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ECONOMIC AND SOCIAL IMPACT OF INVERNESS AIRPORT

Final Report
September 2018

CONTENTS

1 INTRODUCTION

BACKGROUND TO THE STUDY

1.1 ekosgen, in partnership with Reference Economic Consultants, was commissioned by Highlands and Islands Enterprise (HIE) and Highlands and Islands Airports Limited (HIAL) to undertake an economic and social impact study of Inverness Airport.

1.2 Inverness Airport is the principal airport in the Highlands and Islands and the fourth busiest in Scotland. The airport offers daily flights to and from a number of important destinations including London, Manchester, Bristol and Amsterdam, and acts as a major gateway to the Highlands and Islands, providing business links and accessibility for tourists travelling into the region.

1.3 While Inverness Airport is currently growing strongly, other major transport developments in the region can present challenges and opportunities for the airport. Current improvements to surface transport include the dualling of the A9 and A96, rail improvements to the Central Belt and Aberdeen, and the rollout of the Road Equivalent Tariff (RET) or equivalent to the Northern Isles.

1.4 These factors are likely to have implications for leisure and business use of Inverness Airport. It is therefore important to understand the contribution of the airport to regional development, and assess the economic, social and catalytic impacts of the airport. This includes how the airport supports business growth, inward investment and social inclusion across the catchment area.

1.5 The findings of the study provide a robust evidence base to inform the development of HIAL's new strategic plan and support route development, as well as assessing the minimum level of air service needed to support economic and population growth in the Highlands and Islands.

STUDY OBJECTIVES

1.6 The purpose of the study is to illustrate, and quantify where possible, the economic, social and wider catalytic impacts that Inverness Airport has in relation to the regional economy. The specific aims of the work were to:

- Provide a high level overview of how Inverness Airport, and its air services, currently supports economic and community development in the Highlands and Islands;
- Present an overview of the services and air routes currently provided by Inverness Airport including freight volumes and passenger numbers;
- Undertake an assessment of the economic impacts of Inverness Airport to include on-site impacts, impacts from the expenditure of inbound visitors and a high level analysis of time savings for business and leisure passengers; and
- Assess the wider catalytic impacts and strategic importance of the airport and air services for the region.

STUDY METHODOLOGY

1.7 The study ran from February to May 2018. The research was undertaken through:

- **Desk-based review:** An extensive review of the latest CAA Passenger Survey results for Inverness Airport passengers, and historical CAA carryings data to analyse passenger trends by scheduled route for Inverness and other Scottish airports.
- **On-site businesses:** The study team gathered quantitative information from businesses located at/adjacent to the airport through an emailed proforma. These data were a key input for the calculation of on-site economic impacts. Further details on the economic impact calculations and methodology are provided at Appendix 1.

- **Consultations:** The study team undertook consultations with 20 stakeholders, selected for being business representative organisations, transport oriented organisations, or for the importance of the airport to their organisation or members. These focused on the ways in which the airport contributes to economic growth, population growth/retention and social benefits, as well as gathering views on the current level of air service provision. A list of consultees is provided at Appendix 2.
- **Business interviews:** The study team completed telephone interviews and an online survey with businesses, including key employers based in the airport catchment area and other employers from HIE's business panel who had agreed to be contacted for other research being undertaken by HIE. In total, 169 business responses were gathered. The interviews covered the business's use of Inverness Airport for inbound and outbound travel, the extent to which the current air services meet business needs, the economic and social impacts of Inverness Airport, and the business's use of other Scottish airports.

STUDY CONTENTS

1.8 The report is structured as follows:

- **Chapter 2** presents a review of the services and air routes currently provided at Inverness Airport. Whilst covering all aspects, it focuses in particular on the profile of passenger services and how demand for them has developed over time, and gives an assessment of Inverness Airport's global connectivity;
- **Chapter 3** provides an overview of the approach and quantification of the on-site and off-site (inbound visitor) impacts;
- **Chapter 4** presents our findings on the wider economic, social and catalytic impacts of Inverness Airport, identified through stakeholder and business consultations; and
- **Chapter 5** provides a summary of findings.

2 OVERVIEW OF INVERNESS AIRPORT AND AIR SERVICE ACTIVITY

Chapter summary

- **Passenger numbers at Inverness Airport have grown substantially in the last ten years, outperforming Glasgow and Aberdeen Airports.**
- **Although the peak season has extended and there has been strong growth in December passenger numbers, the seasonal distribution of passengers is largely unchanged over the last 10 years.**
- **The recent growth in passenger numbers has been driven by passengers from the Inner Moray Firth and Caithness and Sutherland, while passenger numbers from outside the catchment area have dropped.**
- **In 2017, there were around 875,000 passengers at Inverness Airport. Over half were using the three London routes – Gatwick, Luton and Heathrow.**
- **Two thirds of trips made through Inverness Airport were for leisure purposes, one third for business. Most leisure trips were inbound, while most business trips were outbound.**
- **Across leisure and business passengers, the most common foreign nationalities were American, Dutch and German.**
- **In terms of global connectivity, direct services from Inverness Airport make it comparable with Exeter Airport and better connected than Newquay Cornwall Airport. Inverness performs better than both Exeter and Newquay Cornwall in terms of useful onward connections.**
- **Almost 500,000 passengers travelling to/from the Inverness Airport catchment area used other Scottish airports in 2013. These were predominantly leisure travellers at Glasgow and Edinburgh Airports, and business passengers at Aberdeen Airport.**

INTRODUCTION

2.1 This chapter provides a high level overview of how Inverness Airport, and its air (and other) services, supports economic and community development in the Highlands and Islands.

2.2 It gives a brief background and history to the airport; provides a review of historic and current activity at Inverness Airport, focusing on scheduled passenger services; a detailed profiling of passengers on each scheduled route and how this has changed over time; a quantified and qualitative analysis of the level and usefulness of global connectivity offered by Inverness' routes; and analysis of the number and profile of passengers leaking to other Scottish airports.

EVOLUTION OF INVERNESS AIRPORT

2.3 Inverness Airport was opened in 1947 for civilian operations. It is currently owned and operated by HIAL, which owns and operates ten airports throughout the Highlands and Islands, and one outside the region (Dundee). The airport's catchment area covers the whole of the Highland Council and Moray Council areas, including north to Caithness and Sutherland and west to Lochaber, Skye and Wester Ross.

2.4 Inverness Airport is the fourth busiest airport in Scotland in terms of passenger numbers, behind Edinburgh, Glasgow and Aberdeen. It has enjoyed rapid growth in passenger numbers in

recent years to an all-time peak in 2017. Its routes include inter-regional services to the Outer Hebrides and the Northern Isles, flights to a range of UK cities and international services to Amsterdam and Dublin. Summer 2018 saw the introduction of new services to Bergen and Zurich.

2.5 There have been some changes in the route profile over the last 10 years. The route network in 2008 was similar to that in 2017. However, a short-lived reintroduction of the Heathrow service ended in that year. Flights to Dublin operated in 2009 and 2010 but were also withdrawn. More positive developments occurred in 2011 when a new service to Amsterdam was introduced. This was followed by the reintroduction of Dublin flights in 2015 and restoration of the Heathrow service in 2016.

2.6 Recent years have seen increased capacity introduced on the easyJet services to Gatwick and Luton. Summer 2018 will see periods when two flights per day will operate on both the Amsterdam and Heathrow routes. The airport also has flights to a number of sunshine destinations (e.g. Jersey, Spain).

2.7 Freight traffic through Inverness is limited as many outbound consignments (e.g. seafood) are taken by road to other Scottish airports or to Heathrow for export from there. A similar process works for inbound consignments particularly parcels traffic. The main freight through Inverness is mail on the inbound flights from East Midlands and Edinburgh, some of which is sorted and then flown to Orkney and the Outer Hebrides. In addition a small volume of newspapers are flown from Inverness to the Outer Hebrides.

2.8 General aviation is also an important aspect of Inverness' overall role. Both the Air Ambulance Service and the Maritime and Coastguard Agency's Search and Rescue operations are based at Inverness Airport.

TRENDS IN ACTIVITY

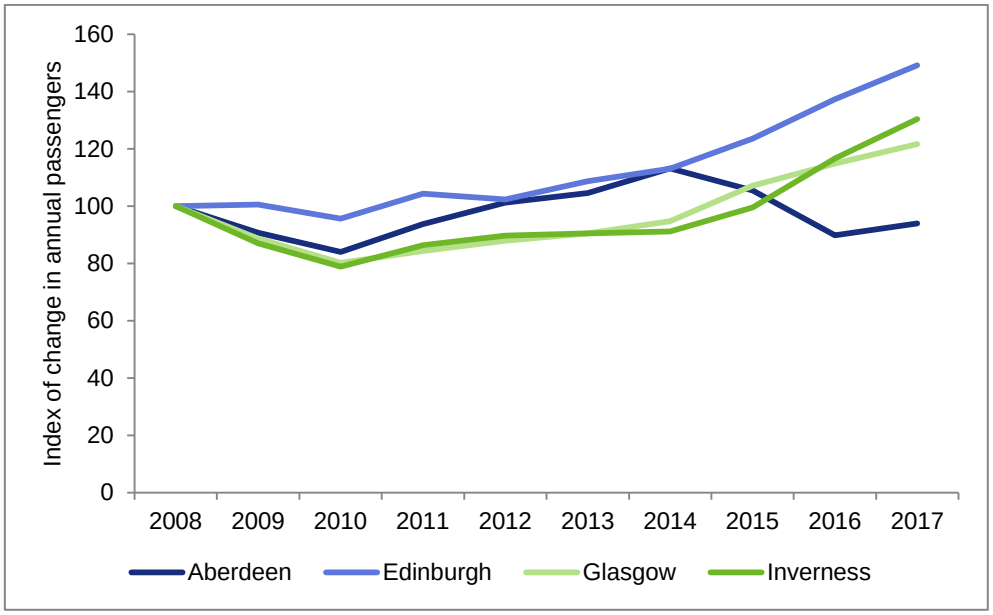
2.9 This section reviews trends at Inverness Airport in terms of passenger numbers, and the surface origin of departing passengers. The analysis is based on CAA data for the period 2008 to 2017.

Annual passenger trends

2.10 As shown at Figure 2.1, there was significant growth (30%) in the number of terminal passengers at Inverness Airport between 2008 and 2017. In absolute terms, this amounted to an increase of over 200,000 terminal passengers: from around 670,000 to approximately 875,000. Inverness experienced the second highest growth rate of Scotland's four busiest airports. Its growth rate was less than at Edinburgh (49%) but above Glasgow (22%) and Aberdeen, which saw a 6% decrease.

2.11 Growth at Inverness has been concentrated in the years since 2015. Passenger numbers did not exceed 2008 levels until 2016. This is likely due to the economic downturn, as all four main Scottish airports saw a decline in passenger numbers immediately after 2008. Between 2015 and 2017 Inverness saw a growth in passenger numbers of 43% – a higher rate than the other three main Scottish airports.

Figure 2.1: Change in number of annual terminal passengers, 2008-2017



Source: CAA Data

Passenger trends by scheduled route

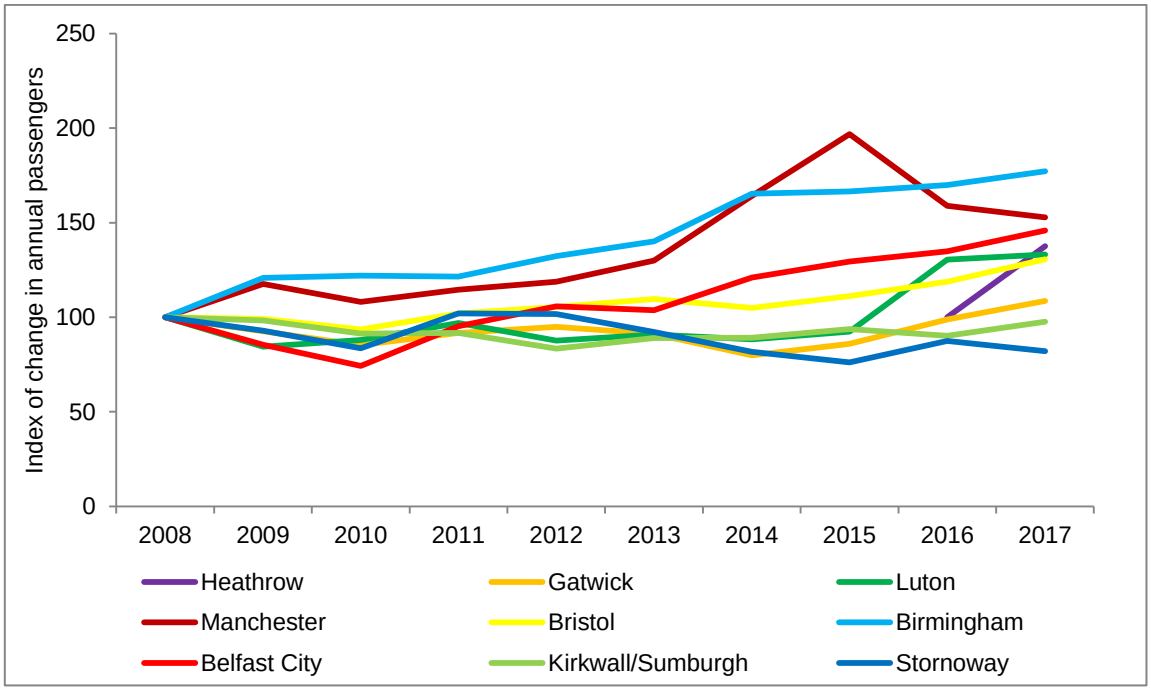
2.12 Figure 2.2 shows that from 2008 to 2017 there were increases in the number of terminal passengers on every Inverness scheduled route apart from Kirkwall/Sumburgh and Stornoway. This indicates that island routes have become less important for Inverness Airport, accounting for 6% of terminal passengers in 2017 compared to 10% in 2008.

2.13 Conversely, international routes have become increasingly significant for Inverness Airport. The Amsterdam route, which was first introduced in 2011, has seen a tenfold increase in passenger numbers[1]. The Dublin route has also seen significant growth since its re-introduction in 2015 following the first scheduled Inverness to Dublin route in 2009 and 2010. The number of passengers to Dublin in 2017 was double that in 2009, although Dublin passenger numbers have fallen since a peak in 2015. The success of the two international routes means that international flights now account for 11% of Inverness passengers, compared to none in 2008 and 1% in 2009 when international flights first started operating at Inverness.

2.14 As well as international flights, there was a considerable increase in London routes and passengers at Inverness from 2008 to 2017. This has largely been due to the re-introduction of the London Heathrow route in 2016, but there were also passenger increases of 9% and 33% respectively for London Gatwick and London Luton. The overall passenger growth on London routes during this period was 54%. Other routes which experienced significant passenger growth were Birmingham (77%) and Manchester (53%).

[1] The Amsterdam route has been excluded from Figure 2.2 due to the extremely high index scale

Figure 2.2: Change in number of annual terminal passengers by scheduled route, 2008-2017



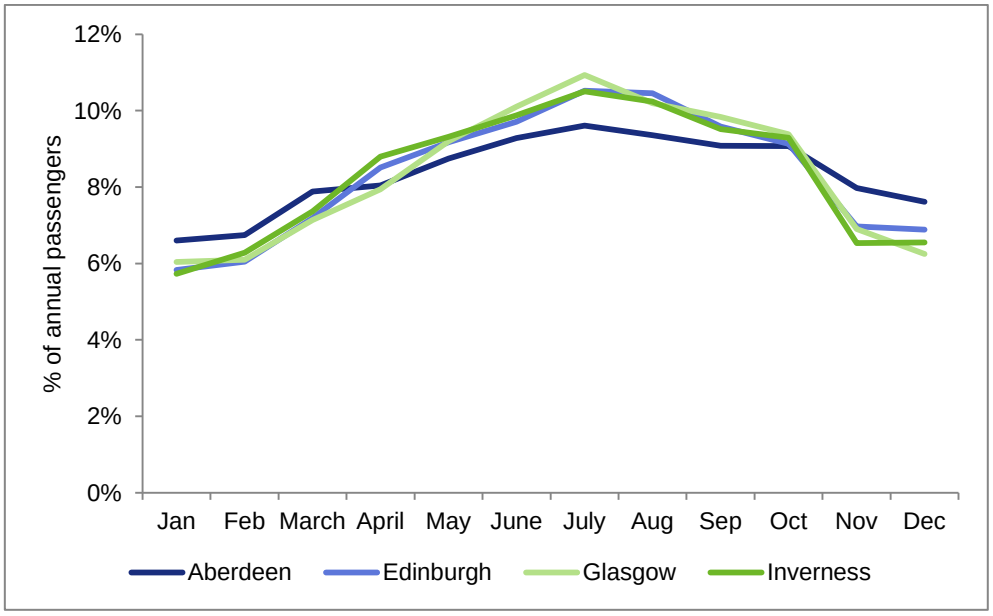
Source: CAA Data

Seasonality of passenger demand

2.15 Figure 2.3 illustrates that in 2017 Inverness had a similar seasonal profile to Edinburgh and Glasgow, with a summer peak from June to September. Aberdeen is less affected by seasonality, because it has a higher proportion of business passengers.

2.16 Despite the post-2008 decline and recent resurgence in passenger numbers at Inverness the seasonal distribution of passengers is largely unchanged over the last 10 years.

Figure 2.3: Monthly passengers, 2017

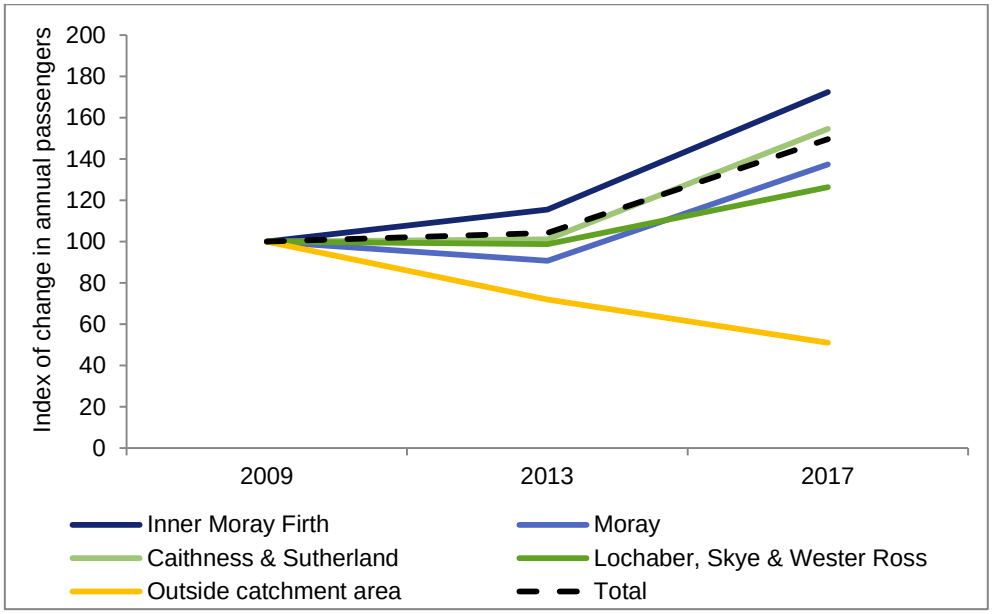


Source: CAA Data

Area trends

2.17 Between 2009 and 2017 there was a significant (50%) growth in passengers at Inverness Airport. However, as set out at Figure 2.4, this growth has not been evenly spread in terms of the passengers' surface origin/destination. Over the period, two areas – Inner Moray Firth, and Caithness and Sutherland – have seen an above average increase in passengers using Inverness Airport, at 72% and 55% respectively. Growth rates were lower for Moray (37%) and Lochaber, Skye and Wester Ross (26%).

Figure 2.4: Change in annual passengers by area, 2009-2017



Source: CAA Data

SCHEDULED ROUTE ANALYSIS

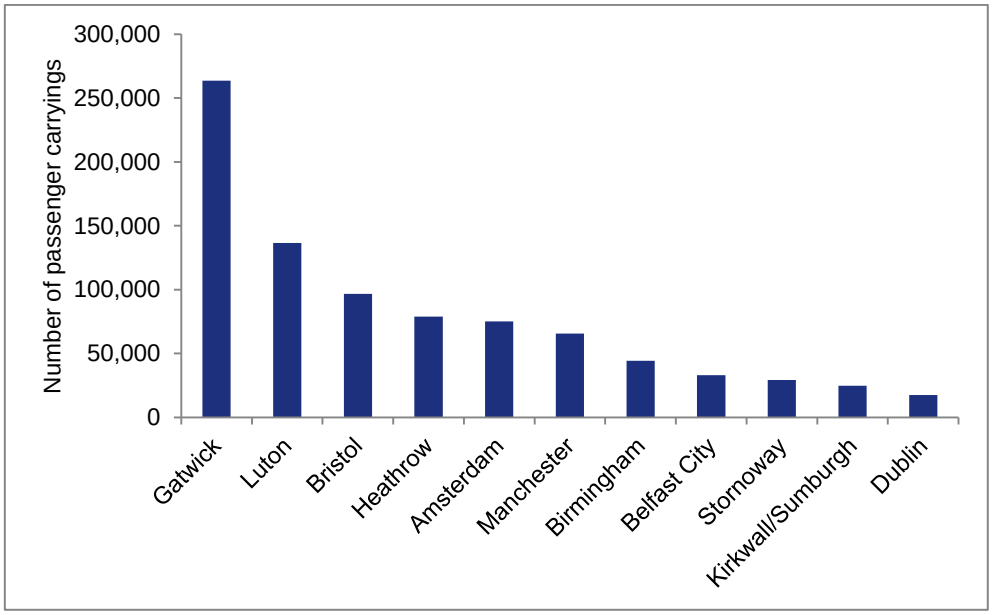
Analysis by route

2.18 Figure 2.5 illustrates the number of passengers on each of Inverness' main scheduled routes in 2017. London Gatwick had the highest carryings with over 260,000 (single) passenger movements (30% of total passengers on the 11 main routes). The two other London routes – Luton and Heathrow – accounted for the second and fourth highest numbers of passengers, with 136,000 and 79,000 respectively. The third most used route was Bristol with just under 97,000 passengers.

2.19 The split of passengers by geographical area of route was:

- London routes: 479,000 (56% of passengers on main scheduled services).
- UK regional: 239,000 (28%).
- International: 93,000 (10%).
- Islands: 49,000 (6%).

Figure 2.5: Inverness Airport main scheduled routes passenger carryings 2017



Source: CAA Data

Analysis by route and purpose

2.20 The analysis in this section is based on the 2017 CAA Passenger Survey results for the approximately 861,000 single (i.e. one way) passenger trips on the eleven main scheduled routes.

2.21 Although the purpose of Inverness Airport passenger trips is split broadly two thirds leisure and one third business, there are significant differences between specific routes, as shown at Tables 2.1 and 2.2 and summarised below.

2.22 For example, in terms of leisure passengers:

- The London Luton route is particularly important, transporting around 110,000 leisure passengers each year and accounting for 80% of passengers on that route. The London Heathrow route also carries a large volume of leisure passengers.
- Leisure passengers account for a particularly high proportion of the Dublin and Belfast City routes.
- London Gatwick carries the largest volume of outbound leisure passengers (55,000), although the London Luton route has the highest proportion of outbound leisure passengers.
- London Luton and Bristol are particularly important for bringing leisure passengers from the rest of the UK, at 61,000 and 56,000 respectively.
- The two international routes (Dublin and Amsterdam) and Heathrow are often used by international leisure passengers travelling to Inverness.

Table 2.1: Proportion of leisure passengers by route, compared to Inverness Airport overall

Greater than Inverness Airport average	Similar to Inverness Airport average	Less than Inverness Airport average
Leisure passengers (67% of all Inverness Airport passengers)		
London Luton Dublin London Heathrow Belfast	Bristol Amsterdam	London Gatwick Birmingham Kirkwall and Sumburgh Manchester Stornoway
Outbound leisure passengers (22%)		
London Luton Dublin	London Gatwick London Heathrow	Bristol Manchester

	Amsterdam	Birmingham Belfast
Inbound leisure passengers from rest of the UK (33%)		
Bristol London Luton Birmingham Belfast	London Gatwick	Manchester London Heathrow Stornoway Kirkwall and Sumburgh Dublin Amsterdam
Inbound international leisure passengers (12%)		
Dublin Amsterdam London Heathrow Belfast		London Gatwick London Luton Manchester Kirkwall and Sumburgh Birmingham Bristol Stornoway

2.23 In terms of business passengers:

- In both 2013 and 2017, business passengers accounted for one third (33%) of all passengers, however the proportion of inbound business passengers fell from 12% to 8%. This has been driven by a fall in the proportion of inbound business passengers from the rest of the UK, from 10% to 6%. However, in terms of absolute numbers, there has been very little change.
- The London Gatwick route is particularly important, carrying around 102,000 business passengers per year. This accounts for over a third (35%) of all business passengers travelling via Inverness Airport.
- The Manchester route also has a high volume of business passengers, at 33,000 (51%), while business passengers account for a high proportion of the inter-Scotland routes to Stornoway, Kirkwall and Sumburgh.
- The vast majority of business passengers on the London Gatwick route are travelling outbound from Inverness (83%). The Inverness-Manchester route is also particularly important for outbound business travel.
- A high proportion of people on flights from Birmingham, Belfast City and Manchester are inbound business passengers from the rest of the UK.
- The Amsterdam route has a relatively high proportion of international business passengers (almost 10% of all its passengers). London Heathrow and Dublin are also important (both 5%).

Table 2.2: Proportion of business passengers by route, compared to Inverness Airport overall

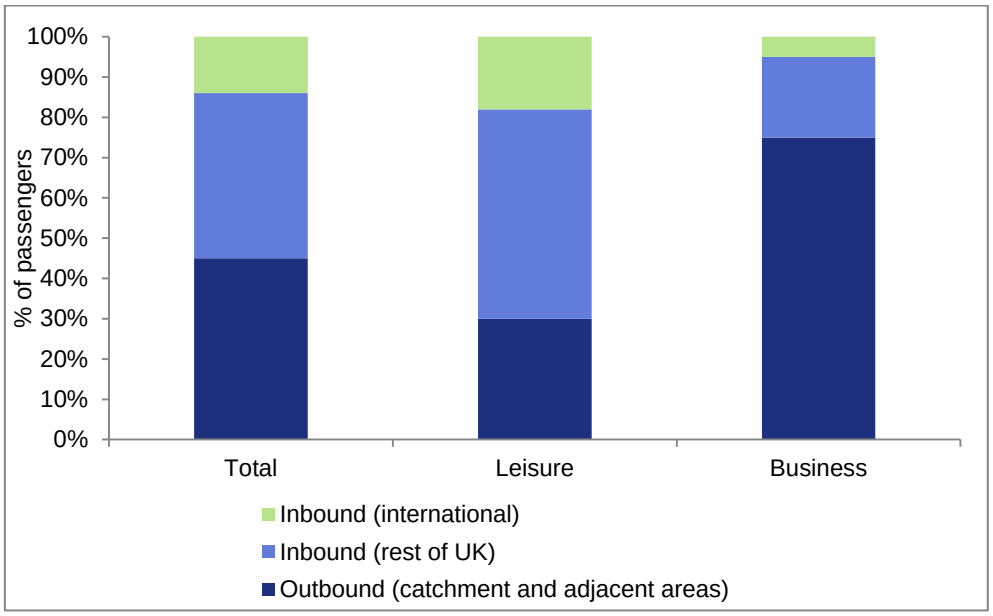
Greater than Inverness Airport average	Similar to Inverness Airport average	Less than Inverness Airport average
Business passengers (33% of all Inverness Airport passengers)		
Stornoway Manchester Kirkwall and Sumburgh Birmingham London Gatwick	Bristol Amsterdam	Belfast London Heathrow London Luton Dublin
Outbound business passengers (26%)		
Manchester London Gatwick	Bristol Amsterdam Birmingham	London Heathrow Dublin London Luton Belfast
Inbound business passengers from the rest of the UK (6%)		
Birmingham Belfast Manchester	Bristol London Gatwick London Luton	London Heathrow Kirkwall and Sumburgh Amsterdam Stornoway Dublin

Inbound international business passengers (2%)		
Amsterdam London Heathrow Dublin	London Gatwick London Luton Manchester Birmingham Kirkwall and Sumburgh	Bristol Belfast Stornoway

Analysis by origin, destination and purpose

2.24 Figure 2.6 illustrates that slightly more passengers (55%) were making trips that were inbound to Inverness, with the other 45% made by residents of the airport catchment area and those who live in adjacent areas (e.g. parts of Aberdeenshire). This is distinctive in that traffic at other UK airports tends to be mostly outbound rather than inbound, and shows the importance of the airport for inbound passengers as an alternative to road and rail transport. The breakdown of all passengers by their place of residence is 14% (118,000) from overseas; 41% (355,000) from the rest of the UK; and 45% (388,000) from the catchment and adjacent areas.

Figure 2.6: Inverness Airport passengers by trip purpose and place of residence, 2017



Source: CAA Data

2.25 Two thirds (67%, 572,000) of all passengers were travelling for leisure purposes, with the rest (33%, 289,000) on a business trip. Thirty percent of leisure passengers were making outbound trips, meaning most (over two thirds) of leisure passengers were inbound, 52% (297,000) from the rest of the UK and 18% (104,000) from overseas.

2.26 In contrast business passenger traffic is heavily outbound, with three quarters (75%, 216,000) of business passengers making outbound trips. One quarter of business passengers were making inbound trips, with 20% (58,000) from the rest of the UK and the remaining 5% (15,000) of business passengers from overseas.

2.27 Therefore, the three largest market segments for Inverness Airport are:

- Inbound UK leisure: 35% of all passengers
- Outbound business: 25% of all passengers
- Outbound leisure : 20% of all passengers

2.28 As set out at Table 2.3, the purpose of business trips varied by passenger residence. Outbound business trips were most commonly taken for internal company business (26% of all trips). The main other purposes were attending conferences (18%) and meetings with customers/others external to the company (16%). In contrast, most inbound business trips (29%) by passengers from elsewhere in the UK were to meet with customers/others external to the company, with a further 19% for general business purposes. Most overseas business passengers (21%) were travelling for general business purposes and a further 18% were attending conferences.

Table 2.3: Most common business trip purposes by residence, 2017

	Outbound	Inbound (rest of UK)	Inbound (International)
1st	Internal company business (26%)	Meetings with customers (29%)	Business (21%)
2nd	Attending conferences (18%)	Business (19%)	Attending conferences (18%)
3rd	Meetings with customers (16%)	Attending conferences (15%)	Internal company business (16%)

Source: CAA Data

2.29 As shown at Table 2.4, outbound leisure trips were broadly evenly split between holidays (46%) and visiting friends/relatives (42%). In contrast, a higher proportion (46%) of leisure trips by those living elsewhere in the UK was for visiting friends/relatives (VFR) than holiday (44%). More than two thirds (70%) of overseas passengers' leisure trips were for a holiday.

Table 2.4: Most common leisure trip purposes by residence, 2017

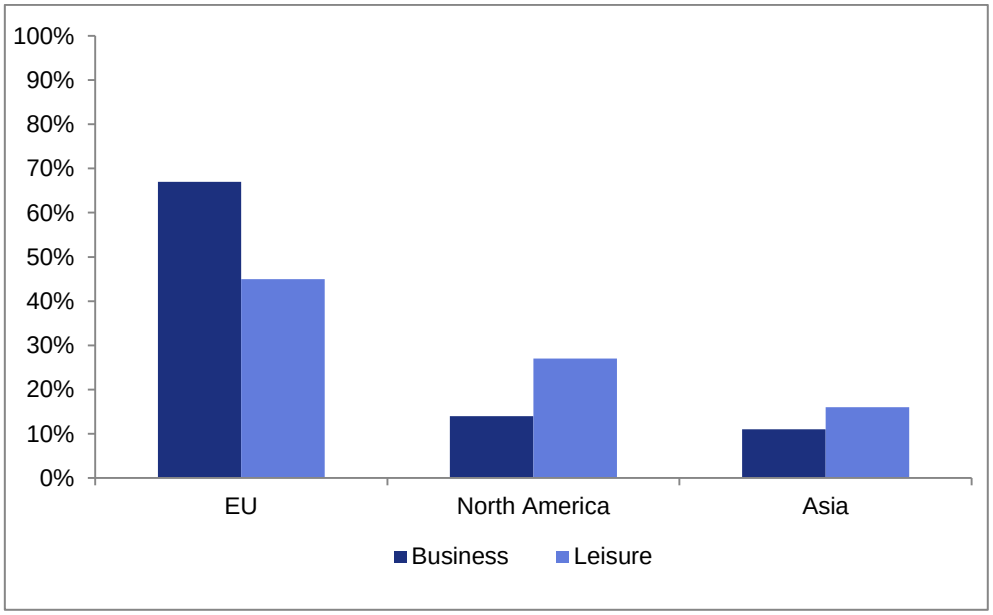
	Outbound	Inbound (rest of UK)	Inbound (International)
1st	Holiday (46%)	VFR (46%)	Holiday (70%)
2nd	VFR (42%)	Holiday (44%)	VFR (24%)
3rd	Other (6%)	Other (6%)	Other (3%)

Source: CAA Data

2.30 Figure 2.7 shows the residence of passengers living outside the UK, split by trip purpose. Over two thirds (69%) of business passengers lived in the EU, 14% in North America and 11% in Asia. The most common individual countries of residence were the Netherlands (c. 4,000 passengers), USA (2,000) and Germany (1,500).

2.31 The places of residence of overseas leisure passengers were more evenly distributed across the globe than their business counterparts. Less than half (45%) were from the EU, with 27% in North America and 16% in Asia. The most common home countries were the USA (24,000 passengers), Netherlands (16,000) and Germany (8,000).

Figure 2.7: Residence of passengers living outside the UK by trip purpose, 2017

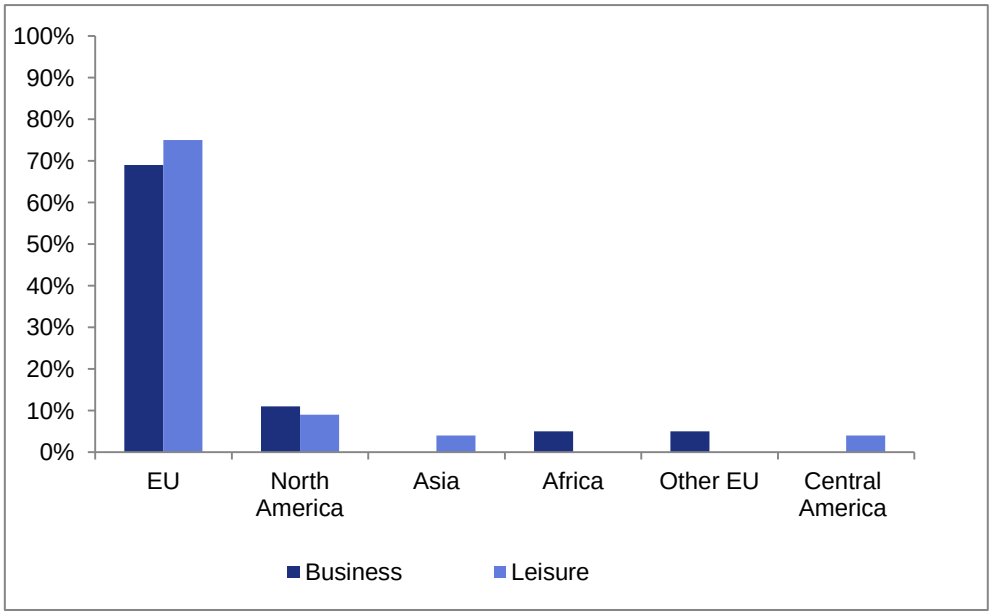


Source: CAA Data

2.32 Figure 2.8 shows the most common final destinations of outbound travellers travelling outside the UK from Inverness Airport. Some 69% of business passengers were travelling to an EU country, 11% were travelling to North America, 5% to Africa and 5% to elsewhere in Europe. The most common individual countries were the Netherlands (c. 12,000 passengers) the USA and Ireland (each with around 3,000 passengers).

2.33 Similarly, most (75%) outbound leisure passengers travelling outside the UK had a destination in the EU, 9% were travelling to North America, 4% to Central America and Caribbean and 4% to Asia. The most common individual destination countries were Spain (c. 16,000 passengers), Netherlands (c. 13,000) and the USA (around 6,000).

Figure 2.8: Final destinations of outbound travellers traveling outside of the UK by trip purpose, 2017



Source: CAA Data

2.34 Table 2.5 shows the surface origin of outbound passengers by trip purpose. The Inner Moray Firth accounted for the majority of business (63%) and leisure (59%) trips. It was followed by Moray, which accounted for 26% of business trips and 17% of leisure trips. Only a small percentage of passengers travelled from outside the Inverness Airport catchment area to the airport, although significantly more did so for leisure trips (8%) than business trips (4%).

Table 2.5: Surface origin of passengers by trip purpose, 2017

Area	% of business trips	% of leisure trips
Inner Moray Firth	63%	59%
Moray	26%	17%
Caithness and Sutherland	5%	11%
Lochaber, Skye and Wester Ross	2%	4%
Outside Inverness Airport catchment area	4%	8%
Unknown	-	1%
Total	**100%**	**100%**

Source: CAA Data

MEASURING GLOBAL BUSINESS CONNECTIVITY

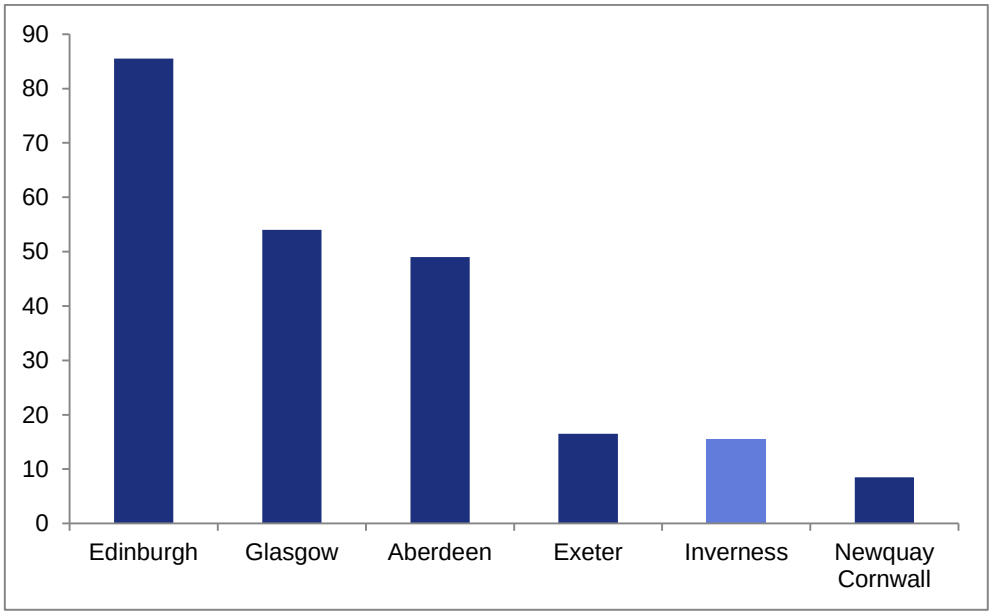
2.35 The first element of this part of the assessment was to provide a measure of the level of all year round business connectivity provided by Inverness' scheduled services. Full detail on the approach used is given at Appendix 3, and is based upon Scottish Enterprise's *Appraising the Economic Benefits of New Air Routes: Technical Report* guidelines.

2.36 Firstly the connectivity provided by direct services from Inverness as of April 2018 was assessed. This was done by producing a composite score for each direct route based on its frequency of service and the economic importance of the destination served (London, Amsterdam, Manchester, etc.). These scores were then summed to give a total for Inverness' direct routes and those of other, selected airports.

2.37 Second, connectivity was measured for the onward international connections available from these direct services within a defined time window after arriving at the airport. As in the analysis of direct services, the score for each connection (e.g. Inverness-Heathrow-New York) was weighted by the economic importance of each city for which an onward connection is available.

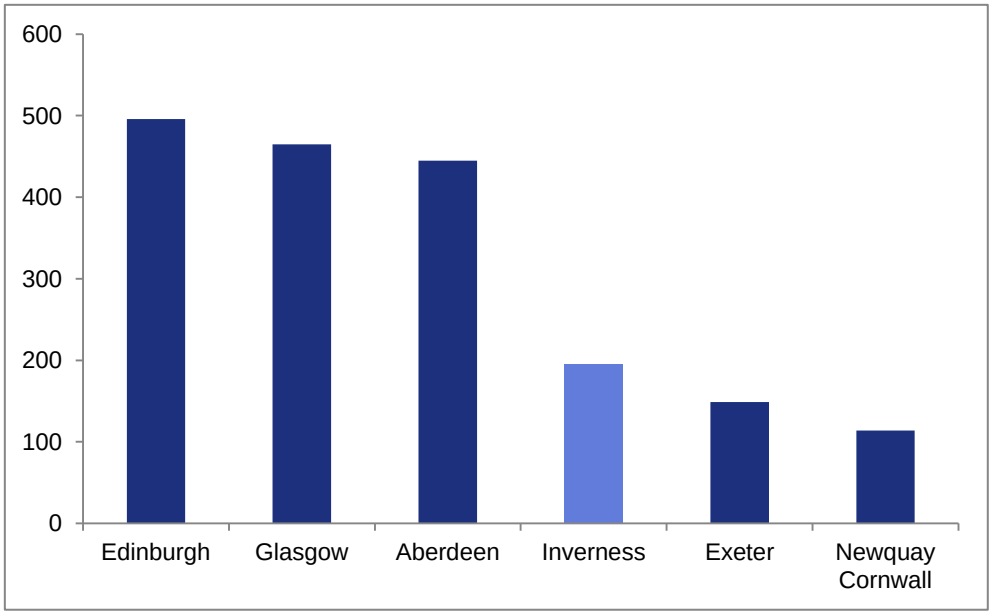
2.38 As shown at Figure 2.9, direct services at Inverness Airport have a business connectivity indice of 15.5, below that of Edinburgh (85.5), Glasgow (54.0) and Aberdeen (49.0). A comparison was also made with Exeter and Newquay Cornwall. These airports are effective comparators because they are similar to Inverness in that they are smaller, regional airports which are relatively distant from major economic centres. The level of connectivity of Inverness Airport is comparable to that at Exeter (16.5) and above that at Newquay, Cornwall (8.5). Inverness scores slightly lower than Exeter because it has only six eligible destination airports compared to nine from Exeter.

Figure 2.9: Direct flights business connectivity index



2.39 With the inclusion of useful onward connections, Inverness has a connectivity rating of 196. As shown at Figure 2.10, this is lower than the ratings for other Scottish airports Edinburgh (496), Glasgow (464) and Aberdeen (445). However, Inverness performs better than Exeter and Newquay Cornwall, which have ratings of 149 and 114, respectively. This demonstrates that the onward connections from Inverness Airport serve more economically significant cities and likely make it a more attractive departing point in comparison.

Figure 2.10: Onward connections business connectivity index



2.40 The fit between the international connections available using Inverness Airports and the needs of businesses within the Airport's catchment area was also assessed. This was done by mapping the current and potential trading markets of HIE account managed businesses against the range of international connections available for businesses using Inverness Airport.

2.41 Inverness offers the most useful connections to the Tourism and Creative Industries sectors whose key markets in Europe and North America are well served by onward connections from

Inverness' flights. The fit is less strong for Life Sciences and Technology and Advanced Engineering businesses. This reflects the relatively limited onward connections to markets in Asia and Australasia.

PASSENGER LEAKAGE FROM INVERNESS CATCHMENT AREA

2.42 In 2013, just under 493,000 passengers travelled from the Inverness Airport catchment area to use a different Scottish airport, as shown at Table 2.6. The most commonly used alternate airport was Glasgow, accounting for over 185,000 passengers (38%), followed by Edinburgh with 173,000 passengers (35%) and Aberdeen with 134,000 passengers (27%).

2.43 Most (around three quarters) of the passengers who used one of these three airports were making a leisure trip rather than a business one. However, the airport used varied by trip purpose.

2.44 More than 90% of passengers using Glasgow and over 80% using Edinburgh were travelling for leisure purposes. In contrast more than half (60%) of those who used Aberdeen were travelling on business.

Table 2.6: Usage of alternate airports by passengers travelling from the Inverness Airport catchment area, by travel purpose and domicile, 2013

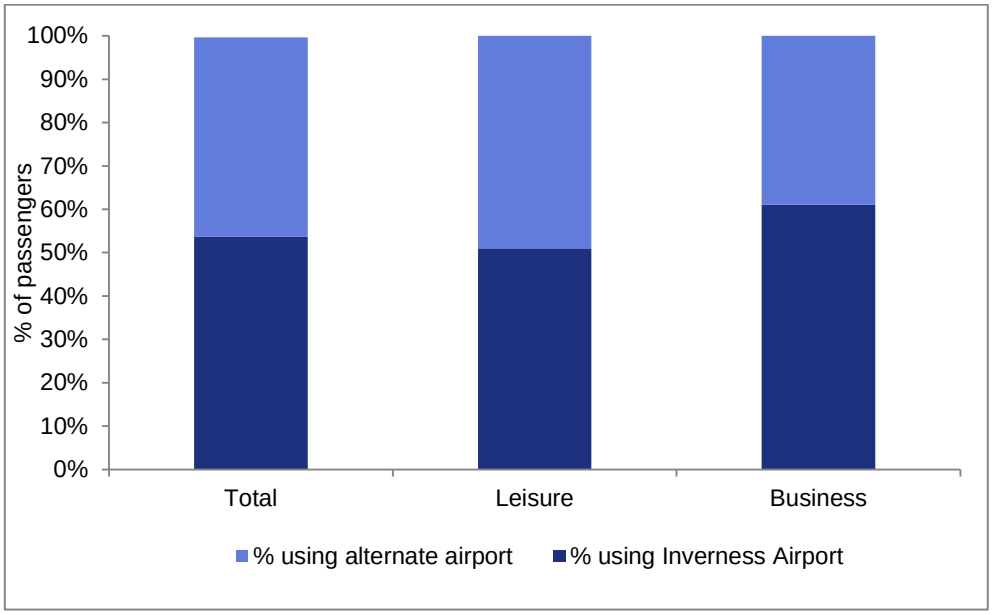
Group	Aberdeen	Edinburgh	Glasgow	Total
Business	80,248	27,094	11,248	118,591
Scotland	*61,728*	*12,282*	*5,041*	*79,051*
Rest of UK	*6,909*	*7,413*	*4,508*	*18,830*
Foreign	*11,611*	*7,399*	*1,700*	*20,710*
Leisure	53,928	145,878	174,248	374,054
Scotland	*29,573*	*76,786*	*117,456*	*223,815*
Rest of UK	*7,452*	*34,090*	*30,965*	*72,508*
Foreign	*16,903*	*35,002*	*25,827*	*77,731*
Total	**134,176**	**172,972**	**185,496**	**492,645**

Source: CAA Data

2.45 Figure 2.11 shows the usage of Inverness Airport and the usage of alternate airports by passengers travelling to/from the Inverness Airport catchment area in 2013. In total 1.062 million passenger flights were made that had a surface origin or surface destination in the Inverness Airport catchment area. Of these slightly more than half (54%) used Inverness, rather than Aberdeen, Edinburgh or Glasgow (46%).

2.46 Overall leisure passengers were more likely to use an alternate airport than business passengers with 49% doing so in comparison with 39% of business passengers. Business passengers were more likely than leisure passengers to use Inverness, likely due to the time savings this offered compared to surface travel to/from Aberdeen or the Central Belt. Foreign passengers were most likely to use another Scottish airport - and particularly those making a business trip.

Figure 2.11: Usage of Inverness Airport and alternate airports by passengers travelling from the Inverness Airport catchment area, by travel purpose, 2013



Source: CAA Data

3 QUANTIFIED ECONOMIC IMPACT ASSESSMENT

Chapter summary

- **The total employment impact of Inverness Airport, within the catchment area, is 748 FTEs, comprising 554 direct, 93 indirect and 101 induced jobs. The total impact increases to 766 FTEs for the Highlands and Islands and 916 FTEs for Scotland.**
- **The income impact of employment generated by Inverness Airport is estimated at £23.3m for the catchment area, rising to £23.7m for the Highlands and Islands and £27.1m for Scotland.**
- **Inverness Airport generates an estimated total GVA impact of £33.3m within the catchment area. This rises to £34.5m for the Highlands and Islands and £42m for Scotland as a whole.**
- **The total gross off-site visitor impacts arising in the Inverness Airport catchment area are 1,774 FTE jobs, £29m in income and £60m in GVA.**
- **The majority of visitor spend is within the Inner Moray Firth area. Passengers travelling on London routes and for holidays/short breaks account for over half of visitor spend.**
- **A high level analysis suggests the value of time savings for Inverness Airport passengers in 2017 was approximately £43m. This is split between a £22.5m economic benefit for business passenger time savings, and a £20.7m welfare benefit for leisure passenger time savings.**
- **The vast majority of the business time savings accrue to employees of Scottish based businesses, almost all of whom live and operate in the Inverness Airport catchment area.**

INTRODUCTION

3.1 This chapter provides a robust assessment of Inverness Airport's on-site impacts and inbound visitor impacts; and an indicative valuation of passenger time savings.

ON-SITE IMPACTS

Scope and method of the assessment

3.2 A quantified assessment of the on-site economic impacts of Inverness Airport was produced. It uses three measures: employment, income and Gross Value Added (GVA). The impacts encompass direct, indirect and induced effects. Impacts were calculated at three geographical levels: Inverness Airport catchment area; Highlands and Islands (i.e. HIE area) and Scotland. Please note that in some tables the column data do not sum to the totals, due to rounding.

3.3 The main source of information for the calculation of on-site impacts was a survey of businesses located on the airport site or immediately adjacent to it. Information was gathered from 21 of 25 on-site businesses, with HIAL providing an estimate of the direct employment in an additional business, based on their knowledge. Four businesses did not respond to our request for information. However, two of these are small businesses and two have little/no presence at the airport. Thus, their exclusion from the analysis will not have a significant impact on the scale of the impacts shown below.

3.4 Table 3.1 sets out the survey response rates for specific data, illustrating that at least two thirds of businesses gave us information for each of the four measures included. All participants provided their levels of employment, while most (16) gave information on staff place of residence.

Some 15 out 21 provided information on employee wages, while 14 submitted details of their purchases.

Table 3.1: Provision of key data by survey sample

Measure	Companies participating in survey	Companies providing data
Employment	21	21
Staff Place of Residence	21	16
Wages	21	15
Purchases of Goods & Services	21	14

3.5 As a result of some missing data, the study team had to estimate data for some businesses and some of the measures. The data gaps were filled through three methods. Firstly, by applying data provided to us by similar companies who had also participated in the survey. Secondly, by using secondary economic statistics, for example for specific sectors' wage levels and GVA from the latest available Scottish Annual Business Survey[2], or for the economic impacts of purchases of goods and services from the most recent Scottish Input-Output Tables[3]. Thirdly, by using our own experience and knowledge from undertaking similar economic impact assessments.

3.6 Table 3.2 describes the main activity of the businesses that were surveyed. The classifications used are from the Scottish Annual Business Survey.

Table 3.2: Survey respondents

Classification	Number of businesses
Support Activities for Transportation	7
Air Transport	4
Retail	3
Food and Beverage Service Activities	2
Rental and Leasing Activities (car hire)	2
Public Administration	1
Services to Building and Landscape Activities	1
Education	1
Total	**21**

3.7 Support Activities for Transportation was the most common type of business, and includes both Inverness Airport's own operations as well as those of HIAL. The second most common category was Air Transport. Detail on the approach to the impact calculations is set out at Appendix 1.

Employment impacts

Direct on-site employment

3.8 There are 578 direct posts in the 22 on-site businesses covered by the analysis. Almost all (573) are permanent all year round positions, and just five are seasonal. Of the 573 all year round permanent posts, the vast majority (480, 84%) are full-time (working 30 or more hours per week). The remaining 93 posts are part-time (working less than 30 hours per week). Most (13) of the businesses have both full-time and part-time posts. In addition, four companies use contractor staff. They are supplied by a third party and work on-site on a permanent basis. There are 16 such posts. Four are full-time and the other 12 part-time. Table 3.3 sets out total direct on-site employment in the 22 businesses, expressed in Full-Time Equivalent (FTE) jobs.

[2] http://www.gov.scot/Topics/Statistics/Browse/Business/SABS

[3] http://www.gov.scot/Topics/Statistics/Browse/Economy/Input-Output

Table 3.3: Total employment in on-site businesses

Category	FTE jobs
All year round permanent	542
Seasonal	2
Permanent contractor	9
Total	**554**

3.9 Combining the year round permanent, seasonal and permanent contractor employment gives a total of 554 FTE jobs. That represents an average (mean) of 25 FTE per business. However, the median is much lower (9 FTE). That is because a small number of businesses (five) account for a large proportion of total employment (almost 400 FTE). In contrast over half (12) of the businesses have fewer than 10 FTE.

3.10 The business survey obtained information on the place of residence of staff and permanent contractors and the results are set out in Table 3.4. They have been grossed up to the full complement of staff working on-site from survey responses provided by 16 of the 22 companies.

Table 3.4: Place of residence of permanent on-site workers (direct posts and contractors)

Area	Number of staff	Share
Inverness & Nairn	431	73%
Moray	83	14%
Easter Ross	57	10%
Other Highland	12	2%
Badenoch & Strathspey	4	1%
Outside the Airport Catchment Area	2	<1%
Total	**589**	**100%**

3.11 The Table shows that almost three quarters (431) of the posts are held by residents of Inverness & Nairn. Most other workers live either in Moray (one in seven) or Easter Ross (one in ten). Just two posts are held by people who live outside the airport's catchment area[4].

Total employment impacts

3.12 Total on-site employment impacts are shown at Table 3.5. The total impact within the Inverness Airport catchment area is 748 FTE jobs. Almost three quarters of these (554 FTE) are direct jobs. The remainder are spread broadly evenly between indirect (93 FTE) and induced employment (101 FTE). Expressed simply, for every three direct FTE jobs around a further one is generated in the wider catchment area economy.

Table 3.5: Total on-site employment impacts (FTEs)

	Airport Catchment Area	Highlands and Islands	Scotland
Direct	554	554	554
Indirect	93	104	204
Induced	101	109	159
Total	**748**	**766**	**916**

3.13 The total impact in the Highlands and Islands (766 FTE) is not much higher than in the catchment area. This reflects, in particular, on-site businesses' very limited purchases from Highlands and Islands suppliers located outside the airport catchment area.

3.14 The total impact for Scotland is 916 FTE jobs. Some 60% of this is from direct impacts (554 FTE) with the other 40% (363 FTE) being indirect or induced employment. For every three direct FTE jobs around a further two is generated in the wider Scottish economy.

[4] The catchment area covers the whole of the Highland Council and Moray Council areas, including Caithness and Sutherland and Lochaber, Skye and Wester Ross.

Income impacts

3.15 Total on-site income impacts are set out at Table 3.6.

Table 3.6: Total on-site income impacts (£m)

	Airport Catchment Area	Highlands and Islands	Scotland
Direct	18.9	18.9	18.9
Indirect	2.1	2.4	4.7
Induced	2.2	2.3	3.4
Total	**23.3**	**23.7**	**27.1**

3.16 Total direct income, covering both staff and permanent on-site contractors, is £18.9 million. This equates to an average (mean) of £34,200 per FTE, higher than the 2017 mean gross annual pay for full-time employee jobs in both Scotland (£33,400) and Highland (£31,700)[5]. However, the median average figure per business is lower (£25,200) than the mean (£34,200). That is because the mean is inflated by the relatively high income levels of staff in a small number of the businesses.

3.17 The total income impact in the airport catchment area is £23.3 million. The figure for the Highlands and Islands is only slightly higher (£23.7 million). This reflects that the total employment impacts in the two areas are very similar. The total income impact for Scotland is slightly over £27 million.

3.18 The mean wage for both indirect and induced jobs is lower than for the direct ones. As a result the mean wage per FTE for all jobs (direct, indirect and induced) is £31,100 for the airport catchment area, £30,900 for the Highlands and Islands and £29,600 for Scotland as a whole. The mean wage figure for Scotland is lower than for the other two areas, which is because of the higher proportion of total Scottish employment that is indirect or induced rather than direct.

GVA impacts

3.19 It should be noted that, unlike the other on-site businesses, HIAL and Inverness Airport receive government grants and we have therefore excluded them from the direct GVA calculations. We have, however, estimated the GVA relating to the two organisation's indirect and induced impacts.

3.20 Table 3.7 sets out total GVA impacts and shows that total GVA impacts within the airport catchment area are around £33 million. Once again, the figure for the Highlands and Islands (£34 million) is quite similar whilst the Scottish figure is higher (£42 million).

Table 3.7: Total on-site GVA impacts (£m)

	Airport Catchment Area	Highlands and Islands	Scotland
Direct*	24.5	24.5	24.5
Indirect	4.4	5.1	10.1
Induced	4.4	4.9	7.3
Total	**33.3**	**34.5**	**42.0**

**Excludes direct GVA for HIAL and Inverness Airport*

Summary

3.21 In summary, in the airport catchment area the total impacts are 748 FTE jobs, c£23 million of income and £33 million of GVA (excluding direct GVA for HIAL and Inverness Airport). The figures are very similar for the Highlands and Islands as a whole, e.g. just 18 more FTE jobs than in the catchment area. The impacts for Scotland are over 900 FTE jobs, £27 million income and £42 million GVA. Table 3.8 summarises the preceding analysis.

[5] Source: ONS Annual Survey of Hours and Earnings 2017

Table 3.8: Total (direct, indirect and induced) on-site impacts

	Airport Catchment Area	Highlands and Islands	Scotland
Employment (FTE)	748	766	916
Income (£million)	23.3	23.7	27.1
GVA (£million)*	33.3	34.5	42.0

**Excludes direct GVA for HIAL and Inverness Airport*

INBOUND VISITOR IMPACTS

Introduction

3.22 The consultancy team produced a quantified assessment of the inbound visitor impacts to demonstrate the economic benefits Inverness Airport provides to its catchment area. This section provides a summary of the more extensive analysis set out at Appendix 4.

3.23 Economic impact was first calculated by estimating inbound visitors' expenditure in the catchment area. Expenditure estimates were calculated using passenger numbers, length of stay and origin details from the 2017 CAA Passenger Survey and average per night expenditure figures from the Great Britain Tourism survey and International Passenger Survey. From the visitor expenditure figure, multipliers were used to calculate gross employment, income and GVA impacts. The impacts calculated are gross as it is not possible to account for the deadweight of inbound visitors who would still have visited the area in the absence of Inverness Airport. Full details of the methodology used are given at Appendix 4.

Visitor spend

3.24 Table 3.9 shows that the estimated total spend of passengers in the Inverness catchment area was £89 million or £351 per inbound passenger in 2017. Reflecting their larger share of passengers, routes from London had the highest levels of visitor spend and accounted for over half (56%) of total visitor expenditure. Gatwick, which also had the largest number of passengers, had the highest spend of all routes at £20.2 million or just under one quarter of total visitor spend.

Table 3.9: Total visitor spend by route

Route	Spend (£million)	Share
Gatwick	20.2	23%
Heathrow	14.7	17%
Luton	14.0	16%
Bristol	11.3	13%
Amsterdam	10.3	12%
Birmingham	4.9	6%
Belfast	4.7	5%
Manchester	4.5	5%
Dublin	2.3	3%
Kirkwall	0.7	<1%
Stornoway	0.6	<1%
Sumburgh	0.6	<1%
Total	**88.7**	**100%**

3.25 Table 3.10 shows visitor expenditure split by route and trip type. As is to be expected, visitors on different types of trips have different levels of expenditure and the analysis showed that holiday/short break visitors accounted for nearly 60% of total visitor spend. The remainder was split between passengers visiting friends/relatives (33%) and passengers on business trips (10%). Reflecting differing usage of routes, some routes had a higher proportion of business or visiting friends/relatives expenditure. For example, 97% of visitor spend of passengers on the Sumburgh route came from those visiting friends/relatives and 49% of visitor spend on the Stornoway route came from business travellers. Other routes, such as Heathrow (75%) had a particularly high percentage of holiday/short break visitor spend.

Table 3.10: Visitor spend by type

Route	Holiday/short break	VFR and other Leisure	Business
Gatwick	43%	46%	11%
Heathrow	75%	19%	6%
Luton	61%	30%	9%
Bristol	62%	30%	9%
Amsterdam	74%	17%	9%
Birmingham	51%	33%	16%
Belfast	29%	60%	12%
Manchester	44%	36%	20%
Dublin	68%	30%	3%
Kirkwall	18%	74%	9%
Stornoway	25%	26%	49%
Sumburgh	1%	97%	2%
All routes	**57%**	**33%**	**10%**

3.26 In terms of expenditure within sub-areas of the Inverness catchment area, the Inner Moray Firth had the highest levels of visitor spend at £54.9 million or 62% of total spend. The remaining spend was split fairly evenly between Lochaber, Skye and Wester Ross (£11.7 million), Moray (£11.2 million) and Caithness and Sutherland (£10.8 million). Reflecting the differing attractions of the sub-areas, there were significant variations in the proportion of visitor spend by trip type. For example, 77% of visitor spend in Lochaber, Skye and Wester Ross came from holiday/short break visitors, whilst 59% of spend in Moray came from passengers visiting friends and relatives.

Gross economic impact

3.27 From visitor spend, gross impacts within the Inverness Airport catchment area in 2017 were calculated to be:

- Employment (FTE jobs): 1,838;
- Income: £30 million;
- GVA: £62 million.

3.28 As shown at Table 3.11, gross impacts by route reflected the level of visitor spend attributed to each route, with the London routes accounting for the majority of impacts.

Table 3.11: Gross total (direct, indirect and induced) economic impacts in catchment area

Route	FTE jobs	Income (£million)	GVA (£million)
Gatwick	420	6.9	14.3
Heathrow	302	4.9	10.2
Luton	290	4.7	9.8
Bristol	234	3.8	7.9
Amsterdam	212	3.4	7.2
Birmingham	102	1.7	3.4
Belfast	97	1.6	3.3
Manchester	95	1.5	3.2
Dublin	46	0.8	1.6
Kirkwall	15	0.3	0.5
Stornoway	13	0.2	0.4
Sumburgh	11	0.2	0.4
Total	**1,838**	**30.0**	**62.2**

Estimate of gross off-site visitor impacts

3.29 As spend at the airport has already been captured within the on-site impact assessment, these were netted off from the inbound visitor impact assessment to prevent double counting. Therefore the

following on-site impacts, which were considered to be attributable to inbound visitors, were deducted from the total inbound visitor impact:

- 100% of car hire impacts;
- 75% of retail;
- 60% of food and beverage.

3.30 This then resulted in total gross off-site visitor impacts of:

- Employment (FTE jobs): 1,774;
- Income: £29 million;
- GVA: £60 million.

VALUATION OF PASSENGER TIME SAVINGS

Scope of the assessment

3.31 One of the benefits for those flying to/from Inverness Airport is the time savings compared to using other means of accessing the airport's catchment area. The alternatives would be to make the trip wholly by surface transport; or to fly to/from another Scottish airport and then travel to/from the catchment area by surface transport.

3.32 The total difference in travel costs made by Inverness Airport would require more detailed research than is possible within the scope of this study. We have therefore focused simply on time savings to current Inverness Airport passengers from being able to fly directly to/from the catchment area rather than travelling via Aberdeen, Edinburgh or Glasgow airports. The picture is however more complex than this. A full appraisal would need to account for issues such as:

- The possibility that fares would be lower on routes from other Scottish airports than on Inverness services. These financial savings would offset some of the additional journey time involved.
- Flight times to many destinations would be shorter from Aberdeen, Edinburgh or Glasgow and therefore, to an extent, offset the longer surface journey times.
- On the other hand, using airports other than Inverness Airport would result in extra financial costs for travel (e.g. vehicle fuel) and, for some travellers, the cost of overnight accommodation.

3.33 Importantly, in reality the lack of an airport at Inverness would lead to some current trips to the catchment area no longer being made at all. However, without detailed primary research with passengers there is no basis to estimate the number of current trips that would be lost.

3.34 Our high level analysis assumes, in effect, that all current trips to the catchment area via Inverness Airport would still be made if the Airport did not exist. The effect of this is to overstate the actual total value of journey time savings. That is because in transport appraisal, time savings for trips that would no longer be made are valued at 50% of those that would continue to be made, which is termed the 'rule of half'.

Results

3.35 Using the approach described in Appendix 5, the total value of time savings to the 2017 Inverness passengers is approximately £43 million. Table 3.12 sets out the results for business passengers. The total value of time savings for business passengers is £22.5 million. This represents the economic benefit of the increased productivity of these passengers through spending more time

working and less time travelling. The largest amount (around £16 million) accrues to Scottish business passengers, with a further £5.4 million of benefits to business passengers residing elsewhere in the UK. The benefit to foreign business passengers is relatively low (£1 million), largely because they are much fewer in number than the other two market segments.

Table 3.12: Value of time savings to Inverness Airport business passengers

Residence	Average Time Saving Per Passenger (h-m)	Total Hours Saved (000)	Value of Time Savings (£ million)
Foreign	2-21	35	1.0
Rest of UK	2-20	135	5.4
Scotland	1-53	406	16.1
Total	**-**	**576**	**22.5**

3.36 Table 3.13 provides the same analysis for leisure passengers. The total value of time savings for leisure passengers is £20.7 million. This is the value these individuals attach to spending more time on other activities (e.g. visiting friends and relatives) rather than travelling. This represents what is termed a welfare benefit, rather than an economic benefit. The largest amount (£10.6 million) accrues to UK residents living outside Scotland, with around a further £6.4 million to Scottish residents. The value of time savings for the former group is much larger than for Scottish residents because that group contains a much larger number of passengers.

Table 3.13: Value of time savings to Inverness Airport leisure passengers

Residence	Average Time Saving Per Passenger (h-m)	Total Hours Saved (000)	Value of Time Savings (£ million)
Foreign	2-40	277	3.7
Rest of UK	2-40	789	10.6
Scotland	2-48	481	6.4
Total	**-**	**1,547**	**20.7**

3.37 In total, Scottish residents, almost all of whom live in the Inverness Airport catchment area, receive just over half (around £22 million) of the total time savings benefits for both business and leisure passengers. Most of these (around £16 million) are benefits to business passengers by increasing the amount of productive working time by reducing time spent travelling. The vast majority of this economic benefit accrues to workers, and therefore businesses, in the Inverness Airport catchment area.

4 WIDER CATALYTIC AND SOCIAL IMPACTS

Chapter summary

- **Inverness Airport has been critical for regional economic development and growth, contributing to confidence in the local economy, supporting businesses with day-to-day operations and attracting and retaining staff, helping to attract inward investment, supporting the tourism industry and contributing to population growth and retention.**
- **The airport is important for allowing businesses to access domestic and foreign markets, with around one in seven businesses surveyed using the airport at least weekly for inbound travel, and one in 15 for outbound travel.**
- **Businesses in the tourism, retail and production sectors tend to use the airport most regularly.**
- **Businesses view Gatwick, Heathrow and Amsterdam as the most important routes for both outbound and inbound travel.**
- **Inverness Airport has a positive impact on business' ability to sell to the rest of the UK and internationally. The airport also increases their access to external expertise.**
- **The main identified business benefits of the current air services are reduced travel time and access to larger markets.**
- **Businesses in the region report road and digital connectivity to be key challenges, with air connectivity relatively low on the list.**
- **There are strong business social benefits as a result of the airport – particularly having enhanced travel options for staff/customers, bringing more tourists to the region, reducing the sense of isolation for communities, and raising the profile of the region.**
- **Enhancements to existing routes, rather than new routes, are more of a priority for businesses, particularly on the London routes e.g. double daily flights to Heathrow, ability to make a business day trip from a London airport.**
- **Business priorities for new routes included a direct link to a main European hub (e.g. Frankfurt, Paris, Milan) or direct routes to Scandinavia.**
- **Improvements could be made to on-site services such as car parking and the arrivals terminal, while the forthcoming rail halt at Dalcross provides opportunities through increased access to the airport.**
- **Whilst businesses anticipate strong positive impacts from the dualling of the A9 and A96 and rail improvements, these are unlikely to influence their use of the airport.**

INTRODUCTION

4.1 This chapter presents the findings of the study's consultation programme which comprised an online survey of businesses and in-depth telephone interviews with a number of larger business users of the airport (169 businesses in total) and key stakeholders. Key sectors represented by business participants included accommodation and food services (a proxy for the tourism sector, 18% of respondents); agriculture and production (17% each); construction (14%); retail (12%); arts, entertainment and recreation (12%); and professional, scientific and technical (8%).

4.2 In terms of geographic location, a third were from the Inner Moray Firth, just under one fifth were from Lochaber, Skye and Wester Ross (18%) and Moray (16%) respectively, and just over 10%

from Caithness and Sutherland. The island communities of Shetland, Orkney and the Outer Hebrides accounted for 21% of business respondents.

4.3 The aim of the consultation programme was to gain an understanding of the wider catalytic impacts and benefits derived from the airport for business, the wider economy and the population living and working in the region.

4.4 The chapter presents the perspectives of all consultees and survey respondents on: the extent to which the airport contributes to economic growth in the region; the current services offered by Inverness Airport; the impact of the airport on business and sector performance; the perceived social impacts associated with the airport; and future priorities for air services from Inverness.

CONTRIBUTION TO ECONOMIC GROWTH

4.5 There was an overwhelming consensus that Inverness Airport has always been critical for the growth of the city and surrounding area and that it continues to be important across a number of areas of the economy that are important for the future growth and prosperity of the area and wider region.

4.6 Route development in recent years indicates that the importance of Inverness Airport is growing and has been a reflection of confidence levels in the local economy. It supports the attraction of inward investment and improves communication channels between businesses in the region and their HQs elsewhere. The airport is cited in every inward investment proposition by HIE and it is felt that being able to cite international routes provides the right image and messaging about the region to potential investors.

4.7 Businesses in particular cited the importance of the airport and its routes for facilitating a wide range of business interactions. The airport services help retain businesses in the area and region as good air connectivity supports their day-to-day external facing operations, in particular, customer, supplier and market development activity. This includes, for some businesses, the exporting of goods, e.g. flying air freight to overseas markets.

4.8 Businesses also report that good air connectivity has allowed them to more easily attract staff to the region. Attracting talent is complex and involves more than offering exciting job and career opportunities. Good transport links are key; the airport allows staff to easily visit family and friends outwith the area when needed, helping staff feel settled and allowing businesses to retain skills and talent.

4.9 Tourism is a big and important sector and much reliant on the airport as reported by most of those consulted. Access to the region has to be easy otherwise visitors will go elsewhere. Inverness itself is very much a tourist city and would not have grown so fast without the airport. The airport continues to play a key role in attracting tourists (and influencing tourism operators) and their spend into the region. Consultees report a growing number of tourists from wealthier markets – the whisky, golf and shooting/fishing offer – which have also boosted private aviation making Inverness one of the busiest airports for private aviation in the UK. In 2017, over 6,000 general aviation passengers landed at Inverness Airport. The airport has also helped build Inverness and Aviemore into a successful and more attractive business conference venue with ongoing growth potential.

4.10 The development and growth of other sectors would have been very difficult without the presence of the airport. For example, it opens up connections to the west coast of the USA for the Life Sciences sector; Aquaculture has a dispersed regional market so flights to Shetland and Orkney are important as the new route to Bergen is also expected to be. For the Oil and Gas sector, aside from connections to Shetland the airport enables wider travel for the industry through London to e.g. Venezuela and Azerbaijan.

4.11 Businesses and stakeholders stated that the existence of the airport raises the region's profile and gives a positive impression of working and doing business there and *'a sense of being connected*

with the outside world'. There is also a consensus that the airport helps retain population in the area and support a viable community, i.e. one where there is access to FE and HE education, attracts students to the area and retains young people for whom connectivity is important. The airport is also growing in importance in attracting international students and plays a key role in supporting the University of the Highlands and Islands (UHI), an anchor institution in the region.

4.12 The impact on people's perceptions is also important; the airport induces confidence in the area as a place to live even for non-users of its services, as there is a perceived value in knowing it is there if required.

4.13 The airport itself is a source of well-paid high quality jobs across a range of functions and there are opportunities for further development of jobs on-site if the number of passengers using the airport further increases and reaches the 1-1.25 million levels. This would attract interest from a range of hotel and retail operators which would improve on-site facilities, and would, in turn, attract more passengers, jobs and employment.

4.14 The impacts of the airport also extend beyond Inverness. Skye, Caithness and Moray have benefited in particular as a result of the onward global connections out of Heathrow and Amsterdam currently served by Inverness Airport.

4.15 The airport is vital for business travel from Orkney, Shetland and the Outer Hebrides for organisations like the Scottish Fire and Rescue Service, Police Scotland and the NHS as well as other public sector organisations like local authorities and HIE. Importantly, business travellers inbound to Inverness are able to do a day trip.

4.16 For the wider region there is a view that the airport is becoming more attractive to more distant parts of its catchment area, e.g. Caithness. Compared to Aberdeen Airport, Inverness has cheaper parking, lower fares to some destinations and better timings for some flights.

4.17 There is agreement that the fundamental problem for the region, however, is the ageing population and out-migration of young people. The ongoing development of Inverness Airport will be an important contributor, in some part, to reversing this trend.

THE AIRPORT SERVICES

4.18 This section presents consultees' views on the routes and services currently on offer at the airport.

4.19 Most stakeholders acknowledged the challenges in retaining and improving the route network over the past few years but the general perception is that the underlying trend has been one of improvement. It is widely agreed that the key routes are those to London followed by Amsterdam and Manchester for both forging and maintaining business links and facilitating inbound tourism.

4.20 This was also borne out by the businesses surveyed – London Gatwick (57% of businesses), London Heathrow (52%) and Amsterdam (34%) were the most important routes (businesses were asked to pick up to three routes). Manchester and Birmingham flights are also considered to be important for the region and will be more so in the future in the light of the Northern Powerhouse initiative and similar developments planned in the Midlands. Both initiatives aim to bring more jobs and attract more inward investment to the areas thus providing possible business opportunities for Highlands and Islands based companies.

4.21 From a business perspective the airport is considered crucial for accessing both domestic and foreign markets. Just over a third surveyed export their goods or services and the top export markets were mainland Europe (of which Germany and France were most common) and the US. Parts of Asia,

including China, and the rest of the UK were also important markets and may become more significant post Brexit.

4.22 On the whole, the Airport is more important to the regional business base for inbound travel rather than outbound travel, in line with CAA data in Chapter 2. Thirteen percent of businesses surveyed use the Airport at least weekly for inbound travel, many of whom are tourism businesses whose customers use the airport, compared with 6% for outbound travel. Those businesses that use the airport most regularly tend to be in the retail, tourism (for inbound visitors) and production sectors.

4.23 Around one third of surveyed businesses use the airport's routes to connect with onward flights or onward travel, e.g. train. Onward travel was particularly common for the London Gatwick and Heathrow routes to other parts of London and the South East, and the Amsterdam route for mainland Europe, particularly Germany, and also parts of Asia. Less common but still significant was using the Birmingham route for onward travel to the Midlands, Bristol to the South West, and Manchester for the North West.

4.24 Businesses were asked to rate the airport's services against a number of factors. Overall the airport scored an average 3 out of 5 for the provision of its services. The number of days of operation was rated slightly higher at 3.1, with frequency of flights and range of destinations both rated 2.9. Timetabling and ability to make day returns was rated slightly lower at 2.8 with timings for onward connections rated the lowest at 2.6.

4.25 Cited by many of those consulted as a gap in service provision is the inability for business travellers to do day trips inbound from London and similarly, in winter Shetland travellers cannot do a day trip to Inverness for business, leisure or visiting friends or family. The following illustrate some of the comments made about timetabling, destinations and flight frequency which may need to be addressed in the future:

'Would like to see a good central European connection, Frankfurt, Geneva, Milan as options, on a year round basis'

'Not enough early outbound, late return flights to/from London'

'There is only one flight per day to Heathrow and the time is inconvenient, there is also only one early flight to Gatwick and there is not one that can leave a little later to avoid a 4am start.'

'More options would improve utility - often we end up using Aberdeen'

4.26 With respect to routes to and from the islands, these are considered a lifeline for both individuals and businesses alike. However, the key issue is the high price of fares which limits their usage, especially on the Shetland service. In the main it is felt that it is mostly the public sector and large corporates that can afford to use these flights.

4.27 There is a recognition that the impacts associated with the airport decay the further away you are from the airport. For example, there aren't likely to be many impacts for Lochaber as Fort William is almost equidistant to Inverness and Glasgow airports. Lochaber travellers prefer the latter because of the much greater range of services available. In Caithness impacts are limited by the availability of flights from Wick John O'Groats Airport, and the downside of a 2.5-3 hour drive from there to Inverness Airport. For the island communities, particularly Shetland and the Outer Hebrides, they will tend to bypass Inverness and fly straight to the Central Belt.

4.28 In terms of leakage there is still use of other airports for a variety of reasons, but time and cost are the main factors. Aberdeen is Inverness' biggest competitor for business passengers and is likely

to be used instead of Inverness for its choice of routes. This can only really be addressed by replicating the type of services available from Aberdeen, Glasgow and Edinburgh.

4.29 The CAA data presented in Chapter 2 reflects the findings from the business survey. The vast majority of surveyed businesses (84%) use other Scottish airport(s), as well as Inverness Airport, for outbound or inbound (business visitors/customers) travel. Of these businesses, the majority use Glasgow, Edinburgh and Aberdeen Airport. Very few use Dundee Airport as an alternative to Inverness Airport.

4.30 Consultees were of the view that to increase the impacts generated by the airport, it was important to secure the most appropriate routes, i.e. ones that are complementary rather than competitive. However, the challenge will be to attract new routes that are sustainable.

4.31 It was also felt that although the airport operation is well respected locally, the infrastructure is struggling as a result of its success. It is important that, as the airport develops, it also gets the overall customer experience right to encourage repeat use.

4.32 In terms of the airport facilities both businesses and stakeholders pointed out a number of issues with the current set-up. Namely, poor public transport links from Inverness to the airport, insufficient short stay car parking, a long walk to and from the terminal building, and the quality of the arrivals terminal has been cited as looking temporary and providing poor first impressions to business and leisure visitors alike. The departure areas have also been highlighted as often struggling to cope with capacity especially on busy departure days.

BUSINESS IMPACTS

Business development, customers and sales

4.33 This section presents those areas where the airport specifically impacts businesses. As Figure 4.1 below shows there are a number of significant impacts on business that can be attributed to the airport. Firstly, business' ability to sell to the rest of the UK (53% of respondents) and internationally (47%). Nearly half (46%), and medium and large sized businesses in particular, also reported that the airport has had a significant impact on their ability to access external expertise.

4.34 Other positive impacts reported include staff productivity, recruitment and retention, and the securing of business investment. In terms of business benefits resulting directly from use of the airport's services over half (52%) of businesses reported that the most significant benefit was reduced travel time.

Figure 4.1: Positive/significantly positive business impact of Inverness Airport

4.35 Consultees are of the view that the airport contributes in a positive way to business collaboration and partnerships through improving the level of business development activity possible, e.g. supplier visits, meetings and industry networking south of the border and beyond. The airport also acts as a gateway for both tourist customers (including those arriving by private plane) and business customers, e.g. as part of the burgeoning events and conference market in Inverness and the increasingly popular North Coast 500 route.

4.36 Specific growth sectors also rely on the airport, e.g. Life Sciences for international travel allowing staff and suppliers to move between Inverness and the USA. Similarly, the airport is important for facilitating international travel for oil and gas supply chain companies. The airport is increasingly important for the food and drink businesses who aside from the big players (whisky distilleries), are building on their digital presence with face-to-face meetings including in non-UK markets. Aquaculture and renewables and small niche creative industries businesses also rely on the airport for accessing customers and key markets.

Staffing and skills – recruitment and retention

4.37 Inverness Airport also has a positive impact on human resources, including improved productivity through reduced travel time and maximising the working day, and cost savings resulting from easier recruitment. Over one third (36%) of businesses reported that staff productivity was positively impacted by the airport, while for a similar proportion (34%) the airport has positively impacted their ability to attract and retain staff to the business and to the wider region. For the tourism sector in particular, the airport helps to attract and retain hospitality staff that are able to easily visit friends and family using the airport and its connections.

Connectivity

4.38 Businesses in the region are facing a number of challenges, particularly around infrastructure, that can create disadvantage and impact on competitiveness. It is well recognised that road and digital connectivity are key business challenges in the Highlands and Islands and this was confirmed by the businesses surveyed as shown in Table 4.1 below. Businesses were given the following eight challenges and asked to rate the extent to which they are currently facing each one.

Table 4.1: Key challenges currently facing the business (1=not at all, 5=very much so)

Business challenges	Average rating
Poor road connectivity	3.4
Poor digital connectivity	3.3
Poor rail connectivity	3.1
Increasing/growing sales	3.1
Accessing/growing new markets	3.0
Accessing suppliers	3.0
Poor air connectivity	3.0
Staff recruitment/retention	2.6

4.39 As a business challenge air connectivity is not as prevalent as road and digital connectivity, although it is still a challenge for many businesses. Not surprisingly, it was cited as more of an issue for large businesses, who are more likely to be regular users of the airport and have a need for onward air connections for international business travel.

4.40 Stakeholders on the other hand are of the view that retaining young people in the region and accessing the required skills for business is the top priority. Alongside the greater challenges of road and digital connectivity are concerns around bank closures and business rates, with air connectivity more of a concern for the tourist sector and those travelling south of the border for business purposes.

SOCIAL IMPACTS

4.41 Most stakeholders and a large proportion of businesses were of the view that the airport is a very significant factor in contributing to population retention and growth. The Highlands and Islands attracts people who are retiring, working in business, setting up a lifestyle business or even high net worth individuals who live in the region and commute to work elsewhere. Air connectivity allows them to keep in touch with family, friends and customers and suppliers elsewhere. Table 4.2 presents the social benefits cited by businesses in particular.

Table 4.2: Social benefits as a result of Inverness Airport

Social benefit	% of businesses
Enhanced travel options for staff, customers, individuals and visitors	83%
Increased visitor numbers to the wider region	72%
Reduced isolation and remoteness for communities	67%
Greater profile of the wider region	64%
Increased visitor numbers to the Inverness area	61%
Greater profile of Inverness city	50%
Increased vibrancy of town centres and rural communities	39%

4.42 The airport improves transport options for a business' staff and visitors, reducing their travel time and enhancing the quality of working life and the visitor experience. It also increases the number of visitors to the Highlands and Islands, which creates jobs and wealth in local communities.

4.43 For those more distant communities, flights to and from Inverness allow people to travel to visit friends and family, for holidays, for events and social outings and for hospital treatment, thus reducing sense of isolation and remoteness.

4.44 Increased connectivity also helps to challenge negative perceptions about the region as a whole and allows for more active towns and communities. Overall it is felt that the airport helps to enhance the quality of life and allows for a better work-life balance.

4.45 This is reflected in the following comments made by consultees.

'It reduces the size of Scotland. It opens up the Highlands and Islands to tourism, so high end tourists can fly to Inverness and meet the cruise ship at Invergordon. We notice an increase in international visitors during the summer schedule'

'Inverness Airport adds to the general vibrancy of Inverness and the region'

'Staff feel less isolated, there are increased incomers from France, Spain, South of England, and better access to graduates in [business's sector]*'*

'Enhanced travel options and reduced isolation. The airport has a tremendous impact on making the region more attractive for population growth and retention'

FUTURE PRIORITIES FOR THE AIRPORT AND SERVICES

Routes

4.46 Businesses were asked about future priorities in terms of new and existing routes. In terms of new routes, priorities for businesses and stakeholders are more direct links to main European hubs, with Germany (Frankfurt) given it is a major inbound visitor market, France (Paris), Italy (Rome, Milan), and Spain (Madrid) to connect with South America and attract inbound Spanish visitors.

4.47 A number of businesses also felt that direct routes to Scandinavia (Norway, Sweden) were a priority to support businesses in aquaculture and renewables. A number of stakeholders also commented that in light of Brexit, direct routes to Germany and France may become more important for some businesses wishing to/currently trading in mainland Europe, and need to be more fully considered.

4.48 More routes within the UK were also mentioned by businesses. The most common new UK destinations prioritised by businesses included Edinburgh, Glasgow, Cardiff, Southampton and Newcastle. Stakeholders acknowledged, however, that public sector effort and/or monies would be required to subsidise flights from Inverness to the central belt as the road/train alternative is very competitive.

4.49 In general, however, the vast majority of consultees tended to prioritise enhancements to existing routes over establishing new routes. There is the sense that the business base has adapted to the existing route schedule from Inverness and currently 'make do' with the existing destinations, and that the links to Heathrow and Amsterdam make substantial onward connections available to mainland Europe, Asia and the USA. As one business said:

'Maintaining the existing routes for our customers is more important than new routes'

4.50 The most common business priority for enhancing existing routes was increasing the frequency of flights between Inverness Airport and Heathrow. In particular, businesses value the double daily flights to Gatwick, and would also benefit from an increase from single daily to double daily flights to Heathrow all year-round. Stakeholders consulted concurred with this suggesting that two flights per day to Amsterdam was also a priority especially in the summer, and if a new route to, for example, Frankfurt was added this would largely satisfy hub connectivity requirements.

4.51 It is felt that the correct level of frequency for Birmingham was also required. It was felt this service could usefully have two flights per day which would make a difference to both inbound and outbound users.

4.52 The timings of flights to London are also important. Businesses value the 'red eye' flights to allow for day return trips from Inverness to London, whilst maximising the amount of working day available in London. The inability to do a day trip from London to Inverness, however, was seen as a negative by a number of businesses.

Other airport services

4.53 In terms of on-site services at the airport, consultees felt that there is a need to review the airport's general infrastructure which includes the provision of long stay car parking, the length of walk to and from the terminal building, the quality of the arrivals terminal which has been cited as providing a poor customer experience, provision of covered walkways between plane and terminal, and the capacity of the terminal in general.

4.54 It is thought that the forthcoming rail halt at Dalcross in 2019 could be beneficial to the airport. A rail link enhancing access to the airport is an expected facility at any major airport. However, consultees felt that the rail link's level of impact will depend on the frequency and timings of the trains vis-a-vis flight times.

4.55 Aside from the airport and its services, a number of consultees stated that further development of Inverness Airport Business Park should be an integral part of development plans for the airport itself. After a disappointing start in attracting businesses, a new Co-op distribution hub is now under construction. Proactive marketing of the now available serviced plots at the business park is accelerating interest, while more tenants would increase demand for on-site retail and catering facilities.

4.56 Consultees felt that the relocation of HIAL to the business park, ongoing activities to draw in new businesses, and the development of a new town nearby at Tornagrain will also enhance the attractiveness of the park as a business location, and could further boost the impact of the airport and wider site.

Other considerations

4.57 A number of stakeholders were of the view that more proactive marketing of the airport and its services is required. They feel that the airport needs a higher profile in the region. There is a perception that there is also a lack of awareness of the routes that are now available among both locals and those living outwith the airport catchment area. Similarly the airport could increase usage by developing business' understanding of its offer. Clear messaging and more promotional activity is needed, e.g. it is easy to use, cheap to get to, and that there are code sharing agreements in place for ease of onward travel.

Improvements to other transport modes

4.58 Significant improvements to other modes of transport are currently underway in the Highlands and Islands. Perhaps most significantly, Transport Scotland has announced a dualling of 80 miles of single carriageway of the A9 between Inverness and Perth[6]. This £3bn project is expected to be completed by 2025 and should reduce road travel time between Inverness and the Central Belt. There are also plans to dual 86 miles of the A96, reducing travel time between Inverness and Aberdeen[7].

[6] https://www.transport.gov.scot/projects/a9-dualling-perth-to-inverness/

[7] https://www.transport.gov.scot/projects/a96-dualling-inverness-to-aberdeen/

4.59 Although 89% of business respondees felt that the dualling of the A9 and A96 will have a positive impact on their business, over half (58%) felt that this would not affect their use of the airport at Inverness. The A9 upgrading will not be completed until 2025, and there could be many changes to the transport landscape in the interim, but it could potentially put the airport under some pressure with increased usage by local businesses but not for those businesses located further away. Equally the dualling of the A9 may increase the number of journeys to the north providing the airport with more passengers.

4.60 Planned rail improvements include an hourly, and quicker, service between Inverness and Aberdeen[8], as well as an extended and slightly quicker service between Inverness and Edinburgh/Glasgow. These rail improvements are expected to have positive business impacts, as reported by around three quarters (74%) of businesses. There appears to be a slightly greater business appetite for using an improved rail service over air services (22% reported this).

4.61 The Scottish Government intends for ferry services to the Northern Isles to benefit from the further roll out of Road Equivalent Tariff (RET), which is a distance based fares structure, basing ferry fares on the cost of travelling the equivalent distance by road. This could reduce passenger numbers on Orkney and Shetland flights as RET ferry fares have negatively impacted on Inverness to Stornoway passenger numbers. RET was due to be rolled out to Orkney and Shetland in the first half of 2018, but its introduction has since been delayed[9]. Shetland's ferry fares have already been cut by 20%, effective since the end of June 2018 – albeit this is a smaller reduction than would be the case under the intended RET scheme.

4.62 In all, improvements to other transport links could create synergies with the airport and benefits, as well as some leakage of passengers to other airports or modes of travel.

[8] https://www.transport.gov.scot/projects/aberdeen-to-inverness-rail-improvements/aberdeen-to-inverness-rail-improvements/

[9] https://www.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-44652997

5 SUMMARY OF FINDINGS

INTRODUCTION

5.1 This chapter provides a clear overall view of Inverness Airport's current impacts and its future potential for contributing to growing the economy of the Highlands and Islands.

SUMMARY OF FINDINGS

Strong recent growth at Inverness Airport

5.2 Passenger numbers at Inverness Airport have grown substantially in the last ten years, at a higher rate than at both Glasgow and Aberdeen Airports. The peak season for Inverness has extended and there has been strong growth in December passenger numbers.

5.3 Recent growth in passenger numbers has been driven by passengers from the Inner Moray Firth and Caithness and Sutherland, while passenger numbers from outside the catchment area have dropped. Of the 875,000 passengers at Inverness in 2017 over half used the three London routes of Gatwick, Heathrow and Luton. Two thirds of trips made through Inverness Airport were for leisure purposes, most of which were inbound, whilst most of the one third of trips for business purposes were outbound.

5.4 Across leisure and business passengers, the most common non-UK nationalities were American, Dutch and German. Almost 500,000 passengers travelling to/from the Inverness Airport catchment area used other Scottish airports in 2013. Leisure passengers were most likely to use Glasgow and Edinburgh Airports while business passengers were most likely to use Aberdeen.

Significant on-site and off-site impacts

5.5 The airport generates substantial economic impacts for the local area, for the region and for Scotland. A summary of the total on-site impacts of Inverness Airport, including direct, indirect and induced impacts, is provided at Table 5.1.

Table 5.1: Total (direct, indirect and induced) on-site impacts

	Airport Catchment Area	Highlands and Islands	Scotland
Employment (FTE)	748	766	916
Income (£million)	23.3	23.7	27.1
GVA (£million)*	33.3	34.5	42.0

**Excludes direct GVA for HIAL and Inverness Airport*

5.6 The total employment impact of Inverness Airport, within the catchment area, is 748 FTEs, of which an estimated 554 FTEs are directly employed, making Inverness Airport a major employment site in the Highlands and Islands. The employment impact increases to 766 FTEs for the Highlands and Islands and 916 FTEs for Scotland. The income impact of employment generated by Inverness Airport is estimated at £23 million for the catchment area, rising to £24 million for the Highlands and Islands and £27 million for Scotland. The total GVA impact of £33 million is generated by the airport within the catchment area. This rises to £35 million for the Highlands and Islands and £42 million for Scotland as a whole.

5.7 The total gross off-site visitor impacts arising in the Inverness Airport catchment area are 1,774 FTE jobs, £29 million in income and £60 million in GVA. Although the majority (62%) of visitor spend is within the Inner Moray Firth area, the remaining 38% is split broadly evenly across Moray, Caithness and Sutherland, and Lochaber, Skye and Wester Ross, showing the airport to contribute well to economic growth throughout the catchment area. Passengers travelling on London routes and for holidays/short breaks account for over half of visitor spend.

5.8 Due to the relative number and frequency of scheduled routes, Inverness Airport ranks significantly lower than Edinburgh, Glasgow and Aberdeen airports in terms of connectivity to significant economic centres. Inverness Airport's direct services make it comparable to Exeter Airport and above Newquay Cornwall Airport in terms of direct connectivity. Inverness' connectivity, in terms of onward connections at destination airports ranks higher than both Exeter and Newquay Cornwall.

5.9 The study made high level estimations of the value of passenger time savings for those flying to or from Inverness Airport, as opposed to using another Scottish airport. The value of time savings for Inverness Airport passengers in 2017 was approximately £43 million, and this is split between a £22.5 million economic benefit of business passenger time savings, and a £20.7 million welfare benefit of leisure passenger time savings.

Inverness Airport contributing to wider, regional economic growth

5.10 The airport has been critical to supporting and contributing to regional economic development and growth in a number of ways. The existence of the airport has increased confidence in the local and regional economy and thus helped to attract inward investment; supported businesses with daily operations and connectivity, as well as with attracting and retaining staff; attracted tourists and their spend to the region, particularly high-end tourists pursuing the whisky, golf, shooting offers; and raised the profile of the Highlands and Islands.

5.11 The airport is particularly important for outbound business travel and inbound leisure travel. The routes to Gatwick, Heathrow and Amsterdam are particularly valued by businesses, for both outbound and inbound travel, while the links to Manchester and Birmingham are also important. The routes to and from the islands communities are considered a lifeline for both individuals and businesses, although high fares can act as a barriers, particularly on the Shetland service.

5.12 Inverness Airport has had a positive impact on the ability of the regional business base to sell to the rest of the UK and overseas, as well as to access external expertise. There have been positive impacts on human resources, particularly improved staff productivity through reduced travel time and being better able to attract required skills.

5.13 There are strong and significant business and social benefits as a result of Inverness Airport. These include having enhanced travel options for staff and customers, bringing more visitors to the region, and reducing the sense of isolation for communities. It is thought that the airport is a very significant factor in contributing to population retention and growth in the Highlands and Islands.

Considerations for future priorities and services

5.14 Enhancements to existing routes, rather than the introduction of new routes, are more of a priority for businesses and stakeholders. In particular, establishing suitably timed twice daily flights to Heathrow throughout the year.

5.15 Business priorities for new routes include a major European hub, such as Frankfurt, Paris, Milan or Madrid, and also direct links to Scandinavia, which would support the development of the region's Aquaculture sector. This latter need may be met by the new service to Bergen which started in May 2018.

5.16 Whilst businesses are set to impact positively from significant improvements to surface transport in the Highlands and Islands, particularly the dualling of the A9 and A96 and quicker and more regular rail links to Aberdeen and the Central Belt, it is unlikely that these will have a major impact on their use of Inverness Airport. The improvements in surface transport, and hence accessibility of Inverness Airport, may even offset the leakage of passengers to other airports or transport modes that might arise.

APPENDICES

APPENDIX 1: EIA METHODOLOGY AND WORKINGS

Approach to impact calculations

Three elements of impact

On-site impacts are generated by the activities of companies that are either based on-site at the airport or otherwise make use of the airport (e.g. some airlines). The impacts comprise three elements:

- **Direct** – these are within the companies based at the airport. In this case we have included the small numbers of permanent on-site contractors within the definition of direct employment.
- **Indirect** – these are generated by the purchases of goods and services by airport-based companies and other companies that use the airport.
- **Induced** – these arise from the spend in the wider economy of the wages of those directly and indirectly employed by companies based at/using the airport.

Total impacts are the sum of direct, indirect and induced impacts. Impacts were calculated individually for each of the 22 companies included in the on-site survey, and were then summed to produce total on-site impacts.

Employment

Direct employment and permanent on-site contractor employment was derived from our business survey. Indirect employment was based on a combination of the purchases information generated by the survey and Scottish Input-Output Tables' Type I multipliers. The process including netting off purchases that on-site businesses make from other on-site businesses (to avoid double counting impacts). Induced employment was calculated by applying the relevant Type II multipliers from the Scottish Input-Output Tables. The tables contain only national level multipliers. These had to be scaled back to produce estimates for the Airport catchment area and for the Highlands and Islands. This was in order to reflect the leakage of some induced impacts to companies based elsewhere in Scotland.

Based on previous studies we have undertaken, and our knowledge of the specific economies, it was assumed that the degree of containment at the sub-national levels are:

- Inverness Airport catchment area: 75% of the Scottish multiplier.
- Highlands and Islands: 80%.

Income

For the purposes of this assessment, income was defined as gross wages, before deduction of income tax and National Insurance, and excluding employer contributions.

Direct employee income and permanent on-site contractor income was derived from our survey of on-site businesses, supplemented by secondary economic statistics for companies that did not provide wages information. This produced total direct on-site income. Indirect income was calculated using Type I multipliers from the Scottish Input-Output Tables as described for indirect employment. Likewise, induced income was also calculated using the approach adopted for induced employment.

GVA

GVA estimates were derived from secondary economic statistics from the Scottish Annual Business Survey. This applied the ratio of GVA per job to income per job (which was calculated as described above) for the industry in which each on-site company operates. This produced an estimate of direct

GVA for each of the businesses. Indirect GVA and induced GVA were then calculated using the approach adopted for employment and income impacts.

APPENDIX 2: LIST OF CONSULTEES

Stakeholder Consultees
Cairngorms Business Partnership
Caithness Chamber of Commerce
Federation of Small Businesses
HIAL – Inverness Airport Manager
HIE – Policy
HIE – Inward Investment
HIE – Business and Sector Development
HIE – Inverness Campus
Highland Council
Highlands and Islands Transport Partnership (HITRANS)
Inverness Airport Consultative Committee
Inverness Chamber of Commerce
Inverness Hoteliers' Association
Moray Chamber of Commerce
Scottish Council for Development and Industry
Transport Scotland
Orkney Islands Council
University of the Highlands and Islands
VisitInvernessLochNess
ZetTrans

APPENDIX 3: MEASURING GLOBAL CONNECTIVITY

INTRODUCTION

This section presents business connectivity indices for Inverness' air services. It analyses the destinations that can be accessed from Inverness and a number of comparator airports. The approach used builds on the one set out in Scottish Enterprise's route appraisal guidelines: *Appraising the Economic Benefits of New Air Routes: Technical Report*.

It is based on, first, direct and connecting flights that operated in March 2018 (source: OAG). This does not account for increased frequencies in the summer months on some routes; however, it measures the business connectivity that is available all year round.

Second, flights that operated on at least three weekdays were assumed to be useful for business purposes, while those of a lesser frequency were excluded.

DIRECT FLIGHTS

Basis of assessment

The number of eligible direct services from the relevant airports was counted. However, the analysis is not limited to simply the *number* of destinations served. Their usefulness has also been assessed. That is in terms of the economic significance of the cities to which the flights operate.

This was assessed based on the 2016 Globalization and World Cities Research Network (GaWC) rankings of what are termed 'World Cities'. The greater the degree of a city's integration with the global economy then the higher it is ranked. Here, the ranking is taken as a proxy for the usefulness of each onward connection for business purposes.

GaWC use five categories for world city status in descending order of importance:

- Alpha (e.g. London, Tokyo).
- Beta (e.g. Copenhagen, Atlanta).
- Gamma (e.g. Hangzhou, St. Petersburg).
- High sufficiency (e.g. Portland, La Paz).
- Sufficiency (e.g. Florence, Nairobi).

To score the importance of each destination served we assigned the city concerned one of the following scores:

- Alpha: 4.
- Beta 3.
- Gamma: 2.
- High sufficiency or Sufficiency: 1.

Any destination not included in the GaWC list of world cities was assigned a zero.

We also rated each service's usefulness in terms of typical weekday return frequency, as follows:

- 1 flight per day: 0.5.
- 2 per day: 1.
- 3-5 per day: 1.5.
- 6 per day: 2.

Thus, the scoring for each route was based on 1 x world city status score x daily frequency score.

As an example, Inverness-Amsterdam has a route a score of 2. That is based on Amsterdam's '4' world city ranking (it is an Alpha city) x frequency rating of 0.5 (only a single return flight per weekday during March 2018).

Inverness-Manchester had a score of 4.5. This reflects it's '3' world city status (it is a Beta City) x frequency rating of 1.5 (three return flights per weekday during March 2018).

Results

The results for the airports included in the assessment are given at Table A3.1.

Table A3.1: Direct services: Total business connectivity indices

Airport	Rating
Edinburgh	88.5
Glasgow	54.0
Aberdeen	49.0
Exeter	16.5
Inverness	**15.5**
Newquay Cornwall	8.5

Exeter and Newquay Cornwall were included because, like Inverness, they are smaller regional airports relatively distant from main economic centres.

Edinburgh clearly scores highest. This reflects the number of world cities it serves, most of which are either Alpha or Beta. It is also due to Edinburgh's relatively high frequency of flights to European cities in particular.

The scores for Glasgow and Aberdeen are broadly similar. The two airports serve broadly similar categories of city, although there are some variations in flight frequency. For example, frequency to Paris from Aberdeen is much higher than from Glasgow, while Glasgow has higher frequencies to some UK cities (e.g. Birmingham).

Inverness scores slightly lower than Exeter. This is because it has only six eligible destinations compared to nine from Exeter (which include Edinburgh, Glasgow and Newcastle). Exeter has a higher frequency to Dublin, plus a direct service to Paris (unlike Inverness). However, Inverness has a much greater number of flights to London.

Inverness ranks higher than Newquay Cornwall. That is mainly due to the latter serving only three destinations compared to the six from Inverness.

Based on the results at Table A3.1, direct flight business connectivity from Edinburgh is around six times greater than from Inverness and connectivity from Glasgow and Aberdeen is 3-4 times greater than from Inverness.

ONWARD CONNECTIONS

Basis of assessment

We have analysed the range of onward connections available at the airports served by Inverness. This is to show how far these flights offer useful connections to destinations outside the UK, and thus provide global connectivity for the Inverness Airport catchment area.

Our assessment has built on that in the Scottish Enterprise's route appraisal guidelines. It differs in that it reflects our experience that passengers using Inverness are willing to make do-it-yourself connections (rather than only those between those airlines in a specific alliance).

Thus, each airport served from Inverness was assessed in terms of the onward connections available within a 3½ hour time window of arrival from Inverness. This was taken as a reasonable total connecting time to catch an onward flight (and would thus represent a useful connection) given that:

- Many of the available connections are on a do-it-yourself basis rather than with through ticketing and baggage.
- Business passengers would be willing to wait only a certain amount of time at the airport for the onward connection to be useful.

It was assumed that a connecting time of 1½ hours would be allowed for, with passengers then looking to catch a flight within the following 2 hours. Thus, if a flight arrives from Inverness at 0830 then the available useful onward connections would be those that depart between 1000 and 1200. If this timing criterion was met then the onward destination served was included in the scoring, factored by its world city rating (as described earlier). However, no allowance was made for the number of onward connections per day to an individual city.

Finally, onward destinations were only included once in the analysis. For example, from Inverness useful connections are available to Lisbon via either Amsterdam or Gatwick. However, Lisbon is included only once in the scoring exercise.

The availability of connections to airports outside the UK was measured for each individual Inverness route. This was based on outbound travel from the UK, e.g. Inverness-Gatwick-Stockholm.

Inverness

Table A3.2 shows the connections available from each airport which has a direct flight from Inverness. As in the earlier analysis, Dublin is excluded because its frequency is less than three flights per weekday for part of the year.

Table A3.2: Summary of useful onward business connections from Inverness

Route from Inverness	Total number of routes	Total number of countries	Number of routes By area					
			EU	OE	ME	AF	AS	NA
Heathrow	41	25	20	4	4	1	4	8
Manchester	30	21	17	3	4	0	2	4
Gatwick	27	17	16	5	2	0	1	3
Amsterdam	21	17	14	3	2	0	2	0
Luton	9	7	8	1	0	0	0	0
Birmingham	9	6	8	0	1	0	0	0
Bristol	4	4	4	0	0	0	0	0

Note: EU=European Union, OE=Other Europe, ME=Middle East, AF=Africa, AS=Asia, NA=North America

Despite having only one flight per day from Inverness, Heathrow is the most significant provider of onward connections. It has the largest number of connecting routes. That includes the highest number of connections to destinations in Asia (e.g. Beijing) and North America (e.g. New York).

The frequency of three per day to Manchester helps to explain its relatively high number of connections. These include four to the Middle East (e.g. Doha), four to North America (e.g. Atlanta) and two to Asia (e.g. Singapore).

In comparison, a high proportion of Gatwick connections are to European destinations. There are also a number to North America (although to less economically important cities than those served by Heathrow and Manchester) and to the Middle East and Asia.

Amsterdam offers fewer connecting routes than these other three airports and a relatively low proportion of destinations outside Europe. However, almost all its connections are to Alpha or Beta rated cities, e.g. Beijing, Paris, Frankfurt.

Luton, Birmingham and Bristol have much fewer connections, almost all of which are to other EU countries.

Across the routes as a whole there is good coverage of EU countries. There is also a broad spread of airports for which connections are available in Germany (eight different cities), France (five), and Switzerland and Spain (three each).

Onward connectivity indices

Of the 69 cities which have useful onward connections from an Inverness flight:

- 24 are Alpha cities (e.g. Beijing, Dubai).
- 28 are Beta (e.g. Copenhagen, Boston).
- 4 are Gamma (e.g. Porto, Marseille)
- 8 are High sufficiency or Sufficiency cities (e.g. Reykjavik, Hanover).

The remaining five are not classed as 'World Cities'.

Total onward connectivity indices were calculated for Inverness and a number of other airports. This was through, first, identifying the cities for which onward connections are available within the defined time window. Second, by totalling world city ratings across the relevant cities based on the factors set out earlier e.g. '4' for an Alpha city, '3' for a Beta city, etc. The results are set out at Table A3.3.

Table A3.3: Onward connections: Business connectivity indices

Airport	Rating
Edinburgh	493
Glasgow	464
Aberdeen	445
Inverness	**196**
Exeter	149
Newquay Cornwall	114

Edinburgh, Glasgow and Aberdeen have broadly similar ratings. They are between 2.3 and 2.5 times higher than Inverness. This reflects, compared to Inverness, the three airports':

- Direct services to a greater number of airports, thus offering a broader range of onward connections.
- Much greater frequency of direct services to key hubs such as Heathrow, Amsterdam and Paris, where they connect on to a relatively high number of Alpha and Beta cities.

However, Inverness scores higher than both Exeter (by c.30%) and Newquay Cornwall (c.70%). This reflects that Inverness has:

- Onward connections to a greater number of destinations.
- A higher proportion of connections to destinations that are either Alpha or Beta cities.

FIT OF INVERNESS AIR SERVICES WITH GROWTH SECTOR REQUIREMENTS

Introduction

This section assesses the fit between the useful international air connections available using Inverness flights and the specific countries that are important to the business base.

HIE provided information for their Account Managed (AM) businesses in Inverness Airport's catchment area. This showed the countries that the businesses identified as actual or potential trading markets.

The connectivity to the relevant countries was assessed in terms of the number of useful connections that are available from Inverness. That used the same criteria for a useful connection that was applied for the connectivity indices shown earlier.

All sectors

Actual trading markets

Table A3.4 shows the seven most common countries with which the AM companies currently trade. These are shown in descending order of importance i.e. USA was listed by the highest number of businesses; France was the second most mentioned, etc. Five of the seven countries/groups of countries are outside Europe, in North America, Asia and Australasia.

Table A3.4: Most important actual trading markets for AM businesses

USA
France
Germany
China & Hong Kong
Australia & New Zealand
Canada
Japan & SE Asia inc. Korea & Taiwan

Table A3.5 shows the number of useful onward business connections to these countries at airports served by direct flights from Inverness.

Table A3.5: Useful connections available to actual trading markets

Trading Market Country	Number of Airports	Airports
USA	9	Atlanta. Boston, Chicago, Houston, Las Vegas, New York, Orlando, Philadelphia, Washington
France	5	Lyon, Marseille, Nice, Paris, Toulouse
Germany	8	Berlin, Cologne-Bonn, Dusseldorf, Frankfurt, Hamburg, Hanover, Munich, Stuttgart,
China & Hong Kong	2	Beijing, Hong Kong
Australia & New Zealand	0	-
Canada	4	Calgary, Montreal, Toronto, Vancouver
Japan & SE Asia inc. Korea & Taiwan	1	Singapore

USA and Germany have the largest number of cities for which useful connections are available (nine and eight, respectively). There are also five French cities to which useful connections are available. Thus, the three most important trading markets appear reasonably well served.

In contrast, there are few connections to the other countries apart from Canada. China & Hong Kong is the fourth most important market. However, it has connections to only two cities, albeit one is the capital city with the other a major business centre.

Potential trading markets

Table A3.6 sets out the most significant potential trading markets for the AM businesses. Again, these are ranked in order of importance. The seven countries shown are the same as those set out at Table A3.4 for actual trading markets. However, their order is somewhat different, notably China & Hong Kong is the second most important potential trading market.

Table A3.6: Most important potential trading markets for AM businesses

USA
China & Hong Kong
Germany
France
Japan & SE Asia inc. Korea & Taiwan
Canada
Australia & New Zealand

Individual sectors

Introduction

This section provides the same analysis broken down by sector. Some sectors (e.g. energy) are not included because the number of companies and trading markets involved are very low in absolute terms.

Data analysis

The following Tables show the most significant actual and potential trading markets by sector. Again, the markets are listed in descending order of importance based on the number of AM businesses identifying them; and the number of airports with a useful connection from Inverness flights is shown.

Table A3.7: Creative Industries AM businesses: Most significant trading markets

Actual			Potential	
Market	**Number of Airports with Useful Connection**		**Market**	**Number of Airports with Useful Connection**
USA	9		USA	9
France	5		Germany	5
Canada	4		Australia & New Zealand	0
Germany	8			

Table A3.8: Financial and Business Services AM businesses: Most significant trading markets

Actual			Potential	
Market	**Number of Airports with Useful Connection**		**Market**	**Number of Airports with Useful Connection**
USA	9		Germany	8
China & Hong Kong	2		France	5
			Spain	3*

**Barcelona, Bilbao and Madrid*

Table A3.9: Food and Drink AM businesses: Most significant trading markets

Actual			Potential	
Market	**Number of Airports with Useful Connection**		**Market**	**Number of Airports with Useful Connection**
France	5		USA	9
China & Hong Kong	2		Germany	8
Germany	8		China & Hong Kong	2

Table A3.10: Life Sciences AM businesses: Most significant trading markets

Actual			Potential	
Market	**Number of Airports with Useful Connection**		**Market**	**Number of Airports with Useful Connection**
USA	9		USA	9
China & Hong Kong	2		Australia & New Zealand	0
Japan & SE Asia inc. Korea & Taiwan	1		France	5
			Denmark	2*

**Billund and Copenhagen*

Table A3.11: Technology and Advanced Engineering AM businesses: Most significant trading markets

Actual			Potential	
Market	**Number of Airports with Useful Connection**		**Market**	**Number of Airports with Useful Connection**
USA	9		USA	9
Norway	3*		Norway	3
Australia & New Zealand	0		Ireland**	1

** Bergen, Oslo and Stavanger. ** Dublin*

Table A3.12: Tourism AM businesses: Most significant trading markets

Actual			Potential	
Market	**Number of Airports with Useful Connection**		**Market**	**Number of Airports with Useful Connection**
USA	9		China & Hong Kong	2
Germany	8		USA	9
France	5		Germany	8

Key findings

For actual markets, the greatest fit between the flights and specific sectors is for Tourism and Creative Industries. That is because of the good range of connections to their most significant markets i.e. USA, Germany and France.

In contrast, the least fit is for Life Sciences and Technology and Advanced Engineering. That is because of the low number of connections to airports in their most significant markets i.e. China & Hong Kong, Australia & New Zealand and Japan et al.

In terms of potential markets, Tourism and Food and Drink have the best fit because of the good range of connections to the German and USA markets in particular.

Again, Life Sciences and Technology and Advanced Engineering have the least fit because of limited connections to airports in their significant long haul markets and in some short haul European markets.

There are no overall major differences between the actual market countries and those identified as potential ones. Based on the available information some countries will increase in importance for some sectors while also becoming less important for others.

APPENDIX 4: INBOUND VISITOR IMPACTS

INTRODUCTION

Overview

This Appendix sets out estimates of the economic impacts of expenditures by inbound visitors who fly into and/or out of Inverness Airport.

These have been calculated by, first, estimating, the visitors' expenditures in the catchment area. These were then converted into employment, income and GVA (Gross Value Added) impacts.

Expenditure figures have also been estimated for individual parts of the catchment area. However, employment, income and GVA were calculated for the catchment area as a whole.

Visitor expenditures

Visitor expenditures were estimated by, first, calculating the number of inbound visitors using the main scheduled services. This was based on 2017 route carryings and also the 2017 CAA Passenger Survey results which are analysed in Chapter 2.

These inbound visitors were then broken down between those from the UK and those from overseas. Each of these two groups were further sub-divided: between business, holiday and VFR (Visiting Friends and Relatives)/other leisure travellers. Again, this used the results of the 2017 CAA Passenger Survey.

Average length of stay (i.e. number of nights) by each of these six groups was estimated from a combination of data from the 2017 CAA Passenger Survey and the International Passenger Survey (2013-2016 averages), using country specific data.

Expenditure per night figures were derived from:

- Great Britain Tourism Survey 2015 – for visitors from the UK.
- International Passenger Survey (2013-2016 averages) – covering overseas visitors who had arrived in Scotland by air and visited the north of Scotland, using country specific data.

The total expenditures for each of the six groups were calculated as follows:

Number of visitors x average length of stay x average spend per night.

Expenditures estimates were also allocated to each of the four constituent parts of the catchment area: Caithness and Sutherland; Inner Moray Firth; Lochaber, Skye and Wester Ross; and Moray.

This was done by assigning visitors – and their expenditures – to one of the four areas using their surface origin on the day of travel to Inverness Airport (as captured by the CAA Passenger Survey). That is quite a simple approach given that someone staying seven nights in the Airport catchment area may visit, say, both Inner Moray Firth and Moray during that time. However, the approach still provides a reasonable approximation of the likely geographical distribution of visitor spend.

Economic impacts

Employment

Employment impacts (as were those for income and GVA) were calculated for the Inverness Airport catchment area. This involved, first, distributing visitor spend between the following five categories:

- Accommodation.
- Food and drink.
- Recreation.
- Shopping.
- Transport.

The distribution was based on an analysis of visitor expenditure data in the 2016 STEAM Tourism Report for the Highland Council area. Separate distributions were calculated for each of business, holiday and VFR/other leisure visitors to reflect their different spending patterns.

This provided total spend figures for each of the five spend categories. These were converted into direct FTE (Full Time Equivalent) employment using turnover: employment ratios from the latest available (2015) Annual Business Survey (ABS).

Indirect and induced employment impacts were then calculated using multipliers for each of the five spend categories from the latest available (2014) Scottish Input-Output Tables. These national level multipliers were scaled down to calculate the indirect and induced impacts in a smaller geography (i.e. e Inverness Airport catchment area).

The factors used were based on similar economic impact studies we have undertaken for HIE and various business surveys we have conducted in the Airport catchment area. They were:

- Indirect: 45% of the Scottish level multiplier.
- Induced: 75% of the Scottish level multiplier.

Finally, direct, indirect and induced employment were added together to give estimates of total FTE employment.

Income and GVA

Income was defined as gross wages/salaries before employee income tax and National Insurance payments, and excluding employer contributions.

The approach to calculating income and GVA impacts was the same as for employment. Direct impacts were derived using data from the ABS, with indirect and induced impacts based on Scottish Input-Output multipliers.

Gross impacts

The impacts shown are *gross*. Thus, they do not account for the proportion of inbound visitors who would still have travelled to the catchment area if Inverness Airport did not exist. This is because there is no available information to allow us to estimate the proportion of visitors who would still have come to the area in the absence of the airport.

All financial values shown (expenditure, income and GVA) are in 2018 prices. Where a Table's columns and rows do not sum exactly to the total shown this is due to rounding.

VISITOR EXPENDITURES

Catchment area

It is estimated in 2017 inbound visitors spent around £89 million in the catchment area. That represents an average of £351 spend per inbound passenger.

The breakdown of spend by broad trip purpose is:

- Holiday/short break: £50.5 million (57% of the total).
- VFR and Other Leisure £29.2 million (33%).
- Business: £9.0 million (10%).

Table A4.1: Total visitor spend by route

Route	Spend (£million)	Share
Gatwick	20.2	23%
Heathrow	14.7	17%
Luton	14.0	16%
Bristol	11.3	13%
Amsterdam	10.3	12%
Birmingham	4.9	6%
Belfast	4.7	5%
Manchester	4.5	5%
Dublin	2.3	3%
Kirkwall	0.7	<1%
Stornoway	0.6	<1%
Sumburgh	0.6	<1%
Total	**88.7**	**100%**

Table A4.2: Visitor spend by type

Route	Holiday/short break	VFR and Other Leisure	Business	Total
Gatwick	43%	46%	11%	**100%**
Heathrow	75%	19%	6%	**100%**
Luton	61%	30%	9%	**100%**
Bristol	62%	30%	9%	**100%**
Amsterdam	74%	17%	9%	**100%**
Birmingham	51%	33%	16%	**100%**
Belfast	29%	60%	12%	**100%**
Manchester	44%	36%	20%	**100%**
Dublin	68%	30%	3%	**100%**
Kirkwall	18%	74%	9%	**100%**
Stornoway	25%	26%	49%	**100%**
Sumburgh	1%	97%	2%	**100%**
All Routes	**57%**	**33%**	**10%**	**100%**

Sub-areas

The estimated breakdown of spend by sub-area is:

- Inner Moray Firth (IMF): £54.9 million.
- Lochaber, Skye and Wester Ross (LSWR): £11.7 million.
- Moray: £11.2 million.
- Caithness and Sutherland: £10.8 million.

Table A4.3: Distribution of route spend by area

Route	Moray	Caithness and Sutherland	LSWR	IMF	Total
Gatwick	18%	10%	14%	58%	**100%**
Heathrow	7%	17%	11%	65%	**100%**
Luton	16%	11%	17%	56%	**100%**
Bristol	12%	14%	15%	59%	**100%**
Amsterdam	7%	15%	9%	69%	**100%**
Birmingham	17%	13%	24%	47%	**100%**
Belfast	7%	10%	10%	73%	**100%**
Manchester	16%	6%	11%	67%	**100%**
Dublin	7%	9%	11%	73%	**100%**
Kirkwall	0%	0%	0%	100%	**100%**
Stornoway	3%	0%	0%	97%	**100%**
Sumburgh	57%	10%	0%	33%	**100%**
All Routes	**13%**	**12%**	**13%**	**62%**	**100%**

Table A4.4: Visitor spend by type

Area	Holiday/ short break	VFR and Other Leisure	Business	Total
Moray	25%	59%	16%	**100%**
Caithness and Sutherland	65%	26%	9%	**100%**
IMF	58%	32%	10%	**100%**
LSWR	77%	17%	6%	**100%**
Catchment Area	**57%**	**33%**	**10%**	**100%**

Table A4.5: Share of area spend by route

Route	Moray	Caithness and Sutherland	LSWR	IMF
Gatwick	32%	19%	24%	21%
Heathrow	8%	23%	14%	17%
Luton	20%	14%	20%	14%
Bristol	12%	15%	14%	12%
Amsterdam	7%	14%	8%	13%
Birmingham	7%	6%	10%	4%
Belfast	3%	4%	4%	6%
Manchester	6%	3%	4%	6%
Dublin	1%	2%	2%	3%
Kirkwall	0%	0%	0%	1%
Stornoway	0%	0%	0%	1%
Sumburgh	3%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**

GROSS ECONOMIC IMPACTS

Gross impacts of visitor spend

Total (direct, indirect and indirect) gross impacts for the catchment area as a whole are around:

- Employment (FTE jobs): 1,838.
- Income: £30 million.
- GVA: £62 million.

Table A4.6: Gross total (direct, indirect and induced) economic impacts in catchment area

Route	FTE Jobs	Income (£million)	GVA (£million)
Gatwick	420	6.9	14.3
Heathrow	302	4.9	10.2
Luton	290	4.7	9.8
Bristol	234	3.8	7.9
Amsterdam	212	3.4	7.2
Birmingham	102	1.7	3.4
Belfast	97	1.6	3.3
Manchester	95	1.5	3.2
Dublin	46	0.8	1.6
Kirkwall	15	0.3	0.5
Stornoway	13	0.2	0.4
Sumburgh	11	0.2	0.4
Total	**1,838**	**30.0**	**62.2**

Estimate of gross off-site visitor impacts

The final stage in the impact calculations was to net off visitors' spend at Inverness Airport on car hire, retail and food and beverage. That is to avoid double counting as these impacts are already captured in the on-site impacts.

From that assessment we assumed that the following on-site impacts are attributable to inbound visitors:

- 100% of car hire impacts
- 75% of retail
- 60% of food and beverage

These were deducted from the total inbound visitor impacts shown at A5.6 to give the following estimates of gross *off-site* visitor impacts:

- Employment (FTE jobs): 1,774.
- Income: £29 million.
- GVA: £60 million.

APPENDIX 5: VALUATION OF PASSENGER TIME SAVINGS

APPROACH

In valuing the time savings to all current Inverness Airport passengers we assumed that in the absence of Inverness Airport they would still make the trip to/from the catchment area; and they would do so through travelling by car between the catchment area and either Aberdeen, Edinburgh or Glasgow airport to fly to/from there.

There would be additional surface travel time for passengers to reach one of these airports compared to using Inverness Airport. This is the time that passengers currently save by being able to fly from Inverness.

The time savings were calculated as follows. First, current (2017) Inverness passengers were distributed between the three other Scottish airports. There was no straightforward means of doing so. Choice of an alternative Scottish airport would be based on a range of factors including the location of surface origin within the Inverness Airport catchment area; and the destinations served from each of the three airports, along with flight frequency, timings and fare levels. The relative importance of these factors would likely vary between business and non-business passengers.

Accordingly, we adopted a simple approach using available data. This used 2013 CAA Passenger Survey results for Aberdeen, Edinburgh and Glasgow Airports (the latest year available to us for this study). We used data on the 2013 leakage of Inverness catchment area passengers to other Scottish airports as a proxy for the distribution of Inverness passengers to these other airports if Inverness Airport did not exist.

This was done for six market segments as shown at Table A5.1. Please note that those living in Scotland are almost all residents of the Inverness Airport catchment area.

Table A5.1: Assumed distribution of current Inverness passengers to other Scottish airports if Inverness Airport did not exist

Place of Residence	Aberdeen	Edinburgh	Glasgow	Total
Business				
Foreign	56%	36%	8%	**100%**
Rest of UK	37%	39%	24%	**100%**
Scotland	78%	16%	6%	**100%**
Leisure				
Foreign	22%	45%	33%	**100%**
Rest of UK	10%	47%	43%	**100%**
Scotland	13%	34%	52%	**100%**

On this basis, most business passengers are assumed to use Aberdeen Airport if Inverness Airport did not exist, while most leisure passengers would use either Edinburgh or Glasgow.

The Inverness passengers in each of the six market segments were then broken down by their postcode of surface origin as shown in the 2017 CAA Passenger Survey results. For each postcode area the additional time required to access Aberdeen, Edinburgh or Glasgow Airport by car rather than Inverness Airport was calculated. That was by using journey times from RAC Route Planner.

As an example, foreign business passengers originating in the IV1 postcode area were distributed between Aberdeen (56%), Edinburgh (36%) and Glasgow (8%) airports. The number of passengers

was then multiplied by the additional time required to access each of the airports compared to travelling to Inverness Airport.

This produced the total time savings to these passengers from being able to use Inverness Airport. This was repeated for each surface origin postcode area and for each of the six market segments. The total time savings were then multiplied by the monetary values shown at Table A5.2.

Table A5.2: Values of time

Passenger	Value of Time Per Hour (£)
Business – UK resident	39.58
Business – foreign resident	29.02
All leisure	13.39

Source: DfT Aviation Appraisal Values of Time for Inverness Airport Passengers: 2014. The figures shown are in 2018 values and prices

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