

BAA Glasgow 🗹

Glasgow Airport Master Plan

October 2006



Foreword



Earlier this year, we celebrated the 40th anniversary of Glasgow Airport with a series of events involving airport staff, both past and present, and many of our neighbours and local stakeholders. A busy international airport, Glasgow is also very much an essential part of the local community.

During this fascinating period of reflection, when we rightly celebrated the many achievements of Glasgow Airport and the benefits it brings to the city of Glasgow, Renfrewshire and beyond, our focus has also been on the future, and the next chapter in this airport's long and proud history.

Since July 2005, when we published our Outline Master Plan for consultation, we have been talking and listening to our neighbours, our airlines, our suppliers and our key business and political stakeholders to determine their views on the future way forward for Glasgow Airport.

Following a three-month consultation last autumn, during which we met hundreds of local people and heard the views of many more, we now set out our vision for the future of Scotland's busiest airport and the developments which we feel sure will enable its continued success in an increasingly competitive global market.

We enjoyed listening to the many and varied views expressed around the impact of Glasgow Airport today and in the future and will take action in due course to manage some of these issues, particularly those around today's noise climate and how we care for our environment.

We have tried, wherever possible, to reflect those views in this revised Master Plan. Our aim, throughout this process, has been to deliver a vision of Glasgow Airport which the community, in its widest sense, can support.

The publication of the Master Plan should not be considered the end of a process, more the beginning of a meaningful relationship between Glasgow Airport and its neighbours, and one from which we take action to mitigate any negative impacts.

The Government's 2003 White Paper, The Future of Air Transport, set out a clear policy framework for the development of UK airports. This long-term vision marked an important commitment by the Government to facilitate planning for the growth of aviation in the future, but to do so in a responsible manner.

Glasgow Airport provides many benefits to the city, to Renfrewshire and the whole of Scotland. These benefits can be measured in terms of social and economic impact, our contribution to business and tourism, and the investment we make, both in our infrastructure and in our people. As our business grows, so too will the number of good quality jobs for local people and the existing financial contribution to the Scottish economy will undoubtedly increase significantly.

The airport has also opened up new opportunities to travel - whether for family holidays, or valuable business trips.

BAA is already committed to a multi-million pound investment and development programme at its three Scottish airports. This long-term investment will provide a world-class airport infrastructure for Scotland and a high-quality legacy for travellers in the future, at no cost to the taxpayer.

However, I have alluded to the other impacts associated with airports. BAA Glasgow will support growth in air travel, but will only do so in a responsible way, with due consideration for our neighbours and the environment in which we all must live and work. Today, as we look to the future, we must also consider the legacy we leave future generations.

It is our job to work with the Scottish Executive and the UK Government, local communities and others to promote a balance between the positive impacts, such as jobs and investment, and the negative effects such as noise and air quality around our operations.

In Europe, we look forward to the aviation industry's inclusion in the EU Emissions Trading Scheme, which will allow the issue of aviation greenhouse gas emissions to be effectively and responsibly addressed.

We know that our responsibilities extend far beyond our boundary and we value the close relationships we enjoy with our local authorities and other key partners in Renfrewshire, Glasgow and beyond.

We are proud of the role Glasgow Airport plays, promoting the city, region and Scotland to the world and building strong and sustainable international connections, better serving the area's thriving business community and tourism industry.

I believe this Master Plan paints an exciting picture of the future of Glasgow Airport and the important role our airport will play in the region's future. I look forward to playing my part in making that future a bright one.

Alan Barr

Managing Director, BAA Glasgow October 2006

This Master Plan has been produced following a three month public consultation in 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:

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Executive Summary

There is no doubt that Glasgow Airport plays a key part in the prosperity of Scotland's largest city and of the wider Scottish economy.

As Scotland's busiest airport, Glasgow provides valuable domestic and international air connections and represents the country's principal long haul gateway, supporting the tourism industry and important business interests across Scotland.

Furthermore, Glasgow Airport has for many years led Scotland's leisure travel market, offering more than 90 destinations in a busy year-round schedule.

A study by the Fraser of Allander Institute found that in 2002, Glasgow Airport supported 15,700 jobs across Scotland, with more than 5,000 people directly employed at the airport. Direct airport employment is forecast to increase to 8,200 by 2015, and to 12,100 by 2030, and it can reasonably be assumed that the number of people whose jobs and livelihoods depend on Glasgow Airport will increase at a similar rate. The report also found that the airport's contribution to the Scottish economy is more than £700m a year. Again, this figure will grow substantially as the airport develops.

Glasgow Airport's most critical contribution to the economic and social well-being of Scotland is its gateway role, supporting business and tourism and connecting Glasgow and Scotland with the rest of the world, increasingly through a fast-growing number of direct international services.

Scotland's cities are its economic heart, and are vital to the future health and competitiveness of the national economy. So it is essential that these cities are well supported by the infrastructure which connects them, and the high value-added businesses that will locate in Glasgow and the surrounding area, to the global economy.

BAA Scotland is committed to providing the air transport infrastructure that Glasgow demands, and thereby playing our part in the long-term growth of Scotland's economy and society. We see the development of our airports going hand-in-hand with the development of the nation's global competitiveness and future prosperity.

BAA's vision for Glasgow Airport is simple: through sustained and sensible investment in the airport's infrastructure and through the continuing development of a strong and lasting route network, Scotland's busiest airport will become Europe's most successful regional airport, supporting Glasgow, supporting Scotland, and promoting social and economic prosperity.

In doing this, BAA Scotland willingly accepts its responsibility to local communities and we restate our commitment to long-term engagement with all airport neighbours, to ensure we remain a responsible and trusted partner in Glasgow and Renfrewshire's future.

If Glasgow Airport is to serve Scotland well in the future, it must continue to provide first-class facilities, and this Master Plan represents a blueprint for the airport of the future.

The plan looks at the development of the airport in two distinct time frames: between today and 2015, and beyond that to 2030. The first section of the plan considers how the airport will grow up to the year 2015 and sets out, in some detail, how it will cope with the increasing demand for air transport by developing within its current boundaries.

It details how the terminal facilities will expand to cater for the forecast increase in passengers from 8.8 million a year today to around 13 million and describes how the existing runway and taxiway systems will cope with the extra aircraft movements (take-offs and landings).

It assesses the need for good ground transport connections (surface access) and how this could be provided and deals with the important issue of sustainable development and responsible growth, together with how BAA intends to protect the environment, particularly in relation to noise.

The second element of the plan looks at how, and where, it is proposed that the airport will grow between 2015 and 2030, which is the upper limit of the timescales set by the Government in its Air Transport White Paper.

Here, and particularly after 2015, the plan is less detailed, because of the difficulty in being absolutely certain about how air traffic will grow over that period with passenger estimates ranging from 17 million to 24 million a year by 2030 and aircraft movements reaching between 146,000 and 194,000 a year.

However, it is quite clear that the continued development of Glasgow Airport up to that time will require the purchase of land outside the current boundary and the plan gives an indication of where the terminal may develop and where a second main runway, if needed in the future, would be located.

Executive Summary

Summary of the Master Plan

This plan, of necessity, is a fairly detailed planning document. But we have endeavoured to simplify the content as far as possible and we are ready to explain or interpret the detail as necessary. Contact details can be found in the Foreword of this document.

The main points arising from the Master Plan are these:

2005 - 2015

Forecasts

- Passenger numbers will grow from 8.8 million per annum now, to between 12 million and 15 million per annum;
- Passenger aircraft movements, also referred to as PATMs, (i.e. the number of landings and take-offs) will increase from almost 96,000 per annum today to between 115,000 and nearly 135,000 per annum
- Peak runway movements will grow from 31 movements an hour now, to around 42 an hour
- Aircraft parking stands required will increase from 39 now, to around 50 under our central forecast
- Cargo and mail tonnage will rise from more than 9,600 tonnes per annum today, to around 11,250 tonnes per annum.

At the Airport

- The terminal building will be extended and re-configured to accommodate more check-in desks, new hold baggage processing facilities, greater baggage reclaim capacity and additional departure lounge and boarding gate facilities to meet rising passenger demand. The first stage, a near £10 million three storey extension to the international side of the main terminal opened in June 2006
- The next phase of terminal expansion will begin in spring 2007 with a £25 million extension of the main terminal. This will create a new centralised search facility, increase terminal capacity and provide additional retail and passenger facilities for passengers.
- A new (second) international pier and associated stands (the i2 project) will be built at a cost of approximately £30 million to accommodate the growth in international services
- At least two replacement aircraft maintenance hangars are likely to be needed
- On-airport public car parking capacity of 5,500 spaces today could rise to 10,000 by 2015, even if the planned rail link is built.

Surface Access

 BAA Glasgow recognises the importance of good surface access. The environmental benefits of ensuring as many passengers and staff as possible use sustainable transport modes to get to and from the airport are also widely accepted. Glasgow Airport will work in partnership with Strathclyde Partnership for Transport (SPT), local authorities and public transport operators to achieve a public transport mode share of 12% by the end of 2006 and to establish new mode share targets in a revised Airport Surface Access Strategy

- A new Glasgow Airport Rail Link (GARL) could be operational by the end of 2009
- A replacement eastbound (Glasgow bound) slip road onto the M8 motorway will be required
- The airport's internal road system will undergo a major reconfiguration, with the creation of an integrated public transport interchange giving priority to key public transport services.

The Environment

- BAA recognises that climate change is a serious global issue and supports the leading role the UK Government has played in relation to it.
- The population within the 57-decibel Leq contour by 2015 is forecast to increase relative to the situation in 1999. To limit this increase, BAA Glasgow has revised its five year Noise Strategy and introduced an annual Noise Action Plan which develops upon the series of commitments made to Renfrewshire Council following their approval of Glasgow Airport's major expansion in 1987.
- The number of people who hear ground noise will not change significantly as developments during this time will occur within the existing boundary of the airfield and, mostly, well away from the nearest housing. However, noise assessments will be carried out before any major development
- Research conducted on behalf of the Government indicates that the development of the airport will not compromise air quality standards in the period to 2015 and beyond. However, BAA is already working with local authorities to identify and address areas of poorer air quality and has set out objectives to reduce the impact of the airport on air quality
- Water courses near the airport will not suffer any adverse impact as a result of new developments in this timeframe. BAA Glasgow is committed to working with the Scottish Environmental Protection Agency (SEPA) and other agencies to develop a range of quality management solutions relating to surface water discharge
- The impact of new developments on sites of ecological and heritage value will be minimal in the period to 2015. The Black Cart Special Protection Area (SPA)/Site of Special Scientific Interest (SSSI) and Paisley Moss Local Nature Reserve (LNR) will not be directly affected by our proposals and we will continue to work with Renfrewshire Council, Scottish Natural Heritage, the RSPB and others to ensure they continue to be managed in a manner that protects their biodiversity, whilst ensuring the safe operation of the airport.

Executive Summary

Land Use

 An additional 20 hectares of land will be developed by 2015 to enable apron and ancillary facility developments.
 This land is currently within BAA Glasgow's ownership.

2015 - 2030

Forecasts

- Depending on the actual rate of growth, passenger numbers could grow to between 17 and 24 million a year, with more than half travelling direct to and from international destinations
- Aircraft movements could increase to between 146,000 and 194,000 per annum
- Peak runway movements could rise to around 45 per hour
- The number of aircraft parking stands needed would increase to 62 under our central forecast, but possibly as high as 71 if higher growth is realised
- Cargo and mail tonnage could grow to over 13,000 tonnes a year.

Land Use

- In order to cater for the predicted growth of the airport, the purchase of additional areas of land not currently within BAA Glasgow's ownership will be necessary by 2030; to the east of Abbotsinch Road, 52 hectares of farm land would be needed to extend the airfield taxiway system and provide space for new and displaced cargo and maintenance facilities
- To the west of Barnsford Road, we envisage the development of the 25 hectares of land currently within our ownership (known locally as Walkinshaw Brickworks)
- If market growth dictates and the project is judged to be commercially and environmentally sustainable, BAA Glasgow is committed to building a second main runway.
 We welcome the positive action taken by the planning authorities in west central Scotland to safeguard the land required for this development through an Alteration to the Glasgow & Clyde Valley Structure Plan
- A second main parallel runway, beyond 2030, would require an additional 105 hectares of land to the north of the existing airport boundary to accommodate the runway, associated taxiways and additional/relocated ancillary facilities.

The Environment

 More people will be affected by aircraft noise if a second runway is built. BAA Glasgow has put in place a voluntary scheme for local property owners to address the 'generalised blight' caused by the potential impacts of noise from any new runway.

Next Steps

 The Government has decided that Airport Master Plans should not be afforded the status of statutory planning documents. Instead, the Guidance on the Preparation of Airport Master Plans (Department for Transport, July 2004) instructs airport operators to work with the Scottish Executive and local authorities to ensure that the contents of their Master Plans are taken into account during the preparation of the relevant Structure Plan, Local Development Plan and Regional Transport Strategy.

The second National Planning Framework (NPF) for Scotland is expected to be published in 2008. The framework offers guidance on the spatial development of Scotland to 2025 and provides the national context for development plans and planning decisions of the Scottish Executive, public agencies and local government. BAA Glasgow will liaise with the Executive to understand how the key elements of this Master Plan will be incorporated in the updated NPF. We will also work closely with Renfrewshire Council, surrounding planning authorities and Strathclyde Partnership for Transport to ensure that forthcoming reviews of development plans and transport strategies take full account of this document.

1 Introduction

Background to the Master Plan

- 1.1.1 In December 2003, following one of the most comprehensive public consultation exercises ever undertaken in the UK, the Government published a White Paper¹, The Future of Air Transport, which sets out a strategic framework for the development of airport capacity in the UK up to 2030.
- **1.1.2** The White Paper sets out the Government's conclusions on the future development of airport capacities, including Glasgow Airport. For airports in Scotland, these conclusions were reached following close collaboration with the Scottish Executive. The main conclusions of relevance to Glasgow Airport are summarised below:
- Land to be reserved for a possible second runway through revisions to the Local Plan by Renfrewshire Council;
- Prior to the construction of any second runway, land outside the current airport boundary should be safeguarded to allow full use of the existing runway;
- Significant expansion of terminal and airside facilities;
- Work with planning authorities to limit any increase in the size of the 57dBA noise contour;
- In conjunction with Scottish Executive, SPT and local authorities, prepare proposals for enhancing transport corridors serving the airport; and
- Land to be provided for new and displaced aircraft maintenance, repair and overhaul facilities.
- 1.1.3 The White Paper asks specified airport operators to produce Master Plans to incorporate the Government's conclusions regarding the future development of aviation. It indicates that Master Plans should set out proposals for the development of airports to 2015 in some detail, but indicative plans only are expected for the period between 2016 and 2030. It views Master Plans as the key planning 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** The Government also directed that the appropriate planning and transport organisations take these Airport Master Plans into account, along with the policies set out in the White Paper, in their own guidance, strategies and decision making.
- **1.1.5** The Government recommended that airport operators including Glasgow Airport produce Outline

- Master Plans for public consultation as soon as was practicable, followed thereafter by a revised version. BAA Glasgow published its Outline Master Plan in July 2005 which was followed by a three month public consultation. A summary of the responses received is included at Appendix 1 and this revised Master Plan has been amended where appropriate to take account of the relevant comments. It is BAA Glasgow's intention, in line with the Government's advice, to review and update the Master Plan every five years.
- 1.1.6 The White Paper does not itself 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.
- **1.1.7** This Master Plan recognises that, as stated in the White Paper: "ensuring the provision of adequate airport capacity in Scotland, whilst taking full account of environmental concerns, is an important priority for the Government and the Scottish Executive".

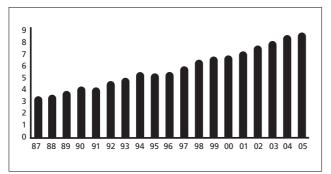
Historical Development of Glasgow Airport 1.2

- 1.2.1 Glasgow Airport, as it stands today, covers 340 hectares and its current layout and land use are shown in Drawings 1 and 2. It is bounded to the north by the Black Cart Water, to the south and west by the M8 Motorway and to the east by the White Cart Water.
- 1.2.2 The existing airport was opened in May 1966 on the site of the former HMS Sanderling air base. It replaced Renfrew Airport, a much smaller facility located two miles to the east, as the principal airport for the city of Glasgow and west central Scotland.
- **1.2.3** The core developed area is around the terminal buildings, located on Caledonia Way. Other main developed areas include the cargo and maintenance bases at Campsie Drive and the western maintenance and ancillary area around St. Andrew's Drive West and St. Andrew's Crescent. At the privatisation of British Airports Authority to BAA plc in 1987, Glasgow Airport handled 3.4 million passengers a year. Figure 1 illustrates the substantial growth since 1987.
- 1.2.4 In June 2006, Glasgow Airport celebrated the 40th anniversary of the official opening of the terminal by Her Majesty The Queen.

¹ CM6046 The Future of Air Transport, Department for Transport, December 2003

1 Introduction

Figure 1: Annual passenger figures (calendar year) since privatisation



Role and Character of Glasgow Airport

- **1.3.1** Glasgow Airport provides air transport services for the greater Glasgow area and the entire west of Scotland. It is the busiest airport in Scotland by passenger throughput and the seventh busiest in the UK, serving more than 90 destinations worldwide. The airport is recognised as Scotland's transatlantic and long-haul gateway providing services to the United States and Canada and other destinations such as the Gulf, the Caribbean, North Africa and the Indian Sub-Continent.
- 1.3.2 In 2005, the airport handled 8.8m passengers, of whom 53% were travelling on domestic services (primarily to/from the London airports) and 47% on international services. Approximately 30% of passengers were travelling on business and 32% of passengers travelled on no-frills airlines. The majority of passengers (approximately 87%) were resident in the UK.
- 1.3.3 The airport has grown at an average rate of 6.2% per year for the period 1995 to 2005, from 5.4m to 8.8m passengers. UK domestic services driven by the low cost carriers continue to account for the larger part of total throughput, accounting for 53% (or 4.6million passengers a year of all traffic). Approximately 58% (2.7 million passengers a year) of all domestic traffic is to and from four London area airports, with a significant proportion of this traffic transferring onwards to international destinations. Despite the structural changes within the holiday sector, Glasgow remains the principal base for charter operations in Scotland and the fourth largest in the UK, which accounts for the large volume of the airport's international passenger traffic. Table 1 shows the growth in passenger numbers (split between domestic and international), passenger air transport movements (PATMs) and the average passenger load per passenger aircraft for the period 1995 to 2005.

Table 1: Historic Passenger Air Traffic Data (1995-2005)

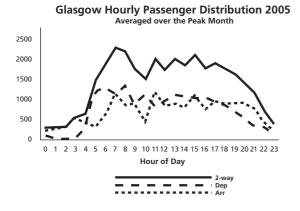
	Annual Domestic Passengers (millions)	Annual International Passengers (millions)	Annual Total Passengers (millions)	Annual PATMs	Average Flight Load (Passengers)
1995	2.63	2.79	5.42	72,970	74
1996	2.80	2.68	5.47	74,090	74
1997	3.14	2.87	6.01	78,790	76
1998	3.38	3.11	6.48	83,180	78
1999	3.41	3.35	6.76	85,600	79
2000	3.41	3.51	6.92	87,620	79
2001	3.80	3.45	7.25	91,260	79
2002	4.18	3.60	7.77	87,190	89
2003	4.48	3.64	8.12	87,460	93
2004	4.63	3.93	8.56	91,508	94
2005	4.62	4.16	8.78	95,952	92

- **1.3.4** In the past ten years, international traffic has grown steadily at 4.1% a year. New direct, international scheduled services introduced during 2005 saw this sector grow by nearly 26% last year alone. At the same time, changes in passenger traffic in the domestic market have been driven mainly by the low-cost/no-frills sector. Average passenger load per passenger aircraft has risen overall from 74 to 92, an annual average increase of approximately 2.2%.
- 1.3.5 Naturally, passenger demand is greater in the summer months as leisure demand increases, primarily due to the school holiday period in July and August encouraging a peak in those two months. This is more than enough to offset the slight reduction in business demand during the same period. The Easter and October school holiday periods also generate a significant amount of demand for package holidays and short breaks.
- 1.3.6 The daily demand profile shows that Fridays and Saturdays are busier on average in the peak months than any other days. This is due to a combination of business and leisure demand on Fridays and the relatively high charter capacity for leisure passengers on Saturdays.
- 1.3.7 The illustration of hourly demand, outlined in Figure 2, shows that the periods between 6am and 8am and 3pm and 4pm are the busiest times at Glasgow Airport. The peak departing period at the beginning of each day, and the peak arriving period at the end of the day, reflects the fact that Glasgow is an overnight base for a large number of aircraft. The other peaks during the day (e.g. between 10:00 and 11:00) reflect the in-bound and out-bound patterns created by a busy short-haul, domestic route network and international scheduled and charter services.

1 Introduction

1.3.8 There remains scope for growth in demand around the middle of the day between 10am and 2pm. Long-haul routes, increased frequencies and international-based aircraft operators could easily be accommodated during these guieter periods.

Figure 2: Average hourly distribution over the peak month (2005)



1.3.9 The monthly profile of passenger air transport movements indicates how available capacity varies with season. A large proportion of the airlines operating at Glasgow are year round businesses with mixed frequencies. However the seasonal variation which is apparent at most airports is more pronounced at Glasgow due to the large summer charter capacity.

Objectives of the Master Plan

- **1.4.1** As outlined in paragraph 1.1.3, this Master Plan sets out the development strategy for the sustained, and responsible, growth of Glasgow Airport to 2030. In line with the expectations of the White Paper, this document describes proposed terminal and airfield expansion and that of supporting ancillary facilities up to 2015, with indicative plans of development beyond that date up to 2030.
- **1.4.2** The key objectives of this Master Plan are as follows:
- To set out the prospects for air traffic growth up to 2030;
- To clearly identify the areas of land currently outside the airport's boundaries which will be required in order to allow the airport to expand to handle the forecast growth in passenger numbers;
- To set out the approximate timescales for the incremental phasing of additional capacity requirements;
- To identify the key improvements required to ground transport links (surface access), serving the airport and the surrounding area;
- To inform future reviews of the Glasgow and Clyde Valley Structure Plan and Renfrewshire Local Plan; and
- To identify environmental impacts and set out mitigation strategies.

- **1.4.3** The White Paper included an indicative new airport boundary, which the DfT considered would be required to serve Glasgow Airport's future development up to 2030. The process of evaluating and developing the airport expansion proposals has resulted in BAA Glasgow developing a future boundary which is very similar to the area shown in the White Paper, but which does differ to the north of the existing airport boundary. Chapters 6 and 9, which describe future development requirements, outline what these differences are and explain why changes have been made.
- **1.4.4** The existing airport boundary, together with the indicative area shown in the White Paper and the future boundary proposed by BAA Glasgow are shown on Drawing 3.

2 The Social and Economic Benefits of Aviation

Introduction

- 2.1.1 The White Paper states that "Aviation makes a significant contribution to Scotland's economy and social welfare". In BAA's view, the responsible growth of air transport in Scotland can help disperse the economic and social benefits which air travel generates across the country and society.
- **2.1.2** The White Paper goes on to state that in the Central Belt, "Air travel plays an important part in improving the economic competitiveness of Scottish businesses and attracting inward investment, as well as serving the main population centres".

Economic Impact and Jobs

- 2.2.1 Airports themselves play a crucial role in stimulating economic activity and in making Scotland an attractive place to invest. The ongoing economic progression towards more knowledge-based sectors, as envisaged by economic development organisations across Scotland and the UK, will further increase this reliance on airports and air services in the future. These sectors will operate increasingly in a global market, where rapid access to clients, suppliers, partners and markets will be vital.
- 2.2.2 A study published by the Airport Operators Association (AOA) in September 2005 estimated that air transport directly supported around 185,900 jobs in the UK economy and around £11.2 billion per annum of Gross Value Added (GVA). When indirect and induced effects are also included these figures rise to nearly 580,000 jobs and £22.2 billion of Gross Value Added.
- 2.2.3 In 2002, the respected Fraser of Allander Institute studied the social and economic impacts of BAA's three Scottish airports at Aberdeen, Edinburgh and Glasgow. The study measured the total employment, output and GDP in Scotland, supported by the activities at the three airports. The study did not set out to address other economic issues, such as how good air transport links might facilitate inward investment to particular parts of the UK, or the role that transport infrastructure in general has in growing Scotland's productivity and its future ability to compete in a global marketplace.
- **2.2.4** The main conclusions of the Fraser of Allander report, as it affected Glasgow Airport were:
- In 2002, the airport supported 15,700 jobs across Scotland, with more than 5,000 of those people directly employed at the airport. The remainder are employed indirectly, through supply chains and associated service-providers;
- The airport's contribution (economic output) to the Scottish economy measures £700 million per annum.

2.2.5 A copy of the 2002 Fraser of Allander report is available on our website at www.baa.com.

Employment Forecasts

2.3.1 Direct employment at Glasgow Airport is forecast to increase to 8,200 in 2015 and 12,100 by 2030. These forecasts have been prepared following an airport employment survey by BAA Glasgow in late summer 2004.

Route Development and Lifeline Services

- 2.4.1 BAA Scotland invests over £20 million a year in support of new routes, through discounted airport charges and financial support for marketing campaigns. BAA Scotland's Route Development Fund is supplemented by support from Glasgow City Marketing Bureau, Visit Scotland, the Scottish Executive Route Development Fund and Renfrewshire Council. This partnership has helped revolutionise air travel in Scotland, attracting world class airlines such as Emirates, Continental and Delta.
- 2.4.2 In 2005/06, Glasgow Airport secured more than a dozen new UK and international services, including new flights to Cardiff, Berlin, Lahore and Orlando. Glasgow Airport has also recently secured new flights to Barbados, Las Vegas, Boston and Toronto, further boosting its status as Scotland's long haul gateway.
- **2.4.3** BAA Scotland recognises that for some remote communities in Scotland, air links offer a vital socioeconomic connection to the major centres of population. In addition to offering support for new international services, BAA Glasgow also provides backing for lifeline air routes within Scotland, with some aeronautical charges discounted by as much as 65%.

Supporting Regeneration and Tourism

- 2.5.1 Scotland's main cities, namely Glasgow and Edinburgh, are critical to the health and competitiveness of the national economy and it is important that their contribution is reflected in their ability to grow. Glasgow City Council, in partnership with the private sector has been pursuing massive regeneration plans for the city. Ambitious projects such as the International Financial Services District (IFSD) and the Pacific Quay Media Village have been successful in attracting thousands of new jobs and investment, cementing Glasgow's position as one of Europe's most thriving cities.
- 2.5.2 In Renfrewshire, the considerable regeneration has continued along the banks of the River Clyde to Braehead and Renfrew Riverside. Glasgow Airport is clearly well placed to support and serve the high value-added economic activities arising within Scotland's largest city region.

2 The Social and Economic Benefits of Aviation

- 2.5.3 New air links are essential to the development and growth of Scotland's economy, tourism and business sectors. According to the Scottish Executive, Emirates' daily service to Dubai alone generates some £10 million a year for the Scottish economy. Flyglobespan, which now serves more than 20 international destinations from Glasgow, carries some 30 tonnes of exports/imports to and from Glasgow every day. Its daily service to Orlando is estimated to benefit Scottish business to the value of £120,000 a month
- 2.5.4 The success of the Glasgow: Scotland with style campaign has also brought clear benefits to the city's economy. Since its launch in March 2004, an additional 240,000 people have visited the city generating in excess of £26.5 million in economic benefit. In September 2006. Glasgow was named as Favourite UK City by leading travel magazine Conde Naste Traveller, a reflection of the city's growing importance as a world class business and leisure destination.
- **2.5.5** The City of Glasgow attracted 2.8 million visitors during 2005, who generated £700 million for the local economy. With international travel a key growth area international traffic grew by almost 6% in 2005 - BAA believes Glasgow and its airport has the potential for further growth and to attract a greater and wider selection of new routes and services. We will continue to work with our partners in the public and private sector to expand our international route network.

2.6 **Capital Investment**

2.6.1 Since 1996, BAA has invested more than £113 million at Glasgow Airport in new terminal and airfield assets, creating a high-quality facility of which Scotland can be proud, all at no cost to the taxpayer. The company is further committed to a £290 million ten year investment programme at Glasgow as part of a wider development plan worth over £600 million across its three Scottish airports.

Local Taxation and Operational Costs

2.7.1 BAA Glasgow currently pays more than £3.6 million in business rates every year to Renfrewshire Council and over £2.5 million to Strathclyde Police. Unlike many other business rate-payers, BAA Glasgow maintains all the roads within the airport boundary, including the costs of street lighting and is also responsible for all waste disposal costs.

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 exercises its influence through its own transport policy and through the national, regional, and local planning systems. To regulate existing airport activities, Government uses primary and secondary legislation.
- 3.1.2 There are functional and legal limits to BAA Glasgow's activities as an airport owner and operator. For example, responsibility for airspace policy and air traffic control respectively lies with the UK Government, the Civil Aviation Authority (CAA) and National Air Traffic Services Limited (NATS). This chapter outlines the principal controls and influences of relevance to Glasgow Airport's operation and future development.

UK Airports Policy

- **3.2.1** The White Paper is the principal policy document with which BAA's future plans for Glasgow Airport are aligned. The White Paper sets out a strategic framework for the development of airport capacity in the UK up to 2030, against the background of wider developments in air transport. The White Paper's main conclusions with regards to Glasgow Airport is that BAA should plan for significant expansion of the terminal and associated facilities and that land for the provision of an additional parallel runway should be reserved through a review of the Development Plan.
- 3.2.2 Government airports policy will need to be reflected within the hierarchy of planning policy documents at national and local level. Referring to Airport Master Plans, the White Paper states 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** BAA Glasgow will closely scrutinise such policy documents, relevant to the airport, which may in future be published by regional bodies, local authorities and other agencies. BAA Glasgow will seek to ensure that they respect, and make reasonable provision for, the interests of the airport, its suppliers and its users, consistent with national policy.

National Planning Framework

3.3.1 The National Planning Framework (NPF) for Scotland was published by the Scottish Executive in 2004. The framework sets out a vision of Scotland to inform other

plans and programmes and identifies priorities for investment in strategic infrastructure. The document offers guidance on the spatial development of Scotland to 2025 and provides the national context for development plans and planning decisions of the Scottish Executive, public agencies and local government.

3.3.2 The NPF states that "to compete successfully in the world economy, Scotland requires a modern, flexible and well integrated transport system with high quality links to the rest of the UK, Europe and the world". The Framework goes on to acknowledge Scotland's relative peripherality by stressing the vital importance of air links for international connectivity and competitiveness. BAA Glasgow will liaise with the Executive to understand how the key elements of this Master Plan will be incorporated in the updated NPF due to be published in 2008.

Regional Planning Policy

- **3.4.1** The Glasgow and the Clyde Valley Structure Plan was approved by Scottish Ministers on 1st May 2002. It constitutes the Structure Plan in force for the purposes of Section 24 of the Town and Country Planning (Scotland) Act 1997. The Structure Plan provides a strategic planning framework for the development of the greater Glasgow area to around 2020.
- **3.4.2** Following the publication of the Aviation White Paper in December 2003, the eight constituent local authorities of the Glasgow and the Clyde Valley Structure Plan Joint Committee, recognising the economic and social importance of Glasgow Airport, promoted an alteration to the Approved Plan to ensure consistency with national policy. This alteration (Alteration 2), which reserves more than 200 hectares of land for the expansion of Glasgow Airport, was approved by Scottish Ministers and became operational on 24 January 2005. BAA Glasgow welcomes and supports the early intervention of the Local Authorities to ensure this land is safeguarded through the development plan process.
- **3.4.3** The Joint Committee has, following a public consultation exercise, produced a comprehensive revision of the Structure Plan, incorporating previously approved alterations and further amendments. The Glasgow and the Clyde Valley Joint Structure Plan 2006 – Written Statement was sent to Scottish Ministers in April 2006 and approval is anticipated later this year.
- 3.4.4 Joint Policy Commitment 1B and Strategic Policy 5 recognise Glasgow Airport as a strategic priority in promoting the regeneration of the metropolitan area. Strategic Policies 1 and 4 note the commitment to the

Glasgow Airport Rail Link (GARL) and call for an upgrade of the M8 motorway between junctions 26 and 29 (Hillington to Paisley St. James) to be safeguarded and investigated.

Local Authority Policies

3.5.1 Glasgow Airport lies within the Renfrewshire Council local authority area and is covered by the local planning policies of the Renfrewshire Local Plan, adopted in March 2006. The document recognises the value of Glasgow Airport as a key component of the national and local economy and seeks to make provision for the operational requirements of the airport and airport related development to ensure its continued prosperity. Within the Local Plan, Policies AIRPORT 1 to AIRPORT 4 are the primary policy statements.

Development Control

3.6.1 All major airports in Scotland have wide-ranging permitted development rights under the provisions of Part 14 of the Town And Country Planning (General Permitted Development) (Scotland)) Order 1992, as amended. Essentially, this allows "the carrying out on operational land by a relevant airport operator or its agent of development (including the erection or alteration of an operational building), in connection with the provision of services and facilities at a relevant airport", subject to the prior submission of a consultation notification (rather than a planning application) to the local planning authority. The entitlement does not include:

- The construction or extension of a runway;
- The development of non-operational buildings (i.e. those unrelated to the movement or maintenance of aircraft, or the embarking, disembarking, loading, discharge or transport of passengers, livestock or goods) e.g. hotels;
- Development on non-operational land.

These exceptions require specific applications for full planning permission to be submitted for scrutiny and determination in the normal way.

3.6.2 The Town and Country Planning (Scotland) Act 1997 defines operational land as land owned by the airport and used for the purpose of carrying out the airport's undertaking.

3.7 **Airport Design Criteria**

3.7.1 The UK, as a signatory to the 1944 Chicago Convention, is required to operate its airports in accordance with specific internationally-agreed criteria. In the UK, responsibility for ensuring this occurs resides with 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, operators must satisfy and continually adhere to the CAA's exacting safetyrelated 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 co-operation to consider such matters as the introduction of new aircraft, for example the new Boeing 787 'Dreamliner'.

3.7.2 Glasgow Airport's existing facilities meet all current CAA requirements and future developments will continue to do so. It is possible that some future developments may be implemented as a direct response to the introduction of new or revised standards. While it is not appropriate for this Master Plan to explain the standards in fine detail, it is worth noting that these cover such matters as:

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

Airport Security

3.8.1 Airport security requirements are the subject of regulatory control by the Department for Transport (DfT). They too can have a defining influence on the need for development, as well as on the form and character of the airport facilities at Glasgow Airport. For example, we are required by DfT to segregate departing and arriving international air passengers in the airport's airside areas. This explains, for example, why the existing international pier is a two level facility as opposed to the single level domestic piers.

Aerodrome Safeguarding

3.9.1 Glasgow Airport, in common with other major airports, is situated at the centre of a series of obstacle limitation surfaces which define, relative to the runway, maximum acceptable heights for buildings and other structures, such as telecommunications masts and wind turbines. Some features in an airport's locality, notably higher ground such as that to the north and south of Glasgow Airport or significant buildings or structures, can constrain and consequently determine the usable length of a runway. The protection of these surfaces is undertaken as part of the routine Aerodrome Safeguarding process.

3.9.2 Safeguarding of Aerodromes² is a process of statutory consultation between local planning authorities and airport operators. The process is intended to:

- Ensure that an airport's operation is not inhibited by
- 2 Scottish Executive Planning Circular 2/2003 Safeguarding of Aerodromes, Technical Sites and Military Explosives Storage Areas: The Town and Country Planning Scottish Executive (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2003

developments, buildings or structures which might infringe that aerodrome's obstacle limitation surfaces;

- Protect visual flight paths by ensuring that runway approach lighting is not obscured by any development and that lights elsewhere do not present any potential for confusion;
- Protect the accuracy (and therefore safety) of radar and other electronic aids to air navigation, e.g. by opposing wind farm developments whose turbine blades could generate an intermittent return on air traffic controllers' radar screens
- Reduce the hazard from bird strikes to aircraft, associated with such land uses as waste disposal and sewage treatment, areas of open water and large landscaping schemes.
- 3.9.3 Local Planning Authorities are issued with safeguarding maps which enable them to identify those planning applications on which BAA, or any relevant airport operator, must be consulted. As a consequence of this consultation process, BAA may choose to object to a proposal, to not object or to withhold its objection, subject to the application of appropriate conditions.
- **3.9.4** Government targets for renewable energy provision in the UK have resulted in a large number of proposals for land based wind farms being brought forward in the last few years. BAA has been consulted on proposals at more than 350 sites since 2003, 80 of these are within a 30km radius of Glasgow Airport. A further 28 proposals are being investigated or progressed within a 45 km radius of the airport.
- **3.9.5** While the company is generally supportive of renewable energy initiatives and has no objection in principle to wind farms, there remain significant concerns regarding the impact that wind turbines can have on the safe and efficient operation of aircraft and airports, both in terms of their physical obstruction to air navigation (i.e. the height of the structures) and, more significantly, their visibility to radar and the potential confusion this can pose for air traffic controllers. The amount of interference ("clutter") generated on the radar screen depends on the number of wind turbines, their size, construction materials and location and on the shape of its blades.
- 3.9.6 In order to safeguard the future expansion of the airport and the safe, orderly and expeditious flow of air traffic, BAA will continue to examine very closely any proposals for wind farms and turbines which are referred to the company for advice. On the expert advice of NATS, our air traffic control provider, BAA will continue to adopt a precautionary approach to proposals for wind turbines where we are advised that there is a risk that these might compromise the safety, flexibility or capacity of the airport. We would recommend that renewable energy developers

- undertake discussions at an early stage in order to identify any potential areas of concern. This can be done through direct contact with BAA's Safeguarding Team (email safeguarding@baa.com) or in accordance with the guidance available on the British Wind Energy Association (BWEA) website (www.bwea.com/aviation). BAA Glasgow also asks the Scottish Executive to give greater recognition of this issue in their Planning Guidance and that Local Planning Authorities give serious consideration to this issue when preparing their local and strategic development plans.
- **3.9.7** Chapter 12 of the White Paper specified that the Aerodrome Safeguarding process should be used to protect land, outside existing airports, needed for future expansion against incompatible development in the intervening period. Revised safeguarding maps will be issued to Local Planning Authorities, separately to this Master Plan, to ensure that BAA is consulted on any application which might conflict with safe operations at the existing or expanded airport.
- **3.9.8** Safeguarding issues related to the possible development of a new runway at Glasgow Airport are addressed in Chapter 9.

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. The Department for Transport (DfT) are responsible for PSZ policy in the UK and local planning authorities have the responsibility for applying the published policy.
- 3.10.2The current PSZs were calculated in 1999 and formally adopted in 2002. They were defined in a Government circular following thorough 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 airports³. 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 Scottish Executive Planning Circular 8/2002 - Control of Development in Airport Public Safety Zones

- 3.10.3The areas of Glasgow Airport's PSZs are based on the 1 in 100,000 individual risk contours for the airport, based on forecasts of the numbers and types of aircraft movements in 2015. There are no PSZs relating to Runway 09/27 (Glasgow's cross-wind, secondary runway) as this runway is not used intensively enough to warrant this particular form of protection.
- 3.10.4In addition, the Secretary of State for Transport 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 vacated. The area is defined in the 1 in 10,000 contour. There are no such properties at Glasgow Airport.
- **3.10.5**It is the responsibility of the Local Planning Authority to ensure that the directions contained within the Circular are adhered to.

3.11 Environmental Regulation

3.11.1 Glasgow Airport operates within the context of a variety of European and nationally applicable policies and standards relating to the environment. These are described in relevant detail in Chapter 8 of this plan, which explores the scale and mitigation of Glasgow Airport's potential environmental impacts up to the year 2015.

3.12 Economic Regulation

- 3.12.1The Airports Act 1986 established the framework for private ownership of airports in the UK and provides specific controls on the use and operation of airports. The status of Glasgow Airport Limited as a relevant airport operator and Glasgow Airport as a relevant airport is conferred by Section 57 of that Act.
- **3.12.2** Airlines are required to pay for the air traffic control services for the airspace through which they fly. At our Scottish airports, this service is provided by National Air Traffic Services Ltd (NATS). There is also a government tax, Air Passenger Duty, which is a levy paid directly to the UK Treasury. Charges currently range from £5 to £40 per departing passenger depending on destination.

4 Today's Airport - Glasgow in 2006

Introduction

- **4.1.1** This chapter describes the facilities of Glasgow Airport as it is today (apart from surface access arrangements which are addressed in Chapter 7). It details existing airport facilities and committed developments, i.e. those projects either under construction or due to be in place by the end of 2006.
- **4.1.2** The existing airport layout and current land-use are illustrated on drawings 1 and 2.

4.2 Air Traffic Control / Airspace

- **4.2.1** The existing air traffic control tower was originally built in the late 1940s and was substantially upgraded in the early 1960s prior to the opening of the current airport in 1966. Located on an island site between the main runway and apron area, the 15-metre high structure provides clear and uninterrupted views across the airfield and apron area.
- **4.2.2** The increasing number of aircraft movements on the main runway, taxiway system and apron area has resulted in the need for investment in new technology to assist air traffic personnel. The most recent example of this type of project is the newly completed £1 million surface movement radar to improve the operational efficiency and safety of the airfield.
- **4.2.3** The airspace serving Glasgow Airport is managed by NATS and controlled from the Scottish Air Traffic Control Centre at Prestwick and the airport control tower at Glasgow. NATS employs long-established procedures for routing arriving and departing aircraft.
- 4.2.4 Although the airspace surrounding Glasgow, Edinburgh (and Prestwick) airports is relatively small and densely utilised, there is enough separation (i.e. space between the airports and their departure and arrival routes), to ensure that operations at one airport do not affect the other.

Runway and Taxiway System

- **4.3.1** There are two operational runways in use at Glasgow today:
- Runway 05/23 (the main runway) is 2,658m in length and is equipped with a Category III instrument landing system (ILS). It lies in a south-west/north-east direction and is oriented into the prevailing wind. It can accommodate the operation of any aircraft up to and including the Boeing 747. The main runway is complemented by a parallel taxiway system which usually allows for an hourly movement level of 32 take-offs or landings per hour. For short periods, a peak hourly

- movement level of 36 take-offs or landings can be sustained;
- Runway 09/27 (the secondary cross wind runway) is 1,104m in length and lies in an east/west direction. It is a visual runway only and is not equipped with instrument landing facilities. The relatively short length means this runway can only accommodate operations of aircraft up to regional jet size. As a result, runway 09/27 handles approximately 3 air transport movements per day, which amounts to less than 1% of the airport's total.
- **4.3.2** There are further enhancements that can be made to the main runway and taxiway system, which BAA Glasgow believes could increase the capacity of the runway system as a whole to approximately 45 movements per hour.

Aircraft Aprons

- **4.4.1** Glasgow Airport currently has 39 aircraft parking stands of various sizes for regular passenger operations, including two new stands completed in August 2006, capable of accommodating one Boeing 757-300 and one Boeing 767-300 aircraft.
- **4.4.2** Of the total stands available, three jumbo stands can accommodate aircraft up to the size of a Boeing 747-400. Thirty stands are "contact" stands, i.e. they are located immediately adjacent to the terminal building/piers and passengers can walk directly to and from the aircraft. The remaining nine stands are known as "remote", i.e. they are not within walking distance of the terminal and passengers have to be coached to and from aircraft.

Table 2: Glasgow Airport Passenger Aircraft Stands

	Small	Medium	Large	Jumbo	Total
Contact Stands	14	7	7	2	30
Remote Stands	0	6	2	1	9
Total	14	13	9	3	39

Small: e.g. BAE ATP, Boeing 737-400, Embraer 145 and BAE146

Medium: e.g. Boeing 757, Airbus 320 and Boeing 737-800

Large: e.g. Boeing 767-300

Jumbo: e.g. Airbus 330-300, Airbus 340-400, Boeing 747

and B777-300

4.4.3 There are three small stands on the east side of the apron, serving the airport's cargo facility. They are not included in the above figures.

4 Today's Airport - Glasgow in 2006

4.5 Passenger Terminal Facilities

- **4.5.1** Glasgow Airport is served by a main passenger terminal, which was originally built in 1966, and T2, an adjacent passenger check-in and baggage facility completed in May 2004. The main terminal building was extensively redeveloped and remodelled in the early 1990s and is nearing its current design capacity in certain facilities (e.g. security search). Adjoining the main terminal are three piers - international to the west, domestic in the centre and the low-cost east pier, which caters for a mixture of domestic and international traffic. Internally, the building is organised such that international departures and arrival facilities are situated at the western end of the building. with domestic departure/arrivals located in the centre and towards the eastern end. After the passenger security search areas, which are located close to the start of each pier, there are departure lounges and gate areas.
- 4.5.2 A forecourt, which allows passengers to be dropped off at the front of the terminal buildings, forms part of Caledonia Way, an internal airport road. BAA Glasgow has recently completed a £450,000 investment to improve the layout and operation of this area and to help reduce traffic congestion and improve pedestrian safety. Public bus services and airport licensed taxis now operate from a dedicated public transport corridor on the inner three lanes directly outside the terminal building. The outer three lanes of the forecourt are reserved for private car and private hire taxi drop-off.
- **4.5.3** The main terminal and the new T2 facility provide a combined total of 63 check-in desks with 100% hold baggage screening systems and 13 self-service check-in kiosks. There are three domestic and four international baggage reclaim belts.
- **4.5.4** There is a range of retail and catering facilities both landside (before security) and airside (the restricted zone after security).

4.6 Car Parking

- **4.6.1** There are four public car parking areas within the airport, offering a total of 5,552 spaces. There are 1,494 staff car parking spaces on the airport campus, 680 of which are located within the Viaduct car park located between St. Andrew's Drive and Sanderling Road. The remaining spaces are attached to the various offices and ancillary service buildings located around the airport campus.
- **4.6.2** Table 3 above right shows the number of parking spaces by type.

Table 3: Car Park Capacity

Location	No. of spaces
Short Stay Car Park 1	812
Short Stay Car Park 2 – MSCP and surface levels	2,418
Short Stay Car Park 3	522
Long Stay Car Park (NCP Flightpath)	1,800
Staff car parking	1,494

4.7 Cargo and Mail

- **4.7.1** Glasgow Airport has a busy cargo facility which occupies a land area of approximately 2.5 hectares at Campsie Drive. The area comprises a mixture of transit sheds and warehouses, providing approximately 8,000m2 of floorspace, and is served by a dedicated cargo apron. Glasgow's cargo business is made up of two elements; air cargo and mail flown on passenger services or dedicated cargo flights and trucked cargo, as the airport is a focal point for freight operators who access other major freight airports such as London Heathrow and Stansted by road.
- **4.7.2** In the twelve months to the end of 2005, 9,632 metric tonnes of air cargo and mail were handled, representing a slight decrease (-1.9%) on the previous year but an increase of 43% over the 2003 total. We understand that air cargo and mail accounted for approximately 15% of the total freight business at Glasgow Airport.
- **4.7.3** The overall increase in air cargo and mail in recent years is mainly due to growth in the volume of "bellyhold" freight being carried on passenger services. A number of long-haul airlines serving Glasgow such as Emirates, Zoom and FlyGlobespan operate aircraft such as the Boeing 777-300 and the Boeing 767-300, which have a large "bellyhold" freight capacity. Emirates have made Glasgow their Scottish hub for its Skycargo operation, shipping goods to the Gulf region, the Far East and Australasia.

4.8 Aircraft Maintenance

- **4.8.1** There are currently two aircraft maintenance bases at Glasgow Airport occupying a total land area of approximately 3.2 hectares. The largest hangar, located on Campsie Drive, has 7,200m2 of floorspace and is occupied by British Airways. This base is the principal location for the maintenance of their short-haul Boeing 737 fleet.
- **4.8.2** Loganair operates from a newer facility located at the western maintenance base. Completed in 2001, their hangar provides 2,300m2 of floorspace.

4 Today's Airport - Glasgow in 2006

Ancillary Facilities

- **4.9.1** A range of ancillary services and facilities are required at all airports to support the aviation business. These sometimes require a considerable land-take and although some can be located "off-airport", the majority need, for operational efficiency or regulatory reasons, to be in close proximity to the core terminal area. We indicate some of the more important ancillary facilities below:
- Airport Fire Station Glasgow Airport has its own airport fire service, which employs 68 staff and is operational 24 hours a day. The fire station is approximately 1,350m2 in size and is located in an airside area adjacent to the airfield. The airport's fire training ground covers an area of 0.5 hectares and is located in the north western part of the airport, off Barnsford Road. The fire station has a CAT 8 designation, consistent with operations by wide body aircraft (e.g. Airbus A330-200) under normal operating conditions, but, with the provision of additional fire-fighters, the airport fire cover can be upgraded to CAT 9 to cater for the largest "jumbo" size aircraft (e.g. Boeing 747-400)
- Fuel Farm There is one fuel farm covering an area of approximately 1.5 hectares. There are a total of seven surface level tanks with a combined capacity of approximately 3.5 million litres for the storage of Jet A1 aviation fuel. On-site accommodation includes offices, training and staff welfare facilities. Fuel is delivered by road tanker to the fuel farm and then by bowser to the aircraft:
- In-flight catering There are two flight catering businesses operating at Glasgow Airport, located at Campsie Drive. The principal operator, Alpha Catering, occupies a total site area of 11,000m2. In addition to the building, there are car-parking facilities and loading bays. Gate Gourmet occupies a slightly smaller base, of 9.500m2:
- Car-hire facilities Car-hire facilities including terminal facilities (desks within the domestic reclaim hall), ready return areas (parking spaces and modular kiosks, with customer shuttle bus service to the terminal). There are also back-up areas (servicing areas with vehicle wash and fuelling facilities and office accommodation). A total of 184 ready return parking spaces are provided opposite the main terminal, adjacent to Short Stay Car Park 2. Five of the six car hire companies have back-up facilities located on-airport, covering a total area of 1.65 hectares, with Europear's back-up depot located off-airport on Inchinnan Road: and
- Hotels There are three hotels located on the airport campus, and a further two immediately to the south within the Glasgow Airport Business Park. The largest of the on-airport hotels is the Holiday Inn, situated opposite the main terminal, which provides 300 rooms, a restaurant and several function/meeting rooms. The Express by Holiday Inn and The Travel Inn provide a

further 141 and 101 rooms respectively. The overall area occupied by on-airport hotels is approximately 2.2 hectares.

- 4.9.2 In addition to these ancillary facilities, Glasgow Airport also has the following facilities:
- General / business aviation facility
- Aircraft sanitation unit
- Motor transport facilities
- Emergency rendezvous points
- Engineering workshops and snow base
- Contractors compounds
- Office accommodation
- Police station
- Taxi feeder rank
- Petrol filling station
- Nursery
- Flying club

5.1 Introduction

- **5.1.1** Following the Air Transport White Paper, which predicts a significant and consistent rise in the number of people travelling by air, it is necessary to outline the range of traffic forecasts from the present day to 2030. Growth in the demand for air travel to and from Glasgow has been forecast using a standard air traffic forecasting model which measures various economic indicators. It is assumed that growth in air travel demand is driven mainly by economic growth (i.e. GDP, trade and consumption) and changes in the price of travel (i.e. real air fares).
- **5.1.2** The approach to passenger demand forecasting taken by BAA and the DfT means that the actual annual passenger volume in any one year will be influenced by any number of economic variables, such as those outlined above. Movements in air fares and population will also influence traffic change along with the extent to which Glasgow Airport has a share of the Scottish lowlands traffic, which is currently distributed across three airports at Glasgow, Edinburgh and Prestwick. Consequently, Glasgow Airport's annual passenger demand in 2030 will fall somewhere within a range of possibilities. For planning purposes, BAA Glasgow has based its medium and longterm capital development plans on the midpoint of this range of forecasts. It is important to emphasise that if traffic growth is at the upper end of the range, development will need to be accelerated to meet demand, while if traffic grows more slowly than predicted, capacity will inevitably be provided at a later date.
- **5.1.3** Forecasts included in this section relate to the following:
- Annual passenger figures;
- Annual passenger aircraft movement figures;
- Peak hour runway movement figures;
- Passenger aircraft stand figures;
- Air cargo and mail tonnage figures; and
- Public car parking figures.

5.2 Air Passenger Forecasts

- **5.2.1** 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 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.
- **5.2.2** 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.
- **5.2.3** 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 for air travel.
- **5.2.4** An important area of judgement is the expected course of oil prices. 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 record high levels for the next decade or so, followed by a period of further moderate increase.
- **5.2.5** BAA's current forecasts do not currently make any explicit assumption on higher levels of cost reflecting environmental impacts. Given the interest in extending the EU emissions trading scheme to cover aviation, something BAA strongly argued for, we are embarking on a study to assess the potential impacts of such a step on BAA's airport forecasts.
- **5.2.6** In the case of Glasgow the expected demand for travel is a result of assessing the share of the aggregate demand for air travel in the Scottish Lowlands area likely to be attracted to Glasgow. This takes account of competition from other airports in the region, notably Prestwick. The catchment areas for Glasgow and Prestwick overlap to an extent, and this provides some uncertainty as to the share of demand each airport achieves in the future. The forecasts represent a most likely scenario of traffic distribution based on current competition, population of the catchment area and surface access options.
- **5.2.7** The model delivers an average annual increase in passenger figures of slightly over 4% to 2015, and approximately 3.4% over the period to 2030. As noted in section 1.3.3, passenger volumes have grown at an average rate of 6.2% per year since 1995. GDP for the UK is assumed to grow at an average annual rate of 2.1% over the period, consumer expenditure at a similar rate, and trade at an average of 4.2%. This represents a slowing down of growth over recent trends.

- 5.2.8 The domestic air travel market experienced a high rate of growth between 2000 and 2003 primarily as a result of the entrance of no-frills airlines, supported by active marketing of our airports by BAA Scotland. The international scheduled market is now experiencing high levels of growth. The demand forecasts assume:
- On going fleet expansion and aircraft renewal by airlines will deliver increased capacity per flight movement;
- Gradual growth of away-based services as the number of continental low cost bases increase;
- On going development of low cost services by foreign airlines: and
- Continued reduction in 'real' air fares
- 5.2.9 Glasgow Airport's catchment area is now very well served by domestic air services, with a significant proportion of travellers utilising these services to transfer in the South East to international destinations. This provides scope for a significant expansion of direct international air services to and from Glasgow, which will to an extent mean a substitution of international for domestic air travel, i.e. the component currently transferring at other domestic points (e.g. London), to onward international destinations.
- 5.2.10 Table 4 below illustrates the range of BAA air passenger forecasts, as outlined above.

Table 4: Annual Passenger Forecasts (millions)

Year	Low	Central	High
2005 (Actual)		8.8	
2015	12.1	13.2	14.4
2030	16.6	20.2	23.8
Average Growth	2.6%	3.4%	4.1%

5.2.11The current international passenger volume at Glasgow is 4.2 million passengers. Of this figure, roughly 52% are using charter carriers such as Thomsonfly, My Travel and First Choice Airlines, 33% full-service carriers such as Continental, Emirates and KLM and 15% are on no-frills/low cost operators such as FlyGlobespan and Zoom. Average annual growth in the international market of 4.1% over the full period is forecast. Of this, the nofrills market share is expected to increase to around 50% of international traffic. Long-haul traffic is expected to increase from the current figure of approximately 800,000 passengers a year to 3.8 million by the end of the period. Domestic passengers as a proportion of the total are forecast to decrease from the current 53% to 43% by the end of the period.

5.2.12 Foreign based passengers, i.e. those passengers whose homes are not in the UK, currently represent 13% of the total passenger base using Glasgow Airport. This number is forecast to increase to 31% by 2015 and to 41% by 2030, creating unprecedented opportunities for Scotland's tourism industry and the wider economy and underlining the need for further growth in the number of hotel bed spaces in Glasgow and the surrounding area.

5.2.13It is assumed that general, short-term improvements in rail services will have a relatively small impact on domestic air services. However, significant impacts would no doubt result from the development of new high-speed rail links between Scotland and London. Given that there appear to be no firm commitments to deliver investments of this scale, the forecasts have to assume that domestic rail competition will have a moderate effect, less than 1% per annum, on the growth of domestic air travel demand beyond 2025.

Passenger Air Transport Movement Forecasts

5.3.1 Table 5 below shows the range of BAA forecasts for the annual number of passenger air transport movements.

Table 5: Annual Passenger Air Transport Movement Forecasts

Year	Low	Central	High
2005 (Actual)		95,952	
2015	115,400	125,100	134,400
2030	146,300	173,300	193,900
Average Growth	1.8%	2.5%	3.0%

- **5.3.2** In terms of air transport movements, BAA's forecasts reflect a reduction of domestic service share for Glasgow, from 71% of passenger air transport movements in 2005 to 61% by 2030. By contrast, the share of international scheduled service movements increases under the illustrated hypothesis from 29% of the total to 39% by
- **5.3.3** Table 6 below shows the range of BAA forecasts for the peak runway movements.

Table 6: Peak Runway Movement Forecasts Per Hour

Year	Low	Central	High
2005 (Actual)		31	
2015	39	42	45
2030	42	45	52

- **5.3.4** It is currently estimated that Runway 05/23 could be enhanced to offer approximately 45 movements per hour by the provision of additional rapid access and exit taxiways (RATs and RETs) and by the construction of additional sections of parallel taxiway. As Table 6 above indicates, our central case forecast demonstrates that peak runway capacity will not be exceeded until after 2030.
- **5.3.5** Therefore, as peak runway movement demand in excess of the available capacity is the key driver for the development of a new runway, it is unlikely that Glasgow Airport will require a second main runway before 2030. However, were air transport movements (and passenger throughout) to continue to grow as strongly as experienced during 2004/05 and the late 1990s, our central and high case forecasts would be exceeded and BAA Glasgow would investigate the feasibility of building a second main runway prior to 2030.

5.4 Passenger Aircraft Stand Forecasts

- **5.4.1** In 2005, the actual peak stand requirement was for 39 stands, against available capacity of 37 stands. (The two new stands are not included as they have only recently become operational).
- **5.4.2** By 2015, peak stand demand is expected to be in the range of 46 to 54 stands, with a central case forecast of 50 stands. By 2030, peak stand demand is likely to be in the range of 54 to 71 stands, with 62 stands being the most likely forecast. Table 7 below shows a detailed breakdown of the central case (most likely) forecasts for passenger aircraft stands by size.

Table 7: Passenger Aircraft Stand Forecasts (central case)

Year	Small	Medium	Large	Jumbo	Total
	Central	Central	Central	Central	Central
2005 (actual)	14	12	8	3	37
2015	9	24	4	13	50
2030	3	34	1	24	62

5.4.3 The stand demand forecasts for 'Large' and 'Jumbo' category aircraft are notably different from those shown in our Outline Master Plan. This is due to an expected requirement for more 'Jumbo' size stands to accommodate new generation wide-body aircraft such as the Boeing 787 'Dreamliner' and the Airbus A350. These new aircraft types have wider wingspans which help deliver enhanced range capability and superior fuel performance than the current models they will replace (e.g. the Boeing 767 and Airbus 310) and consequently, they will require larger parking

stands. Several airlines serving Glasgow Airport have placed orders for these new planes including Icelandair, First Choice Airlines, Monarch Airlines and FlyGlobespan. The total number of stands is forecast to remain the same as the need for 'Large' category stands is reduced.

5.4.4 The forecast growth in jumbo-sized stands is also driven by the anticipated growth in the international market, specifically long-haul and medium-haul routes. The growth in the requirement for medium stands is driven by the predicted expansion in international short-haul routes and by airlines changing the make-up of fleets and replacing older, smaller aircraft with new, larger ones.

5.5 Air Cargo and Mail Forecasts

- **5.5.1** As noted in Chapter 4, Glasgow's cargo business comprises both air flown and trucked cargo, as the airport is a focal point for freight operators who access other major freight hubs by road.
- **5.5.2** Glasgow Airport handled 9,632 metric tonnes of air cargo and mail in the twelve months to the end of 2005, a decrease of 1.9% on the previous year but an increase of 43% over the 2003 total. This overall rise was mainly due to a large increase in the volume of "bellyhold" freight being carried on scheduled passenger services. A number of long-haul carriers such as Emirates, Zoom and FlyGlobespan now operate aircraft such as the Boeing 777-300 and the Boeing 767-300, which can carry around 17 and 11 tonnes of freight respectively.
- **5.5.3** This recent increase in capacity along with the forecast growth in other direct international air services is expected to facilitate sustained growth in Glasgow's air cargo business over the forthcoming years.
- **5.5.4** Table 8 outlines indicative BAA forecasts for air cargo and mail tonnage.

Table 8: Air Cargo and Mail Tonnage Forecasts

Year	Air Cargo and Mail
2005 (Actual)	9,632
2015	11,250
2030	13,130
Average Growth	1.2%

5.6 Car Parking Forecasts

5.6.1 Table 9 below shows the range of BAA forecasts for unconstrained peak public car parking demand. The actual and forecast figures for long stay car parking include BAA Glasgow's estimate of off-airport peak demand within a five mile radius of the airport.

Table 9: Public Car Parking Space Demand Forecasts

Year	Low	Central	High
	Short/Long	Short/Long	Short/Long
2005 (Actual)		3,752 / 13,000	
2015	4,500 / 16,400	4,900 / 17,800	5,300 / 19,300
2030	4,800 / 25,000	5,500 / 29,900	6,600 / 33,800

- **5.6.2** The forecasts suggest that in the period to 2030 the peak demand for short-stay car parking spaces could increase by approximately 50%, while the total demand for long stay car parking spaces related to the airport's operation could more than double over the same period. It is important to highlight two particular points in relation to public car parking provision.
- 5.6.3 Firstly, short stay car park capacity is best developed and most land efficient in the form of multi-storey developments which are planned to accommodate growth over a number of years (i.e. capacity needs to be provided slightly ahead of demand).
- **5.6.4** Secondly, much of the anticipated growth in long stay parking capacity will continue to be provided by third party off-airport operators. However, as a significant volume of this capacity is provided on sites with temporary planning approvals (typically 3 – 5 years), BAA Glasgow will continue to play an important role in providing a consistent and high quality supply of long stay car parking to support the airport's operation and growth.
- **5.6.5** These forecasts assume that the planned rail link to Glasgow Airport is brought into operation around 2009. Chapter 7 provides more information on car parking strategy and new transport infrastructure developments.

6 Land Use to 2015

6.1 Introduction

- **6.1.1** It is predicted that in 2015, Glasgow Airport will be handling between 12 and 15 million passengers a year. The White Paper states that "The Government's view is that substantial development of terminal and airside facilities at Glasgow Airport will therefore be required, including doubling or more the present terminal capacity. We support their provision and the safeguarding of any land required outside the airport boundary to allow full use to be made of the existing runway".
- **6.1.2** This section of the Master Plan details the developments which will be required to cope with the scale of growth for all aspects of the airport's operation up to 2015. Within this timescale, BAA Glasgow believes that airport development can be accommodated on land currently owned by BAA. However, to facilitate airport growth beyond 2015, additional land to the east of Abbotsinch Road (i.e. Netherton Farm) will be required. Drawing 4 indicates that the airport development to 2015 is undertaken within the existing boundary.
- **6.1.3** 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 accelerate some of the expansion programme. Similarly, a slower rate of growth would be reflected in development of new or replacement facilities at a later stage. The exact nature and timing of the developments outlined in this section will always be subject to detailed financial and environmental evaluation. Consequently, the precise location and configuration of capacity enhancements may be subject to change.

6.2. Air Traffic Control / Airspace

- **6.2.1** In preparing this plan, BAA Glasgow has assumed that the capacity of the airspace surrounding the airports, and of the corridors and airspace across Scotland and the UK generally, will grow to accommodate the forecast growth in traffic.
- **6.2.2** The new Scottish Air Traffic Control Centre currently being constructed at Prestwick is due to supersede the existing Scottish control centre in 2009 and will offer the potential for increased airspace capacity through the delivery of new technology.
- **6.2.3** BAA Glasgow understands that NATS are undertaking a major review of the Scottish air traffic area in order to deliver additional airspace capacity. The promoter of any changes in published airspace routes must follow a

specified public consultation process prior to approval by the CAA.

6.3 Runway and Taxiway System

- **6.3.1** It is anticipated that the construction of rapid access and exit taxiways and an additional section of parallel taxiway will be required in the period to 2015 to achieve approximately 45 movements per hour to meet forecast demand. The normal operation of the main runway will be maintained while these taxiways are under construction.
- **6.3.2** It is anticipated that the secondary runway, 09/27, will be utilised in exactly the same way in the period to 2015, with no increase in usage.

6.4 Aircraft Aprons

- **6.4.1** As mentioned in Chapter 5, forecast demand is for between 46 and 54 stands in 2015. Under our central forecast of 50 stands, this would require the building of about one new stand every year over the next ten years. The current preferred airfield development strategy in the period to 2015 is to develop these additional stands to the west of the current main terminal beyond the existing International Pier and its associated aircraft stands, utilising land currently occupied by a range of different operational and airport-related facilities (see Drawing 4).
- **6.4.2** The forecasts highlight a requirement for an increase in jumbo-sized stands to accommodate such aircraft as the Boeing 777, the new Boeing 787, the Airbus A330 and the new Airbus A350. This need reflects the expectation that Glasgow Airport will be handling more international services in the future, especially those to and from longhaul destinations.

6.5 Passenger Terminal Facilities

- **6.5.1** It is envisaged that Glasgow Airport will continue to be served by the main passenger terminal and the T2 check-in and baggage facility in the period to 2015. As noted in paragraph 4.5.1, certain facilities of the main terminal are reaching their current capacity and the building will therefore require to be extended to the east and west in a phased development programme. There may also be a need to expand the terminal to the north or south to increase the size of the baggage processing facilities or to provide extra circulation space. This will allow the terminal to cater for passenger growth up to 2015.
- **6.5.2** Additional terminal capacity will be required for check-in, baggage processing, baggage reclaim, departure lounges and boarding gate facilities. The first stage of this major development programme, a near £10 million three storey western extension of the main terminal, was

6 Land Use to 2015

completed in June 2006. This project has provided increased circulation space and a fourth baggage reclaim belt at ground floor level for passengers arriving from international destinations, a 50% increase in the International Departure Lounge (IDL) at first floor level, offering improved catering and retail facilities, and leisure and business lounges on the second floor level.

- 6.5.3 Commencing in spring 2007, a significant amount of capital expenditure will be invested in the re-development and re-configuration of the main terminal. This £25 million project will promote new levels of customer service, through a centralised security search facility, as opposed to the three separate areas at present, increased circulation space and additional retail and passenger facilities for travellers. Following this development, there will be further expansion on the western (international) side of the main terminal, including a new £30 million international pier (known as the i2 project) to cope with the growth in passengers travelling direct to and from Scotland.
- 6.5.4 In addition to these significant terminal expansions, there will be an ongoing programme of refurbishment and renewal of existing facilities, to ensure that Glasgow Airport can respond to changes in technology, airline needs and passenger expectations as appropriate.

6.6 Car Parking

- **6.6.1** Additional multi-storey capacity for short stay car parking will be required before 2015 and will need to be sited in close proximity to the main terminal. It is likely to be of a similar size and scale to Short Stay Car Park 2, which opened in 2002. In addition to accommodating forecast growth in demand, it will re-provide short stay capacity expected to be lost when the airport rail station and public transport interchange are constructed and the airport road network is reconfigured.
- 6.6.2 Analysis of long stay parking usage has indicated that on-airport supply is lower than peak demand. BAA Glasgow intends to provide additional long stay capacity (approximately 1,000 spaces) on a site at Abbotsinch Road, following the approval of a planning application by Renfrewshire Council. As noted in Section 5.6.4, it is likely that the majority of long stay provision will continue to be provided by third party off-airport operators. Car parking strategy is discussed more fully in Chapter 7.

Cargo and Mail

6.7.1 While sustained growth in cargo is expected to be facilitated by new direct international services, new developments will be undertaken only as a result of specific requests from cargo operators. It is our understanding that cargo handlers require additional pallet make-up space to cope with the forecast growth in air flown cargo. Detailed plans will be brought forward once they have been

prepared and agreed with operators.

Aircraft Maintenance

6.8.1 Two replacement maintenance hangars are likely to be needed as a result of the western expansion of the terminal and apron area. An indicative development zone of approximately three hectares for these hangars is reserved to the east of the runway 09/27, adjacent to the General Aviation area (see Drawing 4). It is anticipated that these hangars would be used to maintain small or medium sized aircraft such as the SAAB 340, Embraer 135/145, Boeing 737 variants and Airbus 319/320.

6.9 Ancillary Facilities

- **6.9.1** As the number of air passengers increases, the demand for land to house extended support services will also increase. Some examples of the types of additional support facilities needed were given in Chapter 4. Where practicable, 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. Drawing 4 illustrates the areas required for ancillary uses to 2015.
- **6.9.2** It is BAA Glasgow's belief that the vast majority of ancillary facilities should be provided within the airport campus in close proximity to the operational areas for two kev reasons:
- If support facilities are located remotely from the airport then a considerable number of additional road journeys would need to be made to service the operational facilities. This would add unnecessarily to road congestion and to CO2 emissions; and
- The additional vehicles, staff and time allowances required to undertake remote servicing would add significantly to the operational costs of the businesses providing support services to the airport.
- 6.9.3 It is anticipated that an increase in the provision of hotel beds at Glasgow Airport will be required before 2015 and this will most likely be met by the construction of one new hotel. The provision of on-airport accommodation is an essential component of a major airport for passengers and air crew staying overnight, delayed flights, business meetings and conferences. On-airport hotels also offer environmental benefits as they limit off-site trips.
- **6.9.4** We recognise the importance and contribution of the business and general aviation sector to the UK economy. The National Business Aviation Association predicts this fast growing sector will double in size by 2011. BAA Glasgow will ensure that the needs of this important sector are taken into account as the airport expands and the utilisation of runway capacity by commercial flights becomes greater.

6 Land Use to 2015

6.10 Landscaping

6.10.1As the airport campus develops, appropriate landscaping provisions will be made to maintain the existing high standards without compromising aircraft safety through the attraction of birds to the airfield.

Introduction

7.1.1 Glasgow Airport recognises the importance of good surface access. The environmental and decongestion benefits of ensuring as many passengers as possible use sustainable transport modes getting to and from the airport are also widely accepted. In 2001, Glasgow Airport set a target to increase the percentage of passengers using public transport from 8.5% to 12% by 2006 and since then has been undertaking a proactive approach and working in partnership with transport operating companies to achieve this.

7.2 Surface Access Strategy in Context

- 7.2.1 BAA Glasgow believes that an integrated approach to surface access issues is required if the appropriate infrastructure to enable the airport to grow is to be provided.
- 7.2.2 The scale of aviation activity and growth at Glasgow Airport has a direct relationship with the demand for surface transport connections. The association between airport activity and the demand for road, rail and even nonmotorised travel is complex and requires full understanding of a wide range of passenger and airport servicing requirements. Air passengers, people accompanying or meeting them, and staff, account for the majority of vehicle movements with the remainder serving the airport's supply chain and cargo operation.
- 7.2.3 BAA Glasgow recognises the importance of monitoring, planning for and managing the demand associated with its operation and the prominence that this issue has been given within UK Government and Scottish Executive policy. Early recognition of the importance of surface access prompted each of BAA's three airports in Scotland, including Glasgow, to establish an Airport Transport Forum, which in turn developed a long-term Airport Surface Access Strategy (ASAS). BAA Glasgow's strategy was published in 2001, with due cognisance of the Scottish Executive's request that all local authorities develop Local Transport Strategies.
- 7.2.4 It is important to be clear on the very different roles of the Master Plan and the Airport Surface Access Strategy (ASAS). The Master Plan takes a long term strategic view, outlining the anticipated demand for air travel and the physical responses to this demand. As would be expected of such a strategic document it takes a necessarily high level view. The ASAS deals with short to medium term tactical responses to the surface access demand identified in the Master Plan and has the setting of increasingly challenging mode share targets as a core objective.

7.2.5 A revised ASAS for Glasgow Airport will be published by March 2007. As noted in the Air Transport White Paper, it will be a subsidiary document to the Master Plan and will set mode share targets based on a corridor and area analysis. It would be inappropriate for this Master Plan to prejudge this analysis and to present revised mode share targets, which whilst challenging, may prove to be unachievable. With this in mind this Chapter will concentrate on current performance, the drivers of mode share, future challenges and the potential strands of future Airport Surface Access Strategies.

Current Airport Surface Access Strategy (ASAS)

- **7.3.1** The Glasgow Airport Surface Access Strategy was developed in consultation with the organisations that make up the Airport Transport Forum, such as Renfrewshire Council, City of Glasgow Council, transport operators and the Strathclyde Partnership for Transport (SPT). The strategy has three main objectives relating to surface access:
- To increase the percentage of passengers using public transport from 8.5% to 12% by 2006;
- To reduce single-occupancy car journeys by staff from 76% to 66% by 2006; and
- To develop an integrated transport strategy.
- 7.3.2 The strategy makes clear that while improvement in public transport provision is important, road and junction capacity improvements in the wider conurbation are of increasing long-term significance, given the disparate nature of passenger origin and demand and the limited capability of public transport to serve such a geographically-dispersed customer base.

Existing Surface Access Infrastructure

- **7.4.1** The main access route to the airport is the M8 motorway. Junctions 28 and 29 provide direct access to the airport road network, which is controlled and maintained by BAA Glasgow. The M8 is the critical link between Glasgow Airport and the wider trunk road network in west central Scotland, providing connections to the A737 (North Ayrshire), the A898 Erskine Bridge, the M77 (East and South Ayrshire) and the M80 (Stirling and the north).
- 7.4.2 The trunk road network (though particularly the M8) suffers from high levels of congestion during peak times, resulting in unreliable journey times. Whilst the airport is a significant generator and attractor of road traffic, the daily passenger profile and staff shift patterns are such that it is far from the main cause of congestion on the road network. Data from a road traffic survey undertaken by our transportation consultants in October 2005 indicates that during the AM and PM peak periods, less than 15% of the

total traffic using the M8 motorway was associated with the airport's operation.

7.4.3 Local road access to the airport from Paisley and other towns in Renfrewshire can be obtained via the A726 Barnsford Road, Inchinnan Road and Abbotsinch Road.

Existing Public Transport Options

7.5.1 Express bus services currently represent the main public transport connection from the city centre to Glasgow Airport. Scottish Citylink's 905 service operates between 05:40 and 00:00 from Buchanan Bus Station and a number of other city centre stops via the M8 to the airport. The service frequency ranges from every ten minutes during the day to every 30 minutes after 20:00. The last Citylink service from the airport to the city centre departs at 00:30 hours. Linn Park Buses introduced their 950 service in January 2005, with a 10 to 30 minute frequency between 05:55 and 23:25. This service also starts at Buchanan Bus Station. The published journey time for both services is approximately 25 minutes, though at peak times this time can be longer.

7.5.2 Arriva Scotland West operate the majority of local bus services to/from and via the airport with the corridor along Inchinnan Road to Paisley town centre benefiting from a ten minute service frequency for most of the day. Other destinations further afield such as Clydebank, Greenock and Gourock have an hourly service and Fort William and the Isle of Skye have a once daily service operated by Scottish Citylink.

7.5.3 BAA Glasgow recognises the value of local bus services, not just in social terms, but as a means of reducing road traffic congestion. The Airport Surface Access Strategy, due for publication in early 2007, will identify ways in which the airport can work in partnership with local transport providers to improve public transport options.

Passenger and Employee Distribution 7.6

7.6.1 Table 10 illustrates the origin of departing passengers using Glasgow Airport. This shows that the vast majority begin their outward journey from the former Strathclyde area.

Table 10: Origin of Passengers using Glasgow Airport⁴

Origin	Percentage
Strathclyde	77.7%
Lothian	5.0%
Central	4.1%
Tayside	3.6%
Fife	2.5%
Grampian	2.4%
Highlands and Islands	1.8%
Dumfries and Galloway	1.3%
Rest of UK	1.3%
Borders	0.3%

⁴ CAA Passenger Survey 2005

7.6.2 The top five home locations of airport employees are shown in Table 11 below. Paisley has the largest residence accounting for almost one third of all staff employed at the airport.

Table 11: Origin of Staff Employed at Glasgow Airport⁵

Location	Percentage
Paisley	28%
City of Glasgow	13%
Erskine	5%
Renfrew	4%
Johnstone	4%

The vast majority of the rest of airport employees live in other towns and villages in Renfrewshire, Inverclyde and East Renfrewshire, though a few employees travel from as far away as Argyll and Perthshire.

Existing Mode Share

7.7.1 Table 12 shows the existing mode share of passengers and Table 13 shows the existing mode share of airport employees.

Table 12: Existing Modal Split of Passengers⁶

Mode of Transport	Percentage
Private Car	58%
Taxi	26%
Bus/Coach	11%
Hire Car	4%
Other	0.9%
Rail Link (to Paisley)	0.1%

Table 13: Existing Modal Split of Staff⁷

Mode of Transport	Percentage
Private Car – driver only	67%
Bus	14%
Private Car – passenger	8.6%
Taxi	6%
Other (inc. motorcycle & cycle)	2%
Walk	1.4%
Rail to Paisley GS (and bus link)	1%

5/7 BAA Glasgow Staff Travel Survey Aug - Oct 2004 6 CAA Passenger Survey 2005

7.7.2 At over 11%, the number of passengers travelling to and from the airport by sustainable transport modes (public transport, walking and cycling) is comparable with many other regional airports in the UK. BAA Glasgow believes that its current target to increase public transport usage to 12% will be achieved this year through the existing bus services.

7.7.3 The significant number of employees who live in close proximity to the airport explains why public transport mode share by staff is higher at almost 18%.

Future Surface Access Infrastructure

7.8.1 The Air Transport White Paper acknowledges that good surface access will be critical to the future ability of Glasgow Airport to grow. The key issue for BAA Glasgow is general traffic congestion using the surrounding road network which is unconnected with the airport. BAA Glasgow believes that this will have a growing and significant impact on the airport if it is not adequately addressed. It is important that passengers can access the airport efficiently and reliably. If they cannot, then the natural growth of the airport may be restricted and the demand for air travel may be met at other airports.

7.8.2 BAA Glasgow will continue to explore any initiative which could improve surface access links to the airport. The Scottish Executive, Renfrewshire Council, City of Glasgow Council and all the surrounding local authorities also wish to see better surface access provision to and from the airport. BAA Glasgow is fully committed to working with the relevant agencies to ensure that appropriate strategies and improvements are implemented as and when required. We have commenced work on a revised Airport Surface Access Strategy, which, following further discussion and feedback from our partners on the Glasgow Airport Transport Forum, will be published by March 2007.

7.8.3 The White Paper states that "The proposed increase in terminal capacity at Glasgow Airport would need to be supported by improvements to the surface transport infrastructure serving the airport. The Scottish Executive has asked Strathclyde Passenger Transport (SPT) to work up

plans for a rail link to the airport. This could form one element of a potential package of surface access improvements that may be needed to cater for increased traffic volumes associated with the airport's future growth. BAA and the relevant local authorities, in conjunction with Strathclyde Passenger Transport, are therefore invited to work up proposals for enhancing transport corridors serving the airport for consideration as part of the Executive's review of strategic transport projects".

7.8.4 BAA Glasgow believes that decisions on future interventions should be made on the basis of clear and verifiable data. It is also vital that new surface access initiatives should be considered as part of a fully integrated transport system and co-ordinated to ensure their development does not compromise the accessibility and operation of the airport.

Rail

Strathclyde Partnership for Transport (SPT) is promoting the provision of a heavy-rail link to the airport. A Private Bill seeking the powers to construct and operate the Glasgow Airport Rail Link (GARL) was submitted to the Scottish Parliament on 31 January 2006. This proposal involves the installation of a third track on the main Glasgow Central Station – Paisley Gilmour Street line, the construction of a new double track branch line into the airport from a point close to Paisley St. James Station, and the construction of an elevated airport rail station to the south of Short Stay Cark Park 2. It is proposed that the new station will be linked to the terminal buildings by some form of enclosed walkway with travellators.

The GARL Bill is expected to receive Royal Assent by Spring 2007 and SPT's current programme is for the airport rail link to be operational by the end of 2009. The introduction of the rail link should provide a more reliable and faster journey time into Glasgow city centre (estimated by SPT to be 17 minutes), particularly during peak periods, but at a higher capital cost than the existing bus services. The proposed rail link will allow for connections via Glasgow Central Station to other destinations within and beyond the Greater Glasgow conurbation. Further work is required to understand the scale of improvements and benefits which a 15-minute frequency rail service may deliver for airport growth in future years within the overall public transport

A separate technical assessment has been completed by SPT into the proposed Glasgow Crossrail scheme. If approved and constructed, this strategically important project would allow for new cross-conurbation and crosscountry rail services, greatly improving the connectivity of the airport from the north and east. BAA Glasgow believes the Crossrail project is a logical next step in Scotland's rail infrastructure investment and that its implementation will

be crucial to the long-term success of the Airport Rail Link.

Bus and Coach

BAA Glasgow recognises the socio-economic benefits of bus services and will continue to work with operators, SPT and local authorities to explore the potential for new services to destinations not currently served by public transport.

We have recently completed a £450,000 investment to improve the layout and operation of the terminal forecourt area to help reduce traffic congestion, promote public transport and improve pedestrian safety. All public bus and coach services now operate from a dedicated public transport corridor on the inner three lanes directly outside the terminal building. Charter coaches also have a dedicated drop-off and pick up zone at Bute Road. Further improvements are planned including the creation of a public transport interchange.

The forthcoming ASAS will identify possible improvements to existing bus services and new routes and specify ways in which the airport can work in partnership with key stakeholders to achieve them. The new Clyde Fastlink proposal is an exciting example of one project which BAA Glasgow believes could deliver higher levels of public transport mode share to and from the airport and help to promote social inclusion by linking the airport employment market to disadvantaged communities.

Taxis

In June 2006, BAA Glasgow introduced amendments to the system for taxis and private hire vehicles wishing to operate at the airport. This has resulted in improvements to the management of these vehicles for the benefit of passengers and has reduced congestion at peak times. On the inner forecourt, the fleet of airport licenced taxis operate from a rank directly outside the main terminal building. Also located on the inner forecourt are two bays for pre-booked pick-ups by Glasgow city 'black cabs'. All other taxi and private hire vehicles are able to drop-off passengers on the outer forecourt and have designated pick-up areas in Short Stay Car Parks 1 and 3.

Non-Motorised Transport Modes

There are well established routes for pedestrians at the airport and these will be kept under review to ensure that pedestrian access to and around the airport continues to be safe and convenient.

The airport cycle route network was created in 1999 and is linked via Paisley to the National Cycle Route Network.

Road

Even with the development of a rail link to the airport, the many differing origins of passengers and employees will

result in the majority continuing to access the airport by road, principally by private car. BAA Glasgow believes existing congestion on the road network, together with the anticipated economic growth in the Glasgow and the Clyde Valley conurbation, means that benefits from the probable requirement to improve road capacity will have to be matched with measures to lock in the benefits achieved.

Within the immediate vicinity of the airport, a recent study undertaken by BAA Glasgow's transport consultants indicates the volume of traffic using the M8 motorway will result in the current eastbound (Glasgow bound) on-ramp at Junction 28 exceeding its design capacity by 2015. This is partly due to the fact that the slip road does not meet current design standards due to its geometry and insufficient length. This causes vehicles using the main carriageway over the M8 White Cart Viaduct to avoid using the inside lane at this junction, thereby effectively reducing the road width to two lanes on the elevated section.

BAA Glasgow is committed to working with the Scottish Executive and Renfrewshire Council to identify the most appropriate solution to this sub-standard slip road to ensure current and future traffic volumes can access the motorway in a safe manner. Our consultants have concluded that a replacement eastbound slip road to cater for projected traffic levels beyond 2015 could be constructed for significantly less cost than any of the alternative options previously investigated. An indicative alignment for this replacement eastbound slip road is shown on Drawing 4 and we would welcome further discussions with the Scottish Executive and Renfrewshire Council to establish how our preliminary work can be carried forward.

Beyond the airport boundary, the Scottish Executive has announced its intention to proceed with the construction of the M74 extension, which by providing an alternative to the Kingston Bridge, should reduce peak time congestion for passengers wishing to access the airport from the city centre and from areas to the east of the Glasgow conurbation. The completion of the M74 is expected to be in 2009 and the project will also deliver an increase in M8 capacity between Junction 21 at Seaward Street and Junction 25 at Cardonald/Clyde Tunnel.

Paragraph 5.23 of the White Paper acknowledges that surface access improvements over and above the proposed rail link will be required to support the airport's future growth and calls on BAA, the Scottish Executive, local authorities and SPT to bring forward proposals for consideration in the forthcoming review of strategic transport projects. The Glasgow and the Clyde Valley Joint Structure Plan 2006 – Written Statement also states that priority should be given to investigating an upgrade to the M8 between Junctions 26 and 29. BAA Glasgow supports this proposal in principle and calls on the Scottish Executive

and Renfrewshire Council to lead a detailed study to identify what additional improvements may be required to the M8 motorway and other local roads, not only to secure the benefits from the anticipated growth of Glasgow Airport but to facilitate economic development arising from the large scale regeneration projects at Braehead/Renfrew Riverside, ROF Bishopton, the Phoenix and Inverclyde Riverside.

7.8.5 Glasgow Airport's internal road system was reconfigured and upgraded in the early 1990s when the airport underwent a major development programme. Another reconfiguration of the internal road system will be required over the next ten years to facilitate the expansion of the terminal and associated landside ancillary facilities and to cater for future traffic levels. Architects and roads consultants have been commissioned to prepare a landside development strategy, which includes substantial changes to the airport road network. Although work on this strategy is on-going, it is likely that two separate forecourts will be created, one for drop-off and one for pick-up.

Parking Strategy

- 7.9.1 It is BAA Glasgow's view that car parking has to be considered as part of an integrated approach to surface access improvements.
- 7.9.2 Short stay car parking (generally up to 3 days) is provided in the area immediately in front of the main terminal building, at surface level and within multi storey car parks. There are a total of 3,752 spaces in these car parks. Long stay car parking (1,800 spaces) is provided in a surface level car park on the eastern side of the airport on Abbotsinch Road.
- 7.9.3 Passengers with limited mobility and holding blue badges are able to drop-off and pick-up from two designated bays outside the main terminal building. Disabled parking bays are available in the area of the ground floor of the MSCP closest to the terminal building with access available via a covered walkway. This provides a safe and secure place to be dropped off, away from the busier private car drop off area.
- **7.9.4** There are currently approximately 13,000 spaces provided by third party off-airport car park operators within a five mile radius of the airport. Therefore, of total long stay provision, approximately 14% is located on-airport and 86% off- airport. As noted in Section 6.6.2, analysis of long stay parking usage has indicated that on-airport supply is lower than peak demand. BAA Glasgow intends to provide additional long stay capacity (approximately 1,000 spaces) on a site at Abbotsinch Road to redress this imbalance, though the majority of long stay provision will continue to be provided by third party off-airport operators. It is essential that any strategy for managing car parking

demand has to include off-airport car parking which is by far the largest sector of the market.

- **7.9.5** Passengers requiring short stay parking wish to be accommodated within walking distance of the terminal buildings and we therefore intend to cater for future short stay demand with an additional MSCP at the front of the terminal. This intensification of land use reduces the amount of green field land required for parking.
- **7.9.6** There is a complex relationship between provision and pricing of car parking, car park utilisation and road congestion. Experience in recent years at Glasgow has shown that provision of high quality parking, such as Short Stay Car Park 2, can help reduce the number of passengers being dropped off and picked up by friends and relatives. It is in everyone's interests to reduce "kiss and fly" as much as possible as this is the most environmentally damaging mode of accessing the airport.

7.10 Future Airport Surface Access **Strategy (2007-12)**

- **7.10.1**The ASAS is an important element of the airport's sustainable development policies. Improving travel choices will benefit not only passengers and staff but will benefit the environment by reducing emissions from private cars.
- **7.10.2**As explained in paragraph 7.2.4, the ASAS deals with short to medium term tactical responses to the demand identified in the Master Plan, including the setting of mode share targets. These targets will be developed by corridor or area in relation to the existing or potential passenger and employee concentrations, transport infrastructure and services levels. Data from the 2005 CAA Passenger Survey and BAA Glasgow's 2004 Staff Travel Survey will be used to inform the analysis.
- 7.10.3The airport's Air Transport Forum, which includes Renfrewshire Council, Glasgow City Council, transport operators and other key stakeholders will be fully consulted and involved in the production of the document.
- 7.10.4The ASAS will be published by the end of March 2007 and will cover the five year period from 2007 -2012.

8 The Environment to 2015

8.1 Sustainable Development and **Responsible Growth**

8.1.1 BAA Scotland's airports are and will continue to be managed and developed in the context of the Government's strategy for sustainable development. In 1999, the UK 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; and
- Maintenance of high and stable levels of economic growth and employment.

8.1.2 The Government published a new strategy, "Securing the Future", in March 2005, to which BAA Glasgow has given full consideration while revising this Master Plan. The new strategy's 'purpose' signals how the Government will evolve its sustainable development policy – building on the earlier strategy, not departing from it. Five guiding principles 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; and
- Using sound science responsibly.

8.1.3 The new strategy also specifies four priority areas for

- Sustainable consumption and production;
- Climate change and energy;
- Natural resource protection and environmental enhancement; and
- Sustainable communities.
- 8.1.4 More information on BAA's, and BAA Scotland's sustainable development programme is available at www.baa.com/corporateresponsibility.
- **8.1.5** Responsible growth of air transport and airports should only be undertaken where it is aligned with these key national sustainability objectives. However, 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 specific response, such as the Earth's capacity to handle greenhouse gases, it is also necessary to recognise economic and social costs and benefits, not least in the communities around airports, which enjoy significant employment benefits as well as enduring local impacts.
- 8.1.6 BAA Scotland 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. The ultimate aim is to secure the widest possible support for the development and management of Glasgow Airport.

8.1.7 BAA Scotland has a first-class track-record in funding and delivering high-quality airport capacity infrastructure, at no cost to the tax or rate payer. The Government can have confidence in BAA's proven ability to deliver major projects in a responsible and sustainable way.

Safeguarding the Environment

8.2.1 BAA Scotland recognises that the UK Government, the Scottish Executive and a number of regulatory agencies will need to be satisfied that the environmental implications of airport expansion and of new runways in particular, can be managed in a manner which would not lead to unacceptable impacts. BAA Scotland recognises that the biggest global environmental issue facing aviation is its contribution to climate change. BAA believes that international aviation emissions should be brought within the Kyoto framework as soon as possible. We believe that the most effective solution to address aviation's contribution to climate change is through a system of tradable permits in emissions – emissions trading - and BAA is committed to supporting the EU's work plan to bring aviation greenhouse gas emissions within the EU Emissions Trading Scheme as soon as practicable from 2008. This will force the aviation industry to make a choice: either cut emissions or pay for permits which will fund innovation in other industries to deliver matching emissions reductions.

8.2.2 For people living under flight paths or close to an airport, noise is a major concern and its effective management is an important part of our ability to deliver responsible development. While aircraft are becoming progressively quieter, there is no avoiding the fact that increased capacity and the possibility of new runways will inevitably lead to larger noise footprints around airports. BAA believes that airlines and manufacturers must make further progress to improve their performance and standards.

8.2.3 The remainder of this chapter considers in more detail the following issues:

- Climate Change (including energy consumption)
- Air Noise
- Ground Noise
- Air Quality
- Management of the Water Environment

8 The Environment to 2015

- Biodiversity
- New Land Take
- Waste Management
- Heritage.

8.3 Climate Change

- **8.3.1** There is broad international scientific agreement that emissions of greenhouse gases, such as carbon dioxide (CO2), from human activity are exceeding the earth's capacity to absorb them. There is wide consensus that this is having a noticeable impact on climate, with significant effects on global temperatures and weather patterns.
- **8.3.2** BAA Glasgow recognises that climate change is one of the biggest issues facing mankind. It is a global issue which requires action by all – governments, businesses and individuals. Unilateral action by BAA alone would be of limited value. This explains why we support the leading role that the UK Government has played in the international community working to identify and obtain agreement to address it.
- **8.3.3** The aviation industry has a small but growing contribution to climate change. The UK Government estimates that UK domestic and international aviation accounted for 6% of the UK total in 2004. In comparison, emissions from road transport were estimated to account for 24% of the total. The Intergovernmental Panel on Climate Change (IPCC) estimates that aviation's global contribution to climate change could grow to 5-6% by 2030.
- **8.3.4** Aviation contributes to climate change in a number of ways. The burning of fossil fuel in flight 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. We have taken a proactive approach to addressing our contribution to climate change in each of these areas.

Aircraft and climate change

- **8.3.5** Emissions Trading whereby industries which cannot reduce their own emissions can buy permits from industries which can, within an overall cap – has been identified as the most effective mechanism to meet reductions targets, as resources are directed to where cuts can be achieved most quickly and at the lowest cost. The scheme works on the principle that it does not matter who generates the emissions, as long as the total volume of emissions which are generated do not breach the cap.
- **8.3.6** 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, we recognise this is a complex issue which will take time to resolve, so we support Europe (EU) wide action as an interim step.
- 8.3.7 As such, BAA has been a strong supporter of the UK Government's policy of including aviation in the EU Emissions Trading Scheme (ETS) from 2008, or as soon as possible thereafter. We also welcome the European Commission's recent Communication supporting emissions trading as the best way forward. The Commission is planning to bring forward a formal legislative proposal on this by the end of 2006.
- 8.3.8 BAA has played a leading role within EU aviation in supporting aviation's inclusion in the ETS. In particular we have worked through ACI-Europe, our 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.
- **8.3.9** BAA has also worked with airlines, aircraft manufacturers and other airports in the UK to develop the 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. Further information on the Sustainable Aviation strategy is available at www.sustainableaviation.co.uk.
- 8.3.10The 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 our international trade association, ACI World.
- 8.3.11 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: oxides of nitrogen (NOx) 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 some 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.

8 The Environment to 2015

8.3.12BAA acknowledges the importance of addressing aviation's other impacts. We are committed to work with all stakeholders to discuss other possible policies to complement emissions trading, and have called on governments to establish a roadmap for addressing these impacts, with clear policy milestones.

The contribution of energy consumption at airports

8.3.13BAA Glasgow's main emphasis in addressing the issue of climate change relates to the ground level emissions attributable to the operation of airport facilities. These are emissions from the burning of fossil fuels that provide heating at the airport; emissions from electricity generation at power stations located further afield and emissions from road vehicles using the airports.

- 8.3.14 Glasgow Airport's CO2 emissions from fixed sources in 2005/06 were 17,411 tonnes. Overall, BAA is one of the UK's top 20 industrial consumers of energy and we have set a target to reduce our absolute CO2 emissions from energy use by 15% over 1990 levels by 2010. We are on track to meet that target, through improvements in energy efficiency and conservation and through increasing the use of renewable energy sources. BAA is already a participant in the EU ETS and we are currently undertaking work to develop our emissions reduction target for the period beyond 2010.
- 8.3.15BAA Glasgow has an important role to play in ensuring the overall BAA target is met and has put a range of measures in place, including improvements to the efficiency and management of the heating, cooling and lighting in many airport buildings. Current energy reduction objectives for Glasgow Airport include:
- Investment in equipment that can improve the efficiency of existing plant;
- Information and tools to improve the measurement and management of the airport's energy consumption;
- Behavioural change in the way the airport is operated to promote the efficient use of utilities; and
- Renewable electricity procurement and where appropriate the use of low and no carbon on-site electricity generation.

The contribution of surface transport

8.3.16 Each BAA airport has a surface transport strategy, informed by national, regional and local transport policies. BAA Glasgow's surface access strategy will be updated over the next year, and set challenging but realistic targets for passenger and employee use of public transport, supported by a series of corporate level policies for travel to our airports using rail, bus & coach, and road. Those strategies, discussed in Chapter 7 of this document, will play an important role in addressing our transport-related emissions.

8.4 Air Noise

- **8.4.1** The term 'air noise' refers to noise from aircraft in flight or on an airport runway during take-off or after landing. NATS is responsible for air traffic control in the UK, and their unit at Glasgow directs activity on the ground at the airport (i.e. movements on the runway and the entire taxiway network). NATS and the CAA are the Government's principal advisors on the use of UK airspace and on possible future changes in its allocation between the many flows of air traffic, for example to accommodate the growth associated with airport development.
- **8.4.2** The total air noise to which local communities are exposed to over a given period depends predominately on the noise emitted by individual aircraft and the total number of aircraft movements (arrivals and departures) in that period. An overall measure of air noise exposure can be depicted by noise contours, and noise footprints relating to particular aircraft types can depict single noise events.
- **8.4.3** Forecast noise contours for 2015 were included in the Outline Master Plan. Prior to the preparation of this revised plan, BAA Glasgow commissioned the CAA to produce an updated set of contours for 2015, based on the latest traffic forecasts and aircraft types and these are shown on Drawing 8. The population within the 57-decibel Leg contour is forecast to increase relative to the situation in 1999. To limit this increase, BAA Glasgow has revised its five year Noise Strategy and introduced an annual Noise Action Plan which develops upon the series of commitments made to Renfrewshire Council following its approval of Glasgow Airport's major expansion in 1987. As required by Condition 10 of that planning consent, we remain fully committed to ensuring the total noise energy emitted around the airport is no greater than in 1987. The core objectives of our noise strategy are:
- To achieve industry best practice in airport noise management;
- To seek to minimise the impact of air noise; and
- To seek to minimise the impact of ground noise.

BAA Glasgow recognises that it has a role to play in the control of air noise around Glasgow, and does so through a number of measures, such as higher landing fees for noisy aircraft, fines for noise threshold infringements, the introduction, by the air traffic control provider, of take-off flight paths (noise preferential routes) that, as far as practicable route aircraft away from the densely-populated areas, and various measures to minimise ground noise. We report regularly on our progress to the Airport Consultative Committee, local authorities and on our website.

8.4.4 Following the installation of a noise and track keeping (NTK) system in August 2003, BAA Glasgow is now able to gather and analyse the tracks, including

position and height, of all aircraft flying to and from the airport. The information gathered from this system allows BAA Glasgow to consider and respond to the complaints and guestions 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 and, through working with NATS and airlines, we can identify opportunities to lessen the overall impact of Glasgow Airport's operation on local communities and, if necessary, speak directly to individual pilots and air crew.

- **8.4.5** BAA Glasgow has voluntary adopted the DfT day and night time departure noise limits (at 94 and 87 dBA respectively) set for the London airports, which apply at a point 6.5km from the start of an aircraft's take off. These limits were last revised in 2002 and BAA Glasgow will judge aircraft performance against these limits from April 2004, applying fines for any exceedences. The funds raised in this way are reserved for use in community projects.
- **8.4.6** While BAA Glasgow's degree of direct control over the noise climate is limited, the airport is able to take a number of steps to address the monitoring and reporting of air noise and a variety of means whereby the impacts of noise are less. In summary, these are:
- Forecasting future air noise, aiming for a reduction in the area contained within the daytime 16-hour 57-decibel Leg contour;
- Monitoring air noise in selected local communities;
- Setting differential airport charges which encourage airlines to operate quieter aircraft types;
- Fining aircraft which infringe the DfT noise limits from April 2004:
- Working with stakeholders to identify and encourage the use of flying procedures which minimise levels of noise heard at ground level;
- Encouraging manufacturers to design quieter aircraft; and
- Encouraging international organisations to set tougher standards for aircraft noise.
- **8.4.7** The White Paper established new standard policies for the mitigation of aircraft noise arising from existing and future airport operations and as required by the DfT, BAA Glasgow consulted on these arrangements in September 2004. Following detailed analysis of the responses received and further assessment of the scheme criteria, no residential properties within the 69 decibel Leg contour were found to be eligible for relocation and no noise sensitive buildings (e.g. schools, colleges, nurseries, hospitals) within the 63 decibel Leq contour were eligible for acoustic insulation.
- **8.4.8** In recognising that standard criteria for all UK airports may not necessarily address local issues and concerns, BAA Glasgow will continue to consider a range

of options to help mitigate against noise. We will consider for example, the justification for and feasibility of a separate acoustic insulation scheme for residential properties or the creation of a community trust to assist neighbourhoods most exposed to noise. As a first step, we aim to introduce a dedicated noise enquiry line by the end of 2006. This will allow local residents, concerned about noise, to make contact with the airport and receive a prompt reply.

Ground Noise 85

- **8.5.1** Noise generated other than by aircraft in flight or taking-off or landing is known as 'ground noise'. The main sources of ground noise are:
- Aircraft taxiing between runways and stands this includes all holding, engine start-up and shut-down procedures during taxiing;
- Auxiliary Power Units (APUs) on aircraft for air conditioning the aircraft cabin while it is 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 providing power supplies to aircraft on stand;
- Road vehicles, i.e. those on the airfield and those travelling to and from the airport; and
- Construction activities.
- **8.5.2** Airport ground noise exists in the context of offairport noise sources, known as background noise. Generally, the most dominant contributor to the noise climate in residential areas is road traffic. Around Glasgow, airport ground noise is potentially audible within a limited radius of the airport boundary, particularly at night. Taxiing noise is by far the most significant airport source although engine testing at settings above idle (i.e. at high-power) can generate higher noise levels than taxiing. However, these are infrequent and of comparatively limited duration.
- **8.5.3** The proposed developments to 2015 mean that the number of people who hear ground noise would not change significantly as the developments would occur within the boundary of the airfield, largely away from the nearest housing.
- 8.5.4 BAA Glasgow will seek to improve the understanding of the impacts of ground noise between now and 2015, by carrying out a noise assessment when major development proposals are brought forward.

Environmental Noise Directive

8.5.5 The EU Environmental Noise Directive requires European Union Member States to make Strategic Noise Maps for major agglomerations along major roads, major

railways and major airports within their territories by 30 June 2007. The Scottish Executive has recently published the regulations (The Environmental Noise (Scotland) Regulations 2006) which introduce this Directive into Scottish law.

8.5.6 The regulations assign airport operators as the competent authority for the making of noise maps for major airports and we are working with the Scottish Executive to understand the precise detail and requirements of the mapping process. The Directive also introduces a requirement that competent authorities should produce noise action plans by 18 July 2008.

Air Quality

- **8.6.1** The quality of air is affected by chemicals and particles emitted into the atmosphere as a result of human activity. Certain types of emission are of concern in the context of potential health impacts. Notably, in the cases of fine particulate matter (PM10) and nitrogen dioxide (NO2), which have significance to health in many areas of the UK, the largest single contributor to ambient concentrations of these pollutants is currently road traffic. Homes, workplaces and other buildings also produce emissions either locally (e.g. gas boilers) or elsewhere (electricity generation from fossil fuels). In order to protect public health and comply with EU directives, the Government has set objectives for air quality in the UK National Air Quality Strategy (NAQS). The strategy is based on ensuring that concentrations of certain pollutants do not exceed specified levels in the outdoor air.
- **8.6.2** Airports represent a complex source of air pollutants, consisting of many individual mobile and stationary sources. The pollutants emitted from airports fall into three principal categories and relate to aircraft operations, road vehicles and miscellaneous activities, such as boiler houses and fire training exercises.
- **8.6.3** While aircraft noise is arguably the issue of greatest concern to people living close to airports, or in areas regularly over flown by aircraft, airport-related emissions, coming from aircraft engines and vehicles travelling to and from the airport also gives rise to public concern.
- 8.6.4 Consideration of local air quality against NAQS objectives, which was carried out by the Government, prior to its publication of the White Paper, indicated that the expansion of Glasgow Airport would not compromise air quality standards for NO2 or PM10 in the period up to 2015 and beyond.
- **8.6.5** Renfrewshire Council have an air quality monitoring station located within the airport boundary monitoring for levels of Nitrogen oxides and particulate matter. Their most recent results indicate that the nitrogen dioxide air quality objectives are unlikely to be exceeded at this location.

- **8.6.6** BAA Glasgow has also commissioned two air quality studies in recent years, in 1999 and 2003/04. The air quality study consists of a six month survey using diffusion tubes to measure levels of NO2 at different locations across and around the airport. The results of the 2003/04 study showed that the concentrations of NO2 at the majority of sites around the airport were not above those recorded at most of the Renfrewshire Council monitoring sites outside the Council's priority air quality management areas. Further studies will be undertaken on a regular basis, the results of which will be shared with Renfrewshire Council and other key stakeholders.
- **8.6.7** BAA Scotland has worked with the relevant local authorities on Local Air Quality Management Plans, which involve a review of air quality in the area and identify and address areas of poor air quality. BAA is committed to ensuring that air pollution issues are managed responsibly and, to that end, has developed an air quality strategy at Glasgow Airport, which sets out objectives to reduce the impact of the airport on local air quality. The objectives aim to develop management strategies and air quality measurement and action programmes, including the promotion of alternative fuels and preferential charging by engine size for fuel efficient vehicles operating at the airport. Our air quality strategy is available at www.baa.com/corporateresponsibility.

Management of the Water Environment 8.7

8.7.1 Within the context of the European Union Water Framework Directive (2000/60/EC), the term "water environment" refers to all aspects of natural watercourses, covering such matters as their physical characteristics and the chemical and biological quality of the water they contain.

Surface Water Drainage

8.7.2 Glasgow Airport's surface water drains into the two rivers which effectively form its natural northern and eastern boundaries. The Black and White Cart Waters are both major tidal tributaries of the River Clyde and cover large catchment areas. The Black Cart Water rises from Castle Semple Loch in west Renfrewshire and flows to the north of the airport perimeter. The White Cart Water passes to the east of the airport boundary rising from the hills bordering East Renfrewshire and South Lanarkshire. It flows through parts of East Renfrewshire, south Glasgow and Paisley, draining a catchment area of approximately 250km2. It is our belief that both river catchments are under significant flow management and water quality pressures, due to off-airport development, and are currently the subject of a comprehensive physical, chemical and ecological assessment by the Scottish Environment Protection Agency (SEPA) under the terms of the Water Framework Directive.

- 8.7.3 Airport development planned in the period to 2015 is unlikely to have any potential physical impacts on the water courses near the airport other than to increase the amount of water they receive. The volume of water discharged into local water courses is governed by rainfall and the nature of the surface on which it falls. Glasgow Airport has a large impermeable surface area, therefore rainwater runs off relatively quickly, rather than gradually sinking into the soil and either recharging groundwater or percolating slowly into rivers and streams.
- 8.7.4 To assist in the preparation of this Master Plan, BAA Glasgow commissioned flood risk assessments on both watercourses in December 2004. It is considered that the risk of flooding could increase from future development pressures around both rivers, due to the airport's expansion (beyond 2015) and upstream infrastructure. Prior to the preparation of detailed development proposals, BAA Glasgow will work with SEPA, Scottish Water, Renfrewshire Council and other stakeholders to identify possible flood mitigation measures. We are committed to controlling and minimising the volume of run-off draining from future airport developments into the Black Cart and White Cart Waters, where technically feasible, for example through the use of sustainable urban drainage systems (SUDS).

Water Quality

- **8.7.5** There are several airport activities which have the potential to cause pollution of local water courses, if those activities are not properly managed. For example, these are:
- De-icing of aircraft and airside areas;
- Vehicle and aircraft washing;
- Aircraft and vehicle maintenance;
- Run-off from construction sites;
- Aircraft refuelling;
- Waste and cargo handling; and
- Fire training activities.
- **8.7.6** As mentioned in Section 8.7.2, both river catchments are under significant flow management and water quality pressures, due to off-airport development, and are currently the subject of a comprehensive physical, chemical and ecological assessment by SEPA under the terms of the Water Framework Directive.
- 8.7.7 BAA Glasgow is currently working with SEPA towards the development of a range of solutions to ensure on-going compliance with future surface water discharge consents relating to discharge quality management. The company will continue to manage water quality issues in line with statutory control and best practice.

Biodiversity

- **8.8.1** The hierarchy of sites designated for their nature conservation value comprises:
- Internationally designated sites (e.g. Special Protection

- Areas and Ramsar sites);
- Nationally designated sites (e.g. Sites of Special Scientific
- Locally designated sites (e.g. Local Nature Reserves);
- Non-site specific protection measures.
- 8.8.2 Internationally designated sites are protected by the Conservation (Natural Habitats etc) Regulations 1994. Any development which is likely to have a significant impact on such a site must be subject to rigorous assessment.
- **8.8.3** Public bodies have a duty to enhance and maintain nationally designated sites such as Sites of Special Scientific Interest (SSSI). They are required to consult with statutory nature conservation agencies (i.e. Scottish Natural Heritage) on any proposal which is likely to damage the conservation interests for which a SSSI has been designated.
- **8.8.4** Locally designated sites are afforded protection by planning policies in Local Plans. Some local sites will also be important because they host habitats or species which have special significance under the Biodiversity Action Plan process.
- **8.8.5** Wildlife is also safeguarded outside protected sites. All wild birds are protected under the Wildlife and Countryside Act 1981, which implements the EC Birds Directive in the UK. Other animals and plants are afforded similar protection under this Act.
- **8.8.6** Paisley Moss is an important Local Nature Reserve which lies within the existing airport boundary. BAA Glasgow plays an active role in the management of the Reserve along with Renfrewshire Council, the Carts River Valley Project and other stakeholders. Recent investment, through the construction of a boardwalk, has been made to increase accessibility to this important site. Our proposals in the period to 2015 show an expansion of the apron area and operational facilities towards, but not into the Reserve. BAA Glasgow remains committed to ensuring that any development located in close proximity to Paisley Moss is fully assessed and that any potentially negative impacts are minimised and mitigated.
- **8.8.7** To the north of the airport boundary, a 3km stretch of the Black Cart Water has dual designation as a Special Protection Area and SSSI. This section of the river is used as a roosting and foraging site by wintering Icelandic Whooper Swans. Whilst the development of the airport's facilities in the period to 2015 will not lead to any loss of this habitat, BAA Glasgow remains concerned that the presence of these Whooper Swans represents a hazard to aircraft using the airport. In 2003, the Civil Aviation Authority (CAA) requested that BAA Glasgow undertake a bird management study to assess the risk of the presence of the Whooper Swans in close proximity to the airfield and

identify ways of minimising any unacceptable risk.

- 8.8.8 Our Outline Master Plan indicated our intention to identify the most sensitive way to relocate the Whooper Swans and their habitat. Following representations received during the consultation and having considered expert advice on this matter, we understand this objective will be extremely difficult to achieve. BAA Glasgow will therefore continue to use approved bird control measures to ensure the safety of aircraft using the airport, whilst complying with any directions or orders issued by the CAA's Safety Regulation Group.
- **8.8.9** In terms of measures to be taken in the future, all significant airport developments to 2015 will be assessed to establish their impact on biodiversity and provide appropriate mitigation. BAA Glasgow will take guidance from consultation with the relevant approval authorities (such as Scottish Natural Heritage) and stakeholders on what level of assessment is required, particularly when considering development which may have an impact on the wider biodiversity out with the boundaries of the airport. Our Biodiversity Action Plan will be published by early 2007 and will outline the actions currently being undertaken, and those planned to manage and enhance the natural heritage on the airport.

8.9 **New Land Take**

8.9.1 In the period to 2015, our current view is that the development of the airport (as shown indicatively on Drawing 4) can be accommodated within the existing airport boundary. Therefore, we do not envisage the need to develop any additional land in the short term.

8.10 Waste Management

- **8.10.1** Waste is generated from a number of sources at Glasgow Airport, notably from aircraft using the airport, catering outlets, offices, shops (packaging), and construction activity and from vehicle and aircraft maintenance. Such sources generate seven categories of waste, the handling and disposal of which is covered by extensive legislation:
- Inert (soils, hardcore, concrete, glass etc);
- General non-putrescible (plastic, paper, cardboard etc);
- Scrap metal;
- End of life vehicles;
- Electrical and electronic equipment;
- General putrescible (food waste, vegetable matter, trees and bushes etc); and
- Hazardous waste, including lamps, fluorescent tubes, used oils, flammable liquids and batteries.
- 8.10.2In addition to meeting legal requirements, BAA Glasgow's strategy for waste is based on the Government's sustainable waste management strategy, "A Way with Waste", and its three core principles:

- Best Practicable Environmental Option (BPEO) 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 (recycle, compost or energy recovery), dispose; and
- The proximity principle the disposal of waste should be as near to its place of production as possible.

8.10.3The strategy covers a number of aspects including:

- Measurement of waste tonnage;
- Waste management infrastructure;
- Communication to improve performance;
- The supply chain;
- A construction waste strategy; and
- Reporting.

8.10.4BAA Glasgow is committed to reducing the amount of waste sent to landfill sites from the airport's operation. Over the past five financial years (i.e. comparing 2000/01 with 2005/06), the proportion of waste recycled has been increased from 13% to 24%, and it is intended to further reduce the proportion of waste going to landfill, following the principles of reduce, reuse, recycle.

8.11 Heritage

8.11.1BAA Glasgow recognises Scotland's and Renfrewshire's rich archaeological resources and the potential impact of the development proposals contained within this Master Plan. Studies undertaken on behalf of the Government prior to the publication of the White Paper identified two key types of heritage resources which could be affected by the future development of the airport. They are Scheduled Ancient Monuments and Historic Gardens and Designed Landscapes.

- **8.11.2**Three Scheduled Ancient Monuments (SAMs) were identified within a five kilometre radius of Glasgow Airport:
- The site of All Hallows Church, near the A8 road, Inchinnan:
- Two cross slabs and a cross shaft at Inchinnan Parish Church, Inchinnan; and
- Barochan Cross within Paisley Abbey, Paisley.
- **8.11.3**The studies concluded that none of these SAMs would be directly affected by the airport's development.
- 8.11.4No Listed Buildings will be affected by the airport's expansion, though it is of course possible, that there could be some unknown archaeology in the area and this will be fully investigated at the appropriate time.

Introduction

- 9.1.1 For the period beyond 2015, the White Paper has stated that only indicative land use plans are required at this time. This acknowledges that: "Proposals which will come to fruition so far in the future are likely to bring with them considerable uncertainties and that consequently there is likely to be little value in working them up in any great detail".
- **9.1.2** Accordingly, this section of our Master Plan provides an overview of the future development of the airport between 2015 and 2030, given the information available to BAA Glasgow at present. It outlines a development framework which would allow the airport to grow to handle between approximately 17 and 24 million travellers a year.
- 9.1.3 Accompanying this Chapter, BAA Glasgow has produced two sets of indicative land use drawings for the period from 2015 to 2030. Drawing 5 shows the airport as a single main runway operation and Drawing 6 indicates how the airport could accommodate twin parallel runways, were significant changes in forecast market demand to dictate that a new runway would need to be built before 2030. This approach provides greater clarity to the expected order of the airport development strategy and its impact on the land outside the current land ownership boundary.

9.2 Air Traffic Control/Airspace

9.2.1 As the need for growth in runway capacity (and possibly a new runway) becomes clearer, more detailed analysis and modelling work will require to be undertaken in conjunction with the air traffic service provider to understand what airspace changes, if any, will be needed to accommodate the increase in traffic in addition to those outlined in Chapter 6. Where an airspace change proposal is identified then the CAA airspace change process would need to be undertaken. This process engages stakeholder organisations in consultation including, among others, local authorities, environmental groups, airport consultative committees and resident organisations.

2030 - Single Main Runway Layout

9.3.1 Runways and Taxiways

9.3.1.1 Drawing 5 shows the indicative land use for Glasgow Airport with a single main runway in 2030, in accordance with the broad conclusion of the White Paper. Preliminary work undertaken for BAA Glasgow indicates that improvements to the existing main runway (05/23) and additions to the parallel taxiway system could support around 45 movements per hour. As noted in Chapter 5,

this hourly movement rate would be sufficient to accommodate the peak runway demand under our central forecast.

- 9.3.1.2 This 'single runway maximum use' scenario requires the purchase of additional land that is currently not under the ownership of BAA Glasgow. The land comprises 52 hectares of farmland at Netherton Farm (located to the east of the current boundary between the airport and the White Cart Water) and is required for a number of reasons:
- To construct an additional section of parallel taxiway to allow the airport to obtain the maximum number of movements per hour from a single main runway; and
- To provide sufficient land for the relocation and future expansion of the cargo, maintenance and ancillary facilities.

9.3.1.3 The expansion of the airfield and cargo/maintenance facilities further east will require the realignment of Abbotsinch Road. The road is an adopted highway and serves as a district distributor between Renfrew/Inchinnan and Paisley. When appropriate to do so, we will work with Renfrewshire Council, as Roads Authority, to determine the most suitable design and alignment of the new public road, taking account of matters such as the level and type of development planned. It is our current view that the most appropriate alignment should be close to the river bank of the White Cart Water. We have therefore reserved land for this alignment between the proposed cargo/maintenance development zone and the extended airport boundary (see Drawing 5).

9.3.2 Aircraft Aprons

- 9.3.2.1 Forecast demand is for between 46 and 54 aircraft stands in 2015 and for 54 to 71 stands in 2030. In Chapter 6, we explained the preferred airport development strategy is to build the first phase of these new stands and a second international pier to the west of the existing international pier/apron area by 2015. As we will have utilised all the developable land in that zone by that time, the emphasis of the airport development strategy to 2030, is to expand the apron area towards the eastern boundary of our land ownership (i.e. into the area around Campsie Drive which is currently occupied by cargo, maintenance and ancillary facilities).
- **9.3.2.2** The forecasts show an increasing requirement for jumbo and medium sized stands. This reflects the continued expectation for Glasgow Airport to be serving more international destinations in the future, especially long haul destinations. We envisage that the eastward expansion of the apron area will allow approximately 15

additional stands of varying sizes to be developed. This approach will allow us to maintain high levels of pier service for airlines but will require the relocation of a significant number of important facilities. As noted earlier, the need to relocate these facilities is a key driver for the acquisition of an additional 52 hectares of land at Netherton Farm.

9.3.3 Passenger Terminal Facilities

9.3.3.1 Under a single main runway layout, further extensions and improvements will be required to the terminal to accommodate the forecast 20 million passengers a year which Glasgow Airport is expected to be handling by 2030. It is envisaged that the existing east pier will be demolished and replaced by a modern and significantly longer pier on a different alignment to provide pier service to a greater number of larger aircraft stands than is currently the case.

9.4 2030 - Twin Parallel Runway Layout

9.4.1 Runways and Taxiways

9.4.1.1 The White Paper notes that, "there does not at this stage seem to be a clear case for an additional runway at Glasgow International Airport". BAA Glasgow acknowledges the airport's charter and long-haul services carry large numbers of passengers per flight making it easier to handle a higher passenger throughput than an airport where short-haul domestic or European services dominate. However, we believe that based on past growth rates and to a lesser extent, the considerable changes occurring in the low-cost and charter market, it is sensible to make provisional plans for a scenario of higher aircraft movement and passenger growth. Drawing 6 therefore shows the indicative position of a second close parallel main runway, should passenger and peak runway movements exceed our central and high growth forecasts. If market growth dictates and the project is confirmed as being commercially and environmentally sustainable, BAA Glasgow is committed to building a second main runway.

9.4.1.2 Our preliminary work indicates that a new runway of approximately 1800 - 2000 metres in length could be located to the north of Runway 05/23 and would require approximately 50 hectares of land not currently contained within the airport boundary. If the project were to proceed, the current secondary runway (09/27) would be closed for take-off and landings.

9.4.1.3 Given that the need for an additional runway is still some way off, BAA considers it impractical, at this time, for a precise alignment and runway design to be identified. This is primarily because the planning and operation of a future runway is dependent on a number of complex and interrelated factors and many of these cannot be predicted with any certainty so far ahead of construction. This

explains our decision in Drawing 6, to replicate the indicative position for a new runway as shown in the White Paper.

9.4.1.4 In connection with the twin parallel runway layout, it is important to highlight the differences between the extended airport boundary as shown in Drawings 3 and 6 of this Master Plan and the boundary shown in the Government's White Paper. It is our view that a twin runway airport should, at least in land ownership terms, occupy the full extent of its natural boundaries (i.e. up to the edge of the Black Cart Water and the M8 motorway). We do not believe that the highly regular boundary line as drawn in the White Paper would leave usable areas of land for the current owners and occupiers. Therefore, BAA Glasgow would propose to purchase the full extent of this land to accommodate a re-aligned Barnsford Road, a service corridor and an effective landscape buffer. This is shown as a white coloured strip of land along the western and northern boundaries in Drawing 6.

9.4.2 Aircraft Aprons

9.4.2.1 Under a twin parallel runway layout, the apron development strategy is to continue to incrementally provide aircraft stands in a north-easterly direction towards the proposed cargo and maintenance area at Netherton Farm. This is shown on Drawing 6 and it is likely that a number of these stands would be designated as remote stands.

9.4.3 Passenger Terminal Facilities

9.4.3.1 Were Glasgow Airport to develop as a twin parallel runway airport by 2030, it is possible that a single main terminal would not be sufficient to accommodate the associated passenger volumes. Therefore, in Drawing 6, we have indicated where we believe a second main terminal and piers might be located if this scenario were realised. This would result in the relocation of ancillary facilities (e.g. long-stay surface car parks, staff car parks, airline cleaning/catering facilities) from this zone to the development zone west of Barnsford Road.

Future Runway Safeguarding Policy

9.5.1 Section 3.9 of this Master Plan explained "The Safeguarding of Aerodromes" process as it relates to Glasgow's existing operation. There is now a separate need to consider the manner in which the possibility of developing a second parallel runway at Glasgow should also be 'safeguarded' - a requirement which could potentially lead to the refusal of planning permission for:

- Proposals for development that are incompatible with "safeguarding of aerodromes" criteria specified in relation to the location of the second runway; and
- Proposals for development on land within the area onto which the airport would be extended in the event of a second runway being permitted and built.

- 9.5.2 BAA initially adopted a passive safeguarding policy in relation to proposals which might conflict with future or extended runways. The policy was published in our Outline Master Plan and sought simply to inform Local Planning Authorities (LPAs) and developers of potential conflicts with certain developments, rather than raise planning objections to these developments. Concerns were raised by stakeholders during the consultation period for these documents as to whether this policy would sufficiently protect the Government's expectations. Specific comments were received from the DfT, the Scottish Executive and some local authorities. Following a review of its proposed policy, BAA is advocating a more proactive approach can now be taken to aerodrome safeguarding.
- 9.5.3 BAA will safeguard future runway development options in accordance with Government policy, as published in their White Paper. The 'safeguarding of aerodromes' process makes use of safeguarding maps which are based on details of runway locations and elevations and which, amongst other things, relate the protected surfaces around runways to local topography. A new safeguarding map, endorsed by the Civil Aviation Authority (CAA) has been prepared for Glasgow Airport. It reflects the existing runway's position, length and elevation as well as the details relating to a potential second runway. The map will be reviewed should there be a material change in the assumptions about an airport's development, including any proposals for a second parallel runway, for example, as a consequence of a five yearly review of this Master Plan. If and when a new runway is built and precise details of its location, length and elevation are settled, then these details will be incorporated into the aerodrome safeguarding map.
- 9.5.4 The new map will shortly be published and lodged with relevant LPAs and will be used by them as a filter for determining which planning applications require consultation with BAA under the safeguarding regime. A significant proportion of a new safeguarding map (where that map is designed to protect a new runway) is expected to be identical to its single runway predecessor. For a significant number of consultations the implications (if any) of protecting the future operation of a possible new runway are unlikely to be any different from those associated with the protection of the current runway's operation.
- 9.5.5 BAA Glasgow will treat each 'aerodrome safeguarding' consultation on its merits. If our aerodrome safeguarding conclusions in relation to an existing or a proposed future runway do differ, and our response to the consultation is to object to the development or to require particular conditions to be attached to the planning permission for the development, the justification for our response will be explained. Where conflicts exist, BAA will

- also notify the LPA of any changes that could remove them and we will, if appropriate, work with the LPA and the prospective developer to explore the issues in more detail.
- **9.5.6** Development proposals affecting land within a twin runway airports indicative boundary are amongst those that will be subject to referral to BAA as a result of the LPAs' filtering process for 'safeguarding of aerodromes'. However scrutiny of those consultations is unlikely to identify aerodrome safeguarding reasons for refusing planning permission for all forms of development within the indicative extended boundary. It may, for example, be possible to permit a new building provided its height was not such as to exceed that allowed beneath the 'protected surface' affecting its site.
- **9.5.7** Procedures under the 'safeguarding of aerodromes' process will not legitimise the refusal of planning permission for all forms of development within the affected area. Protecting the possibility of an extended airport boundary is consequently a different matter from the 'safeguarding of aerodromes' procedures which protect the operation of a runway that may be built in the future. It is therefore important that the LPAs' ensure that development plans 'safeguard' the land potentially required for an airport's expansion.
- 9.5.8 In addition to identifying the safeguarded area boundary, new development plans will require to explain the development control policies that will apply within an indicative boundary for the extended airport. In keeping with established practice, BAA Glasgow will engage in the plan preparation process and will wish to be satisfied that they adequately address the Government's expectations that land is safeguarded at airports. Whilst the refusal of all planning applications is an option, so too is a more flexible approach, for example to permit such developments as small extensions to existing houses or commercial premises and some changes of use, provided they are compatible with other development plan policies.

9.6 **Public Safety Zone Policy**

9.6.1 PSZ Requirements

9.6.1.1 The Department for Transport are responsible for Public Safety Zone (PSZ) policy in the UK. Local Planning Authorities are responsible for applying the published policy. The DfT have stated that they expect PSZ contours to be produced for existing and future runways. These will inform the Aerodrome Safeguarding Process and provide Local Planning Authorities with an indication of the areas outwith the airport boundary, which might be affected by the PSZs associated with a future runway.

9.6.2 Updated PSZ Contours for Existing Runways

9.6.2.1 PSZs for existing runways are based on traffic forecasts 15 years in the future. For the published PSZs at BAA airports, forecasts for the year 2015 have been used. The DfT's policy requires a review of the zones every 7 years. The DfT have confirmed they will commission the modelling work to produce the updated contours for the existing runways at BAA airports and anticipate beginning this process towards the end of 2006.

9.6.3 Projected PSZ Contours for Future Runways

9.6.3.1 In preparing this Master Plan, BAA Glasgow has used existing PSZ contours as a proxy for predicting future PSZ impacts. While this has been sufficient to give an indication of the size and shape of the zones the DfT have now requested that computer modelling of future PSZs be undertaken. This will provide a more robust assessment, although, it is still necessary to make some broad assumptions to input to the modelling exercise, for example, in relation to the operation and layout of the future runways.

9.6.3.2 The forecast year for the purposes of calculating PSZs for future runways will be 2030. This date is consistent with the planning horizon for the Master Plan. Modelling will be undertaken for a possible new runway and the indicative PSZs will be made available to LPAs to help inform the safeguarding process.

9.7 Cargo and Mail

9.7.1 As outlined in Chapter 6, cargo developments are only undertaken in response to specific requests from freight handling companies and operators. However, as noted earlier in this Chapter, the easterly expansion of the apron and terminal will require the relocation of the existing cargo facilities located around Campsie Drive. With year-on-year growth in cargo throughput forecast, we have sought to allocate approximately 17.5 hectares (50%) of the land in both layout options for a new large cargo base in the indicative development zone at Netherton Farm (see Drawings 5 and 6). A cargo study on behalf of BAA Glasgow, Renfrewshire Council and Scottish Enterprise Renfrewshire will be taken forward in 2007 to assist in identifying specific opportunities for Glasgow Airport to develop its cargo business.

9.8 Aircraft Maintenance

9.8.1 While there is no quantifiable demand for additional maintenance facilities in the years between 2015 and 2030, the White Paper recommends that BAA Glasgow makes provision for maintenance facilities to support the establishment of a "centre of excellence" for aircraft maintenance, repair and overhaul (MRO) activities. Accordingly, under both layout options for the period to 2030, approximately 17.5 hectares of land has been allocated in the indicative development zone at Netherton

Farm for maintenance related uses. A recent study on behalf of Renfrewshire Council and BAA Glasgow confirmed the potential for new MRO opportunities at Glasgow Airport and various agencies are now working in partnership to prepare an Action Plan to make this "centre of excellence" a reality.

9.9 Ancillary Facilities

9.9.1 As explained in Chapter 6, as the airport passenger and cargo throughput increases, so too does the demand for land for extended support services. Some examples of the types of additional support facilities were given in Chapter 4. It is certain that in the period between 2015 and 2030, additional land will be required to ensure provision of all the necessary ancillary facilities can be made

9.9.2 Under a single main runway layout, we have allocated approximately 25 hectares of land currently within BAA Glasgow's ownership and located to the west of Barnsford Road (the Walkinshaw Brickworks), for ancillary facilities. Given the types of uses likely to be located in this area, it is probable that the current alignment of Barnsford Road (A726) would remain unchanged. When appropriate to do so, BAA Glasgow will discuss with Renfrewshire Council, the method for achieving a modification to the planning policy designation of this land.

9.9.3 In Drawing 6, we have allocated a further 17 hectares of land for ancillary uses in connection with a twin parallel runway operation. This area, the majority of which is not within BAA Glasgow's ownership, is likely to be required for additional long-stay car parking, staff car parking, airline cleaning/catering facilities and contractor's compounds displaced by a possible second terminal.

9.10 Future Surface Access Infrastructure

9.10.1 Further enhancements to the airport's surface access capacity will be required to meet the demands placed on the infrastructure by 2030, but it is not possible at this stage to accurately quantify the type of improvements to the road and public transport networks which will be needed. BAA Glasgow will continue to work with the relevant agencies, authorities and operators to ensure that appropriate improvements which are necessary to facilitate the sustainable development of the airport are delivered in a timely manner. Future revisions of the Airport's Surface Access Strategy will address the airport's long term transportation challenges and solutions in depth.

10.1 Introduction

10.1.1 As this Master Plan has previously indicated, there are significant uncertainties around various points of planning detail which may affect the environmental impacts associated with the development of Glasgow Airport. This plan's purpose is to provide an early indication of the extent and broad land use of the development which may be the subject of a planning application, with detailed planning and environmental studies being undertaken only when it becomes appropriate to prepare a planning application.

10.1.2It is indisputable that the expansion of air traffic and the facilities at Glasgow Airport will lead to some adverse environmental impacts. We, of course, intend to take effective action to reduce or mitigate these impacts. Of course, the development of the airport will also facilitate social and economic benefits, to which reference has been made in Chapter 2 of this document.

10.2 Air Noise

10.2.1 Aircraft noise is arguably the impact of greatest interest to Local Planning Authorities and some communities, given the potential need to consider this when allocating land and considering planning applications for housing. Estimates of future noise exposure around Glasgow and other airports were a key element of the studies undertaken to inform the preparation of the White Paper and they were subsequently updated and published by the CAA8. BAA Glasgow sees no current rationale to supersede the CAA's estimate of noise attributable to a possible twin parallel runway operation.

10.2.2 Table 14 shows the estimated change in population affected by noise between 1999 and 2030 were a new close parallel runway to be built and the contours are depicted on Drawing 10. The number of people within 57decibel Leq contour increases significantly, while the affected population within the 63-decibel Leg and 69decibel Leq contours also increases compared to the 1999 base case.

Leq (dBA)	Base population(000s) 1999	Estimated population (000s) 2030
>57	25.0	32.1
>63	0.8	2.5
>69	0.0	0.1

Table 14: Estimated Change in Population Affected by Noise by 2030

10.2.3The White Paper prescribes the measures that BAA Glasgow must take to mitigate and compensate for aircraft noise impacts arising from future airport operations:

- Offer to purchase those properties suffering from both a high level of noise (69-decibel Leq or more) and a large increase in noise (3-decibel Leg or more); and
- Offer acoustic insulation to any residential property which suffers from both a medium to high level of noise (63decibel Leg or more) and a large increase in noise (3decibel Leg or more).

10.3 Blight

10.3.1In August 2005, BAA Glasgow published details of two schemes designed to protect local property owners from 'generalised blight' arising from the Government's proposals for a possible new runway at Glasgow Airport. This Master Plan seeks to safeguard land for a possible second runway, in line with the conclusions of the White Paper. Residential and small commercial properties that are directly impacted by this proposal are covered by the first scheme: the Property Market Support Bond (PMSB). A second scheme, the Home Owner Support Scheme (HOSS), assists property owners in the area who would be newly exposed to medium to high levels of noise should a new runway receive approval.

10.4 Other Environmental Issues

10.4.1 Other environmental and related issues which will require thorough consideration at the appropriate time include:

- Ground noise;
- Emissions and air quality;
- Water environment;
- Resource use:
- Waste generation;
- Biodiversity;
- Visual impact;
- Archaeology;
- Heritage;
- Loss of existing properties and land uses; and
- Construction impact.

11 Where Now? - The Next Steps

11.1 National Planning Framework Review

11.1.1The second National Planning Framework (NPF 2) is expected to be published by the Scottish Executive in 2008. This document will set out the policy framework for the spatial development of Scotland to around 2030. A draft NPF 2 will be the subject of a public consultation exercise and Parliamentary scrutiny. BAA Glasgow will engage with the Scottish Executive to understand how the key conclusions of this Master Plan may be incorporated in the future NPF.

11.2 Glasgow and the Clyde Valley Structure Plan

11.2.1The Glasgow and the Clyde Valley Joint Structure Plan 2006 – Written Statement was sent to Scottish Ministers in April 2006 and approval is anticipated later this year. As noted in Section 3.4 of this document, an Alteration of the current Structure Plan, reserving more than 200 hectares of land for the expansion of Glasgow Airport, was approved by Scottish Ministers and became operational on 24 January 2005. As the new Written Statement fully incorporates that Alteration, BAA Glasgow understands that no further action is necessary at this stage.

11.3 Renfrewshire Local Plan Review

11.3.1The current Renfrewshire Local Plan was adopted in March 2006. The document recognises the value of Glasgow Airport as a key component of the national and local economy and seeks to make provision for the operational requirements of the airport and airport related development to ensure its continued prosperity.

11.3.2 Following the anticipated approval of the Clyde and the Clyde Valley Structure Plan 2006, we have been advised that Renfrewshire Council will commence the process of revising their Local Plan. This will be obliged to take account of the policies within the Structure Plan and will be subject to all the usual statutory provisions, including a Local Plan Inquiry. BAA Glasgow will work with the Council to ensure that the policy objectives of the Aviation White Paper and this Airport Master Plan are appropriately addressed in the new Local Plan. We will also assist the Council, as required, to ensure they can meet the requirements of Strategic Environmental Assessment (SEA) legislation and guidance.

11.4 Master Plan 5 Year Review

11.4.1This Master Plan will be reviewed and updated every five years, in line with Government guidance. However, BAA Glasgow will regularly review the commitments made in this document to ensure the airport's development plan is kept relevant to local, regional, national and international events. The impacts of airport growth on the surrounding

area will continue to be considered carefully and BAA Glasgow will work with key stakeholders to review the impacts outlined in this document. BAA Glasgow is committed to ensuring that Scotland's largest and most vibrant city is served by a world class international gateway, which exceeds the expectations of its passengers and supports the local and national economy.

11.5 Airport Planning and Environment Forum

11.5.1We are keen to develop our partnership with our key stakeholders and to achieve this objective, we propose to establish a Planning and Environment Forum to be attended by representatives of the Scottish Executive. Renfrewshire Council, City of Glasgow Council and other local authorities and agencies. The Forum will meet twice a year and will provide the opportunity for structured dialogue on the key issues relating to the strategic development of the airport and the challenges and opportunities that will inevitably result.

11.6 Community Engagement

11.6.1 Although our formal consultation on the detail of this Master Plan has ended, we will continue to engage proactively with local communities and invite constructive comment on our development plans.

11.6.2In line with our commitment to engage with the local community, BAA Glasgow will undertake a number of information roadshows in neighbouring areas. These will be held annually and will allow members of the public to discuss the airport's development plans face to face with BAA Glasgow's senior management team. Additionally, we will also introduce a new community newsletter which will outline any current and long term developments at the airport.

12 Master Plan Drawings

Drawing 1: 2005 Land Use Drawing 2: 2005 Layout

Drawing 3: Indicative Boundary of Twin Parallel Runway Airport

Drawing 4: 2015 Indicative Land Use Drawing 5: 2030 Indicative Land Use

Drawing 6: Indicative Land Use - Twin Parallel Runways

Drawing 7: 2002 Standard Noise Contours 2015 Indicative Noise Contours Drawing 8: Drawing 9: 2030 Indicative Noise Contours

Drawing 10: Indicative Noise Contours - Twin Parallel Runways

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Glasgow Airport Master Plan

Consultation Analysis and Report October 2006

Appendix 1: Consultation Comments and BAA's Response.

Master Plan Consultation

Glasgow Airport commissioned Liddell Thomson Consulting to conduct an independent analysis and summary of the responses received during the consultation on the draft Glasgow Airport Master Plan. The final report received from Liddell Thomson has been included in full as Appendix 1 and also includes BAA's specific responses to each of the issues raised.

The issues raised by Liddell Thomson have been produced in tabular form with summarised comments on the left hand column of the table and Glasgow Airport's response in bold and in the right hand column of the table.

Executive Summary

BAA Glasgow commissioned the Liddell Thomson Consultancy in January 2006 to carry out an analysis of all the responses to "Glasgow Airport Outline Master Plan: July 2005" and prepare a report summarising the issues raised in the submissions.

The objective was to capture all issues raised by stakeholder groups and individuals to inform the final drafting of the "Glasgow Airport Revised Master Plan" scheduled for publication in 2006.

Glasgow Airport's Outline Master Plan was published for consultation in July 2005. To engage a wide cross section of the community, public drop-in sessions and meetings were held to enable interested parties to discuss the proposals with BAA. These were held throughout the Glasgow, West Dunbartonshire and Renfrewshire areas. Following the consultation programme BAA Glasgow received 178 responses to the Outline Master Plan.

Responses were received from airport neighbours, local authorities, politicians, Scottish business groups, environment and transport groups, public sector bodies, utilities, community and resident groups and several individuals.

A summary of the key issues raised by the 178 respondents is included in this report, under the chapter headings of the Glasgow Airport Outline Master Plan.

The main issues raised were:

- Factors driving the growth in air travel
- Flexibility of forecasts
- Surface access strategy
 - Public transport
 - Road congestion
 - Car parking forecasts
- Development plans east of the airport
- Impact of noise on local communities
- Impact of pollution on local communities
- Environment concerns relating to the Black Cart and Paisley Moss
- Aircraft emissions
- Impact of second runway
- The effectiveness of the consultation process

Introduction

Introduction

Glasgow Airport undertook a three month public consultation following the launch of its Outline Master Plan in July 2005. This provided an opportunity to consult with a wide range of stakeholders including public, private and voluntary sector organisations and individuals to help gauge opinion and, where possible, to reflect their opinions and comments in the revised Master Plan.

Background

During this consultation period, a community survey was also carried out by public opinion research agency MORI. The MORI report sought to gauge the views of communities about their local airport, its future plans, perceptions of airport activities and possible improvements. The results were largely positive for BAA, with an 83% favourability rating towards the airport with only 3% unfavourable. 72% supported an additional runway.

Outline Master Plan Consultation Process

Glasgow Airport's intention, as stated in the outline Master Plan, was to: "hear as many views as possible from as wide a range of people as possible1". The Master Plan was formally launched for consultation on 25 July 2005 and was supported by a multi tiered consultative process to elicit comment from interested parties. 500 copies of the Outline Master Plan were issued to key stakeholders including:

- Glasgow Airport Consultative Committee
- Airport Business Community
- Control and Contingency Authorities
- Local Authorities
- Scottish Executive
- MPs / MSPs
- Public Bodies
- Professional Bodies
- Community Councils
- Airport Neighbours
- Trade Unions

Further copies of the Outline Master Plan were issued on request and the plan was available for viewing and downloading at local libraries and online at www.glasgowairport.com

The BAA planning team conducted 20 one to one briefing sessions with external stakeholders, 6 internal staff briefings and 10 public drop-in sessions in neighbouring communities.

Response forms were available at all sessions and respondents were encouraged to use these to log their comments.

The official consultation period closed on 28 October 2005.

Responses

A total of **178** responses to the Glasgow Airport Outline Master Plan were received. 139 submissions were received from individuals and 39 from stakeholders, including local authorities, Government agencies and Members of the UK and Scottish Parliaments. A list of respondents is included overleaf.

¹Glasgow Airport Outline Master Plan: July 2005 pg2

Respondents

Category	Name / Area	Number of Respondents
Airport / Transport Interest Groups	 The Independent Airport Park and Ride Association Railfuture Scotland Scottish Association for Public Transport Strathclyde Passenger Transport thgRAIL West of Scotland Transport Partnership (WESTRANS) 	6
Business / Special Interest Organisations	 Clydebank Re-built Glasgow Chamber of Commerce RSPB Scotland The Scottish Council for Development and Industry Scottish Renewables The Guide Dogs for the Blind Association 	6
Community / Residents Groups	 Howwood Community Council St James' Residents Association Whitecrook Tenants and Residents Association Elderslie Community Council Whitecrook Community Group The Quarrelton Area Tenants and Residents Association Whitecrook Community Council 	7
Landowners and Developers	Bryce Associates (Cordale Investments)	1
Local Authorities	 East Dunbartonshire Council Glasgow City Council Renfrewshire Council West Dunbartonshire Council 	4
Members of Parliament / Scottish Parliament / Councillors	 Brian Donohoe MP Councillor Derek Mackay Councillor Iain Nicolson Des McNulty MSP Douglas Alexander MP Kenneth Macintosh MSP 	6
Members of the Public	 Ayr (1) Bishopbriggs (1) Dalmuir (1) Glasgow (2) Johnstone (10) Kilmacolm (1) Kirklandneuk (77) Linnvale (1) Prestwick (1) Renfrew (1) Whitecrook (43) 	139
National and Regional Government / Agencies	 Clyde Valley Community Planning Partnership Historic Scotland Scottish Enterprise Scottish Enterprise Renfrewshire Scottish Environment Protection Agency Scottish Executive Scottish Natural Heritage 	7
Utilities	Scottish Water Scottish Power	2
Total		178

Consultation key issues	Our way forward	
Social and Economic Benefits of Aviation		
Development should be carried out in a sustainable way	• We agree. The Master Plan makes it clear that development will take place incrementally to ensure as far as possible that additional capacity closely matches passenger demand. If traffic grows at a faster rate than is currently predicted, then it may be necessary to accelerate some of the expansion programme. Similarly, a slower rate of growth would be reflected in development of new or replacement facilities at a later stage. The exact nature and timing of developments will always be subject to a detailed financial and environmental evaluation.	
BAA is underplaying Glasgow Airport's contribution to the wider metro region and Scotland	 Glasgow Airport is a major economic driver for the west of Scotland. A study undertaken for BAA Glasgow by the Fraser of Allander Institute in 2002 indicated that Glasgow Airport contributes over £700 million to the Scottish economy and supports around 15,000 jobs across the country. As the airport grows and develops, so too will the economic contribution it provides. 	
 Need for a wider appraisal framework to highlight the benefits provided by the airport to fully capture the economic benefits of the airport 	BAA Glasgow has commissioned the Fraser of Allander Institute to undertake a fresh study of the economic impact of Glasgow Airport. This study will also consider the economic contribution of BAA Glasgow's construction programme and the impact of inbound tourism.	
Adverse impact on quality of life for local residents	● The Master Plan consultation process was very valuable in helping us understand better the issues of importance to our surrounding communities. BAA Glasgow recognises that the impact of Glasgow Airport can be negative as well as positive. We aim, wherever possible, to mitigate against those negative impacts, such as noise, and to develop the airport in a responsible and sustainable manner.	
Need for a Scottish Transport Appraisal Guidance (STAG) of the costs and benefits of airport development options	BAA as a private sector company is not obliged to conduct economic appraisals using the Scottish Executive's STAG Frameworks. However, we undertake a detailed business case for our developments to ensure that the solutions being promoted represent best value for our airline partners, our suppliers and our passengers, and that they best meet the long term interests of our business.	
Need for an indication of BAA's financial investment in Glasgow Airport to 2015 (£500m quoted for all three airports)	● BAA Glasgow intends to spend approximately £290 million in the years leading to 2015-6. This investment will be met entirely from BAA's own funds, at no cost to the taxpayer, and reflects our determination to build a world class 21st century gateway for Scotland.	

Consultation key issues	Our way forward
People living below the flight path present a more compelling case for action than any projected jobs or benefit to the economy	 Glasgow Airport does understand the concerns of the relatively small number of people who will be adversely affected by the growth of the airport, particularly in relation to noise, and we aim, wherever possible, to address as many of those concerns as possible. However, in doing so, we have to strike a balance between those, like the business community for example, who want to see more flights from Glasgow, and those residents who are affected by noise.
Job and economic forecasts overblown	● The job and economic forecasts in the Outline Master Plan were based on a standard econometric framework, which considers current employment levels and examines how they might increase in response to passenger growth. The Fraser of Allander Study has clearly established the link between employment levels and economic contribution. However, the precise level of employment growth will depend on a number of factors including the actual increase in passenger numbers.
The Framework of Regulation and Leg Aerodrome safeguarding	islation:
Need for BAA to provide more detailed guidance to developers	 BAA Glasgow's Planning team and the BAA Safeguarding team regularly offer advice to a wide range of developers on proposals which could impact on the airport's operation. This advice is augmented by fact-sheets and by information posted on the CAA and DfT websites.
European solutions perceived to be "more accommodating"	• Many countries have differing requirements in terms of their regulatory obligations for Air Traffic Control service provision. The operation and classification of airspace varies between countries, as does the requirements for primary radar. In the UK much of the airspace is densely utilised and it is a requirement that primary radar coverage is provided. This has led to problems occurring due to unwanted radar 'returns' from wind turbine developments. Many countries in Europe use 'blanking' to cut out primary returns from turbines and this can be used in the UK on a small-scale basis for specific returns like motorway flyovers, but is used in such a way that large areas are not cut out. If the airspace in question suffers from significant numbers of airspace infringements (as Glasgow does) then blanking is not practical, or indeed safe, on anything but a small scale.
Impact on potential development in Clydebank area due to threat of Compulsory Purchase Orders	• It is not possible to predict the precise alignment and runway design for a possible future runway at this time. This level of detail is only likely to become clear once a planning application for a new runway has been approved and detailed design has commenced. However, based on preliminary design criteria and our best estimate of what a future runway could look like, BAA does not consider compulsory purchase of any

Consultation key issues	Our way forward
	properties in Clydebank will be required. The implications of protecting a possible future runway (if any) on development proposals which are sent to BAA for assessment against Aerodrome Safeguarding criteria, are unlikely to differ significantly from those associated with the protection of the current runway's operation. A considerable proportion of a new safeguarding map (where that map is designed to protect an additional runway) will be identical to its single runway predecessor. A proposed development would need to be significant in height, in excess of some 50m above ground level before any conflict might occur.
Need for more information on the implications of renewable generation, such as wind farms situated on primary radar locations and flight paths Need for more information on the implications of renewable generation, such as wind farms situated on primary radar locations and flight paths	● There are two principle ways a wind farm can conflict with the safe and efficient operation of a nearby airport. If the wind farm is located within 15kms of the airport there is potential for the turbines to infringe the Airport's Obstacle Limitations Surfaces (OLS). OLS's represent the lower limit of the blocks of protected airspace around an aerodrome. They take the form of a complex set of 3-dimensional surfaces, which extend upwards and outwards from the runway. Under the terms of their License, aerodromes are required to prevent new developments or extensions to existing structures from infringing the OLS in order to protect aircraft in flight. Wind farms can also interfere with aviation radar and navigational systems. Two principle types of radar system are in use at BAA airports − Primary Surveillance Radar (PSR) and Secondary Surveillance Radar (SSR). Both types of radar signal are shown on the radar display for use by the air traffic controllers. SSR is not normally affected by wind turbines outside a range of approximately 10km. Within 10km reflection of transmissions can be caused by wind turbines, which can cause an aircraft to be misidentified or mislocated. PSR can be affected by wind turbines at a far greater distance (up to 75km or more) and will produce moving radar returns on the radar screens when the turbine blades are 'visible' to the radar head. An effective means of filtering returns from rotating turbine blades has not yet been developed. Experience of windfarms that have been constructed show that the turbine blades will regularly produce radar returns that are identical to and easily confused with, those produced by small or slow moving aircraft. In addition radar clutter produced by the turbines can mask any aircraft within the airspace above the windfarm that is not using SSR. In order to ensure safety, traffic will often need to be re-routed to avoid the area of clutter reducing the efficiency, capacity of the airspace and increasing fuel burn. As well as inconveniencing passenge

Consultation boulesses	0
Consultation key issues	Our way forward
 Need for Outline Master Plan to consider existing watercourses as features which could constrain development and use of the proposed new runway (it is noted that existing features such as high ground can constrain and determine the usable length of runway) 	● The Master Plan indicates that a second runway is unlikely to be required before 2030. The constraints associated with the development of a new runway will be fully considered if and when detailed design work is commenced.
Miscellaneous	
 Final Master Plan should conform to Natural Heritage protection policies in the Glasgow and Clyde Valley Structure Plan and Renfrewshire Local Plan 	BAA has given a commitment to ensure that the existing Natural Heritage Sites within and close to the Airport will continue to be protected. BAA Glasgow has no plans to develop any part of Paisley Moss Local Nature Reserve and, following consultation feedback and further expert advice, we now no longer plan to relocate the Whooper Swans habitat.
Today's Airport – Glasgow in 2005 Miscellaneous	
 An extension to the main runway would be "difficult" due to constraints of M8 and environmentally designated land to the east. 	 Agreed. The Glasgow Airport Master Plan does not promote the need for a runway extension. The runway as it currently stands offers sufficient capacity for the mix of aircraft types that operate from Glasgow Airport.
● Need for runway to be extended.	 An extension to Runway 05/23 is not promoted in the Master Plan as it is almost technically and physically impossible to achieve.
 Current length of the runway 2,658m "unlikely" to accommodate the development of long haul flights at commercial payloads. 	• The current main runway length is not a 'barrier' to the introduction of long-haul services. The existing long-haul services to North America, the Caribbean, the Middle East and the Indian sub-continent demonstrate this fact.
 Glasgow Airport's heavy reliance on charter flights a concern - 70% of passengers use charter carriers - compared to Edinburgh where scheduled services are growing more rapidly 	Glasgow Airport has a diverse mix of routes and services. Although still a large charter base for many of the industry's leading holiday airlines, Glasgow Airport is increasingly attracting new international scheduled services. Emirates, FlyGlobespan, Pakistan International Airlines, Zoom and easyJet are among several scheduled carriers now operating new direct international services from Glasgow Airport. In the year to March 2006, 13 new services were introduced at Glasgow Airport. Of those, 11 were scheduled flights, with eight of them international destinations. New flights to Las Vegas, Barbados and Boston have recently been announced.
 The existing taxiway does not allow the full length of the runway to be used at the river end without the aircraft backtracking 	Runway 05/23 has a 'full length' capacity and the existing taxiway does allow the full length of the runway to be used. No aircraft are required to backtrack.

Consultation key issues	Our way forward
Need for information about: ■ proceeds to BAA from car parking and trends over the past 10 years	This is commercially confidential information.
 other car parking within 3 miles of the airport 	 Information about third party off-airport car park providers can be obtained from Renfrewshire Council Planning Division who, through their powers as Planning Authority, control development of this land use.
 proceeds to BAA from landing charges over past 10 years 	● This is commercially confidential information. However, Glasgow Airport has reduced its charges to airlines over the past 15 years in an effort to attract new services to Scotland. As a result, we have attracted a number of new international carriers to Glasgow, including Emirates, US Airways, Pakistan International Airlines and Air Berlin while UK based airlines, such as flyglobespan and easyJet, have also expanded their international route network.
 proceeds to BAA from retail activity and trends over the past 10 years 	This is commercially confidential information.
BAA "view" the airport as a single entity within its own boundaries and has "little regard" for matters beyond its geographical restrictions	● Glasgow Airport sees itself very much a part of the local community. This year Glasgow Airport has donated £115,000 to community projects across the west of Scotland, including the Glasgow Youth Games, where over 4,000 youngsters from every primary and secondary school in Glasgow took part in 12 different sporting activities. Glasgow Airport also supports the Renfrewshire Youth Games which are open to every pupil in every secondary school in the area. The airport also supports education initiatives such as Common Purpose, Determined to Succeed, Young Enterprise, Young Engineers, Tomorrow's Inventors and is a sponsor of 'Clyde in the Classroom,' an environmental project. Our staff members are also active in their local communities. In the financial year 2005-6, BAA Glasgow staff donated 1344 volunteering hours to local community projects estimated at over £20,000. As part of its recent 40th anniversary celebrations, Glasgow Airport recently held the 'FAB 40' Community Awards, supporting forty community projects from Renfrewshire, Inverclyde, Glasgow and West Dunbartonshire. These are just a few examples of the many community projects that Glasgow Airport supports.
Passenger Demand – The Forecasts Growth in air travel	
 Air passenger numbers are unsustainable, the price of oil will drive the price of air travel up and reduce affordability 	● To forecast aggregate passenger demand BAA uses an econometric framework to establish the relationship between growth in demand for air travel and key economic drivers that influence demand, including UK and world GDP, international trade, future trends in air fares, and many others. Combining BAA's views on the future trends of these key influencing factors with its

Consultation key issues	Our way forward
	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. An important area of judgement is the expected course of oil prices. OECD statistics demonstrate a substantial increase in oil prices between 1998 to 2005. 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 therefore, prices should remain affordable. However, the Master Plan will be reviewed every five years to reflect changes in the price of oil and other economic factors.
 Aviation is likely to decline as a preference for general consumers and business customers compared with the past 20 years 	• As above
Airline industry cannot sustain both Edinburgh and Glasgow Airport	• Aviation is predicted to grow significantly during the time frame. Passenger numbers at BAA Scotland's airports today stand at 20 million a year and are set to grow substantially in the years ahead. Glasgow and Edinburgh Airports will both play a full part in the coming air transport revolution and BAA has already outlined plans to invest heavily in the future of both airports.
Airport landing and handling charges must be kept competitive	■ We agree. Scotland's airports must remain competitive if they are to continue to grow. This is why BAA continually strives to keep landing charges as low as possible. In real terms, landing fees at BAA Scotland's airports have fallen by more than 30% in the past decade, Glasgow Airport also offers very favourable introductory schemes for airlines wishing to start up new routes through the BAA Scotland route development fund, established in 2002 in a bid to encourage airlines to set up new international routes from Scotland. This fund has attracted several new airlines to Glasgow, including Emirates, US Airways, Air Berlin, Zoom and Pakistan International Airlines and allowed existing carriers, flyglobespan and easyJet, to expand their network of international routes. In the past year, BAA Scotland invested some £20 million on route development through discounted landing charges and marketing support.
Other factors that could affect growth in air travel include: • Competition from other airports	BAA Glasgow recognises the competition that other airports provide in Scotland, namely Prestwick and Edinburgh. BAA Glasgow will seek to remain competitive. At Glasgow, the expected demand for travel is a result of assessing the share of the aggregate demand for air travel in the Central Scotland area likely

Consultation key issues	Our way forward
	to be attracted to Glasgow. This takes into account competition from other airports in the region (including Prestwick). The forecasts represent a most likely scenario of traffic distribution based on current competition, population of the catchment area and surface access options.
Alternative transport modes competing on travel time and price	● It is assumed that improvements to rail services between Scotland and England will have little impact on total passenger volumes through Glasgow Airport. BAA Glasgow recognises the reduction in journey times following recent improvements to the West Coast Main Line. However, we remain confident that domestic air travel will continue to represent a significant proportion of passenger throughput.
● Route Development Fund	 BAA Scotland's Route Development Fund has been very successful in attracting new direct international services from Glasgow Airport. Our fund will continue until at least 2007.
● The vibrancy of Glasgow City	 BAA Glasgow is working closely with airlines, Glasgow City Marketing Bureau and VisitScotland to ensure Glasgow is promoted to a worldwide audience and to encourage inbound tourism.
● Airport accessibility	● The Master Plan makes it clear that improved surface access will be crucial to the airport's ability to grow. BAA Glasgow is working closely with Renfrewshire Council, SPT and the Scottish Executive and other stakeholders to ensure that a package of transport improvements is secured.
● Increased accessibility for disabled people	BAA Glasgow recognises that accessibility issues are important. The airport will ensure that all developments are in compliance with the DDA regulations. An example of this is the recent forecourt redevelopment which gives greater priority to public transport and makes special provision for passengers with disabilities by creating dedicated drop off zone and help points in front of the terminal building.
In determining the growth of air travel no account has been taken of: Transit / transfer and single journey passengers	● To forecast aggregate passenger demand BAA uses an econometric framework to establish the relationship between growth in demand for air travel and key economic drivers that influence demand, including UK and world GDP, international trade, future trends in air fares, and many others. Combining BAA's views 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.

Consultation key issues	Our way forward
Potential economic downturn	• As above.
 Amalgamation / demise of low cost operators 	BAA Glasgow does not believe consolidation within the low cost sector will necessarily lead to a reduction in demand for air travel or that there will be an overall reduction in capacity of low cost carriers.
 World environmental and health embargoes 	● To forecast aggregate passenger demand BAA uses an econometric framework to establish the relationship between growth in demand for air travel and key economic drivers that influence demand, including UK and world GDP, international trade, future trends in air fares, and many others. Combining BAA's views 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.
● Airport charging policy	When making Master Plan forecasts, BAA have taken into account their ongoing voluntary commitment to an RPI-3 pricing formula. Therefore prices are reduced annually. In real terms, landing fees at BAA Scotland's airports have fallen by more than 30% in the past decade.
 Independent ownership of BAA plc as and when the Government sells its "golden share" 	● The Government sold its Golden Share in 2001 as a result of an EU Directive. In June 2006, BAA plc was bought by an international consortium, ADI, with Spanish infrastructure giant Ferrovial the lead investor. However, responsibility for the management of Glasgow Airport remains with BAA. Investment indicated in the Master Plan is predicated on BAA remaining the owner of Glasgow Airport.
Mid Point Range of Forecasts	
BAA's Forecasts predict much higher growth than the Government's white paper	● To forecast aggregate passenger demand BAA uses an econometric framework to establish the relationship between growth in demand for air travel, and key economic drivers and other important factors that influence demand, such as the cost of oil. Movements in air fares and population will also influence traffic change. The model delivers an average annual increase in passenger figures of 4.1% to 2015 and approximately 3.4% over the period to 2030. This represents a slowing down of growth over recent trends. Over the past 10 years, passenger numbers at Glasgow Airport have grown on average by 6.9% a year.
BAA's forecasts are too high - needs revision	● In preparing this revised Master Plan, BAA Glasgow has undertaken a thorough revision of its forecasts. Short term fluctuations will occur from time to time, but we remain of the view that our forecasts are robust

Consultation key issues	Our way forward
More appropriate to use high point of a range of forecasts and if they do not materialise, development can be slowed down	BAA Glasgow has a range of forecasts and will continue to use the central point to guide its development strategy. Should passenger numbers grow at a higher than expected rate, it may be necessary to accelerate development. Conversely, a slower rate of growth would be reflected in development of new or replacement facilities at a later stage.
Need for flexible forecasts	BAA show a range of forecasts, illustrated within the Master Plan as the 'High', 'Central' and 'Low' case.
● Need for a regular review of figures	BAA Glasgow is committed to revising the Master Plan every five years in line with recommendations in the UK Government's White Paper published in 2003 with agreement form Scottish Executive Ministers.
Impact of rail on growth of air travel	
 Further testing required on the impact that the Glasgow Airport Rail Link (G.A.R.L) and Cross Rail line will have on the growth of air travel 	• Noted.
● Rail may impact air travel growth	BAA Glasgow believes that committed improvements to the UK rail network will have a limited impact on air travel in the short term. However, it is not yet clear what further improvements e.g. high speed lines, may have on the domestic air travel sector. The Master Plan will be reviewed every five years and will reflect any shifts in rail use.
 Impact of the Glasgow Rail Link on the growth of air travel will be in "due proportion" to the level of support it gains from BAA and the Airlines 	• Noted.
Rail will have a moderate effect but could be more than the 1% assumed in the Outline Master Plan forecasts	BAA Glasgow believes that committed improvements to the UK rail network will have a limited impact on domestic air travel in the short term. However, it is not yet clear what further improvements e.g. high speed lines, may have on the domestic air travel sector. The Master Plan will be reviewed every five years and will reflect any shifts in rail use.
Car parking	
 Proposed levels of short and long stay car parking unjustified (too high) 	Car-parking forecasts within the Master Plan reflect unconstrained demand. The Master Plan indicates that the majority of this demand will be met by third party off-airport providers as is the case today. Forecasts do not necessarily imply that BAA Glasgow will provide the capacity to meet all this demand.
 "Predict and Provide" basis for car parking is unsustainable and needs to be examined within the context of an integrated surface access strategy 	• The Master Plan does not necessarily 'predict and provide'. See above. The master plan is revised every five years and will take into account the circumstances of the day when predicting passenger numbers and developmental needs.

Consultation key issues	Our way forward
 Need for vehicle movement and staff car parking forecasts 	These matters will be addressed in detail in the forthcoming Airport Surface Access Strategy.
 Car parking demand underestimated by BAA 	• Noted.
Car parking forecasts indicates lack of belief and desire to provide public transport systems	● BAA Glasgow is committed to providing and facilitating a wide range of transport options. The 2006 forecourt redevelopment was design to prioritise public transport to the very front of the terminal. The airport supports the principle of the Glasgow airport rail link and has been working closely with the promoters regarding the detail. BAA Glasgow reiterates its view that the majority of passengers, given their geographical distribution, will still choose to travel by private transport to Glasgow Airport. BAA Glasgow also reiterates its support for any improvements to public transport networks which contribute to an increase in other mode shares.
 Need for forecasted car parking levels to be in line with or without proposed rail link 	 Our car parking forecasts assume the introduction of GARL. However, we do not believe there would be any significant difference in these forecasts if GARL does not proceed.
Vehicle movement forecasts	
 Need for vehicle movement forecasts (in accordance with standard transportation assessment guidelines) 	Further information on patterns of road traffic in to and out of Glasgow Airport will be provided in the forthcoming Airport Surface Access Strategy Document.
Miscellaneous	
 Need for further detail of charter, international short-haul full services and international long-haul services 	 Detailed information on the range of services operating to and from Glasgow Airport can be obtained from the website at www.glasgowairport.com
 Need for more co-operation between Glasgow, Edinburgh and Prestwick Airports to avoid duplication of services and to maximise existing infrastructure without allowing passenger growth to be disproportionate to population growth 	● The three airports in central Scotland will continue to compete for new services. Ultimately the market will decide the range of services offered from each airport. BAA has ambitious, achievable and sustainable plans for the development of its airports. It will be for Infratil, the owners of Prestwick, to determine their level of investment in that airport.
Land Use to 2015 Land use	
 BAA's planning policy and land safeguarding strategy stems from a desire to not pay compensation to developers until the latest possible time rather than buying land as it becomes available 	● The Master Plan is a high level land use strategy document. It is not an acquisition strategy and does not set out to be. Acquisition of land required to enable the airport to grow will be the subject of discussions between BAA and the relevant land owner and the Scottish Executive. BAA will only seek to purchase land when required for the expansion of facilities

Consultation key issues	Our way forward
Need for explanation on funding for land safeguarding	• Following the publication of the White Paper, BAA Glasgow produced its future runway safeguarding policy in the Outline Master Plan. Within the revised Master Plan is an updated version of this Policy which explains how BAA safeguard land required for the possible future runway.
Minor discrepancies between suggested boundaries, in the amended Structure Plan and the Outline Master Plan	● The extended airport boundary as shown in the Outline Master Plan represents BAA Glasgow's view on the extent of land required to support the expansion of the airport. It is our view that future revisions of development plans covering the airport should take account of the boundary set out in the Outline Master Plan.
BAA infers it may need more land than indicated but plans seem definitive up to 2015	● The airport boundary shown in the Airport Outline Master Plan reflects BAA's best estimate based on central case forecast growth. Should the rate of growth be higher then the expansion of airport facilities into the Netherton Farm area may occur prior to 2015.
 Potential development east of the airport is "wholly unwelcome" and will destroy green land between Renfrew and Paisley and industrialise a green area immediately adjacent to residential properties and Kirklandneuk 	● The Renfrew District Local Plan (1995) and the Renfrewshire Local Plan (2003) have consistently designated land to the east of the existing airport as being suitable for expansion of airport activities at a time when it is required. These policy designations were known prior to the granting of planning permission for new residential properties in Renfrew.
Aesthetics of view to hills will be destroyed at Kirklandneuk	• See above
BAA should consider supporting the plan to improve facilities at St James playing fields and / or the proposal to relocate St Mirren FC's stadium	 Comments are noted. BAA would welcome any attempts to improve recreational facilities within Renfrewshire by the Council. However, this issue and the relocation of St. Mirren FC are of little relevance to the Master Plan.
Additional terminal / development would decrease value of surrounding properties in Kirklandneuk	BAA Glasgow recognises the concern amongst some residents living close to the airport about the impact of the airport's development on property prices. However, to date there is no evidence that property values surrounding the airport have suffered. The outline Master Plan makes it clear that airport development up to 2015 can be accommodated on land currently owned by BAA, but that in later years, an additional 52 hectares of land to the east of Abbotsinch Road will be required for new cargo and maintenance facilities, as well as general airfield development. This land has been zoned for future airport operational use in the emerging Renfrewshire Local Plan. However, we do not currently envisage developing this land before 2015. Also, any development will be subject to local authority planning approval. As part of that process, detailed environmental assessments will be carried out and these will consider issues such as noise, visual impact and any necessary landscaping.

Consultation key issues	Our way forward
Incremental development	
 Incremental development at the airport should be subject to robust forecasts 	 BAA Glasgow believes it has a robust set of forecasts to anticipate demand for expanded or new facilities. It is our policy to deliver facilities "just in time".
BAA has to ensure the pace of incremental development meets demand	• As above.
 Need for flexible Outline Master Plan to reflect developments and changes within the industry 	The Master Plan is a flexible document reflecting a high level land use strategy for airport expansion. It will be reviewed every five years.
Need for quinqueniall Outline Master Plan review	In accordance with Government guidance, the Master Plan will be reviewed and consulted on every five years.
 Developments such as maintenance repair and overhaul, cargo handling and new accommodation could be developed speculatively before reaching full demand status 	BAA's policy is to deliver facilities "just in time" and in response to known/anticipated demand. BAA Glasgow does not intend to develop large scale facilities on a speculative basis.
 Need for a more ambitious approach for roads serving airport 	● BAA Glasgow believes that the trunk and local road network serving the airport needs to be improved as part of a package of measures to support the airport's expansion. We also believe that this should be carried forward with a package of public transport improvements such as the Glasgow Airport Rail Link and potentially the Clyde Fastlink Scheme. We are working with Renfrewshire Council and Scottish Enterprise Renfrewshire to seek the most appropriate method to identify and deliver transport improvements.
Incremental development should not leave areas of land blighted	BAA Glasgow recognises the concern amongst some residents living close to the airport over possible blight associated with the expansion of the airport and possible second runway in 2030. BAA Glasgow has already published two schemes to address blight and seek to protect the value of neighbouring properties. BAA Glasgow is also developing plans to address existing daytime noise levels. These will be published separately.
Need for increased car parking levies to ease congestion on approach roads to counteract extension of the multi storey car park	• The issue of congestion on roads surrounding the airport is very complex. The vast majority of congestion of the trunk and local road network is caused by general commuting and is not caused by the airport's main operation. However, the authorities responsible for roads and public transport policies need to consider what they can do, in partnership with BAA Glasgow, to reduce general congestion upon the road network.
 Greater transparency should be introduced in Airport Annual Report and Accounts 	● This is not an issue relevant to the Airport Master Plan.

Consultation key issues	Our way forward
 Costs could be cut by removing requirements for additional jumbo stands for long haul flights – Prestwick may be more suitable 	 Glasgow Airport is the long haul gateway for Scotland. Recent and current route network developments and passenger volumes indicate that airlines and the travelling public want to fly long haul from Glasgow. BAA Glasgow is committed to providing facilities 'just in time' to meet our future demands for long haul services.
 Need for sensitivity regarding development at Paisley Moss Conservation Area (in respect of possible 1832 cholera victims graveyard) 	BAA has no intentions to develop on Paisley Moss local nature reserve (LNR).
 Incremental development should not lead to the airport looking like a building site 	 It is inevitable that with a policy of incremental development there will be an ongoing construction programme. However, BAA Glasgow aims to minimise disruption as much as possible and ensure continuity of design.
 Underestimations of any aspect of land development could result in unnecessary competition for restricted space 	 Glasgow Airport's future development plans are based on a range of forecasts. BAA has always made it clear that the airport will be developed in line with actual traffic growth, which will dictate the acquisition programme for the purchase of land outwith our boundaries.
 Lack of priority given to the incremental provision of surface access facilities both on and off-airport in terms of accommodating and mitigating traffic impact off airport 	 BAA Glasgow is working with Renfrewshire Council, Scottish Enterprise Renfrewshire and other stakeholders to deliver a package of transport solutions to mitigate against off-airport congestion.
Other facilities	
Need for ■ an animal reception centre to assist dog owners who want to travel under the Pets Passport scheme to and from Glasgow Airport	 BAA Glasgow is investigating opportunities for an animal centre at the airport. However, to be able to carry animals, airlines need to have licensed routes which can take time to formalise. BAA is also working with possible operators to investigate the possibility of day to day management of the centre.
 the development of Paisley Moss area to maintain and enhance conservation area 	BAA Glasgow has no plans to develop any facilities on the area designated as Paisley Moss LNR.
● improved access and signage for Paisley Moss	• Glasgow Airport continues to play an active role in the management of this reserve, which lies within the airport's boundary. In early 2006, the airport worked closely with the Paisley Moss Management Group to install a boardwalk area, increasing accessibility to the moss. Additional interpretation and orientation signs will be developed and put in place during 2006 to provide those visiting this Local Nature Reserve with a better appreciation of the species that are present.

Consultation key issues	Our way forward
additional outdoor recreational areas closer to the terminals	● The airport is first and foremost an operational facility handling thousands of passengers a day within strict regulatory standards. Glasgow Airport is committed to providing facilities which improve our customers' experience. However these must always be considered within the security and other regulatory requirements set down by Government. It is our long term intention to create improvements to public open space in front of the terminal building.
• improved cycle routes separated from vehicular transport	This issue will be considered as part of the forthcoming Airport Surface Access Strategy.
• more hotel beds	• Glasgow Airport considers the need for onsite hotel provision to be a key requirement as it grows. Airport hotels serve business and leisure travellers and provide a range of complementary facilities to the airport. The availability of on-airport accommodation increases the potential catchment area by allowing passengers to access early and late flights and this assists airlines in the planning of new routes, and planning of new schedules
more provision of bullion storage and bonded warehouses	BAA Glasgow operates a 'just in time' policy. Therefore any provision of bullion storage or warehouses would be provided on demand.
an expansion of maintenance facilities	● The Airport Master Plan reserves 17 hectares of land for relocated and new maintenance facilities. We are continuing to work with Scottish Enterprise Renfrewshire and Renfrewshire Council to understand the specific opportunities for Glasgow Airport in this sector.
 Consideration should be given to the construction of lower cost / lower service facilities to meet the evolving needs of some segments of the airline industry 	 BAA Glasgow will develop facilities appropriate to the demands of its airline customers. Our T2 check in facility, opened in 2004, represents our commitment to delivering facilities which meet the requirements of low cost airlines.
Public Safety Zones	
Need for updated Public Safety Zones	 It is the responsibility of the UK Government's DfT to revise PSZ's associated with major airports. It is our understanding that the DfT will be undertaking this task towards the end of 2006.
Miscellaneous	
Need for reference to sustainable design and materials in the Final Master Plan	● This is done on a case basis, and all project boards have an environmental and sustainability input. For example, during the development or renovation of the facilities within the terminal building, a reduction in the use of energy will be targeted. Where opportunities exist within a development, energy saving devices such as daylight linked lighting, movement activated lights, and water conserving equipment will be used. Also, within the longer term capital plan for airport, there are specific environmental projects, such as water quality investment, to ensure we continue to meet environmental legislation.

Consultation key issues	Our way forward
Development at Prestwick Airport preferable to Glasgow	BAA believes both Prestwick and Glasgow airports will require to be developed to accommodate the demand for air travel to and from the west of Scotland. BAA has ambitious, achievable and sustainable plans for the development of its airports. It will be for Infrtail, the owners of Prestwick, to determine their level of investment in that airport.
Prestwick could share increased number of flights	• As above.
Surface Access (transport links) to 201 Road	5
Increases in road traffic will lead to further road congestion and local pollution	Good surface access will be important to the future ability of Glasgow Airport to grow to the levels indicated in the White Paper. BAA believes that increased investment in public transport and the road network is necessary to address existing commuter congestion which is unconnected to the airport. BAA Glasgow remains committed to working with other stakeholders to identify measures which could lead to a reduction in general road congestion.
Need for an explanation of the sources of road congestion	● BAA Glasgow undertook a survey of the traffic levels on the airport road network in October 2005. This survey also obtained recent data from the Scottish Executive on M8 traffic levels. Analysis of this information has revealed that during the AM peak period (08:00 – 09:00 hours) the airport's contribution to total volumes on the eastbound motorway is approximately 12%. In the PM peak period (17:00 – 18:00 hours) the analysis revealed that the airport's contribution to westbound traffic is 13%.
Unsustainable to constantly increase road capacity in response to demand	• Glasgow Airport has the largest geographic influence of any airport in Scotland and BAA Glasgow is of the view that Glasgow Airport will continue to serve passengers in all areas of Scotland. We believe that a package of improvements will be required to the road network and public transport systems to support the future growth in the airport. Our forthcoming Airport Surface Access Strategy will address this issue in greater detail and identify mode share targets for the promotion of public transport.
Need for effective management of airport access to avoid impact on local roads	BAA Glasgow agrees that good surface access will be important to the future ability of Glasgow Airport to grow to the levels indicated in the Master Plan.
Potential impact of road user charging on the airport	BAA has an agreed policy on road user charging associated with an airport operation. Any introduction of road user charging would need to be appropriate to the scale of the problem and be considered in association with road user charging proposals for the surrounding areas.

Consultation key issues	Our way forward
More detail required about new roads access to airport	Noted. Further details on this issue will be shown in the forthcoming Airport Surface Access Strategy.
 Comprehensive package of road improvements needed to be able to accommodate the forecast throughput of the airport 	• As above
● The link in the Outline Master Plan between surface access constraints and air passenger growth with reference to "general road traffic congestion in the areas immediate surroundings which is unconnected with the airport" — is not substantiated by survey or analysis	● BAA Glasgow undertook a survey of the traffic levels on the airport road network in October 2005. This survey also obtained recent data from the Scottish Executive on M8 traffic levels. Analysis of this information has revealed that during the AM peak period (08:00 – 09:00 hours) the airport's contribution to total volumes on the eastbound motorway is approximately 12%. In the PM peak period (17:00 – 18:00 hours) the analysis revealed that the Airport's contribution to westbound traffic is 13%.
 Need for BAA to extend transport study to assess the impact of future development at the airport on the trunk road network, including the M8 and local road network and assessment of mitigation measures 	BAA Glasgow is working alongside other stakeholders to assess the impact of the future development of the trunk road network. This study will also investigate the future development within the entire M8 Corridor west of Glasgow.
It is inappropriate to assume that private cars will remain the principal means of transport	BAA Glasgow supports the development of public transport to Glasgow Airport and the revised Airport Surface Access Strategy will indicate mode share targets for public transport and a reduction to private car journeys for both passengers and staff. However, given the widespread catchment area of the airport and the ability of public transport to serve such a distribution it is not unreasonable to assume that the private car will remain the principle mode of transport to Glasgow Airport.
 Need to reconvene the M8 Corridor Working Group to consider issues such as replacing the eastbound egress from the airport to the M8 	Noted. We agree the M8 Corridor Working Group should be reconvened and be chaired by Renfrewshire Council.
Any adjustments to M8 junctions should include peak entry / exist controls	 Any improvements or adjustments to Junction 27 of the M8 are primarily a matter for Transport Scotland and Renfrewshire Council. This issue will be dealt with as part of a wider study into the future of the M8.
■ BAA has a "fixated position" on the question of improvements to the main motorway access to and from the airport (e.g. consultants are to work on the question of necessary improvements to the controlled road system <u>before</u> closure of the consultation and review of surface access strategy <u>after</u> final publication of the plan)	● The White Paper calls for a package of Surface Access improvements to support the future growth of Glasgow Airport. BAA Glasgow believes that road access will continue to serve the majority of trips to and from the airport in the long term.

Consultation key issues	Our way forward
 New road links will be subject to Scottish Transport Appraisal Guidance procedures (STAG) 	● Noted
 Insufficient consultation with stakeholders regarding the proposed new access to the M8 at Arkleston (particularly Scottish Executive) 	• The purpose of the Outline Master Plan was to highlight issues where a partnership approach would be required to resolve barriers to the future growth of the airport. Detailed solutions to problems associated with junctions and the capacity of the M8 will be considered as part of a multimodal study which is being promoted by Renfrewshire Council, Scottish Enterprise Renfrewshire and BAA Glasgow.
Outline Master Plan does not take sufficient account of existing problems caused by M8 congestion	● This is a matter for the Scottish Executive and Transport Scotland. A survey that was undertaken on behalf of BAA Glasgow in October 2005 indicated that the airport's operation accounted for 12% of the total M8 traffic during peak periods.
 Surface access links via the M8 subsidiary road through Renfrew and the Netherton Farm expansion area should be delivered as soon as possible 	• The issue of new surface links from the airport to Renfrew through the area around Netherton Farm will be addressed if and when a planning application is brought forward.
 Outline Master Plan should take account of impact to White Cart and Site of Importance for Nature Conservation (SINC) from the proposed new slip road onto M8 	Noted. No detailed proposals for a new east bound slip road on to the M8 have been prepared.
 Outline Master Plan fails to take account of Scottish Executive objectives for overall road traffic stabilisation, CO2 emission reduction, reduced levels of congestion and unreliability of transport networks 	● The Master Plan is first and foremost a land use strategy document. Objectives for stabilisation of road traffic and the reliability of transport networks will be addressed in detail in the forthcoming Airport Surface Access Strategy.
Need for synergy between policies for airport related traffic and non airport traffic	 Noted. BAA Glasgow is committed to working with the Scottish Executive, Transport Scotland, Renfrewshire Council and SPT to ensure transport policies applicable to the airport are consistent with other land issues.
● The absence of peak road pricing or other measures of demand management on the urban M74 will worsen congestion problems between the M8/M74/M77 junction and the Airport	● This is an issue for the Scottish Executive, Transport Scotland and SPT. The Outline Master Plan makes it clear that road congestion could be a barrier to future airport growth. BAA Glasgow supports the completion of the M74 extension and we have discussed with Renfrewshire Council and the Scottish Executive our concerns about congestion on the M8. BAA Glasgow is determined to play its part in improving surface access to and from the airport. Ultimately, however, it will be for the local authority and the Scottish Executive to identify, and implement, solutions to the wider issue of motorway congestion.

Consultation key issues	Our way forward
Car parking	
Demand for car parking at and near airport will lead to loss of green land	• The Renfrewshire District Local Plan and the Renfrewshire Local Plan (2003) have consistently designated land to the east of the existing airport as being suitable for expansion of airport activities at a time when it is required.
Monopoly will lead to high airport parking prices	 BAA Glasgow controls 5,552 of approximately 18,00 public car parking spaces serving the airport. The Master Plan makes it clear that third party (non BAA) car park operators will continue to provide the majority of supply.
Need for: ● long stay car parking off-site to mitigate effects on the road network at the airport	BAA Glasgow believes that long stay car parking provision should continue to be provided by BAA and third party operators both within and close to the airport boundary.
 more information on car parking plans 	● The revised Master Plan provides details of current car parking proposals by BAA Glasgow. The projected future car parking demand will be provided by BAA and third party operators. More information on car parking will be provided in the forthcoming Airport Surface Access Strategy.
 an outline of BAA's car parking levy to fund public transport initiatives 	 BAA diverts 20 pence per transaction from short stay car parking at Glasgow Airport to the PTL fund. This money supports transport initiatives which promote the surface access strategy, meet community issues identified through the Airport Transport Forums, improve the utilisation of airport assets and enhance customer service.
 reduced staff car parking and increased charges 	The forthcoming Airport Surface Access Strategy will consider all aspects of staff travel and parking.
 park and ride facilities to support switch to public transport 	 The provision of park and ride facilities to increase public transport mode share is essentially a matter for SPT as Regional Transport Partnership and Renfrewshire Council as Local Transport Authority.
 proposals to reduce the numbers of forecasted additional car parking spaces 	● The Master Plan identifies future car parking demand associated with Glasgow Airport's growth and also assumes the operation of GARL. The Airport Surface Access Strategy will address how public transport could accommodate higher proportions to and from the airport.
Public transport	
Need for: ● improved public transport between West Dunbartonshire / Clydebank and Airport	 Noted. Improvements to public transport will be fully addressed in the forthcoming Airport Surface Access Strategy.
● improved bus services to Elderslie	• As above.

Consultation key issues	Our way forward
 improved bus services through East Renfrewshire on to East Kilbride / Hamilton 	• As above.
Need for more information on planned public transport initiatives including: • scale and function of the projected future public transport interchange	 BAA Glasgow is working with SPT to determine the exact location, scale, function and layout of the proposed Public Transport Interchange. The progress of this work will be partly dependent upon the status of the GARL Parliamentary Bill.
• improved bus services and staff travel to the airport	 Noted. Improvements to public transport and all aspects of staff travel will be fully addressed in the forthcoming Airport Surface Access Strategy.
• improvements to public transport	• As above.
 more challenging public transport usage targets (linked to new surface access strategy) 	● The forthcoming Airport Surface Access Strategy, a sister document to the Master Plan, will set challenging Public Transport Targets.
modal shift from private car to public transport	BAA Glasgow believes that road access will continue to serve the majority of trips to and from the airport in the long term.
 public transport priority over road building 	● Noted.
• reference in Outline Master Plan that Public Transport can reduce harmful emissions from cars	• Noted.
 extended targets for cutting staff access to airport in single occupant cars 	Noted. The forthcoming Airport Surface Access Strategy will consider all aspects of staff travel to the airport.
 introduction of taxi buses for staff working shifts 	● The issue of how to improve public transport for staff who work shifts will be considered in the forthcoming Airport Surface Access Strategy. This will require consultation with the 115 business partners located on the airport and public transport providers.
Rail	
Need for:	BAA Glasgow has reached agreement with SPT on the alignment of GARL within the airport boundary.
 BAA to safeguard the opportunity to create a through station eastwards through the airport and continuing as a "loop route" to Renfrew - Braehead and thereafter joining the main Glasgow - Paisley line between Hillington East and Cardonald stations 	● The questions concerning possible future extensions to GARL are a matter for SPT and not BAA Glasgow. BAA Glasgow has no plans to safeguard any land over the area currently being safeguarded.

Consultation key issues	Our way forward
 safeguarding pedestrian access from proposed rail station to the terminal building 	 BAA Glasgow is working with SPT to identify the most appropriate solution for linking the proposed airport rail station to the terminal building.
 consideration to develop rail station adjacent to the terminal building 	 BAA and SPT reached agreement on the location of the proposed airport rail station following extensive evaluation of several possible options. The chosen option fits best with the airport Master Plan.
 BAA Glasgow to lobby for a Cross Rail link between Queen Street and Central Rail Station 	BAA Glasgow supports SPT's proposals for Glasgow Crossrail as it would offer the potential for cross- conurbation and national rail services to serve the airport.
● BAA support for airport rail loop	BAA Glasgow supports GARL in principle. We have, however, raised detailed concerns about some of the provisions within the GARL Bill.
 consideration of a railhead to allow fuel to be delivered directly to Glasgow Airport from Grangemouth 	The airport fuel farm and the provision of fuel supplies to it are a matter for Pentland Aviation Ltd, the consortium which operates the facility.
 Outline Master Plan to reference the impact of rail on road congestion and opportunities for an improved interchange at Paisley Gilmour Street 	BAA Glasgow believes that the GARL will have an important role to play as part of a package of transport improvements to support the future growth of the airport and the metropolitan area. Improvements to Paisley Gilmour Street Station are a matter for Network Rail, SPT and Renfrewshire Council.
 Cross Rail initiative to be delivered as soon as possible 	The technical assessment of this project is being undertaken by SPT (the Regional Transport Partnership), with funding support from the Scottish Executive. A decision on whether to proceed is a matter for these organisations.
Rail link is one solution to alleviate surface access at the airport	• Agreed.
 The location of the proposed airport train station and public transport interchange viewed as "a disappointment" 	 Noted. BAA and SPT reached agreement on the location of the proposed airport rail station following extensive evaluation of several possible solutions. The chosen option fits best with the airport Master Plan.
Glasgow Airport Rail Link and Cross Rail underplayed in the Outline Master Plan	BAA Glasgow supports in principle both GARL and the Glasgow Crossrail.
 The Cross Rail link considered to be a "weak case and expensive project of limited value" 	Noted. This is a matter for SPT.
 Proposed rail link will have "sub optimal" levels of usage and does not provide important connections through Glasgow 	 Noted. This is a matter for SPT as the scheme's promoter and the Scottish Executive and Transport Scotland as principle funders.
 Concern about BAA's negative reference to high capital costs of Glasgow Airport Rail Link 	BAA Glasgow supports GARL in principle. We have however, raised detailed concerns about some of the provisions within the GARL Bill.

Consultation key issues	Our way forward
Glasgow Airport Rail Link a "white elephant"	 Noted. Glasgow Airport supports the GARL project in principle and measures to increase the public transport options to and from the airport. However, responsibility for the project rests with SPT as the promoter and, ultimately, with Members of the Scottish Parliament.
 "Optimistic" forecasted passenger usage of the proposed rail link to Glasgow 	 This is an issue for SPT as promoter of the rail link and, ultimately, for Members of the Scottish Parliament. Further information on the GARL scheme is available on their website www.spt.co.uk
 There is no projected figure for passenger use of the predicted rail link spur 	• As above
Financial	
 Planning authority / public sector partners could have control over BAA to contribute financially towards surface access enhancements 	BAA Glasgow is working with a variety of stakeholders to ensure that a package of surface access improvements are delivered. The Master Plan is primarily a high level planning document. However the forthcoming airport surface access strategy will offer more detail on our surface access plans.
Need for: clear division of planning and financial responsibilities between BAA and other parties in delivering improved access without significant increase in present levels of peak road use	• As above.
 information on funding for surface access improvements 	• As above.
 information on funding (ownership and management) of proposed railway station 	 This is a matter for SPT who are the promoters and owners of the GARL scheme. BAA Glasgow is committed to working with SPT and other stakeholders on this issue.
 Information on the funding of rail and road infrastructure, bus services including further development of the Bus Quality Partnership or green travel initiatives 	● BAA Glasgow is committed to working with the Scottish Executive, Transport Scotland, SPT, Renfrewshire Council, bus operators and other stakeholders to deliver a package of surface access and public transport improvements to support the growth of Glasgow Airport.
Modal share / split	
Need for: mode split figures at comparator airports including public transport on offer and other factors affecting the mode split	The revised Master Plan has been updated to show mode share figures.
Need for: mode split figures at comparator airports including public transport on offer and other factors affecting the	

Consultation key issues	Our way forward
 modelling implications of different transport use at different times during airport development taking into account the availability of rail at relevant dates 	● The Master Plan is a high level land use strategy document. Therefore, it would not be appropriate for this level of information to be contained within it. However, the forthcoming Airport Surface Access Strategy will provide detailed information regarding all aspects of modal splits and Glasgow Airport's mode share targets.
• new modal split targets for airport staff	The forthcoming Airport Surface Access Strategy will also provide detailed information on all options for staff travel and parking targets.
 future modal split targets to be based on Civil Aviation passenger survey results 	● The results of the 2005 CAA passenger survey will be an important baseline dataset in the preparation of the new Airport Surface Access Strategy.
 proposals to update and enhance the airport Staff Travel Plan 	The forthcoming Airport Surface Access Strategy will provide details on improvements to the airport Staff Travel Plan.
 modal share targets for period covered by Outline Master Plan in line with sustainable objectives to reduce car use and reflect shift to public transport usage 	 BAA Glasgow supports the sustainable objectives of reducing car use. All information about modal split targets will be illustrated in the forthcoming Airport Surface Access Strategy.
 the adoption of 3 year cycle for modal share surveys to support the Master Plan review process and surface access strategy 	• In accordance with the White Paper requirements, the Master Plan will be updated every five years and will be consulted on. The Surface Access Strategy will also be completed every five years as a sister document to the Master Plan.
Miscellaneous	
Need for: • transport strategies in accordance with national guidance Scottish Planning Policy 17 Planning for Transport	Glasgow Airport's transport strategies will be in accordance with Government Strategies.
 a demonstration of how surface access requirements have been assessed 	The forthcoming Airport Surface Access Strategy will show all relevant information on how future mode share targets and surface access improvements were assessed.
 the surface access strategy should to be consistent with the new Regional Transport Strategy 	Agreed. BAA Glasgow is committed to working with SPT (the Regional Transport Partnership) to ensure this.
 a consultation on the revision of the surface access strategy for Glasgow in 2006 	BAA Glasgow will work with key stakeholders when producing the forthcoming Airport Surface Access Strategy.
a commitment to a review of surface access strategy objectives in 2006	BAA Glasgow is committed to reviewing the objectives of the forthcoming Airport Surface Access Strategy.

Consultation key issues	Our way forward
 more detail on surface access infrastructure and service use from other non-airport users 	This will be considered in the forthcoming Airport Surface Access Strategy.
• the identification of proposed fuel farm site	● This matter is directly related to the GARL project. The preferred site for the relocation of the airport fuel farm is located at St Andrew's Crescent (adjacent to Paisley Moss). It is zoned as Policy Airport 2 in the adopted Renfrewshire Local Plan which favours the use of the site for airport operational use. The Council has therefore, given a clear indication it considers this area to be suitable for uses such as a fuel farm and aircraft stands.
 the incremental provision of surface access facilities both on and off- airport to be a priority 	• It is agreed by most observers that the growth of the airport to 2030 will require significant improvements to transport infrastructure and services. The question of what solutions are the most appropriate and how they are prioritised will be considered in the revised Airport Surface Access Strategy.
a variety of surface access measures to help travel choice - reducing the need for car parking	BAA Glasgow agrees with the desire to have a range of transport choices and is committed to working in partnership with a variety of key stakeholders to provide a package of surface access and public transport improvements to support the growth of Glasgow Airport. However, BAA Glasgow believes that due to the distribution of its users and the ability of public transport to serve them, the private car will remain the primary mode of transport for the foreseeable future. This position will be reviewed every five years in line with our commitment to revise the Master Plan.
 a choice of transport links to the airport with easy access 	• As above.
a cycle route linking through the airport to Renfrew and national cycle network	BAA Glasgow would welcome the opportunity to work with Renfrewshire Council and SPT to connect cycle routes in the area. We will investigate the options available.
reference to: Transport Act 2005	Noted.
• SPT Policies	● Noted
SPT's 2000 strategy and implementation Plan	● Noted
● Joint Transport Strategy of SPT and WESTRANS	● Noted.

Consultation key issues	Our way forward
Managing External Impacts to 2015 Sustainable development	
BAA's "first priority" will always be the airport and then the balance between promoting social and economic benefits with the impact on the environment	• Sustainable development is increasingly at the heart of what we do. BAA Glasgow understands more than ever the impact of our airports on our communities and our environment and we are setting increasingly more challenging targets going forward. We impact on society and communities in both positive and negative ways. Successful airports are essential for economic growth, business, trade links and tourism but with growth comes responsibility and an obligation to mitigate, where we can, against the negative impacts of aviation. We seek to do so by supporting sustainability projects across the country, by engaging with, listening to and responding to the needs of our communities and by taking the action outlined in this report. We strive to be a responsible, responsive company which aims not only to address and act on the things we can control but to use our influence to persuade the industry to act also.
Need for sustainable surface transport solutions for passengers and staff to help manage external impacts	BAA Glasgow is committed to working in partnership with the Scottish Executive, Transport Scotland, SPT, Renfrewshire Council and other stakeholders to ensure a package of sustainable surface transport solutions can be delivered.
Noise	
Concern about airport / flight noise over: Clydebank, Whitecrook, Bearsden, Milngavie, Dalmuir, Howwood, Johnstone, Renfrew, Elderslie, Linnvale, Drumry and Kirklandneuk	BAA Glasgow recognises that the airport's operation has negative as well as positive impacts. We fully understand the concern expressed in some communities about day/night time noise. BAA Scotland has produced a Noise Strategy which has in turn enabled Glasgow Airport to produce a Noise Action Plan which will outline how Glasgow Airport aims to deal with noise issues.
 Concern about night noise / early morning noise in Clydebank, Whitecrook and Johnstone 	• See above.
Secondary "vortex" noise in Johnstone, Kirklandneuk and Whitecrook	• A vortex is a circulating current of air generated by aircraft. Vortices can cause 'whooshing' noises but are generally quiet and usually only occur when aircraft are landing. There is only one type of vortex and less than 0.01% of flights cause vortex damage according to studies undertaken by the Building Research Establishment.
Current noise in Kirklandneuk and Renfrew unacceptable - development of cargo maintenance facilities will increase problem	BAA Glasgow recognises that ground noise is an issue for people who live close to the airport. Our development of new cargo and maintenance facilities in the Netherton Farm area have the potential to act as a 'noise barrier' as opposed to increasing the problem.

Consultation key issues	Our way forward
BAA is more concerned with noise pollution at Clydebank than Kirklandneuk	BAA Glasgow recognises that Kirklandneuk experiences similar noise levels to parts of Clydebank. However we also recognise that parts of Clydebank are within higher noise contour ranges. In seeking to address such concerns, we have to take into account the views of a broad range of communities, including Whitecrook, but obviously including many more.
Concern about the impact of noise on buildings such as schools and hospitals in West Dunbartonshire	• Government Guidance in the White Paper for Aviation Growth states that acoustic noise insulation should be offered to noise sensitive buildings within the 63dBA Leq contour. There are no noise sensitive buildings within this contour in West Dunbartonshire. Any new build should be designed to modern standards reflecting the areas in which they are sited.
 Indicative noise contours in Outline Master Plan do not reflect "unacceptable" noise levels in Blytheswood, Kirklandneuk, Whitecrook, Stepps, Bishopbriggs, Balmore and Johnstone 	● The areas of Stepps and Balmore are not regularly flown over. The revised Master Plan contains updated Forecast Noise Contours for the year 2015 (drawing number 7) which are based on the central case air traffic movements forecasts and assumptions on the aircraft fleet mix operating at Glasgow Airport at that time.
Noise modelling, rather than testing, produces inaccurate information and decisions taken using the assumptions are flawed	● The modelling of aircraft noise is undertaken by the Environmental Research and Consultancy Department (ERCD) at the CAA using their ANCON modelling software. ANCON calculated LAeq at each grid point by summing the Sound Exposure Levels (SEL) caused by all passing aircraft. To compute the SEL at a particular grid point requires the aircraft position (in 3 dimensions), aircraft velocity (relative to the grid point) and the engine power setting/thrust. Applying this data to the Noise-Power-Distance curve gives the SEL for an aircraft noise event.
Noise infringement penalties do not go far enough - they need to be tougher	● The Noise Action Plan indicates that daytime noise thresholds are set at 94dBa and at 87dBa during the night time periods (night time hours are between 23:00 and 05.59 hours). The penalties for infringing these levels are: Less than 3dBa receives a £500 infringement fine. More than 3dBa carries a £1000 infringement fine. This money is given to local charitable causes. BAA Glasgow will continue to review the penalties structure in future revisions of the Noise Action Plan
Concern about resale value of property in areas affected by noise	BAA Glasgow recognises the concern amongst some residents living close to the airport about the impact of the airport's development on property prices. However, to date there is no evidence that property values surrounding the airport have suffered
● Sleep disturbance as a result of noise	• Glasgow Airport voluntarily adopts DfT restrictions on night time flying. We are not compelled to do so but have chosen to adopt the limits set by the Government for larger, so-called 'designated' airports. These noise restrictions are designed to limit noise levels to no more than 87dba between the hours of 2300 and 0600 hours,

Consultation key issues	Our way forward
	and regular monitoring is carried out to identify any operators that exceed these limits. Aircraft that exceed agreed noise limits will be subject to an infringement fine.
Noise disturbance in summer months along flight path	Approximately 4% of Glasgow's aircraft movements take place during the night period (2300 – 0600hrs). A certain number of these night flights are necessary in order to correspond with schedules and time differences around the world. Also, a number of Glasgow's night flights are Air Ambulance flights to and from the Highlands and Islands. BAA Glasgow appreciates that the busy summer schedule may have a negative impact on some communities surrounding the airport. These negative impacts have to be balanced with the many positive impacts that the airport provides. Through our Noise Strategy and Noise Action Plan we will attempt to minimise the impact of noise on our neighbouring communities. For example, BAA Glasgow voluntarily adopts DfT restrictions on night time flying and will fine airlines that exceed agreed noise thresholds.
Noise impacts on quality of life	• As above.
 Concern about the impact of more flights and new flight path on the future development of Whitecrook, Clydebank East and riverside proposals 	● There are no definite proposals for a second runway at Glasgow Airport for the foreseeable future. However, in order to be open and transparent, we have made provision for a second runway, should it be required. It is important that our neighbours understand where a second runway, if required, would be situated. However, we do not envisage the need for a second runway before 2030.
Need for: ● reference to the EC Environmental Noise Directive (END) in the Outline Master Plan	The revised Master Plan will make reference to the EU Environmental Noise Directive, please refer to chapter 8.
 aligning publication cycle of the Outline Master Plan with END action plans (every 5 years from 2008) 	● The publication cycle of the Airport Master Plan was set in accordance with UK Government advice. The timing of the Environmental Noise Directive is a matter for the Scottish Executive. BAA did raise this anomaly in its response to the END consultation (Directive 2002/49/EC).
 detail on how The Environmental Research and Consultancy Department (ERCD) Report 0308 relates to noise impact at Glasgow Airport 	 Report 0308 presents estimated areas and populations within present (1999) and future (2015 and 2030) aircraft noise contours at 23 regional airports included in the Regional Air Service Co-Ordination Study (RASCO), including Glasgow Airport.
 Noise and Track Keeping System at Glasgow Airport 	BAA Glasgow installed a Noise and Track Keeping System which became operational in 2003. This system is interrogated to provide information on the performance of airlines serving Glasgow Airport. A quarterly report on 'Noise Performance Information' derived from the NTK system is provided to the Airport Consultative Committee and to Local Authorities. It will also be

Consultation key issues	Our way forward
	available, for the first time, on Glasgow Airport's website www.glasgowairport.com from March 2007.
 Outline Master Plan to anticipate increased ground and air noise to predict future consequences for residents 	The revised Master Plan included noise contour maps and information on the anticipated change in the noise climate surrounding Glasgow Airport.
 the provision of resources for noise sensitive buildings for areas outside the existing qualifying noise contours in West Dunbartonshire 	 Government Guidance in the White Paper for Aviation Growth states that acoustic noise insulation should be offered to noise sensitive buildings within the 63dBA Leq contour. There are no noise sensitive buildings within this contour in West Dunbartonshire. BAA Glasgow supports many community initiatives within this area and will continue to do so.
clarification of noise mitigation measures in place	BAA Glasgow has a series of noise abatement procedures in place and will continue to keep these under review. Jet aircraft failing to meet the noise standards defined by the International Civil Aviation Authority will not be permitted to operate from the airport and we will continue to apply and review a system of differential charges based on the noise categorisation of aircraft. Any income generated from such charges is used for charitable purposes.
 a contribution of costs from BAA to community noise monitoring equipment 	BAA Glasgow has a mobile noise monitoring unit which can be linked to its Noise and Track Keeping system. This equipment was verbally offered to West Dunbartonshire Council in January 2006 to allow it to undertake noise monitoring in the Whitecrook area. However, the Council opted to purchase its own equipment.
● more precise noise contours	• The updated Master Plan will show indicative forecast noise contour maps for the periods 2015 and 2020 alongside 2002 actual contours. All contours are produced by the Civil Airports Authority.
• rotational flight paths (e.g. fly over rural rather than urban areas)	• All procedures for arriving and departing aircraft comply with published noise preferential routings and noise-abatement procedures. These procedures were required to fulfil certain criteria and were subject to evaluation and approval by the UK Civil Aviation Authority and the UK Department for Transport and the Directorate of Airspace Policy. The procedures are rarely deviated from and then only in cases of emergency as in all measures safety is paramount. A quarterly report on 'Noise Performance Information' derived from the Noise and Track Keeping system will be available, for the first time, on Glasgow Airport's website www.glasgowairport.com from March 2007.
 on the type and future size of aircraft that Glasgow Airport will accommodate as noise from existing aircraft is increasing despite assurances otherwise 	 Glasgow Airport is currently able to accommodate a variety of different aircraft types including the Boeing 777 and 747, two of the largest passenger jets in operation today. The runway and stand requirements of the new Airbus A380 'superjumbo' means that it is very

Consultation key issues	Our way forward
	unlikely that Glasgow Airport will be able to accommodate an aircraft of this size. In any case, the A380 was not designed with regional airports, such as Glasgow Airport, in mind. It is designed to operate from major hub airports such as Schiphol and Heathrow, airports which are slot constrained. More likely to operate from Glasgow is the new Boeing 787 'Dreamliner', due to come into service in 2008. This will allow airlines to offer direct, point to point flights from Glasgow to destinations on the far west of the US, Latin America and parts of Australia. Further information on aircraft sizes and anticipated stand demand is contained within the revised Master Plan.
 improved noise monitoring at Blytheswood, Whitecrook, Linnvale, Drumry, Milngavie, Howwood and Johnstone 	BAA Glasgow undertakes its noise monitoring at both ends of the runway and to the south east side (where the greatest population is located). Our monitoring procedures are in accordance with the strict criteria set down by the Civil Aviation Authority, details of which can be viewed on their website www.caa.co.uk It is our understanding that West Dunbartonshire Council propose to conduct noise monitoring in the Whitecrook and Linnvale areas.
● a ban on night time flying	• Glasgow Airport has always been a 24 hour, 365 day operation. BAA Glasgow appreciates that night time flying may have a negative impact on some communities surrounding the airport. These negative impacts have to be balanced with the many positive impacts that the airport provides. Currently only 4% of flights to and from Glasgow Airport operate during night time hours.
noisy aircraft to be banned and fine levels increased	● The Noise Action Plan indicates that daytime noise thresholds are set at 94dBa and at 87dBa during the night time periods (night time hours are between 23:00 and 05.59 hours). The penalties for infringing these levels are: Less than 3dBa receives a £500 infringement fine. More than 3dBa carries a £1000 infringement fine. This money is given to local charitable causes. BAA Glasgow will continue to review the penalties structure in future revisions of the Noise Action Plan.
compensation for people under the flight path / affected by noise disturbance	BAA Glasgow hopes to announce its preferred scheme for addressing existing noise impacts by the end of 2006. The White Paper suggests that priority should be given to mitigating noise at source and the Noise Action Plan will set out how we intend to do this. BAA is committed to working with airlines, National Air Traffic Services and communities to identify and encourage the use of flying procedures which minimise levels of noise heard at ground level.

Consultation key issues	Our way forward
Air quality / pollution	
Aviation fuel smell and fuel dumping in local communities not acceptable	• Kerosene odour is not considered to be an issue at Glasgow Airport, With regards to the issue of aviation fuel, the Civil Aviation Air Navigation Order only permits the dumping of fuel in an emergency. This is normally carried out over the sea, or if this is not possible, above 10,000 feet to allow it to evaporate before it reaches the ground. BAA Glasgow is notified of any such events through the air traffic controller. Over the past five years there have been no reports of fuel dumping in this area.
 Concern about pollution levels / air quality in Blytheswood, Johnstone, Kirklandneuk, Renfrew, Whitecrook, Linnvale, Drumry and Milngavie and Bishopbriggs 	● Air Quality monitoring is routinely undertaken by BAA Glasgow and Renfrewshire and West Dunbartonshire Councils. The most recent survey undertaken at Glasgow Airport indicated that with the exception of the terminal forecourt, most of the airport's monitoring sites had Nitrous Oxide (NO2) levels similar to, or less than, the majority of urban areas and roadside locations around the city of Glasgow. Also, the Renfrewshire Council Local Air Quality Progress Report (04) indicated that their monitoring sites based at the airport have recorded that that the NO2 statutory air quality objectives are unlikely to be exceeded at this location. Road traffic has been identified as the most significant polluter of air quality around the airport campus.
 Concern about fumes at three local primary schools; Kirklandneuk, St James's and Moorpark 	• As above
Concern about impact of further airport development on health	 Government guidance on preparing Master Plans states that it is not considered necessary to produce a Health Impact Assessment as part of the Master Plan process. This should instead accompany formal planning applications for qualifying developments set out in the Master Plan.
Need for monitoring of impact to health of those under flight paths	• As above
Need for joint working with Local Authorities on Local Air Quality Management	 BAA Glasgow has an environment manager who works closely with colleagues in the surrounding Local Authorities on air quality issues. BAA meets regularly with Renfrewshire Council, and government agencies such as SEPA, to discuss such matters.
Developments required to be assessed on potential impact to local air quality and form part of the local transport plan	 Major developments are likely to require detailed planning and Environmental Impact Assessments (EIA) as part of the planning process. It is normal practise in EIA to consider the implication for air quality and to bring forward proposals for mitigation.
 Need for anticipation in Outline Master Plan of increased pollution and air quality 	Studies completed for the Government prior to the publication of the Air Transport White Paper illustrated that in terms of excedence standards and properties affected, no local air quality problems are likely to arise

Consultation key issues	Our way forward
	at the Airport, even under a worst case scenario (i.e. the highest Air Traffic Movements) packages.
Need for factoring airport traffic into calculations for greenhouse gases and air quality at airport	• As above.
 Single authority should be responsible for air noise and pollution and not spread amongst Government, BAA, Civil Aviation Authority and National Air Traffic Services 	 Issues related to the governance of air noise and pollution are not a matter for BAA Glasgow and should be addressed to the UK Government and the Scottish Executive.
Environmental	
 Outline Master Plan suggests that the Black Cart Special Protection / Site of Special Scientific Interest and Paisley Moss Nature Reserve will not be directly affected by proposals but this appears to be contradicted elsewhere in the Outline Master Plan where BAA appear to offer solutions for Whooper Swan relocation 	• The revised Master Plan proposals do not anticipate the development of facilities on the Black Cart SPA in the period to 2030 under a single runway scenario. In the event that a second parallel runway were required at 2030, it is possible that part of the SPA could be designated for airfield uses. BAA Glasgow would seek to minimise any negative impact on this area. The Outline Master Plan did, however, indicate long standing concerns regarding the presence of Whooper Swans on the Black Cart Water during winter and the significant hazard they represent to aircraft using the airport. Taking account of representations received during the Outline Master Plan consultation and having considered expert advice we now believe that the relocation of the Swans will be extremely difficult to achieve successfully. BAA Glasgow will continue to use approved bird control measures to ensure the safety of aircraft using the airport.
BAA require conservation advice about The Black Cart Special Protection Area / Site of Special Scientific Interest and Paisley Moss Local Nature Reserve from Scottish Natural Heritage to determine any effects of development proposals	• As above.
Environmental concerns are a "major issue" for residents and business close to airport	• As the demand for air travel continues to grow and airports expand, the environment and its protection becomes increasingly important. BAA Scotland recognises that it not only has an obligation to meet customer demands but a responsibility to both understand and mitigate the impact of growth on the environment. Our revised Master Plan will set out how we aim to do so.
Detailed environmental strategies should be developed to minimise and mitigate future environmental impacts	BAA has a set of environmental strategies and these are described within the revised Master Plan.
Concern about development impact on landscape character and visual amenity	 As the airport campus develops, appropriate landscaping provisions will be made to maintain the existing high standards without compromising aircraft safety through

Consultation key issues	Our way forward
	the attraction of birds to the airfield.
• Concern about impact to local wildlife at Kirklandneuk	● The expansion of Glasgow Airport will be undertaken in the context of international, national and local nature conservation policies. The development of Cargo and Maintenance facilities further east in to the Netherton Farm Area and the possible impacts on local wildlife will be considered during the detailed planning process by an Environmental Impact Assessment upon which statutory consultees and the public will have the opportunity to comment.
Need for: • information on provisions which may be taken in the Control of Major Accident Hazards (COMAH) regulations	● The provisions of the COMAH Regulations can be found in 'The Planning (Control of Major Accident Hazards) (Scotland) Regulations, 2000'. The Scottish Executive conducted a consultation in 2005 on the above Regulations following the publication of European Directive 2003/105/EC. Further information on this issue could be found on www.scotland.gov.uk
culture shift in Outline Master Plan to encourage energy efficiency and conservation	● The Master Plan is a high level strategic land use document. Therefore this type of information is not appropriate here. However, Glasgow Airport does encourage energy efficiency throughout the airport and all project boards have an environmental and sustainability input. For example, during the development or renovation of facilities within the terminal building, a reduction in the consumption of energy use is targeted, as is the promotion of waste recycling. Where opportunities exist within a development, energy saving devices such as daylight linked lighting, movement activated lights, and water conserving equipment will be used. Also, within the longer term capital plan for airport, there are specific environmental projects, such as water quality investment, to ensure we continue to meet environmental legislation.
an employee at airport to promote energy efficiency and conservation	In addition to a full time environment manager, Glasgow Airport has several members of staff who champion energy efficiency and conservation.
clarification of energy efficiency targets at airport	 Annual Carbon dioxide targets are set at Glasgow Airport in relation to electricity and gas consumption from fixed assets and buildings on the airport. Individual projects and developments have energy targets incorporated into their design. Please visit our Corporate Responsibility website for details on Glasgow airport's energy efficiency and environmental work. www.glasgowairport.com/corporateresponsibility
● Co2 audit at airport	BAA understands the energy consumption and associated carbon dioxide emissions through analysis of meter readings. Departmental targets are being established at the moment to foster behaviour change and reduce energy consumption.

Consultation key issues	Our way forward
monitoring environmental impacts on communities	• It is BAA Glasgow's intention to continue to work closely with Local Authorities to share expertise and results of our air quality studies. When developments are taking place the hours of operation for high noise generating activities will be rigorously controlled to ensure that local communities are not impacted upon.
 the inclusion of environmental impacts of surface access 	 The Master Plan is a high level land use strategy document. Information on surface access will be published in the forthcoming Airport Surface Access Strategy.
 the consideration of access to jobs via sustainable development and improved public transport 	● As above.
Biodiversity	
Need for explicit reference to Article 6 of the Habitats Directive	The revised Master Plan has now been updated to include reference to Article 6 of the Habitats Directive.
● BAA appear "blasé" towards the environment	• BAA takes the environment and issues of sustainable development extremely seriously and we know there is more to do. We recognise that as an expanding business we have a responsibility to ensure that our airports are as clean, energy efficient, resource effective and as operationally efficient as possible. And where a negative impact on the environment is unavoidable we will seek new ways of mitigating its effect. Please visit our Corporate Responsibility website for details on Glasgow Airport's commitment to sustainable growth. www.glasgowairport.com/corporateresponsibility
 Concern about BAA comment about "Landscaping without attraction of birds to the airfield" as any developments should promote biodiversity not restrict it 	BAA's priority is to ensure the safety of passengers. Bird strikes present a severe safety hazard to aircraft. BAA will continue to seek to discourage birds from the airfield.
 Concern about land use strategy to 2030 if it involves wiping out an important wildlife area possibly for an extension that may not happen 	• The revised Master Plan makes its clear that a second runway is unlikely to be required before 2030. Were such a development to become economically viable, the impacts would require to be fully assessed and mitigated against.
Further information needed on BAA's plans to relocate Whooper Swans	BAA Glasgow has consulted with experts in this field and has been advised that relocating habitats or birds is very difficult to achieve successfully. Therefore BAA has no intention to relocate the Whooper Swans.
 Whooper Swan relocation and expansion of airport facilities in the Special Protection Area (SPA) conflicts with the objectives of the SPA 	• As above.

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Consultation key issues	Our way forward
Management of the water environment Surface water	nt
 Need for surface water drainage to be treated in accordance with the principles of Sustainable Urban Drainage Systems (SUDS) 	BAA Glasgow understands and recognises current planning policy in relation to SUDs and will strive to use this method of reducing point source run-off where appropriate.
 Car park developments will require appropriately-sized SUDS to protect watercourses – including satellite parking around Paisley 	As above. Any new BAA developments will require to consider the use of SUDs.
 Expansion proposals offer opportunities to include current unsatisfactory car park run-off through appropriate effective SUDS systems 	 Any new proposals will be treated as above. However, Glasgow Airport does not consider it appropriate at this time to alter existing car park systems.
 Pollutants from de-icing aircraft and airside areas a major concern – airport expansion may lead to more pollutants entering watercourses 	BAA Glasgow will continue to work with SEPA on this matter to ensure that we meet our objectives in this area.
 There should be no increase in the typical run-off hydrograph to receiving watercourses 	• As above.
Foul drainage	
Current sewer overflows are "unsatisfactory"	● The waste water network off airport is owned by Scottish Water. On airport, BAA has no combined storm water and waste water networks. All BAA waste water is taken by Scottish Water. Any current overflow issues should be directed to Scottish Water.
 Concern about potential increase sewage overflows impact to the White Cart Water 	At Glasgow Airport, BAA has no combined storm and waste water networks. With regards to the Scottish water network, we refer to the above response
 Vehicle, aircraft washings and fire station run-off should be directed to public sewer 	BAA will consider the most sustainable and economical method of disposal of these waste products. BAA has the option of using the Scottish Water network, but also has other options for the removal of this waste though licensed waste handlers. At present BAA Glasgow has no facilities that allow aircraft washing.
Contaminated land	·
 Concern about increased level of oil product in the ground at Hanger 10 	Contaminated material from this area has been removed and is undergoing a bioremediation process to reduce levels of contamination.
Waste management	
 Need for suitable provision for waste storage at new developments 	BAA Glasgow currently has several sites where waste management and recycling facilities are located. As the airport expands the need for more facilities of this type

Consultation key issues	Our way forward
	will be considered with any new development proposal and we will strive to drive recycling for all developments.
Strategy	
 Surface access strategies could make an important contribution to sustainability objectives and proposals should be consistent with the new national and regional transport strategies 	 The forthcoming Airport Surface Access Strategy will be prepared in the context of national, regional and local transport policies and objectives.
Emissions scheme	
● EU emissions scheme "not supported"	 Noted. BAA Glasgow as part of the BAA group fully supports the EU emissions trading scheme to address aviations impact as a whole. BAA plc have also supported the formation of a climate change taskforce through our global trade body ACI world.
 EU emissions scheme prudent for international flights but fuel levy should be considered for domestic flights 	This is an issue for the UK Government which controls air transport and fiscal policy within the UK.
 BAA are "absolving responsibility" for sources of pollution from traffic and air travel to the operators 	BAA Glasgow takes its environmental responsibilities extremely seriously and recognises that climate change is the biggest challenge facing the aviation sector today. BAA Glasgow, in conjunction with its parent company BAA, is working extremely hard with airline and public transport operators to tackle this issue. BAA Scotland also recognises that the airport operations have an environmental impact and is continually working to find ways of mitigating against any negative impact of the airport's operations.
 Mitigation plans are heavily dependent on yet undiscovered advancements in technology 	 Agreed. However, where possible new technology and renewable energy generating equipment will be used within developments.
 Need for a proportion of domestic flights from Glasgow Airport to be diverted onto forms of travel with lower greenhouse gas emissions 	 The proportion of domestic flights/market share of other forms of domestic travel is a factor of variable matters such as journey time, price, frequency and service level. The attractiveness of domestic air travel to destinations such as Bristol, Southampton and London will remain strong unless other options are significantly improved.
 EU trading should not be the only route. Energy saving and energy efficiency should be considered in all aspects of the airport 	 We agree. The revised Master Plan provides details of BAA Glasgow's energy saving and energy efficiency targets, measures and recent performance. See also our corporate responsibility report on www.glasgowairport.com/corporateresponsibility
 Greater input required from BAA to assess the extent to which changes in aircraft operation may aid cuts in aircraft greenhouse gas emissions 	 BAA Glasgow encourages airlines to use more fuel efficient new generation aircraft and we also have differential charging mechanisms depending on aircraft engine size.

Consultation key issues	Our way forward
Emissions reduction should be the first resort - before trading	• We agree that emissions reduction is the ultimate goal but emissions trading is a viable mechanism for achieving this. We also agree that where we can, we will ensure that emissions reductions at our airports are achieved. More generally, given the twin challenges of climate change and a historically higher oil price, airline operators and aircraft manufacturers are working extremely hard to identify ways in which to reduce emissions - for example, the step-change technologies being used in the production of the new Boeing 787 Dreamliner (due to enter service in 2008), will result in being 20% more fuel efficient than current models. On a smaller scale, aircraft operators are retro-fitting blended winglets to their fleets which can reduce fuel consumption by 6.5% and some have even taken more radical steps of applying fewer layers of paint to save weight and reduce fuel consumption.
More effort needed from BAA to promote alternative fuels and emissions abatement technology	 All vehicles on the airfield areas are subject to differential charging dependent on the engine size to encourage cleaner vehicles to be used. Several business partner vehicles on the airfield are electric. BAA Glasgow also has a number of fuel efficient LPG vehicles in its fleet.
Miscellaneous	
House movement from air traffic in Renfrew and Whitecrook	Vortices from aircraft would only be expected very close to and directly under the airport flight path. Vortex damage is usually confined to the disturbance of roof tiles and does not cause movement to properties or damage to vertical walls.
Cracks appearing on buildings in Whitecrook - caused by planes overhead	BAA Glasgow takes both the issue of noise and community relations very seriously. We do not believe that aircraft are the cause of structural damage in Whitecrook. We are willing to continue to listen and talk with our neighbours and provide both help and advice where we can.
Concern about increasing chance of accident in surrounding areas	BAA Glasgow recognises the concerns of the communities around the airports and works closely with a range of stakeholders to address these concerns where we can. We do not compromise on safety and airlines and airport operators are working to continue to raise the bar in an already exceptionally safe industry. We are happy to provide both reassurances and advice to individuals and communities who are concerned about safety.
Land use to 2030 and a possible new Parallel taxiway	runway
Additional section of parallel taxiway should be delivered before it is required as this could: • delay growth or free up more space for more aircraft stands	 BAA Glasgow's policy is to deliver facilities 'just in time'. We have a track record of ensuring that high quality and appropriate facilities are delivered when needed.

Consultation key issues	Our way forward
New runway	
No objection to new runway providing noise levels don't increase over Whitecrook	• A second runway would only be developed if it was economically and sustainably viable. If and when it is brought forward it will be subject to a detailed planning environmental impact assessment in accordance with national, regional and local policies at that time. BAA Glasgow will review and update its view on a new runway every 5 years as part of the airport Master Plan process. BAA Glasgow recognises that the airport's operation has negative as well as positive impacts. We fully understand the concern expressed in some communities about day/night time noise. BAA Scotland has produced a Noise Strategy which has in turn enabled Glasgow Airport to produce a Noise Action Plan which will outline how Glasgow Airport will aim to deal with noise issues.
Central Whitecrook should be declared an industrial zone and residents moved out if second runway goes ahead	• As above.
Need to identify the population likely to be affected by the two runway option	• As above.
 Need for BAA commitment that they won't oppose any development proposals for land between existing airport boundary and Black Cart 	• As above
Need for augmentation of Blight Protection Policy	• As above.
New runway: ■ unlikely to be needed before 2030	• As above
 development before 2030 - a technical and operational issue for BAA 	• As above
will increase noise levels over Clydebank / Whitecrook	• As above
 will affect Clydebank businesses / regeneration 	• As above
will increase noise and air pollution to an even more unacceptable level in Renfrew	• As above
 likely to adversely affect the Black Cart's Whooper Swan population and the integrity of the Special Protection Area 	• As above
 will be subject to the same problems of land conditions as the present runway (e.g. sub surface conditions / water table) 	• As above

Consultation key issues	Our way forward
 will be difficult to justify operationally and financially due to its proposed location 	• As above
 New runway needed sooner rather than later to spread adverse effects of traffic increases, maintain Glasgow Airport's premier status and cater for growth in industry (note: assertion from unsupportive respondent) 	• As above.
2030-single main runway layout	
 Need for Master Plan to include the natural heritage status of land likely to be within new airport boundaries and mitigate against development impact 	● The revised Master Plan recognises the status of this land and expansion will bear this in mind. The forthcoming BAA Glasgow Biodiversity Action Plan will address the issues of natural heritage at sites adjacent or close to Glasgow Airport. This is due to be published late 2006 – early 2007.
2030-twin parallel runway layout / pa	ssenger terminal facilities
 Airport boundary extends beyond what is indicated in the Government White Paper – BAA should recognise the potential impact on SPA 	BAA Glasgow has shown a slightly larger land take than the indicative layout in the White Paper for a number of reasons. Firstly, to provide an appropriate landscape buffer between any new runway and the Black Cart SPA; secondly, to avoid leaving any unsuitable area of land; thirdly, to ensure the safeguarding of a 2000m length runway. The change of boundary between the Master Plan and the White Paper impact on the SPA would be negligible.
Additional stands	
 Mix of stands should be commensurate with the peak aircraft movement rate and appropriate for future larger aircraft expected to use the airport 	BAA Glasgow's future detailed development strategy takes account of forecast demand and has provision for a full range of aircraft stands.
Piers	
Pier lengths are "very long" and could entail long walking distances for passengers	The precise layout of stands and associated new piers is yet to be determined. Customer service issues such as walking distances will be fully considered when the detailed proposals are being drawn up.
Clarification on timescales for new pier required	BAA Glasgow is currently of the opinion that a second international pier will be required by 2015, depending on passenger growth.
Multiple terminals	
Development of two terminals may be an option	Noted. This is discussed in the revised Master Plan.
 Decision on whether Glasgow has one or two terminals is an operational matter for BAA 	● Agreed. As above

Consultation key issues	Our way forward
BAA should consider long term strategy of developing Glasgow as transatlantic terminal and Edinburgh as a far east terminal	It is envisaged that both Glasgow and Edinburgh airports will continue to have a mixture of domestic and international services, including long haul. Ultimately, airlines decide where they fly to, not the airport operator.
Land use strategy to 2030	
● Not supported due to impact on SPA	● The revised Master Plan proposals do not anticipate the development of facilities on the Black Cart SPA in the period to 2030 under a single runway scenario. Were a second parallel runway required at 2030, it is possible that part of the SPA could be designated for airfield uses. BAA Glasgow would seek to minimise any negative impact on this area.
Local community will oppose potential development at Netherton Farm	The Renfrewshire Local Plan and its predecessor identified the Netherton Farm area for possible expansion of the airport. This Local Plan was the subject of a Public Local Inquiry in 2004 therefore represents existing planning policy.
Proposed siting of cargo / maintenance development "will completely destroy the only green space between Renfrew and Paisley"	• As above.
Need for BAA to secure existing industrial land for airport development (i.e. Westway in Renfrew)	BAA Glasgow recognises that other industrial areas have a roll to play facilitating the expansion of the airport. However, these areas will not be able to support or provide the necessary land for an extended apron and taxiway, nor will they have the locational advantage of being immediately adjacent to the airport's operational area.
 Request that future development is undertaken to the west side of the Airport near the Black Cart River which is not densely populated and where there is significant undeveloped land 	● The most efficient layout of the airport would be for BAA Glasgow to expand the airport further east towards the existing Cargo and maintenance area which will result in the relocation of these existing facilities to the Netherton Farm area. However, the Master Plan will be reviewed every five years and such matters will be revisited.
After land to west has been exhausted - develop land to the east	• As above.
Development of cargo and maintenance facilities should only be undertaken if essential	● The Master Plan forecasts a major expansion of cargo handling at Glasgow Airport, benefiting the economy and Scottish businesses. The development of cargo and maintenance facilities into the Netherton Farm area will be required to provide relocated facilities dispersed as a result of the terminal and apron expansion in the existing cargo and maintenance zone.
Long term surface access strategy required for period through to 2030	● The forthcoming Airport Surface Access Strategy will have aspirational targets to 2015. Like the Master Plan, the Surface Access Strategy will be revised every five years.

Consultation key issues	Our way forward
● Too soon to fix details of 2015-2030 programmes	 Agreed. The Master Plan will be reviewed every five years.
 Need for an outline of plans for the airport beyond 2030 	 The Master Plan provides an indicative layout of the airport's expansion including a second runway beyond 2030. It is too early to provide any greater detail than that shown.
 No justification for reserving development land for events which may happen beyond a reasonable period - little reason to blight land for the next 25 years 	• The Master Plan indicates why reserving land for the second runway is justified. BAA Glasgow has, in accordance with the 2003 White Paper, introduced a Blight Policy to protect the value of properties which may be affected by a possible second runway. BAA Scotland is also looking at the possibility of introduce measures to mitigate against existing day time noise issues.
Consideration required for: • updating Public Safety Zones (PSZ) for runway 05/23 in line with revised 2015 / 2030 forecasts and;	● The responsibility for updating PSZs at UK airports rests with the DfT. We understand that it is their intention to commence this work for all major UK airports in late 2006/early 2007.
 PSZs for new second runway to avoid sensitive development in the interim 	● BAA Glasgow in conjunction with NATS, the air traffic control provider, has prepared indicative PSZs associated with a new second runway. This task was undertaken as part of our wider future safeguarding policy workstream. The indicative PSZ associated with a possible new runway will be issued to relevant stakeholders e.g. the Scottish Executive, Local Planning Authorities, shortly after the publication of the Master Plan.
● Indicative boundary in white paper is sufficient to allow airport growth	● BAA Glasgow has shown a slightly larger land take than the indicative layout in the White Paper for a number of reasons: firstly, to provide an appropriate landscape buffer between any new runway and the Black Cart SPA; secondly, to avoid leaving any unsuitable area of land; thirdly, to ensure the safeguarding of a 2000m length runway. The change of boundary between the Master Plan and the White Paper would have a negligible impact on the SPA.
 Extension of airport boundary should be for the purpose of aviation operations only and not land-side operations such as car parking, hotel and airport related office and airline catering operations 	• The Master Plan indicates that the extension to the airport boundary will predominantly be required for operational purposes. Airport related functions will continue to be located both within and close to the airport boundary.
 Greater consideration required now for the development opportunities along the northern boundary 	It is too early to consider what additional facilities may be required close to the northern boundary of the airport at this stage.
No natural environmental areas left for recreation	 It is our intention to ensure that the airport's expansion is designed in such a manner that green corridors are maintained along the Black Cart and White Cart Waters. In addition, the Paisley Moss Nature Reserve will continue to provide a haven for local wildlife.

Consultation key issues	Our way forward
 Need for information on possible safeguarding zone extension in West Dunbartonshire 	● The responsibility for updating PSZs at UK airports rests with the DfT. We understand that it is their intention to commence this work for all major UK airports in late 2006/early 2007.
Managing external impacts to 2030 Miscellaneous	
Projected impacts to the Black Cart SPA required	● The revised Master Plan proposals do not anticipate the development of facilities on the Black Cart SPA in the period to 2030 under a single runway scenario. Were a second parallel runway required at 2030, it is possible that part of the SPA could be designated for airfield uses. BAA Glasgow would seek to minimise any negative impact on this area.
 Surface access strategy should be developed and highlighted in this section 	• The Master Pan is a high level strategic land use document. The issue of surface access will be addressed in detail through the forthcoming Airport Surface Access Strategy.
 No link between land use components of the plan and the development and delivery of strategies and projects to manage external impacts on surface access 	• As above.
Consideration that Master Plan should contain a summary of the blight consultation	 Noted. Comments were considered. However, as the Master Plan is a high level land use strategy document it was considered inappropriate to publish this information within the document. For more information on the blight scheme please see www.baa.com
Need for: ■ car parking strategy for passengers and staff	 All details on car parking for both passengers and staff will be provided in the forthcoming Airport Surface Access Strategy.
 land management for the surrounding roads and motorways 	 Glasgow Airport is committed to working in partnership with the Scottish Executive, Transport Scotland, SPT, Renfrewshire Council and Scottish Enterprise Renfrewshire to deliver a package of surface access improvements to enable the predicted growth of the airport.
 consideration of freight movements by trucks in relation to operations at Glasgow Airport 	• As above.
 clarity of potential land needed for development to assist other potential developers with their plans 	• As required by Government guidance the Master Plan indicates in detail the land required to support the airport's development to 2015 and also provides a strategic overview of expansion to 2030. We believe that the revised Master Plan, when read in association with the approved Glasgow and Clyde Valley Structure Plan and the adopted Renfrewshire Local Plan, provides sufficient clarity for other developers.

Consultation key issues	Our way forward
 strong links with the Scottish Strategic Transport Review and the future strategy of the WESTRANS statutory RTP 	BAA Glasgow is committed to working with Transport Scotland, SPT and Westrans.
Noise	
Outline Master Plan should include current noise contours to enable comparison of the existing situation with future scenarios	● The revised Master Plan will include forecast noise contours illustrating indicative contours for 2015 and 2030. However, following requests during the consultation the revised Master Plan will also show 2002 actual noise contours. All contour maps are produced by the Civil Aviation Authority.
BAA should report what properties and population will be affected by the likely increase in air traffic noise to 2030 and report the compensation measures to address this	Within the revised Master Plan are indicative noise contour maps which show our best guess of how areas are likely to be affected by 2030. As these are only indicative it would be impossible to state how we would compensate people for noise disturbance that far in to the future. However the Noise Action Plan states how Glasgow Airport is seeking to minimise noise levels experienced by neighbouring communities at present.
Flooding	
Development of land immediately adjacent to Kirklandneuk would wipe out natural flood plain	 BAA Glasgow commissioned a comprehensive Flood Risk Assessment in 2004 which indicated that to develop the Netherton Farm Area, flood mitigation measures would be required. These measures will be outlined if and when a planning application is brought forward.
Pollution	
Development of land immediately adjacent to Kirklandneuk would increase pollution in Renfrew	We anticipate the development of land at Netherton Farm in the period beyond 2015. The impact of this development will be rigorously assessed through an Environmental Impact Assessment as part of the planning process. Prior to this assessment it would be premature to assume that the development in this area will increase pollution in Renfrew.
Where now? – Next steps Miscellaneous	
Focusing on the wants and needs of the local community	 The Master Plan consultation has been very valuable in understanding the needs and concerns of the airport communities. BAA Glasgow recognises more than ever that it can only grow with the trust and support of neighbouring communities.
Need for BAA commitment to the development of a green travel plan	The forthcoming Airport Surface Access Strategy will address these issues.
A Strategic Environmental Assessment	● The Master Plan does not need to go through an SEA as it is not a statutory document, an example of which would be a Local Authority Local Plan. However, once proposals progress to the development stage, they will

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	go through normal planning application procedures including EIA where necessary.
Assessment of increases in cargo tonnage	As part of the preparation of the revised Master Plan BAA undertook a review of its forecasts. Updates to this section can be found in Chapter 5.5
Commitment to communities north of the river (Clydebank) to take greater steps in terms of positive discrimination for training and job opportunities	• Glasgow Airport is a responsible employer with employment policies that reflect best practice and are in line with employment legislation. Our Equal Opportunities Policy promotes a positive attitude towards equality and diversity which is right for the company, employees, customers, business partners and suppliers. We are dedicated to putting the right people in the right jobs, helping them learn the skills they need now and in the future. All job vacancies for BAA Glasgow Airport are initially advertised on the BAA.com website by airport location. In addition there is a dedicated recruitment telephone number where callers can request detailed information about jobs and how to apply.
Community benefits for residents of Whitecrook and central areas of Clydebank	 BAA Glasgow Airport recognises that it can only grow with the trust and support of neighbouring communities. We have a community and sponsorship programme that commits us to supporting projects which focus on education, environment and sport at a local level. Glasgow Airport also has access to the BAA Communities Trust which supports larger projects. We have already made significant contributions - both financial and in kind - to local communities, including Whitecrook and Clydebank, and we are committed to continuing to do so in the future.
 Expansion of the network of direct flights from Glasgow to meet tourism and business needs 	BAA Scotland's Route Development Fund has been successful in attracting new direct international services from Glasgow Airport (and it is envisaged that this will continue). Glasgow Airport is working closely with Glasgow City Marketing Bureau and Visit Scotland to promote the city as a business and leisure destination, and to support new and existing airlines.
Ensuring the Outline Master Plan is set in context of: Climate Change Strategy for Scotland, developments in UK, EU and global policies affecting energy and climate change and sustainable development	● The Master Plan is published against the background of the White Paper which considered these matters in full. The White Paper is the UK Government's Policy for sustainable growth of aviation.
Encouraging airlines to introduce new and reinstate old routes	Ultimately, airlines decide where they fly to, not the airport operator. However, Glasgow Airport is working hard to attract new airlines to the city, and to encourage existing airlines to expand. The BAA Scotland Route Development Fund was established in 2002 in a bid to expand international services from Scotland. At Glasgow, it has succeeded in attracting Emirates, US Airways, Pakistan International and Air Berlin, and has also

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	facilitated expansion by easyJet and flyglobespan. In 2006, new services to Orlando, Berlin and Las Vegas have been introduced and further expansion is likely over the coming weeks and months.
Resolving surface access impacts in final Master Plan	• The Master Plan is a high level land use strategy document so it is not appropriate to promote mode share and surface access strategy details here. The forthcoming Airport Surface Access Strategy, due for publication in 2006, will include this detail.
Final Master Plan should demonstrate how: • impacts of airport growth on the external transport networks have been assessed	● The Master Plan is a high level land use strategy document. Therefore this information will not be presented here. BAA Glasgow is committed to working in partnership with the Scottish Executive, Transport Scotland, SPT, Renfrewshire Council and other stakeholders to deliver a package of surface access improvements to enable Glasgow Airport's growth.
 public transport and car parking strategies contribute to addressing these impacts 	These issues will be addressed in the forthcoming Airport Surface Access Strategy.
 the provision of identified interventions will be funded and programmed in tandem with the provision of airfield and terminal capacity 	 BAA Glasgow has a capital expenditure programme of approximately £290 million over the next 10 years. This investment comes at no expense to the tax payer and ensures that Scotland has a world class international gateway airport.
What do you think? Miscellaneous	
Outline Master Plan prepared totally within the BAA Group environment and no Master Plan Steering Group has been involved in its drafting	● The Outline Master Plan was prepared in line with White Paper guidelines. As part of the BAA Master Plan Consultation Process, BAA Glasgow chaired a series of Master Plan Stakeholder Meetings involving the Scottish Executive, transport bodies, key Local Authorities and Scottish Enterprise Renfrewshire to reach a consensus on the contents of the revised Master Plan. Following these group meetings, BAA Glasgow staff met on a 1:1 basis with the key stakeholders. We will continue to engage with these groups through a new Glasgow Airport Environment, Community and Planning Forum which will include representatives from BAA, Renfrewshire Council and other local authorities, and the transport sector. The public consultation carried out in 2005, though the most extensive ever undertaken by BAA Glasgow, was not an end in itself - it was simply the start of a long term process of engagement with the local community.
 Need for engagement with stakeholders when drafting the final Master Plan 	● Throughout this process, we have sought to be open and inclusive with our stakeholders. Following an extensive three month public consultation, the largest ever undertaken by BAA Glasgow, the revised Master Plan has been substantially rewritten to take into account the views expressed by a wide range of stakeholders.

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Need for a summary of Master Plan responses	 BAA Glasgow has produced this document as an Appendix to the revised Master Plan, which seeks to address every response made as part of the consultation process.
 Wording of consultation questions biased (e.g. qu.9 seeks covert support for road capacity development by suggesting "these must be developed"). 	Noted. Respondents were free to make comments on a range of issues. The questions in the outline Master Plan were merely posed as a means of starting a debate.
BAA should avoid statistical response to questions posed in Outline Master Plan	 Agreed. The majority of respondents did not answer questions posed by the Master Plan. Therefore, BAA Glasgow has not sought to statistically analyse any of the responses.
● Need for ongoing consultation	● In line with Government guidance, the Glasgow Airport Master Plan will be reviewed and updated every five years and will be open to public consultation. In the interim, we will continue to engage proactively with our neighbours, with local political respresentatives and with our airlines and other business partners. As a first step, we intend to establish the Glasgow Airport Planning, Environment and Communities Forum which will bring together representatives from BAA, Renfrewshire Council and other local authorities, and the transport sector. It is intended that this forum will meet twice a year.
Concern that BAA suggests specific community concerns are outside its remit e.g.: • increased noise	BAA Scotland has produced a Noise Strategy and each airport, including Clasgow, has produced a Noise Action.
	airport, including Glasgow, has produced a Noise Action Plan which will seek to minimise noise at source.
• summer noise	BAA Glasgow appreciates that the busy summer schedule may have a negative impact on some communities surrounding the airport. These negative impacts have to be balanced with the many positive impacts that the airport provides. Through our Noise Strategy and Noise Action Plan we will attempt to minimise the impact of noise on our neighbouring communities
● fuel discharge	● The Civil Aviation Air Navigation Order only permits the dumping of fuel in an emergency. This is normally carried out over the sea, or if this is not possible, above 10,000 feet to allow it to evaporate before it reaches the ground. BAA Glasgow is notified of any such events through the air traffic controller. Over the past five years there have been no reports of fuel dumping in this area.
inadequate levels of fines for noisy aircraft	● The Noise Action Plan indicates that daytime noise thresholds are set at 94dBa and at 87dBa during the night time periods (night time hours are between 23:00 and 05.59 hours). The penalties for infringing these levels are: Less than 3dBa receives a £500 infringement fine. More than 3dBa carries a £1000 infringement fine.

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	This money is given to local charitable causes. The levels of fines are consistent with our London Airports which are designated for noise control by the Secretary of State for Transport. Glasgow is not a so-called designated airport and is not compelled to mitigate against night time noise. However, BAA Glasgow has voluntarily chosen to do so.
● Siting of noise monitoring equipment	● BAA Glasgow undertakes its noise monitoring at both ends of the runway and to the south east side where the greatest population are located. The location at which the monitoring takes place is based on strict criteria provided by the Civil Aviation Authority. Details are available on their website www.caa.co.uk
 Drawings used in drop in sessions outlining effects on local community "inaccurate" (didn't show three new housing estates next to Kirklandneuk) 	● The accuracy of the drawings used in the Master Plan was explained during the drop-in sessions. The base mapping is provided by the Ordinance Survey which BAA Glasgow purchases and the base mapping used was our understanding of the most up to date available at that time.
Public's opinion deliberately ignored and denied	● The three month public consultation launched in response to the publication of the draft Master Plan was the most extensive ever underdaken by BAA Glasgow. Ten drop-in sessions were held around the airport and in key local neighbourhoods, during which members of the public were given the opportunity to meet face to face with senior managers from Glasgow Airport, including the Managing Director, the Customer Services Director and the Head of Development. Following the public consultation, BAA Glasgow commissioned Liddell Thomson Ltd to produce an independent report analysing the many different views expressed by members of the public. The Master Plan has been updated, where appropriate, in response to the public consultation and many of the key concerns identified through the consultation process have been addressed.
Drop in sessions: ● held too close to final submission date	● There was ample opportunity for interested parties to take part in the public consultation. BAA Glasgow conducted 10 community drop-in sessions from the beginning of September to the end of October. In addition, members of the public were able to download copies of the Master Plan online or view a copy in their local library. The public consultation was heavily featured in the local media.
● badly advertised	● The Master Plan consultation was the largest ever undertaken by Glasgow Airport. A series of pre-briefings were held with key stakeholders ahead of its launch in July 2005. Following its publication, a series of drop-in sessions were held across the region, where members of the public were given an opportunity to meet face to face with senior airport managers, including the Managing Director, the Customer Services Director and

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	the Head of Development. Further follow-up meetings were held with key local authorities, local politicians and neighbourhood groups. The launch of the Master Plan attracted massive media coverage, with almost every national newspaper giving prominent coverage to its launch. Several local newspapers, including the Paisley Daily Express and the Evening Times, also featured the Master Plan in depth. Following its publication, copies of the Master Plan were distributed to MPs, MSPs, community groups, public libraries. The Master Plan was also available to download from Glasgow Airport's website – www.glasgowairport.com
● badly managed	As above
● a PR exercise	• As above
had no maps showing flight plans or noise contours	● The purpose of the drop-in sessions was primarily to communicate and answer questions associated with the airport's future development. The Outline Master Plan included two noise contour maps at the rear of the document. Copies of the Master Plan were available to study at each event and senior members of the airport team were on hand to answer any related questions.
Hierarchy of BAA in Scotland not good at attending meetings	 All drop-in sessions and public meetings were attended by senior managers of BAA Glasgow. The Managing Director and Customer Services Director also attended a number of sessions.
● Residents opinions not sought	• Members of the public attending the drop-in sessions were encouraged to register their comments on pre-printed response forms. These could then be returned to staff attending the evening sessions or posted to Glasgow Airport after the event. A special email address was also created in order to allow members of the public to express their views on the Outline Master Plan. Copies of the Master Plan were also sent to a number of residential properties and were available on request to members of the public, as well as being available on the Glasgow Airport website and at public libraries.
BAA should take the initiative and organise meetings with community groups	● BAA Glasgow staff have met with a number of community groups surrounding Glasgow Airport as part of the consultation process. Going forward, we intend to establish a new Glasgow Airport Planning, Environment and Communities Forum which will bring together representatives from BAA, Renfrewshire Council and various Government agencies to discuss the development of Glasgow Airport. It is intended that this forum will meet twice a year. It is also our intention to produce a community newsletter which will keep local residents, and other key stakeholders, fully informed of any airport developments, route announcements, community initiatives etc.

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Need for public meetings in Johnstone / Whitecrook	Meetings with community representatives were held on several occasions in Whitecrook and drop-in sessions were held at Johnstone and across Renfrewshire.

If you would like this document in an alternative format please call us on 0800 731 4247. Alternatively a fully accessible version of this document can be found on our website



- → www.baa.com
- → www.glasgowairport.com



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:

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