

# THE INTRODUCTION OF A ROAD EQUIVALENT TARIFF BASED FARES SYSTEM ON SCOTLAND'S FERRY NETWORK

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## Background

The Scottish Government commissioned a study to investigate the impact of introducing a Road Equivalent Tariff (RET)<sup>1</sup> fares system for passengers, cars and commercial vehicles travelling on subsidised ferry services in Scotland supported by Central Government. The study has involved a detailed analysis by Halcrow Group Limited and the purpose of this paper is to provide a summary of the work carried out to date.

The key aim of the paper is to show how detailed analysis was used to help support, design and implement a high-level and important government transport policy, by using a range of techniques. A key driver of all government policy in Scotland is how it can contribute to the government's purpose as set out in the new Government Economic Strategy. This paper also shows the importance of using monitoring and evaluation as a technique to provide hard evidence to support the policy contribution to the Government's overall purpose through the use of national indicators and targets.

## Introduction

The RET study is split into three Phases. The first Phase of the study was carried out between September 2007 and February 2008 and was split into 5 key Stages. These were to:

- Stage 1 - Review approaches to fare setting for public service ferries in a selection of countries across the world, including the RET approach;
- Stage 2 - Offer definitions of RET that could be applied to all categories of passenger and vehicular traffic in the context of ferry fares for the Clyde and Hebrides and Northern Isles routes which are subsidised by the Scottish Government;
- Stage 3 - Provide an initial analysis of the potential impacts (especially in economic and social terms) of the introduction of the RET approach;
- Stage 4 - Make recommendations on the design and implementation of a pilot study applying RET probably on one or more of the routes connecting the Scottish mainland and the Western Isles (ie Stornoway to Ullapool, Tarbert/Lochmaddy to Uig (Skye) and Castlebay/Lochboisdale to Oban), including the choice of route(s), anticipated costs, start date, length of the pilot, operational constraints and any capacity constraints that may emerge; and
- Stage 5 - Carry out any baseline information gathering in advance of the pilot that is considered necessary for subsequent monitoring and evaluation purposes.

The second phase of the study will be carried out between March 2008 and April 2011 and will involve the monitoring of the pilot study, including the gathering of a

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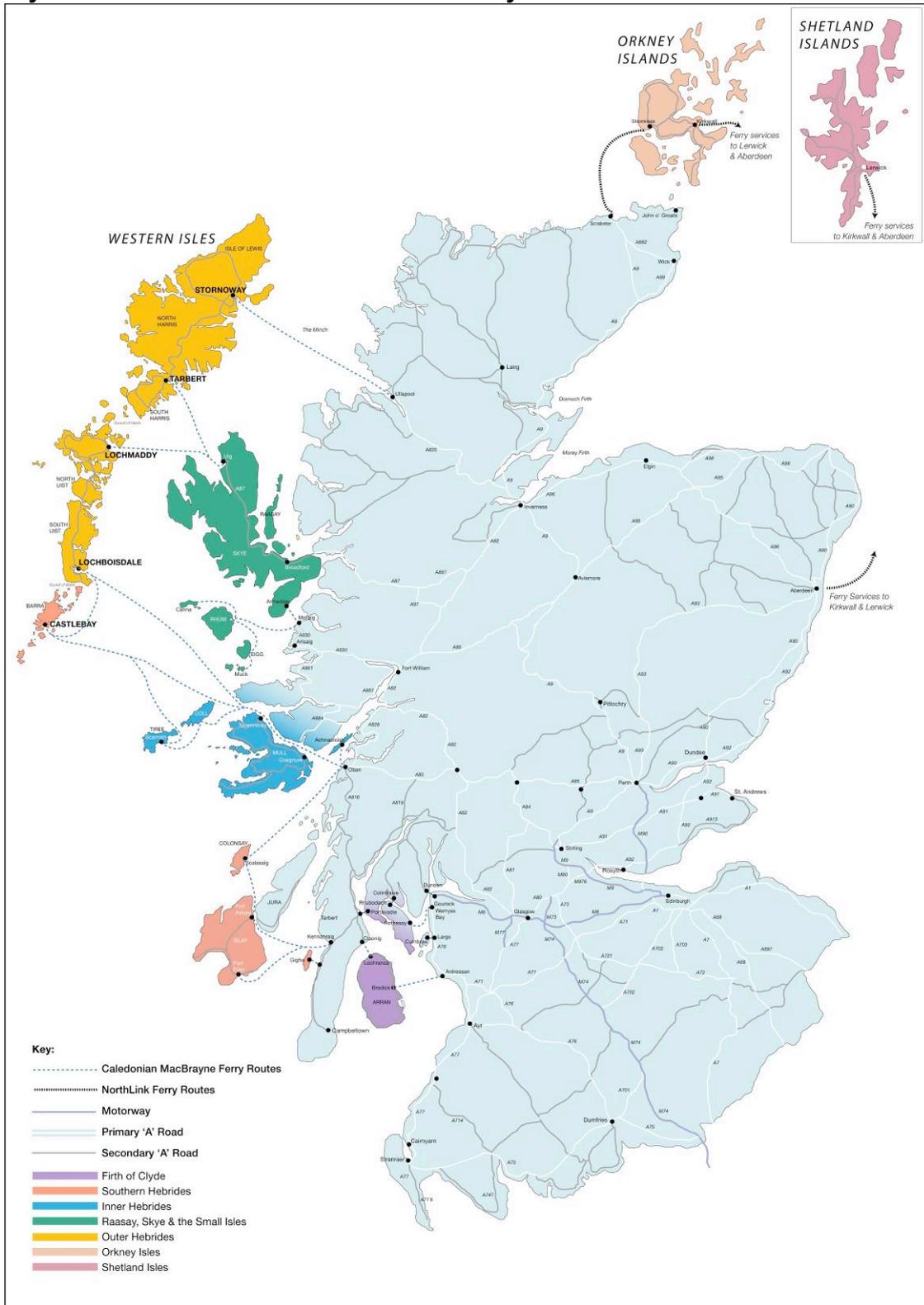
<sup>1</sup> The introduction of a Road Equivalent Tariff would mean that the fare paid by vehicle users on the ferry would be equivalent to the cost of driving the same distance as the ferry trip.

wide range of statistics and information from, for example, ferry users and local employers (including the freight and tourist sectors) designed to allow the impact of the pilot (especially in economic and social terms) to be assessed.

The third phase of the study will involve an evaluation of the pilot, making use of the information gathered through the baseline and monitoring exercises. In addition to assessing the impact of the pilot, the evaluation will, as far as is possible, quantify both the costs and benefits which would arise should RET be applied on a permanent basis and rolled out to other ferry routes in the Clyde and Hebrides and Northern Isles networks and the likely longer-term impacts of such a roll out. This stage will also seek to identify any capacity constraints that may emerge from a permanent roll out and quantify the cost of increasing the capacity to meet demand (e.g. through additional or larger vessels and new shore infrastructure).

The key focus of this paper is to provide a summary of the first Phase of the study, covering the issues outlined in the bullets above.

# Clyde and Hebrides and Northern Isles Ferry Services



## Stage 1

The **Clyde and Hebrides** Ferry Service network serves twenty two island and four peninsulas on Scotland's west coast. The route distance ranges from 0.62 miles for Colintrave – Rhubodach to 89.48 miles on Oban – Castlebay/Lochboisdale. The existing fares mechanism for the CHFS network stems from a combination of historic fares and the CFares system which operated in the 1990s. Under the CFares system fares on the individual routes were set to meet 3 objectives. These were:

- **Local economic objective** – to maintain or improve economic and social conditions in the area
- **National economic objective** – to ensure that resources are used efficiently and in a cost-effective manner
- **Financial objective** – to produce a return to contribute towards resources for capital expenditure

Since the 1990s the increase in fares on individual routes has moved away from the CFares structure and has tended to reflect inflation, using the government's official measure through the Retail Price Index (RPI) or, more recently, the Consumer Price Index (CPI).

NorthLink Ferries Limited operates a small number of ferry services between the Scottish mainland to and from the **Northern Isles** of Orkney and Shetland. The distance of the routes ranges from 29.76 miles on the Scrabster – Stromness route to 220.65 miles on the Aberdeen – Lerwick route.

The current fares have been arrived at through a combination of historical reasons and the new fares regime introduced by NorthLink in 2002. P & O operated the services on a commercial basis until the mid 1980s when they advised the Government that they could no longer provide the service without a subsidy. The Scottish Government then had a Public Service Contract with P & O Scottish Ferries until 2002 when NorthLink Ferries took over the services after a competitive tender. A new fares regime was then introduced to reflect the new vessels and different services. The fares on the NorthLink services are set out in the tender specification.

Table 1 below shows the route distance, passenger fares and passenger fares per mile for the majority of routes on the Scottish ferry network, both in the Clyde and Hebrides and Northern Isles networks.

Table 1: Route distances and passenger fares on the Scottish Ferry Network

	<b>Distance (miles)</b>	<b>Current single fare<sup>2</sup></b>	<b>Fare per mile</b>
Gourock - Dunoon	4.29	£2.85	£0.66
Wemyss Bay - Rothesay	6.77	£3.33	£0.49
Colintraive - Rhubodach	0.62	£1.05	£1.69
Tarbert - Portavadie	3.45	£2.78	£0.80
Ardrossan - Brodick	11.81	£4.48	£0.38
Lochranza - Tarbet/Claonaig	4.97	£4.03	£0.81
Largs - Cumbræ	1.18	£1.90	£1.61
Kennacraig - Islay	32.31	£7.20	£0.22
Oban - Craignure	9.32	£3.63	£0.39
Fishnish - Lochaline	1.93	£2.23	£1.16
Fionnphort - Iona	1.04	£1.98	£1.90
Oban - Coll/Tiree	59.71	£11.40	£0.19
Oban - Castlebay/Lochboisdale	89.48	£18.75	£0.21
Mallaig - Armadale	4.97	£2.98	£0.60
Uig - Tarbert - Lochmaddy	29.2	£8.55	£0.29
Ullapool - Stornoway	52.2	£13.25	£0.25
Tayinloan - Gigha	2.49	£3.85	£1.55
Raasay - Sconser	1.93	£2.80	£1.45
Scrabster – Stromness	29.76	£14.50	£0.48
Aberdeen – Kirkwall	151.24	£20.50	£0.14
Kirkwall – Lerwick	112.1	£16.30	£0.15
Aberdeen - Lerwick	220.65	£27.10	£0.12

The vast majority of other ferry services in the **UK** are operated on a commercial basis with fares determined by the operating company to ensure the service is financially viable. Examples within the UK include services between the mainland and the Isle of Wight and the Isle of Man, as well as a number of international services operating between Scottish and UK ports to Northern Ireland, Ireland and the European mainland.

As explained above, Stage 1 involved a review of approaches to fare setting for public service ferries in other countries to examine how these compared with ferry fares on services operating in Scotland. A number of countries were considered as part of the review, including Denmark, Sweden, Norway, Canada, Ireland, Spain, Germany and New Zealand. A summary of the fares structure in the first four of these countries is set out below.

#### *Denmark*

The Danish National Rail Authority (Trafikstyrelsen) is part of the Danish Ministry of Transport, and is the regulating body for rail and ferry services in Denmark. It is responsible for securing provision of rail and ferry services by tendering contracts for the operation of services determined by the government. There are 26 islands served by 24 lifeline ferry routes. All of the routes which are subsidised are tendered services.

<sup>2</sup> Single fare used for CHFS routes is half the summer saver 5 day return fare, while the Northern Isles routes uses the mid season fare.

Many of the subsidised routes are considered 'society substantiated' or lifeline services, and are regulated by national or local government. The responsible body determines a 'maximum acceptable fare' for a route under consideration, and then the performance of the route is examined to determine if a subsidy is required. If a subsidy is required, then tenders will be sought, or in the examples where a local municipality operates the route directly, the municipality finances the deficit.

The term 'society substantiated' ferry service is not clearly defined, but is based on historic and current political decisions. The concept of the 'maximum acceptable fare' is based on historic fares combined with political motives and initiatives, such as promoting regional development, as well as recognising changing operating costs. On the lifeline routes, the resident islanders being served by a ferry route do not pay a fare to use that ferry, or to transport a bicycle or to take a car if registered disabled. All other passenger and vehicle types pay the fare set by the government.

### *Sweden*

The majority of services in Sweden are regarded as small road ferries. These are services across rivers and estuaries around the coastline of Sweden, among the archipelagos around Stockholm and Gothenburg and inland, providing a ferry service to connect lengths of roads rather than fixed bridges. These vessels are owned by the Swedish Government, and operated by the Vegvesnet (Public Road Department). A network of 38 services is maintained, and many of the services operate 24-hours a day.

The history of these services is varied, having been started by different organisations, but in the course of time have become a 'natural' part of the roads network. There is a principle in Swedish road legislation that roads (including ferry links) should be taken care of on a national basis if the road is required for common purpose. There is no formal definition of 'common purpose' and any judgement is on a case-by-case basis.

Because the ferry services are regarded as an extension of the road network all ferry services are operated by Farjerederiet, an organisation within the Public Roads Department of Sweden, and are free of charge – costs are offset by general taxation.

### *Norway*

The coastline of Norway is approximately 57,000 miles in length with thousands of islands. With 80% of the Norwegian population living less than 6 miles from the coast there is a great need for efficient coastal transport for people and freight.

Ferry services in Norway are administered by an agency of the Ministry of Transport and Communications called 'The Public Roads Administration' (Statens vegvesen). The Public Roads Administration provides funding to local municipalities for the subsidy of ferry services.

One of the key policy aims of the Norwegian Government has been the retention of population levels in the remote areas of the country. This is encouraged through policies to promote economic development and good social provision and affordable ferry connections are seen as an integral part of this policy. Passenger fares are therefore set by the government to help achieve these objectives.

Until recently, the ferry tariff for cars in Norway was based on a formula where the ticket price was a function of the driving cost for a particular vehicle and the size of

the vehicle. This formula has been adapted and the national pricing structure for every ferry company now consists of the following three elements:

- The length of the connection (distance the ferry travels)
- The cost of the alternative road route vehicles would have to take if there were no ferry (if applicable) <sup>3</sup>
- The length of the vehicle

From discussions with officials in the Norwegian Government, the fares reflect the political decision that it should not cost more to travel by ferry than it costs to drive to the destination by car - although budget constraints mean that fares can be 400-500% higher than the cost to drive. In Norway, local authorities are allowed to increase fares where there is an increase in supply (operating time and/or frequency of services) or change in ferry design to accommodate tourism. Each ferry crossing is classified as a particular 'zone' and passengers and vehicles are priced accordingly within that zone. Within the 2007 pricing structure, there are over 100 different zones.

As the fares are based on distance travelled, the length of alternative road route and length of vehicles, rather than the cost of operating the ferries, in most cases the revenues from ferry fares do not cover the cost of their operation, so subsidies are essential.

Every year the Norwegian parliament reviews ferry fares. Price increases are not based on inflation but are a political decision and in some cases, there will be a price freeze.

The Public Roads Administration is researching alternatives to the current fare structure. One pilot has been carried out trialling a free ferry service for passengers based on Swedish principles. Officers are also investigating the introduction of peak fares as a way to manage capacity issues.

### *Canada*

There a large number of private sector ferry operators in Canada providing subsidised services on behalf of the government. The structure of the fares system varies by province.

For example, in British Columbia some routes are considered part of the national highway and fares are kept low, with two key considerations of local need and economic development (tourism). Other routes are not considered as part of the national highway and merely connect small islands with the mainland, such as Vancouver and Vancouver Island.

In Newfoundland and Labrador a review of ferry fares was carried out in 2006 which concluded that car fares should come into line with "road equivalency" and fares are now set with reference to the Canadian Automobile Association set Cost of Driving. Factors taken into account in deriving the fares are fuel costs, vehicle maintenance costs, tyres, insurance, licence, registration, taxes and depreciation. Ferry fares for cars are calculated using fixed and variable costs calculated for mid-sized vehicles

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<sup>3</sup> For island routes where there is no alternative road route, the calculation is based only on the point to point distance i.e. the length of the sailing.

and adjusted in line with changing fuel prices. The formula is then applied to the distance of the route to calculate the fare.

The vehicle Road Equivalent Tariff was set at 62.9 Canadian cents per km (£0.56 per mile) in all cases and passenger rates are equal to one third of the Road Equivalent Tariff. This formula is then applied to the distance of the route to calculate the fare. A minimum of \$2 is charged for a single fare for each vehicle and \$0.75 for each passenger on routes where the RET calculated fare would be less than this.

The introduction of the Road Equivalent Tariff scheme resulted only in a decrease in fares. Prices of those routes for which the application of this scheme would result in an increase in fares experienced no change. The application of the Road Equivalent Tariff resulted from a political promise. No other province in Canada operates such a system to the extent of Newfoundland and Labrador. A review is expected to commence with regards to fares for heavy and commercial vehicles in due course.

### *Summary*

It is clear from the findings that different governments use a variety of fares structures on their ferry networks, for passengers, cars and goods/commercial vehicles. In some countries current fares simply reflect past fares and rise in line with inflation. There does not seem to be any clear rationale for how fares were set historically, although most seem to reflect the aim of cost recovery. In other countries fares are set to achieve wider government objectives such as local economic development, promoting tourism or perhaps maintaining population levels in remote areas. In Sweden, the ferry network is seen as an extension of the road network and there is no charge for using car ferries. In Denmark, residents of islands travel free on ferries connecting them to the mainland.

In Norway and Canada, some ferry fares are based on the distance of the route. While the Norwegian Government also takes into account other factors, such as the cost of driving the alternative road route and the length of the vehicle, the Newfoundland and Labrador Government has introduced a fares system for cars that is based on the equivalent cost of driving the same distance as the ferry route. The passenger fare is equivalent to 1/3 of the car fare. The road equivalent fare is based on running costs of an “average” car and includes fuel costs; vehicle maintenance costs; tyres; insurance; licence, registration, and taxes; and depreciation.

### **Stage 2**

The second stage of the study focuses, to a large extent, on distance related fares i.e. the fare is a function of the distance of the crossing covered by the ferry and considers how a Road Equivalent Tariff could be calculated for different user types and what elements can be included in the cost per mile. It also looks at the change in ferry fares that would occur on the Scottish network under different fare scenarios.

As well as a pure distance related system of fare setting some commentators have suggested applying a core element to fare setting where the fare would then be a combination of a fixed amount and a rate per mile. The core element of the fare could be justified on either covering the fixed cost elements, such as harbour and vessel costs, or if the proposed rate per mile was not affordable under the available budget. A core element of the fare is therefore also included as part of the consideration of setting future fares.

### *Passenger Vehicles*

The cost of driving a on an equivalent length of road can be different for a number of reasons. For example, the size of the engine, the efficiency of the vehicle, the weight or size of the vehicle, the cost of fuel and whether it is fuelled by petrol or diesel will all have an impact on the cost. As a result there are a number of different approaches to calculating the cost per mile of running a vehicle.

### *HM Revenue and Customs*

Her Majesty's Revenue and Customs (HMRC) sets out the approved maximum tax and national insurance free mileage allowances for employees using their own transport for business. The mileage allowance is calculated to represent a fare reimbursement for the cost of driving a car. HMRC calculate the cost per mile of driving a car to be 40p for the first 10,000 miles. However, the HMRC figures do not necessarily reflect the actual cost of running a car as they have been set to provide an incentive for drivers to switch to more fuel efficient cars and help achieve the government's wider environmental objectives. The HMRC figures were therefore not considered in detail in setting distance based fares.

### *The RAC Motoring Services*

The RAC Motoring Services has compiled illustrative vehicle running costs based on different categories of engine size. The RAC figures reveal that the estimated cost per mile for a petrol engine car ranges from 28.0p for a 1 litre engine to 106.2p for engines over 3 litres. For diesel fuelled cars, the cost per mile figure ranges from 34.0p for a 1.4 litre engine to 90.4p for a car with an engine size greater than 3 litres. The RAC also provides costs per mile for motorcycles, ranging from 21.8p for 100cc to 60.3p for over 1000cc.

### *The AA*

The AA also provides figures for the cost of running different types of cars based on the price paid for a new vehicle. The AA figures reveal the estimated cost per mile for a petrol fuelled car ranges from 23.41p, for a new car costing less than £10,000 covering more than 30,000 miles per annum, to 193.91p for a car which costs over £30,000 new and doing less than 5,000 miles per annum. The estimated cost per mile for a diesel fuelled car ranges from 21.74p, for a new car costing less than £10,000 covering more than 30,000 miles per annum, to 164.27p for a car which costs over £30,000 new and doing less than 5,000 miles per annum.

### *Comparison – HM Revenue and Customs, RAC and AA*

The figures from the HM Revenue and Customs, the RAC and the AA reveal that there is a wide range of values that can be used as estimates for the cost per mile of driving a car. Depending on the assumptions made, the cost per mile ranges from 21.74p for a diesel car costing less than £10,000 with an annual mileage of over 30,000 miles, to 193.91p for a petrol fuelled car costing over £30,000 with an annual mileage up to 5,000.

### *Wider Considerations*

When considering a figure for RET on the Scottish ferry network, there was also a need to consider whether an "average" car in the UK, as used by HMRC, the RAC and AA, is comparable with the cost per mile of running an "average" car in the areas served by the ferry networks. Consideration was therefore given to issues such as the age of the car and depreciation, the size of the engine, the annual mileage, the

fuel type and the maintenance/servicing costs of the vehicle and whether these differed between an average car and one used in the areas of Scotland served by the ferry network. For example fuel costs are higher in many island and remote areas of Scotland and this would tend to push up the cost per mile of running a car. On the other hand, engine sizes tend to be relatively small and the servicing and maintenance costs tend to be low in remote areas suggesting that running costs could be lower.

The analysis suggests that the cost of running an average vehicle in Scotland per mile is likely to be within the range of £0.40 to £0.70. Applying rates per mile in this range would lead to significant reductions in car fares across the majority of ferry routes in Scotland.

### *Commercial Vehicles*

The introduction of an RET fare structure would not only be applied to cars, but would also be applied to commercial vehicles. The current fare structure on the CHFS and Northern Isles networks is based on the length of the vehicle.

Running costs for goods vehicles of different sizes, as estimated by the Road Haulage Association, reveal that the total cost per mile, including time and distance related costs, ranges from £0.96 for a 3.5 Tonne vehicle to £1.78 for a 32 Tonne vehicle. Figures from the Freight Transport Association state the total cost per mile ranges from £0.91 for a 7.5 tonne vehicle to £1.79.5 for a 4 axle rigid tipper vehicle of 32 tonnes.

It is clear there is a strong correlation between the length/weight of the vehicle and the cost per mile of running that vehicle. It was therefore recommended that the fare per mile for CVs and buses continue to reflect the length of the vehicles carried on the vessels, although the fare should also reflect the running cost of the vehicle. The new fare would then be a rate per metre per mile.

### *Passengers*

The study also investigated how a distance based fares mechanism such as RET could be applied to passenger fares and what could be used as a basis for calculating these fares. Figures were collected for bus and rail fares in Scotland to provide an indication of how much it would cost a passenger to travel in Scotland using these modes.

Table 2: Passenger Fares on a Selection of First Scotrail Routes

Provider	Departure Point	Arrival Point	Equivalent Road Distance (Miles)	Standard Single Fare - £	Fare per mile (single) - £
First Scotrail	Alness	Invergordon	3.19	1.8	0.56
First Scotrail	Fearn	Tain	3.88	1.5	0.39
First Scotrail	Plockton	Kyle of Lochalsh	7.99	1.9	0.24
First Scotrail	Spean Bridge	Fort William	9.29	2.7	0.29
First Scotrail	Taynuilt	Oban	12.3	3.2	0.26
First Scotrail	Georgemas Junction	Wick	15.24	3	0.20
First Scotrail	Glasgow	Ardrossan	31.71	5.55	0.18
First Scotrail	Bridge of Orchy	Fort William	39.85	11.2	0.28
First Scotrail	Inverness	Kyle of Lochalsh	78.59	16.5	0.21
First Scotrail	Glasgow	Stranraer	84.55	17.5	0.21
First Scotrail	Glasgow	Oban	96.9	17.5	0.18
First Scotrail	Inverness	Wick	103.26	14.6	0.14
First Scotrail	Glasgow	Fort William	107.23	21.2	0.20
First Scotrail	Edinburgh	Aberdeen	125.46	31	0.25
First Scotrail	Glasgow	Mallaig	149.62	24.7	0.17

From the figure presented it is evident fares per mile on rail services in Scotland do not necessarily decline with the length of route as per the ferry routes. The figures also show that for the longer CHFS routes the fare per mile is similar to rail fares per mile on routes of the same distance e.g. Oban – Castlebay/Lochboisdale and Glasgow – Stranraer. Comparing shorter rail and ferry routes shows that the fares per mile on the CHFS routes are higher than rail. For example, the Tobermory - Kilchoan ferry route is 3.7 miles and £0.91 per mile, while the Fearn - Tain rail journey is 3.88 miles and £0.39 per mile. Also, the Mallaig - Eigg is 12.4 miles and £0.40 per mile for a return journey, while the Taynuilt – Oban rail journey is 12.3 miles and £0.26 per mile.

Table 3: Passenger Fares on a Selection of Long-distance Bus Routes

Provider	Departure Point	Arrival Point	Road Distance (Miles)	Standard Single Fare - £	Fare per mile (single) - £
Citylink	Inverness	Kyle of Lochalsh	78.59	13.80	0.18
Citylink / Ulsterbus	Glasgow	Stranraer	84.55	13.80	0.16
Citylink	Glasgow	Oban	96.90	15.00	0.15
Citylink	Inverness	Wick	103.26	15.00	0.15
Citylink	Glasgow	Fort William	107.23	16.10	0.15
Citylink	Edinburgh	Aberdeen	125.46	19.70	0.16
Citylink	Glasgow	Mallaig	149.62	21.00	0.14

From using a standard fare for a selection of long-distance bus routes in Scotland it is apparent that the fare per mile is significantly lower on bus routes compared to routes of similar length on the CHFS network and the Northern Isles network. For example, the Glasgow – Stranraer bus fare is £0.11 per mile whereas the Oban – Castlebay/Lochboisdale ferry fare is £0.21 per mile.

#### *Recommended RET rates*

Following on from the previous analysis a number of different rates per mile were examined to assess their impact on ferry fares. As part of the exercise it was explained by the Scottish Government that the impact on revenue also had to be an important consideration to ensure the fares were affordable, both during the pilot study and in the long term.

A range of fares per mile for different carrying types was therefore considered. These were based on the analysis carried out in stages 1 and 2 looking at the cost per mile for the various mode and carrying types. These included both rates per mile scenarios as well as a core element plus rate per mile for each carrying type. As noted earlier, a core fare element was incorporated on the basis of affordability to address the loss in revenue which would result from the introduction of an RET fare mechanism and the fixed cost elements that would remain on each route.

The core fares and rates per mile are set out in the Table 4 below.

Table 4: RET Scenarios

Passenger		Car		CVs	
Core fare	Rate per mile	Core fare	Rate per mile	Core fare	Rate per metre per mile
£0	£0.10	£3	£0.40	£10.00	£0.15
£1	£0.20	£4	£0.50	£20.00	£0.16
£2	£0.30	£5	£0.60	£30.00	£0.17
£3		£6	£0.65		£0.18
			£0.70		£0.19

The exercise then involved assessing a wide range of scenarios using combinations of different core fares and rates per mile for each carrying type. The aim was to compare these fares against existing fares and analyse the potential impact on revenue, assuming demand remained constant<sup>4</sup>.

After analysing the revenue impact of a large number of scenarios the following core fares and rates per mile were recommended to be used in the application of RET on the Scottish network. Table 5 shows passenger fares on each route were recommended to include a £2.00 core fare plus £0.10 per mile. The car fare on each route is recommended to equal a £5.00 core fare plus £0.60 per mile. The CV fare across the network is recommended to be a £20.00 core fare and £0.18 per metre per mile.

<sup>4</sup> The assumption of no change in demand was used to measure the worst case scenario in terms of change in revenue. It was also used because of the lack of available reliable price elasticities of demand for ferry fares.

Table 5: Recommended RET fares

Passenger		Car		CVs	
Core fare	Rate per mile	Core fare	Rate per mile	Core fare	Rate per metre per mile
£2.00	£0.10	£5.00	£0.60	£20.00	£0.18

Using these recommended rates, Table 6 below sets out the RET fare for passengers, cars and CVs on each of the ferry routes on the CHFS and Northern Isles networks subsidised by the Scottish Government<sup>5</sup>. It also includes, for comparison purposes, the current fare for each carrying type on the routes as well as the percentage change between the current fares and the proposed RET fares. The table shows where fares are already at a level below a road equivalent tariff then there would be no change in fare levels<sup>6</sup>.

The table shows that for **passenger** fares the vast majority of routes would see a decline under the proposed RET fare structure. Fare reductions would range from 1.4% on the Fishnish – Lochaline route to 65.7% on the Scrabster – Stromness route. The fare under RET would be higher on a small number of routes (Colintraive – Rhubodach, Largs – Cumbrae and Fionnphort – Iona), although there is a Government commitment that no fares will increase under RET and so the fares would remain unchanged under the new system.

The fares for cars under RET would also decline on the vast majority of routes. The reductions would range from 14.3% on the Oban – Castlebay/Lochboisdale route to 58.5% on the Oban – Craginure route. Under the proposed RET rates, the fare would remain unchanged on the Gourrock – Dunoon, Aberdeen – Kirkwall, Kirkwall – Lerwick and Aberdeen – Lerwick routes.

The largest reduction in fares would apply to the CVs with around half of all routes seeing a reduction of 50%. The reductions range from 34.3% on the Oban – Castlebay/Lochboisdale route to 68.8% on the Sconser – Raasay route. The fares for commercial vehicles would rise on the Colintraive – Rhubodach, Aberdeen – Kirkwall, Kirkwall – Lerwick and Aberdeen – Lerwick routes. It should be noted these changes are based on existing published fares and do not take account of discounts offered by CalMac on commercial vehicles which can extend up to 15%.

The proposed RET system would therefore generate significant reductions in fares on the vast majority of routes and across all types of carryings. The impact of these reductions was explored in Stage 3 of the study and summarised below.

<sup>5</sup> The fares used here are half a 5-day saver return because this is a commonly used fare on a number of routes, although it is recognised that on some routes there is an opportunity to currently purchase multi-journey tickets at a lower price. Both comparisons were used in the study.

<sup>6</sup> The Scottish Government made a commitment that no fares would increase as a direct consequence of introducing RET. If a fare was higher using the RET rates, then it would remain at the pre-RET level.

Table 6: Current and RET fares on the CHFS and Northern Isles Networks.

	Current Passenger	RET Passenger	% change	Current Car	RET Car	% change	Current CVs	RET CVs	% change
Gourock - Dunoon	£2.85	£2.43	-14.80%	£7.03	£7.57	0%	£81.78	£32.57	-60.20%
Wemyss Bay - Rothesay	£3.33	£2.68	-19.50%	£13.50	£9.06	-32.90%	£71.44	£37.82	-47.10%
Colintraive - Rhubodach	£1.05	£1.05	0%	£6.63	£5.37	-18.90%	£24.68	£24.81	0%
Tarbert - Portavadie	£2.78	£2.35	-15.50%	£12.75	£7.07	-44.60%	N/A	£30.80	N/A
Ardrossan - Brodick	£4.48	£3.18	-28.90%	£27.00	£12.09	-55.20%	£116.56	£48.48	-58.40%
Lochranza - Tarbert/Colintraive	£4.03	£2.50	-38.00%	£18.00	£7.98	-55.70%	£83.66	£34.01	-59.40%
Largs - Cumbrae	£1.90	£1.90	0%	£8.00	£5.71	-28.70%	£57.22	£26.00	-54.60%
Kennacraig - Islay	£7.20	£5.23	-27.40%	£38.50	£24.39	-36.70%	£173.90	£91.84	-47.20%
Oban - Craignure	£3.63	£2.93	-19.10%	£25.50	£10.59	-58.50%	£122.91	£43.21	-64.80%
Fishnish - Lochaline	£2.23	£2.19	-1.40%	£9.65	£6.16	-36.20%	£71.21	£27.58	-61.30%
Fionnphort - Iona	£1.98	£1.98	0%	N/A	N/A	N/A	N/A	N/A	N/A
Oban - Coll/Tiree	£11.40	£7.97	-30.10%	£67.00	£40.83	-39.10%	£241.82	£149.79	-38.10%
Oban - Castlebay/Lochboisdale	£18.75	£10.95	-41.60%	£68.50	£58.69	-14.30%	£323.83	£212.75	-34.30%
Mallaig - Armadale	£2.98	£2.50	-16.10%	£16.25	£7.98	-50.90%	£55.70	£34.01	-38.90%
Uig - Tarbert - Lochmaddy	£8.55	£4.92	-42.50%	£41.00	£22.52	-45.10%	£181.42	£85.26	-53.00%
Ullapool - Stornoway	£13.25	£7.22	-45.50%	£63.50	£36.32	-42.80%	£257.56	£133.90	-48.00%
Tayinloan - Gigha	£2.85	£2.25	-21.10%	£10.55	£6.49	-38.50%	£81.55	£28.77	-64.70%
Raasay - Sconser	£2.50	£2.19	-12.30%	£9.75	£6.16	-36.80%	£88.36	£27.58	-68.80%
Tobermory (Mull) - Islay	£3.35	£2.37	-29.25%	£17.75	£7.22	-59.32%	£73.20	£26.66	-63.58%
Oban - Lismore	£2.53	£2.75	0.00%	£21.25	£9.50	-55.29%	£82.80	£33.50	-59.54%
Oban - Colonsay	£10.10	£5.66	-43.96%	£49.50	£26.96	-45.54%	£211.40	£85.88	-59.38%
Mallaig - Eigg	£5.05	£3.24	-35.84%	N/A	£12.44	N/A	£91.00	£42.32	-53.49%
Mallaig - Rum	£7.43	£3.43	-53.84%	N/A	£13.58	N/A	£102.80	£45.74	-55.51%
Mallaig - Muck	£7.70	£3.68	-52.21%	N/A	£15.08	N/A	£143.00	£50.24	-64.87%
Mallaig - Canna	£9.30	£4.30	-53.76%	N/A	£18.80	N/A	NA	£61.40	NA
Berneray - Leverburgh	£4.88	£3.05	-37.50%	£22.25	£11.30	-49.21%	£139.60	£38.90	-72.13%
Barra - Eriskay	£5.23	£2.63	-49.71%	£15.50	£8.78	-43.35%	£97.40	£31.34	-67.82%
Scrabster - Stromness	£14.50	£4.98	-65.70%	£43.20	£22.86	-47.10%	£230.18	£86.44	-62.50%
Aberdeen - Kirkwall	£27.10	£24.07	-11.20%	£110.50	£110.50	0%	£370.48	£370.48	0%
Kirkwall - Lerwick	£20.50	£17.12	-16.50%	£84.00	£84.00	0%	£278.24	£278.24	0%
Aberdeen - Lerwick	£16.30	£13.21	-19.00%	£72.20	£72.26	0%	£231.36	£231.36	0%

### Stage 3

The third stage of the study involved an initial desk-based analysis of the potential impacts of introducing an RET fares system on the areas of Scotland served by ferry services. The impact analysis was split into geographic areas and included the Western Isles, Orkney, Shetland, Firth of Clyde, Inner Hebrides, Southern Hebrides

and Skye. The work involved a detailed investigation and the results are summarised in this paper.

Consultation was also undertaken with key stakeholders to discuss the issues, including local authorities, Regional Transport Partnerships, ferry operators and elected council members.

It is clear from the desk-based research and consultation undertaken that the impacts of introducing RET will vary by area and will not be uniform across the affected regions. They will ultimately depend on the characteristics of a particular area and the nature of demand for the ferry services e.g. leisure, tourism, business or commuter traffic.

Many of the communities served by ferry services have very fragile economies with lower than average levels of Gross Value Added (GVA), employment and industrial activity. In addition, a number of the areas served by the ferry services have declining populations. This is particularly so among younger people where the proportion of the population aged under 44 years is much lower than the Scottish average. The island communities are therefore very dependent on the ferry services for their short and long term economic and social well-being. The key findings from the initial impact analysis are summarised below.

#### *Economic*

- The islands have very open economies and businesses and residents depend on ferry services for their main transport/trade links.
- Reduced fares could make business opportunities that are not currently viable a more attractive proposition in the future.
- Reduced fares would have positive impacts. They would lead to an increase in competitiveness, compared to other companies on the mainland, through reduced costs. This could lead to an increase in demand and output, resulting in higher levels of employment and improved economic performance in general.
- While the net impact is expected to be positive some consultees suggested that lower fares could have a detrimental impact on their business. For example, lower fares could open up opportunities for mainland businesses to compete on the islands i.e. to a certain extent, current fares are protecting local businesses from outside competition and reducing fares would remove this barrier.
- Fares are only one part of total transport costs and transport costs are only one element of total costs. A reduction in fares may not lead to a significant reduction in total costs for businesses – although it could make an important difference to those companies whose profit margins are low.
- Some island businesses could suffer if local expenditure falls. For example, reduced fares would make travelling to the mainland more affordable. If residents travel to the mainland to buy goods in large superstores then local shops would suffer.

- A large share of the potential benefits that could be generated by lower fares will only materialise if the savings are passed on by hauliers to local customers. There is not sufficient evidence to suggest that this will happen.
- Many businesses use air services than ferry services because they are time sensitive. Reduced ferry fares will not impact on them.

### *Social*

- Many consultees felt that the main benefits of reduced fares would be social rather than economic – RET would provide islanders with greater opportunity and choice and would allow them to engage in activities that those in the mainland currently engage in.
- Research shows that one of the main factors given by people leaving the islands is high transport costs to the mainland. RET would therefore help reverse this trend.
- Lower fares would allow increased social interaction with family and friends on the mainland.
- RET would provide more affordable access to key services and facilities on the mainland which are not currently available on the islands.
- Lower fares would allow greater participation of island residents (particularly Western isles, Orkney and Shetland) in Scottish society by reducing travel costs to a level closer to the mainland communities.
- There is a concern that lower fares may lead to an increase in demand for holiday homes on the islands and result in an even greater shortage of affordable homes for local residents.
- There was a concern that lower fares may lead to capacity constraints on the ferries with some island residents not being able to travel at times which suits them.

### *Tourism*

- Tourism is an important sector to the island economies, particularly during the summer season. It is anticipated that a reduction in fares would make holidaying on many of the islands a more attractive proposition and lead to a greater number of visitors to the islands, both short and long stay.
- Lower fares may encourage more Scottish residents to holiday within Scotland, with potential environmental benefits, particularly in relation to CO<sub>2</sub> savings if holiday plans would otherwise include flying.
- There is a concern that at present there is not enough accommodation to satisfy an increase in tourism demand, particularly in the peak periods – although it is anticipated that capacity would increase to satisfy demand in the medium to long term.
- The cost of the ferry is only one part of the total cost of a holiday and in many cases it can be a relatively small percentage. Other factors, such as the quality and availability of accommodation, can have a greater influence on the holiday destination.

Overall the evidence suggests that lower fares will have a positive economic and social impact on island communities. However, it was also recognised by local

residents that there could be negative economic impacts as more people travel to the mainland and reduce their expenditure on local goods. This could be outweighed by an increase in expenditure by visitors to the islands but only if the quality and quantity of accommodation was increased to satisfy demand.

The Stage 3 analysis also included an investigation of the potential impact on demand. The purpose was to determine the financial impact associated with lower fares and the extent to which RET would result in any capacity constraints on the network.

To estimate the anticipated change in demand and the impact on revenue from the introduction of RET it is necessary to know the price elasticity of demand for ferry services. The price elasticity of demand is used to measure consumers' behavioural response to changes in the price of a particular good or service.

To carry out this exercise Halcrow was unable to obtain relevant and reliable price elasticity figures for the Scottish ferry network or for routes elsewhere with similar characteristics. The most comprehensive study carried out to date to calculate price elasticities on Scottish ferry routes was by the Scottish Office<sup>7</sup>. The fare price elasticities for those routes operating between the Scottish mainland and the Western Isles are set out in Table 7 below

Table 7: Fare Price Elasticities of Demand for the Western Isles Routes

	Passenger	Car
Ullapool - Stornoway	-0.8	-1.4
Tarbert/Lochmaddy - Uig	-0.8	-1.4
Castlebay/Lochboisdale - Oban	-1.5	-2.2

The elasticities given suggest that a 10% decrease in passenger fares would stimulate an 8% increase in passenger demand on the Ullapool – Stornoway and Tarbert/Lochmaddy – Uig routes. Similarly, they suggest that a fare reduction of 10% on the Castlebay/Lochboisdale – Oban route would lead to a 15% increase in passenger numbers on this route. A 10% decrease in car fares would lead to a 22% increase in demand on the Castlebay/Lochboisdale – Oban and a 14% increase on the Ullapool – Stornoway and Tarbert/Lochmaddy – Uig routes.

While the figures produced by the then Scottish Office are the best available they have a number of limitations which means their use in calculating changes in demand on the routes from the introduction of RET may not be appropriate.

Firstly, the figures were produced in the 1980s and are therefore dated. The nature of demand on the routes has changed, albeit not significantly, since the research was carried out and therefore the impacts of changes in fare prices may be different.

Secondly, when measuring changes in demand it is important to know how the impacts differ over time. For example, it is likely that people's behaviour will not change immediately after the introduction of RET and the impacts will differ over the medium to long term. Different elasticities are therefore required over different timescales and the work by the Scottish Office doesn't indicate the timescale to which the elasticities apply.

Thirdly, the figures do not include separate elasticities for islanders and visitors. The monthly carryings data set out earlier in the chapter revealed that there are

<sup>7</sup> Fare Price Elasticities on the Caledonian MacBrayne Ferry Network by R A Henderson and D J Maddison, Scottish Office Industry Department

significant seasonal fluctuations in demand on the routes with different user types at different times of the year. It is likely that behavioural responses will differ by type of user (e.g. visitors may be more sensitive to price changes than islanders that need to make a particular trip) with different impacts on demand. It is therefore not sensible to apply uniform elasticities to all user types.

Finally, and perhaps most importantly, the elasticities calculated for the purpose of the research were to be used to measure small or marginal changes in fares. As the change in fare increases, the margin for error in calculating the fare price elasticities also increases. Given that the changes in fares as a result of introducing RET are likely to be step changes, as opposed to marginal, the figures are not appropriate for this exercise.

The responses to the consultation suggested that if capacity constraints were to occur after the introduction of RET they are likely to occur on the shorter routes, where demand is more likely to be responsive to price changes. It is also likely to occur on particular sailings of the week and at specific times of the year. For example, a Sunday evening sailing in July from a popular holiday destination such as Arran is more likely to experience capacity issues compared to a winter sailing between the mainland and the Western Isles where there is currently a significant amount of vehicle and passenger capacity.

#### **Stage 4**

The aim of stage 4 followed on from the manifesto commitment by the current government and was to make recommendations on the design and implementation of a pilot study applying RET on one or more routes connecting the Scottish mainland and the Western Isles (i.e. Stornoway to Ullapool, Uig to Tarbert/Lochmaddy and Oban to Castlebay/Lochboisdale), including the choice of route(s), anticipated costs, start date, length of the pilot, operational constraints and capacity constraints that may emerge.

On the basis of the issues discussed in previous chapters and views gathered during the consultation exercise, this section details a series of recommendations for the nature and structure to the design and implementation of the pilot study. These are set out below.

Due to the anticipated displacement that may occur if RET is introduced on one or two routes and not others then, **if the aim of the pilot study is to give a reliable indication of the impact of introducing RET across the network, it is recommended that the pilot study include all routes sailing between the mainland and the Western Isles.**

**The analysis carried out to estimate the financial impact of introducing RET on all routes to the Western Isles concluded that it is not expected to cost in excess of £7.648m per annum.**

The consultation responses suggested that the main impacts of RET will occur on the shorter routes where demand is likely to be more responsive to price changes, but also those routes where capacity constraints will arise. While it is recognised that there may be affordability issues, to gain a better understanding of the impact of rolling RET out across the network, **it was recommended that the Scottish Government give consideration to also including a shorter route with different demand characteristics within the pilot.**

The introduction of the pilot study may distort demand on the Oban – Coll/Tiree route and provide users with an incentive to buy the cheaper ticket for the longer Oban – Castlebay/Lochboisdale route. In response to this **it is recommended that the Oban**

**– Coll/Tiree route be included in the pilot. Alternatively, measures should be put in place to remove the incentive for people to buy cheaper tickets for the longer Oban – Castlebay/Lochboisdale route while travelling to Coll or Tiree. One option would be for the fares on the two routes to be equalised at the RET level for Oban – Castlebay/Lochboisdale.**

There are a large number of discounts and rebates offered to CalMac users. Once RET is introduced, **it is recommended that all discounts and rebates, other than those for concessions and sailings on the Muirneag vessel serving the Western Isles, be removed.**

There are a number of practical issues that need to be considered before the RET pilot is introduced and this will take a number of months – these include changing ticketing systems, publishing timetables, preparing websites and developing advertising/marketing strategies. To ensure that mechanisms are in place to maximise opportunities from RET, **it is recommended that RET be introduced to coincide with the introduction of CalMac’s winter timetable in October 2008.**

There are clearly seasonal variations across all the routes with demand peaking in the summer months. To capture all the impacts of RET, the pilot will have to be in place and monitored for no less than a year. Given that people’s behaviour is likely to take more than one year to respond to the cheaper fares, and also to reflect the Scottish Government’s budget constraints set out in the latest Comprehensive Spending Review, **it is recommended that RET be introduced as a pilot in October 2008 and operate until the spring of 2011. The impacts will be monitored and evaluated with a decision made towards the end of this period on rolling out the fare system across the network in summer 2011.**

**In January 2008 the Scottish Government announced that RET is to be piloted on all routes operating between the mainland and the Western Isles. The pilot will also include those routes sailing between Oban and Coll/Tiree. The pilot will begin in October 2008 and run until the spring of 2011. The fares charged will be £2.00 core and £0.10 per mile for passengers, a £5.00 core and £0.60 per mile for cars and a £20.00 core fare and £0.18 per metre per mile for commercial vehicles.**

### **Stage 5**

The purpose of stage 5 is to carry out any baseline information gathering in advance of the pilot that is considered necessary for subsequent monitoring and evaluation purposes.

The monitoring and evaluation exercise will be critical in assessing the success, or otherwise, of RET. Not only will it capture the impact on the Western Isles from lower fares, it will also ensure the impact on other communities served by ferries is also covered and reviewed throughout the pilot study and beyond.

In detailing the data required to monitor and evaluate the RET pilot scheme it is important to re-visit the objectives of RET and the key linkages between the Scottish Government’s recently published Government Economic Strategy. The administrations central purpose of ‘...*increasing sustainable economic growth*’ is highlighted in the strategy and supported by high level strategic objectives which aim to make Scotland Wealthier and Fairer, Healthier, Smarter, Safer and Stronger and Greener.

In addition, the central purpose and high-level strategic objectives are supported by a set of National Outcomes which the Scottish Government will use to measure performance against the overall purpose. National Outcomes relevant to RET are:

- We realise our full economic potential with more and better employment opportunities for our people;
- We have tackled the significant inequalities in Scottish society;
- We live in well-designed, sustainable places where we are able to access the amenities and services we need;
- We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others; and
- Our public services are high quality, continually improving, efficient and responsive to local people's needs.

Identification of the linkages between RET and the Scottish Government's Economic Strategy has therefore provided a useful basis for developing a recommended approach to use in the monitoring and evaluation stage of the RET pilot scheme. A set of indicators has therefore been developed to assess the impact RET will have on the Western Isles and also those areas served by routes not included in the pilot study.

It is unlikely that the full impact of RET will be felt in the short term because people's behaviour and travel decisions/choices will generally change over time in response to the change in fares. The true impact of RET will therefore become more apparent over the medium to long term. A number of short and long term indicators have therefore been developed as part of the monitoring and evaluation exercise.

In monitoring the impact of RET on the economic performance and social well-being of the Western Isles it will be necessary to try and isolate the impact of RET from other factors that could be influencing the Western Isles economy. This will require collection of similar data for other island communities in Scotland, allowing for comparison over time. This analysis will also be a useful indicator of any displacement of economic activity from other island areas.

Baseline information collection will be required in advance of the pilot. This is needed to allow a before and after comparison and help determine the impact of RET. At this stage key indicators are likely to include information on the local and national economy, factor markets, ferry traffic, tourism and socio-economic wellbeing. For the Western Isles and other island communities this section will build upon information collected in stage 3 looking at the economic and social impacts. This will involve the collection of official statistics, such as those on industry and labour markets, as well as recommendations for additional survey data and analysis where there are likely to be gaps in the available data.

Having identified the challenges to the monitoring and evaluation processes the data required to monitor the short and medium to long term impacts of the RET pilot scheme were discussed with a number of groups, including the Scottish Government, the ferry operators and other public sector organisations such as local authorities, Regional Transport Partnerships and the enterprise network. In the short term (which includes the 2 ½ year duration of the pilot) it is recommended that the main focus of the monitoring process should be to monitor trends outlined in Table 8 below.

**Table 8: Monitoring and Evaluation of RET: Short term impacts**

Short term indicator	Availability	Importance rating and justification
Annual Ferry Traffic Numbers <ul style="list-style-type: none"> <li>• Passengers</li> <li>• Cars</li> <li>• CVs</li> </ul>	This data can be sourced from the ferry operators CalMac and NorthLink which forms the basis for ferry traffic data published in <i>Scottish Transport Statistics</i> . This type of data was used extensively throughout the analysis in stages 1 – 4 of Phase 1 of the RET project and should continue to be monitored before and throughout the pilot scheme.	Essential; This data will provide an important proxy indicator of the impact of RET on economic activity, social inclusion and the environment.
Passengers/Cars - Residents	This type of data is not readily available. Origin and destination surveys required at various intervals.	Highly recommended; Supports ferry traffic data and gives indication of social impacts. Also needed to gauge the net economic impacts.
Passengers/Cars - Visitors	This type of data is not readily available. Origin and destination surveys required at various intervals.	Highly recommended; Supports ferry traffic data and gives indication of possible contribution towards the Scottish Government's Economic Strategy.
Capacity Utilisation	This data can be sourced from the ferry operators CalMac and NorthLink and should be monitored before and during the pilot scheme on a regular basis.	Essential; Highlights any possible capacity constraints and impact on demand.
Accommodation Occupancy Rates	This type of data is not readily available. Surveys of local accommodation suppliers would be required before and during the pilot at regular intervals.	Highly recommended; Important indicator of economic activity in tourism sector.
Employment	This type of data can be sourced from NOMIS ( <a href="https://www.nomisweb.co.uk/Default.asp">https://www.nomisweb.co.uk/Default.asp</a> ) and is available on a monthly basis. Employment data should be monitored both before, during and after the pilot scheme.	Essential; Important indicator of local labour market performance / economic activity.
Unemployment	This type of data can be sourced from NOMIS ( <a href="https://www.nomisweb.co.uk/Default.asp">https://www.nomisweb.co.uk/Default.asp</a> ) and is available on a monthly basis. Unemployment data should be monitored both before, during and after the pilot scheme.	Essential; Important indicator of local labour market performance / economic activity.

Business confidence, turnover, profitability and costs	This type of data is not readily available. Surveys of island businesses to assess the impact of RET on business performance, confidence and attitudes to investment could be used for assessment purposes.	Recommended; Can be an important indicator of the local business environment. Important to monitor any change in confidence with RET.
Business start ups	This type of data can be sourced from local enterprise companies and should be monitored both before and during the pilot.	Recommended; Key indicator of local entrepreneurial activity. Important to evaluate impact (if any) of RET on start-ups.
Prices of goods and services	This type of data is not readily available. Monitoring of prices for goods and services on the Western Isles could be executed based on the methodology of the Rural Scotland Price Survey carried out for Highlands and Islands Enterprise in 2003 <sup>8</sup> . Comparison with other islands and rural economies would also be required.	Highly recommended; Such data could be used to analyse the impact of RET on the cost of local goods and services.
House prices	This type of data is readily available from the Registrars of Scotland (ROS) and is also published on a quarterly basis by the BBC <sup>9</sup> .	Essential; Important indicator of the potential impact (if any) of RET on local house prices.
Quality of life	This type of data is not readily available. Surveys of island residents to assess the impact of RET on quality of life could be used for assessment.	Recommended; Important to measure the impact of more affordable travel through RET on the quality of residents' lives.
Environment	This type of data is not readily available. Surveys of visitor ferry traffic may be required to uncover where additional visitors would have travelled to otherwise and the alternative mode they would have used. This type of data would give an indication of the additional environmental impact of RET.	Essential; It is crucial to consider the potential environmental impacts of introducing an RET fares structure.

Information on these indicators will be gathered throughout the pilot study and evaluated to determine the impact on all areas served by Scotland's ferry network if the RET based fares system was rolled out nationally.

While RET may have a number of short term implications for island communities, the full economic and social impact is unlikely to materialise in the short term. It will therefore be necessary to continue the monitoring and evaluation exercise over the

<sup>8</sup> Available at; <http://www.hie.co.uk/HIE-economic-reports-2005/rural-scotland-price-survey-2003---final-report.pdf>

<sup>9</sup> Available at; [http://news.bbc.co.uk/1/shared/spl/hi/in\\_depth/uk\\_house\\_prices/html/houses.stm](http://news.bbc.co.uk/1/shared/spl/hi/in_depth/uk_house_prices/html/houses.stm)

medium to long term. Over this period it is recommended that a number of additional indicators be monitored. These are set out in Table 9 below.

Table 9: Monitoring and Evaluation of RET: Medium to longer term impacts

<b>Medium - long term indicator</b>	<b>Availability</b>
Gross Value Added	Scottish Government Economic Statistics
Weekly earnings	Scottish Government Economic Statistics
Population	General Register Office for Scotland
Demographics	General Register Office for Scotland
Working age population	Scottish Government Economic Statistics
Employment	Office of Statistic
Unemployment	Office of Statistics
Sectoral performance and output	Office of statistics
Investment levels	Enterprise Companies
House and Land prices	Registrars of Scotland