

INVESTIGATING THE TRAVEL BEHAVIOUR OF VISITORS TO SCOTLAND

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1. INTRODUCTION

Tourism in Scotland is both a major contributor to GDP and an important and extensive land use. The internal accessibility of Scotland plays a central rôle in the performance of this part of the economy. Studies of tourist travel behaviour have previously been undertaken from both demand and supply perspectives, in urban and rural contexts and at local and national level. However, there has thus far been no attempt to collect and collate the disparate information produced by such surveys in order to provide a meaningful picture of tourist travel behaviour in Scotland.

The response of the Executive to the report *First Impressions of Scotland* (Scottish Executive, 2005) highlighted the importance of considering tourist travel in the National Transport Strategy and illustrated the Executive's understanding of the link between transport supply and the success of Scotland as a visitor destination. The National Transport Strategy has subsequently reinforced this view, by recognising the importance of tourism to the Scottish economy and the salient role of transport in affecting the tourist experience. In addition, the recently published tourism strategy for Scotland - *Scottish Tourism: The Next Decade* - (Scottish Executive, 2006) highlights the need to ensure excellent transport provision for visitors within Scotland and underlines the Executives commitment towards facilitating the use of sustainable transport options for visitors.

The aim of this paper is to uncover the body of existing data sources which directly or indirectly contain data on tourists' use of transport within Scotland. Visitor flows within Scotland are examined to identify existing data on spatial travel trends, travel behaviour and visitor type and visitor use of travel modes. Secondary data and grey literature are included in this analysis. The outcomes of this research enable gaps in the existing knowledge base to be identified and make a contribution towards the development of transport policy that aims to provide a transport product that better serves the tourist.

2. CURRENT PATTERNS ON VISITORS' TRAVEL BEHAVIOUR

2.1 National and Route or Area-Specific Data Sets

There are a number of surveys which contain information on visitor flows. The two principal data sets for domestic visitors to Scotland are the United Kingdom Tourism Survey (UKTS) and the National Travel Survey (NTS). The

UKTS is a national consumer survey which covers all trips away from home lasting one night or more. The NTS covers all travel made by Great Britain residents within Great Britain. Details of “long distance” journeys (defined as journeys greater than 50 miles) made during the survey period are included in the survey. For overseas visitors, the main source of data is the International Passenger Survey (IPS) which collects information from visitors as they leave the UK.

Three other surveys which provide route or area-specific information on tourist travel patterns were also identified:

1. The Civil Aviation Authority Survey (CAAS) undertaken at Edinburgh, Glasgow, Aberdeen, Prestwick and Inverness airports (2005).
2. Rosyth to Zeebrugge Superfast Ferry service (George Street Research, Ltd, 2003).
3. Greater Glasgow and Clyde Valley Area Tourist Board (TNS, 2005).

Table 1 summarises details of the above surveys. It can be seen that the UKTS, NTS and IPS provide data on the origins of visitors to Scotland, the modes of transport used to travel to Scotland and regions visited within Scotland. Other aspects of travel within Scotland, such as mode(s) of travel used within Scotland, route choice and the order in which overnight stays are undertaken, are not covered by these surveys with the exception of the NTS which records long distance travel within Scotland. The CAAS and IPS record mode of travel to port/route of departure. Data from the Rosyth to Zeebrugge Superfast Ferry supplements leisure data available in the IPS. Data from The results of the Greater Glasgow and Clyde Valley Visitor Survey shed some light on the travel behaviour of visitors and day-trippers to the area.

2.2 Trends in Domestic and Overseas Tourism

In 2003, it is estimated that around 18.1 million tourists spent at least one night in Scotland, of which approximately 10 million originated outside Scotland. Just over 84% of the overnight tourist trips originating outside Scotland did so from within the United Kingdom, with the remainder having an international origin. This chapter seeks to investigate what is known about the travel patterns of these visitors during their visit to Scotland by identifying relevant literature and secondary data sources and, as far as possible, to use this information to map current patterns of travel behaviour. The process of drawing together available information from a variety of sources also enables limitations of existing data and gaps in knowledge to be identified.

Figures 1 and 2 show trends for domestic and overseas visits to and nights spent in Scotland respectively. It would appear that the number of domestic visits by UK residents to Scotland has declined from a high in 1997 of over 20 million visits to around 16.5 million visits in 2003. Table 2 distinguishes between visits to Scotland from the constituent parts of the UK for 2003. It can be seen that just under half the domestic visitors originate within Scotland itself. Analysis of the NTS shows an increase in the number of long distance

trips to Scotland over the period 1992-95 to 2001-04 from 7.46 million to 9.02 million. Some caution must be employed in comparing the UKTS and NTS: the surveyed population is different in the two data sets, the UKTS measures overnight stays whilst the NTS measures long distance trips (which may or may not include an overnight stay) and the NTS estimates are based on fairly small sample sizes.

The number of overseas visitors has remained relatively static over the period 1995 to 2004 at just under 2 million. There has been a rise of around 2 million nights spent by overseas visitors in Scotland between 2001 and 2004, returning to levels achieved in mid-1990s. There were around 1.88 million overseas visits to Scotland in 2004. Over 50% of this total came from only five countries – United States of America, Germany, Australia, Canada and France.

2.3 Mode of arrival in Scotland

According to the UKTS, 54% of all visitors from England arrive by car, 22% arrive by air and 11% by train. It is clear that car is the most popular mode of travel to Scotland from the majority of regions of UK, with the exception of London, the South East and the South West. Travel by plane from these regions is the dominant mode of travel, although taking the train from London constitutes a significant mode share of 23%.

The vast majority (82%) of overseas visitors to Scotland arrive in the UK by air (IPS). Around 15% of overseas visitors arrive by sea and the Channel Tunnel only accounts for about 3% of visitors. Figure 3 shows mode of arrival in UK for the five most common countries of origin and purpose respectively. Around 30% of residents in France and Germany enter the UK by sea and around 10% of French residents use the Channel Tunnel. It is notable that over 20% of Australians use either a sea route or the Channel Tunnel when visiting Scotland.

2.4 Destinations visited in Scotland

Table 3 shows destinations visited by domestic residents in 2003 (UKTS). Edinburgh and the Lothians is the most popular destination visited in Scotland followed by Greater Glasgow and Clyde Valley. The attraction of the Highlands and Argyll, Loch Lomond, Stirling and the Trossachs as destinations is also evident in these figures.

Table 4 shows destinations visited by overseas visitors estimated from the IPS 2004 data set. The importance of Heathrow airport as a gateway to Scotland is revealed in this table. Glasgow and Edinburgh airports and Sea and Tunnel ports are also important gateways. Edinburgh is the most significant attractor of overseas visitors to Scotland by some distance, followed by Glasgow and the Highlands and Islands.

An analysis of destinations visited for domestic visitors departing by air was undertaken using CAAS data set. This analysis shows that just under 2.5 million visits were made to Scotland by air in the first three quarters of 2005, of which around half of these were made through Edinburgh airport. The relative attractiveness of Edinburgh and the Lothians as a destination is also clear from these figures. It is also interesting to note that whilst Aberdeen and Inverness airports cater principally for a local catchment area, over half those flying from Prestwick airport visited the Highlands and Islands.

Table 5 examines destinations visited by purpose for those overseas visitors departing from Scottish airports. For all visit purposes, it can again be seen that Edinburgh and the Lothians followed by Greater Glasgow and Clyde Valley were the most frequently visited areas. Over 75% of overseas visitors spend at least one night in Edinburgh and the Lothians. It is also clear that Edinburgh and the Lothians is a significant attractor of visitors departing from both Glasgow and Prestwick airports. There is evidence of greater dispersal of visitors beyond the local area for those departing Glasgow and Prestwick airports than for those departing Aberdeen, Edinburgh and Inverness airports.

With reference to the Superfast Ferry service operating between Rosyth and Zeebrugge, the Highlands was the area most visited by survey respondents, followed by Argyll, Isles, Loch Lomond and the Trossachs and Edinburgh and the Lothians. For respondents in 2003, significant proportions travelled to Edinburgh and the West Highlands for their first overnight stay. A higher proportion of respondents chose to stay overnight in Edinburgh on the last night of their stay than on their first night in both 2002 and 2003.

2.5 Travel mode choice within Scotland

Table 6 shows the estimated number of long distance trips (>50 miles) undertaken from a base inside Scotland for domestic visitors to Scotland for the periods 1992-95 to 2001-04. It is clear that car is the principal mode used by this group of visitors. It would also appear that there has been a reduction in the number of long distance trips, although it should be noted that these figures are based on small sample sizes.

Figures 4 to 6 show the final mode of travel for overseas visitors to Edinburgh, Glasgow and Prestwick airports respectively. Although there are some difference between airports it can be seen that between 40% and 50% travel by private transport – that is either by hire car or as by being dropped-off at the airport. Moreover, just under half the overseas visitors travelling to Prestwick airport do so by train with another 7% travelling by bus. Although Glasgow and Edinburgh airports do not yet have dedicated railway stations and, as a result, have a higher proportion travelling to the airport by bus/coach, the difference between these airports and Prestwick airport for those who are neither driven nor drive would appear to be largely made up with travel by taxi / minicab.

Nearly all visitors travelling on the Rosyth to Zeebrugge Superfast Ferry

service used a car in Scotland whilst train and bus modes were used by just under 10% of visitors. The popularity of visiting the islands of Scotland is evidenced by the large proportion of visitors using ferry / boat / yacht.

Of the 1350 visitors interviewed in the Greater Glasgow and Clyde Valley study, 17% of respondents were domestic visitors from outside Scotland and 12% of respondents were overseas visitors. The available data on transport use does not disaggregate between origin of visitor which makes it difficult to draw any firm conclusions. However, the results show that the private car is used less to travel to the centre of Glasgow than to the rest of the area. Furthermore, the frequent use of walking within Glasgow comes out strongly in the results.

3. VISITOR USE OF NON-TOURIST DEDICATED MODES OF TRANSPORT

The section reviews data which relates to visitor use of non-tourist dedicated modes of transport. For the purpose of this research, the most popular paying and non paying visitor attractions in Scotland were contacted and asked to provide a modal breakdown of how visitors travelled to the attraction, where this information was available. In many cases the data could not be provided, however key organisations such as the National Trust for Scotland, Scottish National Heritage and Historic Scotland were able to provide data for many of their attractions. In addition, a response was received from several other attractions. This information has been collated and compared below.

3.1 National Trust for Scotland

The following discussion identifies mode of transport used by visitors from outside Scotland to travel to National Trust properties in Scotland. Data is taken from the National Trust for Scotland Visitor Survey 2005 undertaken by Lynn Jones Research Ltd. In the original visit survey report (Lyn Jones Research Ltd, 2005) data is not disaggregated by origin of visitors. However, this data was obtained from the contractor for the purposes of this report. The total number of respondents varies for each property and, due to the small (and in some cases, very small) sub-subsets, the data presented here should be viewed as being indicative only.

The overall picture is that, unsurprisingly, the further away visitors come from, the less likely they are to use the private car. As regards use of other modes of transport, this appears to be correlated with the available transport network at the attraction. For example, arrivals by train are highest at attractions such as Hill House in Helensburgh and Gladstone's Land in Edinburgh, both of which are close to railway stations. Since it is unlikely that visitors hire a car especially to travel to a specific visitor attraction, we can draw the more likely conclusion that the attractions visitors without a private car (i.e. principally those from overseas) choose to go to are dictated by the availability of public transport. Attractions such as Inverewe, Crathes, Culzean and Falkland, which are well beyond walking distance from a station, are not perceived as

accessible by public transport, despite the fact the fact that the National Trust for Scotland displays public transport information for all of the properties on its website. Such attractions appear to benefit from private coach tours. In this sense, the private coach is undoubtedly filling a perceived gap in transport provision. Moreover, country of origin of the visitor also appears to play a role. Although the numbers in the sample are small, it seems that visitors from North European countries are more likely to use public transport than those from the other countries represented, perhaps due to the fact that they are better unaccustomed to use public transport at home. Visitors from the USA are most likely to arrive at rural destinations by private coach or hire car.

3.2 Historic Scotland 2002 Visitors Survey

Historic Scotland undertake a major visitor survey every five years and data was supplied regarding mode of arrival at 19 of their properties from the most recent survey in 2002. The data is not disaggregated by origin but visitors to Scotland represent the majority (75%) of the sample. At Edinburgh Castle, 91% of visitors were from outside Scotland. Table 7 presents an overview of mode of arrival at all properties with Edinburgh Castle shown in a separate column. 78% of visitors to all properties arrived by car, 54% by private car and 24% by hire car. Since the 1991 and 1996 surveys, use of the private car has decreased by 17% and use of hire cars increased by 14%, attributable to the increase in visitors to Historic Scotland properties from further afield. The data confirms the findings of the National Trust for Scotland survey that limited parking facilities and good transport links in Edinburgh discourage visitors from arriving by car. It is also reasonable to assume that many of the visitors to Edinburgh Castle were staying in Edinburgh and could therefore walk to the property.

3.3 Glasgow Museums

Data was obtained from Glasgow City Council on mode of transport to the key visitor attractions which it administers within the City of Glasgow (see Table 8). Again, it is not possible to differentiate between visitors from within and outside Scotland. Indeed the relatively high use of the private car in comparison to Edinburgh Castle probably reflects the higher percentage of Scottish visitors in the sample. The picture is nonetheless an interesting one since it. It appears that, the further the museum is located from the city centre, the more likely visitors are to arrive by car, despite the existence of good public transport links to attractions such as the People's Palace and the Museum of Transport. Indeed, the contrast between the Museum of Transport and the Kelvingrove Art Gallery is particularly acute, since they are located in such close proximity to one another. Again, greater numbers of visitors from overseas (with no access to a car) visiting Kelvingrove probably explains this. It would be extremely useful if the data were collected and analysed in such a way that allowed this to be examined.

3.4 Falkirk Wheel data

British Waterways provided data on mode of arrival to the Falkirk Wheel, one of Scotland's increasingly popular visitor attractions. The Falkirk Wheel lies on a canal and on a dedicated cycle route (the canal towpath). There are two train stations nearby in Falkirk and a shuttle bus service is provided from the station. In the years 2003, 2004 and 2005, a visitor survey was undertaken. In 2003, a sample of 200 visitors was obtained, this was increased to 300 in 2004 and 2005. The percentage of visitors resident in Scotland across the three years was 64%, 47% and 68 respectively. It is not clear how representative these percentages are in terms of total visitation. Although data was provided for all three years, there is a lack of continuity in the categories of transport used, thus only data for 2005 is presented here (Table 9). There was a slight decrease in the percentage of Scottish residents arriving by car from 88% in 2003 to 82% in 2005. The numbers arriving by public bus and tour coach have increased slightly.

Cross analysis of the data shows findings consistent with the other surveys discussed in this section, namely that Scottish residents were underrepresented as users of public transport and tour coaches. However, they were over-represented in the categories of public bus, walking and cycling.

3.5 Transport to Scottish Natural Heritage Sites

Scottish Natural Heritage (SNH) are one of the key organisations involved in the management of tourism in Scotland, having responsibility for Scotland's protected areas, which constitute about 20% of the land area. This includes a number of National Nature Reserves and the two National Parks. They periodically undertake visitor and user surveys within these protected areas. Table 9 is a summary of mode of transport use to SNH taken from five visitor surveys over the period 1997 to 2003. Transport aspects of the first three studies are discussed in further detail below.

The NNR Baseline Visitor Survey was undertaken by NFO on behalf of SNH at twenty three National Nature Reserves in Scotland on a sample of 4220 visitors to the park. 52% of these visitors were from Scotland, 36% from elsewhere in the UK and 10% from overseas. When asked to indicate what their main type of transport had been on their journey to the NNR they were visiting, the majority of respondents indicated that they had travelled by car or van (86%). Other methods were much less likely to be used, with 6% travelling by boat or ferry, 4% using public transport and 2% walking all the way. Table 10 illustrates that type of transport used was similar regardless of the types of trip taken. It was also found that younger visitors were slightly less likely to travel by car (79%) while those classified as Empty Nesters were more likely to do so (85%).

Visitors to island NNRs were clearly more likely to state that their main form of transport was a boat or ferry (30%) and visitors to NNRs located in the

Northern Isles (8%), Grampian (8%) and the West Highlands (6%) were slightly more likely to use public transport than in other areas. Whilst it is not possible not separately examine mode of travel by visitors from outside Scotland within this data set, the high percentage of such visitors in the sample, combined with the high rate of car usage, suggests a higher level of car usage than for the National Trust properties, presumably due to the remote nature of SNH properties.

3.6 Cairngorms Visitor Survey

Unfortunately this information is not broken down by origin of visitor. However, some indication of where opinions from outside Scotland principally lie can be gleaned from examining the information on length of stay. Whilst 100% of day-trippers were from Scotland, of the 1569 visitors questioned who were staying one night or more, 24% were from overseas. Overseas visitors tend to spend longer in Cairngorms National Park than visitors from Scotland or the wider UK. Since use of transport is broken down by length of stay, we can make some observations on the types of transport which visitors from outside Scotland have used both to access the park, and to travel around within it.

Participants in the survey were asked which mode(s) of transport they had used to access the park and to travel within the park. The dominant means of transport used to access the Cairngorms was private car/ hired car cited by 86% of those on a day trip, 82% on a short break and 74% of visitors on a longer break. Private bus/ coach tours, organised by companies such as Shearings, transported 10% of short break visitors and 14% of those on a longer holiday, while public buses were used by 4% and 3% of respondents on short breaks and longer holidays respectively. The rail network was only utilised by 1% of people on a short break and 2% on a longer holiday.

The private car also emerges as the preferred mode of transport for travel within the park for day visitors and holidaymakers alike. Among those taking a break within the park, buses and coaches are used by 15% on a short break and 17% on a longer break. Walking and cycling are also highlighted in these findings as important forms of transport used by visitors to travel around the park, while rail travel is absent, suggesting the lack of a relevant service.

3.7 Loch Lomond and Trossachs Visitor Survey 2005

A very similar survey to the Cairngorms Visitor Survey was undertaken the following year by the same contractor in Loch Lomond and the Trossachs National Park. Again, visitors from outside Scotland were most likely to have undertaken a longer stay in the park, with 76% of those on a longer break residing outside Scotland.

Unsurprisingly, the dominant means of accessing the Loch Lomond and the Trossachs area was private /hired car, the figures being fairly static for both

day trippers and people spending a longer time away from home. Day trippers were most likely to have used a private car (89%). Use of a hired car is highest among people spending a longer break away from home (16%). The use of a private bus or coach tour is highest among those people on a short break (14%), again highlighting the importance of the five day breaks offered by many of the coach tour holiday companies such as Shearings. Use of private car/hired car for visitors from overseas is stated by the report to be 83%

3.8 Transport to Large-Scale Events

An attempt was made to access data on use of transport for large scale events. Some data was obtained from EventScotland but the data collected is in the form of economic impact study and therefore does not cast a great deal of light on travel behaviour. Two reports by Comperio Research (2005a; 2005b) provide information on For the Open Golf Championship in St Andrews in 2005 it was calculated that spectators spent £2,050,000 on travel in Scotland, 60% of which was on petrol. For the Senior British Open Championship 2005 in Aberdeen, expenditure on travel was considerably less, calculated at £27,000 for the North East of Scotland and £12,000 for Scotland. Again, the majority of expenditure is estimated to be on petrol, with the remainder attributable to car hire and public transport.

EventScotland were able to verbally provide some data on mode of transport use for the Open Championship. The percentage of visitors using public transport (train and bus) is rather higher than has been observed in many of the other studies discussed above, possibly due to special provision for the event. 54% of the 1948 respondents were from Scotland with 35% from the rest of the UK and the remaining 11% from overseas.

For the case of the Burns an' a' That Festival which took place in May 2005 in Ayrshire, an evaluation and economic impact assessment compiled by the Moffat Centre for Travel and Tourism Business Development (2005) provides data on mode of transport used to travel to Ayrshire for various events. Table 11 details the responses of a sample of 255 respondents by place of residence, some respondents using more than one form of transport. It can be observed that the number of respondents from outside Scotland is very small. The dominance of the private car is however less acute for these visitors, than for those from Ayrshire and elsewhere in Scotland. Private coach did not feature in the range of transport modes used, which probably indicates that the festival, which takes place outside peak season, does not feature on organised tour itineraries.

3.9 Tourist Use of Rail (First Scotrail data, 2005)

To conclude this section, it is useful to examine data provided by First Scotrail which has been collected on users of the Freedom of Scotland Travelpass (DHC, 2005). Travelpasses are aimed at tourist travellers and allow either 4

out of 15 consecutive days travel for £96, or 8 out of 15 consecutive days travel for £130. Travel is allowed travel on certain train, bus and ferry services. ScotRail has supplied data for the purchases of the Freedom of Scotland Travelpass.

With reference to Figure 7, 66% of Travelpasses were bought in a travel centre or station, the second most popular method of buying a Travelpass was on the internet, however only 12% of passes were bought on the internet. Travel to Scotland by Travelpass users from outwith the UK is mainly by aeroplane, with over 60% of users arriving this way. 20% also travelled to Scotland from outside the UK by day train. Just under 10% of Travelpass users from outside the UK travelled to Scotland by bus/coach. Nearly 70% of Travelpass users from within the UK travelled to Scotland by train, with just over 10% of users travelling by airplane and 10% by car to Scotland. Less than 5% of people from within the UK used the Caledonian Sleeper or the bus/coach to travel to Scotland.

51% of people purchasing the Travelpass had used a tourist ticket previously, with 61% having used the Freedom of Scotland Travelpass before, 15% having used the Highland Rover and 2% having used the Central Scotland Rover. This perhaps indicates a niche market with a high degree of repeated usage. 40% of those using the tourist tickets from outside the UK learnt about the passes from the internet while 22% were recommended the passes by a friend or relative. By contrast, of those purchasing tourist travel tickets from within the UK, only 14% found out about the tourist tickets from the internet, 7% were recommended the tickets from a friend or family and 7% saw the tickets advertised in a Scotrail leaflet.

It is interesting to note from Figure 8, that 20% of users would have chosen a different holiday if their tourist travel ticket was not available from First Scotrail. Over 40% of users stated, however, that they would have bought tickets for individual journeys. Again this indicates a consistent market segment of tourists who prefer to travel by rail. From Table 12 it can be observed that the West Highland Line is used by 38% of those with Travelpasses, 33% also use the Edinburgh/Glasgow to Inverness line and 28% use ferry services included in the ticket. It is noticeable that only 24% of passengers use the bus to travel. Very few passengers are seen to be travelling by rail south of Edinburgh.

4. VISITOR USE OF TOURIST DEDICATED MODES OF TRANSPORT

The most common form of tourist dedicated transport in Scotland is the private coach. Data presented in earlier in this chapter has illustrated that it plays a crucial role in transporting visitors, particularly those from outside the UK, around the more remote areas of Scotland which are less readily accessible by public transport, but also to urban locations (14% of visitors from outside Scotland travelled to the Gladstone's Land National Trust property in Edinburgh by private coach). Private coach travel is often associated with organised group travel and, where this is the type of trip

chosen by the visitor, travel behaviour has normally been decided at the point of booking the holiday. Coach travel is often argued to be popular among certain market segments, particularly the young and the elderly, due to low cost and high convenience. This is reflected in the range of coach travel products on the market, from those at the top end of the market which may use expensive accommodation and are marketed as luxury coach tours, to the backpackers buses which are essentially a cheap form of coach tour with built in flexibility. Additionally, short coach trips are offered by companies such as Jacobite and Heart of Scotland Tours. The decision to use this form of travel may be taken at shorter notice but advance booking would probably be required during peak season.

Tourist dedicated travel by rail is less common. The Jacobite steam train runs a daily summer service from Fort William to Mallaig and is extremely popular with tourists. However, tickets for this train are only available from the private company which operates the tour, and not from the normal rail ticket outlets. This may pose a barrier to use for visitors who only discover the existence of the service during their stay in Scotland. Luxury rail product exists, such as the Royal Scotsman luxury train which offers a five day tour for a maximum of 36 passengers at a cost of US\$5500 with accommodation and food on board the train.

Overall, little data is available on the use of tourist dedicated modes of transport by visitors. However, in 2003 research was commissioned by VisitScotland in order to fill gaps in their knowledge regarding the coach tour market (Lynn Jones Research, 2003). The survey focused on industry stakeholders rather than consumers, to gain a better initial understanding of the market and is thus interesting, as it provides information on the mediating role of tour operators in travel behaviour. The study involved a desk based review of secondary data and eleven interviews with individuals representing industry interests. Coach tours are shown to account for 3% of all tourist trips to Scotland with the domestic market accounting for 80% of business and the majority of overseas coach tour passengers coming from Germany, however, the source of these figures is unclear.

5. CONCLUSIONS

A large amount of data has been reviewed in this paper. Drawing on this review, it is possible to develop a picture of what we currently know about the travel behaviour of visitors to Scotland and also to identify gaps in knowledge which may be addressed in future surveys.

It is clear that a great deal of reliable information is currently available from national data sets. This allows us to build up a picture at the aggregate level of the country / region of origin of domestic and overseas visitors, port of entry (in relation to overseas visitors) and mode of travel to Scotland / UK. We also know the areas visited within Scotland and the number of nights spent in each area. However, we can learn very little about the travel patterns of visitors within Scotland itself from this data. We know that the majority of domestic

visitors arrive in Scotland by car but we do not know whether the likelihood of using a car whilst in Scotland for this group is any different from that of local users with access to a car. Similarly, a significant minority arrive in Scotland by air and rail, but we do not know whether there are any differences in mode and destination choice between these two sub-groups after controlling for personal and trip characteristics.

We also know that the vast majority of overseas visitors arrive in UK by air, most of whom will face a choice whether to use public transport (including taxis/minicabs) or to hire a car. Data from Edinburgh, Glasgow and Prestwick airports show a broadly similar modal split between public and private transport. Although we have no data on the travel behaviour of visitors within Scotland beyond the mode of travel to the airport on departure, there is nothing to suggest that the availability of direct access to rail at Prestwick makes any difference to the overall public / private modal split in comparison with Edinburgh and Glasgow airports. What is evident from the available data, and has probably more to do with the relative attraction of Edinburgh than transport connectivity, is that dispersal of visitors beyond the local area is greater for those departing Glasgow and Prestwick airports than for those departing Edinburgh airport.

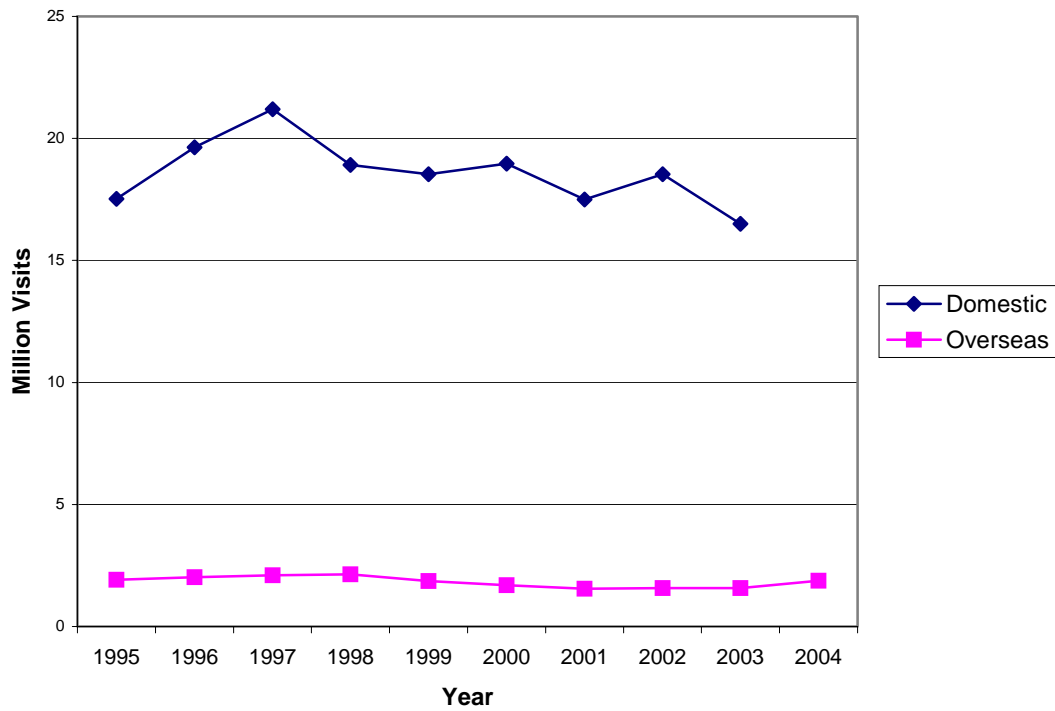
Data from a variety of attractions for which transport data was available was collated in order to complement that which was available at the national level. However these have largely been surmised in a piece-meal fashion from a number of reports which only deal with specific modes, as well as inferences from passenger and visitor satisfaction studies which do not always distinguish between types of visitor. It is therefore difficult to draw any firm conclusions from the data. However, it is clear that the car is the dominant mode of travel to attractions for visitors. Nonetheless, public transport is an important element of the destination product for a sizeable percentage of overseas visitors. This percentage seems to increase for urban areas, and it is likely that the rise in numbers of visitors travelling directly by air from overseas, but also from the more southerly regions of the UK will lead to more visitors being reliant on public transport during their stay in the future.

Table 1 Information available from national surveys and surveys of major routes / ports of entry

	UKTS	NTS	IPS	CAA	Rosyth-Zeebrugge Superfast Ferry	Greater Glasgow & Clyde Valley Visitor Survey
Sample size	70,000 per annum (UK)	Travel to Scotland ~ 300 (1992/95, 95/98, 98/01) 694 (2001/04) Travel within Scotland ~ 150 (1992/95, 95/98, 98/01) 197 (2001/04)	46,000 in 2004 (UK) 460 at Glasgow and Edinburgh airports in 2004	6,700 domestic at Scottish airports in 2005 5,700 overseas at Scottish airports in 2005	304 in 2002 340 in 2003	1,350 overnight visitors and day-trippers (excludes residents of GGCV)
Residence	Region of residence	Region of residence	Country of residence	Region of residence (UK); Country and region of residence (Overseas)	Country of residence (overseas)	Country of residence (all UK (except GGCV)) and overseas
Entry / departure	Mode	Mode: journeys > 50 miles to region Destination: journeys > 50 miles (1992-95 only)	Entry to UK by port/route and mode	Glasgow, Edinburgh, Prestwick, Aberdeen & Inverness airports	Rosyth Dock	Mode of arrival in area
Travel to first overnight	Mode (private)		Area of	Area of	Area of	Areas within

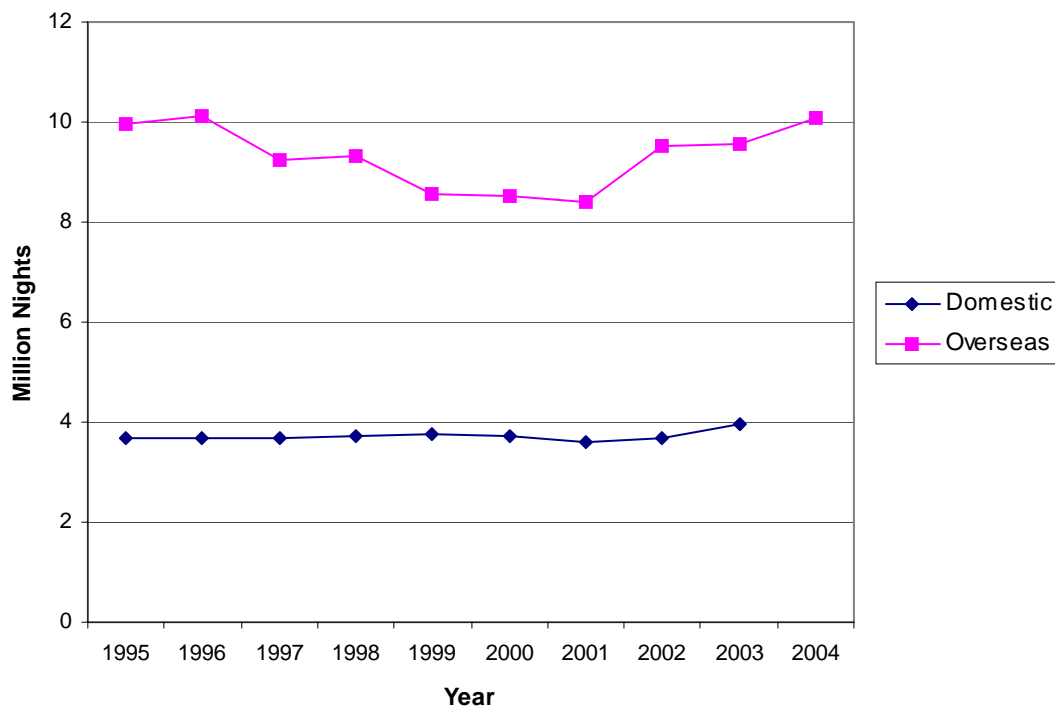
base	transport modes only)				overnight stay; Mode of transport.	GGCV visited and stayed in.
Travel between overnight bases	Area of overnight stays	Mode: journeys > 50 miles to region Destination: journeys > 50 miles	overnight stays	overnight stays	Areas of overnight stays; Mode of transport.	
Travel from last overnight base			Mode of travel to port/route of departure	Area of last overnight base; mode of travel to port/route of departure	Area of last overnight stay; Mode of transport.	
Day trips undertaken to local attractions					Areas visited without overnight stops (N.B. not distinguished from areas of overnight stays)	Mode of travel within area

Figure 1 Trends in UK and overseas visits to Scotland



Source: IPS 1995 – 2004; UKTS 1995 - 2003

Figure 2 Trends in nights spent in Scotland for domestic and overseas visitors



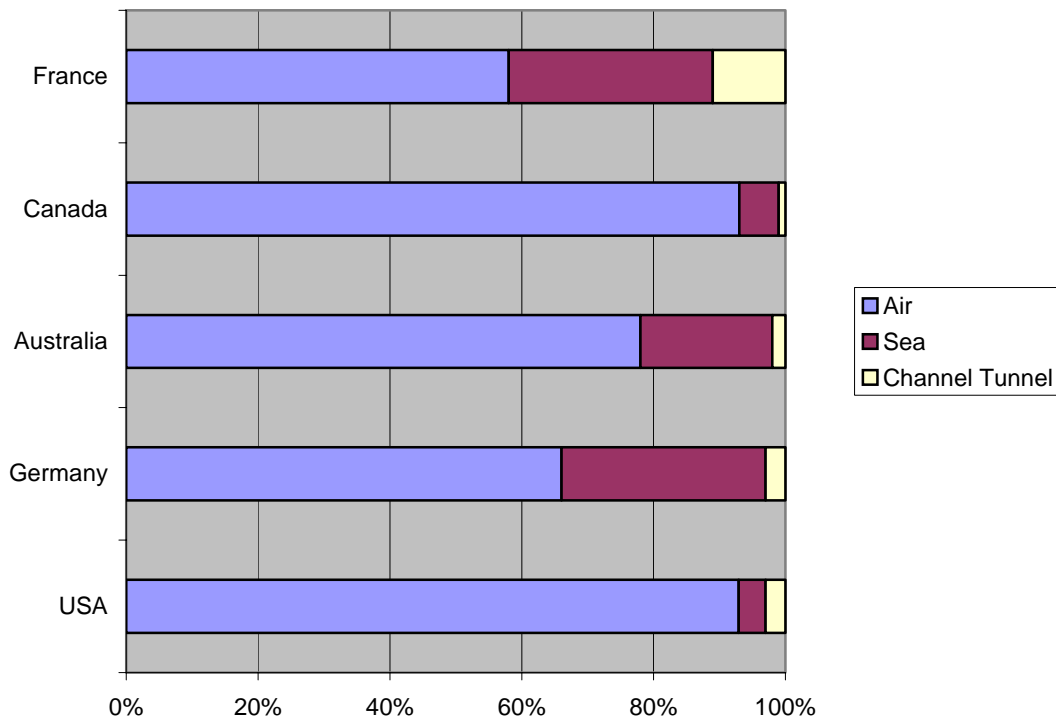
Source: IPS 1995 – 2004; UKTS 1995 – 2003

Table 2 UK and overseas trips to Scotland in 2003

	Visits (million)
Scotland	8.0
England	7.8
Rest of the UK	0.7
Total UK	16.5

Source: UKTS 2003

Figure 3 Mode of arrival in UK of overseas visitors by country of origin



Source: IPS 2004

Table 3 Destinations visited in Scotland by domestic visitors

	Visits (%)
Aberdeen and Grampian	9
Angus and Dundee	3
ALLST	13
Ayrshire and Arran	6
Dumfries and Galloway	6
Edinburgh and Lothian	21
Edinburgh	18
GGCV	18
Glasgow	16
Highlands	14
Fife	4
Perthshire	5
Scottish Borders	3

Source: UKTS 2003

Table 4 Destinations visited in Scotland by overseas visitors by port/route of entry

	Total	ALLST	GGCV	Ayrshire & Arran	Dumfries & Galloway	Scottish Borders	Lothian	Fife	Perthshire	Dundee & Angus	Grampian	H & I	Unspecified
Heathrow	515,421	45,706	135,874	18,604	11,133	5,185	276,265	18,431	19,389	12,566	62,156	96,451	4,626
Gatwick	93,450	9,805	13,856	2,023	2,173	802	60,403	5,976	4,057	2,688	10,668	22,204	3,498
Manchester	50,297	10,123	11,976	2,332	1,810	4,251	20,482	2,733	4,731	554	7,057	13,046	0
non-Scottish UK residual	233,214	21,000	76,126	5,330	7,321	11,293	114,350	11,637	3,023	3,199	21,567	36,802	6,340
Glasgow	342,080	64,525	227,145	37,611	8,097	2,432	90,407	24,467	23,686	15,468	24,739	92,226	0
Edinburgh	309,709	55,120	45,970	4,584	2,092	11,452	230,903	25,359	18,834	16,395	25,292	63,234	0
Total UK Sea & Tunnel Ports	337,097	51,274	106,453	9,060	20,591	1,322	172,371	11,652	19,930	14,110	18,355	137,125	17,764
Total	1,881,268	257,553	510,947	79,544	53,217	36,737	965,181	100,255	93,650	64,980	169,834	461,088	32,228

Source: IPS 2004

Table 5 Destinations visited in Scotland by departing overseas visitors from Scottish airports

	Total	Highlands & Skye	Outer Isles	Glasgow & Clyde Valley	Loch Lomond, Trossachs, Argyll & the Isles	Argyll & Isles	Aberdeen & Grampian	Perthshire, Angus, Dundee & Fife	South of Scotland	Edinburgh & Lothians	Other
Aberdeen	308,952	8,606	6,916	50,008	4,652	176,934	9,137	1,245	2,206	10,024	0
Edinburgh	713,136	189,039	10,378	67,048	48,175	40,721	152,030	35,578	18,306	505,122	7,264
Glasgow	640,369	137,819	104,910	427,289	64,988	31,734	75,222	82,701	76,329	122,260	3,014
Inverness	45,725	38,178	603	689	441	820	19	254	4,818	1,867	106
Prestwick	418,975	111,731	101,765	224,325	124,222	20,444	7,689	142,450	28,349	212,144	18,198
Total	2,127,157	485,373	224,572	769,359	242,478	270,653	244,097	262,228	130,007	851,417	28,582

Source: CAAS 2005 Quarters 1 - 3

Table 6 Long distance trips from bases within Scotland

	1992 - 95	1995 - 1998	1998 - 2001	2001 - 2004
Trips (million)	4.05	5.38	4.39	2.56

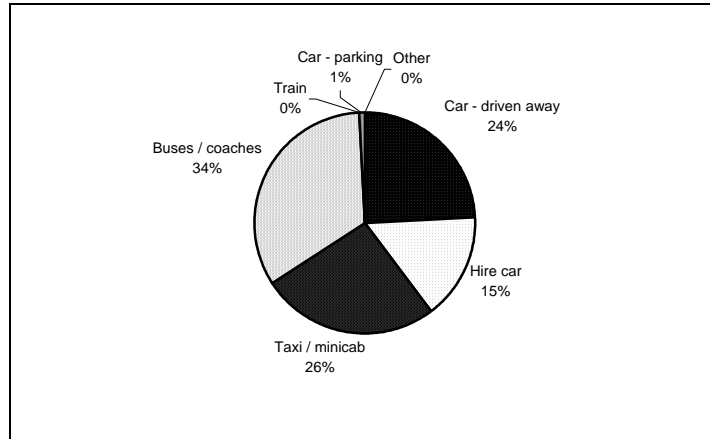
Source: NTS 1992 - 2004

Table 7 Mode of arrival at Historic Scotland Properties 2002

	All Properties (total 19)	Edinburgh Castle
Private car	54	19
Hire car	24	9
Organised coach trip	10	14
Boat	6	1
Scheduled bus/coach	5	20
Walking all the way	4	27
Train	2	9
Walked part of way	1	4
Bicycle	1	-
Campervan	1	-
Taxi	-	4

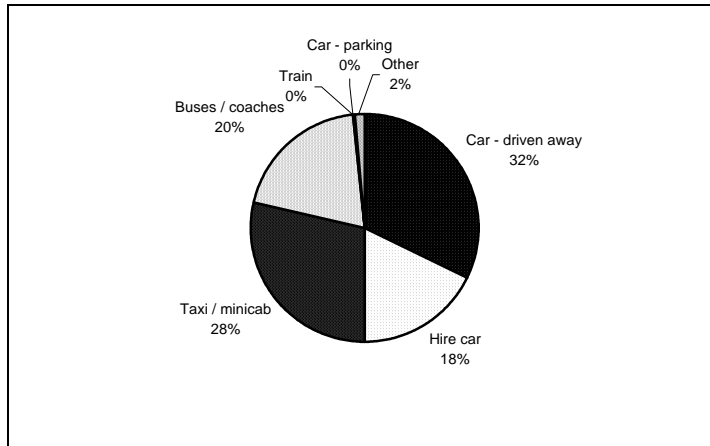
Source: Historic Scotland, 2002

Figure 4 Final mode of transport to Edinburgh Airport (overseas visitors)



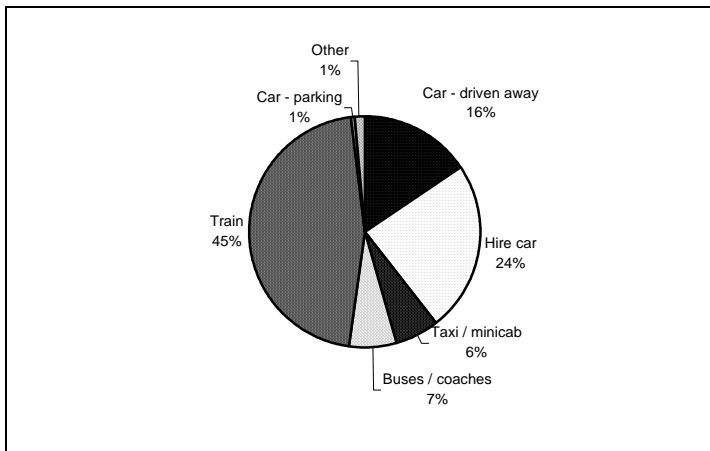
Source: CAA 2005 Quarters 1 - 3

Figure 5 Final mode of transport to Glasgow airport (overseas visitors)



Source: CAA 2005 Quarters 1 - 3

Figure 6 Final mode of transport to Prestwick airport (overseas visitors)



Source: CAA 2005 Quarters 1 - 3

Table 8 Mode of arrival at Glasgow Museums 1999

Museum	Car	Local Bus	Train	Walk	Underground	City Tour Bus
Kelvingrove	2	19	6	36	5	0
People's Palace	68	3	11	13	0	0
Museum of Transport	69	9	6	4	8	1
St Mungo Museum	35	22	6	33	2	0
The Burrell	88	7	1	3	0	0
GOMA	17	31	22	23	5	0
Scotland Street	62	6	3	7	15	0
Total	52	14	8	17	5	0

Source: Glasgow City Council, 1999

Table 9 Main method of transport to Falkirk Wheel 2005

Mode of Transport	Percentage
Car/van/motorcycle	82.0
Private boat	0.3
Train/Underground	2.9
Public bus	2.3
Tour coach/minibus	4.3
Bicycle	1.6
Taxi/minicab	0.3
Walked	5.8
Other	0.3
Total	100.0

Source: British Waterways, 2005

Table 10 Mode of transport to Scottish Natural Heritage Sites (Percentage)

Survey	Ratio Scottish to Other	Own Vehicle	Public (Bus/Train)	Private (Coach)	Bicycle / Walk
NNR Visitor Survey 2002-2003	52:48	86	4	1	3
LLT NP Visitor Survey 2003-2004	n/a	74	9	6	3
Cairngorms NP Visitor Survey 2003-2004 (interim report)	n/a	76	5	8	<1
Cairngorm Mountain Recreation Survey 1997-1998	56:44	94	1	3	1
Glenmore & Rothiemurchus Visitor Survey 1998-1999	58:42	90	3	3	2

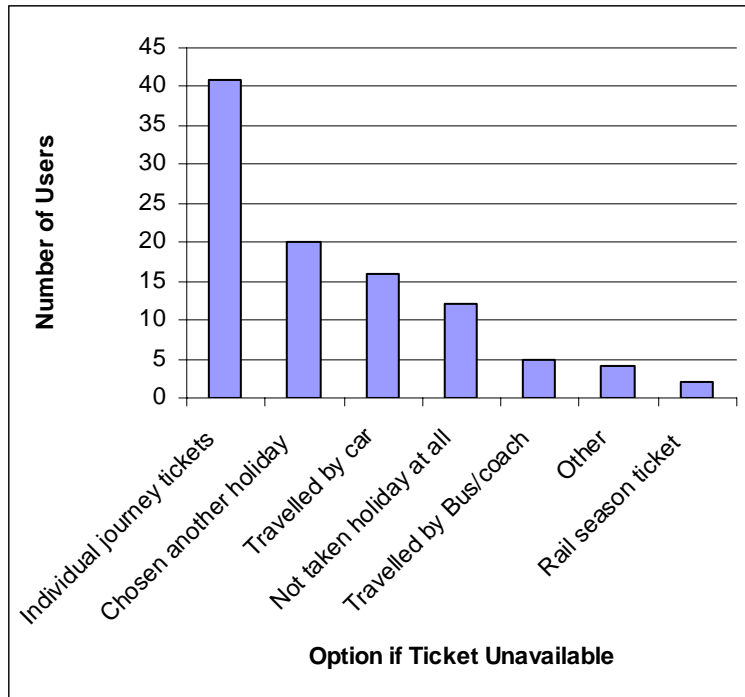
Source: SNH, 2004

Table 11 Mode of transport to *Burns an' a that* festival by origin

Mode of Travel to Ayr/Ayrshire	Ayr	Other Ayrshire	Other Scotland	England	Overseas	Total
Sample	54	97	84	14	6	255
Walked	11	22				33
Own car	34	68	60	8	2	172
Train	2	3	20	2	1	28
Bus	6	2	3	1	1	13
Scheduled coach	1					1
Private coach						0
Hire car				2	2	4
Air				1		1
Other		3	2	1		6
Total	54	98	85	15	6	258

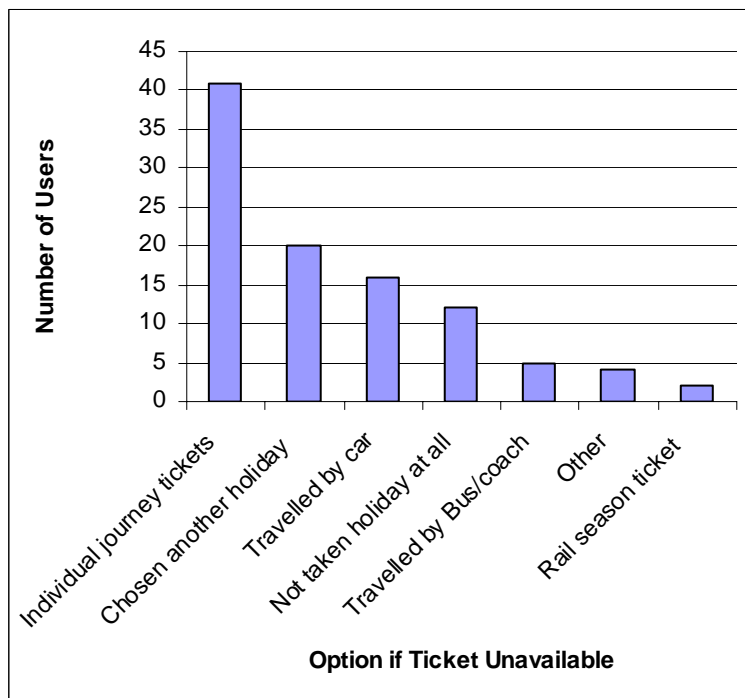
Source: Moffat Centre for Travel and Tourism Research, 2005

Figure 7 Travel to Scotland by Travepass Users



Source: First Scotrail cited in DHC, 2005

Figure 8 Transport option taken if tourist ticket not taken



Source: First Scotrail cited in DHC, 2005

Table 12 Routes used by Travelpass users

Operator	Route	%
First Scotrail	West Highland Line	34
	Edinburgh/Glasgow - Inverness	33
	Inverness - Kyle	26
	Edinburgh - Glasgow	20
	Aberdeen - Inverness	18
	Inverness - Wick/Thurso	17
	Edinburgh - Aberdeen	16
	Glasgow - Aberdeen	10
	Glasgow - Carlisle/Newcastle	10
	Edinburgh/Glasgow - Falkirk /Dunblane/Perth	5
	Fife Circle	5
	Glasgow - Stranraer	4
	Edinburgh - North Berwick	3
	Edinburgh - Bathgate	1
	Glasgow - Shotts - Edinburgh	1
SPT	Ardrossan/Largs/Ayr	8
	Wemyss Bay/Gourock	3
	North Electrics	4
	Argyle Line	2
	Glasgow - Whifflet/Cumbernauld/Motherwell	2
	Paisley Canal	1
	Glasgow - East Kilbride/Barrhead/Kilmarnock	1
Citylink	Oban/Fort William - Inverness	8
	Kyle - Uig	8
	Inverness - Ullapool	5
	Wick - Thurso/John O Groats	2
Stagecoach	Dundee/Leuchars - St Andrews	1
Other	Ferry Services	28
	GNER	8
	Virgin	5
	Highland Country	2
	Subway	2
	Bowmans	2
	Guide Friday	1

Source: First Scotrail cited in DHC, 2005

BIBLIOGRAPHY

British Waterways (2005) Data on Mode of Arrival to Falkirk Wheel, unpublished.

Comperio Research Ltd (2005a) *The Open Championship 2005; Economic Impact Assessment – Version 1a*, prepared on behalf of R&A and Scottish Enterprise.

Comperio Research Ltd (2005b) *The Senior British Open Championship 2005; Economic Impact Assessment – 4th Draft*, prepared on behalf of Scottish Enterprise Grampian, VisitScotland, EventScotland and Aberdeen City Council.

DHC (2005) *Investigation into the Travel Behaviour of Visitors to Scotland. Working Paper 1 – Tourist Travel Behaviour and the Impacts of Public Policy*, unpublished.

George Street Research Limited (2003) *Survey of Visitors Coming to Scotland on the Rosyth Ferry Link*, prepared on behalf of VisitScotland

Glasgow City Council, Culture and Leisure Services (1999) Large-Scale Museums Survey, unpublished.

Historic Scotland (2002) *Visitor Survey 2002*. Edinburgh: Historic Scotland.

Lyn Jones Research Ltd (2003) *The Significance of the Coach Tour Market for Tourism in Scotland: An Initial Review*, prepared on behalf of Visit Scotland.

Lyn Jones Research Ltd (2005a) *National Trust for Scotland Visitor Survey 2005*, prepared on behalf of the National Trust for Scotland.

Moffat Centre for Travel and Tourism Business Development (2005) *Burns an' a' that Festival 2005: Evaluation and Economic Impact Assessment*. Glasgow: Moffat Centre.

Scottish Executive (2005) *Review of First Impressions of Scotland: Report to Ministers - Executive Response*. Edinburgh: Scottish Executive.

Scottish Executive (2006) *Scottish Tourism: The Next Decade*. Edinburgh: Scottish Executive.

Scottish Natural Heritage (2004) *National Nature Reserve Baseline Visitor Survey 2002/2003*.

TNS (2004) *Greater Glasgow & Clyde Valley Visitor Survey 2003/2004*. London: TNS.