paths or close to Southampton Airport, noise is a concern and its effective management is an important part of our ability to develop in a responsible way. Aircraft are becoming progressively quieter for their size and carrying capacity, and Southampton Airport is working in partnership with its airline customers to make further progress in managing the noise impacts of their operations. Noise can be divided into two categories; air noise and ground noise. "Air Noise" refers to noise from aircraft in flight or on the runway during take off or after landing. Ground noise is other types of noise generated at an airport such as the ground running of aircraft engines.

9.5.2 Summary of air noise management initiatives

These are the ways in which Southampton Airport manages the air noise impact on its local community:

- No scheduled night flights
- Noise Preferred Routeings for aircraft
- Ban on noisier types of aircraft
- Strict limits on helicopter movements
- Strict limits on aircraft training movements
- Strict limits on aircraft engine testing for routine maintenance
- Ongoing liaison with airline partners to encourage the use of quieter aircraft
- Community liaison and flight evaluation
- Noise monitoring
- Differentiated aircraft charging
- Noise contour modelling.

9.5.3 No scheduled night flights

The Flying Controls Agreement places strict conditions on the opening hours of Southampton Airport including closure at night time. This is summarised below.

Flying Controls Agreement - Night-time closure

Night closure hours are defined as 23:00 - 06:00 Monday to Saturday. The airport is closed at night for aircraft operations.

On Sundays night closure hours are from 23:00 (on Saturday) - 07.30.

There are a few limited exceptions to this, which may include delayed aircraft movements and medical emergency flights.

There is also a provision for a maximum of 10 aircraft movements in a calendar month and 100 in a calendar year during night hours.

Helicopter movements are banned during night hours.

Southampton Airport does not intend to seek any changes to the permitted night time hours and activities described above.

9.5.4 Noise Preferred Routeings for aircraft

Flying Controls Agreement - Noise Preferred Routeings for aircraft

The airport must consult with Eastleigh Borough Council to identify aircraft routes which create the least nuisance to the occupiers of residential property. The airport is to ensure, as far as is reasonably possible, that aircraft using the airport use the preferred routes.

Southampton Airport, in conjunction with Eastleigh Borough Council, and in consultation with local stakeholders, agrees the location of Noise Preferred Routes for aircraft departures and arrivals. These routeings are designed to minimise the noise impact on the local community, by diverting aircraft away from the most populated areas, where practically possible.

Between 2004 and 2006 the airport has undertaken a series of studies to investigate the viability and impact of changing the Noise Preferred Routes for arriving and departing aircraft. This is because the original Noise Preferred Routes were developed over 10 years previously, and since then aircraft types have changed substantially and new housing has been developed in areas that were previously less densely populated. The aim of these Noise Preferred Routeing Trials is to identify the most appropriate routeings that help minimise the impact on the community.

The airport will continue to strive to find the best possible routeings taking into account advances in aircraft technology and local housing development. The Flying Controls Agreement precludes any realignment to the runway by any

9 Environmental impacts

more than 5 degrees, however the current north/south alignment of the runway is assumed not to alter in the future, given the space required for any potential east/west alignment and the associated impacts on the adjacent Itchen Valley Country Park.

9.5.5 Ban on noisier types of aircraft

Flying Controls Agreement - Ban on noisier types of aircraft

Large and noisy aircraft which do not meet the standards of ICAO Annex 16 Chapter 3 or FAA FAR Part 36 Stage 3 (commonly referred to as 'Chapter Three' aircraft) are not permitted at Southampton Airport. Those aircraft that meet the 'Chapter Three' standards are permitted at Southampton Airport.

Aircraft powered by Rolls Royce Viper jet engines are also not permitted as these engine types are particularly loud.

Southampton Airport was one of the first airports in the country to ban aircraft that do not meet the specifications set out in the Flying Controls Agreement above.

The new Embraer 195 aircraft, operated by Flybe, is anticipated to enter service at Southampton Airport in 2007. This aircraft is expected to be certified as 'Chapter Four' which means that it meets the most stringent noise and emissions standards.

9.5.6 Strict limits on helicopter movements

Flying Controls Agreement - Strictly limited helicopter movements

The number of helicopter movements is very restricted and is not allowed to exceed 7,500 movements in any calendar year.

Helicopter movements are banned during night hours.

Southampton Airport fully complies with this requirement and will continue to do so in the future.

9.5.7 Strict limits on aircraft training movements

Flying Controls Agreement - Flying training

Between 1 January 1993 and 1 January 1998, the number of movements associated with aircraft training was required by the Flying Controls Agreement to progressively reduce to less than 10,400 in a year.

Training aircraft are subject to the Noise Preferred Routeing Agreement, but not in the same way as commercial airlines. Individual aircraft undertaking training circuits from Southampton Airport may not carry out more than 5 circuits in succession in the same direction.

Training flights by jet aircraft and helicopters are only allowed in relation to air crew familiarisation with the airport. This is for a maximum of 3 consecutive days and not for more than 1 hours training on each of the 3 days.

Southampton Airport fully complies with these requirements and will continue to do so in the future.

Over recent years the number of aircraft training movements has continued to reduce below the levels permitted by the Flying Controls Agreement. In 2005 there were in excess of 6,000 aircraft training movements, and this figure is anticipated to reduce by approximately 50% in 2006 as a result of the closure of the remaining flying school at Southampton Airport. All training movements are monitored through regular returns reported to the Southampton Airport Consultative Committee.

There are no longer any flying schools based at Southampton Airport, although training flights still visit the airport.

Monitoring of the further restrictions placed on helicopter training is undertaken by the airport. This does not include armed forces helicopters transiting through the airspace to other aerodromes. The numbers of helicopter movements are not allowed to exceed 7,500 in any 12 month period. In 2005 there were 347 helicopter movements at Southampton Airport. All helicopter movements are monitored through regular returns reported to the Southampton Airport Consultative Committee.

9.5.8 Ground noise

Ground noise refers to noise generated by all sources at the airport excluding noise generated by aircraft in flight, taking off or landing. The main sources of airport ground noise are:

- Aircraft taxiing between the runway and aircraft stands - this includes all holding, engine start-up and shut-down procedures during taxiing
- Auxiliary power units on aircraft for air conditioning the aircraft cabin while on stand, for supplying electrical power and other aircraft services, and for engine start-up
- Ground running of aircraft engines during maintenance and testing
- Mobile ground equipment such as ground power units which provide power supplies to aircraft on stand
- Static building plant such as air conditioning equipment
- Alarms and tannoy systems forming essential security and health and safety alerting processes
- Road vehicles, both airside and those travelling to and from the airport
- Construction activities.

Airport ground noise exists in the context of off-airport noise sources, termed background noise. Generally, the

most dominant contributor to the noise climate in adjacent residential areas is road traffic. Around Southampton Airport, background noise is dominated by road traffic from the M27 and surrounding link roads between Southampton and Eastleigh. Studies have shown that the majority of airport traffic does not coincide with the commuter peaks in the local area.

9.5.9 Minimising ground noise

There are a number of initiatives that are used to manage ground noise. These include strict limits on aircraft engine testing, and the banning of night flights. Engine testing is regulated through the Flying Controls Agreement and Southampton Airport fully complies with this as detailed in 9.5.10.

9.5.10 Strict limits on aircraft engine testing for routine maintenance

Flying Controls Agreement - Strict limits on aircraft engine testing for routine maintenance

No engine testing can take place between 21:00 and 08:00 hours Monday - Saturday.

Engine testing is banned completely on Sundays and Bank Holidays.

The maximum time allowed for ground running of engines is 1 hour in any day or 3 hours in any week.

The location of the engine testing is restricted to areas away from residential properties.

Engine testing refers to high powered engine checks that are carried out during planned routine maintenance. It does not include engine running as part of starting up, pre-flight checks, idling or aircraft taxiing.

Southampton Airport fully complies with this requirement and will continue to do so in the future.

9.5.11 Working with airline partners

Southampton Airport actively encourages its airline partners to minimise noise disturbance wherever possible. An example of this is through Flybe, who are investing over £500 million in new aircraft which are much quieter than the aircraft being replaced. The new quieter Embraer 195 aircraft will start to replace the older BAe146 aircraft in 2007. It is estimated that this new aircraft will be up to 35% quieter than the BAe146 aircraft that it replaces.

On the whole, the aircraft types operating at Southampton Airport are modern regional aircraft.

9.5.12 Community liaison and flight evaluation

Southampton Airport values the feedback it receives from the local community and has invested in a number of initiatives to ensure good relations with its neighbours.

These include:

- A dedicated Noise & Flight Evaluation Unit which handles the comments and complaints received by the local community about aircraft noise and routeing. This is manned during normal office hours, by specially trained staff who can answer questions from the local community about flights that they may have questions about. Outside of normal office hours, there is a Community Comment Line available
- Feedback can be received in a number of ways, including telephone, post and email. Information is also available on the Southampton Airport website, www.southamptonairport.com
- Individual feedback is responded to and recorded on a database, and presented to the Southampton Airport Consultative Committee for review on a quarterly basis
- Feedback is investigated using track monitoring equipment
- Home visits are offered to some individuals to help their understanding of noise or routeing issues
- Individuals are invited to the airport to meet with members of the management team to discuss their particular concerns
- Southampton Airport holds a twice yearly Community & Stakeholder Conference, to which over 200 local representatives are invited. The airport gives an update on key issues, such as noise and air quality, and representatives are encouraged to feedback information to the particular areas of the community that they represent. Guests at the conference include: MP's, Government organisations, regional bodies/agencies, councillors, council officers, resident association representatives and local businesses.

Following the installation of a track keeping system in 2003, Southampton Airport is able to gather and analyse the track, including position and height, of aircraft flying to or from the airport. The data gathered from this system allows Southampton Airport to consider and respond to the complaints and questions received from local people who are troubled by the noise from aircraft. The system can also be used to study the consistency of piloting procedures. There is currently a project underway to develop the flight track keeping equipment, which should provide an enhanced system.

9.5.13 Noise monitoring

Southampton Airport will be investing in mobile noise monitoring equipment in 2007, which will be deployed to gather data about aircraft movements and associated noise impacts in adjacent areas to the airport. The locations of the monitors are currently being developed, as there are a number of constraints that can affect the accuracy and success of the measurements, such as background noise levels and proximity to certain structures.

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9.5.14 Differentiated aircraft charging

Southampton Airport will consider, in full consultation with its airline partners, the potential to introduce a differentiated aircraft charging system to continue to encourage quieter aircraft types.

9.5.15 Noise contour modelling

Exposure to aircraft noise is normally depicted by noise contours. There is an established method developed and used over the years by Government which uses Leq contours to assess the noise created by aircraft taking off and landing at an airport over a period of time. Noise footprints are a different measure and used for depicting single aircraft noise events, e.g. one take off or landing of a particular aircraft. Noise contours can represent historical noise impact and can also be used to show future forecast noise levels. As a result, it is possible to quantify changes in the area and population exposed to different levels of noise.

Contours have been created in alignment with the Government's method for the assessment of aircraft noise. This is to calculate equivalent continuous sound levels (Leq) over a 16 hour daytime period between 7.00am and 11pm. Daytime contours are used because daytime rather than night movements are the relevant noise factor in considering airport capacity issues. The contours are presented in 3 dB(A) steps from 57 to 72 dB(A). Based on research the Government has used 57 dB(A) Leq as the level of daytime noise marking the approximate onset of significant community annoyance. In addition 63 dB(A) Leq is equated to medium to high levels of aircraft noise, and 69 dB(A) Leq as high levels of aircraft noise.

9.5.16 For Southampton airport, aircraft noise contours have been calculated for actual traffic levels in 2005 and forecast traffic levels in 2015. These contours are illustrated in Drawing Numbers 6 and 7. There are no households that reside in the area of high aircraft noise (69 Leq) in either 2005 or 2015. There is an increase of 250 households within the area of medium noise (63 Leq) and an increase of 1,300 households within the 57 Leq contour. The contours have been developed in response to the outline master plan consultation, and Southampton Airport will be proactively working with both the airlines and the local community as part of its Noise Strategy as outlined earlier in this section, in addition to ensuring that future noise contouring reflects any changes in future aircraft types or changes to aircraft routing.

9.5.17 Future noise contour assessments

The Future of Air Transport White Paper and EU Directives highlight a requirement to undertake further future noise contour assessments when the number of passenger ATM's exceeds 50,000 per annum, within a specified weight category. Southampton Airport will adhere to the

requirements of the directives when this threshold is achieved, which is anticipated before 2015 using current forecasts.

9.6 Air quality

9.6.1 Managing air quality is one of Southampton Airport's priorities. As part of the BAA group, Southampton Airport benefits from BAA's work to lead the way on improving environmental standards in the aviation industry. This section of the master plan outlines the legislation governing air quality, BAA's policy and Southampton Airport's strategy for managing air quality.

9.6.2 The legislative context

Air quality levels are managed by local government, but are governed by national and international regulations and laws.

- In the UK, there is the Government's National Air Quality Strategy. This sets out targets based on human health
- At a European Union level, there is the Air Quality Framework Directive, and again, it sets out health-based targets
- At a local level, local authorities are required to assess air quality in their areas for compliance with national air quality objectives. The restrictions are tight - currently there are in excess of 100 local authorities who do not expect to meet national targets at one or more locations in their area.

9.6.3 The scientific background

Air quality is affected by emissions of chemicals and particles from human activity as well as from natural sources. In the UK, emissions are predominantly a result of the combustion of fossil fuels.

The pollutants which present the greatest challenge in the UK are nitrogen dioxide (NO₂) and fine particles (PM₁₀). Road traffic is the single largest emission source of fine particulates (PM₁₀) and nitrogen oxides (NO_x), although other sources, for example power generators, domestic and industrial boilers and industrial processes, also produce these pollutants.

NO_x emissions from the combustion of fossil fuels are converted to nitrogen dioxide (NO₂) in a complex series of atmospheric reactions. It is the resultant NO₂ which is of concern, due to its potentially adverse effects on health. Like NO₂, PM₁₀ is also associated with adverse health effects.

Because of this, the Government has set a series of objectives for atmospheric pollutants. These are set out in the UK National Air Quality Strategy and are based on the principle that polluting emissions and ambient air must not cause harm to human health and the environment.

9.6.4 BAA's air quality objective

BAA's objective is to achieve industry good practice in air quality management in accordance with local circumstances. Air quality emissions are managed from aviation and airport-related sources by:-

- Working with Government, local authorities and other airport companies to meet EU and UK targets
- Getting more people travelling to and from the airport by public transport.

9.6.5 Southampton Airport's Air Quality Strategy

This strategy has been developed following a thorough air quality survey carried out by an independent assessment company, ENTEC. This study was commissioned by Southampton Airport, to understand the impacts of its business on air quality in the local area. The Air Quality Strategy covers the period from 2006 - 2010, and sets out the approach to managing local air quality, explains what has been done so far to manage airport-related air pollution, and gives details of what will be done to limit these impacts in the future.

9.6.6 At Southampton Airport, there is close liaison with the local authority, Eastleigh Borough Council, to manage air quality.

9.6.7 Air Quality Study findings

The most significant finding of the air quality study is that only 5.55% of the total pollutants (NOx) are attributable to all airport activities. The corresponding figures for NO₂ and PM₁₀ emissions are 1.64% and 0.54% respectively. The majority of pollutants in the local area come from other non-airport related road traffic. Figure 7 illustrates this further.

Percentage source contributions towards annual mean NOx concentrations at Southampton Road, Eastleigh

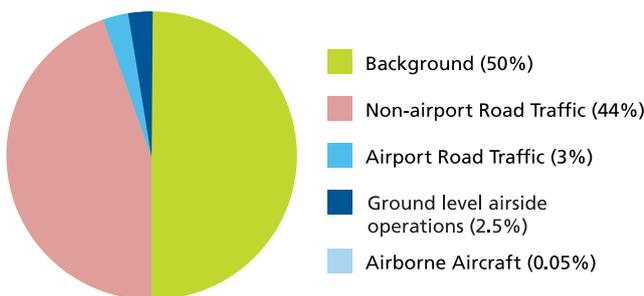


Figure 7: Sources of Nitrogen Oxides (NO_x) adjacent to Southampton Airport

9.6.8 Air quality management area

Eastleigh Borough Council has set out an action plan to tackle local impacts and designated an Air Quality Management Area, which includes the Southampton Road area.

9.6.9 Southampton Airport Air Quality Strategy

BAA's Air Quality Strategy highlights a number of action areas, which will be progressed over the period 2006-2010, these include the following:

- monitoring air quality through the local authority's independent monitors
- working with Eastleigh Borough Council and the other local authorities and government departments to make sure that Southampton Airport plays a full part in improving the local environment
- working with public transport providers to increase the number of passengers and staff getting to and from the airport by bus, coach, rail or bicycle, and thus reducing the reliance on individual cars
- staff travel plan scheme which rewards staff who use public transport and/or car share
- maximising use of technology to monitor and reduce the use of energy through a Building Management System within the airport terminal building
- a policy is in place for the renewal of BAA airside vehicles, to ensure that older vehicles are replaced by more environmentally friendly vehicles, which create fewer emissions.

The principles of the airport's strategy for managing specific aspects of air quality are highlighted as follows:

- implementation of the Airport Surface Access Strategy
- reducing airside vehicle emissions
- managing flight-related emissions.

9.6.10 Implementation of the Airport Surface Access Strategy

The Entec UK study found that although overall emissions relating to the airport were low, the largest contributory factor was passengers travelling to and from the airport in cars.

The majority of passengers using Southampton Airport live in Hampshire and the Isle of Wight. This means that public transport is a genuine option for a great number of passengers. There is also the added benefit of local people using their local airport, rather than driving on congested motorways to the major London hubs, and thus reducing emissions from longer car journeys.

The Southampton Airport Air Transport Forum, as described in Chapter 8, has reviewed a Surface Access Strategy for 2006-2011 with the aim of increasing the percentage of people using public transport to get to and from the airport for both passengers and staff.

9.6.11 Managing airside vehicle emissions

There are plans to introduce a "Clean Vehicle Scheme" at Southampton Airport, in consultation with business partners, airlines and passenger handling companies.

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Areas under consideration for this scheme include:

- a range of incentives as well as penalties for clean versus polluting vehicles that are used airside at the airport
- "spot checks" and any vehicle exceeding the agreed emission limits will be taken out of service until it complies
- all companies will be encouraged to buy more environmentally friendly vehicles when replacing older vehicles in their fleets.

9.6.12 Managing flight-related emissions

The majority of flight related emissions at airports result from aircraft when they are taxiing. Operational procedures will be continuously reviewed to proactively manage the amount of taxiing at the airport. These emissions are already very low, but further reductions will continue to be sought in the future.

In addition, the airport works closely with airlines to ensure that new aircraft fleets are more energy-efficient and have lower emissions. An example of this is the new aircraft type which is being introduced to the Flybe fleet in 2007. This new 2 engine aircraft is anticipated to create significantly fewer emissions than the 4 engine BAe 146 aircraft that it replaces, and uses 20% less fuel.

9.7 Reducing energy consumption

9.7.1 Southampton Airport engages in a range of activities to manage emissions and reduce energy consumption from airport equipment and buildings, including:-

- constant monitoring of electricity and gas usage
- replacement of existing lighting with more energy efficient systems, using up to 5 times less electricity
- the short stay car park is fitted with an "intelligent" lighting system, which adjusts according to the natural light throughout the day
- the use of an electronic Building Management System enables the airport to be heated or cooled in the most energy efficient way
- the use of thermal image analysis to help identify heat loss from buildings
- continued investigation into new energy sources including solar power, which is already used to light one of the roundabouts at the airport
- innovative design solutions will be used in new building projects to ensure energy efficiency.

9.8 Climate change

9.8.1 There is broad international scientific agreement that emissions of greenhouse gases from human activity are exceeding the earth's capacity to absorb them. This is likely to have a noticeable impact on climate, with potentially significant effects on global temperatures and weather patterns. The issue of climate change is

international and is therefore this chapter describes the actions being taken by BAA on behalf of Southampton Airport at a pan-European level.

9.8.2 BAA recognises that climate change is a significant issue and supports the leading role that the UK Government has played in relation to it. There is full recognition that any airport growth, in line with the Government's policy aims (set out in the 2003 White Paper), must go hand-in-hand with responsible environmental management.

9.8.3 The aviation industry contributes to climate change in a number of ways. It is the burning of fossil fuel in flight that is the industry's biggest contribution, but greenhouse gas emissions are also generated by the production of the energy used in airport buildings. Finally, ground emissions from airport vehicles and the vehicles used by passengers and staff also contribute. BAA has taken a proactive approach to addressing its contribution to climate change in each of these areas.

9.8.4 Aircraft and climate change

Emissions trading has been identified as the most effective mechanism to meet reductions targets, whereby industries which cannot reduce their own emissions can buy permits from industries which can, within an overall cap. Resources are directed to where cuts can be achieved most quickly and at the lowest cost. It does not matter who generates the emissions, as long as the total volume of emissions which is generated does not breach the cap.

9.8.5 BAA believes that an open emissions trading scheme represents the most economically efficient and environmentally effective way of addressing emissions from aircraft. BAA is strongly in favour of incorporating aviation into such a scheme at an international level. However, BAA recognises that this will take time, so supports regional action as an interim step.

9.8.6 As such, BAA has been a strong supporter of the UK Government's policy of including intra-EU air services in the EU Emissions Trading Scheme (ETS) from 2008, or as soon as possible thereafter. BAA also welcomes the European Commission's recent communication supporting emissions trading as the best way forward.

9.8.7 BAA has played a leading role within EU aviation in supporting aviation's inclusion in the ETS. In particular it has worked through ACI-Europe, its trade association, which represents over 450 airports in 40 countries, to build support. ACI-Europe issued two policy positions in 2005 in support of this approach.

9.8.8 BAA has also worked with airlines, aircraft manufacturers and other airports in the UK to develop the

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Sustainable Aviation strategy, published in June 2005. This includes a number of voluntary commitments by the aviation industry, including the assistance to policymakers in developing practical solutions for inclusion of aircraft CO₂ emissions in the EU ETS.

9.8.9 The long-term goal is for aviation's emissions to be mainstreamed within the global policy framework to address climate change. The International Civil Aviation Organisation (ICAO) has endorsed the development of an open emissions trading scheme including international aviation and has established an Emissions Trading Taskforce to produce guidance on this issue. BAA has been actively involved in those discussions through the international trade association, ACI World.

9.8.10 Other climate change considerations

BAA recognises that aviation's impacts on the climate are complex, and that emissions trading may not be the right solution for all of them. In addition to CO₂ there are three other impacts from aviation: Nitrogen Oxides (NO_x) in the cruise phase of a flight, the creation of condensation trails (contrails) and the potential impact of contrails on cirrus cloud. The Intergovernmental Panel on Climate Change has estimated that aviation's total climate impact resulting from these effects is 2.7 times that due to CO₂ alone. However, there is a range of uncertainty around this estimate, particularly in relation to the impact of contrails on cirrus clouds, and wide agreement that further research is needed to fully understand the nature and scale of aviation's total climate change impacts.

9.8.11 BAA acknowledges the importance of addressing aviation's other impacts. The company is committed to working with all stakeholders to discussing other possible policies to compliment emissions trading. BAA has also called on governments to establish a roadmap for addressing these impacts, with clear policy milestones.

9.9 Aircraft vortices

9.9.1 Damage arising from vortices is rare. However, Southampton Airport has a policy of investigating reports of vortices when they occur and paying for repair work once a vortex claim has been verified. The airport oversees repair work to the property, through the use of specialist roof contractors.

9.10 Waste management

9.10.1 Southampton Airport's strategy for waste is based on the three core principles of the Government's sustainable waste management strategy, "A Way with Waste". These principles are as follows:

- Best Practicable Environmental Option - the option which provides the most benefit/least damage to the environment as a whole, at acceptable cost, in the long and short term

- the waste hierarchy - reduce, reuse, recover
- the proximity principle - the disposal of waste should be as near to its place of production as possible.

9.10.2 The strategy covers a number of aspects including:

- measurement of waste tonnage
- waste management infrastructure
- communication to improve performance
- the supply chain
- a construction waste plan
- reporting.

9.10.3 Waste is generated from a number of sources at Southampton Airport, notably from aircraft arriving at and departing from the airport, catering outlets, offices, shops, construction activity and from vehicle and aircraft maintenance. Such sources generate a number of waste streams including:

- inert (soils, hardcore, concrete, glass)
- general non-putrescible (plastic)
- general putrescible (e.g. paper, cardboard, food waste, vegetable matter, trees and bushes)
- scrap metal
- electrical and electronic equipment
- hazardous waste (for instance lamps and fluorescent tubes, used oils, flammable liquids, batteries, printer toner cartridges)
- liquid waste.

9.10.4 Southampton Airport has extended its waste management procedures to other business partners and suppliers working on the site. Where appropriate suppliers are screened to ensure that they have their own stringent environmental policies in place. BAA Southampton ensures that appropriate duty of care checks are completed on waste contractors to prevent un-authorised disposal activities. These checks will also be included on property inspections to third party controlled sites to ensure that their waste streams are disposed of/treated by suitably licensed contractors. This will also include encouraging third parties to participate in current and future recycling schemes.

9.10.5 Recycling

BAA has a target to recycle 40% of total waste generated annually by 2010, there are also incremental targets within this timeframe. Southampton Airport primarily aims to reduce waste to landfill and meet the target by increasing the amount of waste that is recycled. Paper, cardboard and glass is recycled, along with printer ink cartridges and mobile phones.

9.10.6 The waste management process is currently being reviewed at the airport to evaluate all the waste streams being produced, together with the feasibility of recycling schemes to cover more types of waste. It is hoped that

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further waste can be recycled, particularly waste produced by third parties at the airport. Southampton Airport will work with third parties and waste contractors in the future, to ensure that viable waste is recycled as sustainably as possible.

9.11 Management of the water environment

9.11.1 Southampton Airport currently have water meters installed to measure water consumption. Water usage and facilities will be reviewed to ascertain where water can be saved to reduce consumption. The utilisation of schemes to harness the rainwater such as "grey" water systems will also be considered with the aim to help reduce and manage the consumption of clean (potable) drinking water used at the airport.

9.11.2 Within the context of the Water Framework Directive, the term 'water environment' refers to all aspects of natural water courses and ground water, covering such matters as the physical characteristics and the chemical and biological quality for the water they contain.

9.11.3 The volume of water discharged into local water courses is governed by rainfall and the nature of the surface on which it falls. Southampton Airport is located on a good quality gravel aquifer lying immediately under a relatively impermeable surface layer. Rainfall gradually sinks into the soil, recharging the ground water which ultimately percolates slowly into rivers and streams. Southampton Airport's drainage system incorporates a number of soakaway drains that are protected by oil interceptors and actuated penstocks. A penstock is a collection chamber immediately prior to the soakaway drain and includes a closable valve to prevent effluent entering the soakaway before it is tested for specific contaminants. The water retained behind the penstocks is tested prior to release and records are retained by the airport.

9.11.4 There are two main sources of waste water at Southampton Airport: waste water which originates from the use of the facilities (catering and toilets, for example) and waste water that results from rainwater running away from the site. There are two main types of drainage at the airport designed to cater for these sources. 'foul drainage', or sewage, receives the waste water from the toilets and other facilities at the airport. Meanwhile surface water drainage receives the rainwater run-off.

9.11.5 Water pollution control

Many of the activities conducted on the site that could lead to the release of pollutants into the water environment (e.g. vehicle washing, aircraft washing, aircraft de-icing etc.) are restricted to dedicated areas where the effluent is diverted to the foul drainage system. However it is recognised that some activities could result in accidental spills, so there are procedures to ensure that such accidental spillages do not enter the groundwater.

A regular water testing regime is also in place to ensure that water quality is monitored. Comprehensive drainage plans have been produced and further protection measures will be implemented as necessary in consultation with the Environment Agency.

9.11.6 During the winter months, the runway and taxiway systems need to be kept free from ice and snow to ensure a high level of aviation safety. This is achieved by using a de-icing chemical, where necessary, that can clear and prevent the build-up of ice on these surfaces whilst at the same time have minimal effect on the water environment.

9.11.7 Fire Service training activities also produce effluents and these are fully contained in a storage tank to prevent any leaching in to the water environment. This effluent is removed from the site by specialist waste contractors. Operating procedures are in place and carefully monitored to ensure that all effluent resulting from these activities is diverted to the storage system.

9.11.8 An increase in the scale of activities at Southampton Airport would result in the increase of waste water production from some of the welfare-related and aviation-related activities. These activities discharge to the foul drainage system and thus the capacity of the drainage system will be evaluated and improved where necessary. It is not envisaged that the type and mix of the effluent will change significantly, but an evaluation of the potential changes will be reviewed at the appropriate time to ensure that the most up to date and accurate information is used in the evaluation.

9.11.9 As with the foul drainage system, the capacity of the infrastructure would be reviewed to determine its continued effectiveness as the scale of activity increased. Southampton Airport will continue its liaison with the Environment Agency to ensure that its mitigation measures remain appropriate. Consideration will be given to the viability of de-icing/water recycling schemes and rainwater harvesting to see whether they could be economically implemented at the airport.

9.12 Biodiversity and landscaping

9.12.1 Biodiversity and landscaping are particularly important issues for Southampton Airport because it borders a Site of Special Scientific Interest (SSSI). Southampton Airport has a 'Strategy for Managing Airport Landscaping Impacts on Biodiversity', hereafter referred to as the Landscape Strategy, which takes into consideration Hampshire County Council and Eastleigh Borough Council's Local Biodiversity Action Plans. Both councils' plans support the UK Biodiversity Programme, and have two broad functions:

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- To ensure that national action plans are translated into effective action at local level
- To establish targets and action for species and habitats characteristic of each local area.

9.12.2 The overall aim of Southampton Airport's Landscape Strategy is to adopt a stance that is sympathetic to the ecology of the surrounding area, including, wherever practicable, the preservation of the undisturbed nature of the habitat within the SSSI designated zone.

9.12.3 Southampton Airport shares its eastern boundary with the Itchen Valley Country Park. The Country Park includes the River Itchen, which is a designated 'Site of Special Scientific Interest' (SSSI) due to the pristine chalk stream habitat supported by the river. For this reason the airport has agreed to voluntarily set aside an area of land to form a buffer zone between its operational area and the SSSI. The buffer zone is intended as a natural break area between the airport and the surrounding habitats, and contains an array of wild plants and insects that complement the adjoining SSSI habitat.

9.12.4 During 2003/04, the airport commissioned a 'Phase 1 Habitat Survey' of this land. This survey recorded and categorised habitat types over large areas of the airport land. The aim was to provide a greater depth of understanding of the biodiversity in the area. This study was further supplemented with an additional survey undertaken during 2004/05 to include new land acquired by the airport. The data contained within the survey has been used to inform the airport's Landscape Strategy. Should habitats be identified within the future development area, an ecological strategy will be developed in partnership with English Nature and the Environment Agency.

9.12.5 The airport intends to repeat the survey at regular intervals to ensure that the operation is not having any impact on the buffer zone, and to investigate and take action should any changes be found. A register of conservation sites within the local area will be implemented and updated as necessary together with further control measures which are required.

9.12.6 For reasons of aviation safety, deterring birds from the airfield is an important landscaping consideration. The airport has a number of measures in place to keep birds away from the airfield. These include landscape and habitat management to make the airport unattractive to hazardous birds, alongside active dispersal using, digital distress calls and bird scaring cartridges. Bird activity is monitored continuously during operational hours to ensure that these measures remain effective.

9.13 Landscape strategy

9.13.1 In addition to the measures in place to safeguard

the buffer zone, a number of managerial controls exist to control the impact of the airport's operation on the surrounding biodiversity. These are set out in Southampton Airport's Landscape Strategy as follows:

9.13.2 Grass Management Policy

The airport adopts the CAA requirements for long grass and ensures that it is managed in such a way as not to attract birds or wildlife that can cause a safety risk to aircraft operations.

9.13.3 Developed land

The area of developed land comprises of all landside areas along the western side of the airport and goes round to include the long term car park to the north and the M27 to the south. Here the landscaping has been largely inherited from the airport development project of the mid 1990's. Future landscaping will strive to blend in indigenous species of vegetation where this does not compromise the visual effect of the landscaping or attract birds or wildlife that can cause a safety risk. The species planted will attempt to divert such wildlife away from the operational areas of the airfield.

9.13.4 No hazardous pesticides or herbicides are used where their release to the environment could be deemed to cause irreparable damage to water courses or natural habitats. No Red List substances (a classification of toxic substance identified as potentially harmful to aquatic life) are used in any chemicals applied on airport land. Contractors are employed by Southampton Airport to undertake the landscaping for this area and adopt recommended procedures for the management of chemicals whilst on site.

9.13.5 Southampton Airport will continue to liaise with Eastleigh Borough Council and the Itchen Valley Country Park management team, to ensure that its Landscape Strategy remains appropriate for the continued well being of the SSSI. Any future development would also take into consideration the enjoyment of users of the Itchen Valley Country Park, by insuring that the landscaping is suitable to this area. There are a number of conservation sites in the local Southampton area including SSSI's, Special Areas of Conservation (SPA), Special Areas of Conservation (SAC), Ramsar sites, and Local Nature Reserves. Consultation with English Nature will be undertaken as appropriate when development plans are formalised.

9.14 Sustainability at Southampton

9.14.1 BAA support the work of the organisation "Sustainable Aviation" and helped develop "A Strategy towards Sustainable Development of UK Aviation". Further details of which can be found at

● www.sustainableaviation.org.uk. BAA was also a member of the Sustainable Procurement Taskforce.

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9.14.2 A Sustainability Board has been set-up to ensure that sustainability is an integral part of the operation of the airport. This board has a number of key objectives including:

- the implementation and review of the sustainability strategy
- the review of environmental targets and key performance indicators (KPI's)
- to ensure sustainable developments and improvements are being delivered
- to ensure environmental compliance and best practice in line with BAA Policy
- to draw together actions and improvements throughout each function of the airport
- to act as a forum for areas of improvement and development including exploring environmentally sustainable schemes and best practice.

9.14.3 Many of the existing suppliers and contractors at the airport embrace sustainability and environmentally-friendly business practice within their company policy. An example of this is the company who supplies cleaning products and detergents to the airport. In the future Southampton Airport aims to develop and evaluate new and existing suppliers and contractors to promote and increase sustainable business practice.

9.15 Construction and development

9.15.1 Construction and development activities at airports present potential environmental risk. Southampton currently undertakes a 3-stage environmental impact assessment throughout the development and delivery stage of projects. This process is designed to mitigate the risk to the environment and identify specific project areas which would require further control measures to be implemented. These measures could include controls such as liaison with the Environment Agency for a land drainage consent for works liable to affect watercourses or through consultation with English Nature to notify operations likely to affect a Site of Special Scientific Interest (SSSI) such as the River Itchen which borders the airport. New development projects could involve anything from a new baggage handling system through to new taxi-way infrastructure. An assessment of the environmental footprint of relevant developments is also undertaken, which include issues such as energy and water consumption.

9.15.2 There are also a number of local controls such as permits to work which have to be issued for undertaking certain activities in the airport environment which have health, safety or environmental risks. These permits offer specific controls to prevent damage to the environment.

9.15.3 Environmentally sensitive materials such as sustainable timber supplies, accredited by the Forest Stewardship Council (FSC), are used where practical to do

so. A system to increase the environmental awareness and sustainable building practices, such as energy efficiency is being developed to influence projects at the development stage and evaluate the viability of such schemes for each proposed development project.

10 Public Consultation

10.1 Introduction

10.1.1 The Government's 2003 White Paper stated that airports do not develop in isolation and should seek to involve local stakeholders during the preparation of the final master plan. This chapter sets out the measures taken by Southampton Airport to ensure the outline master plan was appropriately communicated and consulted upon with its local stakeholders and sets out the next steps for the master plan.

10.2 The public consultation process

10.2.1 Southampton Airport launched a thorough and wide-ranging public consultation process lasting over 3 months, exceeding the guidelines laid down by the Government. The outline master plan was launched on 14th July 2005. Key stakeholders received individual or group briefings in a variety of ways. Presentations and open days were also held to discuss the content and next steps of the outline master plan. Stakeholders included Government agencies, local MPs, airlines, local councils, media, staff, local residents and other organisations. The outline master plan provided an opportunity for Southampton Airport to communicate the plans to local stakeholders, so that organisations could take account of the airport's aspirations when considering their own future plans.

10.2.2 A telephone hotline was provided to receive feedback and answer questions. The outline master plan was available on the website

➔ www.southamptonairport.com/masterplan, and printed copies were sent to key stakeholders and were available to the general public on request.

10.2.3 Written feedback was encouraged by both post as well as by email to a dedicated email address (southampton_masterplan@baa.com).

10.3 Responses

10.3.1 In total Southampton Airport received over 800 responses between 14th July and 31st October 2005. Each response received an individual acknowledgement. In summary:

- 773 responses were received from 698 stakeholder groups and individuals.
- 82 responses received were anonymous
- a further 13 responses were received after the close of the public consultation period
- 60 responses of the total 773 were from stakeholders comprising of elected representatives, Government organisations, regional bodies/agencies and companies. A full list of these stakeholders is shown in Appendix V.

10.4 Summary of public consultation feedback

10.4.1 In a wide ranging public consultation there were naturally a variety of individual comments. There was a broad recognition of the economic and social benefits that the airport brings to the region, and its excellent location, close to motorways and the railway. In addition, there were four themes that were identified as being important considerations in relation to the airport's future development, as follows:-

10.4.2 Aircraft noise

The impact of the growing business and specifically aircraft noise in the local community is a focus for Southampton Airport and its stakeholders. Southampton Airport has developed a noise strategy to reflect feedback received in the public consultation, and further details are available in Chapter 9. It is important to stress that Southampton Airport does not propose to seek any relaxation in the current permitted hours of operation of the airport. The current closure of the airport at night remains unchanged.

10.4.3 Air quality

A detailed study of local air quality impacts has concluded that Southampton Airport is a very small contributor to pollution in the area. However, this is still recognised as an area of continuing importance for Southampton Airport and its stakeholders, and a full air quality strategy has been produced. This sets out ways in which the airport intends to manage its impacts upon the local environment. Further details are available in Chapter 9.

10.4.4 Climate change

Aviation's contribution to global warming relative to other economic sectors is currently small. However, this relative contribution is forecast to rise as the demand for air travel grows, and other sectors achieve cuts in their greenhouse gas emissions. It is believed that this important worldwide issue demands industry wide action, as aviation's impacts occur principally when aircraft are flying at altitude between airports. Southampton Airport and a number of the airlines operating at Southampton Airport are signatories to the cross industry Sustainable Aviation Strategy, which commits to limiting aviation's contribution to global warming. As part of this BAA fully supports, and is lobbying for, the inclusion of the aviation industry within the EU Emissions Trading Scheme by 2008. The Air Quality Strategy also identifies how the airports aim to minimise greenhouse gas emissions through energy saving, and the use of renewable energy sources.

10.4.5 Surface access

The way in which Southampton Airport can be accessed, whether by train, bus, taxi or private car, was another key

10 Public Consultation

theme raised during the public consultation. The location of Southampton Airport, next to two motorways, with a dedicated railway station and excellent bus links, was widely acknowledged as a major benefit. Looking forward, there was specific interest in the timing of the Chickenhall Lane Link Road development, and the airport is working closely with Hampshire County Council and other parties on how this piece of public infrastructure can best be delivered. Further details of the Surface Access Strategy can be found in Chapter 8. This strategy includes feedback from the public consultation about encouraging the use of public transport by passengers and staff.

10.5 Other issues raised during the public consultation

10.5.1 Table 13 lists other issues that were raised on fewer occasions during the public consultation, but nevertheless were of concern to some respondents. Each issue has been discussed in the master plan, in the identified chapters.

Table 13: Other issues raised during the public consultation

Issues raised	Our way forward
Southampton Airport's role in bringing competitors and spectators to the 2012 Olympics	Yes, it is hoped that Southampton Airport will play a supporting role for the transport arrangements of the 2012 Olympics. Detailed travel planning for the event is underway by a number of official organising bodies.
Proximity of Bitterne Park School to the airport, and its effect upon the education of the pupils	The pupils can hear the aircraft at Bitterne Park School, but there is no evidence to suggest that this has had an adverse affect on the educational results. Indeed, over the last few years the educational results of the school have improved year on year. Southampton Airport has developed a strategic partnership with Bitterne Park School, which is now in its third year. Further details on this can be found in Chapter 2.
The need to reduce the number of car journeys from the Hampshire region to Heathrow and Gatwick	Southampton Airport will continue to play a key role in reducing the amount of cars travelling from Hampshire on congested motorways to Heathrow and Gatwick. In 2005, Flybe estimated that it saved 17 million car miles per year in this way.
The need for more business passengers than leisure passengers	Southampton Airport serves a mixture of business and leisure routes and this is likely to continue in the future. This is important for two reasons:- 1. To offer choice for people living in the region 2. To provide a profitable mix of routes for airlines An example of this is where some airlines operate to business destinations at morning and evening peak demand times, whilst operating to leisure destinations in the middle of the day.
Safety standards as the airport grows	Southampton Airport currently operates under strict regulations regarding aircraft safety. These regulations are set and monitored by the Civil Aviation Authority (CAA). Southampton Airport's permission to operate is granted by the CAA, and is conditional upon satisfying strict safety criteria.

10 Public Consultation

Issues raised	Our way forward
The accuracy of passenger forecasts 2015 and 2030	<p>The passenger forecasts have been produced using an econometric framework to establish the relationship between growth in demand for air travel, key economic drivers and other important external factors that influence demand.</p> <p>Southampton Airport acknowledges that there is always a degree of uncertainty with any forecasts, and further information about the methodology used is provided in Chapter 5.</p>
Scenario 1 versus Scenario 2, for the future location of a new terminal	<p>Some respondents expressed a preference for growing the airport based around the current terminal, whilst others showed no preference at all.</p> <p>In this master plan, Southampton Airport has decided to keep both options open for development beyond 2015, until further detailed planning has been carried out. For further information see Chapters 6 and 7.</p>
Date of assumed completion of the Chickenhall Lane Link Road (2010 in outline master plan)	<p>In the outline master plan, the assumed date of completion of the Chickenhall Lane Link Road was 2010. This was felt to be optimistic by a number of respondents.</p> <p>In this master plan BAA has assumed delivery of this infrastructure between 2010 - 2015.</p>
The need for rail links to the East of the airport	<p>Southampton Airport will work with train operators to identify new services that are needed and encourage further use of public transport. It will also look at the possibility of coach links to the east, such as Portsmouth.</p>
Protection of wildlife and biodiversity close to the airport	<p>The master plan has been updated to include more details of how the airport plans to minimise its impact upon the wildlife and biodiversity. More details can be found in Chapter 9.</p>
Protection of water quality close to the airport	<p>Detailed drainage and hydro geologic assessments would be produced for the future major developments if appropriate. Further details can be found in Chapter 9.</p>
Runway alignment possibilities	<p>A number of suggestions were made about changing the alignment of the runway, so that flights would avoid certain parts of the community. BAA Southampton does not propose to change the runway alignment. There are major restrictions in the 106 Flying Controls Agreement in relation to the runway length and alignment.</p>
Tax (Air Passenger Duty and aviation fuel)	<p>In 1994 the UK Government instigated the Air Passenger Duty, a tax designed to make aviation contribute its share to the exchequer. Levying tax on aviation fuel is difficult because of a long standing international agreement. It was therefore decided that a tax would be introduced for each passenger who took off from a UK airport. The charge varies according to whether the destination is within or beyond the EU, and the rate increases for premium fare travellers. Air Passenger Duty ranges from £5 per passenger for the European charge, to £40 per passenger for the premium worldwide charge.</p> <p>Currently, aviation receives virtually no subsidy or concessions from the Government. Of the £180 billion of public transport expenditure outlined in the Government's ten-year plan, none is destined for aviation. Aviation is the only form of public transport which pays for its own infrastructure and operations. BAA asks that there be a level playing field in the treatment of public transport including aviation.</p>
Communication with local communities	<p>There was a general desire for the local community to be kept up to date with developments at Southampton Airport. BAA has a commitment to its neighbours to be open and honest and listen to their concerns. This will continue in the future. The Southampton Airport Consultative Committee is also established to enable interested parties to exchange information and ideas, to raise concerns and resolve issues and complement the legal framework within which the airport operates.</p>

10 Public Consultation

Issues raised	Our way forward
Vortex damage	<p>Damage arising from vortices is rare. However, Southampton Airport has a policy of investigating reports of vortices when they occur and paying for repair work once a vortex claim has been verified.</p> <p>The airport oversees repair work to the property using specialist roofing contractors.</p>
Are the property prices negatively affected near the airport?	<p>There is no evidence to suggest that property prices are negatively affected near the airport. In fact, in a residential research survey carried out by Knight Frank in 2006, house prices in Southampton and Portsmouth are forecast to experience the strongest price rises in the south over the coming years. In this survey, Southampton Airport is seen as a key driver in the resurgence of the south coast and has a positive impact on the local economy.</p>
Jettisoning fuel	<p>In the feedback there were questions about aircraft jettisoning fuel (or fuel dumping) near Southampton Airport, in emergency situations. This is a rare occurrence at any airport, and at Southampton the majority of aircraft do not have the equipment to jettison fuel.</p>
Noise related landing charges	<p>Southampton Airport will consider, in full consultation with its airline partners, the potential to introduce a differentiated aircraft charging system to continue to encourage quieter aircraft types.</p>
Noise monitors	<p>Southampton Airport will be investing in mobile noise monitoring equipment in 2007, which will be deployed to gather data about noise impacts in areas adjacent to the airport. The locations of the monitors have yet to be determined and will be decided in conjunction with the Southampton Airport Consultative Committee and The Technical Working Group.</p>
Noise contours	<p>Noise contours have been produced for 2005 and 2015, by independent consultants ERCD. These have been published in the master plan in drawings six and seven.</p>

10.6 Where now? - The next steps

10.6.1 The Government has made it clear that the principal aim of the master plan is to inform, and be informed by, the regional and local planning processes.

10.6.2 Southampton Airport's master plan is its vision for the future

It is important to stress that the master plan has been produced at the request of the Government in response to the White Paper in 2003. Planning approval for future developments will be required in the standard way, through applying to Eastleigh Borough Council as the airport's local planning authority. This master plan is not a request for planning approval, but is the airport's vision of the future. However, as the airport develops over the next 25 years, planning applications will be accompanied by the necessary supporting documentation and appropriate environmental studies.

10.6.3 Review after 5 years

The master plan will be reviewed every five years to ensure that it remains relevant and appropriate.

11 List of drawings

- **Drawing 1:** Land ownership plan
- **Drawing 2:** 2006 land use
- **Drawing 3:** 2015 indicative land use
- **Drawing 4:** 2030 indicative land use - Scenario 1
- **Drawing 5:** 2030 indicative land use - Scenario 2
- **Drawing 6:** 2005 Air noise contours
- **Drawing 7:** 2015 Air noise contours

Appendix I - Glossary of terms

The following glossary explains the airport-specific terminology contained within the master plan:

Aerodrome: Any area of land or water designed, equipped, set apart or commonly used for affording facilities for the landing and departure of aircraft.

Aircraft stand: A designated area on an aerodrome intended to be used for parking an aircraft.

Airside: Part of the airport inside the posted security boundary, to which entry by members of the public is restricted.

Apron area: The area where aircraft are parked, allowing for the embarkation and disembarkation of passengers or the loading and unloading of cargo and include any associated aircraft stand taxiways.

Chapter 2/3 aircraft: Much of the International Civil Aviation Organisations (ICAO) work over the past 30 years has been aimed at reducing aircraft noise at source. Aircraft and helicopters built today are required to meet the noise certification standards adopted by the council of ICAO. These are contained in annex 16 - Environmental Protection. The initial standards for jet aircraft were included in chapter 2 of annex 16. Subsequently newer aircraft were required to meet stricter standards contained in Chapter 3.

Chapter 4 aircraft: Chapter 4 is a stricter standard for aircraft noise than Chapter 3, and was adopted by ICAO in 2001.

dB(A): This is a measure of noise, commonly used in road and aircraft noise analyses

ETS: Emissions Trading Scheme

Hub: A centre of transport activity

Landside: Area of the airport which is not airside, encompassing passenger facilities.

Leq: The Leq is an energy mean of the noise level averaged over the measurement period and often regarded as an average level.

NOx: Nitrogen Oxides

S.S.S.I.: Site of Special Scientific Interest.

Stakeholder: Any individual or member of a group with an interest in the activities of Southampton Airport and on whom the airport's operation will have an impact, for example: government, airlines, staff, local community and passengers.

Surface access: The means by which the airport can be reached, for example road or rail.

Taxi (verb): Movement of an aircraft from stand to runway, or runway to stand.

Taxiway: A defined path on an aerodrome established for the taxiing of aircraft and intended to provide link between one part of the aerodrome and another. For the purposes of this master plan it excludes and taxiways associated with and directly adjacent aircraft stands. These have been included within the apron area.

Appendix II - Community Involvement Policy

Southampton Airport's commitment to community involvement involves the following pledges:

- Six days paid leave per year for every employee to participate in local volunteering
- An annual BAA-wide awards ceremony, the 'I-Volunteer Awards', which recognises employees for their volunteering achievements
- Sponsorship of the UK's most comprehensive database of volunteering opportunities (www.doit.org) through BAA, which is accessible to everyone via www.youthnet.co.uk
- Funding for local community projects from the BAA Communities Trust
- Two strategic partnerships with local secondary schools, based close to the airport (Bitterne Park School in Southampton and Quilley School of Engineering in Eastleigh). Key elements of these partnerships are skill sharing and enabling pupils to prepare themselves for the world of work
- Annual work experience placements, giving pupils the opportunity to join different departments across the airport for a two-week period
- Careers advice to local sixth form colleges provided by Southampton Airport's Human Resources team
- The involvement of staff as school governors in local primary and secondary schools and sixth form colleges
- A commitment to communicate regularly and openly with the local community. Southampton Airport holds a twice yearly 'Community & Stakeholder Conference' which focuses on issues of particular community concern and explains the actions the airport is taking to mitigate its impacts. Invited delegates include elected representatives of the local community, including MPs, local councils and parish councils, who are encouraged to keep their constituents informed of any developments.

Appendix III: Projects and charities supported by Southampton Airport in 2005

Project	Activities
Bitterne Park School	Southampton Airport supported Bitterne Park School, as part of its strategic partnership, aimed at sharing expertise and resources to help staff and students. The Communications Director was a Governor of this school.
Jubilee Sailing Trust	Southampton Airport sponsored 4 local people with physical disabilities and 4 airport staff, to participate in a week long mixed ability tall ship sailing voyage. The Communications Director was also a trustee of this charity.
The Sophie Barringer Trust	The Sophie Barringer Trust was supported through a number of fundraising events during 2005. Sophie was the daughter of a member of airport staff and she died in 2004 following cancer of the kidney.
Juvenile Diabetes Research Foundation	A team of 61 airport staff took part in the 'Walk for Juvenile Diabetes' and raised money at staff events.
Children in Need	The Southampton Airport team were involved in fundraising for Children in Need.
Burns Unit Support Group	The Airport Fire Service played an active role in supporting and fundraising for Salisbury Burns Unit.
Barnardos	Airport staff played an active role in fundraising for Barnardos, and a member of staff was on the fundraising committee.
Make a Wish Foundation	Airport staff volunteered to organise and participate in fundraising events. This charity was also chosen as Flybe's official charity.
Breast Cancer Awareness	Airport staff supported 'Wear it Pink Day' with fundraising activities in the airport terminal.
1391 Romsey Squadron Air Training Corps	A member of airport staff volunteered to give training for 13-18 yr olds in aviation related subjects.
1216 Eastleigh Squadron Air Training Corps	A member of airport staff volunteered to give training for 13-18 yr olds in aviation related subjects.
Bitterne Manor Community Association	A member of airport staff volunteered to support community facilities in Bitterne Manor.
British Heart Foundation	A member of airport staff helped raise funds for the British Heart Foundation.
Volunteer Reading Help (Hampshire)	Airport staff volunteered to read to 9-11 yrs olds at Norwood Primary School, in Eastleigh.
Bitterne Park Infant School	The Customer Service Director was a Governor of Bitterne Park Infant School.
Bitterne Manor Primary School	A member of staff was the Chair of Governors for Bitterne Manor Primary School.
Quilley School of Engineering	A member of staff was a Governor of Quilley School of Engineering.
Eastleigh College	The Finance and Property Director was a Governor of Eastleigh College.
Business Southampton	Southampton Airport staff play an active role in this organisation.
Hampshire Economic Partnership	Southampton Airport staff play an active role in this organisation.
Business in the Community	The Managing Director is a member of the Business Leader's Group of this organisation.
Southampton & Fareham Chamber of Commerce & Industry	The Managing Director of Southampton Airport is a member of the board of the Chamber of Commerce and Industry.

Appendix IV - Summary of Flying Controls Agreement

The agreement contains restrictions and obligations relating to the following aspects of operational activity at Southampton Airport and became effective on the 1 January 1993.

Runway length and alignment

The construction of a second runway is precluded as is any extension to the present runway. The alignment must be no more than 5 from the present alignment.

Night-time closure

Night hours are defined as 23:00 - 06:00 hours each night and 23:00 hours on Saturday to 07:30 hours Sunday when the airport is closed, apart from the limited exceptions stated below. Aircraft movements during the night are limited to a maximum of 10 in a calendar month and 100 in a calendar year. These restrictions do not apply in respect of certain delayed aircraft movements where the delay arises from defects or from weather conditions. Emergencies at the airport, at the aircraft's point of departure or at its planned destination are also exempt. Helicopter movements are completely banned during night hours.

Types of aircraft

Certain specified large and noisy aircraft which do not meet the standards of ICAO Annex 16 Chapter 3 or FAA FAR Part 36 Stage 3 are not permitted at the airport. Aircraft powered by Rolls Royce Viper jet engines are also not permitted.

Flying training

Between 1 January 1993 and 1 January 1998, the number of permitted movements associated with aircraft training was progressively reduced to less than 10, 400 in a year. Training flights by jet aircraft and helicopters are only allowed in relation to air crew familiarisation with the airport.

Helicopter operations

The number of helicopter movements is very restricted and is not allowed to exceed 7,500 movements in any calendar year.

Ground running of aircraft engines

No engine testing can take place between 21:00 and 08:00 hours or on a Sunday or Bank Holidays. A test should not exceed 1 hour in any day or 3 hours in any week. The location is restricted to areas away from residential properties.

Aircraft vortices

A strategy has been prepared in consultation with Eastleigh Borough Council for the investigation of reports of damage or injury caused by aircraft vortices and for the provision and compensation where appropriate.

The monitoring of activity

The airport must prepare and submit to Eastleigh Borough Council and the Airport Consultative Committee a three monthly return of all aircraft movements including aircraft type, number of training movements, number of movement during night hours and circumstances of any emergency activities or delayed movements. Similarly a return must be made for engine ground running. An annual assessment of changes to the aircraft noise environment around the airport must also be submitted.

The preferred routing of aircraft

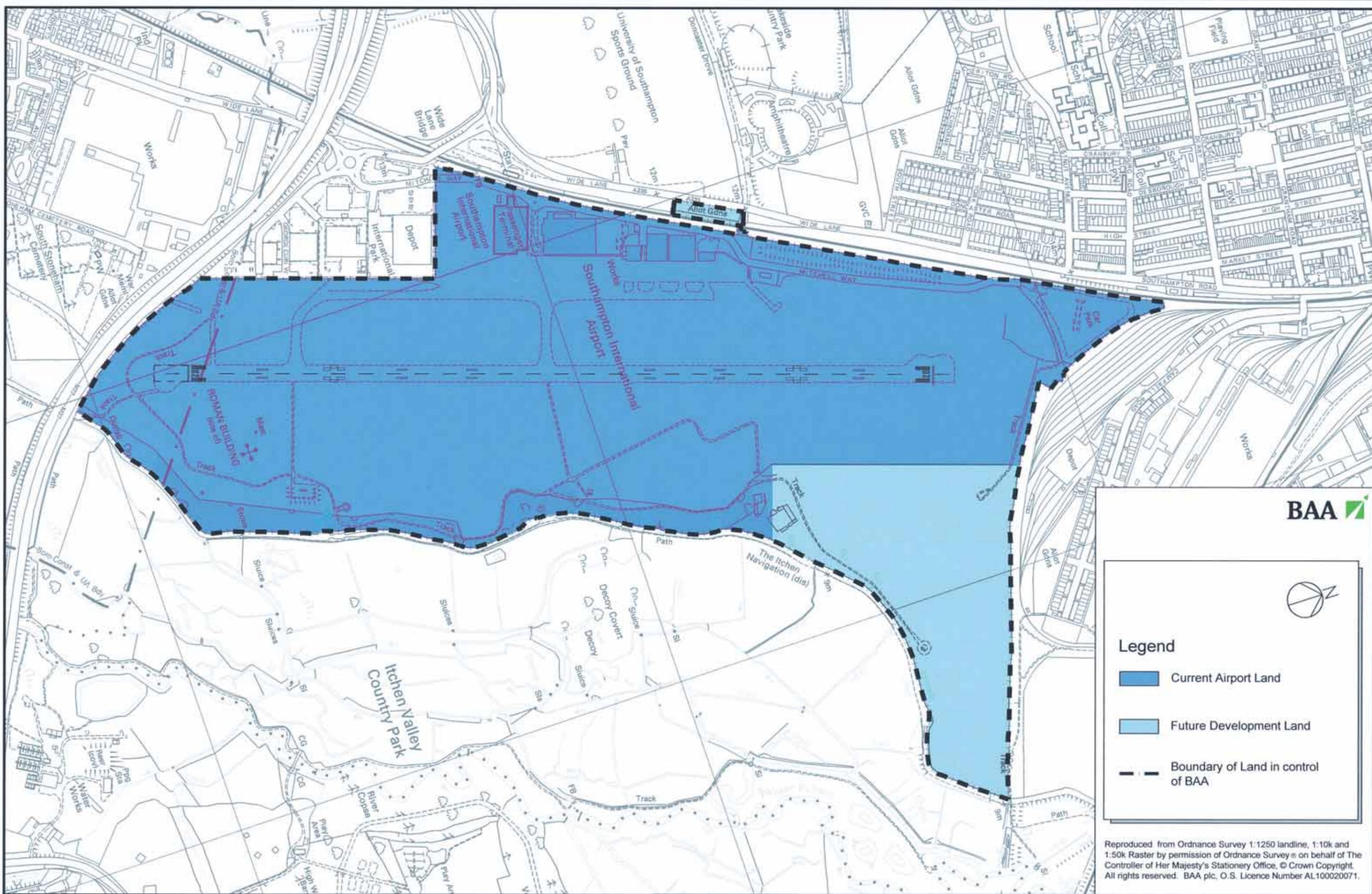
The airport must consult with Eastleigh Borough Council to identify aircraft routes which create the least nuisance to the occupiers of residential property. The airport is to ensure, as far as is reasonably possible, that aircraft using the airport use the preferred routes.

Air quality

The airport must submit to Eastleigh Borough Council a study of key air pollutants arising from aircraft operations at the airport. A subsequent study must be prepared when aircraft movements exceed 180, 000 per annum or when there is a throughput of 1.3 million passengers a year. If air pollution levels give rise to any cause for concern then negotiation is to take place on remedies for the situation.

Appendix V - Stakeholder respondees to the public consultation (excluding individual responses)

- A36/A350 Corridor Alliance
- Adams Morey
- Airport Pressure Group
- Blake Laphorn Linnell
- Bond Pearce
- Campaign to Protect Rural England (CPRE)
- Caroline Lucas, MEP
- Clarke Willmott
- Concorde Club & Hotel
- Confederation of British Industry (CBI)
- Eastleigh Borough Council, including individual responses from councillors
- English Nature
- Environment Agency
- European Regions Airline Association (ERAA)
- Excellent Connections Ltd
- Flybe
- Hampshire Constabulary
- Hampshire County Council, including individual responses from councillors
- Hampshire Economic Partnership
- Headbourne Worthy Parish Council
- Highways Agency
- Hilton Southampton
- Hythe & Dibden Parish Council
- John Denham, MP for Southampton Itchen
- KPMG
- Members of the Southampton Airport Consultative Committee
- New Forest District Council
- New Forest Friends of the Earth
- New Forest National Park Authority
- OceanAir Cargo
- Otterbourne Parish Council
- Owslebury Parish Council
- Portsmouth City Council
- Red Funnel Group
- RF Webb & Son
- Roderick Hall Associates
- ScotAirways
- South East of England Development Agency (SEEDA)
- South East of England Regional Assembly (SEERA)
- Southampton and Fareham Chamber of Commerce and Industry
- Southampton Airport Consultative Committee
- Southampton City Council, including individual responses from councillors
- Southwick & Widley Parish Council
- Sterling Travel Management
- Test Valley Borough Council
- Test Valley Friends of the Earth
- TKL Architects LLP
- Tourism South East
- Townhill Park Residents Association
- University of Southampton
- Upham Parish Councillors
- Williams Shipping Holdings Ltd
- Winchester City Council, including individual responses from councillors
- Winchester City Residents Association



BAA

Legend

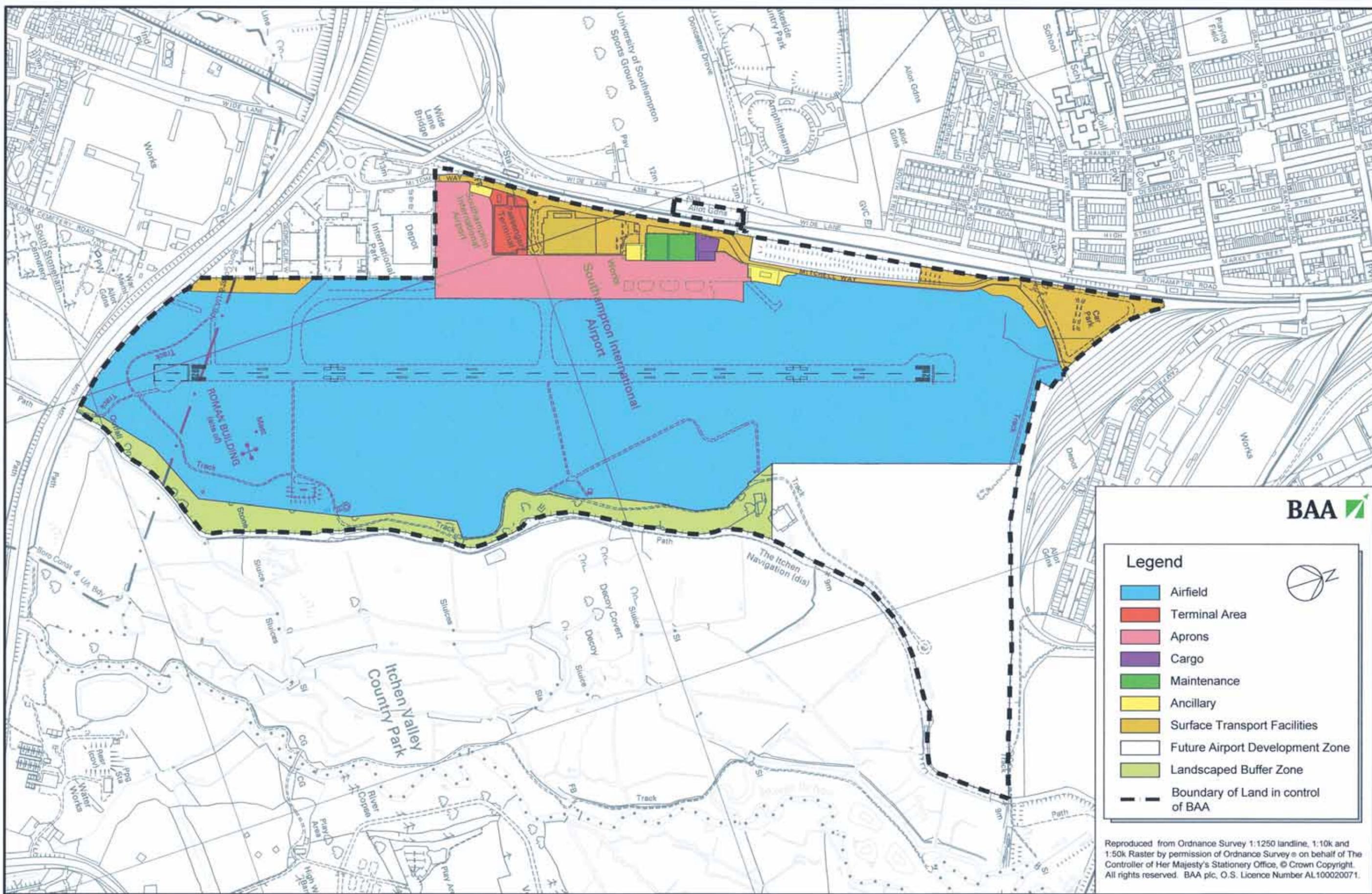
- Current Airport Land
- Future Development Land
- Boundary of Land in control of BAA

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Southampton Airport Master Plan - 2006

Scale 1:7500

2006 Land Ownership Drawing No 1



Legend

- Airfield
- Terminal Area
- Aprons
- Cargo
- Maintenance
- Ancillary
- Surface Transport Facilities
- Future Airport Development Zone
- Landscaped Buffer Zone
- Boundary of Land in control of BAA

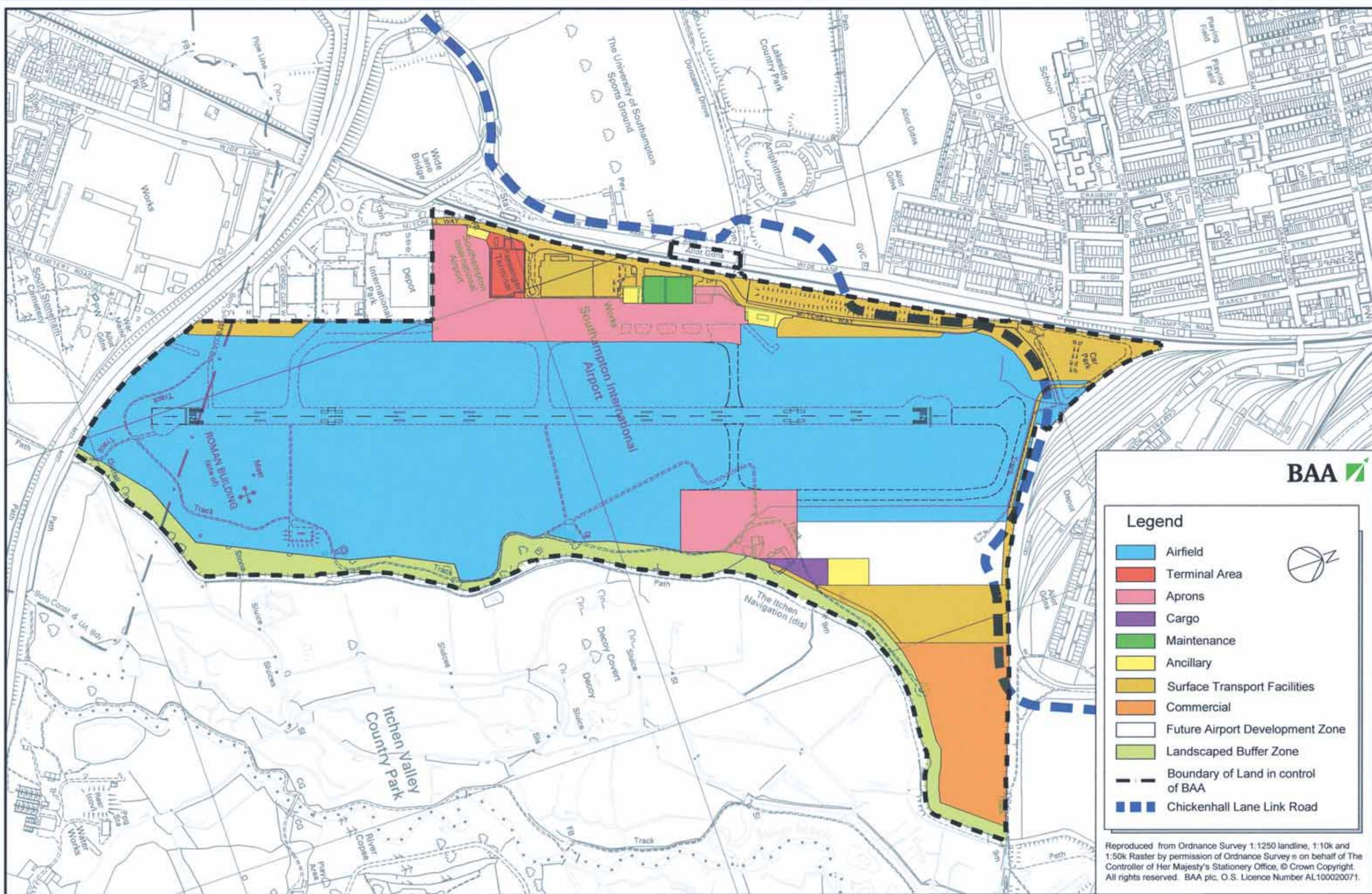


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Southampton Airport Master Plan - 2006

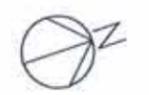
Scale 1:7500

2006 Land Use Drawing No 2



Legend

- Airfield
- Terminal Area
- Aprons
- Cargo
- Maintenance
- Ancillary
- Surface Transport Facilities
- Commercial
- Future Airport Development Zone
- Landscaped Buffer Zone
- Boundary of Land in control of BAA
- Chickenhall Lane Link Road

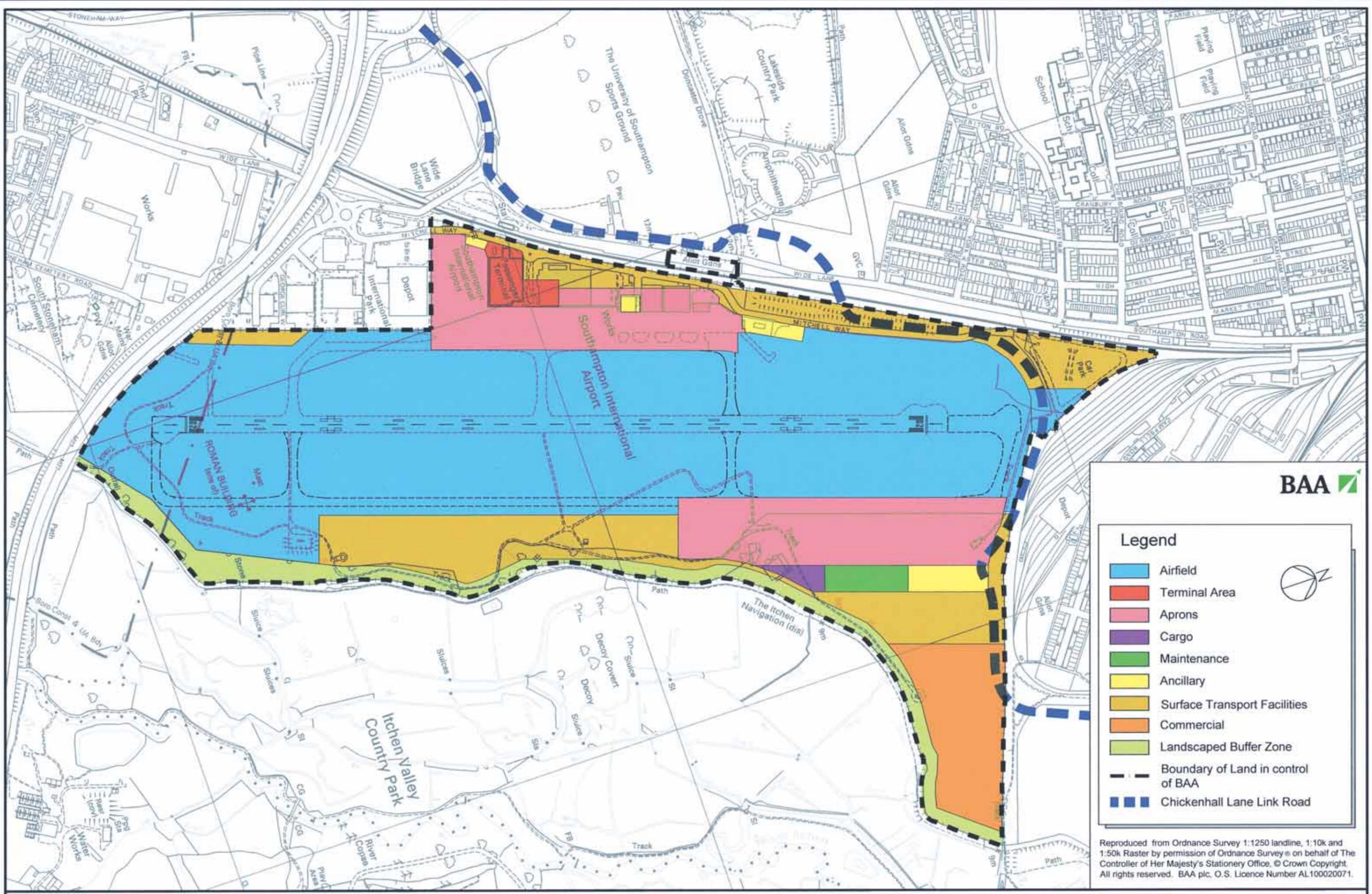


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Southampton Airport Master Plan - 2006

2015 Indicative Land Use Drawing No 3

Scale 1:7500

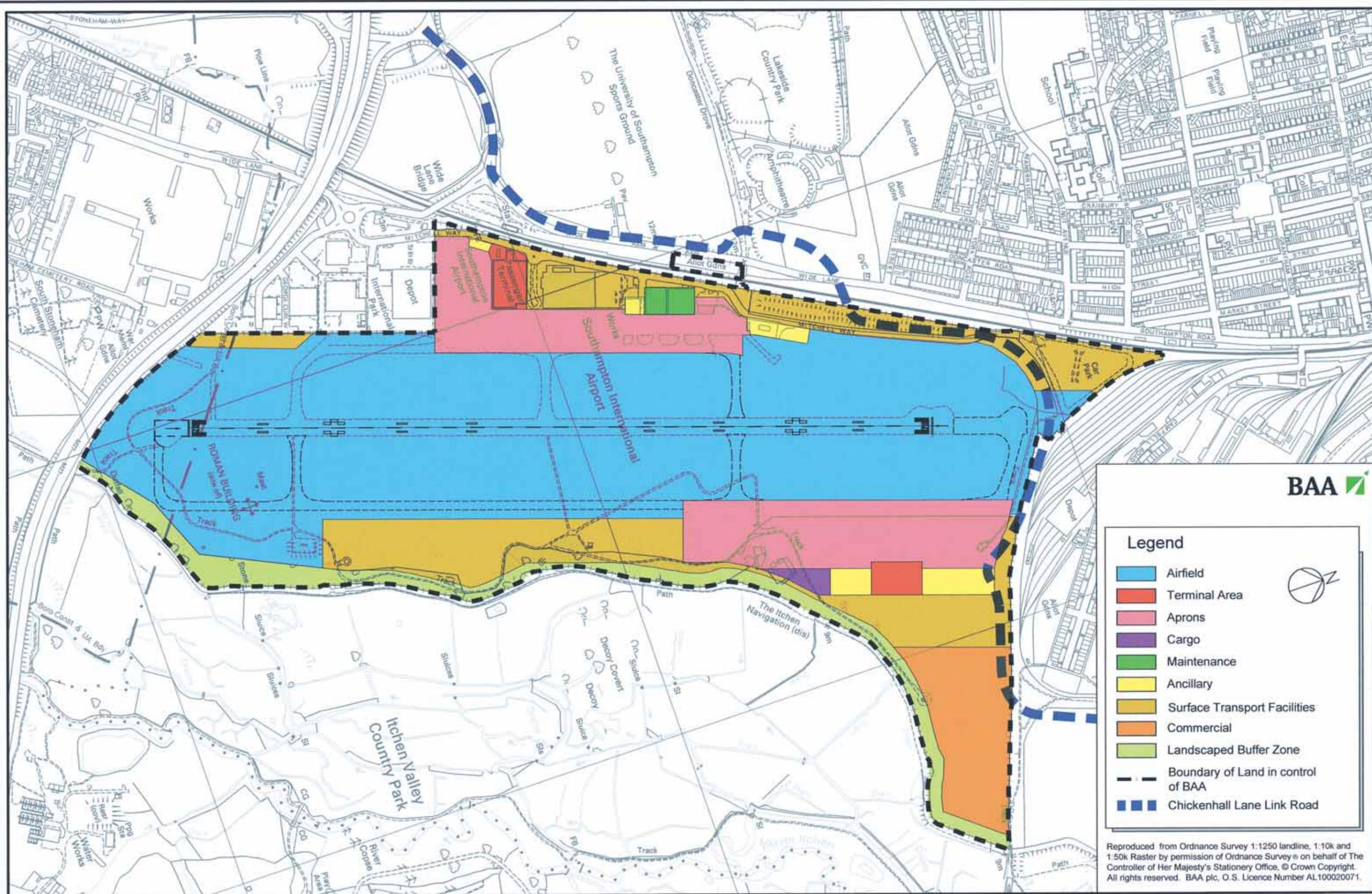


Legend

- Airfield
- Terminal Area
- Aprons
- Cargo
- Maintenance
- Ancillary
- Surface Transport Facilities
- Commercial
- Landscaped Buffer Zone
- Boundary of Land in control of BAA
- Chickenhall Lane Link Road

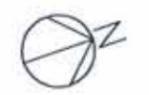


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Legend

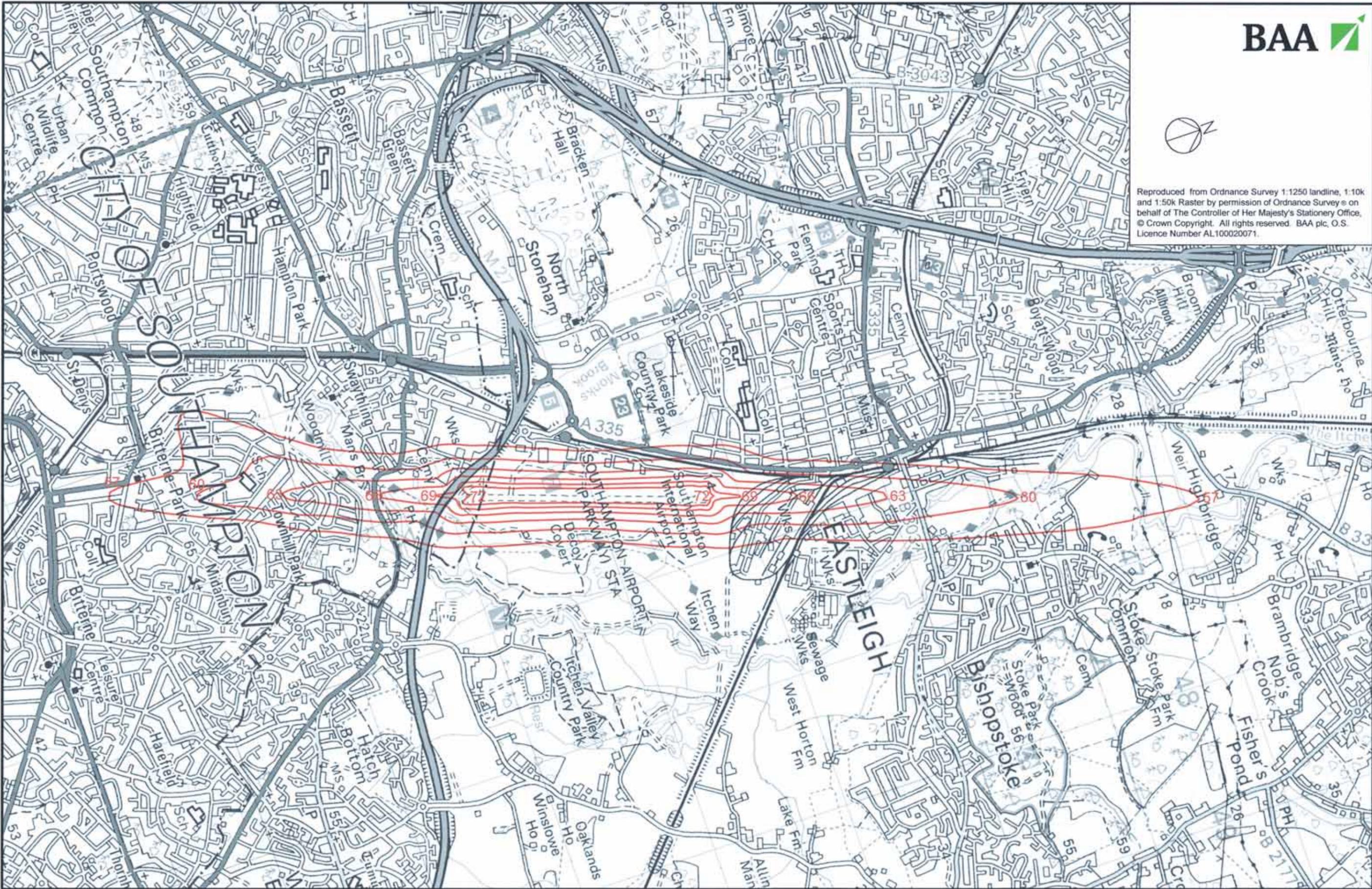
- Airfield
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Southampton Airport Master Plan - 2006

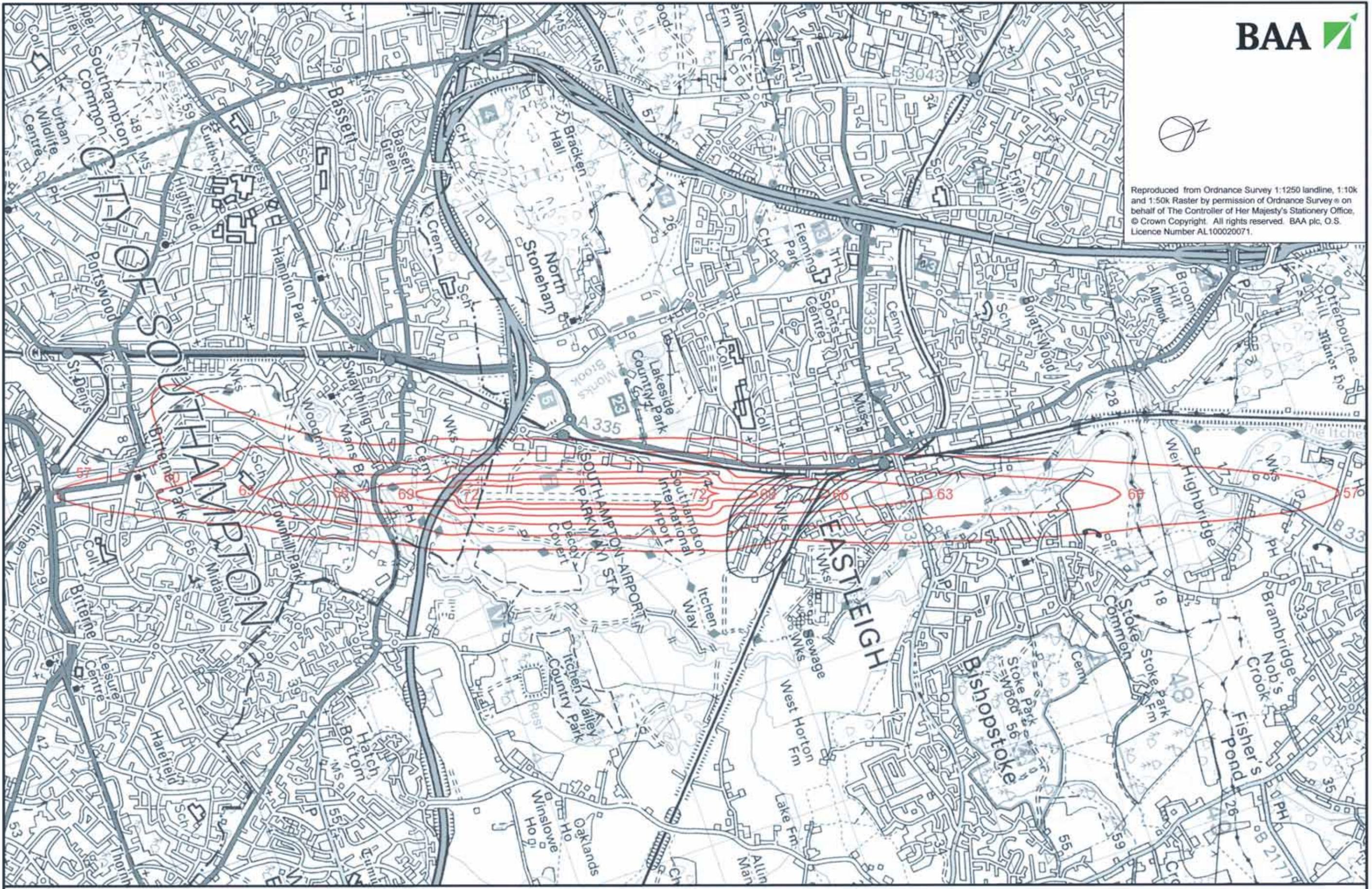
2005 Air Noise Contours

Scale 1:25,000

Drawing No 6



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This master plan has been produced following a public consultation exercise during 2005. It will be reviewed every five years in line with Government advice. If you have any queries about the content of this document, or wish to discuss any aspect of the airport's future development, please contact:

Planning and Development Department
Southampton Airport
Southampton
SO18 2NL
Email: southampton_masterplan@baa.com

➔ www.baa.com
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