HIGHLANDS AND ISLANDS DEVELOPMENT BOARD

R O A D S T O T H E I S L E S

A study of Sea Freight Charges in the Highlands and Islands

December 1974

CONTENTS

1 INTRODUCTION

1.01 One of the most significant characteristics of the Board's area of responsibility is the presence of the four large, well-populated groups of islands. The Shetland Islands stretch 100 miles from north to south with the principal port, Lerwick, situated some 215 miles from Aberdeen and 120 miles NNE of John o' Groats. The Orkney Islands form a compact group in an area 55 miles by 25 miles with the centrally located port of Kirkwall 155 miles from Aberdeen and 24 miles due north of John o' Groats. To the west of the mainland of Scotland lie two great chains of islands, the Inner and Outer Hebrides. The Outer Hebrides are an almost continuous chain stretching 130 miles from the Butt of Lewis to Barra Head. The sailing distance from the mainland varies from 50 miles in the north (Ullapool to Stornoway) to 90 miles in the south (Oban to Barra). The remaining island group is more loosely knit over 150 miles between Skye in the north and Islay in the south. These Inner Hebrides are, in the main, a few miles only from the mainland although several islands, including Tiree, Coll and the Small Isles, are more distant.

1.02 The four island groups total over 3580 square miles or over 25% of the area of the Highlands and Islands. They are inhabited by 80,040 people (1971), 28% of the Board's area population as follows:

Table 1: Area and Population of Island Groups (1971)

	Area (sq miles)	Population
Shetland	551	17,567
Orkney	375	17,254
Outer Hebrides	1,118	29,891
Inner Hebrides	1,542	15,745

1.03 The economic importance of the island groups is considerable and, under the impetus of North Sea oil-related development, increasing. The principal economic activities are:

a Shetland Islands

Major fishing industry. 1973 landings 682,000 cwts, value £2.9m 142 Shetland boats. 17 fish-processing plants. Knitwear industry employing over 3,000 people many part-time and in their homes (1970). Value estimated £1.4m (1969). Probably largest potential in Britain for North Sea oil landing and trans-shipment. Sullom Voe throughput capacity up to 200 million tons per annum. Estimated 1500 new, oil-related permanent jobs by 1981.

/b

b Orkney Islands

Agriculture accounts for about 30% of all employment. Value of agricultural products was £4.1m in 1969 and by 1973 had risen to be well over £7 million. Major oil terminal under construction on Flotta. Estimated 350 oil-related, permanent jobs by 1981.

c Outer Hebrides

An important fishing industry landing fish to the value of £2.4m in 1973. Harris tweed production is concentrated in the islands. In 1973 four million yards of cloth were manufactured with a sales value of about £4.8 million. A large oil-related project is now being developed in Stornoway. By 1981 this industry is estimated to generate about 1500 jobs both direct and indirect.

d Inner Hebrides

The economy of these islands cannot readily be quantified. In virtually all the islands tourism is important, particularly so in Skye. Fisheries, agriculture and distilling are the other major industries.

1.04 The future of these economies depends largely on the direction taken by oil exploration and exploitation. Oil is already stabilising the economies of Shetland, Orkney and Lewis by the introduction of well-paid jobs and the absorption of the able-bodied unemployed. Population decline has been arrested and by 1981 all these populations are likely to have risen substantially. Should oil be found in commercially viable quantities west of Orkney it is probable that growth in Orkney and Lewis will be further accelerated although it seems unlikely that the estimated Shetland rate, of almost 20% increase in ten years, will be attained. The value of these island groups to the national economy hardly needs stressing at a time when the solution to balance of payments problems is largely seen in terms of rapid North Sea oil exploitation.

1.05 The economics of island life are largely conditioned by the availability and costs of transport to the mainland. While this conclusion is generally sustained by available research* it is difficult to quantify. in summary form. There are a number of reasons for this including the relatively small size of island markets, a degree of cross-subsidisation by suppliers to islands and, in some areas, significant volumes of goods of local origin. Some specific examples of high charges relating to agriculture and fisheries are given in Section 5 of this paper.

1.06 Terminology used in this Paper

Flexible road: A vehicle ferry by means of which road vehicles are conveyed between the UK mainland road systems and the road system on an island.

Road equivalent tariff: A scale of charging on a flexible road related to the operating or running costs of a vehicle along an equivalent length of conventional road.

/Mainland

* notably Prof M Gaskin "Freight Rates and Prices in the Islands" - HIDB 1971

Mainland comparison: A proposed system of charging on shipping services to islands whereby land charges from Central Scotland (eg Glasgow) to remote mainland centres (eg Thurso) would be used as a yardstick above which shipping charges should not be allowed to rise. The Board no longer thinks that this comparison is adequate and prefers the concept expressed in Road Equivalent Tariff.

2 THE PRESENT POSITION

2.01 Shipping in the Highlands and Islands is provided by a variety of operators, some of whose services are financially assisted by Government or Local Authority funds, under the Highlands and Islands Shipping Services Act 1960 or Section 34 of The Transport Act 1968. The main operators and the financial criteria effecting them are described below.

2.02 Caledonian/MacBrayne Limited (Cal/Mac)

In 1973 the Caledonian Steam Packet Company Limited was amalgamated with the greater part of David MacBrayne Limited to form Caledonian/MacBrayne Limited. The new Company (part of the nationalised Scottish Transport Group) is responsible for most of the regular ferry services and cruises on the Firth of Clyde and the West Highlands and Islands. On these, it is expected to operate on commercial basis such that overall revenue is required to be sufficient to cover overall operating costs. Caledonian/MacBrayne is committed to conversion of all or most of its routes to the Roll on/Roll off principle.

2.03 David MacBrayne Limited (MacBraynes)

Separate from Caledonian/MacBrayne remains a remnant of the old David MacBrayne Limited, which, although also part of The Scottish Transport Group, is not expected to cover its costs purely from revenue but is subsidised under The Highlands and Islands Shipping Services Act 1960. David MacBrayne operates certain services in the West Highlands and Islands which were thought quite unlikely to be commercially viable.

2.04 The Orkney Isles Shipping Company Limited (OISC)

The status of the OISC is similar to that of David MacBrayne not being expected to cover its costs from revenue and being subsidised under the Highlands and Islands Shipping Services Act. Since the demise of the old Orkney Steam Navigation Company Limited in 1962, the OISC has operated the shipping service from Kirkwall to the North Isles of Orkney. Since April 1973 it has also taken over the former services of Messrs Bremner and Company from Stromness and Scapa Pier to the South Isles of Orkney. The local Orkney inter island air service is operated by Loganair on behalf of the OISC to provide a service supplementary to the shipping service.

/2.05

2.05 The North of Scotland Orkney and Shetland Shipping Company Limited (North Co)

The North Company independent until 1958, later a subsidiary of Coast lines, is now part of the P & O group and, therefore, a normal commercial enterprise. The Company provide services from Aberdeen to Orkney and Shetland, also across the Pentland Firth from Scrabster to Stromness and from Lerwick to the North Isles of Shetland. The last named service is subsidised but is being phased out with the gradual introduction of the Zetland County Council inter-island vehicle ferries. It is to be noted that Orkney County Council pay a subsidy to the North Company to keep freight rates at a reduced level on the Aberdeen/Orkney service.

2.06 Western Ferries

Western Ferries, formed in 1967, part of the Harrison (Clyde) Group, is like the North Company, a normal commercial enterprise which must attempt to cover its costs out of revenue. It operates vehicle ferry services to Islay and Jura and across the Firth of Clyde, competing with Caledonian/MacBrayne. The service from Islay to Jura is subsidised by Argyll County Council.

2.07 Local Authorities

Argyll, Sutherland and Zetland County Councils and also Inverness Town Council and Ross and Cromarty County Council jointly operate vehicle ferry services whose losses, if any, are met from Local Authority and Central Government funds. The Local Authority also have powers under Section 34 of The Transport Act 1968, which are exercised in some instances to afford, with the help of Central Government, grant assistance to private operators to maintain ferry services.

2.08 Other Operators

Many other operators provide a variety of shipping services in or to and from the Highlands and Islands. These include operators like Glenlight Shipping Limited, Hay and Company (Lerwick) Limited, J & A Gardiner, Cunningham of Scalpay, H Carmichael, the Elwick Bay Shipping Company Limited - traditional coastal bulk carriers who specialise in the conveyance of coal, building materials, agricultural lime, aggregates, alginates and the like. Others like EWL, Fife Traders and The Shetland Line operate scheduled cargo services to Orkney and/or Shetland supplementing those of the North Company. Other ferry services, such as those operated by The Ballachulish Ferry Company, M A Mackenzie (Glenelg), W S Banks (S Ronaldsay), N Campbell (S Uist), J A Stout (Fair Isle) and several others, operate (some in summer only) with Section 34 assistance and/or mail contracts from the Post Office. Other small operators provide summer cruises from the various resorts in the Highlands and Islands. The Highlands and Islands Development Board has provided grant and/or loan assistance to a number of usually minor operators, generally towards the capital cost of a new or second-hand vessel.

/3

3 THE CHARGING DEBATE

3.01 Besides the effect of financial assistance, where available in reducing rates and charges to a lower level than would otherwise obtain, recent years have seen substantial changes in the system of charging on many routes. While the old system, once universal on scheduled cargo services, of charging according to a complex commodity scale based on either tonnage or per item is still in force on the traditional services of David MacBrayne, the North Company and the OISC (although on the last named the rate structure has been simplified), the advent of Roll on/ Roll off ferries has made possible the introduction of a simple system of linear charging since virtually all freight on these services is conveyed in vehicles on the vessels deck. It had been hoped by the HIDB that the introduction of this method of charging would have the effect of reducing the cost of transporting at least full lorry loads to the Islands but this has not in practice been the case, especially as in the absence of back loads empty lorries have to pay the same charge as outwards to return to the mainland. Furthermore the steep increase in freight rates due to wages, fuel, insurance etc pushing up costs have meant annual or bi-annual freight increases.

3.02 Past Representations to Government on a New Method of Charging

Since the end of the first world war, island communities have argued and petitioned governments for main sea routes to be added to the trunk road system and financed so that charges could be contained at a reasonable and readily comprehended level. Many ideas as to how this ought to be done have been expressed over the years and in 1961 the Highland Panel recommended that charges to the remote mainland centres (eg Thurso) should be used as a yardstick for determining sea service charges. While there were a number of reasons why this yardstick, which came to be known as the "Mainland Comparison", could not be rigidly applied. The pressure from the Highland Panel resulted in the Government of the day setting up the Highland Transport Board which in its report published in August 1967 added its support to the principle, although it did not carry out any detailed analysis.

3.03 Following receipt and examination of the Highland Transport Board report, the HIDB which had been constituted in 1965 prepared a paper which described in some detail how a meaningful "mainland comparison" situation might be realised. In essence the paper set out to demonstrate that -

"The simplest way to produce this situation (ie mainland comparison) is to create conditions for transport to the islands which are truly comparable with those on the mainland. This means considering the appropriate ferry and shipping links as roads or bridges. The car ferry to an island and the piers are, in fact, parts of a flexible road over which cars and commercial vehicles can pass to and from islands. For passengers or loose freight the ferry acts <u>both</u> as roadway and vehicle (ie it serves as a "bus" for the passenger)".

This proposal was in no way related to transportation costs to Thurso or any other particular point on the mainland. For this reason the Board has now dropped the term "mainland comparison" and prefers to refer to the "road equivalent tariff".

/3.04

3.04 It was implicit, that the Board's proposal did not mean free ferries. A car or lorry does not pass over a mainland road without incurring running costs. These costs cease, of course, while a vehicle is stationary on the deck of a ferry. The Board asserted that the ferry charge ought to be similar to the running costs of a vehicle on a road of the same length as the sea passage. It was recognised by the Board that this system would be very difficult to apply to traditional shipping operations where goods are loaded into holds and discharged manually by dockers at the loading and discharging ports. It was, therefore, an essential element of the "road equivalent tariff concept" that it be introduced as the services were converted to roll on/roll off.

3.05 The paper was submitted to the Scottish Development Department on 18 April 1968 and after four years of correspondence, discussion negotiations the government's decision was announced in a parliamentary statement by the Secretary of State on 18 April 1972*. This indicated that:-

Agreement was reached between the Board and Government on:

(1) Main and other routes.

(2) Conversion of fleet to roll-on/roll-off ferries.

(3) Linear charging for vehicles.

No Agreement was reached on:

(1) A formula for charging per linear foot (or metre), vehicle length per mile (or kilometre) of crossing. In order to ensure equitable rates the Board had argued for a standard linear/distance rate related to road costs and for financial support to meet the shortfall.

(2) The concept that operating costs should not figure in the basis for charging.

(3) The principle that ships and terminals should be considered part of the trunk road system.

3.06 Charges on minor routes with smaller vessels, such as to the small isles; Raasay, Lismore, Mingary etc, are expected to be subsidised by local authorities and operated under Section 34 of the 1968 Transport Act. Local authorities can provide the service themselves, or independent operators can tender for it or Caledonian MacBrayne can operate on behalf of the local authorities.

3.07 The Secretary of State also announced that the Government would continue to give subsidy support under the 1960 Act for services operated by David MacBrayne, the OISC and, temporarily, the North Company's North Isles of Shetland service.

* a summary of these transactions is included at Appendix 1

/4

4 THE PROSPECT OF OPERATING PROFITABLY

4.01 Whatever system of charging is in force, unless financial assistance is available, it remains for the operator to try to earn sufficient revenue to cover his costs like fuel, wages, insurance, pier dues, maintenance, overhaul, capital charges on vessels, shore buildings and plant, publicity and administrative overheads.

4.02 On certain direct routes, such as those to Orkney and Shetland where distances are considerable and economic activity is at a reasonable level, the hope of profit seems to be sufficiently real to have attracted a number of purely commercial operators to start new cargo services. In the West Highland trade, bulk operators like Glenlight and Cunninghams are able to keep going on a commercial basis although the rapidly escalating cost of new or second-hand vessels has introduced a cautionary note into the bulk carriers operations.

4.03 In other spheres the picture is less promising. In the West Highlands in particular, local people consider charges on the regular services to be excessive and this is borne out by a crude comparison between the charge for say a 15 metre articulated vehicle with a maximum 20 tonne load on a given vehicle ferry crossing and the operating cost of such a vehicle over an equivalent length of road. On the Stornoway/Ullapool crossing, the ferry charge is about 3½ times the operating cost of a vehicle over a similar road distance. On Oban/Craignure, about 10 times; on Kyle/Kyleakin, about 20 times and on West Loch Tarbert/Port Ellen about 2 times. If "running costs" of a road vehicle, rather than "operating costs" are used, the comparative costs would be approximately half as much again.

4.04 The shorter the crossing, the greater appears to be the disparity between sea and road. It is also noteworthy that on the Islay services, rates per kilometre are less than on any other route presumably because of the existence of fairly intense competition between Cal/Mac and Western Ferries.

4.05 Because of the high level of service and frequency now expected, coupled with the relatively low level of economic activity, particularly in winter in many of the island communities served, the situation appears to be that despite high rates, Cal/Mac are now operating at a loss which may well be substantial. This loss has no doubt been aggravated by the doubling of bunker oil prices in 1973/74 (Appendix 2) and the purchase of a number of new vessels at great capital cost.

5 THE NEED TO RE-EXAMINE CHARGES TO THE ISLANDS

5.01 In the face of rising costs the sea transport industry, particularly in the West is finding it increasingly difficult to remain financially solvent despite, in some cases, reduced frequencies and in all cases rapidly increasing charges to the user. Islanders increasingly complain of the burden of these charges and their disadvantageous effect. In 1971 Professor Gaskin in the fairly guarded conclusions to his report said of sea freight rates to the islands -

"the conclusion remains that some additional burden results from the freight charges on the trade of the islands".

Since that time there are indications that the situation may have worsened although it has been found extraordinarily difficult to measure. Some specific examples of high charges are given as to how aspects of agriculture and fisheries are disadvantaged by high rates.

/5.02

5.02 Example 1 – Sea Transport Charges in relation to farm income.

This illustrates the effect of sea transport charges on agricultural incomes and compares the cost of constructing and stocking a farm with 30 breeding cows and 300 ewes in Oban, Mull and Barra. The effect of sea transport charges is identified vis-a-vis costing the margins obtained at the three situations. The effect of sea transport charges on the cost of agricultural machinery and buildings is also examined.

A LIVESTOCK GROSS MARGINS

1 Calf Production

		1973/74 £
Output	calf	80.00
	hill cattle subsidy	18.75
	brucellosis incentive	5.00
	calf subsidy	17.00
	winter keep supplement	5.00
		125.75
less	cow depreciation	6.00
	bull depreciation	2.00
	calf mortality	4.41
	barren cows	5.69
		18.10
OUTPUT PER COW		107.65
Variable costs	hay – 1 ton	50.00
	cobs – ¼ ton	11.25
	grazing	9.26
	vet etc	2.00
		72.51
GROSS MARGIN PER COW		35.14

Sea transport charges (£)

	Mull	Barra
calf	1.48	1.30
hay	15.06	39.67
concentrates	1.51	3.97
fertilisers	0.60	1.59
	18.65	46.53

GROSS MARGIN PER COW – 1973/74

Oban	Mull	Barra
£35.14	£16.49	– £11.41

/2

2 Lamb Production 1973/74

Output/ewe		£
	lamb	7.13
	wool	1.37
	subsidies	1.75
		10.25
less	ewe depreciation	2.00
	tup "	0.50
		2.50
TOTAL OUTPUT PER EWE		7.75

Variable costs/ewe	
purchased feed	1.50
hay	0.62
grazing	0.34
casual labour	0.08
vet etc	0.40
	2.94
GROSS MARGIN PER EWE	4.81

Sea transport charges (£)

	Mull	Barra
hay	0.07	0.50
lamb	0.19	0.41
concentrates	0.12	0.30
	0.38	1.21

GROSS MARGIN PER EWE

Oban	Mull	Barra
£4.81	£4.43	£3.60

Sea Transport Rates (£)

Type of Transport	OBAN/MULL	OBAN/BARRA
Agricultural lorry for feed, fertiliser, lime and hay	£1.25 per ½ metre plus 60p driver's fare plus 8% VAT (double, if empty return journey, which is probable)	Commercial rates apply. £3.30 per ½ metre plus £2.95 driver's fare plus 8% VAT (double if empty return journey, which is probable).

/Livestock

Type of transport	OBAN/MULL	OBAN/BARRA
Livestock floats	£5 per crossing plus 60p driver's fare plus headage charge for livestock.	Floats are not very frequently used. Livestock shipped on "open deck".
	- calves up to 6 mths = 0.75p lambs up to 6 mths = 0.14p	Calves up to 6 mths = £1.30 Lambs up to 6 mths = £0.41
Commercial lorries	£1.65 per ½ metre plus 60p driver's fare plus 8% VAT (double for empty return)	Commercial rates are applicable.

COMMENTS ON LIVESTOCK MARGINS

Under present ferry charges, cattle production involving "imported" hay is not a viable proposition on the Island of Barra. Mull is not so adversely affected, but nevertheless its return from cattle production is generally inadequate to cover fixed costs' requirements.

Sheep tend to be less severely affected by the ferry situation, although, allowing for the present, healthy sheep market, these gross margins may not be representative.

B AGRICULTURAL MACHINERY

This is not subsidised. The effect is that the purchase of any machine (new or second hand) faces the following extra cost if it involves the use of a lorry:-

Mull	Barra
£77.34	£158.38

These charges obviously do not encourage frequent replacement of machines on Island farming units.

C BUILDING COSTS

The building cost of a cubicle house for 30 cows in the Islands compared with a mainland cubicle house is shown thus:

Building Requirements for a 60' x 20' cubicle house

		£
Blocks	3,000 blocks = 65 tons wt	330
Roof	1,200 ft timber	400
Asbestos		400
Doors		250
Floors		200
	Total material costs	1,580
	Labour costs - mason	1,000
	joiner	300
TOTAL COST OF BUILDING		2,880

/This

This figure would then be the cost of the mainland cubicle house. How would sea transport charges affect the total cost? Assuming that the timber was obtainable in the Islands, then the major item affected by the ferry charges would be the blocks.

To transporting 65 tons of blocks = 7 lorry loads

	Mull	Barra
	7 @ £77.35 = £541.45	7 @ £158.48 = £1,109.36

Total cost of 30 cow cubicle house

Oban	Mull	Barra
£2,880	£3,422	£3,989

Gross cost per cow place

Oban	Mull	Barra
£96.00	£114.07	£132.97

There can be little doubt that a cubicle house is not feasible on Barra, and the economics of such a structure on Mull must also be in doubt.

5.03 Example 2 - Sea Transport Charges in Relation to Meat Marketing Costs

The Board is currently examining the potential for the further development of the slaughtering/meat processing industry in its area.

Part of the examination involves considering the feasibility of establishing a meat export industry based in Orkney. The assessment of a possible Orkney project has included a detailed examination of transport costs for livestock and meat exports. It has revealed the extent to which sea transport charges can substantially increase marketing costs for an indigenous island industry. The main details of the calculations for meat exports are presented below:-

1 Assumptions

(a) Sides or boxes of Orkney beef to be transported to a single outlet in the London area.

(b) Transport to be articulated refrigerated trailers using RO/RO ferry across the Pentland Firth.

(c) Full loads of 18 tons to be carried in the most economically sized trailers.

/2

2 Total Transport Costs (at December 1974)

	18 tons beef:- (i) Sides	(ii) Boxes
	£	£
Sea transport (£1.60 per linear ft)	115.20	96.00
Pier dues	8.00	8.00
Road haulage (650 miles)	322.56	322.56
Total	445.76	426.56
Percentage increase in total cost due to sea transport and pier dues	38%	32%

(i) 146 sides in a 36 ft trailer

(ii) the equivalent of 200 sides in a 30 ft trailer

3 Transport Costs per lb Freight

	18 tons beef:- Sides p/lb	Boxes p/lb
Sea transport costs and pier dues	0.3	0.26
Road haulage	0.8	0.8
	1.10	1.06

4 Comment

For either type of meat export sea transport charges increase transport costs by over 30%

In terms of Orkney beef sides the total transport costs per lb of 1.1p can be compared with a national average cost of about 0.5p per lb. Thus, in a highly competitive industry Orkney suppliers to a London market would have to bear transport costs over 100% higher than many competitors. Half the extra transport burden represents sea transport charges. These charges comprise 27% of the total transport costs for the Orkney beef sides, yet the thirty-mile sea crossing only accounts for 4% of the total journey.

5.04 Example 3 – Sea Transport Costs in Relation to Fisheries

A Stornoway fish merchant transports boxed fish via the Ullapool ferry to Aberdeen in lorries of 16 ton capacity. The load may vary generally between 200 and 320 boxes. 260 boxes or about 11 to 12 tons of fish represents a fair average. A very rough average price per box at Aberdeen may be taken as £6. A charge of £72 each way (ie £144 altogether or about 60p per box) is made on the lorry for the passage across The Minch. This fairly accurately reflects the difference in transport cost of fish to Aberdeen from Stornoway as compared with Ullapool. As empty boxes must be transported on the return journey there is little opportunity for significant return loads.

/The

The cost of onward transporting a box of fish from Ullapool to Aberdeen (including return of lorry) is about 50p per box which means that Stornoway-Aberdeen cost is 120% greater than that for Ullapool-Aberdeen despite the fact that Stornoway is only 30% further from Aberdeen than Ullapool.

6 THE BOARD'S CASE RESTATED

6.01 The logic of the Board's case remains the same as described in its original submission to Scottish Office. Essentially it is that payment of road tax entitles road users to drive on the road system. Road tax revenue is used in principle to construct and maintain the road system. Roads go everywhere except for reasons of geography to the islands. If it were possible to build conventional roads to islands, in the same way as they are built between points on the mainland, these would certainly have been provided. Islanders pay road tax but are uniquely denied access to the great bulk of the road system without paying what is in effect a substantial ferry surcharge. Vehicle ferries act physically as roads between islands and the mainland. To be equitable the cost to the road user of crossing the ferry ought to be related to the cost of travelling along an equivalent length of road. This would be achieved by charging a vehicle the equivalent of its road running cost which ceases while the vehicle is being conveyed on a vessel's deck. The shortfall between resultant revenue to the ferry operator and his operating costs can be met from road revenues which are financed by road users.

6.02 The main feature of this principle is that it involves an extension of the road system by means of vehicle ferries to the islands (the only significant inhabited parts of the country which at present are not physically connected to the national network). This extension would necessitate an increase in "road" spending. It has been suggested that this would be of the order of £4½ million for the Caledonian/MacBrayne services. The support required for vehicle ferry and essential services operated by other than Caledonian/MacBrayne could add something like another £1½ million, totalling approximately £6 million per annum in all for something over 1000 km of ferry routes altogether. An equivalent length of new conventional roads of a fairly basic standard costing about £60,000 per kilometre would amount to about £60 million which represents about £6 million per year if discounted in perpetuity at say 10%. To this should be added about £1 million per year for maintenance and resurfacing. This suggests that the cost of supporting ferries as part of the road system is no more than and perhaps less than the cost of providing equivalent conventional roads. Indeed, if it were possible to build conventional roads to the islands at normal costs, many would be to a higher specification than basic and the costs consequently greater.

6.03 It is noteworthy that since 1966 the Norwegian Government treats its vehicle ferry services as part of the road system and financially supports these operations in a manner similar to that proposed by the Board. An extract from a Board report on Norwegian transport is provided at Appendix 3.

/6.04

6.04 It is fundamental to the principle that equitable vehicle ferry charges are laid down according to a tariff scale which relates passage distance broadly to the operating cost of road vehicles on road. This means that the operating cost of the vessel on each route is no longer relevant. It has been said that the "road equivalent tariff" concept distorts the accepted transport practice that charges must be related to the actual costs of the operation. It is, in fact, doubtful if that practice is maintained on all existing ferry services. However, there is no doubt in respect of land transport since the use of the road system is available to all subject to payment of various levels of flat rate tax (plus fuel taxes) and this is irrespective of the cost of providing the road in any particular locality be it an expensive urban motorway in a densely populated area or a basic township road in a remote Highland Glen.

6.05 The analogy of the postal service may also help to illustrate the point. The Post Office does not surcharge letters and parcels bound for or originating in islands despite the necessity for a sea crossing or some other unusual means of transport. The ship or aircraft operator provides transport for the Post Office on an agency basis and is paid for doing so from general Post Office revenue. Similarly under the "road equivalent tariff" concept he would provide the "road" on an agency basis for the Roads Authority and would be paid for doing so from general road tax revenue. The ferry operator would also act in this case as a collecting agent for the road equivalent tariff.

7 THE ROAD EQUIVALENT TARIFF

7.01 Vehicle operating costs can be expressed on a mileage basis and related to the length of each type of vehicle. Since lineal charging is now in use on RO/RO ferries it becomes possible to develop a formula for ferry charges which is based on the cost of a journey of equivalent length on the road.

Tables showing the breakdown of average vehicle operating costs are published annually by "Commercial Motor". Some example are detailed below:

Normal Operating Costs are as at 1 May 1974 and include:

Running Costs	+	Standing Costs
- fuel		- licences
- lubricants		- wages
- tyres		- rent and rates
- maintenance		- insurance
- depreciation		- interest

Private car - self driven (with fuel cost) - total operating cost per mile

Miles per week	Up to 1300cc	1301-1600cc	1601-2000cc	2001-3500cc	
	p	p	p	p	
100	14.31	17.40	22.72	35.45	)
200	8.62	10.30	13.21	19.97	) Average say 200
300	6.73	7.94	10.03	14.80	) miles per week
400	5.73	6.76	8.45	12.27	)

/Heavy

Heavy Goods Vehicle - Total operating costs per mile

Miles per week	32 ton (artic)	31 ton (artic van)	21 ton (6 wheel tipper)	15 ton (4 wheel rigid)	9 ton (3 ton U/WT)	
	p	p	p	p	p	
400	44.69	46.35	33.08	29.09	38.21	31/32 ton (gross) vehicle. Average say 800 miles per week.
600	35.71	37.16	26.38	23.10	23.71	
800	31.22	32.56	23.03	20.11	18.87	
1,000	28.53	29.81	21.02	18.31	16.46	9 ton (gross) vehicle. Average say 600 miles per week.
1,200	26.73	27.97	19.69	17.12	15.01	

Light Goods Vehicles - Total operating costs per mile

Miles per week	2 ton cap 35 cwt U/WT	15 cwt cap 20 cwt U/WT	5 cwt cap 16 cwt U/WT	
	p	p	p	
100	57.90	52.25	49.91	Average say 400 miles per week
200	32.63	28.79	27.15	
300	24.21	20.98	19.56	
400	19.99	17.07	15.76	
500	17.47	14.72	13.49	

7.02 The average cost per mile for the various vehicle types can now easily be ascertained and although this is related to gross vehicle weight, it can readily be applied to length. The length of most commercial vehicles can be equated broadly with gross weight and in the following table the normal operating costs are expressed as pence per mile of sea passage per metre of vehicle length.

	Length	Miles per week	Total cost per mile	Cost per mile per meter of length	
	m		p	p	
32 ton GVW (artic)	15 (incl tractor)	800	32	2.6	Average 3p per mile or say 2p per km
21 ton GVW (6 wheel tipper)	9.5	800	24	2.6	
15 ton GVW (4 wheel rigid)	8.5	800	21	2.4	
9 ton GVW (4 wheel rigid)	8.0	600	23	2.9	
2 ton capacity LGV	5.6	500	18	3.3	
15 cwt capacity LGV	4.5	400	17	3.9	
5 cwt capacity LGV	3.4	400	16	4.5	
3000cc car (self drive)	5.0	200	20	4.0	
1500cc car (self drive)	4.0	200	11	2.2	
1000cc car (self drive)	3.5	200	9	2.6	

(NB The greater the weekly mileage the lower the rate per mile but average mileages for the various types of vehicle are selected).

/7.03

7.03 Having established a basis for relating normal road transport operating costs to vehicle length it is possible to lay down a standard formula to arrive at the appropriate rates for a road equivalent ferry service. The operating costs per mile have been converted to a "per kilometer" figure bringing them into line with a metric charging system. Included in the formula is a toll figure equivalent to 4km distance. This is similar to charging policy presently levied on road users for exceptional capital expenditure on certain bridged crossings. This has the effect of making the minimum distance equivalent to 5 km for charging purposes (ie Kyle-Kyleakin). Passenger fares are calculated on the basis of one meter "vehicle" length plus the toll which roughly equates to existing bus fares in rural areas. The formula is therefore as follows:

$C = l\ o\ d + t$ or $l\ o\ d + 4\ l\ o$

C = charge for single journey
o = operating cost per km per metre of vehicle length (average)
l = length of vehicle in meters
d = distance of passate in km
t = toll element = 4 l o

The effect of this system is shown on the examples of major ferry services given below. The present charges are shown for comparison.

Kyle/Kyleakin - crossing 1 KM		Present rates £
Car (4m)	(4 x £0.02 x 1) + (4 x 4 x 0.02) = £0.40	0.75
Artic (15m)	(15 x £0.02 x 1) + (4 x 15 x 0.02) = £1.50	9.00
Passenger	(1 x £0.02 x 1) + (4 x 1 x 0.02) = £0.10	0.10
Stornoway/Ullapool - crossing 84 km		
Car (4m)	(4 x £0.02 x 84) + (4 x 4 x 0.02) = £7.04	8.40
Artic (15m)	(15 x £0.02 x 84) + (4 x15 x 0.02) =£26.40	82.50
Passenger	(1 x £0.02 x 84) + (4 x 1 x 0.02) = £1.76	2.00
Gourock/Dunoon - crossing 7 km		
Car (4m)	(4 x £0.02 x 7) + (4 x 4 x 0.02) = £0.88	0.95
Artic (15m)	(15 x £0.02 x 7) + (4 x15 x 0.02) = £3.30	15.00
Passenger	(1 x £0.02 x 7) + (4 x 1 x 0.02) = £0.24	0.40
West Loch Tarbert/Port Ellen - crossing 58 km		
Car (4m)	(4 x £0.02 x 58) + (4 x 4 x 0.02) = £4.96	3.60
Artic (15m	(15 x £0.02 x 58) + (4 x15 x 0.02) =£18.60	30.00
Passenger	(1 x £0.02 x 58) + (4 x 1 x 0.02) = £1.24	0.80
Oban/Craignure - crossing 15 km		
Car (4m)	(4 x £0.02 x 15) + (4 x 4 x 0.02) = £1.52	5.05
Artic (15m)	(15 x £0.02 x 15) + (4 x15 x 0.02) = £5.70	49.50
Passenger	(1 x £0.02 x 15) + (4 x 1 x 0.02) = £0.38	0.60

/Oban

Oban/Castlebay or Lochboisdale - crossing 130 km

			£
Car (4 m)	(4 x £0.02 x 130) + (4 x 4 x 0.02)	= £10.72	8.80
Artic (15m)	(15 x £0.02 x 130) + (4 x15 x 0.02)	= £40.20	99.00
Passenger	(1 x £0.02 x 130) + (4 x 1 x 0.02)	= £2.68	2.95

Uig/Tarbert - crossing 47 km

Car (4m)	(4 x £0.02 x 47) + (4 x 4 x 0.02)	= £4.08	6.55
Artic (15m)	(15 x £0.02 x 47) + (4 x15 x 0.02)	= £15.30	73.50
Passenger	(1 x £0.02 x 47) + (4 x 1 x 0.02)	= £1.02	1.50

Scrabster/Stromness - crossing 42 km

Car (4m)	(4 x £0.02 x 42) + (4 x 4 x 0.02)	= £3.68	N/A
Artic (15m)	(15 x £0.02 x 42) + (4 x15 x 0.02)	= £13.80	N/A
Passenger	(1 x £0.02 x 42) + (4 x 1 x 0.02)	= £0.92	1.80

Aberdeen/Lerwick - crossing 337 km

Car (4m)	(4 x £0.02 x 337) + (4 x 4 x 0.02)	= £27.28	N/A
Artic (15m)	(15 x £0.02 x 337) + (4 x15 x 0.02)	= £102.30	N/A
Passenger	(1 x £0.02 x 337) + (4 x 1 x 0.02)	= £6.82	7.70 (1st) 5.80 (2nd)

NB (a) VAT applies to ferry charges on goods vehicles and this is not included in either the actual or proposed rates shown.

(b) A comparison between proposed and actual charges is shown in graph form at Appendix 4.

7.04 It will be observed that most rates based on vehicle operating costs are lower than those at present in force. This is particularly so for commercial vehicles. That commercial vehicles should be so placed is logical because for the area of road taken up by them (ie length times breadth), they are more efficient than private cars in terms of operating costs. That although they are generally broader and higher than private cars yet would be charged according to length only is submitted as being fair because they pay a very substantially higher road tax for this privilege. It is also convenient because up till now high freight costs constitute the principal criticism of present arrangements. With the exception of Oban-Craignure there is rather less discrepancy between present and proposed car rates indeed in the cases of West Loch Tarbert-Port Ellen; Oban-Castlebay and Lochboisdale and probably Aberdeen-Lerwick the proposed rates are higher. A similar situation obtains for passenger fares.

7.05 It should be noted that although in the system described "operating costs" of road vehicles are used as the basis, only "running costs" (which amount to about two-thirds of the full "operating costs") cease when a vehicle is being conveyed on a ferry. The rates suggested are therefore rather higher than they strictly ought to be. Because of recent substantial increases in operating costs since these calculations were made they are probably now not so far removed from true running costs.

/7.06

7.06 It is irrelevant therefore to the principle whether the operator is owned by the State, a local authority or private enterprise and if on any particular route (Aberdeen-Shetland for example) an operator was able to make a taxable profit, while applying the road equivalent tariff, he would be at liberty to do so but would of course attract no financial support. In this situation should he wish to reduce his rates below formula rates it appears reasonable that this should be permitted.

8 ROAD COMPARISON APPLIED TO NON-VEHICLE FERRY ROUTES

8.01 The road equivalent tariff as envisaged by the Board would apply specifically to vehicle ferry services. It appears reasonable however that islands, which for one reason or another are not served by vehicle ferries and would thus be unable to benefit from the proposed system, should be relieved so far as possible from any rate disadvantage. For the present the North and South Isles of Orkney, The Small Isles, and certain other small islands come under this category. (Shetland can be ignored because although it does not yet have a satisfactory vehicle ferry connection with the British mainland, this will be rectified in the fairly near future.)

8.02 Tonnage charging is for a variety of reasons more appropriate for instances of the type described. The road equivalent tariff based on vehicle length equates to a tonne/kilometre rate of between about 1p and 30p one way because of the widely different load/cost characteristics of say the heaviest goods vehicles and the lightest van. A fair compromise may be a tonnage charge equivalent to the cost of a 5 tonne load on an 8 metre (say 9 ton gvw) lorry plus return empty which would be about $3\frac{1}{2}$p per tonne/km each way for the lorry or an equivalent of 7p per tonne/km single for a load on a conventional ship (including handling).

8.03 In the case of the Orkney North Isles as the ship varies its route round the main islands it would probably be convenient to charge in accordance with a single average or artificial passage distance for all those islands, say 35 km which at 7p per tonne/km equals £2.55 per tonne for most types of general cargo. Special rates would doubtless apply for unusual or dangerous cargoes. The ship operators financial shortfall would be met as proposed for vehicle ferry services by exchequer grant.

8.04 Apart form the vehicle ferry services, or in their absence in the cases of certain islands, the traditional type of passenger cargo service, the Board does not consider financial assistance appropriate to any other type of shipping operation in the Highlands and Islands except in certain circumstances as may be available on a once-off basis towards the cost of some special capital item. After the implementation of a Road Equivalent Tariff the present losses on the cargo service from Glasgow to the Western Isles would therefore no longer be underwritten nor would any other cargo carriers to Orkney or Shetland or elsewhere be elegible for financial assistance towards operating costs once the basic ferry network were established. It is felt that there will still be room however for independent operators, particularly bulk or specialist carriers where passages are sufficiently long for them to compete on a normal commercial basis.

/9

9 DESIGNATION OF ROUTES

9.01 It is envisaged that supporting finance for ferries would be handled in a way similar to that for roads, ie after application of the road equivalent tariff and agreed schedules "trunk" ferry routes would be financially supported wholly by central government in Scotland. Principal routes would be administered and financed by the local authorities with central government financial aid via Section 34 of the 1968 Transport Act. "Other" routes would receive no running financial support but on these the operators would be free to set charges and schedules more or less as they thought fit.

9.02 The demarkation between "trunk" and "prinicpal" and other routes is a matter for discussion in which local authorities will, of course, have an important role. A fair definition of a trunk route could be those services connecting major islands or peninsular communities (say over 1,000 population) with the British mainland, and possibly also connect major islands in different local authorities. Principal routes would connect the minor islands with the mainland and would cover inter-island services. Other routes would be those not regarded as forming part of the road equivalent network, even although they may provide a valuable service. Included in this category would be cruising vessels, coastal bulk carriers, certain specialist operators, estate and supplementary services. A suggested demarkation between "trunk" and "principle" routes is shown at Appendix 5 and on the accompanying map.

9.03 The Board would be happy to discuss methods of implementation and any necessary legislation which may be required before a road equivalent tariff system can be introduced.

10 THE POLITICAL EFFECT OUTSIDE SCOTLAND

10.1 While it is outside the direct interest and responsibility of the Board the political implications of the adoption of a "Highlands and Islands road equivalent tariff" structure on other parts of Britain have been considered. As the Channel Islands, Isle of Man and Northern Ireland are outside the British road fund tax structure it would seem reasonable or at least politically realistic to exclude ferry services between those places and the mainland of Great Britain from the scheme. This would leave only the Isle of Wight, the Woolwich Ferry and the service between Penzance and the Isles of Scilly to be considered for inclusion. The Woolwich Ferry is already free of charge and the service to the Isles of Scilly is not a vehicle ferry. Therefore, only the Isle of Wight could presumably claim to be treated in a manner similar to vehicle ferry services in Scotland.

APPENDIX 1

BUNKER OIL PRICES

The following table shows the increase over the past few years of the standard price of bunker oil for the main Clyde and Highlands and Islands ports.

	per gallon £	per tonne £
1971	10.00	26.70
9/72	10.30	27.50
4/73	10.90	29.10
6/73	12.15	32.45
12/73	12.90	34.44
1/74	15.15	40.45
2/74	20.65	55.14
10/74	21.76	58.10

Shipping companies who are regular users, eg Caledonian/MacBrayne, Western Ferries, North of Scotland Shipping Company etc, attract discount which is not disclosed but this does not affect the percentage increase.

The fuel consumption of a typical roll-on/roll-off ferry the "St Ola" is 0.55 tonnes/hour at 70% power including generators and boiler. This gives a speed of about 13 to 14 knots.

APPENDIX 2

THE HISTORY OF THE BOARD'S PREVIOUS SUBMISSION

a The Board submitted a discussion paper to SDD on 18 April 1968. During discussions throughout 1968 it was not possible to reach agreement on the principle embodied in the Board's 'flexible road' concept.

b Following enactment of the Transport Act, 1968 SDD put an alternative for discussion to the Board. This proposed that ships and terminals would be provided by the Government leaving the operators to charge such freights and fares as would make running operations viable.

c The Board's initial reaction was not unfavourable but little progress was made before the Department withdrew their suggestion following more detailed examination.

d The Board met the Minister of State on 15 July 1969. The Minister promised to re-examine the Board's paper without commitment. He related the proposals to the need to examine ways of financing both capital and operating expenditures of STG.

e STG confirmed that they did not wish to intervene in the Board's discussions on charges to the islands.

f During the 1969 discussions SDD continued to argue that the Board's proposals meant a substantial and unacceptable increase in Government annual costs on the Western Isles services. They asserted that it was illogical to maintain that a route with a sea-crossing, Glasgow to Mull or Islay for example, should be cheaper than Glasgow to Inverness just because the overall distance is less.

g The Board rebutted that assertion maintaining, as it still maintains, that it <u>is</u> logical to charge by overall distance and that islanders should not be disadvantaged by part of the mileage being by sea.

h When the Minister of State visited the Board in 1970 he disclosed that two factors now permitted a new system of charges. These were the conversion by STG to roll on/roll off services and the ability of local authorities to get assistance under Section 34 of the Transport Act, 1968.

i The Minister intimated that consideration was being given to grant assistance for terminals and ships and for the support of essential uneconomic services which could not be locally sustained.

j Following the change of Government in 1970, discussions continued with new Minister of State (Mr George Younger). He was not satisfied that the Board had proven its case and he stressed that factual data was lacking. He suggested a quick study by a consultant.

/k

k In December 1970 the Board commissioned Prof M Gaskin of Aberdeen University to make such a study. He reported, in May 1971, that while many costs in islands are higher than on the mainland there are a number of factors which condition the general finding and make difficult any straightforward conclusion.

l The Board thought that Prof Gaskin's findings supported their case on the disadvantages faced by islanders although they considered that he had underestimated the general impact of transport costs on islands.

m Following further meetings with Ministers the matters in question were resolved by the statement to Parliament by the Secretary of State on 18 April 1972.

n The principle adopted was that "charges levied on scheduled sea transport services must continue to be based on operating costs in order to provide incentives for the most efficient operation of services and to prevent resources from being misdirected. I believe that these two objectives can best be secured:

1 by requiring modernised services carrying substantial traffic to pay their way without revenue grant after account has been taken of capital assistance for terminals and, if necessary, for vessels; and

2 by providing revenue grants for services which do not generate enough traffic to enable a service, even after improvement with capital grant, to be provided at fares and charges comparable to those for the more economic services".

"We will encourage operators of roll-off/roll-on vehicle ferries to charge by reference to length, irrespective of load".

o The Board made representations to the Department on the draft of the Secretary of State's statement, and commented on publication of the statement as follows:-

"That the Board welcomed the proposals, as modern vessels could do much to encourage development in the islands always provided that commercial charges on the linear footage basis are levied at an attractive rate. Subject to the rate per linear foot a reduction in freight rates over almost the entire range of goods carried could result".

APPENDIX 3

VEHICLE FERRY FINANCE IN NORWAY

In May 1968 members of the HIDB visited Norway to examine that country's transport system. The report produced describes all forms of transport and the Norwegian governments financial involvement in them.

On the shipping side, while trunk cargo services do not receive a subsidy the coastal express (passenger and urgent freight) steamer service (Hurtigruten), the various area and local shipping services and vehicle ferries do receive substantial subsidies. The amount of these subsidies (except for the Hurtigruten) are decided in advance each year by the Ministry from examination of the previous year's accounts and in the knowledge that it is also the price fixing organisation leaving the operator with every incentive to operate more efficiently. Finance comes from Central Government, Fylkes (Regions) and Communes (Districts).

Of particular relevance to the Board's proposals is the Norwegian philosophy relating to vehicle ferries. Their role in Norway is very important as many of the main routes utilise several ferries along their length and these ferries are now considered by National and Local Government bodies to be part of the road system. Because of their huge importance Norway has led the way in the design of vehicle ferries and terminals.

The vehicle ferry system has undergone a major change in the past two years. Following substantial pressure for a reduction of charges and for a system of charging related to the cost of travelling the roads of which they were in fact part, the Government put in hand a study by the Norwegian Institute of Transport Economics. This report, whose broad findings were accepted and implemented by the Government, on a basis more generous than the Ministry of Transport advised, established certain important principles.

(1) the comparison with journeys along the road was largely accepted. The new tariff resulted in much lower ferry prices - but subject to a minimum payment rather like a bridge toll.

(2) goods vehicles do not pay according to their load but according to the space they take upon deck (the study related length to area and expressed tariffs in lengths).

The changes in tariffs mean that there has been a very substantial increase in subsidies and the 1966 level of 23 million kroner is now 45 million (£2.6 million).

For ferries on State roads, the whole responsibility for the subsidy rests in the Central Government but where it is a local or county road that is involved, the subsidy is paid by these authorities. This basis applies to both operating subsidies and capital payments for ferry terminals.

/For

For example the Torghatten Transport Company at Bronnoysund operate several vehicle ferry routes. Of these most are considered part of State roads and one, to a small island, is considered part of the County road. In 1967 they received these subsidies.

Ferry	Vehicle Crossing 1967	Revenue (Kroner) 1967	Subsidy (Kroner) State	Subsidy (Kroner) County
Bronnoysund/Turget	8,794	104,595	-	110,000
Vendesund/Holm	16,291	206,607	-	-
Mollebogan/Arsandoy	15,299	204,700	1,360,000	-
Hurn/Anndalsvag	11,585	164,578	-	-
	51,969	680,480	1,360,000	110,000

It can be seen that the revenue was less than half the subsidy payment. Overall ferry traffic using the crossing is growing rapidly thus:-

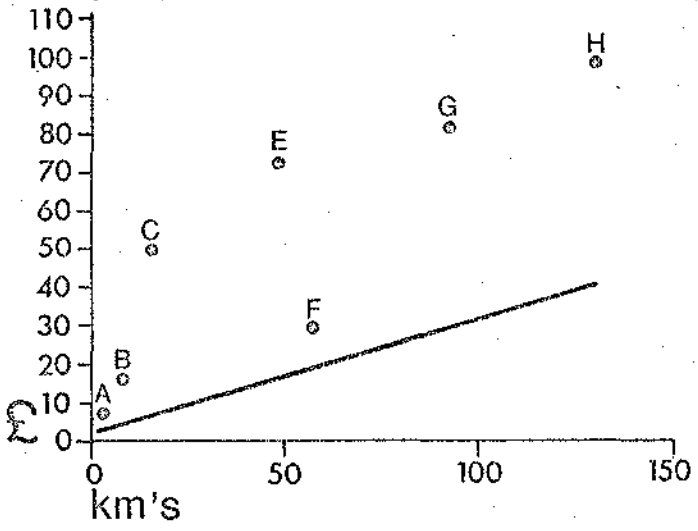
Year	Vessels in service	Lorries 000	Bus 000	Cars 000	Passengers 000
1962	110	415	159	1,837	12,847
1964	114	524	151	2,686	15,800
1966	191	634	153	3,467	18,671
1967	-	701	156	3,921	-

Ownership of the ferries has not been changed by the new system and there remains a mixture of private and public ownership. All operators are now, however, virtually agents of the State. By agreeing subsidies in advance, however, there is a distinct incentive to the operator to be efficient.

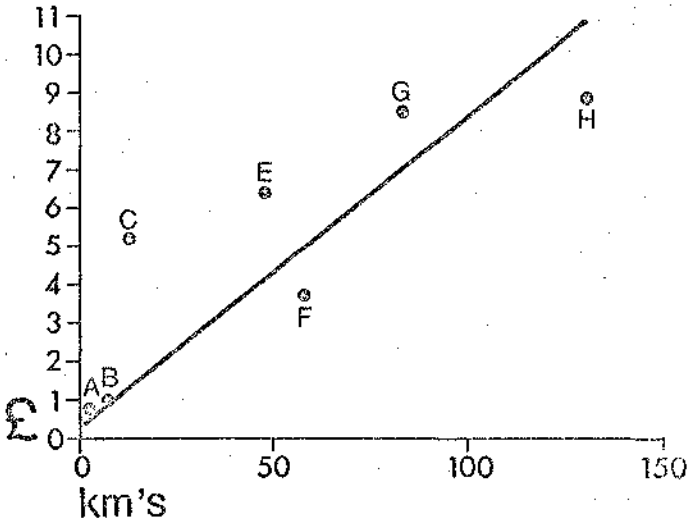
There have been several Highland visits to Norwegian ferry systems with a view to adapting their techniques. The sheltered crossings and sheltered terminal sites with limited rise and fall make adaptation less simple than it appears but the one very relevant figure was for the usual cost of a ferry terminal with 145 foot ramp which was estimated at £12,000.

COMPARATIVE VEHICLE FERRY RATES
(mid 1974)

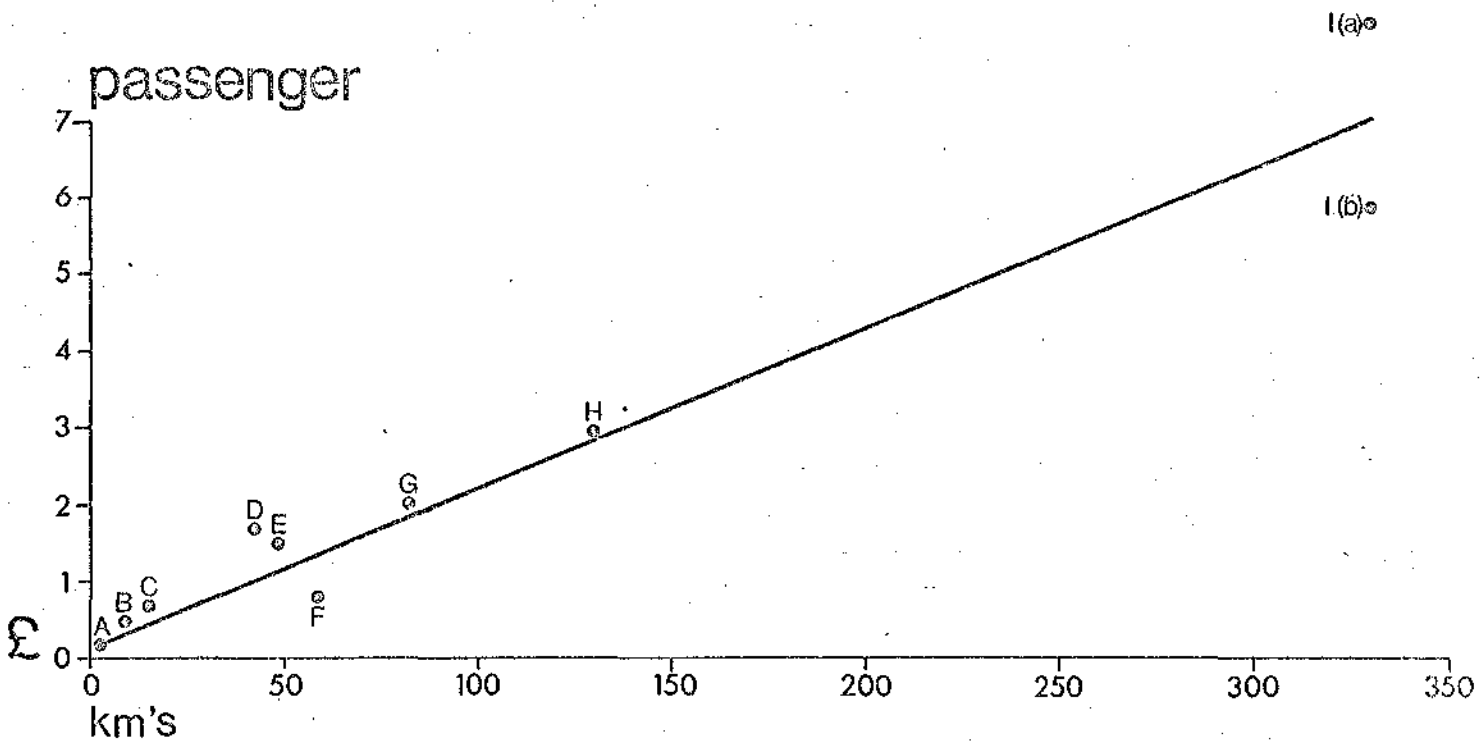
15 metre HGV



4 metre car



passenger



actual rate •

proposed road equivalent tariff /

A kyle–kyleakin
B gourock–dunoon
C oban–craignure
D scrabster–stromness
E uig–tarbert
F w. loch tarbert–port ellen
G stornoway–ullapool
H oban–lochboisdale
I(a) aberdeen–lerwick (1st class)
(b) aberdeen–lerwick (2nd class)

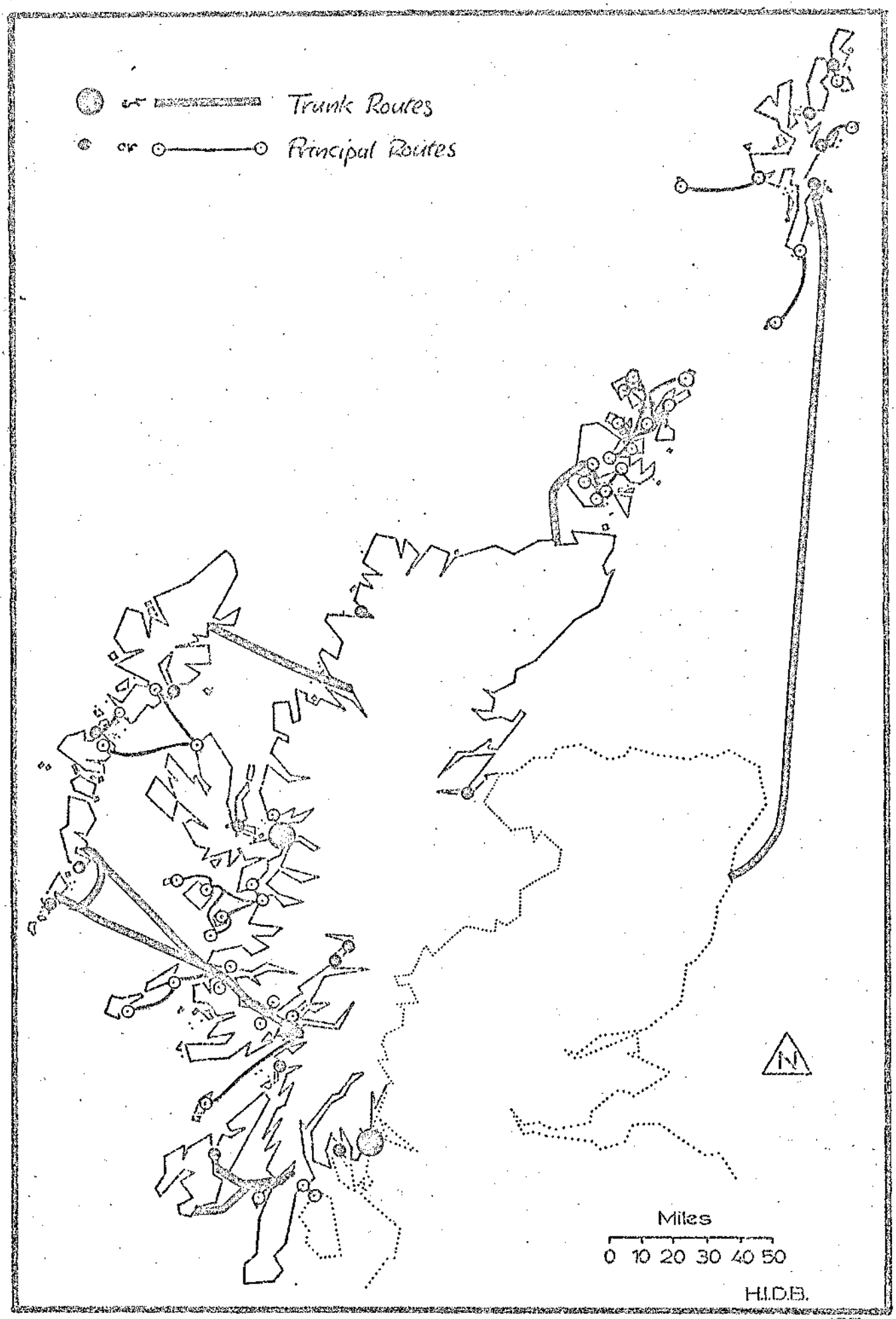
APPENDIX 5

PROPOSED CATEGORIES OF FERRY ROUTES IN THE HIGHLANDS AND ISLANDS

1	TRUNK ROUTES (all vehicle ferries)	Passage	Present Operator
	Gourock – Dunoon	7 km	Caledonian/MacBrayne
	and/or MacInroys Point/Hunter Quay	4 km	Western Ferries
	West Loch Tarbert – Port Ellen	58 km	Caledonian/MacBrayne
	and/or Kennacraig – Port Askaig	48 km	Western Ferries
	Oban–Craignure	15 km	Caledonian/MacBrayne
	Oban–Tobermory–Coll–Tiree (debateable)	various	MacBrayne
	Oban–Barra–Lochboisdale	130 km	Caledonian/MacBrayne
	Uig–Tarbert } debateable	47 km	Caledonian/MacBrayne
	Uig–Lochmaddy } debateable	49 km	Caledonian/MacBrayne
	Mallaig–Armadale (debateable)	8 km	Caledonian/MacBrayne (summer) MacBrayne (winter)
	Kyle–Kyleakin	1 km	Caledonian/MacBrayne
	Stornoway–Ullapool	84 km	Caledonian/MacBrayne
	Scrabster–Stromness	42 km	North Co
	Aberdeen–Lerwick	337 km	North Co
2	PRINCIPAL ROUTES (* indicates vehicle ferry)		
	*Colintravie–Rubodach (as inter island)	1 km	Caledonian/MacBrayne
	*Lochranza–Claonaig	8 km	Caledonian/MacBrayne
	West Loch Tarbert–Gigha	29 km	Caledonian/MacBrayne
	*Port Askaig–Feolin	1 km	Western Ferries
	Oban–Colonsay	59 km	Caledonian/MacBrayne
	*Cuan Ferry	1 km	Loch Authority
	Oban–Kerrera	1 km	Roberts
	*Oban–Lismore	13 km	Caledonian/MacBrayne

/Oban

	Passage	Present Operator
Oban-Tobermory-Coll-Tiree (if not "trunk")	various	MacBrayne
*Ardgour-Corran	1 km	Ferry Co
Fort William-Camusnagall	1 km	MacKinnon
Mallaig (or Arisaig) - Small Isles	various	MacBraynes
Kyle-Toscaig	13 km	MacRae
*Raasay-Sconsar (proposed)	3 km	Caledonian/MacBrayne
Barra-Vatersay	2 km	MacLeod
Ludag-Eriskay	2 km	McIsaac
Sound of Harris/Berneray (vehicle ferry proposed)	various	MacAskill
*Scalpay Ferry	1 km	Caledonian/MacBrayne
*Uig-Tarbert } if not "trunk"	47 km	Caledonian/MacBrayne
*Uig-Lochmaddy } if not "trunk"	49 km	Caledonian/MacBrayne
*Kylesku Ferry	1 km	Local Authority
*Inverness-North Kessock	1 km	Joint Committee
Stromness-South Isles of Orkney	various	OISC
Kirkwall-North Isles of Orkney	various	OISC
Grutness-Fair Isles	40 km	Stout
Walls-Foula	30 km	Gear
*Lerwick-Bressay (proposed)	1 km	Local Authority
*Billister-Whalsay (proposed)	6 km	Local Authority
*Gutcher-Belmont-Fetlar	various	Local Authority
*Toft-Ulsta	4 km	Local Authority
*Whalsay-Skerries (proposed)	18 km	(North Co Present)



A 167