Research Into
Proposed Ferry Discount Scheme

Final Report

To

HITRANS
Comhairle nan Eilean Siar
HIE Innse Gall

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EXECUTIVE SUMMARY

INTRODUCTION

Reference were commissioned by HITRANS, Comhairle nan Eilean Siar and HIE Innse Gall to undertake a preliminary study to provide underpinning information to assist future development of a Ferry Discount Scheme (FDS) on services to the Outer Hebrides. The study assessed the impacts of a:

- 40% reduction in passenger and car fares for island residents.
- 40% reduction in charges for all freight vehicles.

It was assumed that these reductions would be in addition to existing discounts.

The study was largely desk-based, drawing on existing data and research reports. Consultations were undertaken with a number of businesses and organisations based in the Outer Hebrides.

TRANSPORT CONTEXT

There are five ferry services between the mainland and the Outer Hebrides:

- Ullapool-Stornoway (island of Lewis).
- Uig-Tarbert (Harris).
- Uig-Lochmaddy (North Uist).
- Oban-Lochboisdale (South Uist).
- Oban-Castlebay (Barra).

Compared to many other CalMac routes the services have:

- Long-crossing times. These range from 1 hour 40 minutes on most Uig-Tarbert sailings, to over 7 hours on some Oban-Lochboisdale sailings.

- Limited frequency. The number of return sailings per week ranges from 20 on Ullapool-Stornoway in mid-summer, to three to Castlebay/Lochboisdale during some of the winter timetable.

In 2006 the total traffic volumes on the five services were:

- Passengers: 388,000 of which, it is estimated, 207,000 were island residents.
- Cars: 114,000 of which, it is estimated, 70,000 were for trips made by island residents.
- Freight vehicles: 20,000.

It is estimated that the fare revenues on these services in 2006 were:

- Island residents-passengers: £1.9 million.
- Island residents-cars: £2.9 million.
- Freight vehicles: £4.4 million.

In the most recent year for which data are available, the annual operating subsidy for the services was £11.1 million.

Other points of note are that:

- Fares on the services are among the highest on the CalMac network. Examples include:
    - £129 for a return trip with a car and two passengers on Ullapool-Stornoway. This is based on a 6-journey ticket which offers the cheapest fare available on that route
    - Between £363 (Uig services) and £647 (Oban services) for a return trip with a 12 metre freight vehicle.

- Passenger and car fares are below those on ferry services to Orkney and Shetland, although some of the Northern Isles' freight charges are below those to the Outer Hebrides.

- Within the last decade, passenger and freight traffic growth has been below that on comparable CalMac services. Total freight demand actually fell between 1997 and 2006.

- Ferry services are the dominant mode of travel to/from the mainland. They account for almost three quarters of trips, with the balance made by air.

- Two out of three residents' trips on the ferry services are made accompanying a car. This means that car fares are an important determinant of total passenger demand.

Among those consulted, there appears to be considerable dissatisfaction with existing services. This is not only in terms of cost. It also relates to service frequency, timings, reliability and certain elements of the fare structure.

DEMOGRAPHIC AND ECONOMIC CONTEXT

The main challenges facing the Outer Hebrides are:

- Reversing long-term population decline.
- Increasing productivity.
- Reducing unemployment levels, which continue to be above the regional and national averages.

There is a need to make the islands a more competitive place in order to attract and retain more investment, "talent" and population. High levels of imports and exports place a critical emphasis on external connectivity (both sea and air) which will have a major influence on future prosperity.

AIR DISCOUNT SCHEME AND OTHER TRANSPORT INNOVATIONS

The Air Discount Scheme provides reduced air fares to island residents and students who are studying off-island. As it was only fully introduced in 2006 the Scheme's impacts have yet to fully emerge. However, as far as can be discerned, the ADS has generated traffic on some of the air routes. The very high take-up, in terms of registrations among Outer Hebrides residents, implies that the Scheme is seen as being of significant value.

A number of other transport innovations have been introduced in the Outer Hebrides. These included: improved, dedicated inter-island ferry services; fare reductions on the Barra-Glasgow air service; and a scheme to reduce transport costs for inter-island freight movements.

The levels of traffic growth, along with independent evaluation evidence, shows that these developments have generated significant economic and social impacts. They also demonstrate that demand for travel is responsive to innovations; including not only lower fares but also reduced journey times and increased frequencies.

The research identified a number of other countries where discounts for ferry services are provided for island residents. In some cases the discounts are greater than those presently available through CalMac's multi-journey tickets; and in others, passenger travel on the ferry services is free.

POTENTIAL IMPACTS: DEMAND AND OPERATOR REVENUES

Based largely on pre-existing research we estimate that total growth in demand from the 40% fare reductions could be of the order of:

- Passengers: 32,000 additional return trips per annum.
- Cars: 18,000 return trips.
- Freight vehicles: 2,200 return trips.

It is estimated that 10% of the additional passenger trips would be displaced from air.

Caution is required in interpreting these findings. Some of the information used is quite dated; and some was not specifically designed to assess large decreases in fare levels. Further, it is uncertain as to the number of years that it would take for the forecast traffic increases to be achieved.

It is estimated that FDS would increase annual operating subsidy by around £1.8 million. However, the fare reductions would also incur further, additional costs to the ferry operator. Increased demand is likely to require additional capacity to be provided through larger vessels and/or additional sailings.

It is estimated that the lower fares would increase vehicle deckspace utilisation on the ferries by between one quarter and one third. However, more sailings and/or larger vessels would also, it could be expected, stimulate additional demand from both island residents and visitors.

POTENTIAL ECONOMIC AND SOCIAL IMPACTS

Again based largely on pre-existing research, estimates were produced for the potential employment impacts (Full-Time Equivalent jobs) of the reduced fares. It is estimated that around 320 FTE jobs could be generated within the Outer Hebrides. This would be largely through increased business competitiveness in key export sectors; and the attraction/retention of population which, in itself, would support greater economic activity. Again there is, however, uncertainty around the timescale over which the forecast impacts would emerge.

It appears that greater economic benefits could be generated through reducing freight rates rather than passenger and car fares. However, the economic impacts of population growth arising from lower transport costs could be at least as significant in the longer-term. The impacts from lower freight rates assume, of course, that hauliers pass on the full 40% ferry fare reduction to their customers.

More widely, the effects of FDS would be to:

- By reducing island residents' travel costs, address one of the main identified causes of out-migration.

- Support the objectives of national and regional economic policy by stimulating participation in export markets, with the Outer Hebrides ferries being a first link in the chain of global connections from the islands. Overall, FDS would make the Outer Hebrides a more competitive location and thus support and attract investment, "talent" and population.

- Help deliver the National Transport Strategy's objective of ensuring affordability of public transport.

- Allow greater participation of island residents in Scottish society by reducing travel costs to a level closer to those in mainland communities.

1 INTRODUCTION

This is the final report for a research study to provide underpinning information to assist the future development of a Ferry Discount Scheme (FDS). The research was undertaken on behalf HITRANS, Comhairle nan Eilean Siar (CnES) and HIE Innse Gall between January and March 2007.

1.1 STUDY OBJECTIVES

The principal objectives of the study were to:

- Undertake a preliminary overview of the Air Discount Scheme (ADS).
- Undertake preliminary modelling in relation to the potential impacts and costs of FDS.
- Identify key administration issues arising from the introduction of FDS.

1.2 STUDY METHOD

The research was largely desk-based, reviewing and utilising existing information and studies covering:

- Ferry services to the Outer Hebrides.
- The population and economy of the Outer Hebrides.
- The detail and operation of ADS.
- Discount schemes for ferry services elsewhere in Europe.
- Potential impacts of fare reductions on ferry services to the Outer Hebrides.

This was supplemented by: interviews/consultations with **19** organisations and companies based in the Outer Hebrides; and a meeting with Scottish Executive officials. These were used to generate views and information which formed inputs to the study.

1.3 STRUCTURE OF THE REPORT

Chapter 2 describes the present position regarding ferry services between the Outer Hebrides and mainland Scotland. **Chapter 3** provides an overview of the population and economy of the Outer Hebrides.

Chapter 4 describes the proposals for the FDS as they presently stand, reviews experience from the introduction of ADS and reviews schemes elsewhere that offer discounted ferry travel to local or island residents.

Chapter 5 presents our appraisal of the potential impacts of FDS on demand and revenues for the ferry services. **Chapter 6** assesses FDS' potential economic and social impacts. **Chapter 7** gives our conclusions.

Appendix A provides a detailed analysis of ferry services between the Outer Hebrides and mainland Scotland. **Appendix B** summarises the main findings from interviews with a number of companies and sectoral representatives based in the Outer Hebrides.

2 FERRY SERVICES TO THE OUTER HEBRIDES

2.1 INTRODUCTION

This Chapter provides an overview of ferry services between the Outer Hebrides and the Scottish mainland. It is based on the analysis given at **Appendix A**, which reviews traffic volumes and fares in detail. It covers:

- Context.
- Traffic volumes and trends.
- Overall mainland travel market.
- Ferry travel by island residents.
- Fares.
- Operating subsidy and traffic revenues.

2.2 CONTEXT

The five services from the mainland are as follows:

- Ullapool-Stornoway (island of Lewis).
- Uig-Tarbert (Harris).
- Uig-Lochmaddy (North Uist).
- Oban-Lochboisdale (South Uist).
- Oban-Castlebay (Barra).

All of the services convey passengers and vehicles and operate all year round.

The context of the fare regime for ferry services to the Outer Hebrides is one where, compared with many other Highlands & Islands routes, crossing times are long and frequencies are limited. The crossing times range between:

- 1 hour 40 minutes on most Uig-Tarbert sailings; and
- 7 hours 25 minutes on some Oban-Lochboisdale sailings.

In addition, overall journey times are extended by the need for vehicles to check in at the port between 30 to 45 minutes before departure.

Sailing frequencies range from 20 return sailings per week on Ullapool-Stornoway in the peak summer months down to three return sailings per week to Castlebay and Lochboisdale during parts of the winter timetable. The crossing times and limited frequency create time penalties for users of the services. These are in addition to the financial costs of travelling; encompassing not only fares but costs for overnight stays some of which arise due to early last sailings on some routes.

2.3 TRAFFIC VOLUMES AND TRENDS

2.3.1 Volumes

In 2006, total traffic levels on the Outer Hebrides services were:

- Passengers: 388,000.
- Cars: 114,000.
- Commercial vehicles: 21,000, of which almost all (20,000) were freight vehicles.

In recent years, traffic growth has been strongest on the Uig services. In part this reflects the introduction of a larger vessel and the growing attractiveness of Uig-Lochmaddy relative to Oban-Lochboisdale for trips to Benbecula and South Uist. Allied to this is the growth of Inverness as a service centre for much of the Highlands & Islands.

2.3.2 Passengers

Between 1997 and 2006, on the five routes as a whole, traffic has grown by 11%, a simple average of only around 1% per annum. The overall increase is largely attributable to growth on the two Uig services. Passenger growth has been lower than on most comparable CalMac services.

2.3.3 Cars

For the Outer Hebrides routes in total, car traffic increased by 37% between 1997 and 2006. This growth rate is more than three times that for passengers. It is comparable to that observed on similar CalMac routes during the same period.

This indicates that the Outer Hebrides market is responsive to service improvements-notably the provision of additional vehicle space on the Uig and Stornoway routes. Where this has occurred, the strong growth in car traffic relative to passenger demand suggests that additional capacity has led to a "trading up" by those who previously travelled as foot passengers to travelling with their car.

2.3.4 Commercial Vehicles

Total commercial vehicle traffic to/from the Outer Hebrides declined by 8% between 1997 and 2006. The issue is complicated by the earlier years' data including some inter-island traffic which now travels on the dedicated inter-island services. However, even allowing for these factors, the trend is still well below those on similar CalMac services.

2.4 OVERALL MAINLAND TRAVEL MARKET

Ferry is the dominant mode of travel between the Outer Hebrides and the mainland. In 2006, a total of 535,000 trips (air and sea) were made. Of these, 388,000 (73%) were by surface travel. This compares to 147,000 air trips, which represent 27% of all travel to/from the mainland.

However, between 2001 and 2006 the growth in air passenger demand (34%) was approaching four times that observed for the ferry services (9%). This again shows that the travel market is responsive to service improvements. In the case of air travel this has been in terms of:

- New destinations served.
- Increased frequencies on existing routes.
- Within the last year, lower fares for island residents.

Total mainland trips (air and sea) grew by 14% between 2001 and 2006. This is below the growth rates observed on, for example, Islay and Coll/Tiree.

2.5 FERRY TRAVEL BY ISLAND RESIDENTS

It is estimated that island residents made 207,000 passenger trips and 70,000 car trips in 2006. This equates to just over half of the total passenger demand on the services and around 60% of car volumes. While visitor traffic is important, the data imply that a majority of trips are made by those living in the Outer Hebrides.

Most residents' trips are for leisure purposes. Employers' business travel is low and, especially so relative to that made by air. In fact, long-distance commuting by ferry is greater than in-work travel. This reflects the importance within the islands' economy of those who are based in the Outer Hebrides but spend much, or all, of their working time on the mainland or offshore.

The main type of leisure trip is Holiday/Short Break, although Personal Business (eg health, visiting lawyers, etc.) and VFR are also significant. The Inverness and Glasgow areas are the two key destinations. Among residents that use the ferry services, the average (mean) number of return trips per annum is between eight and nine. This equates to around one trip every six weeks.

Two in three residents' trips are made with a car. Therefore, car fares will be a relatively important influence upon passenger demand.

The ability to travel with one's car is a key factor in the decision to use surface transport rather than fly, although cost is also important for some users. This, and other research we have undertaken into transport services to the Outer Hebrides, suggests that the air and sea markets are quite separate. Residents will make use of both modes during the year, with the choice on each occasion reflecting the nature of the trip being undertaken.

2.6 FARES

2.6.1 Passengers and Cars

A range of ticket types is available for passenger and car traffic.

The main points to note for passenger and car fares on the Outer Hebrides services are that:

- Discounts are available on single fares through 5 Day Returns. These are available at "winter" rates for trips from the islands all year round. For island residents using this ticket in the summer months this provides a discount of 11%-20% compared to the summer season 5 Day Return.

- Discounts are also available via 6 Journey tickets. For passengers they offer only a slight reduction compared to the winter 5 Day Return. However, 6 Journey tickets offer a deeper discount (between 11% and 18%) for cars.

- The significance of these discounts is unclear. CalMac informed us that they do not hold data in a usable format which breaks down use of various ticket types and, in particular, the number of trips made using 6 Journey tickets.

Table 2.1 shows the charges for a car and two passengers using a 6 journey ticket which offers the lowest level of fares.

TABLE 2.1: TOTAL FARE FOR CAR AND TWO PASSENGERS: 6 JOURNEY TICKETS: WINTER 2006-07

Route	Cost (£)
Castlebay/Lochboisdale	152
Stornoway	129
Uig	84

The car element of these costs represents between 61% and 67% of the total charge for a vehicle and two passengers.

Passenger and car fares on the Outer Hebrides services are among the highest on the CalMac network. They are also higher than on the comparable internal Orkney services, largely due to higher car fares. In contrast, they are lower than those charged by Northlink on their services to Orkney and Shetland where all fares are singles with no discounted return or multi-journey tickets provided.

The *Western Isles Ferry Fares Mechanism Study* highlighted a number of anomalies in the existing fares: in particular, a lack of consistency in charges between routes. It is beyond the scope of this study to examine these issues. However, they do suggest a need to examine the CalMac fares structure-particularly in terms of the consistency or otherwise with which the CFARES system has been implemented.

2.6.2 Freight

For freight vehicles, CalMac offer discounts to high volume users which can be as high as 15% on some routes. In addition, a discount of 10% is given to vehicles using the overnight Ullapool-Stornoway freight service.

During winter 2006-07 the freight rates (excluding VAT) for a return trip by a 12 metre vehicle were:

- Uig-Tarbert/Lochmaddy: £363.
- Ullapool-Stornoway: £516 (£464 on overnight service).
- Oban-Castlebay/Lochboisdale: £647.

Freight charges on the Outer Hebrides services are among the highest on the CalMac network. The Castlebay/Lochboisdale and Stornoway services (daytime sailings) have the highest rates of all the company's services. Charges are also higher than those on the internal Orkney services.

Northlink's fare structure is more complex than that of CalMac. Charges are generally higher on a per metre basis and premiums are charged for bookings made close to the day of sailing. However the Northlink regime also offers:

- A heavily discounted rate for empty trailers on the Aberdeen-Lerwick service, with availability depending on the time at which a booking is made. As far as we are aware, this is not offered on any CalMac routes. The Northlink discount can mean that in certain circumstances, trailer rates for a return trip to Shetland can be significantly lower than for the Stornoway and Castlebay/Lochboisdale services, despite it having a crossing time (12 hours) well above that of any Outer Hebrides service.

- The ability to drop trailers. This is not permitted on any CalMac route bar the overnight Stornoway service. The need to have a unit accompanying the trailer increases the total vehicle length and thus the charge incurred.

- Fares that do not include the cost of an accompanying driver. CalMac include this element in their charge irrespective of whether the vehicle is accompanied or not.

2.7 OPERATING SUBSIDY AND TRAFFIC REVENUES

2.7.1 Deficit Grant Funding

The latest Annual Accounts published by CalMac are for financial year 2005-2006. In total, the company received a deficit grant of **£31.4 million** from Scottish Executive for operating its network of approved services.

To place the deficit grant for CalMac in context, the budgeted subsidy for the first year of operation of the Northlink services to Orkney and Shetland is **£31 million**. Further, *Scottish Transport Statistics (2006 edition)* shows that rail services in Scotland were forecast to receive **£631 million** in Scottish Executive funding in 2006-07.

Within the CalMac operations, the total operating losses incurred by services between the Outer Hebrides and the mainland was £11.1 million, broken down as follows:

- Ullapool-Stornoway: £4.5 million.
- Oban-Castlebay/Lochboisdale: £3.8 million.
- Uig-Tarbert/Lochmaddy: £2.9 million.

2.7.2 Traffic Revenues

Total Revenues

We have used existing fare levels and traffic volumes, along with data contained in a previous report (*Western Isles Ferry Fares Mechanism Study*) regarding the levels of discounts applicable to single fares, to estimate revenues for 2006.

The results are summarised at **Table 2.2**. Please note that we have not included figures for coaches as this traffic type is not being considered in this study.

TABLE 2.2: TRAFFIC REVENUES (£ MILLION): 2006

Traffic Type	Stornoway	Uig	Castlebay/Lochboisdale	Totals
Passengers	2.0	1.2	0.7	**4.0**
Cars	2.5	1.9	0.8	**5.2**
Freight Vehicles	3.0	1.1	0.3	**4.4**
Totals	**7.5**	**4.2**	**1.8**	**13.6**

In total, payments of £13.6 million (excluding those for coaches) were made by users of the Outer Hebrides services. The largest payments relate to car traffic. At over £5 million, they account for 38% of the charges incurred. Freight vehicle payments account for £4.4 million, around one third of total revenues.

The Stornoway service generates revenues of £7.5 million. This is over half (55%) of the total payments made by users. The services to North Uist and Harris account for £4.2 million-which is approaching one third (31%) of total payments across the three routes. Payments by users of the Oban services are £1.8 million.

The importance of freight vehicle payments varies between the routes. On the Stornoway service, it is the highest of the three traffic types; but is less significant on the other two routes.

Payments By Island Residents and Island-Based Freight Operators

Given the focus of this study, we have also calculated the payments made by residents of the Outer Hebrides and by freight operators based there. For passengers and cars, this was based on island residents' shares of total traffic. These were adjusted downwards to reflect greater use of discounted tickets by island residents than by visitors.

Our research has indicated that haulage to/from the Outer Hebrides is largely undertaken by island-based companies. In calculating the charges paid to CalMac by such companies it is also necessary to account for the fact that island-based hauliers will be in receipt of volume-related rebates. Overall, we have assumed that 80% of the freight vehicle revenues on the services (shown at **Table 2.2**) are from payments by hauliers based in the Outer Hebrides.

Our estimates of total charges paid by residents of, and hauliers based in, the Outer Hebrides are shown at **Table 2.3**.

TABLE 2.3: REVENUES (£ MILLION): ISLAND RESIDENTS AND HAULIERS: 2006

Traffic Type	Stornoway	Uig	Castlebay/Lochboisdale	Totals
Passengers	1.1	0.5	0.3	**1.9**
Cars	1.6	1.0	0.4	**2.9**
Freight Vehicles	2.4	0.9	0.2	**3.5**
Totals	**5.1**	**2.4**	**0.8**	**8.3**

Total payments are estimated at £8.3 million. Of theses, £4.8 million is by passengers and cars. Freight charges account for the balance of £3.5 million. Of the total, a majority (61%) accrues to the Stornoway service, a further 29% to the Uig routes and the balance of 10% to Oban-Castlebay/Lochboisdale.

Thus payments by island residents/hauliers account for:

- 48% of total passenger revenues.
- 56% of total car revenues.
- 80% of total freight vehicle revenues.

3 POPULATION AND ECONOMY OF THE OUTER HEBRIDES

3.1 INTRODUCTION

This Chapter describes and analyses the main demographic and economic characteristics of the Outer Hebrides. It covers:

- Population.
- Employment by sector.
- Employment by occupation.
- Business characteristics.
- GVA.
- Unemployment.
- External economic linkages

Please note that in some Tables columns and rows may not sum to totals because of rounding.

3.2 POPULATION

Table 3.1 shows population levels in the Outer Hebrides, Highlands & Islands Enterprise (HIE) area and Scotland between 1991 and 2005.

TABLE 3.1: POPULATION: OUTER HEBRIDES, HIE AND SCOTLAND: 1991-2005

	1991	1995	2001	2004	2005
Outer Hebrides	29,600	28,810	26,450	26,260	26,370
HIE Area	430,361	-	433,745	437,754	440,761
Scotland	5,083,330	5,103,690	5,064,200	5,078,400	5,094,800

Source: GROS

In 2005, the population of the Outer Hebrides was estimated at 26,370 accounting for around 6% of the population of the Highlands & Islands and 0.5% of the Scottish population. This compares to 1991 when the Outer Hebrides accounted for almost 7% of the population of the Highlands & Islands.

Table 3.2 describes trends in population.

TABLE 3.2: POPULATION CHANGE (%): OUTER HEBRIDES, HIE AND SCOTLAND: 1991-2005

	1991-2001	1995-2005	2001-2005	2004-2005
Outer Hebrides	-10.6	-8.5	-0.3	0.4
HIE Area	0.8	-	1.6	0.7
Scotland	-0.4	-0.2	0.6	0.3

Source: GROS

The population of the Western Isles has generally been declining over the period, although the rate has slowed from 10.6% between 1991 and 2001 to 8.5% between 1995 and 2005. More recently (2004-2005) there has been some growth in the islands' population levels.

Between 1995 and 2005 the population of the Outer Hebrides fell by 8.5%, compared a decline of 0.2% for Scotland as a whole. No other local authority area posted such a large percentage decline during this period. Deaths exceeded births by 1,448 and a net 992 people **migrated** from the islands. Net migration accounted for 41% of the decline and natural change for 59%. In comparison, for Scotland negative natural change was significantly offset by net inward migration.

Between 2004 and 2005 the population of the Outer Hebrides grew; with in-migration outweighing the losses from natural change. From being the worst performing Scottish local authority area in terms of change in population for the year to 2005, the Outer Hebrides was ranked 12th out of the 32 Councils. However, this growth is still slower than that for the Highlands & Islands overall which grew by 0.7% over the same period.

While evidence from GROS suggests that the birth rate in the Outer Hebrides has grown since 2005 Q4 it is likely that population trends in the Outer Hebrides will, at least in the short term, be driven by migration patterns.

Table 3.3 compares the population by gender in 2005 for the Outer Hebrides and Scotland.

TABLE 3.3: POPULATION BY GENDER: OUTER HEBRIDES AND SCOTLAND: 2005			
	Total	**Male**	**Female**
Outer Hebrides	26,370	49%	51%
Scotland	5,094,800	48%	52%

Source: GROS

In 2005 there were 430 more females than males in the Outer Hebrides. The distribution between males and females is slightly more balanced in the Outer Hebrides than in Scotland.

Table 3.4 shows the changing age structure of the Outer Hebrides' population.

TABLE 3.4: OUTER HEBRIDES: POPULATION STRUCTURE (%)					
Age Band	**1991**	**1994**	**2001**	**2004**	**2005**
0-4	6.1	5.8	4.8	4.9	4.8
5-19	20.8	20.4	18.1	18.1	17.8
20-44	32.3	31.9	30.0	28.8	28.6
45-64	22.4	23.5	27.2	28.1	28.5
65-84	16.2	15.8	17.2	17.8	17.8
85+	2.2	2.5	2.7	2.3	2.5
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: GROS

Since 1991 the population of the Outer Hebrides has aged. Between 1991 and 2005 the share of population under 45 years has declined from around 59% to just over 51%.

Table 3.5 compares the age distribution of the Outer Hebrides in 2005 to that for the Highlands & Islands and Scotland.

TABLE 3.5: POPULATION STRUCTURE (%): OUTER HEBRIDES, HIGHLANDS & ISLANDS AND SCOTLAND: 2005			
Age Band	**Outer Hebrides**	**Highlands & Islands**	**Scotland**
0-4	4.8	4.9	5.2
5-19	17.8	18.3	18.2
20-44	28.6	30.3	34.4
45-64	28.5	28.4	25.8
65-84	17.8	16.1	14.6
85+	2.5	2.0	1.8
TOTAL	**100.0**	**100.0**	**100.0**

Source: GROS

The population of the Outer Hebrides is older than that of both the Highlands & Islands and Scotland. It has a smaller share of total population in each of the age bands up to 45 years and a larger share of the population in each of the age bands over 45 years. In 2005, the share of the over-45 year olds in the Outer Hebrides was almost 49%, compared to under 47% in the Highlands & Islands as a whole and just over 42% for Scotland.

3.3 EMPLOYMENT BY SECTOR

This section reviews the employment structure of the Outer Hebrides. It is based on the Annual Business Inquiry (ABI). The ABI is a sample survey which covers employees in employment in jobs in the Outer Hebrides. It does not encompass the self-employed.

Table 3.6 reports the distribution of employment by sector in the Outer Hebrides and the Highlands & Islands for 2005.

TABLE 3.6: EMPLOYEES IN EMPLOYMENT 2005		
Sector	**Outer Hebrides (%)**	**Highlands & Islands (%)**
Agriculture & Fishing	4	2
Energy, Water & Manufacturing	8	11
Construction	9	7
Distribution, Hotels & Restaurants	19	26
Transport & Communications	5	6
Banking, Finance & Insurance etc.	9	10
Public Administration, Education & Health	43	34
Other Services	3	5
TOTAL	**100**	**100**

Source: Nomis (ABI)

The key sector in the Outer Hebrides is *Public Administration, Education & Health* which accounts for 43% of jobs compared to 34% within the Highlands & Islands as a whole and 30% for Scotland. This is followed by *Distribution, Hotels & Restaurants* at 19% of jobs. This is lower than the share for both the Highlands & Islands (26%) and Scotland (22%). Between them, *Energy, Water & Manufacturing*, *Construction* and *Banking, Finance & Insurance* account for a further 26% of jobs. Of these *Construction* is slightly more important for the Outer Hebrides than the Highlands & Islands, while the other two sectors are less important in the Outer Hebrides.

Agriculture & Fishing is twice as important in the Outer Hebrides as it is for the Highlands & Islands. However, given the importance of self-employment in primary activities the relative importance of these sectors is likely to be underestimated based on employees in employment. Data from the Census 2001 suggest, for example, that *Fishing* accounted for almost 6% of jobs of residents of the Outer Hebrides compared to 2% for the Highlands & Islands as a whole.

Nomis provide a separate estimate of 'tourism-related' employment. This includes: hotels; restaurants; bars; the activities of travel agents; library, archives, museums, etc; sporting activities; and other recreational activities. On this basis tourism-related activity accounts for 8.6% of jobs in the Outer Hebrides compared to 8.8% for Scotland. However, compared to the rest of the Highlands & Islands the Outer Hebrides has a smaller percentage of jobs in tourism. For, example Orkney has almost 12% and Shetland over 10% of jobs in tourism, while tourism in Argyll & Bute accounts for almost 14% of jobs.

3.4 EMPLOYMENT BY OCCUPATION

Table 3.7 compares the distribution of employment by major occupation groups. These data are represented graphically in **Figure 3.1**.

TABLE 3.7: EMPLOYMENT BY OCCUPATION 2006 (%)

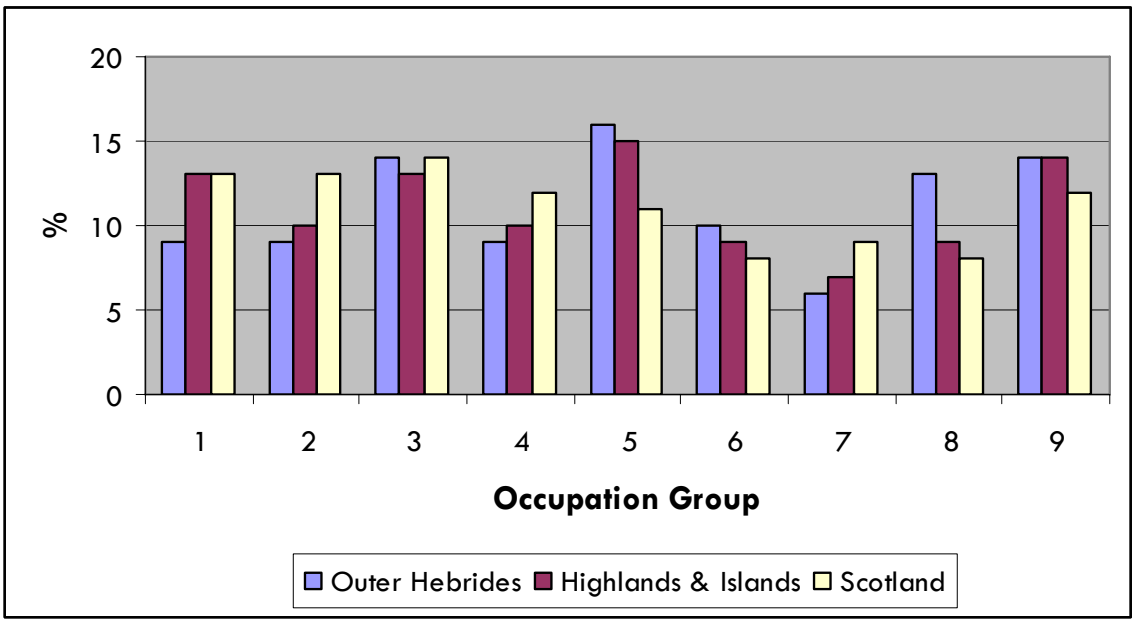
Occupation Group	Outer Hebrides	Highlands & Islands	Scotland
1. Managers & senior officials	9	13	13
2. Professional occupations	9	10	13
3. Associate professional & technical	14	13	14
4. Administrative & secretarial	9	10	12
5. Skilled trades occupations	16	15	11
6. Personal service occupations	10	9	8
7. Sales & customer service occupations	6	7	9
8. Process plant & machine operatives	13	9	8
9. Elementary occupations	14	14	12
Total	**100**	**100**	**100**

Source: Nomis (ABI)

Broadly, compared to both the Highlands & Islands and Scotland, the Outer Hebrides is underrepresented in the more senior management and professional groups while being over-represented in the skilled trades and process plant and machine operatives groups.

While some of these differences reflect the nature of the Highlands & Islands economy in terms of a general under-representation of management and professional occupations, the Outer Hebrides is noticeably under-represented compared to the Highlands & Islands in managers & senior officials, and over-represented in process plant & machine operatives. In all other categories they do not differ from the Highlands & Islands by more than one percentage point.

Figure 3.1: Employment by Occupation Group (2006)



Source: Nomis

3.5 BUSINESS CHARACTERISTICS

Table 3.8 reports the number of business start-ups recorded by the clearing banks.

TABLE 3.8: BUSINESS START-UPS (Nos)				
	2002	**2003**	**2004**	**2005**
Outer Hebrides	113	121	147	118
Highlands & Islands	1,650	2,199	2,074	2,053
Scotland	18,518	21,468	20,808	21,383

Source: CSCB 2006

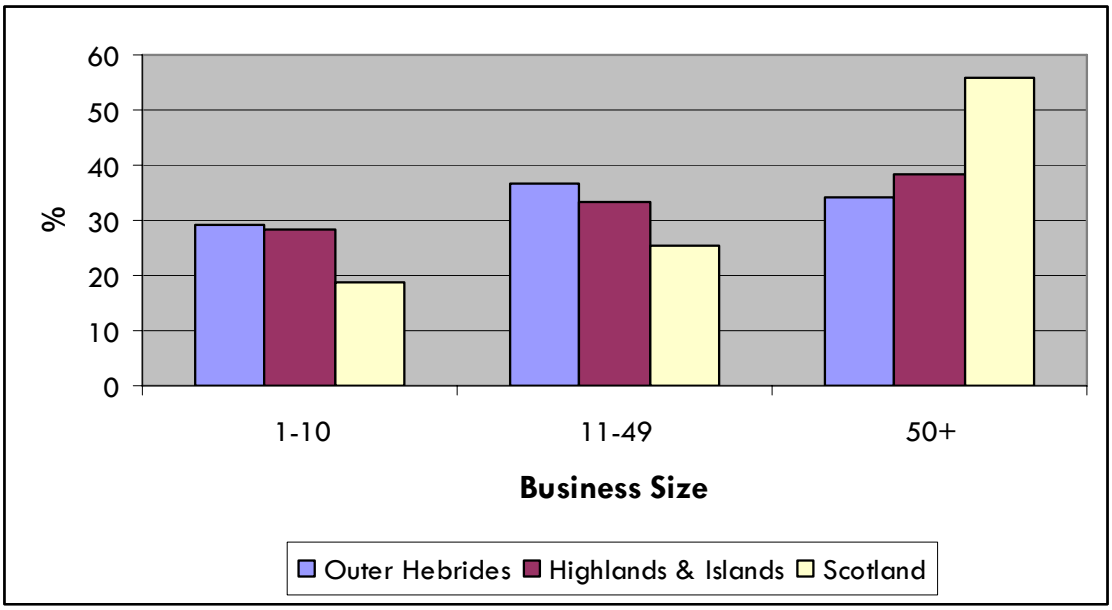
The Outer Hebrides outperforms Scotland in terms of business start-ups but is lower than that for the Highlands & Islands. Data for new business start-ups based in Scotland that have opened accounts with the four Scottish Clearing Banks show that in 2005 118 new-starts were established in the Outer Hebrides. This equates to a rate of **4.5** per 1,000 of population. By way of comparison, the rates are:

- **4.2** for Scotland.
- **4.7** for the HIE area.

It appears, however, that the rate has decreased over the past year. The number of new starts in the Outer Hebrides in 2004 was 147.

Figure 3.2 compares the distribution of employment by size of business.

Figure 3.2: Distribution of Employees by Business Sizeband (Number of Employees) 2005



Source: Nomis

Broadly, in the Outer Hebrides, employment is more concentrated in smaller business size bands compared to both the Highlands & Islands and Scotland. For every size-band there is at least a ten percentage point difference between the Outer Hebrides and Scotland.

3.6 GVA

GVA provides a measure of an area's productivity. **Table 3.9** reports GVA per head for 2004.

TABLE 3.9: GVA PER HEAD OF POPULATION IN 2004

	£	Compared to Scotland (%)
Outer Hebrides	11,508	70
Highlands & Islands	12,269	75
Scotland	16,334	100

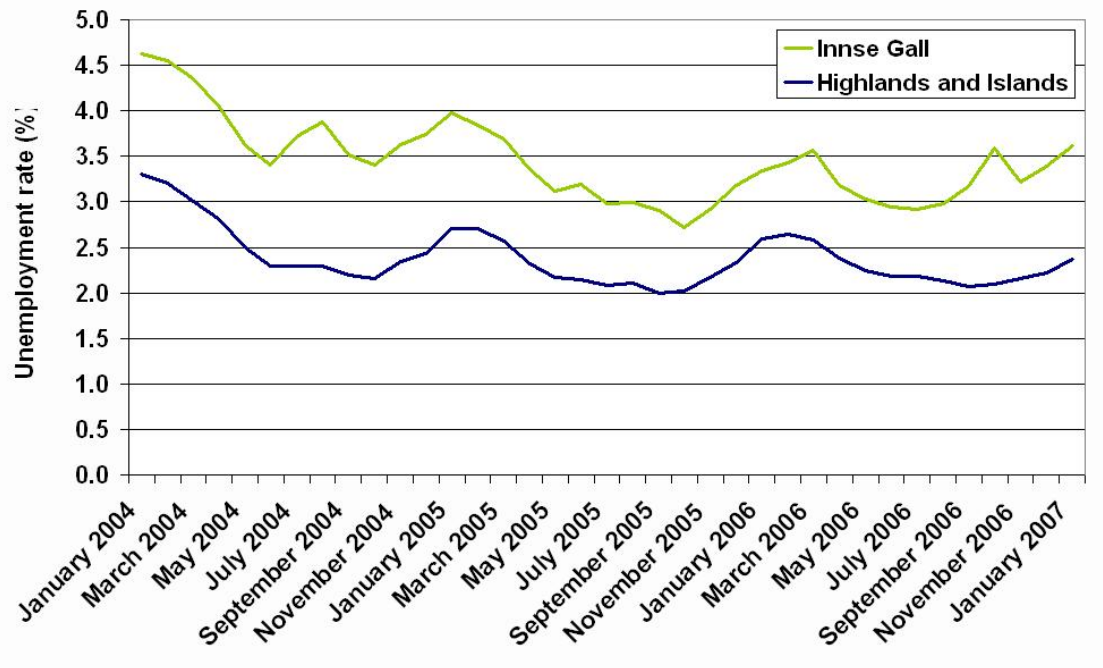
Source: Scottish Executive

The Outer Hebrides has a GVA per head of just over £11,500. This is equivalent to 70% of GVA per head for Scotland. The Outer Hebrides' GVA is 94% of that for the Highlands & Islands and reflects the lower productivity experienced in the more remote parts of the region.

3.7 UNEMPLOYMENT

Figure 3.3 shows unemployment rates for the Outer Hebrides ("Innse Gall") and the HIE area between January 2004 and January 2007.

Figure 3.3: Unemployment Rates, 2004-2007



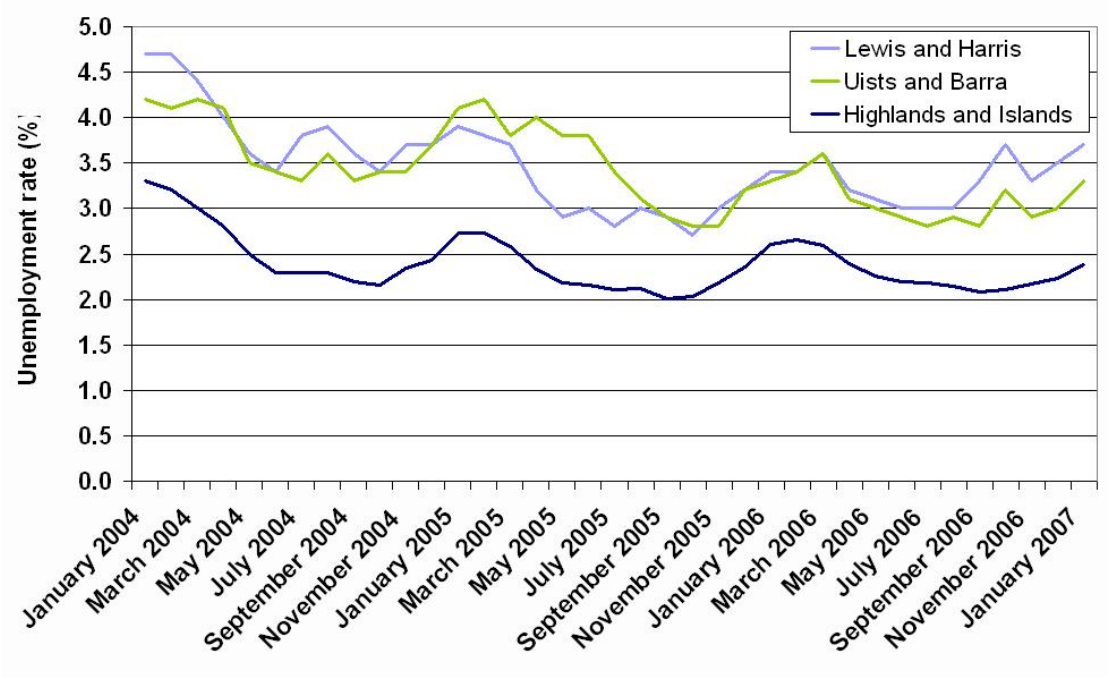
Source: HIE Innse Gall Economic Update (April 2007)

In January 2004 unemployment in the Outer Hebrides stood at around 4.6%. This fell to 3.6% by January 2007. Throughout the period the unemployment rate in the Outer Hebrides has been greater than that for the Highlands & Islands as a whole. The trend for the Outer Hebrides has been downwards, largely mirroring that for the Highlands & Islands, with some narrowing of the differential.

Unemployment by TTWA

Unemployment rates within the Outer Hebrides are available for Uists & Barra and Lewis & Harris travel to Work Areas (TTWAs). Trends in these unemployment rates are shown at **Figure 3.4**, over.

Figure 3.4: Unemployment Rates by TTWA, 2004-2007



Source: HIE Innse Gall Economic Update (April 2007)

While unemployment rates in both the Outer Hebrides TTWAs were greater than those for the Highlands & Islands as a whole they have converged with unemployment rates in Lewis & Harris most recently being higher than in the Uists & Barra.

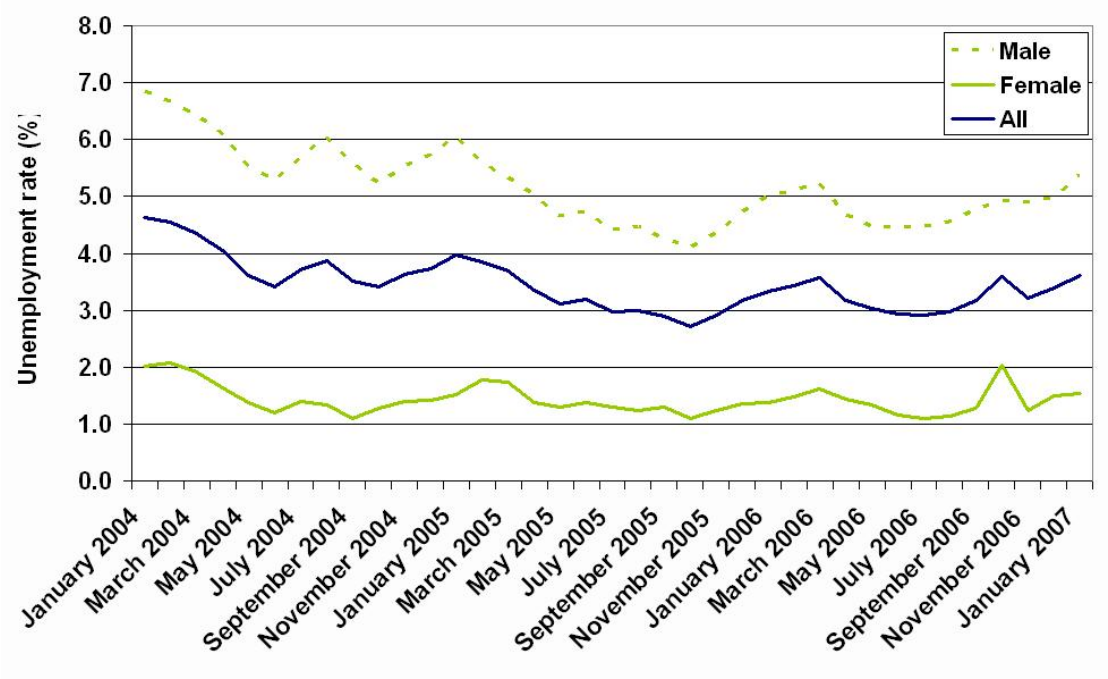
In Lewis & Harris the unemployment rate fell from 4.7% in January 2004 to 3.7% in January 2007. In Uists & Barra the unemployment rate fell from 4.2% to 3.3% over the same time period.

Unemployment by Gender

Figure 3.5, over, shows the trends in male and female unemployment rates for the Outer Hebrides between January 2004 and January 2007.

Male unemployment rates have been significantly higher than those for females. In January 2004 male unemployment was almost 3.5 times that of females. By January 2007 both rates had fallen, although male employment remained around 3.5 times of female unemployment. Typically, the male unemployment rates show much greater seasonality in absolute terms with peaks around January and troughs in June and October.

Figure 3.5: Male and Female Unemployment Rates, 2004-2007



Source: HIE Innse Gall Economic Update (April 2007)

3.8 EXTERNAL ECONOMIC LINKAGES

3.8.1 Introduction

The islands' economy is one that is particularly open. Its small scale means that there is a high degree of dependence on imports of goods and services (by both businesses and households) while a number of key sectors are heavily reliant on markets outside the Outer Hebrides.

This section presents an analysis of these issues. It is based on the *Western Isles Regional Accounts 2003* report which was completed in 2005. Unless otherwise stated, data are expressed in 2003 values and prices.

3.8.2 Business-to-Business

Imports

In 2003 businesses in the Outer Hebrides made a total of £236.7 million of purchases of goods and services. Of these, approaching one third (31%, or £73.5 million) were made from other businesses based in the islands. Of the remaining £163.2 million, most (93%) came from elsewhere in the UK, with the balance coming from the Rest of the World. In total, over two thirds of purchases from other businesses take the form of imports to the Outer Hebrides.

Exports

In 2003, total sales by Outer Hebrides businesses to other businesses totalled £207 million. Of these around one third were internal to the islands. Thus 65% was exports.

The UK outside Scotland is the key export market. It generated £84.5 million of sales, equal to 63% of all exports. The balance comprised: exports to Rest of Scotland (24%); and exports to the Rest of the World (13%). In total exports to companies outside Scotland were over £102 million.

3.8.3 All Transactions (Including Household Expenditures and Tourism Spend)

Imports

Within the Outer Hebrides economy in 2003, total spend on imports was £297.3 million. A considerable proportion of this was through household expenditures. Households spent £100 million on imports in addition to direct expenditures of £82 million on goods and services provided by organisations based in the Outer Hebrides.

As shown at **Table 3.10** the importance of imports varies by sector of the economy.

TABLE 3.10: ANALYSIS OF IMPORT ACTIVITY BY SECTOR

By Absolute Value		
Sector	**Value of Imports (£000)**	**Share of Outer Hebrides Imports**
Other Public Services	69,919	43%
Education	18,160	11%
Distribution	15,171	9%
Construction	12,197	7%
Banking/Insurance	9,100	6%
Agriculture	5,776	4%
Fin Fish Farming	5,586	3%
Import Intensity		
Sector	**Value of Imports (£000)**	**Imports As A Share of Total Purchases**
Banking/Insurance	9,100	94%
Education	18,160	87%
Pottery, Jewellery	299	77%
Health	4,051	76%
Other Public Services	69,919	76%
Other Manufacturing	2,395	75%
Catering	435	75%

Note: Total value of imports is £163.2 million

In terms of **absolute value** of imports the public sector dominates the flows. Other Public Services (ie excluding Education and Health) accounts for 43% of imports. Not all of the imports shown in the Table will be physical goods and we would expect this to also be true for Banking/Insurance. Private sector activities where imports will largely be freight include Distribution (£15 million) and Construction (£12 million).

In terms of **import intensity** the featured sectors are largely services. However, the Table shows two manufacturing activities that are likely to involve the import of goods rather than simply services. Over three quarters (77%) of purchases by the Pottery, Jewellery sector are through imports. The sector's absolute value of purchases is, at around £300,000, quite low reflecting its small scale within the Outer Hebrides. Other Manufacturing makes three quarters of its purchases from outside the islands, with expenditures of around £2.4 million.

While **Table 3.10** shows the most significant import sectors it should be appreciated that other key sectors, in terms of their employment and value added contribution, are also quite import intensive. For example:

- Construction: 66% of purchases are imports.
- Fin Fish Farming: 60%.

Exports

Exports declined in real terms between 1997 and 2003. However, they remain significant generators of economic activity in the Outer Hebrides. In 2003, they supported a total of almost 4,000 FTE jobs which equals 40% of total employment in the islands. Exports to the Rest of UK alone supported 2,595 FTE.

As shown at **Table 3.11** the importance of exports varies by sector of the economy.

TABLE 3.11: ANALYSIS OF EXPORT ACTIVITY BY SECTOR

By Absolute Value		
Sector	**Value of Exports (£000)**	**Share of Outer Hebrides Exports**
Fin Fish Farming	30,667	23%
Construction	24,988	19%
Fish Processing	19,620	15%
Land Transport	18,579	14%
Distribution	16,354	12%
Export Intensity		
Sector	**Value of Exports (£000)**	**Exports As A Share of Total Sales**
Fin Fish Farming	30,667	99%
Fish Processing	19,620	99%
Textiles	6,904	80%
Construction	24,988	76%
Land Transport	18,579	75%

Note: Total value of exports is £133.9 million

In terms of **absolute values** the five sectors shown account for over 80% of all Outer Hebrides exports. At over £30 million, Fin Fish Farming was the largest exporting sector, while Fish Processing accounted for approaching £20 million of exports. (It should be appreciated that restructuring in both industries means that these values will have decreased since 2003).

It is also interesting to note the export contribution of each of the Construction, Land Transport and Distribution sectors, which collectively account for 45% of all exports from the islands.

The most **export intensive** sectors are almost the same as those that have the highest export sales. The exception is the Textiles sector which makes 80% of its sales via exports. Fin Fish Farming and Fish Processing made virtually all of their sales through selling to companies outside the Outer Hebrides. Although the absolute value of their exports will have declined since 2003 we would expect that a very high level of export intensity will remain in both sectors.

Balance of Trade

The total difference between imports and exports is approximately £163 million. Even if tourism expenditure is included as an export, the negative balance of trade still remains at around £122 million. While not all goods and services require to be physically transported, the analysis does support the views of consultees regarding an imbalance of goods moving to/from the islands. This creates a significant amount of empty running on freight vehicles leaving the Outer Hebrides. This issue is discussed further at **Chapter 6**.

It is also important to note that despite the bias towards imports:

- The economy is a very open one with both imports and exports forming significant proportions of total economic activity. This means that the cost as well as the frequency, timings and reliability of the ferry services are of great importance to the functioning of the economy.

- As shown earlier, exports sustain a significant proportion of total employment in the Outer Hebrides.

In 2003, the sectors contributing most positively to the islands' balance of trade were:

- Fin Fish farming: exports were £25.1 million greater than imports.
- Fish processing: £18.3 million.
- Land transport: £13.7 million.
- Construction: £12.8 million.

Between 1997 and 2003, and in real terms, imports grew by 16%, while exports fell by 6%. Thus the balance of trade became even more biased towards imports.

3.9 CONCLUSIONS

This Chapter has shown that the Outer Hebrides continues to face a number of challenges. The main one is retaining and attracting population. While very recent trends have been positive, the islands have faced a long-term population decline that is one of the most severe in Scotland. This continuing loss of population has had a significant social and economic impact.

There is a need to identify, and address, the factors that have led to out-migration. In addition to increasing the population, there is a need to address the age imbalance and, in particular, the underrepresentation of the 20-44 age group.

Productivity, in terms of GVA, is below the averages for both the Highlands & Islands and Scotland. Part of the solution to this is to move towards higher value added activities, as well as developing companies of scale which, as this Chapter has shown, are relatively few in number.

The business environment should be such that as companies grow and expand into activities on the mainland they are willing and able to retain their headquarters in the Outer Hebrides. Further, the business environment should also be supportive of the retention of senior posts in the Outer Hebrides among companies that are headquartered elsewhere.

GVA will also be enhanced by increasing the private sector's share of economic activity. This will be encouraged by improving the competitiveness of the business environment, particularly in terms of business costs. The islands' business birth rate remains below that for the Highlands & Islands as a whole and there is a need to make the islands attractive as a business location to existing and potential entrepreneurs.

Despite the emphasis on GVA, some of the competitive advantage of the Outer Hebrides will continue to lie in making use of its natural resources in the agriculture and fishing sectors. Some parts of these sectors face relatively high transport costs relative to the value of their outputs, while others are trading in markets where competition from mainland-based companies is strong.

Unlike many parts of Scotland, as well as increasing productivity there remains a need to create more employment opportunities, and particularly for men, as the unemployment rate has remained above the national and regional averages.

Finally, the future of the Outer Hebrides economy will continue to be based around importing and exporting from/to the rest of Scotland and beyond. Despite growth in recent years, tourism appears underrepresented compared to other parts of the Highlands & Islands. Further, exports declined between 1997 and 2003 and are likely to have fallen further since then due to restructuring in the aquaculture and fish processing sectors. There is a need to support the main exporting sectors, including tourism, given the large amount of employment they support on the islands.

Given the open nature of the Outer Hebrides economy, the cost and quality of external transport links will have a strong influence on future prosperity.

4 PROPOSED FERRY DISCOUNT SCHEME AND EXPERIENCE FROM ELSEWHERE

4.1 INTRODUCTION

This Chapter:

- Describes the proposals for a Ferry Discount Scheme (FDS) as they presently stand.
- Reviews the impact to date of the Air Discount Scheme. (ADS)
- Considers approaches to discount schemes for residents in ferry services outside the UK.
- Reviews evidence on the impacts of other transport improvements in the Outer Hebrides.

4.2 PROPOSALS FOR A FERRY DISCOUNT SCHEME

Our research has been based on the following information provided by the study Steering Group. First, for **car and passenger** trips made by Outer Hebrides residents, with the eligibility as per the ADS, a discount of 40% would be applied to existing fare levels.

Second, for **freight vehicles** on the ferry services, a discount of 40% would apply. This would be in addition to any discounts presently available. The research was to consider issues around whether the freight discounts:

- Should apply to all freight vehicles or only those operated by companies based in the Outer Hebrides.
- Should be reclaimed by the person/company whose goods are being transported or whether there should simply be a 40% reduction in the rate charged to hauliers.

4.3 AIR DISCOUNT SCHEME

4.3.1 Scheme Objectives and Description

The Air Discount Scheme (ADS) provides a discount of 40% on the core air fare (that is, excluding taxes) on eligible routes. Those who are eligible for ADS complete an application form and receive a discount card which is used when booking flights. The Scottish Executive state that the scheme's primary objective is:

"to facilitate greater social inclusion in the most peripheral areas of the Highlands & Islands through affordable access to air services to the main economic administrative centres of Scotland"

Subsidiary objectives are to:

- Stimulate additional demand for air services that will in turn lead operators to expand capacity and frequency.
- Potentially generate greater economic growth as a result of improvements in accessibility.

Eligible persons are defined as those whose main residence is in one of the following areas:

- Outer Hebrides.
- Orkney.
- Shetland.
- Islay & Jura.
- Caithness.
- North-West Sutherland.

Students from these areas who are studying away from home are also eligible.

The following types of trips are excluded from ADS:

- Onward connections to an airport outside Glasgow, Edinburgh, Aberdeen and Inverness. Thus discounts are available for point to point journeys only.
- National Health Service-funded trips.
- Public Service Obligation (PSO) routes, which are already in receipt of public sector financial support. Therefore, ADS is not available for trips on the Barra-Glasgow air service.

Data provided by Scottish Executive show that the total budget for ADS in 2006/07 is £11.2 million. At the end of December 2006, the number of people registered for ADS in the Outer Hebrides was 26,653. This compares with a permanent population of 26,370 in the islands in 2005, as shown at **Chapter 3**.

4.3.2 Impact Of ADS On Air Passenger Volumes

Outer Hebrides Routes

ADS became fully operational in late May 2006. As a measure of the Scheme's impacts, we have compared passenger volumes on the relevant services between June and December 2006 with those for the same months of 2005.

The net change in passenger volumes between the two years was as follows:

- Benbecula-Glasgow: +10%.
- Stornoway-Glasgow: +7%.
- Stornoway-Inverness: 0%.
- Stornoway-Edinburgh: -1%.

It should be emphasised that the above growth rates are for **all** passengers, whereas the reduced fares through ADS apply to only one part of the overall market-that is, **island residents**. Information supplied by Scottish Executive show that to the end of December 2006, the total number of ADS related flights booked by those registered in the Outer Hebrides was 24,313.

The carryings data show that growth has been reasonably strong on the two Glasgow routes. In contrast, traffic levels have actually declined on the services between Stornoway and Edinburgh/Inverness. However, there are factors which may explain the reduced traffic on these two routes, as follows:

- **Stornoway-Edinburgh**. Two airlines (bmi and Loganair) served this route in 2005. However, bmi withdrew in late July 2006. While, Loganair subsequently replaced the lost bmi frequency with an additional flight, the reduction to one carrier may have affected demand on the service.

- **Stornoway-Inverness**. Some traffic on this service may have been displaced to two new services: Aberdeen-Stornoway (commenced January 2006); and Benbecula-Inverness (started September 2006).

Over the period June-December 2006 passenger volumes on **all** mainland-Outer Hebrides air services were 10% greater than in the same months of 2005.

The changes in service provision mean that attribution of changes in demand to the introduction of the ADS is complicated. Further, the Scheme's impacts on carryings will reflect the nature of underlying demand: in particular, the proportion of passengers that are island residents.

Other Highlands & Islands Routes

There is a mixed picture for other routes Highlands & Islands routes where ADS operates. Traffic volumes have grown markedly on services from:

- **Orkney**, where passenger numbers increased by over 10% on all relevant routes in June-December 2006 compared to the same period in 2005.

- **Islay**. Traffic on its sole scheduled route (Glasgow) has grown by 26%, although there have also been more frequent flights.

At **Wick**, traffic on the Aberdeen service has grown by 20%, but that to/from Edinburgh has fallen by 8%.

Finally, volumes on some routes to **Shetland** have grown (Edinburgh, for example, by 10%) but those on some others, such as Glasgow, have fallen. However, 2005 carryings were distorted by the additional trips generated by the World Island Games which were held in Shetland in July of that year.

Overall, there are difficulties in assessing the impacts of ADS simply on the basis of changes in passenger volumes. The issue is a complex one, as are airline pricing structures generally. A number of consultees for this study referred to a lack of capacity on some flights, while a smaller number also referred to a lack of reliability on certain services. Both of these factors will have depressed demand.

Loganair have stated that they believe it is too early to fully determine the impacts of ADS based simply on an analysis of carryings data. This is because:

- The airline made significant amendments to its schedules and fare structures on a number of routes during May 2006.
- Registration for the full eligible population was not complete until around 5-6 months after the launch in May 2006.
- The bulk of Loganair's forward sales for summer 2006 were made in advance of the introduction of ADS.

Loganair are of the view that the bulk of the traffic growth on the Highlands & Islands routes in the second half of 2006 was due to factors other than ADS. In the absence of a full evaluation of the Scheme no firm conclusion can be drawn on this issue. However, on the basis of Loganair's views, it appears that significant growth in island resident demand may appear in addition to the increases in passenger numbers already observed on a number of routes.

4.4 FERRY SERVICES IN OTHER COUNTRIES

Based on an initial review of research reports, we identified the following examples of discount schemes targeted at "islanders":

- **The Balearic Islands (Spain)**: Residents benefit from a 33% fare reduction for both air and maritime travel.

- **Corsica (France):** The island is served by a number of subsidised ferry services to France. To avoid the problem of defining "islanders", the principle of direction-based subsidy is applied. Thus tickets bought on Corsica are at a discounted rate.

- **Belle Ile en Mer (France):** This is a Breton island with a population of 4,500. Islanders are able to purchase tickets at 62% of the standard fare.

- **Republic of Ireland:** There are a number of subsidised ferry services with additional discounts for island residents, including:

    - Clare Island-the island resident's fare is 80% of the standard adult passenger fare
    - Cape Clear-57%
    - Inishbofin-53%
    - Aran Islands-43%
    - Tory Island-42%.

In addition, an independent report-*Research & Advice on Risk Management in Relation to the Subsidy of Ferry Services*-was prepared for Scottish Executive in 2005. This included a number of examples where island residents receive concessions on ferry fares including:

- **Malta**: On the Malta-Gozo ferries, Gozitan residents and their vehicles benefit from lower pricing. The islanders pay one-third of the standard fare and the associated revenue loss to the operator is met by the public authorities. Also, state aid is granted to the transport of agricultural goods between Gozo and Malta.

- **Denmark**: The Danish government provides the inhabitants of twenty-six islands with free ferry transport to/from the mainland for passengers and bicycles. It appears that these services also receive operating subsidy from the public sector.

- **Estonia**: The national government offers support to island residents through the direct financing of a ticket concession scheme.

- **Finland**: Permanent residents in the west coast archipelago travel free on the ferry services.

4.5 EVIDENCE ON IMPACTS OF OTHER TRANSPORT IMPROVEMENTS IN THE OUTER HEBRIDES

4.5.1 Introduction

Appraising the impacts of FDS requires a view to be taken on the responsiveness of transport demand in the Outer Hebrides to improved provision. This section reviews available evidence on the impact of transport improvements in the islands.

4.5.2 Inter-Island Business Development Scheme: Sound of Barra and Sound of Harris Ferry Services

Scheme Operation

The scheme provides financial assistance to companies whose goods are being transported inter-island within the Outer Hebrides. This takes the form of a rebate on the ferry charge element of the total transport costs. It is intended that this cost reduction will lead island-based companies to undertake new activities and generate new sales, or safeguard existing activities and sales, which would not occur in the absence of the scheme.

The scheme commenced in September 2006 and is expected to operate for two years. The total budget is £150,000. The intervention rate will normally be 30% of ferry costs.

Financial assistance is not a transport subsidy and, as such, is not available to freight transport companies. It is only available to private-sector businesses operating in the Outer Hebrides.

Grant funding can only be provided for additional ferry usage rather than supporting existing movements of goods. However, in practice applicants can also receive assistance for existing ferry trips that would no longer be made in the absence of support through the scheme. Assistance can only be provided where goods are transported on the ferry service(s) using vehicles which are charged commercial vehicle rates by CalMac. The applicant can receive assistance for goods transported:

- On its own account-ie using its own vehicles; or
- By a third party haulier.

Companies are paid in arrears on either a monthly or quarterly basis. This is on the basis of actual use of the inter-island ferry services. Claims must be supported by invoices from:

- CalMac, where the company is moving goods on an own-account basis; or
- Third party hauliers where these are being used.

CnES had originally intended that all companies moving goods inter-island would be eligible for funding. However, regulations have restricted the Scheme to supporting new flows or ones which would not continue in the absence of financial support. This has apparently limited take-up of the Scheme.

Indeed, the Comhairle originally intended to simply make the funding available to CalMac who would use it to reduce the rates paid by hauliers on the services across the two Sounds. However, State Aids regulations did not permit this.

Operation To Date

We understand that a number of companies have been assisted; and that the Scheme has led to the establishment of a seaweed processing factory in Stornoway which also provides employment for seaweed cutters based in the Uists.

4.5.3 Barra-Glasgow Air Service

In July 2004, core fares (that is, after taxes are excluded) on the Barra-Glasgow air service were reduced by 30%. This reduction was applied to all users: that is, both island residents and visitors. This was part of a wider reduction of air fares instigated by Scottish Executive on their PSO services out of Glasgow, with lower fares also introduced on flights to Campbeltown and Tiree.

In late 2005, an independent evaluation was undertaken of the impacts of the fare reductions across the three routes. The main findings for Barra were that:

- Use of the service by island residents is significant-estimated at 50% of total demand.

- Of the three routes, Barra had seen the highest increase in passenger traffic. It was estimated that the lower fares had increased traffic on the route by 18%, resulting in 1,087 additional trips on the air service.

- The majority of the new air trips were wholly new ones, rather than diverted from the Oban ferry service.

- The lower fares facilitate the employment patterns of those who are based locally but work away for periods of time in, for example, the offshore oil industry.

- The main social impact has been through an increase in VFR trips.

The research concluded that the reductions in air fares on the Barra service had been successful. It stated that the impacts are significant and that, in particular, the effects have been marked on Barra which saw the largest fare reductions.

More widely, it also concluded that the fare reductions demonstrate that demand is responsive to significant price reductions on the region's air services. This is for both inbound and outbound travel; and with only limited displacement of traffic from surface modes.

Consultees for the **current study** reported sometimes having difficulties in booking a seat on the Barra-Glasgow air service due to excess demand. This is despite the fact that, during some summer months, the service operates at a frequency above the minimum specified in the PSO.

4.5.4 Sound of Harris Ferry Service

A dedicated vehicular service across the Sound of Harris was introduced in 1997. It replaced the previous passenger only service between Harris and the Uists and also the occasional vehicular service operated between Tarbert and Lochmaddy. Relative to the two pre-existing services, the new route offered: lower fares; greater frequency of sailing; and a shorter crossing time.

An independent evaluation of the service's impacts was undertaken in 2003. It found that:

- The new service has been successful.
- Demand had grown strongly across all traffic types since the service's inception.
- While also catering for the visitor market, 38% of passenger trips and 50% of car trips were made by residents of the Outer Hebrides.
- In addition to tourism-related employment impacts and savings to business visitors, the service had generated almost £500,000 of savings to local businesses using the ferry.

In addition, the service had increased economic and social interaction between Lewis & Harris and the Southern Isles. Prior to the introduction of the new route, one in three of the resident passengers surveyed had not travelled between these two parts of the Outer Hebrides. The vast majority (89%) of island residents surveyed on-board believed that the ferry service had allowed them better access to, and more social integration with, other parts of the Outer Hebrides.

Strong growth in demand for the service led to the introduction of a new, larger vessel on the route in 2003, six years after the service commenced. Traffic growth in the eight years to 2006 has been:

- Passengers: from 31,000 to 51,000 (65% increase).
- Cars: from 10,000 to 21,000 (110%).
- Freight vehicles/coaches: from 900 to 1,700 (89%).

4.5.5 Sound of Barra Ferry Service

The first full year of operation of the Sound of Barra vehicular service, which links Barra and South Uist, was in 2003. Like the Sound of Harris operation, it replaced a combination of a passenger only service and an occasional vehicular service which formed part of the mainland ferry service between Oban and Castlebay and Lochboisdale.

The new service provided an enhanced vehicular service with lower fares, a reduced crossing time and greater frequency. The vessel used from 2003 onwards was the one previously deployed on the Sound of Harris service.

Traffic growth has been strong in the three years to 2006, as follows:

- Passengers: from 27,000 to 37,000 (37% increase).
- Cars: from 10,000 to 13,000 (32%).
- Freight vehicles/coaches: from 500 to 1,400 (180%).

4.6 CONCLUSIONS

This Chapter has shown that:

- As far as can be discerned, the ADS has generated traffic growth on some of the air routes. The very high take-up, in terms of registrations among Outer Hebrides residents, implies that it is seen as being of significant value.

- Specific reductions for island residents, including instances of free travel, are offered on ferry services in a number of other European countries.

- There is evidence of positive economic impacts from the reduced freight rates offered via the Inter-Island Business Development Scheme.

- Where significant changes have been made to Outer Hebrides transport services there have been marked increases in demand. Independent evaluation evidence demonstrates that this has led to significant economic and social benefits.

5 POTENTIAL IMPACTS OF FDS: DEMAND AND REVENUES

5.1 INTRODUCTION

This Chapter assesses the potential impacts of FDS in terms of:

- Fare reductions to existing users.
- Traffic generated as a result of reduced charges.
- The effects on CalMac, in terms of increased demand and operating revenues.

The impacts have been assessed on the basis of:

- A 40% reduction on existing fares paid by island residents for passenger and car travel-that is, over and above existing discounts available through multi-journey tickets, etc.

- A 40% reduction on existing charges for freight vehicles, applied to all hauliers whether island based or otherwise, and, again, over and above existing rebates. This approach has been adopted given the difficulties involved in modelling the impacts of a discount scheme applicable only to island-based hauliers.

Please note that in some Tables, columns and/or rows may not sum to totals due to rounding.

5.2 FARE REDUCTIONS TO EXISTING USERS

The fares currently charged for use of the services and the resultant payments by island residents and freight vehicles were set out at **Chapter 2. Table 5.1** presents the impact of the 40% reduction in charges in terms of the lower annual payments that would be made for using the services.

TABLE 5.1: REDUCED PAYMENTS (£000) BY ISLAND RESIDENTS AND FREIGHT VEHICLES FROM A 40% FARE REDUCTION

Traffic Type	Reduced Payment
Passengers	761
Cars	1,172
Freight Vehicles	1,746
Totals	**3,679**

Based on 2006 fare levels and traffic volumes total savings are estimated at over £3.6 million. Of these, approaching half (47%) would be for freight traffic, with a further 32% accruing to cars.

Based on the user profile shown at **Chapter 2**, it is estimated that around £135,000 of the passengers and car savings would accrue to businesses, with the balance to island households. In total, therefore, the savings to existing users would be:

- Businesses: £1.88 million.
- Households: £1.80 million.

5.3 TRAFFIC GENERATION

5.3.1 Price Elasticities

The impacts of lower fares on demand for travel has been undertaken using the elasticities contained in the *Western Isles Ferry Fare Mechanism Study*. There are a number of issues around these data as follows:

- They were derived in the 1990s and are thus quite dated.
- The elasticities are, we understand, based on observed price changes that are relatively modest compared to the 40% reductions being tested here.
- No separate elasticities were provided for residents as opposed to visitor traffic, although we understand that the source report for the Study's elasticities concluded that tourist traffic is just as sensitive to price changes as local traffic.
- There is no indication as to the timescale over which the implied increases in demand would occur.

This means that a considerable degree of caution must be taken in interpreting the findings. Nevertheless, the elasticity data remain the best available. Further, the values adopted for car traffic in the Study were reduced by the authors "in the interest of a conservative approach". The elasticities used are shown at **Table 5.2**.

TABLE 5.2: PRICE ELASTICITIES OF DEMAND

Traffic Type	Stornoway	Uig	Castlebay/Lochboisdale
Passengers	-0.7	-0.7	-1.5
Cars	-1.2	-1.2	-1.9
Freight Vehicles	-0.55	-0.55	-0.55

This shows, for example, that a 10% decrease in passenger fares would stimulate an additional 7% increase in passenger traffic on the Stornoway service. The greatest impacts would be on the Castlebay/Lochboisdale service where, for example, a 10% fare reduction is forecast to generate a 19% increase in car demand.

The approach adopted in using the elasticities reflects that used in the *Western Isles Ferry Fares Mechanism Study*. Applying the elasticities in this manner means, for example, a 40% fare reduction on car fares on Ullapool-Stornoway leads to a 48% increase in demand. However, there remain uncertainties over the factors underlying the elasticities, and more widely in assessing the impacts of a large fares decrease.

5.3.2 Impact on Demand

Applying the elasticity data to existing trip levels combined with the fare reductions produces the changes in demand shown at **Table 5.3**, over.

There would be significant increases in demand. These range from a 22% increase in freight vehicle demand across the routes to a 76% rise in car demand on the Castlebay/Lochboisdale service. As noted earlier, caution is required in interpreting the findings but they do offer an indication of the potential scale of change in demand.

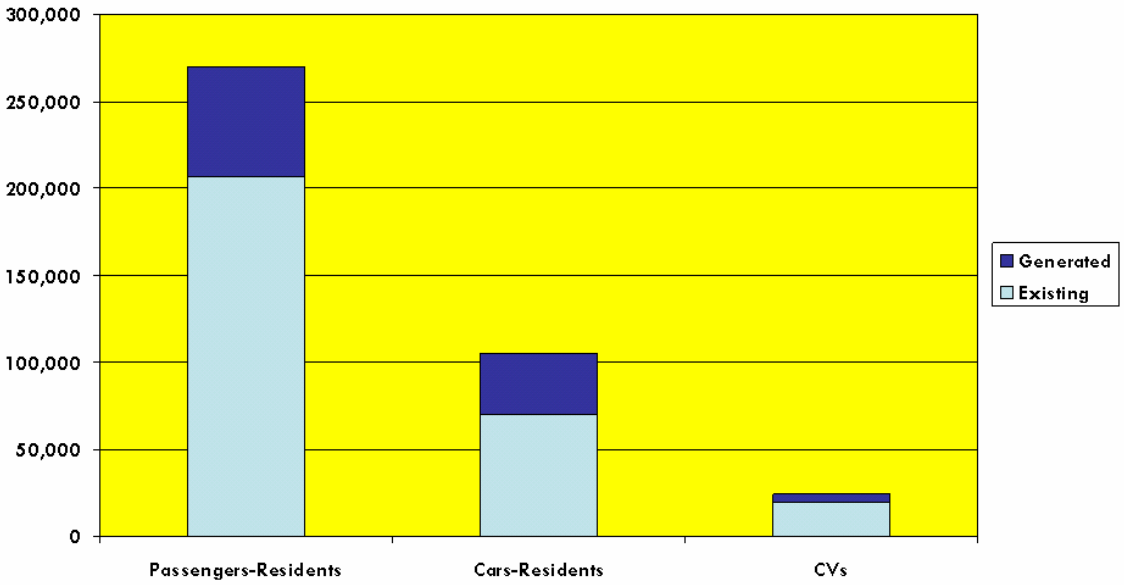
TABLE 5.3: CHANGES IN RESIDENT AND FREIGHT VEHICLE DEMAND FROM A 40% FARE REDUCTION			
Passengers			
	Stornoway	**Uig**	**Castlebay/Lochboisdale**
Existing	112,716	76,577	17,220
With Fare Reduction	144,276	98,019	27,552
Cars			
	Stornoway	**Uig**	**Castlebay/Lochboisdale**
Existing	33,199	30,146	6,581
With Fare Reduction	49,135	44,616	11,582
Freight Vehicles			
Existing	11,966	7,004	1,008
With Fare Reduction	14,599	8,545	1,230

Total growth in demand would be approximately:

- Passengers: 32,000 additional return trips per annum.
- Cars: 18,000 return trips.
- Freight vehicles: 2,200 return trips.

This is illustrated, in terms of single trip per annum, at **Figure 5.1**.

Figure 5.1 Increase In Demand: Single Trips Per Annum



The additional vehicle movements would equate to an extra 109 single movements per day on the roads connecting the three mainland ports of Ullapool, Uig and Oban. This is unlikely to have any significant impact on road congestion or vehicle emissions.

Based on our research for this study we have assumed that 90% of the passenger and car trips are newly generated with the remaining 10% diverted from air. This equates to a reduction of 6,300 air passengers per annum, which represents around 4% of 2006 traffic levels on the islands' external air services.

5.4 IMPACT ON THE FERRY OPERATOR

5.4.1 CalMac Revenues

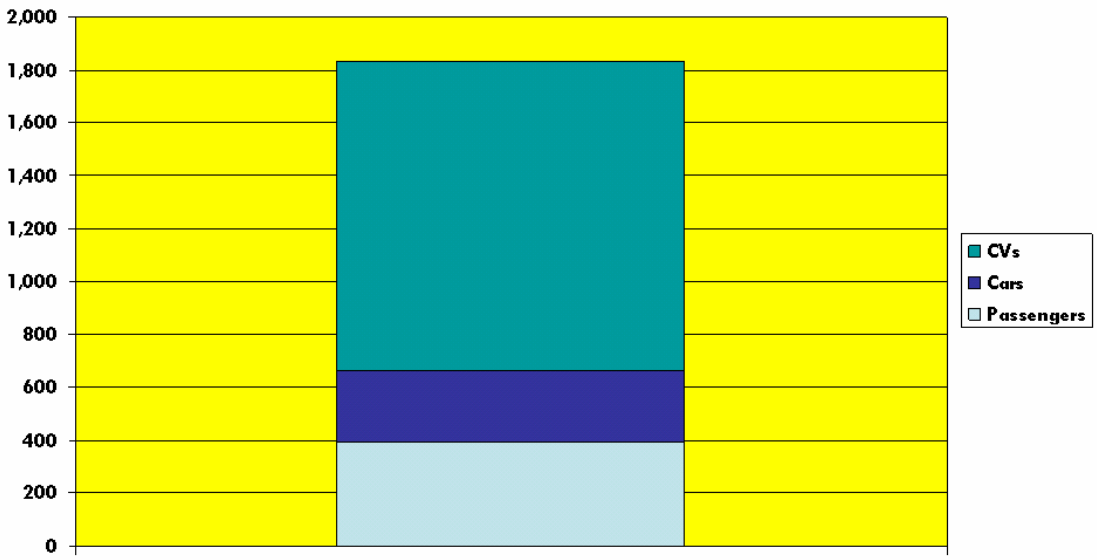
The reduction in revenue from existing passengers would, to an extent, be offset by the revenues from traffic that is generated. However, as shown at **Table 5.4**, the net effect will be to increase the operating deficit on CalMac's Outer Hebrides services. This reflects the approach adopted in applying the elasticities as described earlier.

TABLE 5.4: CHANGE IN CALMAC ANNUAL OPERATING REVENUES FROM A 40% REDUCTION IN FARES

Traffic Type	Net Change In Revenue (£000)
Passengers	-393
Cars	-269
Freight Vehicles	-1,170
Total	**-1,832**

This is illustrated at **Figure 5.2.**

Figure 5.2: Increase in Annual Operating Subsidy (£000)



It shows a net increase of around £1.8 million in annual operating costs on the Outer Hebrides mainland routes. On this basis, this would increase the total annual subsidy for the Outer Hebrides mainland services to £12.9 million, a rise of 16%.

5.4.2 Traffic Growth

Change In Demand

In reality the effects on the supply of ferry services to the Outer Hebrides is more complicated than a simple change in their financial position. Increased demand is likely to require additional capacity to be created through larger vessels and/or additional sailings.

This would incur extra costs to the operator. However, in turn, there would be additional demand stimulated by increased capacity/sailings which is likely to include increased visitor traffic as well as more trips by island residents. This is the "virtuous circle" that, as noted at **Chapter 4**, the ADS aims to induce through an initial fare reduction for island residents.

It is beyond the scope of this study to examine these issues in any detail. However, **Table 5.5** shows the forecast change in **total** traffic volumes on the services.

TABLE 5.5: COMPARISON OF EXISTING TRAFFIC AND PROJECTIONS UNDER FDS (000)

	Passengers		Cars		Freight Vehicles	
Route	**Present**	**FDS**	**Present**	**FDS**	**Present**	**FDS**
Ullapool-Stornoway	181	213	47	63	12.0	14.6
Uig-Tarbert/Lochmaddy	162	183	54	69	7.0	8.5
Oban-Castlebay/Lochboisdale	45	56	13	18	1.0	1.2
Totals	**388**	**452**	**114**	**150**	**20.0**	**24.3**

Across the routes as a whole the highest growth, at approaching one third (31%) of total demand, is among cars. Freight vehicles are forecast to increase by 22% and passengers numbers by 16%. For passengers and cars the highest growth is on the Castlebay/Lochboisdale service reflecting the higher elasticities applied to that service. The lowest growth is on the Uig services reflecting: the relevant elasticities used; and also the relatively low proportion of island resident traffic on the Uig routes.

Vehicle Capacity

Vehicles have been converted into passenger car equivalent units (PCUs). These place various vehicle types on a common denominator to allow an analysis of changes in total vehicle lengths and thus in deckspace utilisation.

Based on data in the *Western Isles Ferry Fares Mechanism Study* we have adopted the following values for PCUs:

- Car: 1.
- Coach: 6.
- Freight Vehicle: 6.

Table 5.6, over, summarises the estimated increases in annual PCU demand resulting from the vehicle traffic generated by lower charges. The growth in PCUs ranges from 24% on the Uig services to 32% on Castlebay/Lochboisdale.

TABLE 5.6: INCREASES IN ANNUAL PCU DEMAND	
Route	**Change in Annual PCU Demand**
Stornoway	26%
Uig	24%
Castlebay/Lochboisdale	32%

The actual impacts, in terms of capacity constraints, on each route will reflect the:

- Existing level of deckspace capacity utilisation.
- Distribution of the generated demand across times of the day, days of the week and seasons of the year.
- Timescale over which the extra demand will occur.

5.5 CONCLUSIONS

We conclude that:

- The available data suggest that there could be significant increases in demand. However, there is considerable uncertainty over the scale of the effect and the timescale over which it would occur.

- There would be a net increase in the operating deficit on the Outer Hebrides ferry services. **As well as** decreased revenues, financial support would be required to increase the supply of services to cater for increased demand. The nature of this would, in practice, depend not only on the scale of additional trips but also the timescales over which these emerged. Failure to increase supply sufficiently would frustrate some of the demand generated by the fare reductions. It would also lead to a loss of traffic from those based outside the islands-notably tourists.

- Increased vehicle traffic on mainland roads is unlikely to have any significant effects, in terms of either congestion or vehicle emissions.

6 FDS: POTENTIAL ECONOMIC AND SOCIAL IMPACTS

6.1 INTRODUCTION

This Chapter appraises the potential economic and social impacts of FDS. It covers:

- The nature and range of economic impacts.
- A quantified assessment of some of the potential economic impacts. This draws on the previous approach of the *Western Isles Ferry Fares Mechanism Study*. It should be appreciated that our brief was to produce an "indicative and headline" set of impacts.
- Population.
- Wider social impacts.
- Linkages to strategies and policies.
- Conclusions.

Please note that in some Tables, columns and rows may not sum to totals due to rounding.

6.2 NATURE AND RANGE OF ECONOMIC IMPACTS

6.2.1 Introduction

This section discusses the range of economic impacts that could occur from the FDS. This encompasses the impacts on:

- Movement of freight.
- Hauliers.
- Business travel.
- Training and recruitment/retention of staff.

There is also a discussion of the importance of ferry costs relative to other business factors.

The analysis is based on the consultations conducted as part of our research.

6.2.2 Freight

Appendix B summarises the main findings from our interviews with a number of companies and sectoral representatives based in the Outer Hebrides. In terms of potential impacts of FDS the main points to note are that:

- For full loads, total transport costs range from £1,100 (Inverness-Stornoway) to £1,350 (Glasgow-Stornoway) to £1,600 (to Outer Hebrides from elsewhere in Scotland or England). On a pro rata basis, charges for part loads appear to be considerably higher than for full loads.

- The charges paid by the haulier for a one-way ferry trip appear to be between, at least, 20%-35% of the total transport cost charged to their customer, depending on the mainland origin or destination.

- On this basis, a 40% reduction in the ferry element could reduce total transport costs by, at least, 8%-14%. This is in a context where some companies' total annual freight costs are over £100,000. Total annual savings per company would typically be at least £12,000-but likely to be above this as not all consignments will be full loads.

- Companies reported a number of possible responses to the potential freight cost reductions:

    - Generally increasing their competitiveness relative to mainland-based companies
    - Increased activity-increased output in the Outer Hebrides and greater exports to the mainland
    - Re-investment of savings in the company.

- A number of companies are importing raw material to be processed on the islands, with the finished products then exported back to the mainland. Thus companies are paying ferry charges on both the import and the export of goods.

- Cost is one element of the impacts of the ferry services. Other constraints relate to the additional time accrued in moving goods to/from the mainland and the need to structure company operations around the ferry timetable.

6.2.3 Hauliers

Significance of Ferry Charges

Four of the main hauliers serving the Outer Hebrides were consulted. A key issue was to understand the importance of ferry charges in the companies' overall cost structure. The findings were that:

- For movements from Stornoway to Glasgow the ferry charges account for 25%-40% of the total transport charge. The lower figure is also cited in the *Western Isles Ferry Fares Mechanism Study*.
- For Stornoway-Inverness the figure is around 33%.
- For traffic between the Southern Isles and Glasgow via Oban, the figure is around 45%.

These ratios are generally supported by the information provided by the companies sending or receiving freight, as shown at **Appendix B**..

It is important to appreciate, therefore, that a 40% reduction in **ferry charges** does not equate to a 40% reduction in **total transport costs**. The costs associated with the ferry account for less than one half of total haulage costs and in some cases as low as 25%, although it appears there is variation according to the type of load being transported and the need, or otherwise, to accompany the vehicle on the sailing.

In part this reflects the distances from the mainland ports to the main centres. These are shown at **Table 6.1**.

TABLE 6.1: DISTANCES (MILES) FROM MAINLAND PORTS TO MAIN FREIGHT ORIGINS/DESTINATIONS		
From/To	**Glasgow**	**Inverness**
Ullapool	224	57
Uig	233	128
Oban	99	110

In most instances, the mainland ports are over 100 miles from the main freight origins and destinations. As Inverness is generally closer than Glasgow, ferry charges are a greater share of total transport costs for movements between **Stornoway and Inverness** than they are for those between **Stornoway and Glasgow**.

The share attributable to ferry costs for trips between **Inverness and Uig** is around 20% This reflects the relatively low freight charges on the Uig-Lochmaddy service.

As stated earlier the highest proportion of transport costs attributable to ferry charges was for trips between the **Southern Isles and Glasgow** via Oban. This reflects the relatively high ferry charge on these services and the relatively short distance between the mainland port and Glasgow.

However, this does nor mean that the ferry charges are insignificant. We return to this issue at **6.2.6**.

Given that we consulted some of the main hauliers using the Outer Hebrides services these companies' annual payments to CalMac are significant. They range from £150,000 to over £1 million per annum. In two cases, payments for the ferry are between 25% and 30% of the companies' annual turnover.

Impacts of A 40% Reduction In Freight Vehicle Charges

None of the four hauliers stated that they would pass on the reduction in full. The general impression was given that around half of the reduction may be passed on. The need to retain a part of any discount was justified on a number of grounds, that:

- In some cases existing profitability is slight due to limited markets and empty running. In two cases, however, the businesses appear to be quite profitable.
- Hauliers had already absorbed previous cost increases-notably in road fuel-and had not passed these on.

We would state that none of the hauliers' customers we consulted believe that they are presently being overcharged. Also, none reported any concerns regarding the quality or range of services available.

Two hauliers stated that savings would allow better operating margins. The other two hauliers would invest in new vehicles and, possibly, offer an extended service to customers, with more vehicle runs.

Not all of the hauliers' **customers** were willing or able to comment on whether the 40% reduction should simply be made available to the haulier or direct to those receiving or sending the goods.

Of those who commented there was an even split between the two possible approaches. Those who favoured direct payment to those whose goods were being moved wished to see this to ensure that the discount was passed on in full.

Those who would prefer a simple reduction in haulage rates stated that:

- This would avoid an overly-bureaucratic approach/additional paperwork.
- It was unclear how the ferry costs of part-loads could easily be attributed to individual customers.

In addition, although not mentioned by consultees, not all freight transport to the islands is organised and paid for by companies based in the Outer Hebrides. Some purchases are made on a delivered price basis. Therefore, there is no certainty that a discount claimed by a mainland based consigner of goods would be passed on in full to the island-based receiver of those goods.

Where comments were made there was a general view in favour of a discount being made available to island based hauliers rather than all freight operators. This was justified on the basis that:

- It would support employment within the Outer Hebrides.
- The market for island-based hauliers is smaller than for other companies that can source work throughout the mainland.

Trade Imbalance

Costs for hauliers and their customers are increased by the trade imbalance affecting the islands. It was reported to us that the proportion of hauliers' vehicles departing the islands empty is at least 40%; and for two hauliers it is above 50%. One of the hauliers is awaiting a response to a letter written to Scottish Executive requesting that a discount be introduced for the movement of empty vehicles on the ferry services.

Another commented that their depreciation charges were higher than the industry average because of the effects of transporting vehicles on open-decked ferries.

6.2.4 Business Travel

For most consultees, business travel is undertaken by air rather than surface transport. This is largely due to the time savings involved, and in some cases overnight stays avoided, especially when travelling to main centres such as Glasgow. In the case of Lews Castle College almost all business trips are by air. Further, in some cases, it can be cheaper to fly than to travel by the ferry if a vehicle is taken on board the vessel, especially when the flight is booked relatively far in advance.

Those working in more "traditional" sectors-such as primary production and road haulage-are more likely to use the ferry service. However, they are also less likely to undertake business travel than those in other sectors.

These findings fit with the analysis at **Appendix A**, with Employer's Business trips accounting for a low proportion (7%) of ferry use, compared to the much higher proportions using air services.

Some companies use a mixture of air and sea travel for their business travel throughout the year. Choice of mode for a particular trip depends on the number of meetings being held and their location relative to mainland airports. One of the larger companies reported a 70%: 30% air: ferry split.

ADS was welcomed by all of those who commented on it. Only one respondent commented on any administrative difficulties in its operation, in terms of being able to successfully make bookings online.

One of the main benefits is seen as the reduced costs of business trips made at short notice. There appears to have been some stimulation of additional trips-particularly among those operating to a fixed annual travel budget that can now buy a greater number of flights.

A number of consultees referred to a lack of capacity on the air services at times; while some stated that they believed that all fares should have been reduced, rather than simply those available to island residents.

Overall, we would expect that there would be only a slight increase in business travel as a result of **FDS** and that some of this would be through diversion of trips presently made by air.

6.2.5 Training and Recruitment & Retention of Staff

Training

Among those consulted, only a limited amount of training takes place off-island. This is, in the main, to avoid the loss of time associated with staff being away for a number of days. Many of the companies undertake a large amount of training at their own hand; or, on occasion, a training provider is brought in from the mainland. Where trips to the mainland are involved, the choice of air or ferry depends on the length and location of the training course.

There is no indication that FDS would stimulate a significant increase in training activity. Thus the main benefits would be through reduced costs for existing trips.

Recruitment & Retention

Perhaps surprisingly, given the scale of the Outer Hebrides economy, very few consultees saw the recruitment and retention of staff as a major issue. This differs from the findings of the *Western Isles Regional Accounts 2003* report which stated that:

"An overwhelming majority of respondents felt there were problems with the local labour market which were inhibiting economic development. A wide number of particular skills shortages were mentioned from professionals such as lawyers, doctors, specialist lecturers/teachers, allied health professionals to semi-skilled manual work and workers who "did not mind getting their hands dirty""

The difference in findings may be due to the fact that our consultees were mainly:

- Relatively large employers.
- Operating in sectors other than public and professional services.
- Ones which may have only limited demand for more specialist skills.

In addition, the Outer Hebrides labour market has effectively expanded since 2003 with the accession of a number of Eastern European states to the EU.

The 2003 report also states that:

"Many businesses said they had difficulty in finding employees with previous experience or the skills that they required and, as a result were required to train employees on the job and bear the costs associated with such training"

However, among our sample, in-house training was seen as the preferred choice rather than one forced on them by circumstances.

At least among our sample, there was no indication that existing ferry provision, including fare levels, was constraining the amount of available labour in the islands.

6.2.6 Importance Of Ferry Costs Relative To Other Business Factors

There is no doubt that ferry transport, and external connectivity in general, are a major issue for consultees. However, while cost is a key issue, many consultees also see a number of other factors as of being of equal importance. Among those who saw other aspects of the ferry as being at least as important as cost, the main issue was the timings of arrivals and departures. A key issue for consultees in Lewis was the early departure time of the last sailing from Ullapool. This is seen as constraining demand for the ferry service-particularly for those travelling from central Scotland.

The other issues mentioned were:

- Fare structure-specifically the 5m threshold for freight vehicle charging which is seen as affecting smaller businesses in particular.
- Frequency of sailing which, if increased, would offer greater connectivity to export markets.
- Long crossing times.
- Service reliability.

Most consultees expressed a high level of dissatisfaction with existing ferry services. In particular, there is a belief that the reliability of the ferry services out of Stornoway have declined in the last two years and that this is particularly the case with the freight vessel. This was seen as having meant that:

- It is increasingly the case that export orders are not reaching their customers/markets on time. This is in a context of increasing service expectations among mainland customers.
- Passengers have switched to air services as they have a greater degree of reliability.

Criticisms were also made of services from South Uist and Barra. This was in terms of: frequency; timings of arrivals and departures; and crossing times. These issues were seen as constraining the ability to export to major customers on the mainland which require a frequent and regular flow of products.

In addition, a number of consultees saw a need to reduce fares in **both** directions of travel, rather than simply for island residents. This was to encourage and support the tourism sector in particular.

Unsurprisingly, given the earlier analysis, the vast majority of consultees believed that reduced freight rates would have a greater economic impact than lower passengers/car fares.

6.2.7 Conclusions

We conclude that, in fact, freight charges may be more significant than implied by the data presented at **6.2.2** and **Appendix B**. This reflects a number of factors. First, the issue of empty running on the ferry. It is reasonable to assume that hauliers will attempt to recover at least some of this cost by increasing the ferry-related part of their haulage price to the customer. Thus the charge to the customer will be for more than that implied by the cost of a single journey on the ferry service.

This may, however, have less impacts on major importer and exporters which can expect keener prices given the large and regular volume of business they can offer. The cost of empty running may be passed on more fully to those with a low volume of business or requiring one-off consignments-particularly for imports given that empty running is largely on vehicles leaving the islands.

Second, there is the issue of companies' cost competitiveness versus mainland competitors-some of which may be part of the same company/group of companies and thus competing with the Outer Hebrides site for investment. There are a number of Outer Hebrides companies that fall into this category. They tend to be large employers and also significant importers **and** exporters of freight-so freight charges have a double effect.

This means that any additional, or reduced, costs change the competitiveness balance for those which form part of a wider company. This is in a context where the ferry services *per se* act as a barrier and are, in effect, a competitive disadvantage. This is because companies have to base their operations around the sailing schedules, with the risk of cancellations or delays due to adverse weather or vessel breakdown. **These disadvantages would remain even if the ferry was free to use;**. Thus ferry fares act as a barrier to connectivity and trade which is **additional** to the disadvantages imposed by the constraints of a ferry operation.

This is in a context where many consultees perceive significant deficiencies in the ferry services, beyond simply the fare levels. For many consultees these factors are as important as financial costs, reinforcing the importance of all aspects of external connectivity in an open economy.

Consultees' were generally of the view that reduced freight charges would have a greater business impact than lower fares for passengers and car. This means that it is essential that a discount is passed on to the final customer; although the responses of hauliers suggest that this would not be the case if the freight rate charged by CalMac was simply reduced. This point is reinforced by the fact that, while significant, the ferry charge generally accounts for less than half of the total haulage rate to/from the islands such that a 40% discount would apply to only a proportion of the total transport cost. The economic impact estimates at **6.3** assume that a discount of 40% is, in fact, passed on in full to island businesses.

6.3 QUANTIFIED ASSESSMENT OF ECONOMIC IMPACTS

6.3.1 Introduction

This section presents our quantified assessment of the economic impacts of:

- A 40% reduction in passenger and car fares paid by island residents.
- A 40% reduction in the ferry fare element that all hauliers (whether island-based or otherwise) include in their freight charges to companies in the Outer Hebrides that import or export goods.

We would re-emphasise that the impacts shown are indicative and are based on previous research undertaken. The analysis covers:

- Monetary travel savings for island households and businesses and how these translate into economic impacts within the Outer Hebrides.
- Residents' expenditures made outside the islands as a result of newly generated trips.
- Changes in output and employment in key exporting sectors.
- The economic impacts of an increase in the Outer Hebrides population induced by reducing the cost of ferry travel.

6.3.2 Monetary Savings To Existing Users (Non-Freight)

The financial savings to Outer Hebrides households and businesses are shown at **Table 6.2**.

TABLE 6.2: MONETARY SAVINGS (£000) TO ISLAND BUSINESSES AND RESIDENTS

Category	Monetary Savings
Businesses	135
Residents	1,798
Total	**1,933**

These are based on the reduced costs of travel in relation to the existing payments made by island residents set out at **Table 2.13**. The allocation made to Businesses reflects the 7% share of ferry travel attributable to Employer's Business.

The savings total around £1.9 million of which almost £1.8 million would accrue to households. The balance of £135,000 relates to businesses.

6.3.3 Economic Impacts of Monetary Savings To Existing Users

We have adopted the approach used in the *Western Isles Ferry Fares Mechanism Study* to estimate the impacts of these savings within the Outer Hebrides economy. One of the key assumptions underlying this is that island residents spend 80% of the monetary savings within the local economy.

The basis of calculating the impacts of the monetary savings is set out at **Table 6.3**. The approach replicates that used in the *Western Isles Ferry Fares Mechanism Study*.

TABLE 6.3: ECONOMIC IMPACTS OF MONETARY SAVINGS TO EXISTING USERS	
Category	**Value**
Expenditure	£1,546,244
Retained In Local Economy	£742,197
Output Multiplier	*1.24*
Change In Output	£920,325
Employment Effects Co-Efficient (Per £000 Output)	*0.027*
Employment Impact (FTE)	**25**

The process is as follows:

- Expenditure of £1,546,244 is made within the local economy. This is 80% of the amount shown at **Table 6.2**.
- This figure is then reduced to £742,197 to account for expenditures which involve imported goods and services, and taxation.
- The impact of this on total output in the Islands economy is factored by the output multiplier of 1.24. This results in a total increase in output of £920,325.
- This is converted into the employment impact of **25 FTE** (Full-Time Equivalent) jobs using the Employment Effects Co-Efficient. The latter was updated based on the 2003 *Regional Accounts*, based on the relationship between output and employment in the sectors of the local economy most likely to be affected by additional expenditures.

6.3.4 Economic Impacts: Leakage Of Spend Due To Generated Trips

The same approach has been undertaken for resident's additional spend on the mainland in making trips generated by the reduced fares. The spend comprises:

- Payments to the ferry operator. It is assumed that these generate economic impacts outside the Outer Hebrides.
- Spend per trip while on the mainland. In the absence of any data on this we have assumed an average spend of £125 per trip.

The calculation is shown at **Table 6.4**.

TABLE 6.4: ECONOMIC IMPACTS OF LEAKAGE OF SPEND DUE TO GENERATED TRIPS	
Category	**Value**
Expenditure	-£5,229,376
That Would Have Been Retained In Local Economy	-£2,510,101
Output Multiplier	1.24
Change In Output	-£3,112,525
Employment Effects Co-Efficient (Per £000 Output)	0.027
Initial Employment Impact (FTE)	-85
Employment Impacts of Trips Already Made By Air (FTE)	10
Employment Impact (FTE)	**-76**

This shows a net loss of 76 FTE due to additional spending outside the Outer Hebrides made by island residents because of the extra trips they make to the mainland. As this is a loss of activity to the local economy, the numbers in the Table have a negative sign.

The Table also shows that the employment impact figure is adjusted on the assumption that 10% of these trips on the ferry would otherwise have been made by air (as noted at **Chapter 5**).

6.3.5 Economic Impacts of Increased Business Competitiveness

The approach to calculating these estimates is, again, based on that used in the *Western Isles Ferry Fares Mechanism Study*. Reduced ferry charges will enhance the competitiveness of key export sectors in the Outer Hebrides by reducing the costs of importing and exporting. This will then lead to increased profitability, in turn increasing output and employment in the sectors.

Five exporting sectors were identified. The change in output in each was calculated by using multipliers that describe the responsiveness in output to changes in ferry fares. These multipliers are taken from a 1993 Scottish Office study and given that they are dated some caution must be taken interpreting the findings.

Table 6.5, over, presents estimates of economic impacts based on this approach, using the assumed 40% ferry charge reduction.

This shows a total employment impact of 242 FTE jobs. In addition to this it can be expected that there would be smaller scale impacts on other sectors and the possible development of new businesses and new types of economic activity. However, it is not possible to quantify the scale of such impacts.

6.3.6 Economic Impacts of A Potential Population Increase

The *Western Isles Regional Accounts 2003* report presents estimates of the economic impacts of a continued annual growth of population in the Outer Hebrides of 0.6% over a ten year period. This represents a total increase in population of 5.5% over the decade.

TABLE 6.5: ECONOMIC IMPACTS OF INCREASED BUSINESS COMPETITIVENESS					
Sector	**2003 Output (£000)**	**Ferry Price/Output Multiplier**	**Change in Output (£000)**	**Employment Effects Co-Efficient (Per £000 Output)**	**FTE**
Agriculture	10,998	0.150	660	0.025	**16**
Fish Farming*	30,888	0.375	2,317	0.017	**39**
Textiles	8,622	0.450	1,552	0.051	**79**
Fish Processing*	19,908	0.300	1,195	0.031	**37**
Other Manufacturing	8,415	0.450	1,515	0.046	**70**
Total Employment Impact					**242**

* Due to reduced activity in these sectors since 2003 the change in output has been assumed as 50% of that implied by total 2003 output. Note: Output is expressed in 2003 prices.

The impacts do not account for any new economic activity that these in-migrants would generate and, therefore, the *Regional Accounts* report states that:

"the results should be interpreted as lower bound estimates"

Assuming that the household composition of in-migrants is identical to that seen in the Outer Hebrides in 2003, the employment impact of the economic growth would be **131 FTE.** This gives an indication of the scale of impacts that could be achieved if FDS was to generate a population growth of 5.5% over a ten year period. The issue of population attraction and retention is discussed at **6.4**.

6.3.7 Summary of Impacts

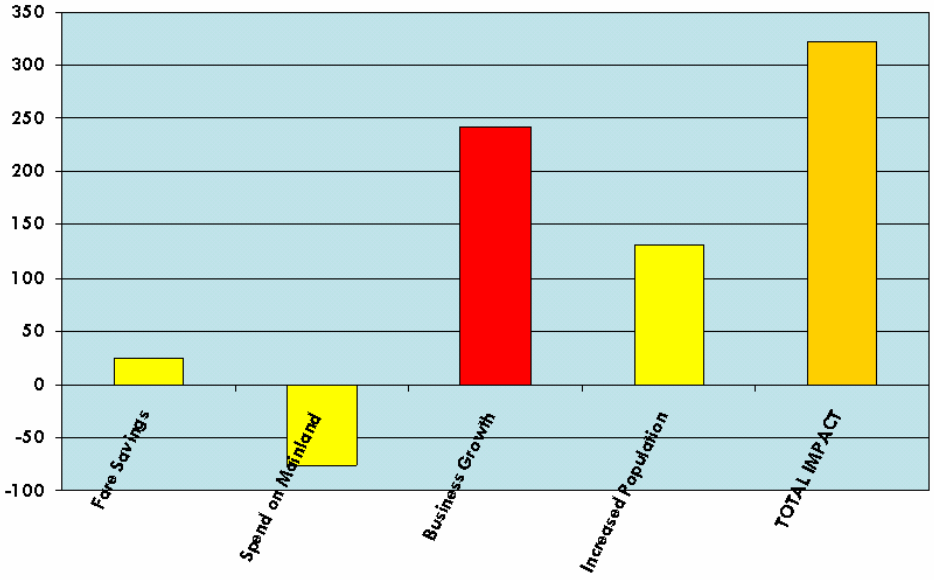
Table 6.6 summarises the employment impact estimates from the preceding analysis.

TABLE 6.6: EMPLOYMENT IMPACTS SUMMARY	
Impact	**FTE**
Monetary Savings To Existing Users	25
Leakage Due To Generated Trips	-76
Business Competitiveness	242
Increased Population	131
Total	**322**

It shows a total of **322** FTE. As stated earlier these impacts are **indicative.** They are, however, based on previous research and provide an indication of the scale of impact that might be achieved through FDS.

The results are also illustrated at **Figure 6.1**, over. It shows that the main economic impact is from business growth stimulated by lower freight charges. The other main impact is from the increased population levels that could be stimulated by lower ferry fares.

Figure 6.1: Potential Economic Impacts: FTE



6.4 POPULATION

6.4.1 Introduction

As shown at **Chapter 3**, population decline has been a major issue for the Outer Hebrides. An independent study, the *Outer Hebrides Migration Report*, was completed in January 2007. This examined the main factors that drive population changes in the Outer Hebrides. It also contained a series of recommendations on the policies required to move towards a sustainable population; one that was not only growing but more balanced in terms of age structure and gender.

6.4.2 Drivers of Population Change

The report identified the following as key drivers of population change:

- The limited job opportunities available in the Outer Hebrides; and particularly the lack of skilled jobs with progression opportunities.
- The limited range of training and education opportunities.

Four other drivers were identified. One was the cost and availability of transport. The others were housing, community confidence and attitudes among community leaders. The report states that:

"Stakeholders and interviewees frequently identify transport as a key factor in decisions around leaving or returning to the Outer Hebrides…..the high cost of ferry and air travel makes travel more difficult and exacerbates the isolation that many younger islanders feel"

6.4.3 Views on Transport

The research sought different groups' views on transport within and to/from the Outer Hebrides. Those who had **stayed** in the Outer Hebrides noted that:

"Getting people and goods on and off island was seen generally as expensive and difficult"

Among those who had **left** the islands two common themes on transport emerged. One was the issue of Sunday sailings. The other was that:

"The cost in time and money to get on and off islands was seen as prohibitive" such that

"Overall, anything which made visiting home easier and cheaper would mean more trips home"

The views on transport among **lifestyle in-migrants** were that, apart from the Sunday ferry service issue:

"public transport, and the costs of travelling between the islands and the mainland were viewed critically by participants. Expensive fares prevented Outer Hebrides residents from leaving the islands and connecting with family on the mainland, as well as discouraging friends and family on the mainland from visiting the Outer Hebrides"

No factors relating to transport were identified in the research with **international in-migrants**.

6.4.4 Issues To Be Addressed To Achieve A Sustainable Population

The report sets out ten key issues that the public sector and communities need to address to achieve a sustainable population. One of these relates to transport, as follows, the need to develop:

"An integrated and affordable transport network between and to the Islands which maximises opportunities and minimises barriers to economic growth. Subsidies (should be) deployed fairly across transport modes to address issues of peripherality and market failure in existing services"

The report identifies the following issues as underpinning this aspiration:

- Transport connections at the right times are seen by employers as critical to economic growth.
- Employers/businesses rate transport as the single most important factor underpinning growth.
- The Air Discount Scheme is seen as a success but only covers some routes and does not apply to ferry travel which is very expensive.

Transport is also mentioned under the discussion of the "Jobs & Economy" issue as follows:

- Under-investment in the tourism infrastructure and limited transport services means it is difficult to take advantage of significant assets.
- Most businesses selling to consumers rely on customers from off-island, so transport and tourism sectors are key.

6.4.5 Policy Recommendations

The report states that:

"The Air Discount Scheme has been a welcome and positive initiative. There is clear evidence that it is enabling residents …..to travel to and from the mainland more easily"

A number of consultees for this study stated that air is becoming the preferred mode of travel for students and for young people in general as it was more closely meeting their expectations for a high level of mobility.

The report also notes that although the ADS has been successful:

"ferry prices are very high"

The Study refers to issues highlighted in the research which could be promoted by local agencies in order that transport policy can further help to support population growth and stability. These are:

- Widening the Air Discount Scheme to include routes to Aberdeen.
- Developing a similar discount scheme for ferry travel.
- Looking at the Norwegian model of Road Equivalent Tariff pricing for rural air and ferry services.

6.4.6 Conclusions

The Migration Study indicates that transport is a significant issue for the retention and attraction of population to/in the Outer Hebrides; and, indeed, recommends the introduction of FDS. In particular, FDS could contribute to the attractiveness of the islands as a base for those who work elsewhere and possibly vice versa. HIE Innse Gall believe that there may be as many as 1,000 "long-distance commuters" who are based in the Outer Hebrides.

Some of the consultees for this study argued that the issues of population levels and structure were sufficiently critical to justify the targeting of FDS solely at island residents. This would be balanced by more directly supporting business development through reduced freight charges.

Our consultations suggest that younger people's expectations of mobility are higher than those of preceding generations; and that transport costs, along with frequency and timings, are an important influence on accessibility.

6.5 WIDER SOCIAL IMPACTS

In addition to the potential economic and population impacts discussed above, there is a range of social impacts which could also be generated through FDS. It would:

- Allow increased social interaction with family and friends on the mainland. As noted at **Chapter 2,** VFR is one of the main trip purposes for island residents using ferry services to the mainland.

- Provide cheaper access to specialist services and facilities on the mainland which are not available on the islands. Personal Business is the trip purpose of over 20% of island residents using the ferry services. The importance of this factor, along with VFR, is shown in the average of 8-9 return trips per annum made by those using the mainland routes.

- Increased travel opportunities for those on lower incomes and/or with families for whom the ferry will remain more affordable than air services, even allowing for ADS.

- Meet the increasing expectations of mobility/transport services which are prevalent not only in the Outer Hebrides but throughout Scotland.

- Allow increased interaction between groups, societies and sports teams based in the islands and those on the mainland.

- In sum, allow greater participation of island residents in Scottish society by reducing travel costs to a level closer to those in mainland communities.

6.6 LINKAGES TO STRATEGIES AND POLICIES

6.6.1 National Transport Strategy (NTS)

Scottish Executive's National Transport Strategy (NTS) sets out three key strategic outcomes which will set the context for transport policy-making for the next 20 years.

The first of these is ***improving journey times and connections***. To enhance Scotland's global competitiveness requires a well-connected, sustainable transport network, which offers fast and reliable journey times for both passengers and for businesses needing to transport freight.

The NTS recognises that transport can help unlock the economic and regeneration potential of particular places and in particular it can ensure connections for people who live and work in more remote and rural areas. The issue is how to improve journey times, make them more reliable, improve connections and tackle congestion in Scotland.

The challenges being faced are how to tackle the critical issue of congestion on key corridors and the strategic pinch points in our road and rail networks; how to make journey times more reliable and how to ensure the infrastructure supports economic activity, providing connections to key markets and locations, providing access to work and education and access for visitors.

This aspect of the Strategy does not focus on the costs of ferry travel. However, there are issues concerning improving journey times and connections between island communities and the rest of Scotland and globally. While reducing the costs of travel may contribute to more people taking more opportunities to 'connect' with the mainland, other aspects of connectivity such as frequency of service should be considered.

The second outcome relates to ***reduced emissions***. Delivering carbon savings is a central feature of the NTS and the most important of the environmental and health issues to get right. The key challenge for transport is to break the link between economic growth, increased traffic and increased emissions.

It is likely that reducing ferry fares will tend to increase traffic, in particular road traffic. As such, these increased flows will have some negative impact on emissions. However, the Scottish NTS also states that the focus on reducing emissions does not mean that any one project, or policy, which increases emissions cannot go ahead. Further, the analysis shown at **Chapter 5** indicates that the scale of vehicle traffic generated by FDS would be very slight.

Finally, the third outcome, ***improving quality, accessibility and affordability*** is most relevant to FDS. The following points are of note:

- It is recognised that transport has a key contribution to make to ensure that Scotland becomes an inclusive and just society by providing high quality and affordable public transport which will enable access to key services and leisure and cultural opportunities.
- The Executive are committed to ensuring that lifeline ferry services remain affordable.

The Executive's commitments include undertaking a review of ferry services with a view to developing a long-term strategy for lifeline services to 2025. As part of this review consideration will be given to the scope for rationalisation of fares structures and whether through fares adjustments greater support could be provided for particularly vulnerable island communities.

6.6.2 Economic Development

Framework for Economic Development in Scotland (FEDS)

Its high level transport objectives include:

- Promoting economic growth by building, enhancing, managing and maintaining transport services, infrastructure and networks to maximise their efficiency.
- Promoting social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network.

Other points of relevance include:

- A key objective is to secure improved efficiency and thereby reduced transport costs that will impact on the wider economy.

- Peripheral rural areas are especially sensitive to all transport costs.

- The peripherality and remoteness of large parts of Scotland, combined with issues of transport costs, have implications for economic development in these areas.

- The role of ferries and air services, and in particular the role of the Executive in the provision of subsidies, in providing a level of service at reasonable costs, has been an important feature of efforts to maintain and improve economic conditions in some of these areas.

- In terms of "improving services for all transport users" supporting good services at affordable costs, through subsidised ferry and air services, has remained a priority because it is vital to maintaining and improving economic conditions in many rural and island areas of Scotland.

- It is recognised that improved transport services can bring benefits to local communities in the form of improved access to work, education and training, health and other public services, shopping and leisure facilities.

- It is recognised that business location decisions take account of accessibility to the market place and to the labour market and are influenced by changes in the costs of transport.

A Smart, Successful Highlands and Islands (SSHI)

SSHI builds on FEDS and describes how the enterprise strategy will be implemented in the Highlands & Islands. Consultations during the process of refreshing the strategy highlighted the importance of transport links for the future of the region; and in particular that achieving the vision of a strong, vibrant community will require a range of integrated transport links including rail, road, sea and air. A stronger public transport network will improve quality of life, draw new people to the region and support the growth of rural areas.

SSHI's overall aim is to enable people living in the Highlands & Islands to realise their full potential on a long-term sustainable basis. It will be realised through four strategic objectives:

- Strengthening communities.
- Developing skills.
- Growing businesses.
- Making global connections.

Each of these objectives will be supported by a range of factors and conditions including the quality of connectivity and the role of transport.

Strong and vibrant **communities** with high quality and diverse amenities and services are essential to retain local population, especially young people, and make places attractive to in-migrants. Reducing the costs of travel for residents of smaller and more isolated areas will be vital in sustaining these communities.

In relation to **developing skills** and in particular in improving the operation of the labour market, including access to training and education, requires that those in the more remote and isolated areas have access to both local provision as well as to provision available in larger communities including Inverness. In addressing the challenges of supporting the knowledge economy there will be occasions where a critical mass for certain education provision, for example, will be necessary. Lower costs of travel for those originating from the remoter communities may help to create this rather than dispersing and diluting resources.

Growing businesses and making **global connections**, both in accessing international markets and in attracting people, businesses and investment from around the world requires that the Highlands & Islands is connected- both internally and externally. The strategy notes that eliminating economic and social remoteness requires intelligent solutions to geographic and market-failure challenges. A priority for action identified in SSHI is working on a regional scale to address the area's quality and range of physical communications.

Finally, the HIE network operates on the principles of balanced development across the entire Highlands & Islands and recognises the challenges posed by the additional costs which living and operating in remote areas involves.

6.6.3 Scottish Executive Position

The NTS contains two key commitments which have implications for an FDS, to:

- Review the affordability of public transport in relation to ferry, rail and bus services.
- Undertake a review of ferry services with a view to developing a long-term strategy for lifeline services to 2025.

In terms of possible targeting of any revisions to the fare structure the NTS makes the following point, that:

"We shall be considering, as part of our comprehensive review of ferry services……..whether through fares adjustments we could provide greater support for particularly vulnerable island communities"

In terms of the timescale for an investigation into fares, in response to a Parliamentary Question in December 2006 the Transport Minister stated that:

"Once the tendering of the Clyde and Hebrides ferry services has been completed, the Executive will be commissioning a review of the fares structure that applies to the Clyde and Hebrides routes"

Discussions with Scottish Executive officials during this study indicated that the contract for provision of the CalMac services can be amended and FDS can be included within any such amendments if Ministers decide that this should happen.

The officials envisage that the review of fares will:

- Commence in either late 2007 or early 2008.
- Consist of a programme of research rather than a single "big study", which would be defined in agreement with stakeholders.
- Look at experience elsewhere in Europe as to how fares are set.
- Possibly aim to rationalise the number of fares, seek consistency across routes and consider targeting by islands served-perhaps on the basis of some measure of peripherality-and particular groups of users.
- Examine both fares and frequency in terms of their impacts.

6.7 CONCLUSIONS

This Chapter has been wide ranging in terms of the potential impacts of FDS. In terms of **economic impacts**:

- Island companies perceive freight rates on the ferry services to be a significant additional cost. Their levels and significance are increased by the amount of empty running by freight vehicles on sailings from the islands.

- Freight rate reductions would have a greater direct economic impact than would be achieved through reducing passenger and car charges. This, of course, assumes that hauliers fully pass on the reduction in ferry charges.

- Reductions in the freight rates would benefit most sectors given the open nature of the economy. However, they would particularly assist major exporters, in a context where exports have declined in recent years. Lower freight charges will also benefit as business sites that are part of larger companies/groups by making the Outer Hebrides a more competitive business location. Further, external connectivity will be a key factor in retaining the headquarters functions of its successful indigenous companies that also have business sites on the mainland.

- The ability of reduced fares to increase population, and thus economic activity, in the islands will also be important in achieving the forecast levels of impact. However, targeting fare reductions at island residents will not address the transport cost issues facing the tourism sector.

- The significant reductions in freight and passenger and car fares will make the Outer Hebrides a more competitive business environment, more able to attract and retain entrepreneurs and investment.

- There is considerable general dissatisfaction with ferry services across a range of factors-of which cost is only one. The open nature of the economy means that the cost as well as the frequency, timings and reliability of the ferry services are of great importance to the islands' economic well-being.

Our quantified findings must be considered as initial and indicative. However, based on pre-existing research studies we estimate that the employment impacts of a 40% reduction in passengers and car fares for island residents, along with a general reduction of 40% in freight rates, could generate a net increase of 320 FTE jobs in the islands' economy. This is significant given the scale of the economy; and also the need to address the relatively high unemployment rates described at **Chapter 2.**

This is apart from the impacts that may be achieved through the development of new sectors that are not currently present in the Outer Hebrides; and from economic activities that may be undertaken by people moving to the islands as a result of lower fares.

We would, however, emphasise that there is uncertainty around the timescale over which the forecast impacts could emerge. Further, the forecast levels of impact would need to be compared to those that would accrue from a reduction in fares for **all** users-particularly in terms of the stimulation of additional tourism activity.

In terms of **population**, the Outer Hebrides Migration Study clearly identifies a need to reduce the cost of ferry travel in order to develop an increasing population with a more balanced structure. As shown at **Chapter 2**, this is the key issue facing the Outer Hebrides.

In terms of **wider social impacts**, FDS would allow greater participation of island residents in Scottish society by reducing travel costs to a level closer to those in mainland communities. More specifically, it would be of benefit to those with families and/or those on low incomes for whom air travel may be relatively expensive even with the introduction of ADS.

FDS would support the objectives of **national and regional economic policy** by stimulating participation in export markets with the Outer Hebrides ferries being a first link in the chain of global connections from the islands. Overall, FDS would make the Outer Hebrides a more competitive location and thus support and attract investment, "talent" and population.

FDS would also help deliver the **NTS'** strategic objective of ensuring affordability of public transport.

7 CONCLUSIONS

7.1 MAIN FINDINGS

There is a need to address the costs of ferry transport in order to improve the competitiveness of the Outer Hebrides and its ability to attract investment, "talent" and population. The high levels of both imports and exports place a critical emphasis on external connectivity in all its forms; both transport (sea and air) and electronic communications.

Air transport affordability has been addressed through the introduction of ADS which has been warmly welcomed and has clearly benefited island residents. However, the evidence underlying this study shows that sea transport also has a vital role to play. This is not only for freight movements. It is best suited to particular types of business trips; as well as offering a potentially more affordable travel option for residents with families and/or on low incomes. FDS would allow greater participation of island residents in Scottish society by reducing travel costs to a level closer to those in mainland communities.

Among those consulted, there appears to be considerable dissatisfaction with existing ferry services. This is not only in terms of cost. It also relates to service frequency, timings, reliability and certain elements of the fare structure. This is of concern in a context where:

- There is an operating subsidy of around £11 million per annum for Outer Hebrides ferry services.
- Island residents pay an estimated £4.8 million per year for passenger and car travel.
- Total charges to freight operators are around £4.4 million.

Growth in ferry passenger and commercial vehicle traffic to the Outer Hebrides has generally been below that on other comparable west coast routes. Growth has been strongest on the Uig services reflecting the innovations of a new vessel and increased sailings. This is in a context where the Harris and North Uist routes provide the shortest crossing times and cheapest fares of the services from the three mainland ports. The responsiveness of the Outer Hebrides transport market to innovation is also evident in the:

- Very high level of ADS registrations and the general view that trip-making by air has increased-in response to lower fares for residents and increased frequencies and new services.

- Growth in traffic on the Barra-Glasgow air service in response to fare reductions.

- Success of both the Sound of Harris and Sound of Barra ferry services and the strong traffic growth on the routes since they were introduced.

- Economic impacts to date of the Inter-Island Business Development Scheme, through the reduced freight costs it offers.

There is considerable uncertainty over the levels of demand that could be stimulated via FDS, reflecting the lack of a track record of fare reductions on mainland-island ferry services on the west coast. There is similar uncertainty regarding the **timescales** over which any increases would emerge.

Based largely on pre-existing research we estimate that total growth in demand could be of the order of:

- Passengers: 32,000 additional return trips per annum.
- Cars: 18,000 return trips.
- Freight vehicles: 2,200 return trips.

There is, however, uncertainty as to the timescales over which such increases would be realised.

With two out of three residents' trips being made with a car, achieving this increase in passenger traffic and thus the benefits associated with it, is highly dependent on a reduction in car fares.

The impact on road vehicle traffic (equal to 109 extra movements per day) would be slight. It is also expected that there be only limited trip diversion from existing air services.

Introducing the FDS would require an estimated additional £1.8 million subsidy per annum **plus** additional costs for increased supply to cater for the uplift in demand. This figure is tentative and more detailed research is required-particularly with regard to the additional supply of services. More sailings and/or larger vessels would also, it could be expected, stimulate additional demand from both island residents and visitors.

Based on pre-existing research studies we estimate that the employment impacts of a 40% reduction in passengers and car fares for island residents, along with a general reduction of 40% in freight rates, could generate a net increase of 320 FTE jobs in the islands' economy. This is apart from the impacts that may be achieved through the development of new sectors that are not presently active in the Outer Hebrides; and also from the economic activities that may be undertaken by those moving into the islands as a result of lower ferry costs. However, there is uncertainty around the timescale over which such impacts would emerge.

The impacts are, therefore, potentially significant. However, their scale is supported by the following evidence:

- 73% of passenger travel to/from the mainland is by ferry.
- Outer Hebrides ferry and air services are complementary rather than competitive.
- Growth in passenger and freight ferry traffic has been below that on comparable CalMac services.
- The Outer Hebrides routes have some of the highest fares on the CalMac network.

In terms of population, the *Outer Hebrides Migration Study* identifies a need to reduce the cost of ferry travel to help develop a sustainable population. Our study has identified a number of European countries where residents travel at reduced rates or even for free.

FDS would support the objectives of national and regional economic policy by stimulating participation in export markets with the Outer Hebrides ferries being a first link in the chain of global connections from the islands. FDS would also help deliver the NTS' strategic objective of ensuring affordability of public transport.

Finally, in addition to addressing the general issue of fare levels, consideration could also be given to:

- Introducing a discounted rate for empty freight vehicles travelling on the ferry services, as is presently the case on Northlink services.
- Raising the threshold for freight vehicle rates to greater than the existing 5 metres length, in order to benefit smaller businesses in particular.
- The introduction of a discount for online booking with CalMac.

7.2 IMPLEMENTATION

We conclude that FDS should be structured as follows. First, a reduction of 40% in **passenger** and **car** fares for island residents. This reflects the role that this could play in moving the Outer Hebrides towards a more sustainable population and reversing long term population decline. This supports the targeting of fare reductions on the travel of island residents.

Scottish Executive transport officials are of the view that implementation of FDS would not fall foul of the "double funding" rule; that is, that discounts to island residents could be introduced on ferry services that already receive public sector subsidy.

It is envisaged that, as with ADS, those who are eligible for ADS would receive a discount card for use when they book/travel on the ferry.

Second, a general reduction of 40% in the **freight** rates on the service, applicable to **all** freight movements. This reflects the complexities of the freight market whereby some freight transport is by mainland-based hauliers. FDS should support the economy in general, rather than specifically benefiting island-based hauliers.

Ideally, the freight reduction would be claimed by the shipper of the goods rather than the haulier. This would ensure that the discount is passed on in full. This is vital to achieving the underlying aims of FDS. However, such a system would be difficult to manage in terms of the:

- Administrative burden for companies that would have to claim the discount, and for those administering FDS.
- Proper allocation of ferry costs where a part-load is being moved.

For these reasons, we recommend simply a 40% reduction in the freight rates charged to hauliers. We recognise that this presents the risk that the discount would not be passed on in full to island businesses; although it is beyond the scope of this report to comment on the degree of competition in the existing Outer Hebrides haulage market.

However, the impacts of FDS should be monitored in terms of the extent to which reduced freight rates are actually being passed on to the customer. This would help to identify any necessary revisions to the Scheme.

APPENDIX A: FERRY SERVICE REVIEW

A.1 INTRODUCTION

This Appendix describes and analyses existing provision of ferry services between the Outer Hebrides and mainland Scotland. It covers:

- A description of existing services.
- Traffic volumes.
- A profile of use of the ferry services by island residents and island-based hauliers.
- Fare levels and structures.
- Operating subsidy and traffic revenues.
- Conclusions.

Please note that in some Tables, columns and/or rows may not sum to the totals due to rounding.

A.2 DESCRIPTION OF SERVICES

A.2.1 The Services

Ferry

In total there are seven ferry services provided for the Outer Hebrides. Of these, two are internal services. They operate between: Harris and North Uist; and Eriskay and Barra. The five services from the mainland are as follows:

- Ullapool-Stornoway (island of Lewis).
- Uig-Tarbert (Harris).
- Uig-Lochmaddy (North Uist).
- Oban-Lochboisdale (South Uist).
- Oban-Castlebay (Barra).

All of the services convey passengers and vehicles and operate all year round.

Air

The Outer Hebrides also has the following air services to mainland airports:

- **Stornoway**: Aberdeen; Edinburgh; Glasgow; and Inverness.
- **Benbecula**: Glasgow; and Inverness.
- **Barra**: Glasgow.

A.2.2 Crossing Time and Frequency

Table A.1, over, describes the crossing times and sailing frequency for the five mainland ferry services.

TABLE A.1: FERRY SERVICES: CROSSING TIMES AND SAILING FREQUENCY			
		Frequency (return sailings per week)	
Route	**Crossing Time**	**Summer**	**Winter**
Ullapool-Stornoway*	2h 45m	18-20	18
Uig-Tarbert	1h 40m-3h 40m	9-10	6
Uig-Lochmaddy	1h 45m-3h 40m	11	10
Oban-Lochboisdale	5h 20m-7h 25m	4	3-4
Oban-Castlebay	4h 50m-7h 20m	8	3

* Note: Frequency includes six sailings by overnight freight vessel. Crossing time shown is for the daytime ferry service. Crossing times vary on some routes according to whether the sailings is direct to/from the mainland or via another port

The **crossing times** are long relative to other Highlands & Islands ferry services. This is particularly the case for the Lochboisdale and Castlebay services which, excepting services between Aberdeen and the Northern Isles, are the longest vehicular ferry crossings in the region. Journey times are extended by the need for vehicles to check in at the port between 30 to 45 minutes before departure.

Again in relative terms, **sailing frequency** is quite limited. This is particularly noticeable given that the islands served have some of the highest levels of population among Highlands & Islands communities that have mainland ferry services. Despite this, in almost all cases the services offer a frequency of no more than two return sailings per day and, in the case of Barra and South Uist, considerably less. South Uist has one of the poorest vehicular ferry service frequencies in the Highlands & Islands. The low frequency of service means that the islands are isolated from the mainland for what are considerable periods of time.

In 2007 the summer timetable will operate from the end of March to the end of the third week in October. Across the routes in total, winter frequency is one fifth below that in summer. There are significant decreases between summer and winter on the services to Harris and Barra.

A.3 TRAFFIC VOLUMES

A.3.1 Passengers

2006 Volumes

Table A.2 shows passenger carryings for 2006.

TABLE A.2: FERRY SERVICES: PASSENGER CARRYINGS: 2006	
Route	**Passengers (000)**
Ullapool-Stornoway	181
Uig-Tarbert/Lochmaddy	162
Oban-Castlebay/Lochboisdale	45
Total	**388**

Note: Only combined figures are available for the Tarbert & Lochmaddy, and the Castlebay/Lochboisdale, services. Uig-Tarbert-Lochmaddy data include some inter-island traffic, although this will be slight

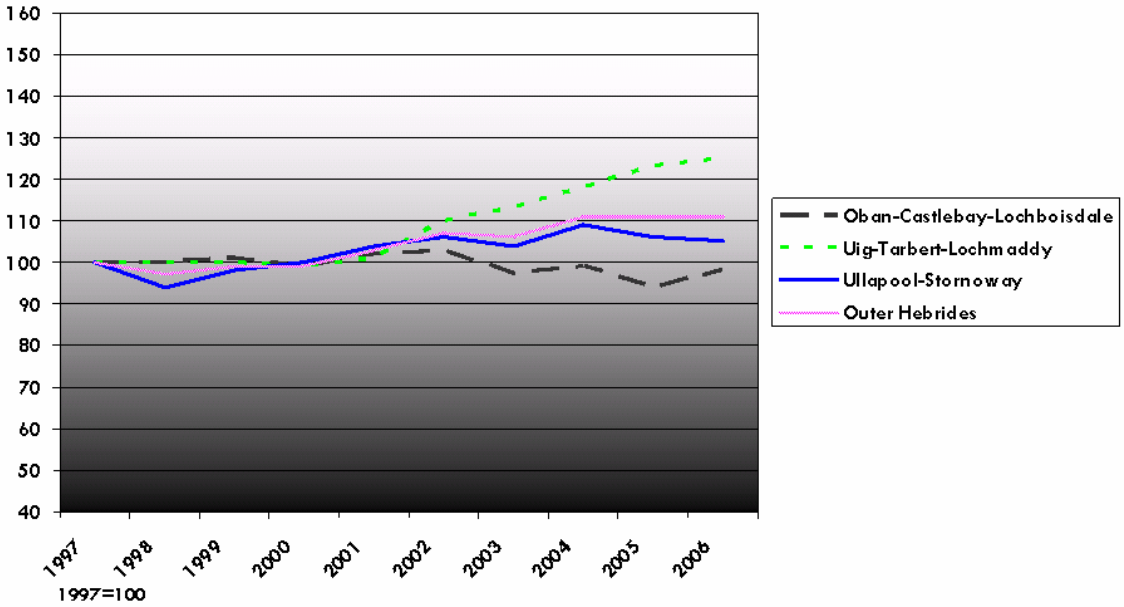
A total of 388,000 passengers used the services in 2006. The two main routes are to Lewis and to Harris/North Uist. Of all passengers, 47% travelled on the Stornoway service, with most of the rest (42%) on the two services via Uig. The latest available data (2005) suggest that slightly more passengers use the Lochmaddy service than Tarbert sailings.

The balance of 12% travelled on the Barra and South Uist services.

Trends

Figure A.1 graphs trends in passenger carryings on the routes since 1997.

Figure A.1: Ferries: Outer Hebrides Routes:
Passenger Trends 1997-2006



Growth since 1997 has been strongest on the **Uig** services where passenger numbers have increased by 25%. This equates to around 32,000 additional movements. It should be noted that growth has only emerged since 2002, with the trend flat up until that point. This relates to the introduction of a new, larger vessel in 2001.

Growth has also occurred on the **Stornoway** service but at much more modest levels. Carryings grew by just 5% in the nine years to 2006; an increase of around 8,000 movements. Apart from the peak in 2004, traffic volumes have been broadly similar since 2001.

Traffic has declined by 2% on the **Castlebay/Lochboisdale** services since 1997. It has decreased; equating to around 1,000 fewer passengers. Some of the decrease may be due to the larger vessel out of Uig from 2001 onwards which may have led to a diversion of demand from Lochboisdale.

In addition, the data shown at **Figure A.1** also contain inter-island movements between Barra and South Uist. Some of this traffic will have been diverted to the new, dedicated inter-island car ferry between Barra and South Uist that was introduced in 2002.

Nevertheless, these factors will have largely played out by 2004 and passenger numbers in 2006 remain lower than two years before.

For the **Outer Hebrides** routes as a whole traffic has grown by 11%, although this represents a simple average of only around 1% per annum. Also, the increase is largely attributable to growth on the two Uig services.

A.3.2 Cars

2006 Volumes

Table A.3 shows car traffic for 2006.

TABLE A.3: FERRY SERVICES: CAR CARRYINGS: 2006	
Route	**Cars (000)**
Uig-Tarbert/Lochmaddy	54
Ullapool-Stornoway	47
Oban-Castlebay/Lochboisdale	13
Total	**114**

Around 114,000 car trips were made in 2006. The highest proportion (47%) is on the Uig routes, with a further 41% on Ullapool-Stornoway. The split between the routes is different from that for passengers. As shown at **Table A.1**, the Stornoway service conveys the greatest numbers of passengers. Castlebay-Lochboisdale has a 12% share of car traffic which is the same as its share of passenger volumes.

Trends

Figure A.2, over, shows trends in car carryings on the routes since 1997.

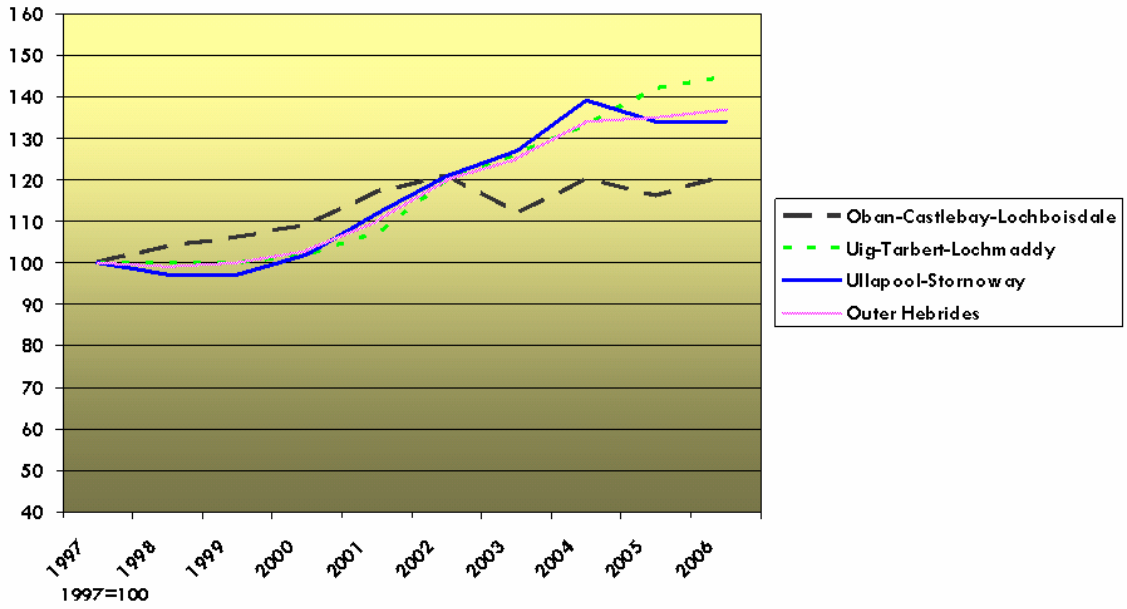
Car traffic on the Uig routes has increased significantly, by 45%, over the period, with most of this coming from 2001 onwards. Growth has also occurred on the **Stornoway** service. However, the level (34%) is below that on the Uig routes and car traffic has declined since 2004.

Car traffic on **Castlebay/Lochboisdale** has grown at a slower rate (20%) than on other routes over the period. Its growth to 2002 matched those on the other services but has since been volatile. 2006 carryings were the same as those in 2002.

On the **Outer Hebrides** as a whole, car traffic has increased by 37% since 1997, representing an additional 31,000 trips.

On each route car traffic has grown more strongly than passengers. Across the Outer Hebrides routes as a whole the rate of increase has been more than three times that for passengers.

Figure A.2: Ferries: Outer Hebrides Routes:
Car Trends 1997-2006



The introduction of a larger vessel on the Uig services has generated a disproportionate increase in car traffic compared to passenger growth. The same feature occurred on the Stornoway route. The introduction of the overnight freight service in September 2002 freed up significant space on daytime sailings which induced a 15% increase in car traffic over a two year period.

This implies that where additional vehicle space is made available then a proportion of the increase in car demand is among those who previously travelled as a foot passenger because they were unable to book a space for their vehicle. Therefore, the increase in car volumes is greater than the increase in passenger trips on the services where additional capacity has been introduced.

A.3.3 Freight Vehicles and Coaches

2006 Volumes

Table A.4 shows freight vehicle and coach traffic for 2006.

TABLE A.4: FERRY SERVICES: FREIGHT VEHICLE AND COACH CARRYINGS: 2006			
	Vehicles (000)		
Route	Freight Vehicles	Coaches	**Total Commercial Vehicles**
Ullapool-Stornoway	12.0	0.4	**12.3**
Uig-Tarbert/Lochmaddy	7.0	0.4	**7.4**
Oban-Castlebay/Lochboisdale	1.0	0.1	**1.1**
Total	**20.0**	**0.9**	**20.9**

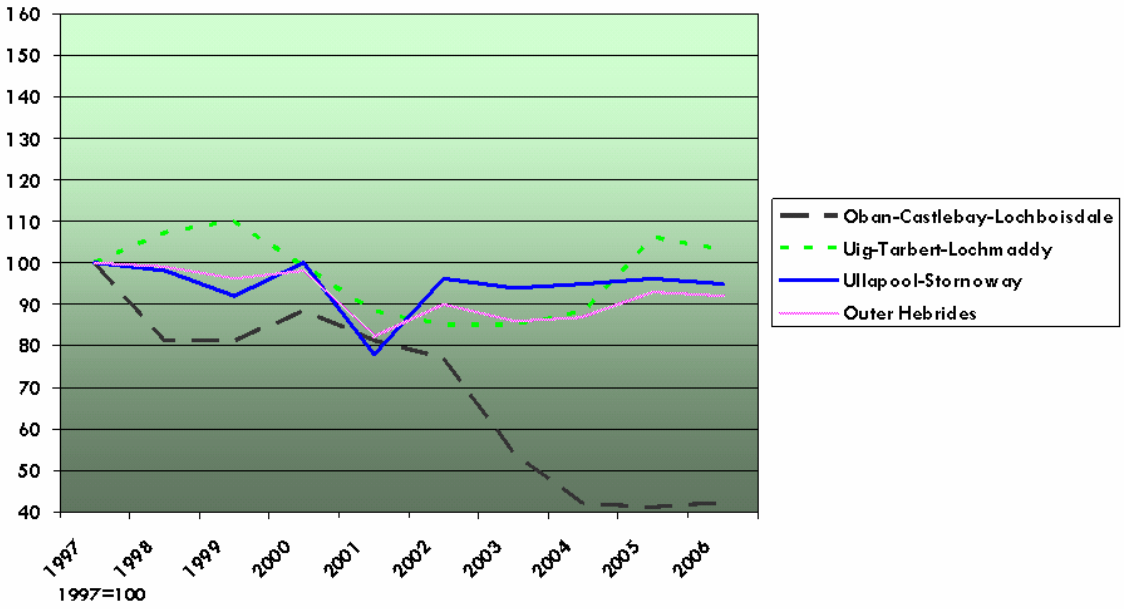
It shows that the number of freight vehicles greatly exceeds those of coaches.

Ullapool-Stornoway has the largest level of freight vehicles (12,000), accounting for 60% of total demand on Outer Hebrides services. The two Uig services account for most (35%) of the rest. Available data show that in the case of the Uig services, the vast majority of freight vehicles are travelling to/from Lochmaddy rather than Tarbert.

Trends

Figure A.3 graphs trends in commercial vehicles (freight vehicles and coaches) since 1997.

Figure A.3: Ferries: Outer Hebrides Routes: Commercial Vehicles Trends 1997-2006



The trends on the three routes are quite different. However, the overall picture for the Outer Hebrides is one of, at best, no underlying growth in commercial vehicle traffic. On the **Stornoway** service demand dipped in 2001 as custom was lost to a competing private service which commenced and then ceased in a period of around four months. Traffic has been basically flat since 2002.

Traffic has been volatile on the **Uig** routes. Demand increased to 1999, followed by decline until 2004, with a sharp rise in traffic in 2005. It is the only service where 2006 volumes are above those seen nine years earlier.

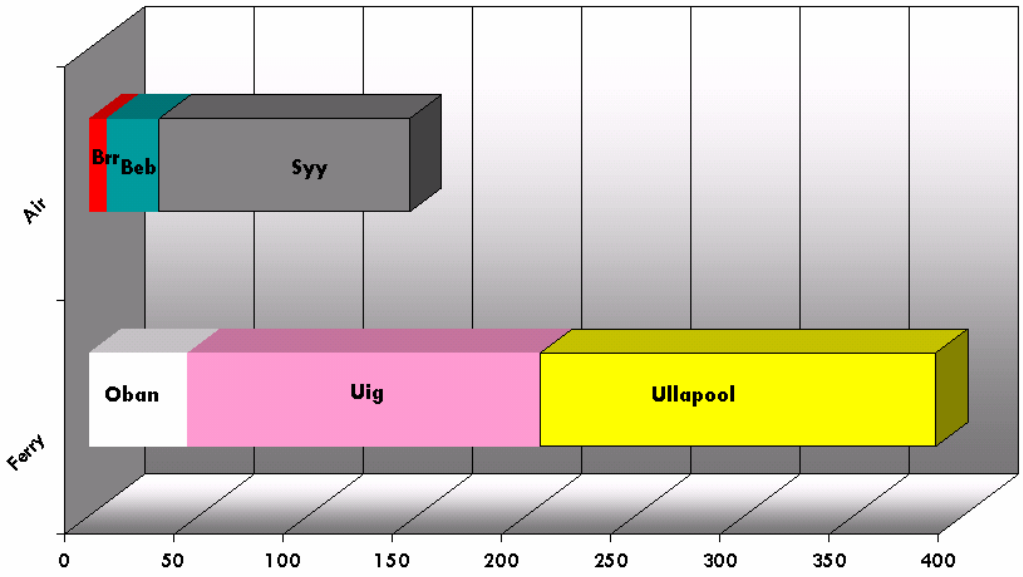
Demand on the **Castlebay/Lochboisdale** service was clearly affected by the introduction of the Barra-Eriskay service in 2002. However, demand was declining before then and has shown no growth since 2004.

Across the **Outer Hebrides** services as a whole, demand in 2006 was 8% below 1997 level.

A.3.4 Significance of Ferry Traffic in Total Passenger Movements

Figure A.4 compares 2006 passenger volumes on the ferry services with those on external air services.

Figure A.4: Passengers (000) On Mainland Ferry and Air Services: 2006



Key to airports: Brr=Barra; Beb-Benbecula; Syy=Stornoway

It shows that ferry is the dominant mode of travel between the Outer Hebrides and the mainland. In 2006, a total of 535,000 trips were made and of these 388,000 (73%) were by surface travel. This compares to 147,000 air trips, which represent 27% of all travel to/from the mainland.

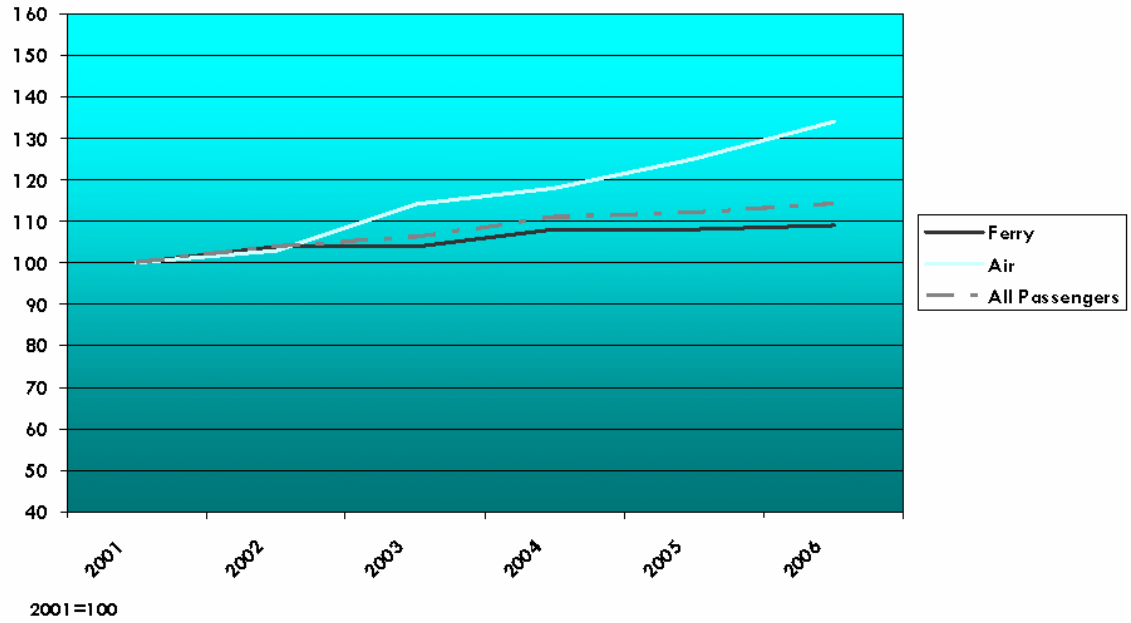
Air is relatively important for trips out of Stornoway. Some 115,000 air passengers used that airport's four scheduled services in 2006. This compares to 181,000 passengers on the Ullapool ferry. Thus air accounts for approaching 40% of total demand for travel to/from Stornoway.

Figure A.5, over, compares the trend in ferry passenger carryings with that for air. It shows that demand for air travel has increased at a much higher rate that that for ferry services. Between 2001 and 2006 air passenger numbers grew by over one third (34%) compared to growth of just 9% on the ferry services.

Total passenger trips across both modes grew by 14% over the five years. This represents 67,500 additional movements. Of these, a slight majority (55%) were by air. Thus between 2001 and 2006 **absolute** growth levels were higher for air, as well as it having a much higher growth **rate** than for ferry service.

However, ferry remains the dominant mode. Despite its low levels of growth, its share of all mainland travel declined by only four percentage points in the five years to 2006.

Figure A.5: Passenger Trends on Mainland Ferry and Air Services 2001-2006



In total, passenger movements on mainland services (both ferry and air) grew by 14% in the five years to 2006. By way of comparison, growth in passengers on external transport services (air and ferry) to the following islands was:

- Islay: 29%.
- Tiree: 16%.

A.3.5 Comparison With Other West Coast Islands

Introduction

In order to more fully understand trends on the Outer Hebrides services we have analysed demand on a number of other CalMac routes. The ones selected were those with:

- Relatively large populations. These were Arran, Islay and Mull.
- Crossing times which are similar to those on the Outer Hebrides routes: that is, over one and a half hours. These were Colonsay, Coll/Tiree and Islay.

Figure A.6, over, compares trends in **passenger** carryings on the Outer Hebrides services with those on comparator routes.

Figure A.6: Ferries: Outer Hebrides and Comparator Routes
Passenger Trends 1997-2006

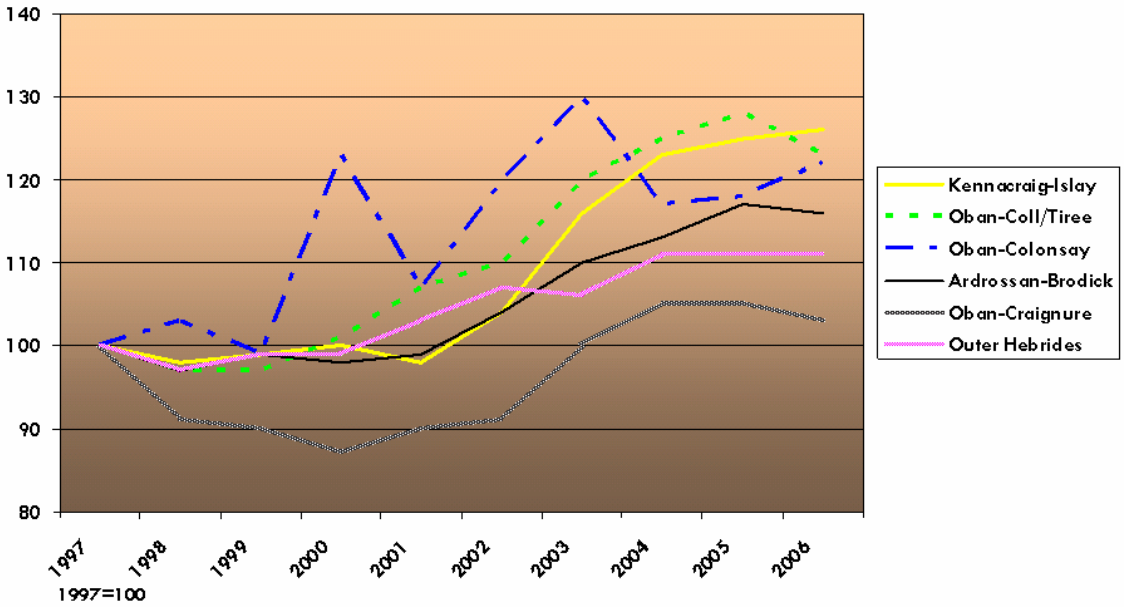
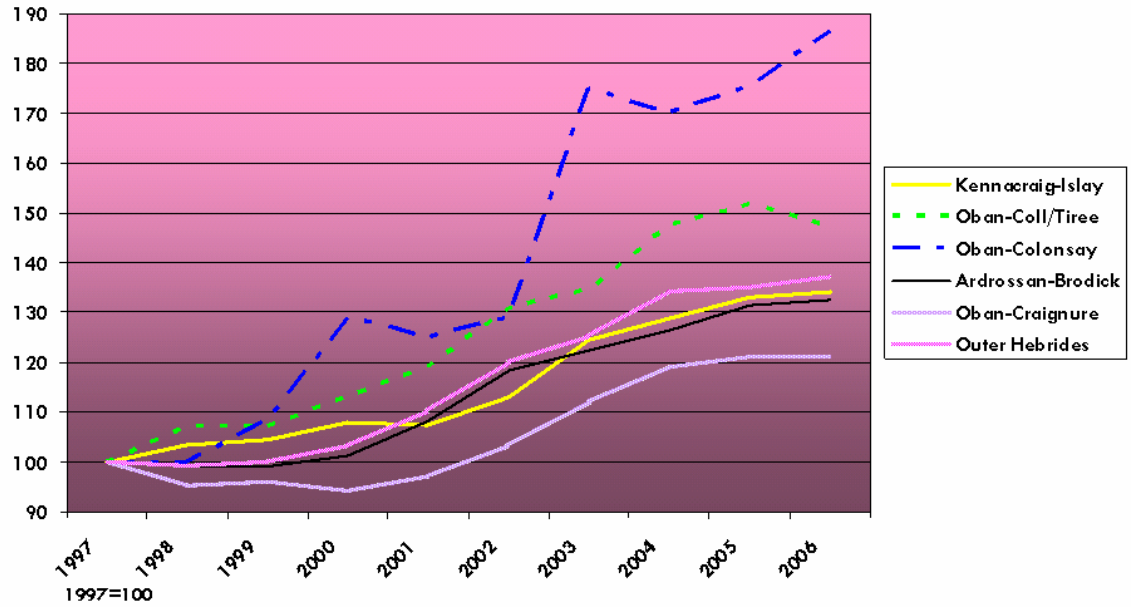


Figure A.7 compares trends in **car** traffic.

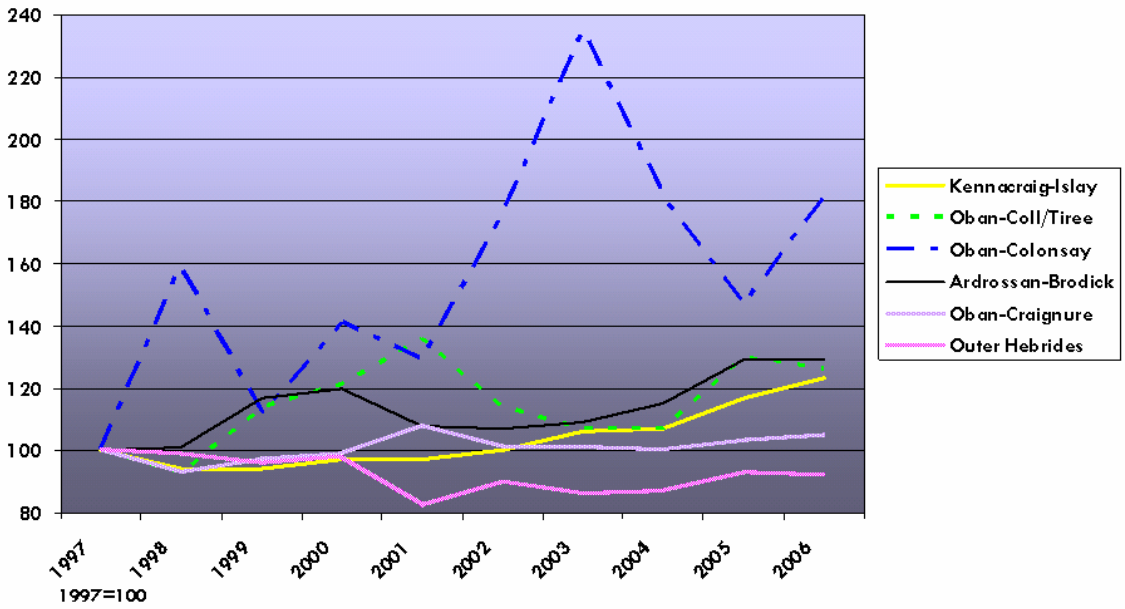
Figure A.7: Ferries: Outer Hebrides and Comparator Routes
Car Trends 1997-2006



The Outer Hebrides routes' performance is better for cars than passengers. They have seen the third highest growth rates of the six services, albeit that growth is only slightly above that on the Islay and Arran routes.

Figure A.8 compares trends for **commercial vehicles.**

Figure A.8: Ferries: Outer Hebrides and Comparator Routes
Commercial Vehicle Trends 1997-2006



The Outer Hebrides routes have the lowest growth rate. They are the only one of the six services where commercial vehicle traffic has fallen during the period. In contrast, growth has been over 20% for all other routes bar Mull.

A.4 TRAVEL BY OUTER HEBRIDES RESIDENTS

A.4.1 Estimation Of Volumes

Basis of Estimation

To help appraise the potential impacts of FDS it is necessary to estimate the proportion of total annual trips made by island residents, as opposed to visitors. This has been calculated as follows. CalMac provided carryings data for passengers and cars split into the following time periods:

- Summer: April-October.
- Winter: January-March, November-December.

In order to estimate island residents' trip the simple assumption was made that all trips in the winter period were made by those living in the Outer Hebrides. The resultant figure was factored by 12/5 to produce an estimate of residents' annual trip-making volumes. This is a simple assumption. However, it was felt to be the best approach given the data available to us.

Passengers

Table A.5 presents our estimates of island resident passenger demand.

TABLE A.5: FERRY SERVICES: ESTIMATE OF RESIDENT PASSENGER CARRYINGS: 2006		
Route	**Passengers (000)**	**Share of Annual Demand**
Ullapool-Stornoway	113	62%
Uig-Tarbert/Lochmaddy	77	47%
Oban-Castlebay/Lochboisdale	17	38%
Total	**207**	**53%**

It shows that just over half (53%) of demand is attributable to island residents, which represents around 207,000 trips per annum. Of this, 55% is on the Stornoway service, a further 37% on the Uig routes and the balance of 8% on services to Oban. The share of annual traffic attributed to residents varies by route: from 38% on Castlebay/Lochboisdale up to 62% on Ullapool-Stornoway.

In the period 2003 to 2006, island resident passenger demand fell from just over 209,000 to 206,500 annual movements.

Cars

Table A.6 presents the same analysis for car traffic.

TABLE A.6: OUTER HEBRIDES FERRY SERVICES: ESTIMATE OF RESIDENT CAR CARRYINGS: 2006		
Route	**Cars (000)**	**Share of Annual Demand**
Ullapool-Stornoway	33	71%
Uig-Tarbert/Lochmaddy	30	56%
Oban-Castlebay/Lochboisdale	7	50%
Total	**70**	**61%**

It is estimated that around 70,000 car trips were made by island residents in 2006, equating to 61% of total car demand on the services. The share of "local" traffic ranges between 50% and 71%. Island residents' car trips increased by around 3,600 between 2003 and 2006.

A.4.2 User Profile: Passengers

Surveys of passengers using the main ferry routes in the Highlands & Islands were undertaken on behalf of HITRANS in August and November 2006. These included the five services between the Outer Hebrides and the mainland. The findings relevant to this study are shown below.

Some 18% of island residents travelling on the Outer Hebrides ferry services had a main trip purpose of what could be defined as "non-leisure". This consisted of Commuting To/From Regular Place of Work (11%) and Employer's Business (7%).

In contrast, 2001 CAA Survey data show that non-leisure purposes are much higher on the Outer Hebrides air services. They range from 17% on Edinburgh-Stornoway up to 52% on Glasgow-Stornoway.

The vast majority of island residents interviewed on the ferries were travelling for leisure purposes. The main ones were:

- Personal Business: 21% of passengers.
- Holiday: 19%.
- Visiting Friends & Relatives (VFR): 15%.
- Short-Break: 15%

Shopping accounted for 6% of trips, while Travelling To/From Place of Education was the main trip purpose for 2%.

As might be expected given the frequency of sailing, almost all (94%) passengers were undertaking a trip that included an overnight stay on the mainland.

The trip destination on the mainland varied by route, reflecting the proximity of different islands in the Outer Hebrides to different parts of the mainland. However, the main trip ends across the interviews as a whole were:

- Inverness, East Highland and Moray: 26% of island residents.
- Glasgow/Renfrewshire: 15%.
- North Argyll (presumably Oban): 13%.
- Aberdeen: 8%.

Across the routes as a whole, one third of island residents were travelling as foot passengers on the ferry. The proportions varied by route. The figure for Uig-Lochmaddy was 5%, while that for the Stornoway service was just over half (51%).

In terms of frequency of use of services to the mainland, most (77%) users travelled on the ferry less than or up to 6 times per annum. The overall average (mean) across the sample was between 8 and 9 return trips per year.

There are two main reasons why residents travelling on the ferry do so rather than travelling by air. The main one is the convenience of being able to travel with one's own car. This was cited by over half (52%) of those interviewed. The second reason was the lower fares on the ferry compared with air (mentioned by 19%). A further 6% simply stated that they do not like flying.

A.4.3 User Profile: Freight Traffic

On-Board Surveys

The HITRANS surveys, referred to at **A.4.2**, also included interviews with drivers of freight vehicles. The most important mainland trip ends identified were:

- **Ullapool-Stornoway**: Inverness, East Highland & Moray; Glasgow/Renfrewshire; and Aberdeen/Aberdeenshire.
- **Uig-Tarbert**: Inverness, East Highland & Moray.
- **Uig-Lochmaddy**: Inverness, East Highland & Moray.
- **Oban-Lochboisdale**: Oban; and east central Scotland.
- **Oban- Castlebay**: Glasgow/Renfrewshire.

The trip ends are quite predictable given the geographic spread of the Outer Hebrides in relation to the Scottish mainland. However, the importance of the Inverness and Moray areas for freight on the Stornoway and, in particular, North Uist routes is notable.

Consultations

The consultations highlighted the significant extent of empty running by freight vehicles travelling from the Outer Hebrides. This reflects the trade imbalance on the islands. The volume of imports is substantially greater than exports. On the Ullapool-Stornoway route one of the main hauliers reported empty running on 40%-50% of ex island legs.

A.5 FARES

A.5.1 Passengers

Outer Hebrides

CalMac's fare structure has three main ticket types for passengers and cars. These are:

- Single.
- 5 Day Return.
- 6 Journey.

The first two of these tickets vary in price by season. Higher fare levels operate during the summer timetable. However, the cost of 5 Day Return tickets for trips **originating in the Outer Hebrides** do not increase in the summer. Thus the "winter" fare is available all year round. Finally, 6 Journey fare levels are the same in the summer as in the winter.

Table A.7 shows passenger fares for the Outer Hebrides routes for summer 2006 and winter 2006-07. To allow comparison between the ticket types, all fares have been expressed in terms of the cost of a single journey. For example, the cost of a 5 Day Return on Ullapool-Stornoway in summer 2006 was £25.50.

TABLE A.7: PASSENGER FARES (£): SUMMER 2006 AND WINTER 2006-07

	Single		5 Day Return		6 Journey	
Route	**Summer**	**Winter**	**Summer**	**Winter**	**Summer**	**Winter**
Ullapool-Stornoway	14.65	12.20	12.75	10.45	10.50	10.50*
Uig-Tarbert/Lochmaddy	9.60	8.55	8.20	7.30	6.83	6.83
Oban-Castlebay/Lochboisdale	21.10	16.40	18.00	15.00	14.83	14.83

*Note: It is unclear why this fare is higher than that for the 5 Day Return

The main points to note are that the:

- Fares are higher the longer the crossing.
- Broadly, 5 Day Returns are set at between 85%-90% of the single fare level.
- 6 Journey tickets are around 70% of the single fare in the summer months and 80%-90% of the single fares in the winter months.
- The extent of discount provided by the multi-journey ticket compared to the winter 5 Day Return fare is very slight.

The premium for summer over winter fares is:

- Between 12% (Uig services) and 29% (Castlebay/Lochboisdale) for **single** fares.
- Between 12% (Uig services) and 22% (Stornoway) for **5 Day Returns**.

CalMac were unable to provide information on the numbers of different ticket types used on any of their routes. They stated that these data were not processed from their sales records.

Passengers Fares Compared

Other CalMac Services

Table A.8 compares the cost of a 6 Journey passenger ticket on the Outer Hebrides services to that on other CalMac services.

TABLE A.8: PASSENGER FARES: 6 JOURNEY TICKET: WINTER 2006-07	
Route	**Cost (£)**
Castlebay/Lochboisdale	89
Stornoway	63
Oban-Coll/Tiree	54
Colonsay	48
Canna	46
Uig	41

Fares on the **Oban-Castlebay/Lochboisdale** service are the **highest** in the CalMac network, reflecting that it is the longest route served by the company. In addition, the cost of a 6 Journey ticket on the **Stornoway** route is the **second most expensive** on the CalMac network despite the Oban-Coll/Tiree service having a longer crossing time. The **Uig** services are the **sixth most expensive**, after the other two Outer Hebrides routes and services to Coll/Tiree, Colonsay and Canna.

Northlink

Northlink operate subsidised passenger, car and freight services to Orkney and Shetland. Only single fares are charged for their services. There are no return fares or multi-journey tickets. The cost of six passenger journeys on the Northlink services in winter 2006-07 would be:

- Aberdeen-Lerwick: £126.80 (crossing time over 12 hours).
- Scrabster-Stromness: £78 (crossing time 90 minutes).

Thus the Aberdeen service is more expensive than any CalMac route while the Scrabster charges are greater than all bar Castlebay/Lochboisdale.

For passengers and cars Northlink operates a three tier fare structure according to the time of year. This is:

- **Peak**-July and August.
- **Mid**-April, May, June, September, October and Christmas & New Year period.
- **Low**-January, February, March, November and December until Christmas & New Year period.

The differentials are as follows for passenger fares:

- Aberdeen-Lerwick: The **Mid** fare is 27% above the Low fare and the **Peak** fare is 53% above the Low fare.
- Scrabster-Stromness: The **Mid** fare is 8% higher than the Low fare while the **Peak** fare is 16% higher than the Low fare.

In addition to the above, during all three time periods Northlink offer a 10% discount on standard fares to the following groups:

- Senior citizens.
- Those in full time education.
- Disabled passengers.

The ferry company also provide "Special Offer" fares at certain times of the year.

Orkney Ferries

Orkney Ferries operates passengers, car and freight services within Orkney. The routes that are most comparable to the Outer Hebrides routes are the ro-ro services to Orkney's North Isles. The crossing time on direct sailings from Kirkwall to each of the islands of Sanday, Stronsay and Westray is around one and a half hours: that is, slightly less than that for the Uig services.

The fare structure comprises:

- Single.
- Return, the price of which is simply double the single fare.
- 10 Journey Tickets.
- 20 Journey Tickets.

Senior citizens and registered disabled receive a 50% discount on all ticket types including multi journeys. Unlike CalMac and Northlink, no premium fares are charged at times of higher demand.

Passengers fares on the North Isles services are below those on the Uig routes. The comparisons are provided at **Table A.9**.

TABLE A.9: PASSENGER FARES (£): NORTH ISLES AND UIG-TARBERT/LOCHMADDY COMPARED TO ORKNEY NORTH ISLES			
	Single	**Return**	**Multi-Journey***
North Isles	6.55	13.10	4.58-4.92
Uig-Tarbert/Lochmaddy	8.55-9.60	14.40-16.40	6.83

* Note: Per single trip

A.5.2 Cars

Outer Hebrides

Table A.10 compares fare levels for cars on the same basis adopted for passengers at **Table A.7**. It should be noted that car rates are for vehicles only. An additional charge is applied to all accompanying passengers, including the driver.

TABLE A.10: CAR FARES (£): SUMMER 2006 AND WINTER 2006-07						
	Single		**5 Day Return**		**6 Journey**	
Route	**Summer**	**Winter**	**Summer**	**Winter**	**Summer**	**Winter**
Ullapool-Stornoway	72.00	58.00	61.00	49.00	43.50	43.50
Uig-Tarbert/Lochmaddy	46.00	39.00	39.50	33.50	28.17	28.17
Oban-Castlebay/Lochboisdale	77.00	66.00	65.50	56.50	46.17	46.17

The main points to note are that:

- As might be expected car fares are higher than passenger fares. The ratio ranges from 3:1 to 5:1, varying by route and by ticket type.
- The premium for summer over winter fares is broadly similar to that for passengers. It ranges between 16% and 24%.
- 5 Day Returns are set at around 85% of the single fare level. Again, this is similar to the levels for passengers.
- 6 Journey discounts are greater than those for passengers. They range between 60% and 75% of the single fare.

Table A.11 shows the return fares for a car and two passengers for 5 Day Returns (winter) and 6 Journey tickets.

TABLE A.11: CAR AND TWO PASSENGER FARES (£)		
Route	**5 Day Return**	**6 Journey**
Ullapool-Stornoway	140	129
Uig-Tarbert/Lochmaddy	96	84
Oban-Castlebay/Lochboisdale	173	152

Note: Values rounded to nearest whole number

The 5 Day Return varies from £96 on the Uig services to £173 on Oban-Castlebay/Lochboisdale. The discounts obtained by using a 6 Journey ticket range from £11 on Ullapool-Stornoway to £21 on the Barra/South Uist service.

The charge for a car forms the main element of the composite fare for the vehicle and passengers. It accounts for 60%-70% of the total fare paid.

Comparison With Other Services

Other CalMac Services

The cost of a 6 Journey ticket for a car and two passengers on the Outer Hebrides routes is compared to others on the CalMac network at **Table A.12**.

TABLE A.12: TOTAL FARE FOR CAR AND TWO PASSENGERS: 6 JOURNEY TICKETS: WINTER 2006-07	
Route	**Cost (£)**
Castlebay/Lochboisdale	152
Stornoway	129
Oban-Coll/Tiree	126
Colonsay	98
Uig	84
Islay	75

As with the passengers fares shown earlier, the Outer Hebrides are among the most expensive.

Northlink

The total charges for a return sailing for a car and two passengers would be as follows, with the range representing the differences between the Low and Peak charges:

- Aberdeen-Lerwick: £253-£355. This is considerably above the charges on all CalMac routes.

- Scrabster-Stromness: £134-£151. This is more expensive than any CalMac route bar Oban-Castlebay/Lochboisdale. A special offer fare of £110 for a car and two passengers was available on the route during February 2007, although with restrictions on the sailings that could be used.

Orkney Ferries

The rates for a car and two passengers on the North Isles services using a multi-journey ticket ranges between £39-£42. This is considerably lower (by around 50%) than the £84 shown earlier for the Uig services. Orkney Ferries single car fare is £14.65. This is around one third of the car rates on the Lochmaddy and Tarbert services.

The ratio of car: passenger fares on the Orkney North Isles services is around 2:1, compared to up to 5:1 on the Outer Hebrides routes. The discounts on car fares offered through multi-journey tickets on the Orkney services are no greater than those offered by CalMac. However, the base single fare is much lower on the Orcadian routes.

A.5.3 Freight

Outer Hebrides

Freight vehicles are charged per half metre and the rate includes the fare for an accompanying driver (irrespective of whether the vehicle is actually accompanied). VAT is applied to the total charge. Fares do not vary by season.

The present rates per half metre (excluding VAT) are:

- Uig-Tarbert/Lochmaddy: £7.57.
- Ullapool-Stornoway: £10.76. This rate applies to daytime sailings, with a 10% discount applied to traffic using the overnight freight service.
- Oban-Castlebay/Lochboisdale: £13.48.

Example return fares are shown below, based on a 12 metre vehicle:

- Uig-Tarbert/Lochmaddy: £363.
- Ullapool-Stornoway: £516 (£464 on overnight service).
- Oban-Castlebay/Lochboisdale: £647.

Hauliers are also eligible for volume-related rebates up to, we understand, a maximum of 15%.

Freight Rates Compared

Other CalMac Services

Table A.13 compares freight charges on the Outer Hebrides services with those on other CalMac routes.

TABLE A.13: FREIGHT RATES: 12 METRE VEHICLE: RETURN	
Route	**Cost (£)**
Castlebay/Lochboisdale	647
Stornoway	516/464
Oban-Coll/Tiree	483
Colonsay	483
Uig	363
Islay	360

As with the fares for a passenger and two cars (see **Table A.11**) the Castlebay/Lochboisdale and Stornoway services have the highest rates in the CalMac network-although the rate for the overnight freight service puts the Stornoway charges below those to Coll/Tiree and Colonsay. Uig has the fifth highest rate, slightly above that charged on Kennacraig-Islay.

Northlink

Northlink's freight charging structure is considerably more complex than that operated by CalMac. The rates per metre differ between:

- Self-propelled vehicles and dropped trailers.
- Dropped trailers and empty dropped trailers.
- Vehicles which are booked more than three days in advance or travel on standby; and those booked within 3 days or less in advance of sailing.

In addition, special rates are offered on weekend freight vessel sailings from Aberdeen to Kirkwall.

It should be noted that trailers can be dropped without accompanying units on both the Lerwick and Scrabster services. This practice is not permitted by CalMac apart from on its overnight Stornoway freight service.

The various rates for Scrabster-Stromness and Lerwick-Aberdeen are shown at **Table A.14**. As per the CalMac rates shown earlier, these are based on 12 metre vehicles. They also relate to charges for **self-propelled** vehicles. The Table also shows the CalMac charges on the Outer Hebrides routes, excluding any volume-related rebates available to particular hauliers.

TABLE A.14: NORTHLINK FREIGHT RATES (£): 12 METRE SELF-PROPELLED VEHICLES: RETURN		
Route	**Advance/Standby**	**3 Day Premium**
Aberdeen-Lerwick	738	816
Scrabster-Stromness	458	672
Castlebay/Lochboisdale	648	
Stornoway	464-516	
Uig	364	

The main point to note is that Northlink charges are generally higher than those of CalMac.

In the case of Aberdeen-Lerwick this is unsurprising given the length of crossing compared to the west coast services. However, the rates are only £90-£168 higher than on Castlebay/Lochboisdale where the crossing time is less than half that between Aberdeen and Shetland.

Rates on the Scrabster service are above those on Uig-and by over £300 where vehicles are booked in the three day window before sailing. The 3 Day Premium rate for Orkney is higher than the rates on any of the Outer Hebrides routes.

As noted earlier it is possible to drop trailers on the Northlink service, while empty dropped trailers are offered a discounted rate. **Table A.15** sets out Northlink rates for 14m vehicles.

TABLE A.15: NORTHLINK FREIGHT RATES (£): 14 METRE VEHICLES: RETURN					
	Advance/Standby			3 Day Premium	
Route	Self Prop.	Drop Trailer	Drop Trailer-Empty On One Leg	Self Prop.	Drop Trailer-Empty On One Leg
Aberdeen-Lerwick	861	875	613	952	1,045
Scrabster-Stromness	534	534	534	784	936

The main points to note are that:

- While it is possible to drop trailers, in most cases the charge per metre is above that for self-propelled vehicles.

- The discount for empty trailers applies only to those on the Aberdeen-Lerwick route **and** which are booked more than three days ahead or travel on standby. The discounted rate provides a total reduction of £262 compared to a dropped trailer which is loaded on both legs.

Table A.16 compares the cost of trailer return trips on the various service, **where the trailer is travelling empty on one leg**. Note that the length of a trailer with an accompanying unit is 16.5m, while that of a dropped trailer is 14m.

TABLE A.16: NORTHLINK FREIGHT RATES (£): TRAILERS: RETURN		
Route	Advance/Standby	3 Day Premium
Aberdeen-Lerwick	613	1,045
Scrabster-Stromness	534	936
Castlebay/Lochboisdale	891	
Stornoway	541-710	
Uig	501	

Notes: Northlink rates assume trailer is dropped on both legs (14m vehicle length) and is empty on one leg. Lower rate on Ullapool-Stornoway service (freight vessel) assumes that trailer is dropped on both legs. Other CalMac rates are based on an accompanied trailer, with a total vehicle length of 16.5m. All CalMac rates exclude any volume-related rebates

The Scrabster service's rates, where an advance or standby booking is made, are quite similar to those on the Uig service and the Stornoway freight vessel.

In the same circumstances, the rates on the Lerwick service are around £100 below those on Ullapool-Stornoway daytime sailings; and around £280 cheaper than on Castlebay/Lochboisdale. Thus the need to accompany the trailer plus the absence of a discount for empty trailers makes use of these CalMac routes significantly more expensive than the much longer Aberdeen-Lerwick service. However, where bookings are made during the three day window, the Shetland route is clearly more expensive than **all** the CalMac services.

Orkney Ferries

Orkney Ferries structure for larger vehicles is as follows. A flat rate for the first 5 metres is applied which is the same as the car rate. Thereafter a charge is made for every additional half metre. A 10 journey ticket can be purchased which offers a 25% reduction on the single journey rate.

On this basis the charge for a 12 metre vehicle return on the North Isles service ranges between £193 and £258 depending on the use, or otherwise, of a multi-journey ticket. This is below the charge on the Uig service (£363) shown at **Table A.13**. Again, this reflects the Orkney Ferries fare structure whereby vehicle rates are relatively low compared to those for passengers.

APPENDIX B: FREIGHT CHARGES: SUMMARY OF INTERVIEW FINDINGS

Introduction

This Appendix summarises the main findings from interviews with a number of companies and sectoral representatives based in the Outer Hebrides. Not all consultees were willing or able to provide all of the data we requested. Further, and on the grounds of commercial confidentiality, we do not present information that would allow identification of the companies concerned.

Company 1

The **import** of a major input incurs road transport costs of around £82,000 per annum. It is estimated that the ferry charges constitute around £29,000 (35%) of this total transport payment; and that they add 2.2% to the input's total delivered price.

A 40% reduction in the ferry charge would allow the company a saving of around £12,000 per annum and reduce the delivered price of the input by around 0.9%.

For **exports** from the island, a full load from Stornoway-Glasgow costs £1,200. We estimate that the ferry charge accounts for around 27% of this total cost. A 40% reduction in the ferry charge would reduce the total cost to Glasgow to around £1,070, a reduction of 11% in the total transport cost.

The consultee also provided information on transport costs to Glasgow from other locations. Compared to the £1,200 for Stornoway-Glasgow, these were:

- Fort William-Glasgow: £400.
- Lerwick-Glasgow: £1,040.

These data suggest that the ferry charge is responsible for some but not all of the higher transport price for deliveries from Stornoway compared to those from Lochaber and Shetland.

In total, the company incurs transport costs of £1.5 million for its operation in the Outer Hebrides. For this company, the impact of a 40% reduction would be to increase their relative cost competitiveness against its competitors.

Company 2

The cost for **importing** a full load from Inverness to the Uists is £1,200. The company stated that the ferry element of this is £246, equal to 21% of the overall transport cost. Thus a 40% reduction in the ferry charge would effect an 8% reduction in the total transport cost.

This company stated that a 40% reduction in freight charges would mean that they would consider undertaking a greater amount of assembly work in an underutilised facility in the Outer Hebrides rather than continuing to do all of this work on the mainland. The company would also consider investing in upgrading its vehicle fleet.

Company 3

This company **imports** materials from England and manufactures products most of which are sold in the Outer Hebrides, although some limited exporting does take place. The cost per full load from England is £1,750, of which we estimate that the ferry charges may represent around 20%. Thus a 40% reduction in ferry costs would reduce the overall transport cost by around 8%.

The company stated that haulage rates constrain their ability to trade on the mainland. This is because their vehicles are slightly over the 5m length that is the threshold for classification as freight vehicles on the ferry service. Reduced rates for their freight vehicles would allow the company to increase the amount of work undertaken on the mainland.

Company 4

The price of transport for **import** of a full load of materials from Inverness ranges between £900 and £1,100. We estimate that the ferry charge will constitute between 32% and 39% of the total cost of transport. On this basis, it is estimated that a 40% reduction in the ferry charge could effect a 13%-16% decrease in transport costs for these loads.

The company stated that transport costs represent around 9% of the delivered price value of their materials. On this basis, we estimate that ferry charges account for around £30,000 per annum and thus a 40% reduction would reduce annual total transport costs by approximately £12,000. This would equate to 0.5% of the company's annual turnover. The company stated that savings in freight costs would be reinvested in the company.

Company 5

This company is a significant **importer** of materials and stated that transport costs form a substantial element of their overall operating costs. One commodity has a delivered price of £400 per tonne of which transport accounts for £57 per tonne (that is, 14% of the total purchase price). We estimate that a 40% reduction in ferry charges would reduce the commodity's delivered price by around £8 per tonne (2%).

The company operates in a particularly competitive environment. It expects that it and other island-based businesses benefiting from lower freight charges would pass on the lower costs through their bids for project work.

Company 6

The company manufacturers products from both locally sourced materials and those that are **imported**. The imports account for 50% of total inputs, with the balance sourced within the Outer Hebrides. Imports are required to maintain continuity of production and supply to customers. They are sourced from a range of locations-mainly Scotland outside the Highlands & Islands, but also from elsewhere in the British Isles.

Exports of finished products are consigned to various destinations throughout the UK. The cost of a full load to Glasgow is £1,375; around 24% of which, we estimate, is attributable to ferry charges. Transport costs for a full load to other parts of Scotland are £1,650 of which the ferry charges represent around 20%. Part loads can be more expensive per kilo of product-a point also made by a number of other consultees across a number of sectors.

The company's annual freight costs are £135,000. These represent 11% of total company costs. We estimate that cost savings from a 40% reduction in ferry charges would be around £12,000, equal to 0.8% of total operating costs.

The company stated that the savings would make it more profitable and increase its competitiveness in relation to mainland UK companies.

Company 7

This company spend over £100,000 per annum on freight costs for **importing** goods. This represents one quarter of their total costs, reflecting the relatively low value of the products which they sell. Transports cost for full loads vary between £1,110 (Inverness) and £1,380 (Glasgow). These represent between 20% and 23% of the total delivered price of goods and commodities.

We estimate that ferry charges constitute around one third of the cost of transport of the company's goods from Inverness. The proportion for those moved from Glasgow would be around one quarter. Thus we broadly estimate that a 40% reduction in ferry charges would save the company around £12,500 per annum, equivalent to 11% of its total current freight payments. The company stated that cost savings would be passed on to customers thus helping to support its customer base.

Crofting

Based on the information provided to us, we estimate that ferry charges account for around 28% of the total costs of **importing** feed to the islands. This implies that a 40% reduction in the ferry cost would reduced the delivered price by around 11%.

The overall cost of feed and fertiliser are a key issue as they can represent as much as 70-80% of a crofter's total costs. Generally, transport costs are important given the amount they add to the purchase price of what are quite low value commodities.

CalMac offer a rebate for the transport of hay to the islands, with hay lorries that return empty to the mainland travelling at no charge. However, the cost per bale is considerably higher on the islands (£4.75) than on the mainland (£2.40).

Exports of livestock differ from much of the haulage to/from the islands in that the organisation of, and payment for, transport is largely dealt with by mainland companies. As an example, lambs selling for £24.50 per head have an additional transport cost of £3.50 for transport to the mainland-equal to 12.5% of the total "delivered price".

Sea Fishing

The relevant consultee stated that the total transport cost for the **export** of shellfish from the islands was £500,000 and this compares to the product's total value of £10 million.

Some processors **import** shellfish from the mainland in order to maintain continuity of production and supply to customers. However, the actual proportion of a load which is usable forms only a small part of the total load-the remainder being water and other elements that are not actually processed. A yield of 22% was quoted for the import of scallops from the mainland, with over three quarters of the volumes not actually directly contributing to the final product. This incurs additional transport costs.

The consultee referred to the fact that vivier lorries exporting live fish from the islands cannot get inbound loads because they are operating specialist equipment. This adds to the cost of transport as the cost of travelling to the islands, including the ferry charges, have to be borne by the export leg.