York Aviation

SCOTTISH ENTERPRISE

THE ECONOMIC IMPACT OF GLASGOW PRESTWICK AIRPORT

Final Report

November 2012

York Aviation

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SCOTTISH ENTERPRISE

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GLASGOW PRESTWICK AIRPORT

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Executive Summary

1. In August 2012, Scottish Enterprise commissioned York Aviation to undertake an economic impact study of Glasgow Prestwick Airport (GPA). This research is intended to provide an update on the current role that the Airport plays in the Ayrshire and Scottish economies building on the work undertaken by SQW Consulting in 2008.

2. ***The background context for the study is the considerable change that has occurred at the Airport over recent years:***

   - passenger traffic has declined significantly from a rolling year high of around 2.4 million passengers per annum in 2008 to around 1.1 million in the year to July 2012. This decline in passenger numbers has seen GPA lose market share in Scotland. It has gone from around 10% in 2007 and 2008 to just under 6% currently;
   - the Airport's route network has changed substantially with connections to key inbound tourism markets being lost and replaced by outbound leisure routes. Routes to Spain and Italy now make up 62% of the traffic compares to only around 18% in 2008;
   - freight traffic at the Airport has also declined dramatically, reducing from handling around 31,500 tonnes of freight in 2007 to handling around 12,000 tonnes last year;
   - the growth of Maintenance, Repair and Overhaul (MRO) on-site at the Airport, with the expansion of Prestwick Airport Maintenance Limited (PAML), a subsidiary of Ryanair, and the arrival of British Airways maintenance.

3. ***The other major recent development relates to the Aerospace & MRO cluster that has developed around the Airport. The new Prestwick International Aerospace Park, which offers a high quality, fully serviced location for aerospace companies adjacent to the Airport site and which is currently being developed out by Scottish Enterprise, has been designated as an Enterprise Area.***

4. ***This study builds on the research undertaken by SQW Consulting in 2008 and uses essentially the same methodology and analytical framework wherever possible to ensure consistency and comparability of the results. The approach focuses on the provision of <u>net</u> estimates of the economic impact of GPA. The results presented have therefore been adjusted to allow for a number of factors that relate to additionality, either at an Ayrshire level or in relation to Scotland as a whole, and for multiplier effects reflecting impacts through supply chain (indirect) and income expenditure (induced) effects.***

5. ***The approach focuses on estimating the net impacts relating to eight main areas:***

- the Airport Company;
- the Airport Company Supply Chain;
- MRO activities on-site;
- Other Tenants, exc. HMS Gannet and Freight;
- HMS Gannet;
- Freight;
- Tourism Impacts;
- Off-site Aerospace & MRO Impacts.

6. ***The latter two categories are generally considered to be highly resistant to robust quantification. Hence, while we have made estimates of these effects here based on the assumptions stated, these estimates should be viewed with caution. The impacts in relation to Aerospace & MRO cluster are particularly difficult. GPA's impact here relates to image, an anchoring effect on existing companies and the residual effect of historical decisions. As a result, a simplified assumption has been used and the results relating to this category are reported separately from the quantitative analysis.***

7. ***In 2012, we estimate that the Airport supports around 1,080 net jobs and £41.1 million in GVA through direct, indirect and induced impacts in Ayrshire. This is supplemented by 270 jobs and £6.6 million in GVA through inbound tourism impacts. This gives a total impact in Ayrshire of 1,350 jobs and £47.6 million in GVA. In addition, assuming that GPA's influence accounts for around 5% of activity in the Aerospace & MRO cluster, it would support a further 190 net jobs and £16.0 million in GVA.***

8. In the wider study area of Scotland, these impacts are increased to a total impact of 1,810 jobs and £61.6 million in GVA. This includes 1,130 direct, indirect and induced jobs and £43.8 million in GVA and 670 jobs and £17.8 million through inbound tourism impacts. In addition, assuming that GPA's influence accounts for around 5% of activity in the Aerospace & MRO cluster, it would support a further 320 net jobs and £23.5 million in GVA across Scotland.

9. ***Within Ayrshire the largest contributor in terms of employment is On-site MRO (460 net jobs) at the Airport followed by the Airport Company (290 net jobs) and the Airport's contribution to inbound tourism (270 jobs). In terms of GVA, again On-site MRO at the Airport are again the largest contributors (£19.2 million), followed by the Airport Company (£8.4 million).***

10. ***The balance of impacts in Scotland is slightly different. Tourism is by far largest impact in terms of employment (670 jobs), with On-site MRO (430 jobs) and the Airport Company (240 jobs) the next largest areas of impact. In terms of GVA, Onsite MRO and Tourism Impact are the largest impacts.***

11. ***In addition to the quantifiable impacts identified, consultations with stakeholders have emphasised the strategic importance of GPA in putting Ayrshire 'on the map' in terms of attracting inward investment and supporting global businesses based in the area. However, there is a recognition that, given the Airport's current route network, this is more about perception than reality. The fact that there is an international airport in Ayrshire with a range of connections is seen as important but in reality with the loss of the Stansted service and the growing focus on outbound leisure destinations, there are very limited connections that are actually of use to businesses.***

12. ***The role that the Airport plays in anchoring the Aerospace and MRO cluster has also been emphasised. Again, it is recognised that the functional link between the cluster and the Airport is currently limited but there is a strong belief that the Airport plays a role in securing activity.***

13. ***The declines in traffic at the Airport since 2008 have had a significant impact on GPA's ability to support employment and prosperity. Within Ayrshire, we estimate that in 2012 it supports around 340 fewer jobs than in 2008 and supports around £4.2 million less in GVA (2012 prices). Across Scotland as a whole its impact has fallen by around 1,190 jobs and £27.2 million in GVA (2012 prices). The biggest driver of these reductions has been reductions in the impact the Airport has on inbound tourism.***

14. ***The Airport Company's forecasts see a significant recovery in terms of passenger traffic from around 1.1 million passengers per annum in 2013 to around 2.1 million in 2017. If these are achieved, this would see passenger throughput at the Airport beginning to approach the levels seen at its high point in 2007 and 2008. The forecasts to 2017 also see GPA moving back towards a route structure more akin to that in place in 2008. Freight growth at the Airport is forecast to be more modest, with a step up to around 14,400 tonnes in 2014 followed by gentle growth to around 15,700 tonnes by 2017.***

15. ***If this recovery can be achieved, it will result in a considerable increase in the economic impact of the Airport compared to 2012 levels. We estimate that by 2017 GPA will support around 1,820 net jobs in Ayrshire and around £63.9 million in GVA (2012 prices). Across Scotland as a whole, GPA's total net impact is expected to be around 2,760 jobs and £93.4 million of GVA (2012 prices). This reflects a substantial recovery in the level of impact since 2012:***

- GPA supports around 120 more jobs and £12.1 million more in GVA (2012 prices) in Ayrshire at a slightly lower level of traffic. The recovery to 2017 comes primarily from the Airport Company impact and Inbound Tourism;
- across Scotland, the net employment supported by GPA remains below 2008 levels by around 230 jobs, at least partly because Tourism Impact does not make back all its losses. GVA is however around £4.5 million higher, reflecting the gains made since 2008 by on-site MRO.

1 Introduction

Background

1.1 In August 2012, Scottish Enterprise commissioned York Aviation to undertake an economic impact study of Glasgow Prestwick Airport (GPA). The study has been undertaken in the context of significant change at the Airport. There has been:

- **a significant decline in passenger traffic** – passenger numbers at the Airport have declined from a high of around 2.4 million in 2008 to only 1.3 million in 2011. Latest CAA Statistics suggest that this decline is continuing with GPA only handling around 1.10 million passengers in the 12 months to August 2012;
- **the loss of a number of key routes**, particularly UK domestic routes, including the Ryanair service to Stansted, and a number of Scandinavian routes. In 2008, the Stansted route had been handling in excess of 400,000 passengers per annum and at its absolute peak it handled in excess of 700,000 passengers per annum. While it is difficult to be clear as to the reasons for these losses, the recession, rising APD and the establishment of Ryanair's base at Edinburgh Airport are likely to have been contributory factors;
- **a significant decline in cargo traffic** - freight and mail handled at the Airport has fallen from a high of around 31,500 tonnes in 2007 to only 11,800 tonnes in 2011. This decline is believed to have been precipitated by the decline of the Scottish electronics industry over recent years;
- the **designation of the Prestwick International Aerospace Park** adjacent to the Airport site, with its significant aerospace cluster, as an Enterprise Area;

1.2 *This study builds on and updates the research undertaken by SQW Consulting in February 2008[1] which examined the economic impact of GPA at close to the historic high point of its traffic throughput. One of the key objectives for the study is to try to understand and articulate the impact that the changes at the Airport have had on the surrounding Ayrshire economy and on Scotland as a whole.*

1.3 *The study is also intended to be forward looking. It seeks to examine the potential economic impact of GPA in the future based on the Airport Management's forecasts for future passenger and freight traffic growth through to 2017.*

Our Approach

1.4 *York Aviation is one of the leading consultancies in Europe examining the economic impact of airports. We use a range of techniques to consider how airports interact with the economies that surround them. In this study, we have focussed primarily on considering the quantifiable impact of the Airport in terms of Gross Value Added (GVA) and employment, building on the approach taken by SQW in 2008 to ensure that results can be effectively compared over time. However, we have supplemented this analysis with an extensive range of consultations with regional and national organisations, including a number of local businesses, to enable us to fully understand the linkages between GPA and the regional and national economy and to enable us to articulate some of the less quantifiable impacts of the Airport on the surrounding economy.*

Report Structure

1.5 *This report is organised in to the following key sections:*

[1] Economic Impact of Glasgow Prestwick Airport – SQW Consulting for Scottish Enterprise and South Ayrshire Council (2008).

- in **Section 2**, we outline a profile of Glasgow Prestwick Airport in terms of its current operations and recent history;
- in **Section 3**, we present our analysis of the current economic impact of Glasgow Prestwick Airport and consider how this has evolved since 2008;
- in **Section 4**, we set out the future passenger and freight forecasts for the Airport and the associated economic impact from this growth;
- in **Section 5,** we summarise our conclusions in relation to the economic impact of GPA.

2 Profile of Glasgow Prestwick Airport

Introduction

2.1 *In this section, we provide an overview of Glasgow Prestwick Airport in terms of its location, recent traffic performance and position in relation to the Aerospace & MRO cluster in Ayrshire.*

Airport Location, Catchment Area and Study Area

2.2 *GPA is located on the West Coast of Scotland in South Ayrshire, near to the towns of Prestwick, Troon and Ayr. It is around 30 miles from the centre of Glasgow, linked by either a regular train service or the M77 motorway. The Airport has the longest commercial runway in Scotland and was in the past the designated Scottish airport for long haul connections. It also has an excellent weather record. This makes the Airport of significant strategic importance in providing resilience for the air transport market in Scotland and the UK. During the severe winter of 2010, GPA was the only Scottish airport to remain open throughout the period.*

2.3 *The Airport's passenger catchment area is focussed primarily around Ayrshire, Glasgow and the western lowlands of Scotland. Table 2.1 shows the distribution of GPA's passengers by district taken from the 2009 CAA Passenger Survey (latest available).*

Table 2.1: GPA Catchment Area in 2009

District	Passengers	% of Total
Glasgow City	558,564	31%
South Ayrshire	194,459	11%
City of Edinburgh	127,978	7%
South Lanarkshire	111,809	6%
North Ayrshire	87,249	5%
Renfrewshire	71,008	4%
East Ayrshire	63,698	4%
North Lanarkshire	60,870	3%
Highland	47,937	3%
Aberdeen City	42,724	2%
Stirling	40,220	2%

Dumfries and Galloway	37,616	2%
Sub Total	**1,444,131**	**81%**
Other Districts	348,635	19%
Total	**1,792,766**	**100%**
Source: CAA Passenger Survey 2009.		

2.4 ***While there are some anomalies caused by the relative size of markets in individual districts, for instance Edinburgh and Aberdeen are amongst the largest sources of passengers in Scotland overall in 2009, the data establishes Glasgow and Ayrshire as the primary sources of demand.***

2.5 ***This is reinforced by the list of districts where GPA has a market share of at least 10% of passengers, as set out in Table 2.2. The list is dominated by the Ayrshire districts (GPA is particularly strong in South Ayrshire where its market share is around 50%), Glasgow and the former Strathclyde areas.***

Table 2.2: GPA Passenger Market Share by District

District	Market Share
South Ayrshire	50%
East Ayrshire	30%
North Ayrshire	29%
Dumfries and Galloway	21%
Glasgow City	18%
East Renfrewshire	17%
South Lanarkshire	16%
Inverclyde	16%
Na H-Eileanan an Iar	13%
East Dunbartonshire	13%
Renfrewshire	12%
Argyll and Bute	12%
North Lanarkshire	11%
West Dunbartonshire	11%
Source: CAA Passenger Survey 2009.	

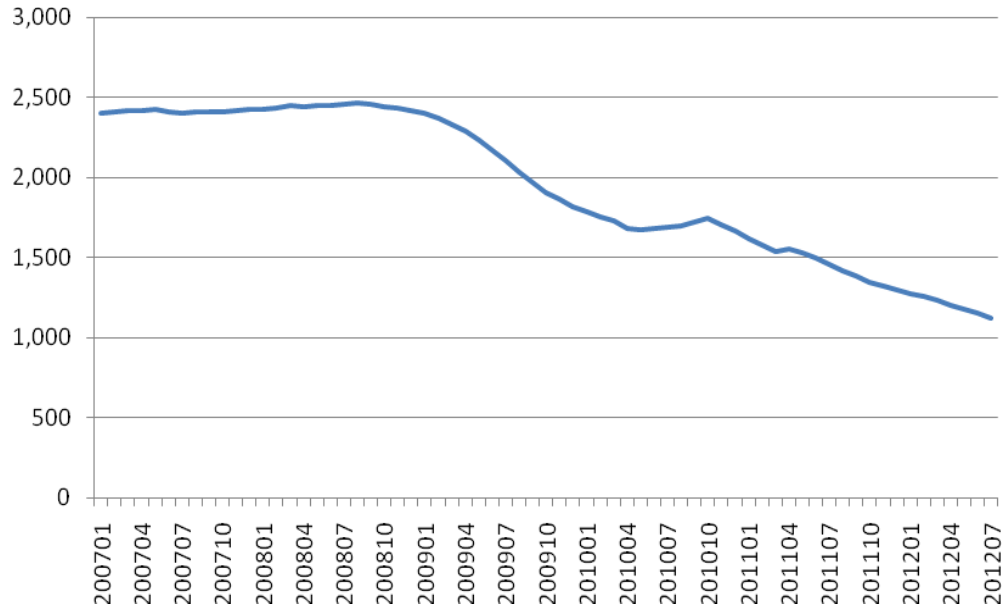
2.6 ***Analysis of this data reinforces the definition of the study areas for the analysis as Ayrshire as the primary focus and then Scotland as a whole.***

Passenger Traffic

2.7 Passenger numbers at the Airport have suffered significantly in recent years in the wake of factors such as the recession, the end of the Scottish Route Development Fund and rising Air Passenger Duty (APD). Figure 2.1 shows rolling year passenger numbers for the airport since 2007.

2.8 This clearly shows how the Airport has declined from a high point in Summer 2008 of around 2.46 million passengers in a rolling year to a current low of 1.1 million passengers in the rolling year to August 2012. It is currently Scotland's fourth largest airport behind Edinburgh, Glasgow and Aberdeen.

Figure 2.1: Total Passengers at GPA – Rolling Year (000s)

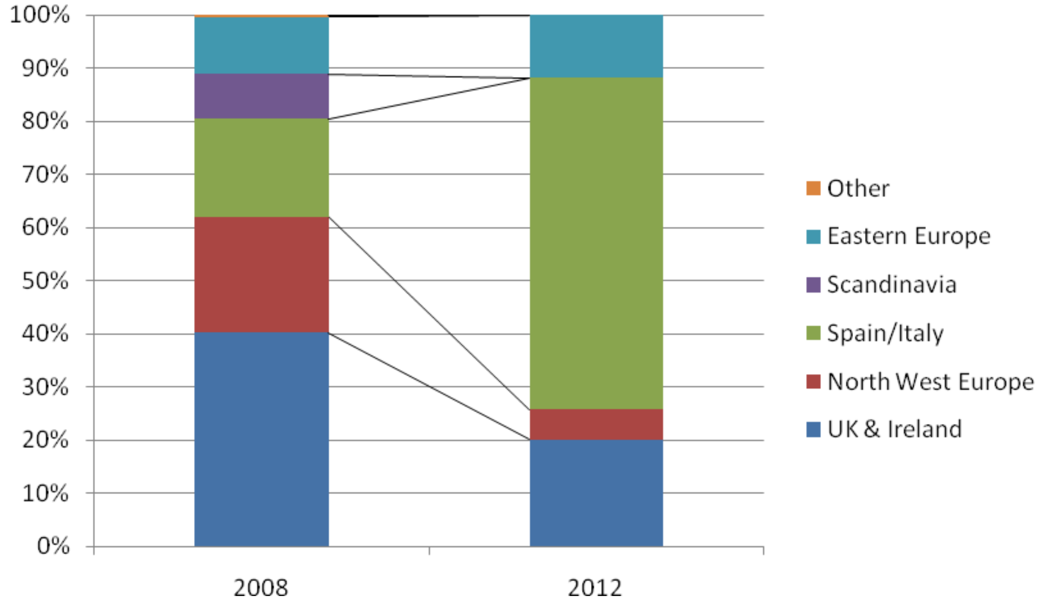


Source: CAA Passenger Statistics.

2.9 Passenger numbers have not only declined but there has been a substantial shift in the route network in recent years. While the number of destinations served has declined from around 35 in 2008 to 28 in 2012, the airlines using the Airport have also increasingly moved services towards more outbound leisure destinations at the expense of Scandinavian and Northern European routes particularly (see Figure 2.2). The Airport also lost its link to London via Ryanair to Stansted in late 2011. Routes to Spain and Italy have gone from making up only around 18% of traffic in 2008 to over 62% in 2012. From an economic impact perspective, this switch is important as the change towards outbound leisure focussed routes reduces the inbound tourism impact of the Airport substantially[2]. This switch has been part of general moves by the Airport's primary customer, Ryanair, towards locating capacity in Southern Europe where the airport charges environment has been more conducive to growth and to increase average sector lengths and increase yields.

[2] CAA Passenger Survey data provides information on the number of Scottish, UK and Foreign residents travelling on individual routes. Routes to Spain and Italy tend to have high proportions of Scottish travellers using the services.

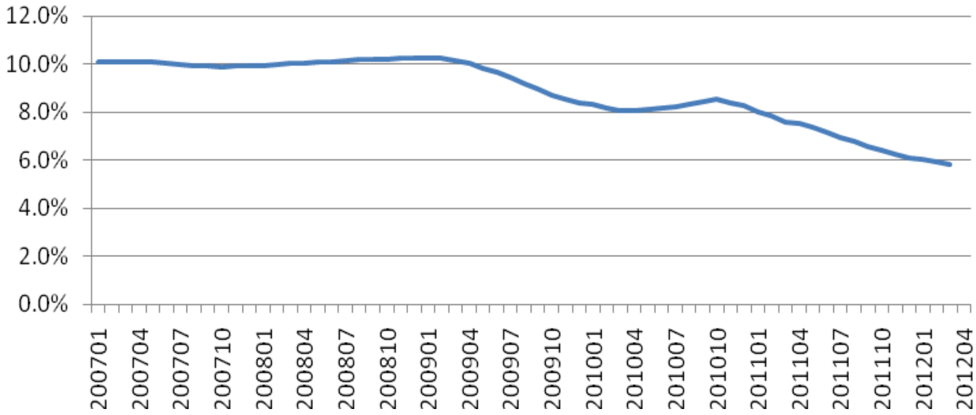
Figure 2.2: % of Passengers by Destination Area – 2008 vs 2012 (rolling year)



Source: GPA and York Aviation analysis of CAA Statistics.

2.10 *The fall in passenger numbers at Prestwick has been part of a more general downturn in the Scottish air transport market during the recent recession. However, Prestwick has clearly suffered more heavily than the others as a whole as its market share compared to Scotland's other main airports has dropped significantly over the period (see Figure 2.3). It has gone from around 10% in 2007 and 2008 to just under 6% currently.*

Figure 2.3: GPA's Market Share against Scotland's Main Airports



Source: CAA Statistics.

2.11 *Another key feature of the passenger market at Prestwick is its domination by Europe's largest low fares airline, Ryanair. Figure 2.4 shows the percentage of scheduled seats offered by Ryanair from Prestwick each year since 2007. In 2007, Ryanair accounted for around 93% of scheduled seats and this has risen since to around 95% in 2011. While the Airport does have small number of charter services, this analysis serves to demonstrate its reliance on Ryanair.*

Figure 2.4: Ryanair and Other Airlines Scheduled Seat Capacity

Source: OAG Analyser.

2.12 *Table 2.3 shows the numbers of business and leisure travellers and the estimated proportions of Scottish, UK and Foreign residents using the Airport based on the CAA Passenger Surveys for 2005 and 2009. It should be noted that the change in the route mix at GPA is likely to have influenced these numbers such that the proportion of inbound travellers and business users is now lower. We examine this issue further in considering the current economic impact of the Airport.*

2.13 *In 2009, the Airport was dominated by leisure travellers (92% of passengers). Scottish passengers made up around 54% of passengers, suggesting an overall inbound proportion of around 46%. In general this structure has changed very little since 2005. The only area where some difference might be observed is in terms of UK passengers, where the proportion of leisure passengers has grown by around 7% with knock-on changes elsewhere.*

Table 2.3: Breakdown of Passengers by Nationality and Purpose of Travel

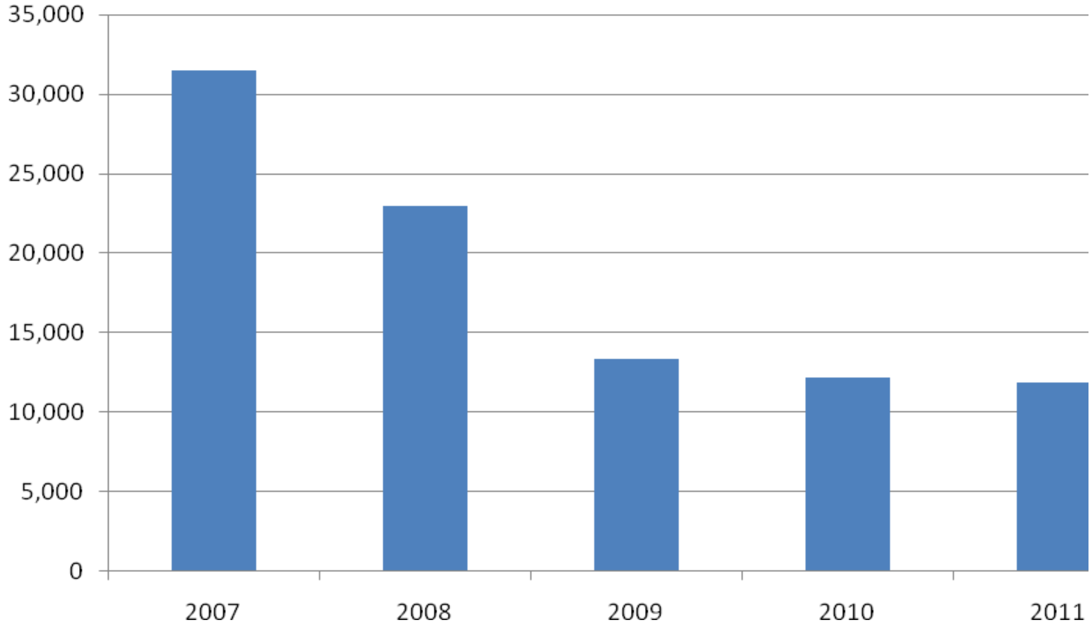
	2005			2009		
	Business	**Leisure**	**Total**	**Business**	**Leisure**	**Total**
Scotland	2.8%	56.2%	59.0%	3.9%	50.3%	54.1%
UK	1.1%	4.3%	5.4%	1.2%	11.1%	12.3%
Foreign	2.3%	33.3%	35.5%	3.1%	30.5%	33.6%
Total	**6.2%**	**93.8%**	**100.0%**	**8.1%**	**91.9%**	**100.0%**

Source: CAA Passenger Survey 2009.

Freight Traffic

2.14 ***Figure 2.5 shows the freight traffic at GPA since 2007. This freight is carried almost exclusively on freighter aircraft rather than in the belly-hold of passenger aircraft. Again, GPA has experienced significant losses in the freight market, particularly following the losses of the freight forwarder Panalpina and Polar Air Cargo. The decline in the electronics industry is generally felt to have been the key driver of this trend.***

Figure 2.5: Freight Traffic at GPA



Source: CAA Statistics.

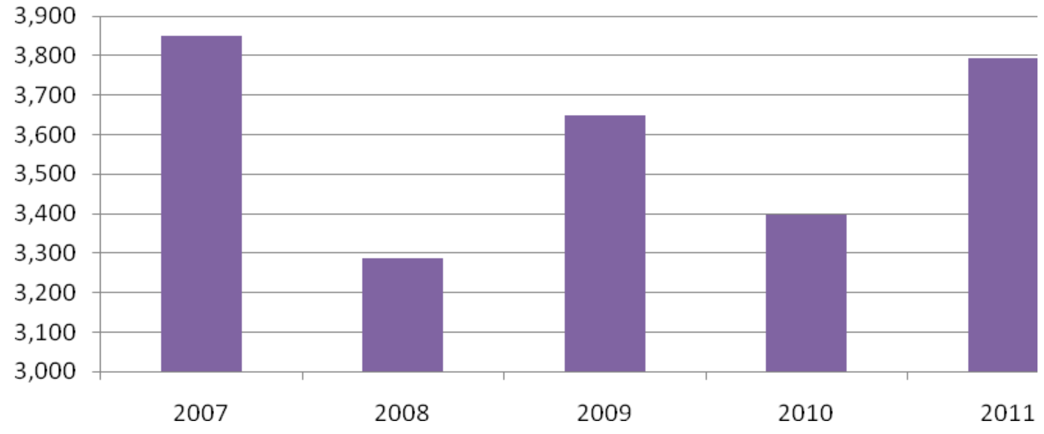
2.15 GPA has gone from handling around 31,500 tonnes of freight in 2007 to around 12,000 tonnes in 2011. Air freight in Scotland has been declining generally in recent years and although nominally it would appear that GPA has lost market share to Edinburgh, it is important to understand that they are largely operating in different markets. Edinburgh focuses considerably more on the integrators (DHL, UPS, TNT, Fedex) that carry letters and small parcels in the main. Prestwick continues to be focussed on pure freighter traffic that tends to be bulkier and heavier and requires larger aircraft. Edinburgh cannot currently play this role.

Other Traffic

2.16 In addition to the commercial activities described above, GPA provides services to a range of other users. In relation to this economic impact study there are two further activities that should be mentioned:

- **Military Movements** – GPA provides a technical stop option for a range of military flights. These movements fluctuate but are generally between 3,000 and 4,000 movements per year;

Figure 2.6: Military Movements at GPA 2007 to 2011



Source: GPA.

- **HMS Gannet** – GPA continues to act as the base for the HMS Gannet. This base provides search and rescue services and acts as a forward operating base for the Navy supporting the submarine fleet. This is home to three Sea King helicopters. The search and rescue element is to be privatised in 2016 but GPA is a strong candidate to retain the operation.

Aerospace & MRO Cluster

2.17 ***In addition to its role as an air transport provider for a range of customers, there is also a significant Aerospace and MRO cluster centred around the Airport. Currently, there are around 13 companies located at or near to the Airport, employing around 3,100 staff and with sales of around £918 million per annum.***

2.18 ***The companies are truly global organisations, with the majority either headquartered in the rest of the UK, Ireland or USA. Some of the key organisations in the cluster include:***

- Spirit AeroSystems (Europe);
- GE Caledonian;
- UTC Aerospace Systems;
- PAML (Ryanair MRO);
- BAE Systems;
- British Airways Maintenance.

2.19 ***The great majority of these companies are based off the Airport, on land immediately adjacent. The two organisations actually located within the Airport site are PAML and British Airways Maintenance due to their requirement for runway access. The cluster has recently received a significant boost from the designation of the Scottish Enterprise owned Prestwick International Aerospace Park as an Enterprise Area. The Aerospace Park continues to be developed out and will provide significant amounts of high quality space for companies wishing to locate or invest further in the area.***

2.20 ***The functional link between the Aerospace and MRO cluster and GPA as an operational airport is an issue that is explored further in considering the current economic impact of the Airport.***

Conclusions

2.21 ***GPA is Scotland's fourth largest airport in terms of passenger throughput and its second largest in terms of freight traffic. However, both types of traffic have declined dramatically in recent years. This will clearly have a knock-on effect to the economic impact of the Airport since it was last assessed in 2008.***

2.22 ***Away from commercial air transport activities, the Airport is home to HMS Gannet and continues to function as a location for military technical stops. It is also the centre of one of Scotland's most significant Aerospace and MRO clusters.***

3 economic impact in 2012

Introduction

3.1 In this section, we set out our estimates of the economic impact of GPA in 2012, including the details of our methodology. We then move on to consider how the Airport's economic impact has changed since 2008.

Our Approach

3.2 This study builds on the research undertaken by SQW Consulting in 2008 and uses essentially the same methodology and analytical framework wherever possible to ensure consistency and comparability of the results. Below, we have outlined the approach used in relation to each of the key impact areas and set out our assumptions for 2012. A more detailed description of the precise approach used can be found in SQW's 2008 report.

3.3 At the outset, it should be said that SQW's approach departs from the standard approach used for airport economic impact assessments in a number of ways. Consequently, comparing the results to other airport economic impact reports is not a simple matter. However, we have examined the approach in some detail and believe it to be essentially robust. The differences lie primarily in terminology, the scope of and relationship between particular areas of effect and in presentation.

3.4 Table 3.1 below seeks to provide a basic map of the SQW approach compared to a conventional airport economic impact assessment. One of the primary difficulties inherent in the approach is the inability to separate out direct, indirect and induced effects. The way that additionality and multiplier effects have been applied means that seeking to identify direct effects separately leads to apparently perverse (but ultimately correct) results whereby the final total net effect is lower than the gross direct effect in some cases. Equally, impacts in Scotland can be smaller than impacts in Ayrshire for the same reason. The assumptions around additionality mean that, on occasions, there is significant deadweight within the gross Scotland estimates.

3.5 The assessment focuses on estimating the economic impact of GPA in terms of GVA and employment. However, it should be recognised that not all of the impacts of an airport are quantifiable in these terms. We have, therefore, considered the extent to which GPA offers additional positive economic impacts that are unquantifiable. It should also be noted that a number of the impacts measured here are generally considered to be either very difficult or impossible to quantify robustly. This applies to those described as wider benefits in Table 3.1, namely impacts through Inbound Tourism and on the Aerospace & MRO sector. In both cases we have set out a methodology and assumptions that produce a quantified estimate of the effect of the Airport in relation to these two effects. However, both estimates should be viewed with caution. In relation to the Aerospace & MRO cluster producing effective estimates is particularly difficult as currently functional links between the Airport and the cluster are limited and the Airport's influence on location decisions within the cluster is largely about history and image. We discuss this issue further below. Given these particular difficulties <u>in relation to the Aerospace & MRO cluster our estimates of impact in this area are quoted separately</u> from the other impacts identified.

Table 3.1: Mapping SQW Approach to Standard Airport Economic Impact Framework

<table>
<tr><th>Standard Framework</th><th>SQW Framework</th></tr>
<tr><td rowspan="5">Direct, Indirect & Induced: employment and GVA supported by companies at the airport and in the surrounding economy through the provision of air transport services, including in the supply chain and through the expenditure of wages & salaries earned in the study area.</td><td>Airport Company GVA & Employment</td></tr>
<tr><td>Airport Company Supply Chain GVA & Employment</td></tr>
<tr><td>Airport Tenants GVA & Employment, exc. HMS Gannet & Freight</td></tr>
<tr><td>HMS Gannet GVA & Employment</td></tr>
<tr><td>Freight Activities GVA & Employment</td></tr>
<tr><td rowspan="3">Wider Economic Benefits: employment and GVA supported in the wider economy through the availability of connectivity relating to the air services offered and the presence of the Airport. In this case, benefits in relation to inward investment, trade, competitiveness or tourism. This would include the presence or otherwise of the Aerospace & MRO cluster</td><td>Inbound Tourism GVA & Employment</td></tr>
<tr><td>Aerospace & MRO GVA & Employment (Estimated but Quoted Separately)</td></tr>
<tr><td>Other Business GVA & Employment (Not Quantified)</td></tr>
<tr><td colspan="2">Source: York Aviation.</td></tr>
</table>

3.6 ***The approach focuses on the provision of <u>net</u> estimates of the impact of GPA. The results presented have therefore been adjusted to allow for a number of factors that relate to additionality, either at an Ayrshire level or in relation to Scotland as a whole. These adjustments are designed to reflect factors including:***

- Deadweight – the extent to which activity would happen with or without the existence of GPA. For instance, some of the economic activity that takes place at the Airport is not directly related to the operation of the Airport. Therefore, if GPA were not to exist this activity would continue regardless;

- Displacement – the extent to which the impacts of GPA result in reduced impacts from other sources. For instance the provision of passenger services from GPA may mean that less people are using Glasgow International than if GPA did not exist. Therefore, some impacts might be captured via increased activity at Glasgow International if GPA were not there;

- Leakage – the extent to which economic impacts may be lost from either Ayrshire or Scotland. For instance, if an inbound visitor flying through GPA were to travel straight to Cumbria once they arrived, the great majority of the impact from that travel would be felt in England and not in Scotland.

3.7 The economic impacts identified have also been subject to multiplier effects to reflect the knock-on effects that GPA's direct impacts have through indirect (supply chain) and induced (income expenditure) effects. This process is consistent with the Scottish Enterprise guidance issued in November 2008[3].

3.8 Table 3.2 sets out the broad approach taken to estimating the economic impact relating to each of the elements in the SQW framework, including the key sources of information and data used, the additionality adjustments assumed and the multiplier effects applied.

[3] Additionality & Economic Impact Assessment Guidance Note – Scottish Enterprise Appraisal & Evaluation Team (2008).

Table 3.2: Approach and Key Assumptions by Impact Area

Impact Area	Approach	Additionality Assumptions	Multipliers
Airport Company	Updated information on the number of people employed by GPA and its wages and salaries bill has been provided by the Airport Company. This data shows a significant decline since 2008. Currently, the Airport Company employs around 310 people (seasonally adjusted) and pays out around £8.9 million in wages & salaries.	The assumptions adopted are common to those of the 2008 study. **Displacement** Ayrshire – all activity at GPA is assumed to be additional. Scotland – 65% of activity is as a result of GPA. If GPA did not exist and its passengers chose to use another Scottish airport this is unlikely to result in significant changes in employment in the receiving airport companies (although there will be some increases). Many functions within airport companies are relatively fixed and there are significant economies of scale to be exploited **Leakage** All benefits are assumed to captured within Scotland but around 10% are assumed to leak outside of Ayrshire.	An induced effect relating to the wages & salaries earned is estimated within Ayrshire using a multiplier of 1.05 and within Scotland of 1.2 (based on the household income multiplier taken from the Scottish Input-Output Tables 2007). The Ayrshire assumption is based on the SQW study and seems reasonable given typical multipliers. The Scotland assumption has been updated based on the latest available data.
Airport Company Supply Chain	Updated information on the airport's expenditure on goods and services over the last 12 months, including a breakdown of the geographic location, has been obtained from GPA. It should be noted that this data suggests that there have been some changes in the structure of GPA's supply chain compared to the assumptions made in 2008. It is not clear to what extent this reflects a real shift. As such, estimates in this area should be	The assumptions relating to the **Leakage** of expenditure have been significantly updated. Only around 29% of expenditure is captured within Ayrshire and 56% in Scotland. **Displacement** effects are as per the Airport Company impacts.	An Output Multiplier of 1.7 for Scotland has been taken from Scottish Input Output Tables 2007 (updated). This has been reduced to 1.3 for Ayrshire. This is taken from SQW's research and seems reasonable given typical ranges. GVA as a proportion of total turnover of 40% has been assumed based on Annual Business Survey 2010. Average GVA per employee has been

Table 3.2: Approach and Key Assumptions by Impact Area			
Impact Area	**Approach**	**Additionality Assumptions**	**Multipliers**
	viewed with caution. Expenditure on goods and services over the last 12 months was around £10.2 million.		calculated at around £41,000 based on Annual Business Inquiry and Business Register and Employment Survey data.
Other Tenant Businesses, exc. On-site MRO, HMS Gannet & Freight	Updated information on the number of people employed by tenant businesses on site at the Airport has been provided by GPA. Employees have then been classified by sector as per the 2008 study. GVA per employee has been calculated using the rates calculated for 2008 updated by the increase in labour productivity in the UK since 2008 and the price base adjusted to 2012. Attempts were made to estimate new GVA per employee figures using ABI and BRES data but these were significantly at odds with the 2008 study. There are currently around 420 jobs on-site employed by tenant companies.	Estimates have been adjusted for additionality based on the survey work undertaken with businesses as part of the 2008 study. This suggested that 60% of tenant jobs and GVA were purely related to the existence of GPA. This assumption applies to both Ayrshire and Scotland as a whole. A further adjustment to allow for potential double counting between this impact and tourism impacts has been retained. It is possible that a small proportion of the tourism expenditure brought to the area by GPA is spent with airport tenants. This would result in double counting. Hence, it is removed from this impact element.	Again, a multiplier effect is applied to account for the indirect and induced impacts. For Scotland this assumed to around 1.6 based on the Scottish Input-Output tables 2007. For Ayrshire a multiplier of 1.25 is assumed in line with the 2008 study. This again seems reasonable.
On-site MRO activities	Updated information on the number of people employed by tenant businesses on site at the Airport has been provided by GPA. GVA per employee has been calculated as per other tenants. In total there were around 390 jobs on-site employed by MRO companies.	These jobs are assumed to be purely related to GPA in Ayrshire and 75% related to GPA in Scotland as a whole	Again, a multiplier effect is applied to account for the indirect and induced impacts. For Scotland this assumed to around 1.6 based on the Scottish Input-Output tables 2007. For Ayrshire a multiplier of 1.25 is assumed in line with the 2008 study. This again seems reasonable.

Table 3.2: Approach and Key Assumptions by Impact Area

Impact Area	Approach	Additionality Assumptions	Multipliers
HMS Gannet	HMS Gannet currently continues to operate three Sea King Helicopters from GPA. Currently there are believed to be around 100 people employed at HMS Gannet, with a mixture of military and civilian personnel. Since 2008 there seems to have been some switch in the balance between civilian and military personnel. This has increased the net impact of HMS Gannet in 2012. However, given the difficulty in making effective estimates of Gannet's impact this should be regarded with some caution.	Only the civilian jobs associated with HMS Gannet are assumed to be additional to Ayrshire and Scotland. However, the injection in to the local economy from the base supply chain and the expenditure of military wages and salaries is additional. The assumptions in relation to these from the 2008 study have been retained.	The civilian jobs are assumed to have a multiplier effect of 1.2 in Ayrshire and 1.4 in Scotland. An induced multiplier for military expenditure of 0.15 in Ayrshire and 0.3 in Scotland is carried forward from 2008. A supply chain multiplier of 0.6 for Ayrshire and 0.8 for Scotland is assumed. These assumptions are taken from the 2008 study and are believed to remain sensible.
Freight Businesses	We have estimated the impact of freight businesses at or around GPA based on the change in freight throughput between 2008 and 2012 assuming that productivity has remained broadly level. On this basis we estimate that freight activities directly support around 38 jobs compared to 112 in 2008. GVA per job has been estimated at £59,227 having adjusted for price base and productivity changes since 2008.	Survey work in 2008 identified that around 52% of freight jobs were purely related to GPA. Based on discussions with the Airport, this is now believed to be nearer to 75%. Given the nature of freight at GPA, we have assumed that there is no displacement in either Ayrshire or Scotland. In terms of leakage, 79% of impacts are expected to be retained in Ayrshire and 100% in Scotland. These assumptions are retained from the 2008 report.	Employment multipliers of 1.3 for Ayrshire and 1.9 for Scotland have been assumed. GVA multipliers of 1.05 for Ayrshire and 1.25 for Scotland are assumed. Both have been derived from the 2008 Study as they include adjustments to allow for double counting in supply chain expenditure as a proportion of freight businesses expenditure will be spent with GPA.
Tourism Impacts	Approach focuses on inbound tourism effects only. 2002/3 survey work at GPA identified that almost 90% of Scottish passengers would have travelled whether the relevant service	Leakage assumptions have been retained from 2008 when survey work was undertaken to estimate the proportion of visitors staying in Ayrshire (26%) and the average number of	Tourism multiplier effects are applied as follows: Ayrshire – 1.23 based on Scottish Tourism Multiplier Study

Table 3.2: Approach and Key Assumptions by Impact Area			
Impact Area	**Approach**	**Additionality Assumptions**	**Multipliers**
	existed from GPA or not. The approach focuses on identifying the level of inbound expenditure in to Ayrshire and Scotland from trips from GPA. This is based on the number of trips to broad destination areas (see Section 2) and the proportion of inbound passengers on such services from GPA based on the CAA Passenger Survey for 2009. Expenditure per trip is calculated on the basis of VisitScotland data. As per the 2008 study, an allowance is also made for outbound passenger expenditure within Ayrshire as part of a passenger's trip. It should be noted that estimating genuine net tourism impacts is very difficult. <u>Estimates quoted here should be viewed with caution</u>.	nights (3.1). All passengers are assumed to be visiting Scotland. Displacement assumptions have also been retained as these were derived from original survey work at the Airport. This suggested that 75% of visitors to Ayrshire were additional. In relation to Scotland as a whole, the proportion is considerably lower at 45%.	Scotland – 1.6 based on Scottish Input Output Tables The Ayrshire multiplier is retained from the 2008 study. The Scotland multiplier has been updated using 2007 Input-Output Tables. Output has been converted to GVA using data from the Annual Business Inquiry.
Aerospace & MRO	The 2008 SQW study concluded there was no significant current link between GPA and the Aerospace and MRO cluster. As a result no impact was recorded. However, our assessment and discussions suggest that there is some limited link still in terms of GPA being a factor in the retention of the cluster and in its potential for future expansion. A number of the stakeholders interviewed during the study have cited the importance of the Prestwick 'Brand' in attracting these companies to the area originally and they still	Estimating the additionality effect of GPA on the cluster is extremely difficult. The anchoring role the Airport plays and the limited role it plays in enabling activity is largely unquantifiable. We have therefore adopted a simplified assumption whereby the presence of GPA accounts for 5% of activity within the cluster to provide an illustrative estimate of the effect. This has been retrospectively applied to 2008 to enable comparability.	Combined indirect and induced multipliers have been applied as follows: Scotland: Employment – 2.39 GVA – 1.91 Taken from Scottish Input Output Tables 2007 for Aircraft Manufacture. Ayrshire: Employment – 1.4

Table 3.2: Approach and Key Assumptions by Impact Area			
Impact Area	Approach	Additionality Assumptions	Multipliers
	believe that an operational airport is a vitally important part of the package that the area offers to the sector, along with, for instance, the new aeronautical engineering facility at Ayr College and the Enterprise Area. This position is supported by our consultations with the companies within the cluster. While the extent to which they actually use the Airport for passenger or freight services is limited and access to the runway is not generally needed, it is still felt to be an important anchor for the cluster and offers potential to possibly expand the range of activities in the future. We have therefore estimated the GVA and employment impacts of the cluster based on information from Scottish Enterprise on employment and sales. Currently, there are around 3,100 employees in the Aerospace & MRO cluster around Prestwick generating around £918 million in annual turnover. As stated above, estimates in relation to the Aerospace & MRO Cluster should be treated with considerable caution and are quoted separately from the main impact estimates.		GVA – 1.3 No specific information available so adjusted down from Scotland multipliers.
Other Business Impacts	These have not been quantified in either study but are discussed qualitatively.		

The Economic Impact of GPA in 2012

3.9 The economic impact of GPA in 2012 is set out in Table 3.3. This summarises the net economic impact in relation to each impact area based on the approach described above.

Table 3.3: The Net Economic Impact of Glasgow Prestwick Airport in 2012

	Ayrshire		Scotland (inc. Ayrshire)	
	Employment	GVA (£m)	Employment	GVA (£m)
Direct, Indirect & Induced Impacts				
Airport Company	290	£8.4	240	£6.9
Airport Company Supply Chain	40	£1.5	60	£2.5
Other Tenants exc. HMS Gannet, Freight, MRO	170	£6.9	230	£9.5
Onsite MRO	460	£19.2	430	£18.0
HMS Gannet	100	£3.6	120	£4.7
Freight Activities	30	£1.4	50	£2.1
Sub-Total	*1,080*	*£41.1*	*1,130*	*£43.8*
Wider Impacts				
Tourism Impact	270	£6.6	670	£17.8
Total	**1,350**	**£47.6**	**1,810**	**£61.6**

Source: York Aviation.

3.10 In 2012, we estimate that the Airport supports around 1,080 net jobs and £41.1 million in GVA through direct, indirect and induced impacts in Ayrshire. This is supplemented by 270 jobs and £6.6 million in GVA through inbound tourism impacts. This gives a total impact in Ayrshire of 1,350 jobs and £47.6 million in GVA. In addition, assuming that GPA's influence accounts for around 5% of activity in the Aerospace & MRO cluster, it would support a further 190 net jobs and £16.0 million in GVA.

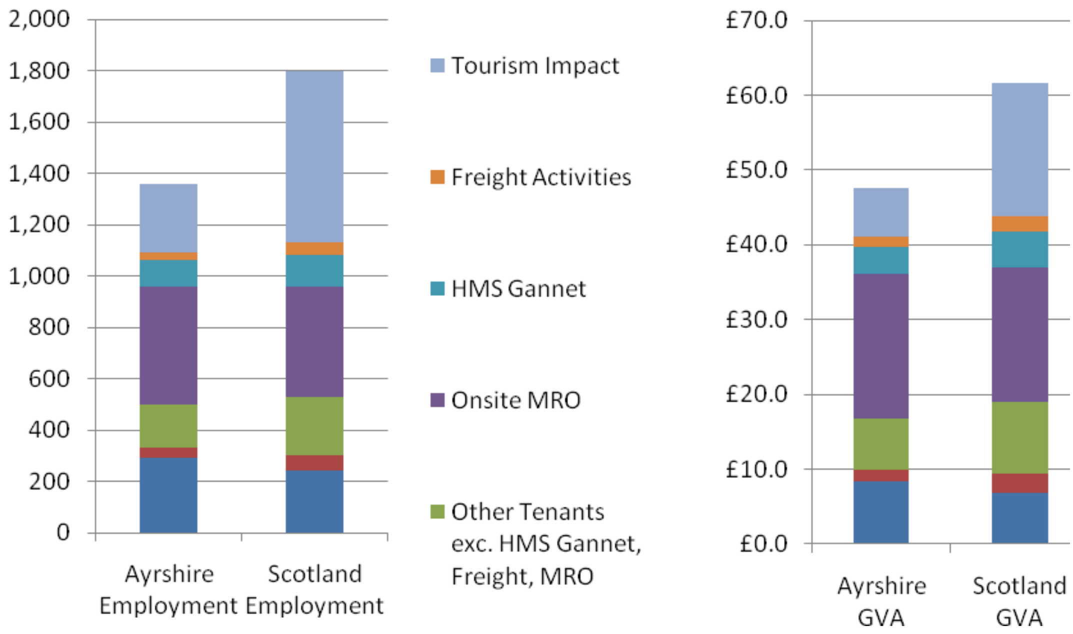
3.11 In the wider study area of Scotland, these impacts are increased to a total impact of 1,810 jobs and £61.6 million in GVA. This includes 1,130 direct, indirect and induced jobs and £43.8 million in GVA and 670 jobs and £17.8 million through inbound tourism impacts. In addition, assuming that GPA's influence accounts for around 5% of activity in the Aerospace & MRO cluster, it would support a further 320 net jobs and £23.5 million in GVA across Scotland.

3.12 Within Ayrshire the largest contributor in terms of employment is On-site MRO (460 net jobs) at the Airport followed by the Airport Company (290 net jobs) and the Airport's contribution to inbound tourism (270 jobs). In terms of GVA, again On-site MRO at the Airport are again the largest contributors (£19.2 million), followed by the Airport Company (£8.4 million).

3.13 The balance of impacts in Scotland is slightly different. Tourism is by far largest impact in terms of employment (670 jobs), with On-site MRO (430 jobs) and the Airport Company (240 jobs) the next largest areas of impact. In terms of GVA, Onsite MRO and Tourism Impact are the largest impacts.

3.14 The structure of impacts in terms of employment and GVA in Ayrshire and Scotland is shown in Figure 3.1.

Figure 3.1: Structure of Economic Impacts in 2012



Source: York Aviation.

3.15 In terms of other wider economic benefits, our discussions with key stakeholders have identified a number of key messages as regards the Airport's impact in 2012:

- a number of stakeholders have emphasised the strategic importance of the Airport in putting Ayrshire 'on the map'. This is important in general terms in attracting and retaining inward investment in the area and in the perception of accessibility in terms of the inbound tourism product. However, equally, there is a recognition that the way the Airport has evolved in terms of its route network in recent years has meant that this effect is perhaps currently more to do with perception than reality. The loss of the Stansted route, which was important as a connection for business, and the Scandinavian routes, which brought in significant numbers of inbound visitors, have significantly reduced the Airport's actual ability to deliver in this area. However, the continued existence of international connections from the Airport is believed to be an important image benefit;

- linked to the above point is the role that the Airport plays in relation to the Aerospace & MRO cluster. We have made an illustrative estimate (assuming the existence of GPA accounts for around 5% of activity) above but it is worth re-emphasising the message that has been conveyed from our consultations. Again, there is a recognition that the link between Aerospace/MRO activity (other than PAML) and the Airport as an operating entity offering passenger and freight services is currently limited. None of the companies particularly use the passenger services offered by the Airport and the use of freight services is relatively limited (although it is important in relation to individual circumstance, such as for instance flying in aircraft engines for overhaul). However, there is a belief amongst both public stakeholders, business organisations and members of the cluster itself that if the Airport were not there this would impact on the success of the Cluster and, therefore, ultimately the employment and prosperity it supports. The Airport acts as a focal point and an anchor for companies and, along with the skills base in the area (which is partly a function of the Airport), does go some way towards ensuring their continued presence. This is not to suggest that if the Airport were to close all the Aerospace & MRO companies would leave. They would not but the Airport undoubtedly played a role historically in their location decisions. However, there could me a downgrading of some activity and possibly less investment in the future;

- there is a general recognition that the Airport is not heavily used by other local businesses, particularly since the loss of the Stansted route, which did offer a useful link to London. In truth, however, a number of consultees identified that use of the route by business was already on the decline since the timings were changed and the early morning departure was lost. In 2009, the Stansted and Dublin routes were the only two routes with a significant business component, together accounting for over 50% of total business passengers at the Airport[4];

[4] CAA Passenger Survey 2009.

- the impact on tourism is also worth expanding upon. While a quantitative measure has been included above, it is important to understand the way that the changes at the Airport have impacted upon Ayrshire's tourism product. The Scandinavian routes were an important part of the golf tourism offer for the area, with anecdotal evidence that visitors were actually purchasing memberships of Ayrshire golf clubs and visiting regularly to play. It has also been noted that it has not just been the individual golfers that have been lost but that they would often be accompanied by partners and children, whose loss has had a broader impact on tourism businesses. The loss of the Stansted route is also likely to prove significant in this market as it has cut off Ayrshire from the important London market. In both cases, the location of GPA actually in the heart of Ayrshire and the very low fares offered by Ryanair were essential in making the offer work. Glasgow International and other airlines are simply not viable alternatives for many potential visitors;

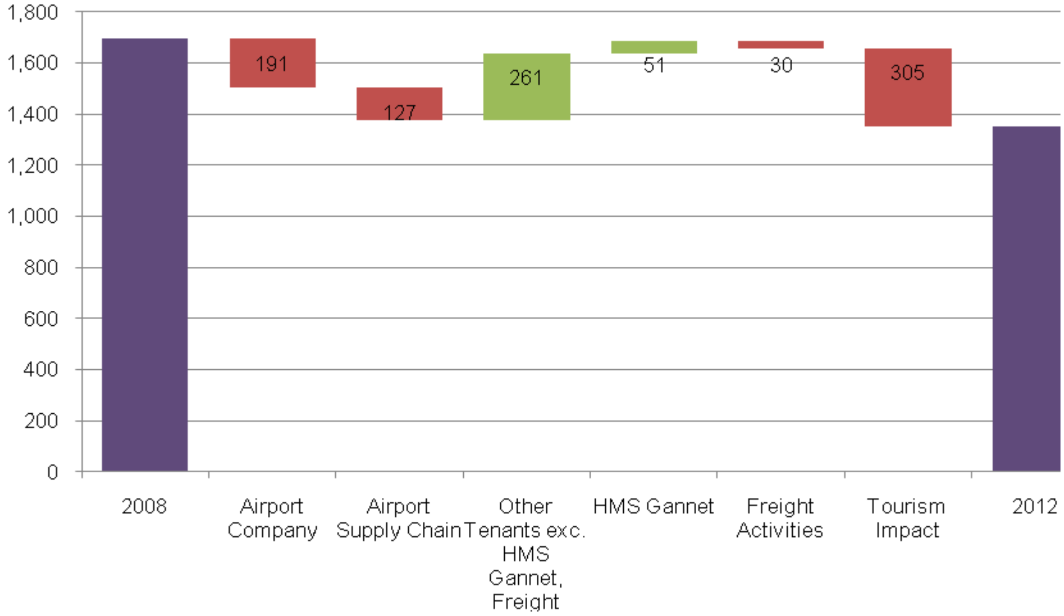
- the continued use of the Airport by the military for technical stops is both an important source of income for the Airport Company (accounted for above) but also provides a boost to the local economy through additional expenditure from military personnel staying in the area at local hotels and spending money on the local retail and leisure offer. It has not been possible to make a quantitative estimate of this effect but discussions with local hotels have indicated that this is an important part of their business.

The Change in Impact since 2008

3.16 As we have outlined in Section 2, since the last economic impact assessment was undertaken in 2008, there have been substantial losses of traffic at the Airport. This has had a knock-on effect in terms of the Airport's ability to support employment and prosperity in Ayrshire and across Scotland as a whole.

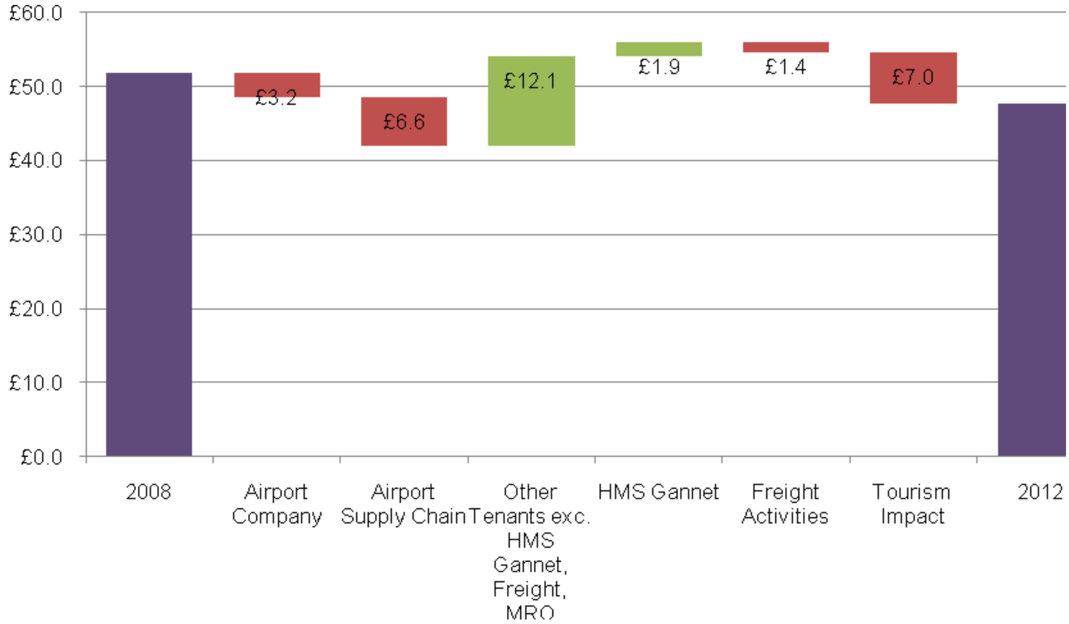
3.17 In Figures 3.2 and 3.3, we have set out a bridge analysis of the change in employment and GVA impact in Ayrshire. The 2008 report did not split out on-site MRO and consequently this has been combined with Other Tenants for the purpose of this analysis. It should be noted that the 2008 results have been adjusted to 2012 prices using HM Treasury GDP deflators.

Figure 3.2: GPA Employment Impact in Ayrshire– 2008 vs. 2012



Source: York Aviation and SQW Consulting.

Figure 3.3: GPA GVA Impact in Ayrshire– 2008 vs. 2012 (2012 Prices)



Source: York Aviation and SQW Consulting.

3.18 ***This analysis clearly articulates the effect that the changes at Airport have had on its economic impact over the last few years. In terms of employment, the Airport's economic impact is over 20% lower (350 jobs) in 2012 than it was in 2008, while in terms of GVA it is around 8% lower (£4.2 million at 2012 prices). Some of the key changes to note include:***

- the significant decline in the economic impact of the Airport Company itself. The net employment it supports through direct, indirect and induced impacts has declined by around 190 jobs. There has also been a corresponding loss of around £3.2 million in GVA (2012 prices);
- the reduction in the size of the Airport Company supply chain and the apparent geographic shift in purchasing away from Ayrshire (and indeed Scotland) has dramatically reduced the number of jobs supported (down by around 130) and the GVA captured within the area (£6.6 million at 2012 prices);

- the decline of freight activities at the Airport has also led to a reduction in the number of jobs and GVA supported (around 40 jobs and £1.8 million in GVA at 2012 prices);

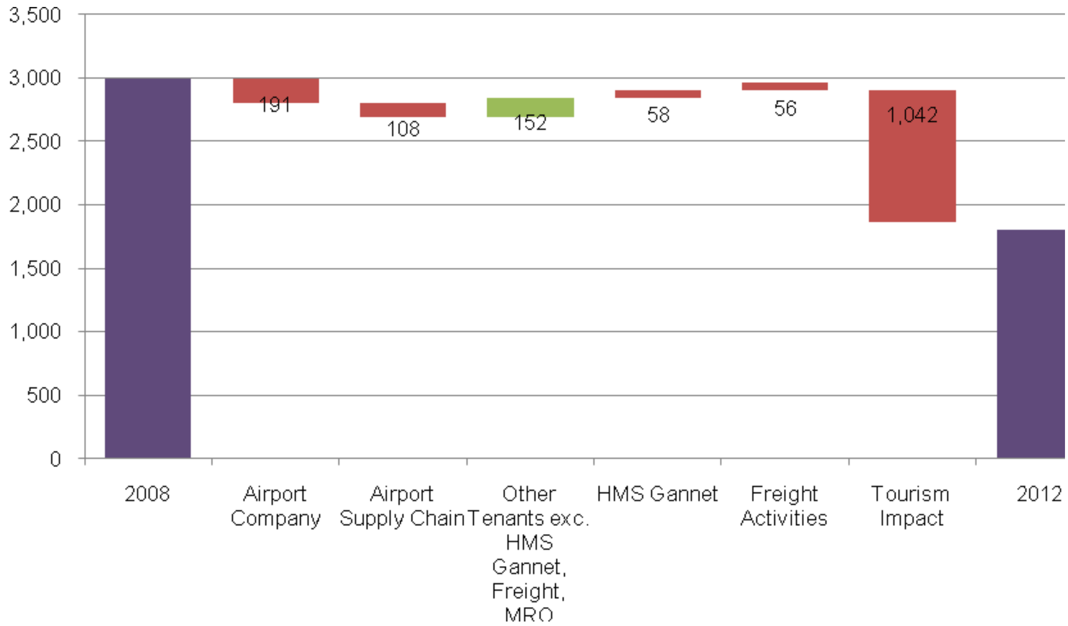
- the tourism sector has been hit hardest of all. The change in route structure away from routes with a strong inbound component has led to a reduction in the number of tourism related jobs supported by inbound passengers of over 300. This has been accompanied by the loss of around £7.0 million in GVA (2012 prices);

- the one area that has seen growth is Other Tenants at the Airport. This would appear to have been largely driven by the expansion of PAML, particularly following the completion of the second maintenance hangar, and the arrival of BA Maintenance at the Airport which has masked losses within others. Direct, indirect and induced employment in this area has increased by around 260 jobs and GVA has increased by around £12.1 million (2012 prices).

3.19 We do not believe that the Airport's impact on the Aerospace & MRO cluster over this period has changed significantly.

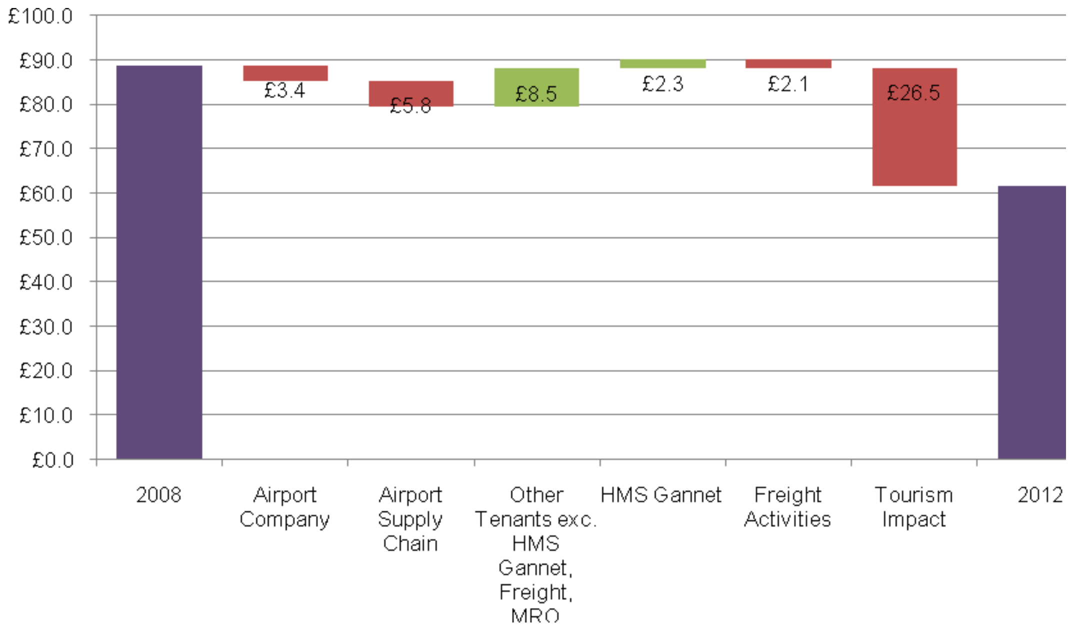
3.20 Figures 3.4 and 3.5 show the same analysis for the wider study area of Scotland as a whole. The pattern is in the main very similar, with the employment and GVA supported by the Airport Company and its supply chain declining significantly, albeit that this is cushioned slightly by the additionality assumptions that activity will be taken up elsewhere, and the most significant losses being seen in relation to Tourism Impacts.

Figure 3.4: GPA Employment Impact in Scotland– 2008 vs. 2012



Source: York Aviation and SQW Consulting.

Figure 3.4: GPA GVA Impact in Scotland– 2008 vs. 2012 (2012 Prices)



Source: York Aviation and SQW Consulting.

3.21 *The majority of tourism impacts are seen away from Ayrshire and this is reflected in the impact at the wider Scotland study area. This reflects the fact that while the inbound visitors that Prestwick brings to Ayrshire are of considerable importance to the local tourism economy, the majority of visitors travel away from Ayrshire, particularly to Glasgow and the surrounding areas. The changes at Prestwick have resulted in over 1,000 fewer jobs being supported in the tourism industry and related sectors across Scotland and a reduction in the GVA supported of over £26 million (2012 prices). This has been a result of both the falling passenger numbers and the switch towards more outbound focussed routes.*

3.22 *Again, the only positive change has been a small increase in the economic impact of Other Tenants, driven by growth at PAML. This has seen around 150 additional jobs supported and an additional £8.5 million in GVA (2012 prices).*

3.23 *In relation to the Aerospace & MRO cluster, we do not believe there has been a significant change in GPA's impact in this area since 2008.*

3.24 *In total GPA's net economic impact in Scotland has fallen by around 1,190 jobs and £27.2 million in GVA (2012 prices).*

Conclusions

3.25 GPA is a significant employer and economic driver within Ayrshire and more broadly in Scotland. In 2012, based on the analytical framework described above, we estimate that GPA supports 1,080 jobs and £41.1 million in GVA in Ayrshire. In addition, assuming that GPA's influence accounts for around 5% of activity in the Aerospace & MRO cluster, it would support a further 190 net jobs and £16.0 million in GVA. Within Scotland as a whole, we estimate the Airport supports a total impact of 1,810 jobs and £61.6 million in GVA. In addition, assuming that GPA's influence accounts for around 5% of activity in the Aerospace & MRO cluster, it would support a further 320 net jobs and £23.5 million in GVA across Scotland.

3.26 However, the declines in traffic at the Airport since 2008 have had a significant impact on GPA's ability to support employment and prosperity. Within Ayrshire, we estimate that in 2012 it supports around 340 fewer jobs than in 2008 and supports around £4.2 million less in GVA (2012 prices). Across Scotland as a whole its impact has fallen by around 1,190 jobs and £27.2 million in GVA (2012 prices). The biggest driver of these reductions has been reductions in the impact the Airport has on inbound tourism.

4 the future economic impact of GPA

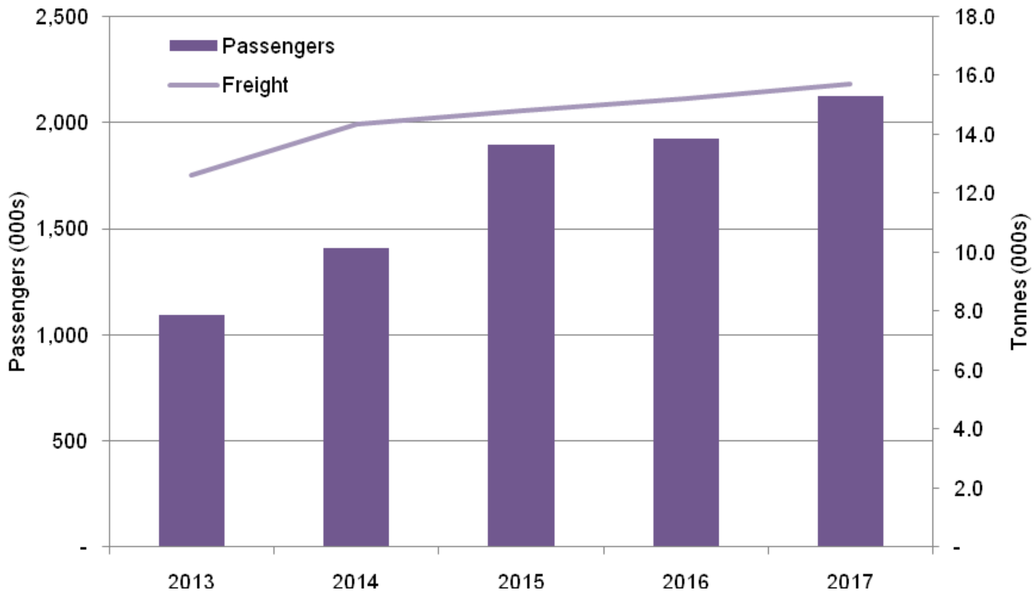
Introduction

4.1 ***In this section, we consider what the economic impact of GPA might be in 2017 based on the Airport Company's forecasts for passenger and freight traffic. It should be noted that York Aviation has not sought to critically appraise these forecasts and, hence, does not take a view as to whether they are reasonable or achievable.***

Traffic Forecasts

4.2 ***Figure 4.1 shows the Airport Company's passenger and freight forecasts for GPA through to 2017. These forecasts see a significant recovery in terms of passenger traffic from around 1.1 million passengers per annum in 2013 to around 2.1 million in 2017. This would see passenger throughput at the Airport beginning to approach the levels seen at its high point in 2007 and 2008.***

Figure 4.1: GPA Passenger & Freight Forecasts

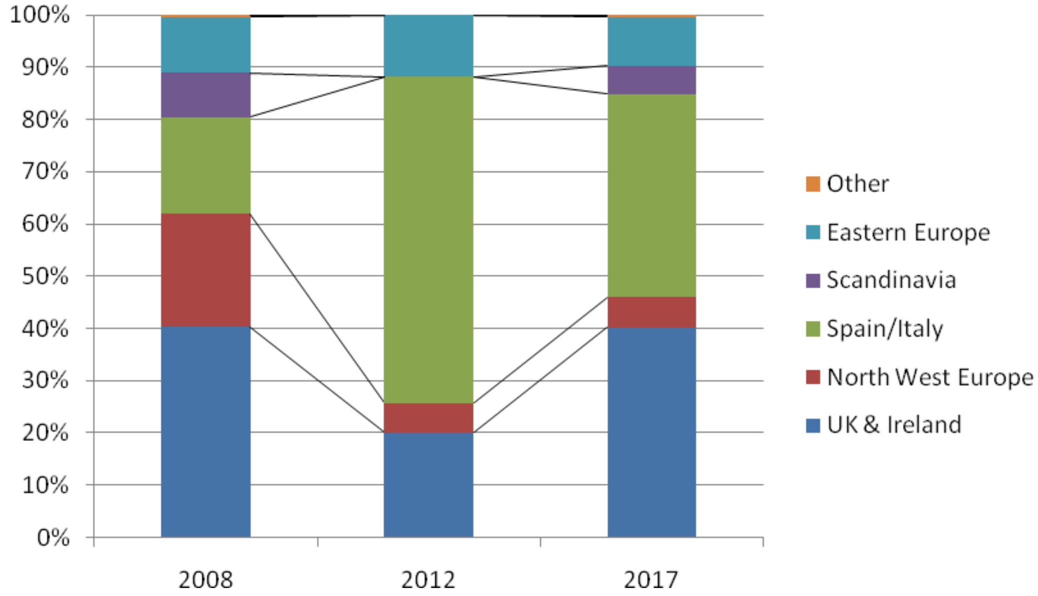


Source: Glasgow Prestwick Airport.

4.3 ***However, as we have seen, it is not simply the volume of passengers that is important in determining the economic impact of the Airport but also the mix of routes on offer and particularly whether these offer connections to potential inbound tourism markets.***

4.4 ***The forecasts envisage the Airport's route network increasing to around 40 scheduled destinations. Figure 4.2 compares the 2008 and current route structure in terms of passenger numbers with the forecast structure in 2017.***

Figure 4.2: GPA Route Structure – 2008 and 2012 (last 12 months) vs. 2017



Source: York Aviation analysis of GPA data.

4.5 ***The forecasts to 2017 see GPA moving back towards a route structure more akin to that in place in 2008. While, the key market segment for the Airport remains Spain/Italy, which are primarily outbound leisure orientated markets, the forecasts project a significant increase in key domestic markets and the return of some Scandinavian routes, which have proved so important for tourism in the past.***

4.6 *Freight growth at the Airport is forecast to be more modest, with a step up to around 14,400 tonnes in 2014 followed by gentle growth to around 15,700 tonnes by 2017. This is still only just over half the freight throughput seen in 2007 and significantly below that seen in 2008.*

Approach to Projecting Economic Impact

4.7 *Our projections for the economic impact of GPA in 2017 have been based on the passenger and freight forecasts outlined above and on a series of assumptions in relation to each of the economic impact areas defined in Section 3:*

- **Airport Company Impact** – the employment and GVA supported by the Airport Company is assumed to be related to combined passenger and freight traffic at the Airport. This has been confirmed by a basic regression analysis based on traffic data and employment data provided by GPA. It should be noted, however, that there is a significant fixed element within Airport Company employment. Consequently, employment does not grow as fast as traffic. The slope coefficient of our regression analysis has therefore been used to project Airport Company employment based on 2017 traffic levels. GVA has then been calculated on the basis of 2012 GVA per employee;

- **Airport Supply Chain** – supply chain impacts at the Airport are assumed to grow in line with the Airport Company impact;

- **Other Tenants exc. HMS Gannet and Freight** – as with the Airport Company Impact, Other Tenants Impact is assumed to be related to traffic at the Airport. However, only some elements of this impact are related to volumes, namely those segments directly involved with operating flights. We have therefore calculated an approximate elasticity to traffic for these volume related segments based on observed changes between 2008 and 2012. This has been used to calculate likely increases in employment and GVA in these segments through to 2017. Other elements are assumed to remain constant;

- **On-site MRO –** given the recent expansion of PAML's capacity at the Airport and BA Maintenance's position at the Airport, we do not envisage any significant growth in MRO at the Airport to 2017;

- **HMS Gannet** – GPA remains a strong candidate for the search and rescue contract and there is no reason to believe that its other activities at GPA will reduce. Therefore, we have assumed that employment levels at HMS Gannet will remain broadly similar;

- **Freight Impact** – we have assumed that freight impact is related to freight traffic and is grown forward on the basis of the forecasts;

- **Tourism Impact** – this is based on the number of additional inbound trips implied by the 2017 forecasts, taking in to account the different inbound proportions inherent within the different destination segments described. Levels of spend and other trip characteristics are assumed to remain the same as in 2012;

- **Aerospace & MRO Cluster** – employment and GVA within the Aerospace & MRO cluster is <u>not</u> assumed to be related to traffic at the Airport. However, for illustrative purposes we again assumed that around 5% of activity in the cluster is there because of the presence of GPA. Again, <u>we have quoted these impacts separately</u> from the main impact estimates given the difficulties in making robust estimates. In terms of how the cluster will grow, we have assumed that the existing companies in the area will remain largely as they are in relation to their current sites until 2017 but that growth in the cluster will be achieved through either new companies investing in the Enterprise Area or through existing companies expanding on to the Enterprise Area. We have assumed that by 2017 there will be an approximately 75% level of occupancy on the Prestwick International Aerospace Park and that employment will be generated in line with the employment densities set out for general industrial use in the Employment Densities Guide 2nd Edition produced for the HCA in 2010. The GVA per employee is assumed to be similar to that generated by the existing companies in the cluster. As described, for illustrative purposes we have assumed that 5% of this growth is enabled by the existence of GPA through image effects, its current role in anchoring the cluster or the residual influence of historic relationships.

4.8 The assumptions around additionality and multiplier effects are assumed to remain the same through to 2017.

Economic Impact in 2017

4.9 Table 4.1 sets out our estimates of the net economic impact of GPA in 2017 based on the traffic forecasts set out above and the projection assumptions outlined. GVA is expressed at 2012 prices.

Table 4.1: The Net Economic Impact of Glasgow Prestwick Airport in 2017				
	Ayrshire		Scotland (inc. Ayrshire)	
	Employment	GVA (£m at 2012 prices)	Employment	GVA (£m at 2012 prices)
Direct, Indirect & Induced Impacts				
Airport Company	420	£12.9	350	£10.6
Airport Company Supply Chain	50	£2.2	80	£3.7
Other Tenants exc. HMS Gannet, Freight, MRO	210	£9.3	300	£13.1
Onsite MRO	460	£20.2	430	£18.9
HMS Gannet	100	£3.7	120	£4.9
Freight Activities	40	£2.2	80	£3.3
Sub-Total	*1,290*	*£50.5*	*1,360*	*£54.5*
Wider Impacts				
Tourism Impact	530	£13.4	1,400	£38.9
Total	**1,820**	**£63.9**	**2,760**	**£93.4**
Source: York Aviation.				

4.10 We estimate that by 2017 GPA will support around 1,820 net jobs in Ayrshire and around £63.9 million in GVA (2012 prices). The largest contributors to this impact are Onsite MRO and Tourism Impact.

4.11 Across Scotland as a whole, GPA's total net impact is expected to be around 2,760 jobs and £93.4 million of GVA (2012 prices). Tourism Impact is by far the largest contributor in terms of both employment and GVA.

4.12 In terms of the Aerospace & MRO cluster, if GPA were to continue to account for around 5% of activity in the cluster, it would support:

- 270 jobs and £24.3 million in GVA (2012 prices) in Ayrshire;
- 460 jobs and £35.6 million in GVA (2012 prices) in Scotland.

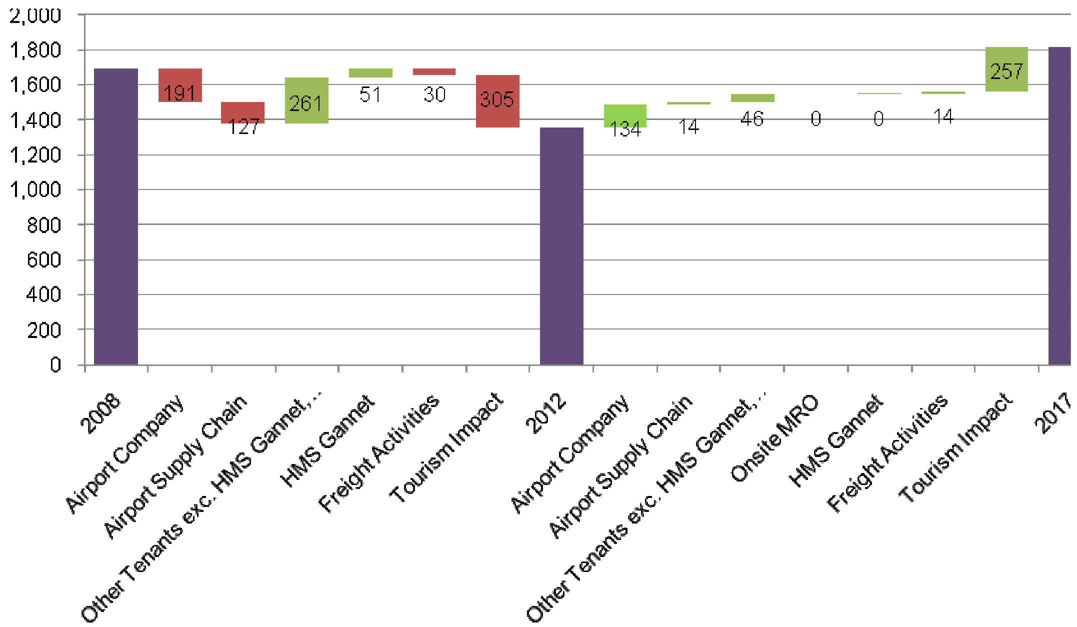
4.13 It should, however, be recognised that this is not related to growth at the Airport but more to do with its on-going presence. Again, this illustrative estimate should be regarded with caution.

4.14 ***In terms of other wider economic benefits the forecasts include the return of a twice daily service to Stansted. This service was previously the most important business route offered by the Airport. Its return, therefore, has the potential to enhance the area's image as a place to locate and to improve the ability of businesses within Ayrshire to trade and interact effectively with the London market.***

Comparison of 2017 Impacts

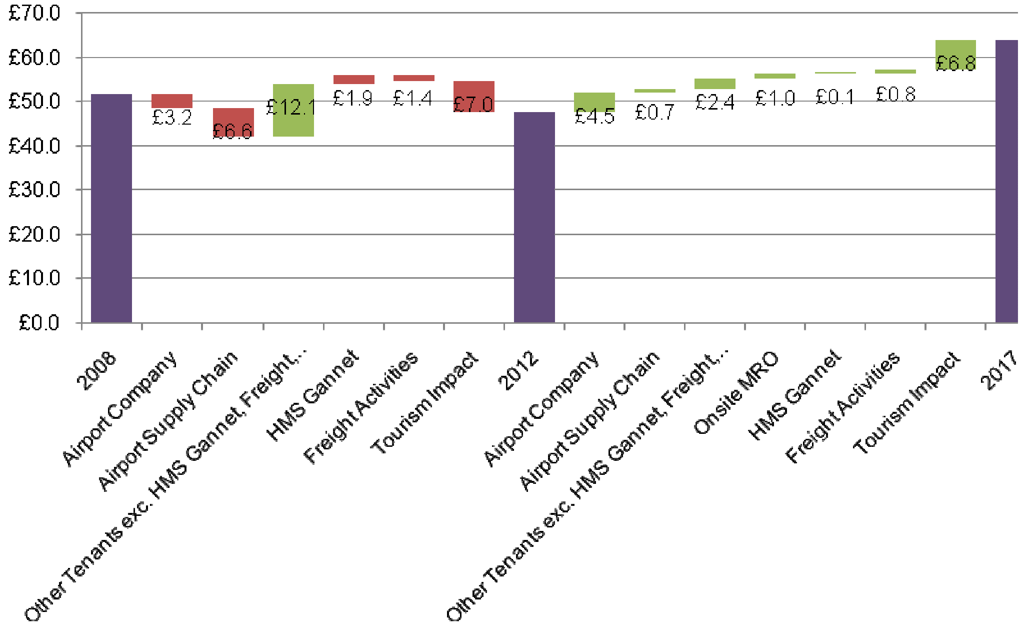
4.15 ***Figures 4.3 and 4.4 set out an employment and GVA impact bridge for 2008 to 2012 to 2017 for Ayrshire. Again, it should be noted that all years are expressed at 2012 prices. This analysis shows how the Airport begins to build back to its former position in terms of economic impact due to gains in employment and GVA in relation to Airport Company Impact, Other Tenants Impact and Tourism Impact;***

Figure 4.2: GPA Employment Impact in Ayrshire



Source: York Aviation and SQW Consulting.

Figure 4.3: GPA GVA Impact in Ayrshire (2012 Prices)



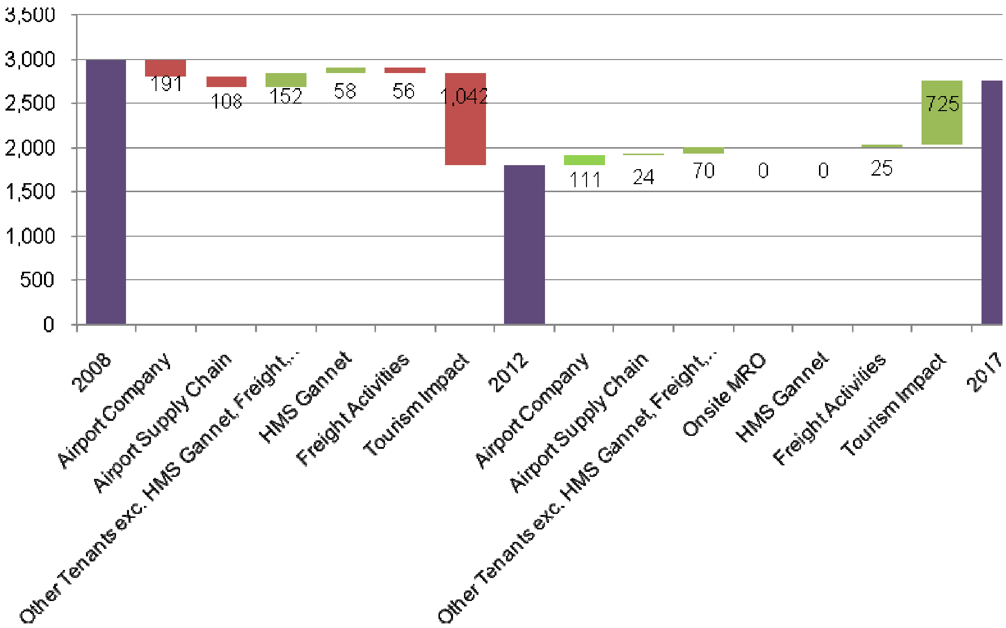
Source: York Aviation and SQW Consulting.

4.16 Ultimately, GPA supports around 120 more jobs and around £12.1 million more in GVA (2012 prices) in Ayrshire at a slightly lower level of traffic compared to 2008. This is driven by the growth of high value added Onsite MRO jobs. From 2012, the recovery comes primarily from the Airport Company impact and Inbound Tourism.

4.17 In relation to the Aerospace & MRO cluster offsite, our illustrative estimate of the effect of GPA's presence results in an additional 80 jobs compared to 2012 and around £8.2 million in Ayrshire compared to 2012. Again, it should however be remembered that this change does not relate directly to growth at the Airport but to the building out of the Enterprise Area.

4.18 Figures 4.4 and 4.5 show the same analysis for Scotland as a whole.

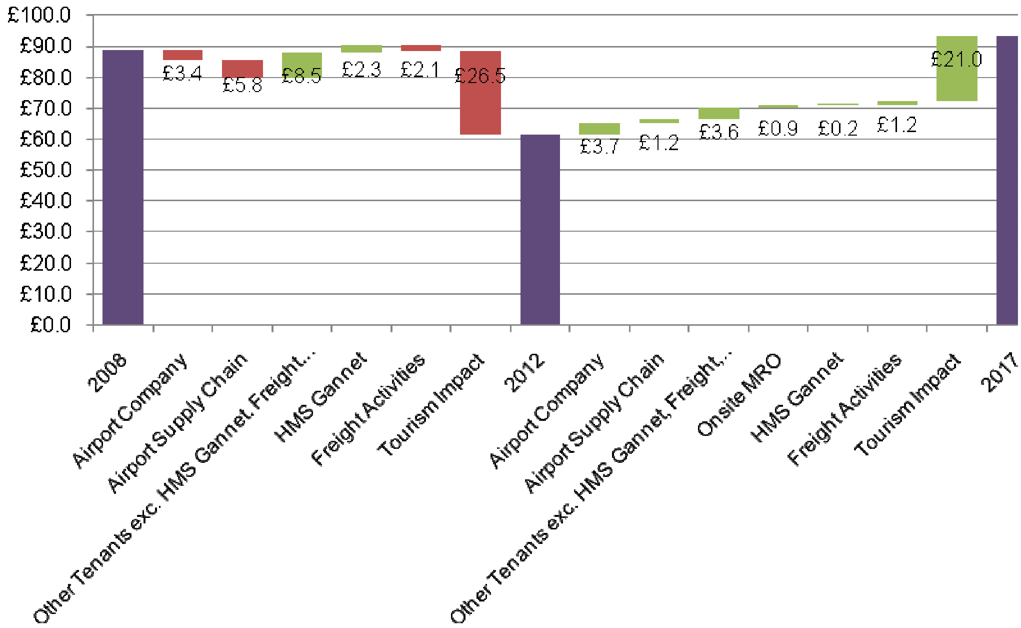
Figure 4.4: GPA Employment Impact in Scotland



Source: York Aviation and SQW Consulting.

4.19 *The analysis of this wider study area reinforces many of the same messages. The resurgence of traffic at GPA increases net employment and GVA supported through a range of channels. However, it is the increase in the Inbound Tourism Impact that is particularly marked. Just as this has fallen significantly since 2008 driven by the change of route structure and declining numbers, so it may be expected to increase markedly as GPA reconnects to important inbound markets and volumes grow. The impact away from Ayrshire is significantly stronger as relatively few tourists are assumed to be retained within the smaller area (only around 26%). It is difficult to be sure where else in Scotland impact is likely to be felt but analysis of the 2009 CAA Passenger Survey would suggest that the City of Glasgow is likely to be a significant beneficiary.*

Figure 4.5: GPA GVA Impact in Scotland (2012 Prices)



Source: York Aviation and SQW Consulting.

4.20 *In total, across Scotland, the net employment supported by GPA remains below 2008 levels by around 230 jobs, at least partly because Tourism Impact does not make back all its losses. GVA is however higher by around £4.5 million in GVA at 2012 prices, reflecting the gains made by on-site MRO since 2008.*

4.21 *In relation to the Aerospace & MRO cluster, our illustrative estimate of the effect of GPA's presence results in an additional 140 jobs compared to 2012 and around £12.1 million in GVA across Scotland. Again, it should however be remembered that this change does not relate directly to growth at the Airport but to the building out of the Enterprise Area.*

Conclusions

4.22 GPA's own forecasts anticipate a significant return to growth over the next five years, with passenger traffic reaching around 2.1 million and freight recovering to around 15,700 tonnes by 2017.

4.23 If this recovery is achieved it will result in a considerable increase in the economic impact of the Airport compared to 2012 levels. We estimate that by 2017 GPA will support around 1,820 net jobs in Ayrshire and around £63.9 million in GVA (2012 prices). Across Scotland as a whole, GPA's total net impact is expected to be around 2,760 jobs and £93.4 million of GVA (2012 prices). This reflects a substantial recovery in the level of impact since 2012.

5 Conclusions

5.1 GPA is Scotland's fourth largest passenger airport and its second largest freight airport. As such, it is a significant economic driver in Ayrshire and Scotland as a whole. In 2012, we estimate that the Airport supports a <u>net additional</u> economic impact of 1,350 jobs and £47.6 million in GVA in Ayrshire. Within Scotland as a whole, we estimate that its net impact is around 1,810 jobs and around £61.6 million in GVA. In addition, if GPA were to support around 5% of activity within the Aerospace & MRO cluster surrounding the Airport, it would support a further 190 net jobs and £16.0 million in GVA in Ayrshire and 320 net jobs and £23.5 million in GVA across Scotland. These estimates should however be treated with caution.

5.2 However, in recent years the Airport has suffered considerable downturns in both passenger and freight traffic. The Airport has declined from a high point in Summer 2008 of around 2.46 million passengers in a rolling year to a current low of 1.1 million passengers in the rolling year to August 2012. This has been on the back of the recession, the end of the Scottish Route Development Fund and rising APD.

5.3 Passenger numbers have not only declined but there has been a substantial shift in the route network in recent years. The Airport has increasingly moved towards more outbound leisure destinations at the expense of Scandinavian and Northern European routes particularly. The Airport also lost its link to London via Ryanair to Stansted in late 2011. Routes to Spain and Italy have gone from making up only around 18% of traffic in 2008 to over 62% in 2012.

5.4 These changes have resulted in a substantial decline in the Airport's economic impact since the last study was undertaken by SQW Consulting in 2008. Within Ayrshire, we estimate that in 2012 it supports around 340 fewer jobs than in 2008 and supports around £4.2 million less in GVA (2012 prices). Across Scotland as a whole its impact has fallen by around 1,190 jobs and £27.2 million in GVA (2012 prices). The biggest driver of these reductions has been reductions in the impact the Airport has on inbound tourism.

5.5 The Airport Company's traffic forecasts for the future are, however, more positive. These see a significant recovery in passenger throughput, with volumes returning to around 2.1 million passengers per annum by 2017, and a more modest recovery in freight traffic, reaching around 15,700 tonnes by 2017. Significantly, the passenger forecasts also see the return of a number of routes to key inbound tourism markets.

5.6 If this recovery can be achieved, it will result in a considerable increase in the economic impact of the Airport compared to 2012 levels. We estimate that by 2017 GPA will support around 1,820 net jobs in Ayrshire and around £63.9 million in GVA (2012 prices). Across Scotland as a whole, GPA's total net impact is expected to be around 2,760 jobs and £93.4 million of GVA (2012 prices). This reflects a substantial recovery in the level of impact since 2012:

- GPA supports around 120 more jobs and £12.1 million more in GVA (2012 prices) in Ayrshire at a slightly lower level of traffic. The recovery to 2017 comes primarily from the Airport Company impact and Inbound Tourism;

- across Scotland, the net employment supported by GPA remains below 2008 levels by around 230 jobs, at least partly because Tourism Impact does not make back all its losses. GVA is however around £4.5 million higher, reflecting the gains made since 2008 by on-site MRO.